Effective 3/01/2013

R649. Natural Resources; Oil, Gas and Mining; Oil and Gas.

R649-1. Oil and Gas Definitions.

R649-1-1. Definitions.

"Authorized Agent" means a representative of the director as authorized by the board.

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

"Artificial Liner" means a pit liner made of material other than clay or other in-situ material and which meets the requirements of R649-9-3, Permitting of Disposal Pits.

"Barrel" means 42 (US) gallons at 60 degrees Fahrenheit at atmospheric pressure.

"Board" means the Board of Oil, Gas and Mining.

"Carrier, Transporter or Taker" means any person moving or transporting oil or gas away from a well or lease or from any pool.

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

"Central Disposal Facility" means a facility that is used by one or more producers for disposal of exempt E and P wastes and for which the operator of the facility receives no monetary remuneration, other than operating cost sharing.

"Class II Injection Well" means a well that is used for:

1. The disposal of fluids that are brought to the surface in connection with conventional oil or natural gas production and that may be commingled with wastewater produced from the operation of a gas plant that is an integral part of production operations, unless that wastewater is classified as a hazardous waste at the time of injection, or
2. Enhanced recovery of oil or gas, or
3. Storage of hydrocarbons that are liquids at standard temperature and pressure conditions.

"Closed System" means but is not limited to, the use of a combination of solids control equipment (i.e., shale shakers, flowline cleaners, desanders, desilters, mud cleaners, centrifuges, agitators, and necessary pumps and piping) incorporated in a series on the rig's steel mud tanks, or a self contained unit that eliminates the use of a reserve pit for the purpose of dumping and dilution of drilling fluids for the removal of entrained drill solids. A closed system for the purpose of these rules may with Division approval include the use of a small pit to receive cuttings, but does not include the use of trenches for the collection of fluids of any kind.

"Coalbed Methane" means natural gas that is produced, or may be produced, from coalbeds and rock strata associated with the coalbed.

"Commercial Disposal Facility" means a disposal well, pit or treatment facility whose owner(s) or operator(s) receives compensation from others for the temporary storage, treatment, and disposal of produced water, drilling fluids, drill cuttings, completion fluids, and any other exempt E and P wastes, and whose primary business objective is to provide these services.

"Completion of a Well" means that the well has been adequately worked to be capable of producing oil or gas or that well testing as required by the division has been concluded.

"Confining Strata" refers to a body of material that is relatively impervious to the passage of liquids or gases and that occurs either below, above, or lateral to a more permeable material in such a way that it confines or limits the movement of liquids or gases that may be present.

"Correlative Rights" means the opportunity of each owner in a pool to produce his just and equitable share of the oil and gas in the pool without waste.

"Cubic Foot" of gas means the volume of gas contained in one cubic foot of space at a standard pressure base of 14.73 psia and a standard temperature base of 60 degrees Fahrenheit.

"Day" means a period of 24 consecutive hours.

"Development Wells" means all oil and gas producing wells other than wildcat wells.

"Director" means the executive and administrative head of the division.

"Disposal Facility" means an injection well, pit, treatment facility or combination thereof that receives E and P Wastes for the purpose of disposal. This includes both commercial and noncommercial facilities.

"Disposal Pit" means a lined or unlined pit approved for the disposal and/or storage of E and P Wastes.

"Division" means the Division of Oil, Gas and Mining.

"Drilling Fluid" means a circulating fluid usually called mud, that is introduced in a drill hole to lubricate the action of the rotary bit, remove the drilling cuttings, and control formation pressures.

"E and P Waste" means (Exploration And Production Waste), and is defined those wastes resulting from the drilling of and production from oil and gas wells as determined by the Environmental Protection Agency (EPA), prior to January 1, 1992, to be exempt from Subtitle C of the Resource Conservation and Recovery Act (RCRA).

"Emergency Pit" means a pit used for containing fluids at an operating well during an actual emergency or for a temporary period of time.

"Enhanced Recovery" means the process of introducing fluid or energy into a pool for the purpose of increasing the recovery of hydrocarbons from the pool.

"Enhanced Recovery Project" means the injection of liquids or hydrocarbon or non-hydrocarbon gases directly into a reservoir for the purpose of augmenting reservoir energy, modifying the properties of the fluids or gases in the reservoir, or changing the reservoir conditions to increase the recoverable oil, gas, or oil and gas through the joint use of two or more well bores.

"Entity" means a well or a group of wells that have identical division of interest, have the same operator, produce from the same formation, have product sales from a common tank, LACT meter, gas meter, or are in the same participating area of a properly designated unit. Entity number assignments are made by the division in cooperation with other state government agencies.

"Field" means the general area underlaid by one or more pools.

"Gas" means natural gas or natural gas liquids or other gas or any mixture thereof defined as follows:

1. "Natural Gas" means those hydrocarbons, other than oil and other than natural gas liquids separated from natural gas, that occur naturally in the gaseous phase in the reservoir and are produced and recovered at the wellhead in gaseous form. Natural gas includes coalbed methane.

2. "Natural Gas Liquids" means those hydrocarbons initially in reservoir natural gas, regardless of gravity, that are separated in gas processing plants from the natural gas as liquids at the surface through the process of condensation, absorption, adsorption, or other methods.

3. "Other Gas" means hydrogen sulfide (H_2S), carbon dioxide (CO_2), helium (H) nitrogen (N), and other nonhydrocarbon gases that occur naturally in the gaseous phase in the reservoir or are injected into the reservoir in connection with pressure maintenance, gas cycling, or other secondary or enhanced recovery projects.

"Gas-Oil Ratio" means the ratio of the number of cubic feet of natural gas produced to the number of barrels of oil concurrently produced during any stated period. The term GOR is synonymous with gas-oil ratio.

"Gas Processing Plant" means a facility in which liquefiable hydrocarbons are removed from natural gas, including wet gas or casinghead gas, and the remaining residue gas is conditioned for delivery for sale, recycling or other use.

"Gas Well" means any well capable of producing gas in substantial quantities that is not an oil well.

"Ground Water" means water in a zone of saturation below the ground surface.

"Hearing" means any matter heard before the board or its designated hearing examiner.

"Horizontal Well" means a well bore drilled laterally at an angle of at least eighty (80) degrees to the vertical or with a horizontal projection exceeding one hundred (100) feet measured from the initial point of penetration into the productive formation through the terminus of the lateral in the same common source of supply.

"Illegal Oil or Illegal Gas" means oil or gas that has been produced from any well within the state in violation of Chapter 6 of Title 40, or any rule or order of the board.

"Illegal Product" means any product derived in whole or in part from illegal oil or illegal gas.

"Incremental Production" means that part of production that is achieved from an enhanced recovery project that would not have economically occurred under the reservoir conditions existing before the project and that has been approved by the division as incremental production.

"Injection or Disposal Well" means any Class II Injection Well used for the injection of air, gas, water or other substance into any underground stratum.

"Interest Owner" means a person owning an interest (working interest, royalty interest, payment out of production, or any other interest) in oil or gas, or in the proceeds thereof.

"Load Oil" means any oil or liquid hydrocarbon that is used in any remedial operation in an oil or gas well.

"Log or Well Log" means the written record progressively describing the strata, water, oil or gas encountered in drilling a well with such additional information as is usually recorded in the normal procedure of drilling including electrical, radioactivity, or other similar conventional logs, a lithologic description of samples and drill stem test information.

"Multiple Zone Completion" means a well completion in which two or more separate zones, mechanically segregated one from the other, are produced simultaneously from the same well.

"Oil" means crude oil or condensate or any mixture thereof, defined as follows:

1. "Crude Oil" means those hydrocarbons, regardless of gravity, that occur naturally in the liquid phase in the reservoir and are produced and recovered at the wellhead in liquid form.

2. "Condensate" means those hydrocarbons, regardless of gravity, that occur naturally in the gaseous phase in the reservoir that are separated from the natural gas as liquids through the process of condensation either in the reservoir, in the well bore or at the surface in field separators.

3. "Oil and Gas" shall not include gaseous or liquid substances derived from coal, oil shale, tar sands or other hydrocarbons classified as synthetic fuel.

"Oil and Gas Field" means a geographical area overlying an oil and gas pool.

"Oil Well" means any well capable of producing oil in substantial quantities.

"Operator or Designated Agent" means the person who has been designated by the owners or the board to operate a well or unit.

"Owner" means the person who has the right to drill into and produce from a reservoir and to appropriate the oil and gas that he produces, either for himself or for himself and others.

"Person" means and includes any natural person, bodies politic and corporate, partnerships, associations and companies.

"Pit" means an earthen surface impoundment constructed to retain fluids and oil field wastes.

"Pollution" means such contamination or other alteration of the physical, chemical or biological properties of any waters of the state, or the discharge of any liquid, gaseous or solid substance into any waters of the state in such manner as will create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare; to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses; or to livestock, wild animals, birds, fish or other aquatic life.

"Pool" means an underground reservoir containing a common accumulation of oil or gas or both. Each zone of a general structure that is completely separated from any other zone in the structure is a separate pool. "Common source of supply" and "reservoir" are synonymous with "pool."

"Pressure Maintenance" means the injection of gas, water or other fluids into a reservoir, either to increase or maintain the existing pressure in such reservoir or to retard the natural decline in the reservoir pressure.

"Produced Water" means water produced in conjunction with the conventional production of oil and/or gas.

"Producer" means the owner or operator of a well capable of producing oil or gas.

"Producing Well" means a well capable of producing oil or gas.

"Product" means any commodity made from oil and gas.

"Production Facilities" means all storage, separation, treating, dehydration, artificial lift, power supply, compression, pumping, metering, monitoring, flowline, and other equipment directly associated with oil wells, gas wells or injection wells, prior to any processing plant or refinery.

"Purchaser or Transporter" means any person who, acting alone or jointly with any other person, by means of his own, an affiliated, or designated carrier, transporter or taker, shall directly or indirectly purchase, take or transport by any means whatsoever, or who shall otherwise remove from any well or lease, oil or gas produced from any pool, excepting royalty portions of oil or gas taken in kind by an interest owner who is not the operator.

"Recompletion" means any completion in a new perforated interval or pool within an established wellbore and approved as a recompletion by the division.

"Refinery" means a facility, other than a gas processing plant, where controlled operations are performed by which the physical and chemical characteristics of petroleum or petroleum products are changed.

"Reserve Pit" means a pit used to retain fluid during the drilling, completion, and testing of a well.

"Seismic Operator" means a person who conducts seismic exploration for oil or gas, whether for himself or as a contractor for others.

"Shut-in Well" means a well that is completed, is shown to be capable of production in paying quantities, and is not presently being operated.

"Spud In" means the first boring of a hole in the drilling of a well by any type of rig.

"State" means the State of Utah.

"Stratigraphic Test or Core Hole" means any hole drilled for the sole purpose of obtaining geological information. The general rules applicable to the drilling of a well will apply to the drilling of a stratigraphic test or core hole.

"Temporarily Abandoned Well" means a well that is completed, is shown not capable of production in paying quantities, and is not presently being operated.

"Temporary Spacing Unit" means a specified area of land designated by the board for purposes of determining well density and location. A temporary spacing unit shall not be a drilling unit as provided for in U.C.A. 40-6-6, Drilling Units, and does not provide a basis for pooling the interest therein as does a drilling unit.

"Underground Source of Drinking Water" (or USDW) means a fresh water aquifer or a portion thereof that supplies drinking water for human consumption or that contains less than 10,000 mg/1 total dissolved solids and that is not an exempted aquifer under R649-5-4.

"Waste" means:

1. The inefficient, excessive or improper use or the unnecessary dissipation of oil or gas or reservoir energy.

2. The inefficient storing of oil or gas.

3. The locating, drilling, equipping, operating, or producing of any oil or gas well in a manner that causes reduction in the quantity of oil or gas ultimately recoverable from a reservoir under prudent and economical operations, or that causes unnecessary wells to be drilled, or that causes the loss or destruction of oil or gas either at the surface or subsurface.

4. The production of oil or gas in excess of:

4.1. Transportation or storage facilities.

4.2. The amount reasonably required to be produced in the proper drilling, completing, testing, or operating of a well or otherwise utilized on the lease from which it is produced.

5. Underground or above ground waste in the production or storage of oil or gas.

"Waste Crude Oil Treatment Facility" means any facility or site constructed or used for the purpose of wholly or partially reclaiming, treating, processing, cleaning, purifying or in any manner making non-merchantable waste crude oil marketable.

"Well" means an oil or gas well, injection or disposal well, or a hole drilled for the purpose of producing oil or gas or both. The definition of well shall not include water wells, or seismic, stratigraphic test, core hole, or other exploratory holes drilled for the purpose of obtaining geological information only.

"Well Site" means the areas that are directly disturbed during the drilling and subsequent use of, or affected by production facilities directly associated with any oil well, gas well or injection well.

"Wildcat Wells" means oil and gas producing wells that are drilled and completed in a pool in which a well has not been previously completed as a well capable of producing in commercial quantities.

"Working Interest Owner" means the owner of an interest in oil or gas burdened with a share of the expenses of developing and operating the property.

"Workover" means any operation designed to sustain, to restore, or to increase the production rate, the ultimate recovery, or the reservoir pressure system of a well or group of wells and approved as a workover, a secondary recovery, a tertiary recovery, or a pressure maintenance project by the division. The definition shall not include operations that are conducted principally as routine maintenance or the replacement of worn or damaged equipment.

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R649-2. General Rules.

R649-2-1. Scope of Rules.

1. The following general rules adopted by the board pursuant to Chapter 6 of Title 40 shall apply to all lands in the state in order to conserve the natural resources of oil and gas in the state, to protect human health and the environment, to prevent waste, to protect the correlative rights of all owners and to realize the greatest ultimate recovery of oil and gas.

2. Special rules and orders have been and will be issued by the board when required and shall prevail as against the general rules and orders of the board if in conflict therewith.

3. Exceptions to the general rules may also be granted by the director or authorized agent for good cause shown and shall prevail as against the general rules.

4. No exceptions granted by the board, director, or authorized agent to the rules applicable to the Underground Injection Control Program will be effective without the consent of the federal Environmental Protection Agency.

R649-2-2. Application of Rules to Lands Owned or Controlled By the United States.

These general rules shall apply to all lands in the state including lands of the United States and lands subject to the jurisdiction of the United States to the extent lawfully subject to the state's power.

R649-2-3. Application of Rules to Unit Agreements.

1. The board may suspend the application of the general rules or orders or any part thereof, with regard to any unit agreement approved by a duly authorized officer of the appropriate federal agency, so long as the conservation of oil or gas and the prevention of waste is accomplished thereby.

2. Such suspension shall not relieve any operator from making such reports as are otherwise required by the general rules or orders, or as may reasonably be requested by the board or the division in order to keep the board and the division fully informed as to operations under such unit agreements.

R649-2-4. Designation of Agent or Operator.

1. A designation of agent or operator shall be submitted to the division prior to the commencement of operations.

2. A designation of agent or operator will, for purposes of the general rules and orders, be accepted as evidence of authority of agent to fulfill the obligations of the owner, to sign any required documents or reports on behalf of the owner, and to receive all authorized orders or notices given by the board or the division.

3. All changes of address and any termination of the designated agent's or operator's authority shall be promptly reported in writing to the division, and in the latter case a designation of a new agent or operator shall be promptly made.

R649-2-5. Right to Inspect.

1. The director or authorized agent shall have the right at all reasonable times to go upon and inspect any oil or gas properties and wells for the purpose of making any investigations or tests reasonably necessary to ensure compliance with the provisions of the statutes, the general rules and

orders of the board or any special field rules and orders. The director or authorized agent shall report any observed violation to the board.

2. The documentation of off lease transportation of crude oil required by R649-2-6, Access to Records, shall be carried in the motor vehicle during transportation and shall be available for examination and inspection by the director or an authorized agent upon request.

R649-2-6. Access to Records.

1. Any person who produces, operates, sells, purchases, acquires, stores, transports, refines, or processes oil or gas or who injects fluids for cycling, pressure maintenance, secondary or enhanced recovery, or disposal of salt water or oil field waste within the state, shall make and keep appropriate books and records covering his operations in the state from which he shall be able to make and substantiate all reports required by the board or the division.

1.1. Such books and records, together with copies of all reports and notices submitted to the board or the division shall be kept on file and available for inspection by the director or an authorized agent at all reasonable times for a period of at least six years.

1.2. The director or the authorized agent shall also have access to all pertinent well records wherever located.

2. Each owner or operator shall permit the director or authorized agent at his sole risk and expense, in the absence of negligence on the part of the owner or operator, to come upon any lease, property or well operated or controlled by him; to inspect the records pertaining to and the manner of operation of such property or well; and to have access at all reasonable times to any and all records pertaining to such well. All information so obtained by the director or authorized agent shall be kept confidential and shall be reported only to the division or its authorized agent, unless the owner or operator gives written permission to the director to release such information.

3. All off lease transportation of oil by motor vehicle shall be accompanied by a run ticket or equivalent document. The documentation shall identify the name and address of the transporter, the name of the operator, the lease or facility from which the oil was taken, the date of removal, the API gravity of the oil, the calculated percentage of BS and W, the volume of oil or the opening and closing tank gauges or meter readings, and the destination of the oil.

R649-2-7. Naming of Oil and Gas Fields or Pools.

1. The division shall name oil and gas fields or pools within the state in cooperation with a Fields Names Advisory Committee and with due regard and consideration for any recommendation from the owners or operators of such fields or pools. The Field Names Advisory Committee shall be composed of a representative of the United States Bureau of Land Management and representatives of appropriate state agencies and the oil and gas industry.

R649-2-8. Measurement of Production.

1. The volume of oil production shall be computed in barrels of clean oil, on the basis of acceptable meter measurements, tank measurements, or with such greater accuracy as may be required by the division. Computations of the volume of oil production shall be subject to the following corrections:

1.1. The gross volume of oil shall be corrected to exclude the entire volume of impurities not constituting a natural component part of the oil.

1.2. The observed volume of oil after correction for impurities shall be further corrected to

the standard volume at 60 degrees Fahrenheit, in accordance with Table 6A of the API/ASTM D-1250, Chapter 11.1, Manual of Petroleum Measurement (1980), or any revisions or supplements, or any alternative publication or tables approved by the division.

1.3. The observed gravity of oil shall be corrected to the standard API gravity at 60 degrees Fahrenheit in accordance with Table 5A of API/ASTM, D-1250, Chapter 11.1, Manual of Petroleum Measurement (1980), or any revisions or supplements, or any alternative publication or tables approved by the division.

2. All gas shall be measured by an orifice type meter unless otherwise authorized by the division.

2.1. In computing the volumes of all gas produced, sold, or injected, the standard pressure base shall be 14.73 pounds per square inch absolute (psia), and the standard temperature base shall be 60 degrees Fahrenheit.

2.2. All measurements of gas shall be adjusted by computation to these standards, regardless of the pressure and temperature at which the gas was actually measured, unless otherwise authorized by the division.

R649-2-9. Refusal to Agree.

1. An owner shall be deemed to have refused to agree to bear his proportionate share of the costs of the drilling and operation of a well under Section 40-6-6.5 if:

1.1. The operator of the proposed well has, in good faith, attempted to reach agreement with such owner for the leasing of the owner's mineral interest or for that owner's voluntary participation in the drilling of the well.

1.2. The owner and the operator have been unable to agree upon terms for the leasing of the owner's interest or for the owner's participation in the drilling of the well.

2. If the operator of the proposed well shall fail to attempt, in good faith, to reach agreement with the owner for the leasing of that owner's mineral interest or for voluntary participation by that owner in the well prior to the filing of a Request for Agency Action for involuntary pooling of interests in the drilling unit under Section 40-6-6.5 then, upon written request and after notice and hearing, the hearing on the Request for Agency Action for involuntary pooling may, at the discretion of the board or its designated hearing examiner, be delayed for a period not to exceed 30 days, to allow for negotiations between the operator and the owner.

R649-2-10. Notification of Lease Sale or Transfer.

The owner of a lease shall provide notification to any person with an interest in such lease, when all or part of that interest in the lease is sold or transferred.

R649-2-11. Confidentiality of Well Log Information.

1. Well logs marked confidential shall be kept confidential for one year after the date on which the log is required to be filed with the division, unless the operator gives written permission to release the log at an earlier date.

2. Information on a newly permitted well will be held confidential only upon receipt by the division of a written request from the owner or operator.

3. The period of confidentiality may begin at the time the APD is submitted for approval if a request for confidentiality is received at that time. The information on the application itself will not be considered confidential.

4. Information that shall be held confidential includes well logs, electrical or radioactivity logs, electromagnetic, electrical, or magnetic surveys, core descriptions and analysis, maps, other geological, geophysical, and engineering information, and well completion reports that contain such information.

5. The owner or operator shall clearly mark documents as confidential. Such marking shall be in red and be clearly visible.

6. Confidential wells or information shall be reported separately from wells or information that is not in confidential status.

R649-2-12. Tests and Surveys.

1. When deemed necessary or advisable the Director or authorized agent can require that tests or surveys be made to determine the presence of waste of oil, gas, water, or reservoir energy; the quantity of oil, gas or water; the amount and direction of deviation of any well from the vertical; formation, casing, tubing, or other pressures; or any other test or survey deemed necessary to carry out the purposes of the Oil and Gas Conservation Act.

2. Directional, deviation, and/or measurements-while-drilling (MWD) surveys must be run on horizontal wells and submitted in accordance with R649-3-21, Well Completion and Filing of Well Logs, as amended for horizontal wells.

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R649-3. Drilling and Operating Practices.
R649-3-1. Bonding.

1. An owner or operator shall furnish a bond to the division prior to approval of a permit to drill a new well, reenter an abandoned well or assume responsibility as operator of existing wells.

1.1. An owner or operator shall furnish a bond to the division on Form 4, for wells located on lands with fee or privately owned minerals.

1.2. An owner or operator shall furnish evidence to the division that a bond has been filed in accordance with state, federal or Indian lease requirements and approved by the appropriate agency for all wells located on state, federal or Indian leases.

2. A bond furnished to the division shall be payable to the division and conditioned upon the faithful performance by the operator of the duty to plug each dry or abandoned well, repair each well causing waste or pollution, and maintain and restore the well site.

3. Bond liability shall be for the duration of the drilling, operating and plugging of the well and restoration of the well site.

3.1. The bond for drilling or operating wells shall remain in full force and effect until liability thereunder is released by the division.

3.2. Release of liability shall be conditioned upon compliance with the rules and orders of the Board.

4. For all drilling or operating wells, the bond amounts for individual wells and blanket bonds required in subsections 5. and 6. represent base amounts adjusted to year 2002 average costs for well plugging and site restoration. The base amounts are effective immediately upon adoption of

this bonding rule, subject to division notification as described in subsection 4.1.

4.1. The division shall provide written notification to each operator of the need to revise or establish bonds in amounts required by this bonding rule.

4.2. Within 120 days of such notification by the division, the operator shall post a bond with the division in compliance with this bonding rule.

4.3. If the division finds that a well subject to this bonding rule is in violation of Rule R649-3-36., Shut-in and Temporarily Abandoned Wells, the division shall require a bond amount for the applicable well in the amount of actual plugging and site restoration costs.

4.4. The division shall provide written notification to an operator found in violation of Rule R649-3-36., and identify the need to establish increased bonding for shut-in wells.

4.4.1. Within 30 days of notification by the division, the operator shall submit to the division an estimate of plugging and site restoration costs for division review and approval.

4.4.2. Upon review and approval of the cost estimate, the division will provide a notice of approval back to the operator specifying the approved bond amount for shut-in wells.

4.4.3. Within 120 days of receiving such notice of approval, the operator shall post a bond with the division in compliance with this bonding rule.

5. The bond amount for drilling or operating wells located on lands with fee or privately owned minerals shall be one of the following:

5.1. For wells of less than 1,000 feet in depth, an individual well bond in the amount of at least $1,500, for each such well.

5.2. For wells of more than 1,000 feet in depth but less than 3,000 feet in depth, an individual well bond in the amount of at least $15,000 for each such well.

5.3. For wells of more than 3,000 feet in depth but less than 10,000 feet in depth, an individual well bond in the amount of at least $30,000 for each such well.

5.4. For wells of more than 10,000 feet in depth, an individual well bond in the amount of at least $60,000 for each such well.

6. If, prior to the July 1, 2003 revision of this bonding rule, an operator is drilling or operating more than one well on lands with fee or privately owned minerals, and a blanket bond was furnished and accepted by the division in lieu of individual well bonds, that operator shall remain qualified for a blanket bond with the division subject to the amounts described by this bonding rule.

6.1. A blanket bond shall be conditioned in a manner similar to individual well bonds and shall cover all wells that the operator may drill or operate on lands with fee or privately owned minerals within the state.

6.2. For wells of less than 1,000 feet in depth, a blanket bond in the amount of at least $15,000 shall be required.

6.3. For wells of more than 1,000 feet in depth, a blanket bond in the amount of at least $120,000 shall be required.

6.4. Subsequent to the July 1, 2003 revision of this rule, operators who desire to establish a new blanket bond that consists either fully or partially of a collateral bond as described in subsection 10.2. shall be qualified by the division for such blanket bond.

6.4.1. Operators who elect to establish a surety bond as a blanket bond shall not require qualification by the division.

6.4.2. In those cases where operator qualification for blanket bond is required, the division will review the following criteria and make a written finding of the operator's adequacy to meet the criteria before accepting a new blanket bond:

6.4.3. The ratio of current assets to current liabilities shall be 1.20 or greater, as evidenced by audited financial statements for the previous two years and the most current quarterly financial report.

6.4.4. The ratio of total liabilities to stockholder's equity shall be 2.50 or less, as evidenced by audited financial statements for the previous two years and the most current quarterly financial report.

7. If an operator desires bond coverage in a lesser amount than required by these rules, the operator may file a Request for Agency Action with the Board for a variance from the requirements of these rules.

7.1. Upon proper notice and hearing and for good cause shown, the Board may allow bond coverage in a lesser amount for specific wells.

8. If after reviewing an application to drill or reenter a well or when reviewing a change of operator for a well, the division determines that bond coverage in accordance with these rules will be insufficient to cover the costs of plugging the well and restoring the well site, the division may require a change in the form or the amount of bond coverage. In such cases, the division will support its case for a change of bond coverage in the form of written findings to the operator of record of the well and provide a schedule for completion of the requisite changes.

8.1 Appeals of mandated bond amount changes will follow procedures established by Rule R649-10., Administrative Procedures.

9. The bond shall provide a mechanism for the surety or other guarantor of the bond, to provide prompt notice to the division and the operator of any action alleging the insolvency or bankruptcy of the surety or guarantor, or alleging any violations that would result in suspension or revocation of the suretys or guarantor's charter or license to do business.

9.1. Upon the incapacity of the surety or guarantor to guarantee payment of the bond by reason of bankruptcy, insolvency, or suspension or revocation of a charter or license, the operator shall be deemed to be without bond coverage.

9.2. Upon notification of insolvency or bankruptcy, the division shall notify the operator in writing and shall specify a reasonable period, not to exceed 90 days, to provide bond coverage.

9.3. If an adequate bond is not furnished within the allowed period, the operator shall be required to cease operations immediately, and shall not resume operations until the division has received an acceptable bond.

10. The division shall accept a bond in the form of a surety bond, a collateral bond or a combination of these bonding methods.

10.1. A surety bond is an indemnity agreement in a sum certain payable to the division, executed by the operator as principal and which is supported by the performance guarantee of a corporation authorized to do business as a surety in Utah.

10.1.1. A surety bond shall be executed by the operator and a corporate surety authorized to do business in Utah that is listed in "A.M. Best's Key Rating Guide" at a rating of A- or better or a Financial Performance Rating (FPR) of 8 or better, according to the "A.M. Best's Guide". All surety companies also will be continuously listed in the current issue of the U.S. Department of the Treasury Circular 570. Operators who do not have a surety bond with a company that meets the standards of subsection 10.1.1. will have 120 days from the date of division notification after enactment of the changes to subsection 10.1.1., or face enforcement action. When the division in the course of examining surety bonds notifies an operator that a surety company guaranteeing its performance does not meet the standards of subsection 10.1.1., the operator has 120 days after notice

from the division by mail to correct the deficiency, or face enforcement action.

10.1.2. Surety bonds shall be noncancellable during their terms, except that surety bond coverage for wells not drilled may be canceled with the prior consent of the division.

10.1.3. The division shall advise the surety, within 30 days after receipt of a notice to cancel a bond, whether the bond may be canceled on an undrilled well.

10.2. A collateral bond is an indemnity agreement in a sum certain payable to the division, executed by the operator that is supported by one or more of the following:

10.2.1. A cash account.

10.2.1.1. The operator may deposit cash in one or more accounts at a federally insured bank authorized to do business in Utah, made payable upon demand only to the division.

10.2.1.2. The operator may deposit the required amount directly with the division.

10.2.1.3. Any interest paid on a cash account shall be retained in the account and applied to the bond value of the account unless the division has approved the payment of interest to the operator.

10.2.1.4. The division shall not accept an individual cash account in an amount in excess of $100,000 or the maximum insurable amount as determined by the Federal Deposit Insurance Corporation.

10.2.2. Negotiable bonds of the United States, a state, or a municipality.

10.2.2.1. The negotiable bond shall be endorsed only to the order of and placed in the possession of the division.

10.2.2.2. The division shall value the negotiable bond at its current market value, not at face value.

10.2.3. Negotiable certificates of deposit.

10.2.3.1. The certificates shall be issued by a federally insured bank authorized to do business in Utah.

10.2.3.2. The certificates shall be made payable or assigned only to the division both in writing and upon the records of the bank issuing the certificate.

10.2.3.3. The certificates shall be placed in the possession of the division or held by a federally insured bank authorized to do business in Utah.

10.2.3.4. If assigned, the division shall require the banks issuing the certificates to waive all rights of setoff or liens against those certificates.

10.2.3.5. The division shall not accept an individual certificate of deposit in an amount in excess of $100,000 or the maximum insurable amount as determined by the Federal Deposit Insurance Corporation.

10.2.4. An irrevocable letter of credit.

10.2.4.1. Letters of credit shall be placed in the possession of and payable upon demand only to the division.

10.2.4.2. Letters of credit shall be issued by a federally insured bank authorized to do business in Utah.

10.2.4.3. Letters of credit shall be irrevocable during their terms.

10.2.4.4. Letters of credit shall be automatically renewable or the operator shall ensure continuous bond coverage by replacing letters of credit, if necessary, at least 30 days before their expiration date with other acceptable bond types or letters of credit.

11. The required bond amount specified in subsections 5. and 6. of all collateral posted as assurance under this section shall be subject to a margin determined by the division which is the

ratio of the face value of the collateral to market value, as determined by the division.

11.1. The margin shall reflect legal and liquidation fees, as well as value depreciation, marketability and fluctuations that might affect the net cash available to the division to complete plugging and restoration.

12. The market value of collateral may be evaluated at any time, and in no case shall the market value of collateral be less than the required bond amount specified in subsections 5. and 6.

12.1. Upon evaluation of the market value of collateral by the division, the division will notify the operator of any required changes in the amount of the bond and shall allow a reasonable period, not to exceed 90 days, for the operator to establish acceptable bond coverage.

12.2. If an adequate bond is not furnished within the allowed period the operator shall be required to cease operations immediately and shall not resume operations until the division has received an acceptable bond.

13. Persons with an interest in collateral posted as a bond, and who desire notification of actions pursuant to the bond, shall request the notification in writing from the division at the time collateral is offered.

14. The division may allow the operator to replace existing bonds with other bonds that provide sufficient coverage.

14.1. Replacement of a bond pursuant to this section shall not constitute a release of bond under subsection15.

14.2. The division shall not allow liability to cease under an existing bond until the operator has furnished, and the division has approved, an acceptable replacement bond.

14.3. When the operator of wells covered by a blanket bond changes, the division will review the financial eligibility of a new operator for blanket bonding as described in subsection 6.4., and the division will make a written finding concerning the applicability of blanket bonding to the prospective new operator.

14.4. Transfer of the ownership of property does not cancel liability under an existing bond until the division reviews and approves a change of operator for any wells affected by the transfer of ownership.

14.5. If a transfer of the ownership of property is made and an operator wishes to request a change to a new operator of record for the affected wells, then the following requirements shall be met:

14.5.1. The operator shall notify the division in writing when ownership of any well associated with the property has been transferred to a named transferee, and the operator shall request a change of operator for the affected wells.

14.5.2. The request shall describe each well by reference to its well name and number, API number, and its location, as described by the section, township, range, and county, and shall also include a proposed effective date for the operator change.

14.5.3. The request shall contain the endorsement of the new operator accepting such change of operator.

14.5.4. The request shall contain evidence of the new operator's bond coverage.

14.5.5. The request may include a request to cancel liability for the well(s) included in the operator change that are listed under the existing operator's bond upon approval by the division of an adequate replacement bond in the name of the new operator.

14.6. Upon receipt of a request for change of operator, the division will review the proposed new operator's bond coverage, and if bond coverage is acceptable, the division will issue a notice of

approval of the change of operator.

14.6.1. If the division determines that the new operator's bond coverage will be insufficient to cover the costs of plugging and site restoration for the applicable well(s), the division may deny the change of operator, or the division may require a change in the form and amount of the new operator's bond coverage in order to approve the change of operator. In such cases, the division will support its case for a change of the new operator's bond coverage in the form of written findings, and the division will provide a schedule for completion of the requisite changes in order to approve the operator change. The written findings and schedule for changes in bond coverage will be sent to both the operator of record of the applicable well(s) and the proposed new operator.

14.7. If the request for operator change included a request to cancel liability under the existing operator's bond in accordance with subsection 14.5.5., and the division approves the operator change, then the division will issue a notice of approval of termination of liability under the existing bond for the wells included in the operator change. When the division has approved the termination of liability under a bond, the original operator is relieved from the responsibility of plugging or repairing any wells and restoring any well site affected by the operator change.

14.8. If all of the wells covered by a bond are affected by an operator change, the bond may be released by the division in accordance with subsection 15.

15. Bond release procedures are as follows:

15.1. Requests for release of a bond held by the division may be submitted by the operator at any time after a subsequent notice of plugging of a well has been submitted to the division or the division has issued a notice of approval of termination of liability for all wells covered by an existing bond.

15.1.1. Within 30 days after a request for bond release has been filed with the division, the operator shall submit signed affidavits from the surface landowner of any previously plugged well site certifying that restoration has been performed as required by the mineral lease and surface agreements.

15.1.2. If such affidavits are not submitted, the division shall conduct an inspection of the well site in preparation for bond release as explained in subsection 15.2.

15.1.3. Within 30 days after a request for bond release has been filed with the division, the division shall publish notice of the request in a daily newspaper of general circulation in the city and county of Salt Lake and in a newspaper of general circulation in the county in which the proposed well is located.

15.1.4. If a written objection to the request for bond release is not received by the division within 15 days after publication of the notice of request, the division may release liability under the bond as an administrative action.

15.1.5. If a written objection to the request for bond release is received by the division within 15 days after publication of the notice of request, the request shall be set for hearing and notice thereof given in accordance with the procedural rules of the Board.

15.2. If affidavits supporting the bond release application are not received by the division in accordance with subsection 15.1.1., the division shall within 30 days or as soon thereafter as weather conditions permit, conduct an inspection and evaluation of the well site to determine if restoration has been adequately performed.

15.2.1. The operator shall be given notice by the division of the date and time of the inspection, and if the operator is unable to attend the inspection at the scheduled date and time, the division may reschedule the inspection to allow the operator to participate.

15.2.2. The surface landowner, agent or lessee shall be given notice by the operator of such inspection and may participate in the inspection; however, if the surface landowner is unable to attend the inspection, the division shall not be required to reschedule the inspection in order to allow the surface landowner to participate.

15.2.3. The evaluation shall consider the adequacy of well site restoration, the degree of difficulty to complete any remaining restoration, whether pollution of surface and subsurface water is occurring, the probability of future occurrence of such pollution, and the estimated cost of abating such pollution.

15.2.4. Upon request of any person with an interest in bond release, the division may arrange with the operator to allow access to the well site or sites for the purpose of gathering information relevant to the bond release.

15.2.5. The division shall retain a record of the inspection and the evaluation, and if necessary and upon written request by an interested party, the division shall provide a copy of the results.

15.3. Within 60 days from the filing of the bond release request, if a public hearing is not held pursuant to subsection 15.1.5., or within 30 days after such public hearing has been held, the division shall provide written notification of the decision to release or not release the bond to the following parties:

15.3.1. The operator.

15.3.2. The surety or other guarantor of the bond.

15.3.3. Other persons with an interest in bond collateral who have requested notification under R649-3-1.13.

15.3.4. The persons who filed objections to the notice of application for bond release.

15.4. If the decision is made to release the bond, the notification specified in subsection 15.3. shall also state the effective date of the bond release.

15.5. If the division disapproves the application for release of the bond or portion thereof, the notification specified in subsection 15.3. shall also state the reasons for disapproval, recommending corrective actions necessary to secure the release, and allowing an opportunity for a public hearing.

15.6. The division shall notify the municipality in which the well is located by certified mail at least 30 days prior to the release of the bond.

16. The following guidelines will govern the Forfeiture of Bonds.

16.1. The division shall take action to forfeit the bond if any of the following occur:

16.1.1. The operator refuses or is unable to conduct plugging and site restoration.

16.1.2. Noncompliance as to the conditions of a permit issued by the division.

16.1.3. The operator defaults on the conditions under which the bond was accepted.

16.2. In the event forfeiture of the bond is necessary, the matter will be considered by the Board.

16.3. For matters of bond forfeiture, the division shall send written notification to the parties identified in subsection 15.3., in addition to the notice requirements of the Board procedural rules.

16.4. After proper notice and hearing, the Board may order the division to do any of the following:

16.4.1. Proceed to collect the forfeited amount as provided by applicable laws for the collection of defaulted bonds or other debts.

16.4.2. Use funds collected from bond forfeiture to complete the plugging and restoration of

the well or wells to which bond coverage applies.

16.4.3. Enter into a written agreement with the operator or another party to perform plugging and restoration operations in accordance with a compliance schedule established by the division as long as such party has the ability to perform the necessary work.

16.4.4. Allow a surety to complete the plugging and restoration, if the surety can demonstrate an ability to complete the plugging and restoration.

16.4.5. Any other action the Board deems reasonable and appropriate.

16.5. In the event the amount forfeited is insufficient to pay for the full cost of the plugging and restoration, the division may complete or authorize completion of plugging and restoration and may recover from the operator all costs of plugging and restoration in excess of the amount forfeited.

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

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

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

R649-3-2. Location And Siting of Vertical Wells and Statewide Spacing for Horizontal Wells.

1. In the absence of special orders of the board establishing drilling units or authorizing different well density or location patterns for particular pools or parts thereof, each oil and gas well shall be located in the center of a 40 acre quarter-quarter section, or a substantially equivalent lot or tract or combination of lots or tracts as shown by the most recent governmental survey, with a tolerance of 200 feet in any direction from the center location, a "window" 400 feet square.

1.1.No oil or gas well shall be drilled less than 920 feet from any other well drilling to or capable of producing oil or gas from the same pool.

1.2. No oil or gas well shall be completed in a known pool unless it is located more than 920 feet from any other well completed in and capable of producing oil or gas from the same pool.

2. The division shall have the administrative authority to determine the pattern location and siting of wells adjacent to an area for which drilling units have been established or for which a request for agency action to establish drilling units has been filed with the board and adjacent to a unitized area, where there is sufficient evidence to indicate that the particular pool underlying the drilling unit or unitized area may extend beyond the boundary of the drilling unit or unitized area and the uniformity of location patterns is necessary to ensure orderly development of the pool.

3. In the absence of special orders of the Board, no portion of the horizontal interval within the potentially productive formation shall be closer than six hundred-sixty (660) feet to a drilling or spacing unit boundary, federally unitized area boundary, uncommitted tract within a unit, or boundary line of a lease not committed to the drilling of such horizontal well.

4. The surface location for a horizontal well may be anywhere on the lease.

5. Any horizontal interval shall not be closer than one thousand three hundred and twenty (1,320) feet to any vertical well completed in and producing from the same formation. Vertical wells drilled to and completed in the same formation as in a horizontal well are subject to applicable drilling unit orders of the board or the other conditions of this rule that do not specifically pertain to

horizontal wells and may be drilled and produced as provided therein.

6. A temporary six hundred and forty (640) acre spacing unit, consisting of the governmental section in which the horizontal well is located, is established for the orderly development of the anticipated pool.

7. In addition to any other notice required by the statute or these rules, notice of the Application for Permit to Drill for a horizontal well shall be given by certified mail to all owners within the boundaries of the designated temporary spacing unit.

8. Horizontal wells to be located within federally supervised units are exempt from the above referenced conditions of 5, 6 and 7.

9. Exceptions to any of the above referenced conditions of 3 through 7 may be approved upon proper application pursuant to R649-3-3, Exception to Location and Siting of Wells, or R649-10, Administrative Procedures.

10. Additional horizontal wells may be approved by order of the Board after hearing brought upon by a Request for Agency Action (Petition) filed in accordance with the Board's Procedural Rules.

R649-3-3. Exception to Location and Siting of Wells.

1. The division shall have the administrative authority to grant an exception to the locating and siting requirements of R649-3-2 or an order of the board establishing oil or gas well drilling units after receipt from the operator of the proposed well of the following items:

1.1. Proper written application for the exception well location.

1.2. Written consent from all owners within a 460 foot radius of the proposed well location when such exception is to the requirements of R649-3-2, or;

1.3. Written consent from all owners of directly or diagonally offsetting drilling units when such exception is to an order of the board establishing oil or gas well drilling units.

2. If for any reason the division shall fail or refuse to approve such an exception, the board may, after notice and hearing, grant an exception.

3. The application for an exception to R649-3-2 or board drilling unit order shall state fully the reasons why such an exception is necessary or desirable and shall be accompanied by a plat showing:

3.1. The location at which an oil or gas well could be drilled in compliance with R649-3-2 or Board drilling unit order.

3.2. The location at which the applicant requests permission to drill.

3.3. The location at which oil or gas wells have been drilled or could be drilled, in accordance with R649-3-2 or board drilling unit order, directly or diagonally offsetting the proposed exception.

3.4. The names of owners of all lands within a 460 foot radius of the proposed well location when such exception is to the requirements of R649-3-2, or

3.5. The names of owners of all directly or diagonally offsetting drilling units when such exception is to an order of the board establishing oil or gas drilling units.

4. No exception shall prevent any owner from drilling an oil or gas well on adjacent lands, directly or diagonally offsetting the exception, at locations permitted by R649-3-2, or any applicable order of the board establishing oil or gas well drilling units for the pool involved.

5. Whenever an exception is granted, the board or the division may take such action as will offset any advantage that the person securing the exception may obtain over other producers by

reason of the exception location.

R649-3-4. Permitting of Wells to be Drilled, Deepened or Plugged-Back.

1. Prior to the commencement of drilling, deepening or plugging back of any well, exploratory drilling such as core holes and stratigraphic test holes, or any surface disturbance associated with such activity, the operator shall submit Form 3, Application for Permit to Drill, Deepen, or Plug Back and obtain approval. Approval shall be given by the division if it appears that the contemplated location and operations are not in violation of any rule or order of the board for drilling a well.

2. The following information shall be included as part of the complete Application for Permit to Drill, Deepen, or Plug Back.

2.1. The telephone number of the person to contact if additional information is needed.

2.2. Proper identification of the lease as state, federal, Indian, or fee.

2.3. Proper identification of the unit, if the well is located within a unit.

2.4. A plat or map, preferably on a scale of one inch equals 1,000 feet, prepared by a licensed surveyor or engineer, that shows the proposed well location. For directional wells, both surface and bottomhole locations should be marked.

2.5. A copy of the Division of Water Rights approval or the identifying number of the approval for use of water at the drilling site.

2.6. A drilling program containing the following information shall also be submitted as part of a complete APD.

2.6.1. The estimated tops of important geologic markers.

2.6.2. The estimated depths at which the top and the bottom of anticipated water, oil, gas, or other mineral-bearing formations are expected to be encountered, and the owner's or operator's plans for protecting such resources.

2.6.3. The owner's or operator's minimum specifications for pressure control equipment to be used and a schematic diagram thereof showing sizes, pressure ratings or API series, proposed testing procedures and testing frequency.

2.6.4. Any supplementary information more completely describing the drilling equipment and casing program as required by Form 3, Application for Permit to Drill, Deepen, or Plug Back.

2.6.5. The type and characteristics of the proposed circulating medium or mediums to be employed in drilling, the quantities and types of mud and weighting material to be maintained, and the monitoring equipment to be used on the mud system.

2.6.6. The anticipated type and amount of testing, logging, and coring.

2.6.7. The expected bottomhole pressure and any anticipated abnormal pressures or temperatures or potential hazards, such as hydrogen sulfide, H_2S rules are found in R649-3-12 expected to be encountered, along with contingency plans for mitigating such identified hazards.

2.6.8. Any other facets of the proposed operation that the lessee or operator desires to point out for the division's consideration of the application.

2.6.9. If an Application for Permit to Drill, Deepen, or Plug Back is for a proposed horizontal well, a horizontal well diagram clearly showing the well bore path from the surface through the terminus of the lateral shall be submitted.

2.7. Form 5, Designation of Agent or Operator shall be filed when the operator is a person other than the owner.

2.8. If located on State or Fee surface, an APD will not be approved until an Onsite Predrill

Evaluation is performed as outlined in R649-3-18.

3. Two legible copies, carbon or otherwise, of the APD filed with the appropriate federal agency may be used in lieu of the forms prescribed by the board.

4. Approval of the APD shall be valid for a period of 12 months from the date of such approval. Upon approval of an APD, a well will be assigned an API number by the division. The API number should be used to identify the permitted well in all future correspondence with the division.

5. If a change of location or drilling program is desired, an amended APD shall be filed with the division and its approval obtained. If the new location is at an authorized location in the approved drilling unit, or the change in drilling program complies with the rules for that area, the change may be approved verbally or by telegraph. Within five days after obtaining verbal or telegraphic authorization, the operator shall file a written change application with the division.

6. After a well has been completed or plugged and abandoned, it shall not be reentered without the operator first submitting a new APD and obtaining the division's approval. Approval shall be given if it appears that a bond has been furnished or waived, as required by R649-3-1, Bonding, and the contemplated work is not in violation of any rule or order of the board.

7. An operator or owner who applies for an APD in an area not subject to a special order of the board establishing drilling units, may contemporaneously or subsequently file a Request for Agency Action to establish drilling units for an area not to exceed the area reasonably projected by the operator or owner to be underlaid by the targeted reservoir.

8. An APD for a well within the area covered by a proper Request for Agency Action that has been filed by an interested person, or the division or the board on its own motion, for the establishment of drilling units or the revision of existing drilling units for the spacing of wells shall be held in abeyance by the division until such time as the matter has been noticed, fully heard and determined.

9. An exception to R649-3-4-8 shall be made and a permit shall be issued by the division if an owner or operator files a sworn statement demonstrating to the division's satisfaction that on and after the date the Request for Agency Action requesting the establishment of drilling units was filed, or the action of the division or board was taken; and

9.1. The owner or operator has the right or obligation under the terms of an existing contract to drill the requested well; or

9.2. The owner or operator has a leasehold estate or right to acquire a leasehold estate under a contract that will be terminated unless he is permitted to commence the drilling of the required well before the matter can be fully heard and determined by the board.

R649-3-5. Identification.

1. Every drilling and producible well shall be identified by a sign posted on the derrick or in a conspicuous place near the well.

2. The sign shall be of durable construction. The lettering on the sign shall be kept in a legible condition and shall be large enough to be legible under normal conditions at a distance of 25 feet.

3. The wells on each lease or property shall be numbered in nonrepetitive, logical, and distinctive sequence. Each sign shall show the number or name of the well, the name of the owner or operator, the lease name, and the location of the well by quarter section, township, and range.

R649-3-6. Drilling Operations.

1. Drilling operations shall be conducted according to the drilling program submitted on the original APD and as approved by the division. Any change of plans to the original drilling program shall be submitted to the division by using Form 9, Sundry Notices and Reports on Wells and shall receive division approval prior to implementation. A change of plans necessary because of emergency conditions may be implemented without division approval. The operator shall provide the division with verbal notice of the emergency change within 24 hours and written notice within five days.

2. An operator of a drilling well as designated in R649-2-4 shall comply with reporting requirements as follows:

2.1. The spudding in of a well shall be reported to the division within 24 hours. The report should include the well name and number, drilling contractor, rig number and type, spud date and time, the date that continuous drilling will commence, the name of the person reporting the spud, and a contact telephone number.

2.2. The operator shall file Form 6, Entity Action Form with the division within five working days of spudding in a well. The division will assign the well an entity number that will identify the well on the operator's monthly oil and gas production and disposition reports.

2.3. The operator shall notify the division 24 hours in advance of all testing to be performed on the blowout preventer equipment on a well.

2.4. The operator shall submit a monthly status report for each drilling well on Form 9, Sundry Notices and Reports on Wells. The report should include the well depth and a description of the operations conducted on the well during the month. The report shall be submitted no later than the fifth day of the following calendar month until such time as the well is completed and the well completion report is filed.

2.5. The operator shall notify the division 24 hours in advance of all casing tests performed in accordance with R649-3-13.

2.6. The operator shall report to the division all fresh water sand encountered during drilling on Form 7, Report of Water Encountered During Drilling. The report shall be filed with Form 8, Well Completion or Recompletion Report and Log.

R649-3-7. Well Control.

1. When drilling in wildcat territory, the owner or operator shall take all reasonably necessary precautions for keeping the well under control at all times and shall provide, at the time the well is started, proper high pressure fittings and equipment. All pressure control equipment shall be maintained in good working condition at all times.

2. In all proved areas, the use of blowout prevention equipment "BOPE" shall be in accordance with the established and approved practice in the area. All pressure control equipment shall be maintained in good working condition at all times.

3. Upon installation, all ram type BOPE and related equipment, including casing, shall be tested to the lesser of the full manufacturer's working pressure rating of the equipment, 70% of the minimum internal yield pressure of any casing subject to test, or one psi/ft of the last casing string depth. Annular type BOPE are to be tested in conformance with the manufacturer's published recommendations. The operator shall maintain records of such testing until the well is completed and will submit copies of such tests to the division if required.

4. In addition to the initial pressure tests, ram and annular type preventers shall be checked

for physical operation each trip. All BOPE components, with the exception of an annular type blowout preventer, shall be tested monthly to the lesser of 50% of the manufacturer's rated pressure of the BOPE, the maximum anticipated pressure to be contained at the surface, one psi/ft of the last casing string depth, or 70% of the minimum internal yield pressure of any casing subject to test.

5. If a pressure seal in the assembly is disassembled, a test of that seal shall be conducted prior to the resumption of any drilling operation. A shell test of the affected seal shall be adequate. If the affected seal is integral with the BOP stack, either pipe or blind ram, necessitating a test plug to be set in order to test the seal, the division may grant approval to proceed without testing the seal if necessary for prudent operations.

6. All tests of BOPE shall be noted on the driller's log, IADC report book, or equivalent and shall be available for examination by the director or an authorized agent during routine inspections.

7. BOPE used in possible or probable hydrogen sulfide or sour gas formations shall be suitable for use in such areas.

R649-3-8. Casing Program.

1. The method of cementing casing in the hole shall be by pump and plug method, displacement method, or other method approved by the division.

2. When drilling in wildcat territory or in any field where high pressures are probable, the conductor and surface strings of casing must be cemented throughout their lengths, unless another procedure is authorized or prescribed by the division, and all subsequent strings of casing must be securely anchored.

3. In areas where the pressures and formations to be encountered during drilling are known, sufficient surface casing shall be run to:

3.1. Reach a depth below all known or reasonably estimated, utilizable, domestic, fresh water levels.

3.2. Prevent blowouts or uncontrolled flows.

4. The casing program adopted must be planned to protect any potential oil or gas horizons penetrated during drilling from infiltration of waters from other sources and to prevent the migration of oil, gas, or water from one horizon to another.

R649-3-9. Protection of Upper Productive Strata.

1. No well shall be deepened for the purpose of producing oil or gas from a lower stratum until all upper productive strata are protected, either permanently by casing and cementing or temporarily through the use of tubing and packer, to the satisfaction of the division.

2. In any well that appears to have defective, poorly cemented, or corroded casing that will permit or may create underground waste or may contaminate underground or surface fresh water, the operator shall proceed with diligence to use the appropriate method and means to eliminate such hazard of underground waste or contamination of fresh water. If such hazard cannot be eliminated, the well shall be properly plugged and abandoned.

3. Natural gas that is encountered in substantial quantities in any section of a drilled hole above the ultimate objective shall be shut off with reasonable diligence, either by mudding, casing or other approved method, and shall be confined to its original source to the satisfaction of the division.

R649-3-10. Tolerances for Vertical Drilling.

1. Deviation from the vertical for short distances is permitted in the drilling of a well

without special approval to straighten the hole, sidetrack junk, or correct other mechanical difficulties.

2. All wells shall be drilled such that the surface location of the well and all points along the intended well bore shall be within the tolerances allowed by R649-3-2, Location and Siting of Vertical Wells and Statewide Spacing for Horizontal Wells, or the appropriate board order.

R649-3-11. Directional Drilling.

1. Except for the tolerances allowed under R649-3-10, no well may be intentionally deviated unless the operator shall first file application and obtain approval from the division.

1.1. An application for directional drilling may be approved by the division without notice and hearing when the applicant is the owner of all the oil and gas within a radius of 460 feet from all points along the intended well bore, or the applicant has obtained the written consent of the owner to the proposed directional drilling program.

1.2. An application for directional drilling may be included as part of the initial APD for a proposed well.

2. An application for directional drilling shall include the following information:

2.1. The name and address of the operator.

2.2. The lease name, well number, field name, reservoir name, and county where the proposed well is located.

2.3. A plat or sketch showing the distance from the surface location to section and lease lines, the target location within the intended producing interval, and any point along the intended well bore outside the 460 foot radius for which the consent of the owner has been obtained.

2.4. The reason for the intentional deviation.

2.5. The signature of designated agent or representative of operator.

3. Within 30 days following completion of a directionally drilled well, a complete angular deviation and directional survey of the well obtained by an approved well survey company shall be filed with the division, together with other regularly required reports.

R649-3-12. Drilling Practices for Hydrogen Sulfide H_2S Areas and Formations.

1. This rule shall apply to drilling, redrilling, deepening, or plugging back operations in areas where the formations to be penetrated are known to contain or are expected to contain H_2S in excess of 20 ppm and to areas where the presence or absence thereof is unknown.

2. A written contingency plan, providing details of actions to be taken to alert and protect operating personnel and members of the public in the event of an accidental release of H_2S gas shall be submitted to the division as part of the initial APD for a well or as a sundry notice.

3. All proposed drill site locations shall be planned to obtain the maximum safety benefits consistent with the rig configuration, terrain, prevailing winds, etc.

3.1. The drilling rig shall, where possible, be situated so that prevailing winds blow across the rig in a direction toward the reserve pit and away from escape routes.

3.2. On-site trailers shall be located to allow reasonably safe distances from both the well and the outlet of the flare line.

4. At least two cleared areas shall be designated as crew briefing or safety areas.

4.1. Both areas shall be located at least 200 feet from the well, with at least one area located generally upwind from the well.

5. Protective equipment shall be provided by the operator or its drilling contractor for

operating personnel and shall include the following:

5.1. An adequate number of positive pressure type self-contained breathing apparatus to allow all personnel normally involved on a drilling location immediate access to such equipment, with a minimum of one working apparatus available for the immediate use of each rig hand in emergencies.

5.2. Chalk boards or note pads to be used for communication when wearing protective breathing apparatus.

5.3. First aid supplies.

5.4. One resuscitator complete with medical oxygen.

5.5. A litter or stretcher.

5.6. Harnesses and lifelines.

5.7. A telephone, radio, mobile phone, or other communication device that provides emergency two-way communication from a safe area near the well location.

6. Each drill site shall have an H_2S detection and monitoring system that activates audible and visible alarms when the concentration of H_2S reaches the threshold limit of 20 ppm in air. This equipment shall have a rapid response time and be capable of sensing a minimum of ten ppm H_2S in air, with at least three sensing points, located at the shale shaker, on the derrick floor, and in the cellar. Other sensing points shall be located at other critical areas where H_2S might accumulate. Portable H_2S detection equipment capable of sensing an H_2S concentration of 20 ppm shall be available for all working personnel and shall be equipped with an audible warning signal.

7. Equipment to indicate wind direction at all times shall be installed at prominent locations. At least two wind socks or streamers shall be located at separate elevations at the well location and shall be easily visible from all areas of the location. Windsocks or streamers shall be located in illuminated areas for night operations.

8. When H_2S is encountered during drilling, well marked, highly visible warning signs shall be displayed at the rig and along all access routes to the well location.

8.1. The signs shall warn of the presence of H_2S and shall prohibit approach to the well location when red flags are displayed.

8.2. Red flags shall be displayed when H_2S is present in concentrations greater than 20 ppm in air as measured on the equipment required under R649-3-12-6.

9. Unless adequate natural ventilation is present, portable fans or ventilation equipment shall be located in work areas to disperse H_2S when it is encountered.

10. A flare system shall be utilized to safely gather and burn H_2S bearing gas.

10.1. Flare lines shall be located as far from the operating site as feasible and shall be located in a manner to compensate for wind changes.

10.2. The outlets of all flare lines shall be located at least 150 feet from the well head unless otherwise approved by the division.

11. Sufficient quantities of additives shall be maintained on location to add to the mud system to scavenge or neutralize H_2S.

R649-3-13. Casing Tests.

1. In order to determine the integrity of the casing string set in the well, the operator shall, unless otherwise requested by the division, perform a pressure test of the casing to the pressures specified under R649-3-7.4 before drilling out of any casing string, suspending drilling operations, or completing the well.

R649-3-14. Fire Hazards on the Surface.

1. All rubbish or debris that might constitute a fire hazard shall be removed to a distance of a least 100 feet from the well location, tanks, separator, or any structure. All waste oil or gas shall be burned or disposed of in a manner to avert creation of a fire hazard.

2. Any gas other than poisonous gas escaping from the well during drilling operations shall be, so far as practicable, conducted to a safe distance from the well site and burned in a suitable flare.

R649-3-15. Pollution and Surface Damage Control.

1. The operator shall take all reasonable precautions to avoid polluting lands, streams, reservoirs, natural drainage ways, and underground water.

1.1. The owner or operator shall carry on all operations and maintain the property at all times in a safe and workmanlike manner having due regard for the preservation and conservation of the property and for the health and safety of employees and people residing in close proximity to those operations.

1.2. At a minimum, the owner or operator shall:

1.2.1. Take reasonable steps to prevent and shall remove accumulations of oil or other materials deemed to be fire hazards from the vicinity of well locations, lease tanks and pits.

1.2.2. Remove from the property or store in an orderly manner, all scrap or other materials not in use.

1.2.3. Provide secure workmanlike storage for chemical containers, barrels, solvents, hydraulic fluid, and other non-exempt materials.

1.2.4. Maintain tanks in a workmanlike manner that will preclude leakage and provide for all applicable safety measures, and construct berms of sufficient height and width to contain the quantity of the largest tank at the storage facility.

1.2.4.1. The use of crude or produced water storage tanks without tops is strictly prohibited except during well testing operations.

1.2.5. Catch leaks and drips, contain spills, and cleanup promptly.

1.2.6. Waste reduction and recycling should be practiced in order to help reduce disposal volumes.

1.2.7. Produced water, tank bottoms and other miscellaneous waste should be disposed of in a manner that is in compliance with these rules and other state, federal, or local regulations or ordinances.

1.2.8. In general, good housekeeping practices should be used.

R649-3-16. Reserve Pits and Other On-site Pits.

1. Small onsite oil field pits including, but not limited to, reserve pits, emergency pits, workover and completion pits, storage pits, pipeline drip pits, and sumps shall be located and constructed in such a manner as to contain fluids and not cause pollution of waters and soils. They shall be located and constructed according to the Division guidelines for onsite pits. See Ranking Criteria for Reserve and Onsite Pit Liner Requirements, on the Oil, Gas and Mining web page.

2. Reserve pit location and construction requirements including liner requirements will be discussed at the predrill site evaluation. Special stipulations concerning the reserve pit will be included as part of the Division's approval to drill.

3. Following drilling and completion of the well the reserve pit shall be closed within one year, unless permission is granted by the Division for a longer period.

4. Pit contents shall meet the Division's Cleanup Levels (guidance document for numeric clean-up levels) or background levels prior to burial.

5. The contents may require treatment to reduce mobility and/or toxicity in order to meet cleanup levels.

6. The alternative to meeting cleanup levels would be transporting of material to an appropriate disposal facility.

R649-3-17. Inspection.

1. Inspection of wells shall be performed by the division to determine operator compliance with the rules and orders of the board.

2. The inspection shall not interfere with the mechanical operation of facilities or equipment used in drilling and production operations.

3. Inspections of operations involving a safety hazard shall not be conducted, nor shall an inspection be conducted that may cause a safety hazard.

R649-3-18. On-site Predrill Evaluation.

1. An on-site predrill evaluation of drilling operations located on state or private land shall be scheduled and conducted by the division prior to approval of an APD and no later than 30 days after receipt by the division of a complete APD.

1.1. An on-site predrill evaluation may be performed by the division prior to submittal of a complete APD at the written request of the operator.

1.2. The division, the operator, and other persons associated with the surface management or construction of the well site shall attend the predrill evaluation.

1.3. When appropriate, the operator's surveyor and archaeologist may also participate in the predrill evaluation.

1.4. When the surface of the land involved is privately owned, the operator shall include in the APD the name, address, and telephone number of the private surface owner as shown on the real property records of the county where the well is located.

1.5. The surface owner shall be invited by the division to attend the predrill evaluation.

1.6. The surface owner's inability to attend the predrill evaluation shall not delay the scheduled evaluation.

2. Special stipulations concerning surface use or justifications for well spacing exceptions may be addressed and developed at the predrill evaluations.

2.1. Special stipulations shall be incorporated as conditions of the approved APD, together with any additional conditions determined by the division to be necessary following a review of the complete application.

R649-3-19. Well Testing.

1. Each operator shall conduct a stabilized production test of at least 24 hours duration not later than 15 days following the completion or recompletion of any well for the production of oil or gas.

1.1. The results of the test shall be reported in writing to the division within 15 days after completion of the test.

1.2. Additional tests shall be made as requested by the division.

2. The division may request subsurface pressure measurements on a sufficient number of wells in any pool to provide adequate data to determine reservoir characteristics.

3. Upon written request, the division may waive or extend the time for conducting any test.

4. A gas-oil ratio "GOR" test shall be conducted not later than 15 days following the completion or recompletion of each well in a pool that contains both oil and gas.

4.1. The average daily oil production, the average daily gas production and the average GOR shall be recorded.

4.2. The results of the GOR test shall be reported in writing to the division within 15 days after completion of the test.

4.3. A GOR test of at least 24 hours duration shall satisfy the requirements of R649-3-19-1.

5. When the results of a multipoint test or other approved test for the determination of gas well potential have not been submitted to the division within 30 days after completion or recompletion of any producible gas well, the division may order this test to be made.

5.1. All data pertinent to the test shall be submitted to the division in legible, written form within 15 days after completion of the test.

5.2. The performance of a multipoint or other approved test shall satisfy the requirements of R649-3-19-1.

6. All tests of any producible gas well will be taken in accordance with the Manual of Back-Pressure Testing of Gas Wells published by the Interstate Oil and Gas Compact Commission, with necessary modifications as approved by the division.

R649-3-20. Gas Flaring or Venting.

1. Produced gas from an oil well, also known as associated gas or casinghead gas, may be flared or vented only in the following amounts:

1.1. Up to 1,800 MCF of oil well gas may be vented or flared from an individual well on a monthly basis at any time without approval.

1.2. During the period of time allowed for conducting the stabilized production test or other approved test as required by R649-3-19, the operator may vent or flare all produced oil well gas as needed for conducting the test.

1.2.1. The operator shall not vent or flare gas that is not necessary for conducting the test or beyond the time allowed for conducting the test.

1.3. During the first calendar month immediately following the time allowed for conducting the initial stabilized production test as required by R649-3-19.1, the operator may vent or flare up to 3,000 MCF of oil well gas without approval.

1.4. Unavoidable or short-term oil well gas venting or flaring may occur without approval in accordance with R649-3-20.4, 4.1, 4.2, and 4.3.

2. Produced gas from a gas well may be vented or flared only in the following amounts:

2.1. During the period of time allowed for conducting the stabilized production test, the multipoint test, or other approved test as required by R649-3-19, the operator may vent or flare all produced gas well gas as needed for conducting the test.

2.2. The operator shall not vent or flare gas which is not necessary for conducting the tests or beyond the time allowed for conducting the tests.

2.3. Unavoidable or short-term gas well gas venting or flaring may occur without approval in accordance with R649-3-20.4, 4.1, 4.2, and 4.3.

3. If an operator desires to produce a well for the purpose of testing and evaluation beyond the time allowed by R649-3-19 and vent or flare gas in excess of the aforementioned limits of gas venting or flaring, the operator shall make written request for administrative action by the division to allow gas venting or flaring during such testing and evaluation.

3.1. The operator shall provide any information pertinent to a determination of whether marketing or otherwise conserving the produced gas is economically feasible.

3.2. Upon such request and based on the justification information presented, the division may authorize gas venting or flaring at unrestricted rates for up to 30 days of testing or no more than 50 MMCF of gas vented or flared, whichever is less.

4. Once a well is completed for production and gas is being transported or marketed, the operator is allowed unavoidable or short-term gas venting or flaring without approval only in the following cases:

4.1. Gas may be vented or released from oil storage tanks or other low pressure oil production vessels unless the division determines that the recovery of such vapors is warranted.

4.2. Gas may be vented or flared from a well during periods of line failures, equipment malfunctions, blowouts, fires, or other emergencies if shutting in or restricting production from the well would cause waste or create adverse impact on the well or producing reservoir.

4.3. The operator shall provide immediate notification to the division in all such cases in accordance with R649-3-32, Reporting of Undesirable Events.

4.4. Upon notification, the division shall determine if gas venting or flaring is justified and specify conditions of approval if necessary.

4.5. Gas may be vented or flared from a well during periods of well purging or evaluation tests not exceeding a period of 24 hours or a maximum of 144 hours per month.

4.6. The operator shall provide subsequent written notification to the division in all such cases.

5. If an operator wishes to flare or vent a greater amount of produced gas than allowed by this rule, the operator must submit a Request for Agency Action to the board to be considered as a formal board docket item. The request should include the following items:

5.1. A statement justifying the need to vent or flare more than the allowable amount.

5.2. A description of production test results.

5.3. A chemical analysis of the produced gas.

5.4. The estimated oil and gas reserves.

5.5. A description of the reinjection potential or other conservation oriented alternative for disposition of the produced gas.

5.6. A description of the amount of gas used in lease operations.

5.7. An economic evaluation supporting the operator's determination that conservation of the gas is not economically viable. The evaluation should utilize any engineering or geologic data available and should consider total well production, not just gas production, in presenting the profitability and costs for beneficial use of the gas.

5.8. Any other information pertinent to a determination of whether marketing or otherwise conserving the produced gas is economically feasible.

6. Upon review of the request for approval to vent or flare gas from a well, the board may elect to:

6.1. Allow the requested venting or flaring of gas.

6.2. Restrict production until the gas is marketed or otherwise beneficially utilized.

6.3. Take any other action the board deems appropriate in the circumstances.

7. When gas venting or flaring from a well has not been approved by the division or the magnitude and duration of venting or flaring exceeds the amounts specified in these rules or any division or board approval, then the board may issue a formal order to alleviate the noncompliance and/or require the operator to appear before the board to provide justification of such venting or flaring. The division shall notify the appropriate governmental taxing and royalty agencies of any unapproved venting or flaring and of any subsequent board action.

8. No extraction plant processing gas in Utah shall flare or vent such gas unless such venting or flaring is made necessary by mechanical difficulty of a very limited temporary nature or unless the gas vented or flared is of no commercial value.

9. In the event of a more prolonged mechanical difficulty or in the event of plant shut-downs or curtailment because of scheduled or nonscheduled maintenance or testing operations or other reasons, or in the event a plant is unable to accept, process, and market all of the casinghead gas produced by wells connected to its system, the plant operator shall notify the division as soon as possible of the full details of such shut-down or curtailment, following which the division shall take such action as is necessary.

R649-3-21. Well Completion and Filing of Well Logs.

1. For the purposes of this rule only, a well shall be determined to be completed when the well has been adequately worked to be capable of producing oil or gas or when well testing as required by the division is concluded.

2. Within 30 days after the completion of any well drilled or redrilled for the production of oil or gas, Form 8, Well Completion or Recompletion Report and Log, shall be filed with the division, together with a copy of the electric and radioactivity logs, if run.

3. In addition, one copy of all drillstem test reports, formation water analyses, porosity, permeability or fluid saturation determinations, core analyses and lithologic logs or sample descriptions if compiled, shall be filed with the division.

4. As prescribed under R649-2-12, Test and Surveys, the directional, deviation and/or measurement-while-drilling (MWD) survey for a horizontal well shall be filed within 30 days of being run. Such directional, deviation and/or MWD survey specifically related to well location or well bore path shall not be held confidential. Other MWD survey data that presents well log, or other geological, geophysical, or engineering information may be held confidential as provided in R649-2-11, Confidentiality of Well Log Information.

R649-3-22. Completion Into Two or More Pools.

1. The completion of a single well into more than one pool may be permitted by submitting an application to the division and securing its approval.

1.1. The application shall be submitted on Form 9, Sundry Notice and Report and shall be accompanied by an exhibit showing the location of all wells on contiguous oil and gas leases or drilling units overlying the pool.

1.2. The application shall set forth all material facts involved and the manner and method of completion proposed.

2. If oil or gas is to be produced from two or more pools open to each other through the same string of casing so that commingling will take place, the application must also be accompanied by a description of the method used to account for and to allocate production from each pool so

commingled.

3. The application shall include an affidavit showing that the operator has provided a copy of the application to the owners of all contiguous oil and gas leases or drilling units overlying the pool.

3.1. If none of these owners file a written objection to the application within 15 days after the date the application is filed with the division, the application may be considered and approved by the division without a hearing.

3.2. If a written objection is filed that cannot be resolved administratively, the application may be approved only after notice and hearing by the board.

R649-3-23. Well Workover and Recompletion.

1. Requests for approval of a notice of intention to perform a workover or recompletion shall be filed by an operator with the division on Form 9, Sundry Notices and Reports on Wells, or if the operation includes substantial redrilling, deepening, or plugging back of an existing well, on Form 3, Application for Permit to Drill, Deepen or Plug Back.

2. The division shall review the proposed workover or recompletion for conformance with the Oil and Gas Conservation General Rules and advise the operator of its decision and any necessary conditions of approval.

3. Recompletions shall be conducted in a manner to protect the original completion interval(s) and any other known productive intervals.

4. The same tests and reports are required for any well recompletion as are required following an original well completion.

5. The applicant shall file a subsequent report of workover on Form 9, Sundry Notices and Reports, or a subsequent report of recompletion on Form 8, Well Completion or Recompletion Report and Log, within 30 days after completing the workover or recompletion operations.

6. For the purpose of qualifying for a tax credit under Utah Code Ann. Section 59-5-102(6), the operator on his behalf and on behalf of each working interest owner must file a request with the division on Form 15, Designation of Workover or Recompletion. The request must be filed within 90 days after completing the workover or recompletion operations.

7. A workover which may qualify under Utah Code Ann. Section 59-5-102(6) shall be downhole operations conducted to maintain, restore or increase the producibility or serviceability of a well in the geologic interval(s) that the well is currently completed in, but shall not include:

7.1. Routine maintenance operations such as pump changes, artificial lift equipment or tubing repair, or other operations that do not involve changes to the wellbore configuration or the geologic interval(s) that it penetrates and that do not stimulate production beyond that which would be anticipated as the result of routine maintenance.

7.2. Operations to convert any well for use as a disposal well or other use not associated with enhancing the recovery of hydrocarbons.

7.3. Operations to convert a well to a Class II injection well for enhanced recovery purposes may qualify if the secondary or enhanced recovery project has received the necessary board approval.

8. A recompletion that may qualify under Utah Code Ann. Section 59-5-102(6) shall be downhole operations conducted to reestablish producibility or serviceability of a well in any geologic interval(s).

9. The division shall review the request for designation of a workover or recompletion and

advise the operator and the State Tax Commission of its decision to approve or deny the operations for the purposes of Utah Code Ann. Section 59-5-102(6).

10. The division is responsible for approval of workover and recompletion operations that qualify for the tax credit.

10.1. If the operator disagrees with the decision of the division, the decision may be appealed to the board.

10.2. Appeals of all other workover and recompletion tax credit decisions should be made to the State Tax Commission.

R649-3-24. Plugging and Abandonment of Wells.

1. Before operations are commenced to plug and abandon any well the owner or operator shall submit a notice of intent to plug and abandon to the division for its approval.

1.1. The notice shall be submitted on Form DOGM-9, Sundry Notice and Report on Wells.

1.2. A legible copy of a similar report and form filed with the appropriate federal agency may be used in lieu of the forms prescribed by the board.

1.3. In cases of emergency the operator may obtain verbal or telegraphic approval to plug and abandon.

1.4. Within five days after receiving verbal or telegraphic approval, the operator shall submit a written notice of intent to plug and abandon on Form 9.

2. Both verbal and written notice of intent to plug and abandon a well shall contain the following information:

2.1. The location of the well described by section, township, range, and county.

2.2. The status of the well, whether drilling, producing, injecting or inactive.

2.3. A description of the well bore configuration indicating depth, casing strings, cement tops if known, and hole size.

2.4. The tops of known geologic markers or formations.

2.5. The plugging program approved by the appropriate federal agency if the well is located on federal or Indian land.

2.6. An indication of when plugging operations will commence.

3. A dry or abandoned well must be plugged so that oil, gas, water, or other substance will not migrate through the well bore from one formation to another.

3.1. Unless a different method and procedure is approved by the division, the method and procedure for plugging the well shall be as follows:

3.2. The bottom of the hole shall be filled to, or a bridge shall be placed at, the top of each producing formation open to the well bore, and a cement plug not less than 100 feet in length shall be placed immediately above each producing formation open to the well bore.

3.3. A solid cement plug shall be placed from 50 feet below a fresh water zone to 50 feet above the fresh water zone, or a 100 foot cement plug shall be centered across the base of the fresh water zone and a 100 foot plug shall be centered across the top of the fresh water zone.

3.4. At least ten sacks of cement shall be placed at the surface in a manner completely plugging the entire hole. If more than one string of casing remains at the surface, all annuli shall be so cemented.

3.5. The interval between plugs shall be filled with noncorrosive fluid of adequate density to prevent migration of formation water into or through the well bore.

3.6. The hole shall be plugged up to the base of the surface string with noncorrosive fluid of

adequate density to prevent migration of formation water into or through the well bore, at which point a plug of not less than 50 feet of cement shall be placed.

3.7. Any perforated interval shall be plugged with cement and any open hole porosity zone shall be adequately isolated to prevent migration of fluids.

3.8. A cement plug not less than 100 feet in length shall be centered across the casing stub if any casing is cut and pulled, a second plug of the same length shall be centered across the casing shoe of the next larger casing.

4. An alternative method of plugging, required under a federal or Indian lease, will be accepted by the division.

5. Within 30 days after the plugging of any well has been accomplished, the owner or operator shall file a subsequent report of plugging with the division. The report shall give a detailed account of the following items:

5.1. The manner in which the plugging work was carried out, including the nature and quantities of materials used in plugging and the location, nature, and extent by depths, of the plugs.

5.2. Records of any tests or measurements made.

5.3. The amount, size, and location, by depths of any casing left in the well.

5.4. A statement of the volume of mud fluid used.

5.5. A complete report of the method used and the results obtained, if an attempt was made to part any casing.

6. Upon application to and approval by the division, and following assumption of liability for the well by the surface owner, a well or other exploratory hole that may safely be used as a fresh water well need not be filled above the required sealing plugs set below the fresh water formation. The owner of the surface of the land affected may assume liability for any well capable of conversion to a water well by sending a letter assuming such liability to the division and by filing an application with and obtaining approval for appropriation of underground water from the Division of Water Rights.

7. Unless otherwise approved by the division, all abandoned wells shall be marked with a permanent monument showing the well number, location, and name of the lease. The monument shall consist of a portion of pipe not less than four inches in diameter and not less than ten feet in length, of which four feet shall be above the ground level and the remainder shall be securely embedded in cement. The top of the pipe must be permanently sealed.

8. If any casing is to be pulled after a well has been abandoned, a notice of intent to pull casing must be filed with the division and its approval obtained before the work is commenced.

8.1. The notice shall include full details of the contemplated work. If a log of the well has not already been filed with the division, the notice shall be accompanied by a copy of the log showing all casing seats as well as all water strata and oil and gas shows.

8.2. Where the well has been abandoned and liability has been terminated with respect to the bond previously furnished under R649-3-1, a $10,000 plugging bond shall be filed with the division by the applicant.

R649-3-25. Underground Disposal of Drilling Fluids.

1. Operators shall be permitted to inject and dispose of reserve pit drilling fluids downhole in a well upon submitting an application for such operations to the division and obtaining its approval. Injection of reserve pit fluids shall be considered by the division on a case-by-case basis.

2. Each proposed injection procedure will be reviewed by the division for conformance to

the requirements and standards for permitting disposal wells under R649-5-2 to assure protection of fresh-water resources.

3. The subsurface disposal interval shall be verified by temperature log, or suitable alternative, during the disposal operation.

4. The division shall designate other conditions for disposal, as necessary, in order to ensure safe, efficient fluid disposal.

R649-3-26. Seismic Exploration.

1. Form 1, Application for Permit to Conduct Seismic Exploration shall be submitted to the division by the seismic contractor at least seven days prior to commencing any type of seismic exploration operations. In cases of emergency, approval may be obtained either verbally or by telegraphic communication.

1.1. Changes of plans or line locations may be implemented in an emergency situation without division approval.

1.2. Within five days after the change is performed, the seismic contractor shall submit written notice of the change to the division.

1.3. The permit may be revoked at any time by the division for failure to comply with the rules and orders of the board.

1.4. Any request to deviate from the general plugging and operations procedures of these rules shall be included on the permit application.

1.5. The name, address, and telephone number of the seismic contractor's local contact shall be submitted to the division as soon as determined if not available when the permit application is submitted.

1.6. After review of the application for a seismic permit, the division may require written permission of the owner of the surface of the affected land if it is determined that the seismic operation may significantly impact any building, pipeline, water well, flowing spring, or other cultural or natural feature in the area.

1.7. The permit will be in effect for six months from the date of approval. The permit may be extended upon application to and approval by the division.

2. Bonding shall not be required for seismic exploration requiring the drilling of shot holes.

3. Seismic contractors shall give the division at least 24 hours advance notice of the plugging of seismic holes. The notice shall include the date and time the plugging activities are expected to commence, the name and address of the seismic contractor responsible for the holes, and, if different, the name and address of the hole plugging company.

4. Unless the seismic contractor can prove to the satisfaction of the division that another method will provide adequate protection to ground water resources and other man-made or natural features and will provide long-term land stability, the following procedures shall be required for the conduct of seismic operations and hole plugging:

4.1. Seismic contractors shall take reasonable precautions to avoid conducting shot hole operations closer than 1,320 feet to any building, pipeline, water well, flowing spring, or other cultural/natural feature, e.g., a historical monument, marker, or structure, that may be adversely affected by the seismic operations.

4.2. When nonartesian water is encountered while drilling seismic shot holes, the holes shall be filled from the bottom up with a high grade bentonite/water slurry mixture.

4.3. The slurry shall have a density that is at least four percent greater than the density of

fresh water and shall have a marsh funnel viscosity of at least 60 seconds per quart.

4.4. The density and viscosity of the slurry are to be measured prior to adding cuttings. Cuttings not added to the slurry are to be disposed of in accordance with R649-3-26-4.6.

4.5. Upon approval by the division, any other suitable plugging material commonly used in the industry may be substituted for the bentonite/water slurry as long as the physical characteristics of the substitute plugging material are at least comparable to those of the bentonite/water slurry.

4.6. The hole shall be filled with the substitute plugging material from the bottom up to a depth of three feet below ground level.

4.7. A nonmetallic permaplug shall be set at a depth of three feet. The remaining hole shall be filled and tamped to the surface with cuttings and native soil.

4.8. The permaplug shall be imprinted with an approved identification number or mark.

4.9. When drilling with air only, and in completely dry holes, plugging may be accomplished by returning the cuttings to the holes, tamping the returned cuttings to the depth of three feet below ground level, and setting the permaplug topped with more cuttings and soil. A small mound shall be left over the hole for settling allowance.

4.10. If artesian flow, water flowing at the surface, is encountered in the drilling of any seismic hole, cement shall be used to seal off the water flow to prevent cross-flow, erosion, or contamination of fresh water supplies.

4.11. Unless severe weather conditions prevent access, the holes shall be cemented immediately.

4.12. Approval may be granted to seismic operator to plug a flowing hole in another manner, if it is proved to this division that the alternate method will provide adequate protection to ground water resources and provide long term land stability.

4.13. The owner of the surface of the land affected may assume liability for a seismic hole capable of conversion to a water well by sending a letter assuming such liability to the division and by filing an application with and obtaining approval for appropriation of underground water from the Division of Water Rights.

4.14. Shotholes shall be properly plugged and abandoned as soon as practical after the shot has been fired.

4.15. No shothole shall be left unplugged for more than 30 days without approval of the division.

4.16. Until properly plugged, shotholes shall be covered with a tin hat or other similar cover.

4.17. The hats shall be imprinted with the seismic contractor's name or initials.

4.18. Any slurry, drilling fluids, or cuttings that are deposited on the surface around the seismic hole shall be raked or otherwise spread out to a height of not more than one inch above the surface, so that the growth of the natural grasses or foliage will not be impaired.

4.19. Restoration plans required by the Mined Land Reclamation Act, Chapter 8 of Title 40, or by any other surface management agency will be accepted by the division.

4.20. The surface area around each seismic shothole shall be reclaimed and reseeded to its original condition insofar as such restoration is practical and is required by the surface management agency.

4.21. All flagging, stakes, cables, cement, or mud sacks shall be removed from the drill site and disposed of in an acceptable manner.

5. Upon application to the division, approval may be obtained for preplugging of shotholes using coarse bentonite material or a suitable alternative used in the industry. Preplugging of holes in

this manner shall be performed according to the following procedures:

5.1. A sales receipt indicating proof of purchase of an adequate amount of coarse bentonite to properly plug all shotholes shall be submitted to the division upon request.

5.2. For shotholes drilled with air that are completely dry, the seismic contractor shall have the option of preplugging with the coarse bentonite material or of using an alternate plugging material under R649-3-26-4.3.

5.3. For conventionally drilled, wet holes, enough approved material shall be used to cover the initial water level, i.e., the depth of the initial water level in the hole prior to adding coarse bentonite material shall be equal to the final plug depth.

5.4. An additional ten feet of approved material shall be placed above this depth and hole cuttings shall be used to fill the remainder of the hole to a depth of three feet below ground level.

5.5. A nonmetallic plug imprinted with an approved identification number or mark shall be installed at this depth.

5.6. The remaining three feet of hole shall be filled and tamped to the surface with cuttings and native soil.

5.7. The remaining cuttings shall be raked or spread to a height not to exceed one inch above ground level.

5.8. When using heliportable drills and insufficient cuttings are available, the hole shall be preplugged with bentonite plugging material or an approved alternate material to a depth of three feet below ground level.

5.9. Installation of a nonmetallic plug and filling the remainder of the hole shall be performed as required by R649-3-26-5.3.

5.10. The coarse bentonite plugging material shall have the following specifications - chemically unaltered sodium bentonite, coarse ground, three quarter inch maximum size, not more than 19% moisture content and not more than 15% inert solids by volume.

6. Form 2, Seismic Exploration Completion Report shall be submitted to the Division within 60 days after completion of each seismic exploration project. The report shall include: Certification by the seismic contractor that all shot holes have been plugged as prescribed by the division.

R649-3-27. Multiple Mineral Development.

1. Drilling operations conducted in areas designated by the board for multiple mineral development shall comply with all rules or orders of the board for drilling, casing, cementing, and plugging except as the general rules or orders may be modified by this rule.

2. It is the policy of the division to promote the development of all mineral resources on land under its jurisdiction. Consistent with that policy, operators engaged in oil and gas operations on lands on which operators are exploring for and developing mineral resources other than oil and gas may enter into a cooperative agreement with these other operators with respect to multiple mineral development. The agreement shall define:

2.1. The extent and limits of liability when one operator, either intentionally or unintentionally, interferes with or damages the deposits of another.

2.2. The coordination of access to and development of the area.

2.3. Mitigation of surface impact including but not limited to issues pertaining to relocation of natural gas pipeline gathering and distribution systems and other surface facilities occasioned by placement of a spent shale pile; phased or coordinated surface occupancy so as to allow each operator to enjoy his respective mineral estate with the least disruption of operations and damage to

the oil and gas deposits, either directly or indirectly, through waste; and limitation of oil and gas operations in areas of concentrated surface oil shale facilities.

2.4. Mitigation of subsurface impact including but not limited to issues pertaining to the interface in the underground environment of oil shale mining operations with other mineral operations.

2.5. The extent of exchange of geological, engineering, and production data.

2.6. Other cooperative efforts consistent with multiple mineral development under the rules and orders of the board pertaining to oil and gas operations, oil shale operations, and mined land reclamation.

3. The division, together with the Division of Forestry, Fire and State Lands, and School and Institutional Trust Lands Administration shall be signatory to the agreement, where applicable.

4. In the event the operators cannot agree on cooperative development of their respective mineral deposits, or having once entered into a cooperative agreement subsequently disagree on the application of the terms and provisions thereof, any operator whose oil and gas or mining operation or deposit may be adversely affected or damaged by the operations of another operator may apply to the board for, or the board may on its own motion enter an order, after notice and hearing, delineating the respective rights and obligations of all operators with respect to development of all minerals concerned.

5. After notice and hearing the board may modify its order to more effectively carry out the policies of multiple mineral development.

R649-3-28. Designated Potash Areas.

1. In any area designated as a potash area, either by the board, or an appropriate state or federal government agency, all wells shall be drilled, cased, cemented, and plugged in accordance with the rules and orders of the board. The following minimum requirements and definitions shall also apply to the drilling, logging, casing, and plugging operations within the Salt Section to protect against migration of oil, gas, or water into or within any formation or zone containing potash. As used in this rule, Salt Section shall mean the Paradox Salt Section of Pennsylvanian Age.

2. Any drilling media used through the Salt Section shall be such that sodium chloride is not soluble in the media at normal temperatures.

3. Gamma ray-neutron, gamma ray-sonic or other appropriate logs shall be run promptly through the Salt Section. One field copy of the log through the Salt Section shall be submitted to the division within ten days, or upon the request of the division, whichever is the earlier.

4. A directional survey shall be run from a point at least 20 feet below the Salt Section to the surface. The survey shall be filed with the division prior to completion or plugging and abandonment of the well.

5. In addition to the requirements of the R649-3-8, any casing set into or through the Salt Section shall be cemented solidly through the Salt Section above the casing shoe.

6. Any cement used in setting casing or in plugging that comes in contact with the Salt Section shall be of such chemical composition as to avoid dissolution of the Salt Section and to provide weight, strength, and physical properties sufficient to protect uphole formations and prevent blowouts or uncontrolled flows.

7. If a well is dry, cement plugs at least 200 feet in length shall be placed across the top and the base of the Salt Section, across any oil, gas or water show, and across any potash zone.

7.1. Plugs shall not be required inside a properly cemented casing string. The division shall

approve the location of the plugs after examining the appropriate logs, drilling and testing records for the well.

7.2. No well shall be temporarily abandoned with open hole in the Salt Section.

8. The division may inspect the drilling operations at all times, including any mining operations that may affect any drilling or producing well bores. A potash owner, if contributing by agreement to the logging and directional survey costs of a well, may inspect the well for compliance with this rule.

9. Before commencing drilling operations for oil or gas on any land within designated potash area, the operator shall furnish by registered mail, a copy of the APD, together with the plat or map required under R649-3-4, to all potash owners and lessees whose interests are within a radius of 2,640 feet of the proposed well.

10.After proper notice and hearing, the board may modify this rule for a particular well or area by requiring that greater or lesser precautions be taken to prevent the escape of oil, gas, or water from one stratum into another. The board may also expand or contract from the designated potash areas.

R649-3-29. Workable Coal Beds.

1. Prior to commencing drilling operations for oil and gas on any lands where there are mine workings, the operator shall furnish a copy of the APD, a plat or map as required under R649-3-4, and a designation of the proposed angle and direction of the well, if the well is to be deviated substantially from a vertical course, to all coal owners and lessees whose interests are within a radius of 5,280 feet of the proposed well.

2. A well penetrating one or more workable coal beds or mine workings shall be drilled to a depth and shall be of a size, to permit the placing of casing in the hole at the points and in the manner necessary to exclude all oil, gas or gas pressure from the coal bed, other than oil, gas or gas pressure originating in the coal bed.

3. Unless otherwise authorized by the division, the casing run through a coal bed shall be seated at least 50 feet into the closest impervious formation below the coal bed. The casing shall be cemented solidly through the coal bed to a height at least 50 feet into the closest impervious formation above the coal bed.

4. A directional survey or a cement bond log shall be performed and furnished to the division upon written request by the division.

5. Upon penetrating a coal bed the operator shall notify the division, in writing, before completing or plugging and abandoning the well.

R649-3-30. Underground Mining Operations.

1. Prior to commencing drilling operations for oil and gas on any land where there are known or suspected underground mining operations, solution mining operations or surface mining operations, including solar evaporation ponds, the operator shall include in the APD or in a separate cover letter, any information known to the operator concerning the name and address of the owner or operator of the mining workings.

2. The division may, with the concurrence of the operator, change the surface location of the proposed well if there appears to be any possibility of interference between the proposed well bore and the mine workings.

R649-3-31. Designated Oil Shale Areas.

1. Designated oil shale areas are subject to the general drilling, plugging and other performance standards described in this section, except where the board has adopted, by order, specific standards for individual oil shale areas. As of June 8, 2001, the board has adopted specific standards for individual oil shale areas by board orders in Cause Nos. 190-5(b), 190-3, and 190-13. The board may adopt specific standards in other areas, or modify the above orders, in the future.

2. Lands may be designated as an oil shale area by the board, either upon its own motion, or upon the petition of an interested person following notice and hearing.

3. As used in this rule, oil shale section means the sequence of strata containing oil shale beds, including any interbedded strata not containing oil shale, consisting of the Parachute Creek Member of the Green River Formation of Tertiary Age, defined as the stratigraphic equivalent of the interval between 1,428 feet and 2,755 feet below the Kelly Bushing on the induction-electrical log of the Ute Trail No. 10 API No. 43-047-15382 well drilled by Dekalb Agricultural Association, Inc. and located in the NE 1/4 of Section 34, Township 9 South, Range 21 East, S.L.M., Uintah County, Utah. The Mahogany Zone is defined as the stratigraphic equivalent of the interval between 2,230 feet and 2,360 feet below the Kelly Bushing on the induction-electrical log of the well cited above.

4. For purposes of identifying the oil shale intervals, an appropriate electrical log shall be run through the oil shale section. One field copy of the log through the oil shale section shall be made available to the division pursuant to R649-3-23 or upon written request by the division.

5. On all wells that are intentionally deviated from the vertical within the oil shale section, pursuant to the provisions of R649-3-10 and R649-3-11, a directional survey shall be run from a point at least 20 feet below the oil shale section to the surface and shall thereafter be filed with the division within 20 days after reaching total depth.

6.Any oil shale lessee or operator whose oil shale mine workings reach a distance of 2,640 feet from a producing well or any oil and gas lessee or operator whose producing well is approached by oil shale mine workings within a distance of 2,640 feet shall request agency action with the board. The board may promulgate an order after notice and hearing with respect to the running of a directional survey through the oil shale section, the cost and potential resource loss liability and responsibility as to the oil and gas operator and the oil shale lessee or operator and any other issues regarding multiple mineral development.

7. The directional survey shall be the confidential property of the parties paying for the survey and shall be kept confidential until released by said parties or the division.

8. In addition to the requirements pertaining to the cementing of casing contained in the R649-3-8, any casing set into or through the oil shale section shall be cemented over the entire oil shale section.

9. If a well is dry, junked or abandoned, a cement plug shall be placed across that portion of the oil shale section extending 200 feet above and 200 feet below the longitudinal center of the Mahogany Zone. The cement plug shall not be required inside a casing cemented in accordance with R649-3-31-8. When the casing is cemented, cement plugs 200 feet in length shall be centered across the top and across the base of the Parachute Creek Member of the Green River Formation.

10. In the event the casing is not cemented in accordance with R649-3-31-8, the division shall approve the method and procedure to prevent the migration of oil, gas, and other substances through the wellbore from one formation to another.

11. The division shall approve the adequacy and location of the cement plugs after examining the appropriate logs and drilling and testing records for the well, to ensure that the oil

shale section is adequately protected.

12. Upon written request of the owner or operator under R649-8-6, the division shall keep all well logs confidential. The division may inspect the drilling operations at all times, including any mining operations that may affect drilling or producing well bores.

13. Before commencing drilling operations for oil or gas on any land within a designated oil shale area, the operator shall furnish a copy of the APD, together with a plat or map as directed under R649-3-4, to all oil shale owners or their lessees whose interests are within a radius of 2,640 feet of the proposed well. The operator shall furnish a notice of intention to plug and abandon any well in the oil shale area, as required under R649-3-24-1, to the owners or their lessees prior to commencement of plugging operations.

14. The operator shall use generally accepted techniques for vertical or directional drilling as defined under R649-3-10 and R649-3-11 to maintain the well bore within an intact core of a mine pillar. Within 20 days of reaching the total depth or before completion of the well, whichever is the earlier, a directional survey shall be run as prescribed by this rule.

R649-3-32. Reporting of Undesirable Events.

1. The division shall be notified of all fires, leaks, breaks, spills, blowouts, and other undesirable events occurring at any oil or gas drilling, producing, or transportation facility, or at any injection or disposal facility.

2. Immediate notification shall be required for all major undesirable events as outlined in R649-3-32-5.

2.1. Immediate notification shall mean a verbal report submitted to the division as soon as practical but within a maximum of 24 hours after discovery of an undesirable event.

2.2. A complete written report of the incident shall also be submitted to the division within five days following the conclusion of an undesirable event.

2.3. The requirements for written reports are specified in R649-3-32-4.

3. Subsequent notification shall be required for all minor undesirable events as outlined in R649-3-32-6.

3.1. Subsequent notification shall mean a complete written report of the incident submitted to the division within five days following the conclusion of an undesirable event.

3.2. The requirements for written reports are specified in R649-3-32-4.

4. Complete written reports of undesirable events may be submitted on Form 9, Sundry Notice and Report on Wells. The report shall include:

4.1. The date and time of occurrence and, if immediate notification was required, the date and time the occurrence was reported to the Division.

4.2. The location where the incident occurred described by section, township, range, and county.

4.3. The specific nature and cause of the incident.

4.4. A description of the resultant damage.

4.5. The action taken, the length of time required for control or containment of the incident, and the length of time required for subsequent cleanup.

4.6. An estimate of the volumes discharged and the volumes not recovered.

4.7. The cause of death if any fatal injuries occurred.

5. Major undesirable events include the following:

5.1. Leaks, breaks or spills of oil, salt water or oil field wastes that result in the discharge of

more than 100 barrels of liquid, that are not fully contained on location by a wall, berm, or dike.

5.2. Equipment failures or other accidents that result in the flaring, venting, or wasting of more than 500 Mcf of gas.

5.3. Any fire that consumes the volumes of liquid or gas specified in R649-3-32-5.1 and R649-3-32-5.2.

5.4. Any spill, venting, or fire, regardless of the volume involved, that occurs in a sensitive area stipulated on the approval notice of the initial APD for a well, e.g., parks, recreation sites, wildlife refuges, lakes, reservoirs, streams, urban or suburban areas.

5.5. Each accident that involves a fatal injury.

5.6. Each blowout, loss of control of a well.

6. Minor undesirable events include the following:

6.1. Leaks, breaks or spills or oil, salt water, or oil field wastes that result in the discharge of more than ten barrels of liquid and are not considered major events in R649-3-32-5.

6.2 Equipment failures or other accidents that result in the flaring, venting or wasting of more than 50 Mcf of gas and are not considered major events in R649-3-32-5.

6.3. Any fire that consumes the volumes of liquid or specified in R649-3-32-6.1 and R649-3-32-6.2.

6.4. Each accident involving a major or life-threatening injury.

R649-3-33. Drilling Procedures in the Great Salt Lake.

1. For all drilling activities proposed within the Great Salt Lake, the APD required by R649-3-4 shall be filed at least 30 days prior to the date on which the operator intends to commence operations. As part of the APD, the operator shall include:

1.1. The name of the drilling contractor and the number and type of rig to be used.

1.2. An illustration of the boundaries of all state or federal parks, wildlife refuges, or waterfowl management areas within one mile of the proposed well location.

1.3. An illustration of the locations of all evaporation pits, producing wells, structures, buildings, and platforms within one mile of the proposed well location.

1.4.An oil spill emergency contingency plan.

2. Unless permitted by the board after notice and hearing, no well shall be drilled that has a surface location:

2.1. Within 1,320 feet from an evaporation pit without the consent of the operator of such pit.

2.2. Within one mile from the boundary of a state or federal park, wildlife refuge, or waterfowl management area without the consent of the appropriate state or federal regulatory agency.

2.3. Within three miles of Gunnison Island during the Pelican nesting season (March 15 through September 30) or within one mile from said island at any other time.

2.4. Within any area south of the Salt Lake Base Meridian Line.

2.5. Within any area north of Township 10 North.

2.6. Within one mile inside of what would be the water's edge if the water level of the Great Salt Lake were at the elevation of 4,193.3 feet above sea level.

3. Well casing and cementing shall be subject to the following special requirements for the purpose of this rule, the several casing strings in order of normal installation are drive or structural casing, conductor casing, surface casing, intermediate casing, and production casing. All depths

refer to true vertical depth:

3.1. The drive or structural casing shall be set by drilling, driving or jetting to a minimum depth of 50 feet below the floor of the lake bed or to such greater depth required to support unconsolidated deposits and to provide hole stability for initial drilling operations. If drilled in, the drilling fluid shall be a type that will not pollute the lake; in addition, a quantity of cement sufficient to fill the annular space back to the lake floor with returns circulated, must be used.

3.2. The conductor casing shall be set at a minimum depth of 200 feet below the floor of the lake, and shall be cemented with a quantity sufficient to fill the annular space back to the lake surface with returns circulated.

3.3. The surface casing shall be set at a minimum depth of 500 feet if the proposed depth of the well is less than 7,000 feet; or 1,000 feet if the proposed depth is over 7,000 feet but less than 11,000 feet; or 1,500 feet if the depth is 11,000 feet. The casing shall be cemented with a quantity sufficient to fill the annular space back to the lake surface with returns circulated, and the bottom of the casing shall be in competent rock.

3.4. The intermediate and production casing shall be set at any time when drilling below the surface casing and hole conditions justify setting casing. This casing will be cemented in such a manner that all hydrocarbons, water aquifers, lost-circulation or zones of significant porosity and permeability, significant beds containing priority minerals, and abnormal pressure intervals are covered or isolated.

3.5. Prior to drilling the plug after cementing, all casing strings except the drive or structural casing, shall be pressure tested. This test shall not exceed the rated working pressure of the casing. If the pressure declines more than ten percent in 30 minutes, or if there are other indications of a leak, corrective measures must be taken until a satisfactory test is obtained. All casing pressure tests shall be recorded on the driller's log.

4. Blowout preventers and related well control equipment shall be installed, and tested in a manner necessary to prevent blowouts and shall be subject to the following special conditions:

4.1. Prior to drilling below the surface casing, blowout prevention equipment shall be installed and maintained ready for use until drilling operations are completed.

4.2. An inside blowout preventer assembly and a full opening string safety valve in the open position shall be maintained on the rig floor at all times while drilling operations are being conducted.

4.2.1. Valves shall be maintained on the rig floor to fit all pipe in the drill string.

4.2.2. A top kelly cock shall be installed below the swivel and another at the bottom of the kelly of such design that it can be run through the blowout preventers.

4.3. Before drilling below the surface casing the blowout prevention equipment shall include a minimum of:

4.3.1. Three remotely and manually controlled, hydraulically operated blowout preventers with a rated working pressure that exceeds the maximum anticipated surface pressure, including one equipped with pipe rams, one with blind rams and one hydril type.

4.3.2. A drilling spool with side outlets, if side outlets are not provided in the blowout preventer body.

4.3.3. A choke manifold.

4.3.4. A kill line.

4.3.5. A fill-up line.

4.4. Ram-type blowout preventers and related control equipment shall be tested to the rated

working pressure of the stack assembly or to the working pressure of the casing, whichever is the lesser, at the following times:

4.4.1. When installed.

4.4.2. Before drilling out after each string of casing is set.

4.4.3. Not less than once each week while drilling.

4.4.4. Following repairs that require disconnecting a pressure seal in the assembly.

4.5. The hydril-type blowout preventer shall be tested to 70 percent of the pressure testing requirements of ram-type blowout preventers. The hydril-type blowout preventer shall be actuated on the drill pipe once each week.

4.6. Accumulators or accumulators and pumps shall maintain a reserve capacity at all times to provide for repeated operation of hydraulic preventers.

4.7. A blowout prevention drill shall be conducted weekly for each drilling crew to insure that all equipment is operational and that crews are properly trained to carry out emergency duties. All blowout preventer tests and crew drills shall be recorded on the driller's log.

5. The characteristics and use of drilling mud and the conduct of related drilling procedures shall be such as are necessary to maintain the well in a safe condition to prevent uncontrolled blowouts of any well. Quantities of mud materials sufficient to insure well control shall be maintained and readily accessible for use at all times.

6. Mud testing equipment shall be maintained on the derrick floor at all times, and mud tests consistent with good operating practice shall be performed daily, or more frequently as conditions warrant. The following mud system monitoring equipment must be installed, with derrick floor indicators, and used throughout the period of drilling after setting and cementing the surface casing:

6.1. A recording mud pit level indicator including a visual and audio warning device to determine mud pit volume gains and losses.

6.2. A mud return indicator to determine when returns have been obtained, or when they occur unintentionally, and additionally to determine that returns essentially equal the pump discharge rate.

7. In the conduct of all oil and gas operations, the operator shall prevent pollution of the waters of the Great Salt Lake. The operator shall comply with the following pollution prevention requirements:

7.1. Oil in any form, liquid or solid wastes containing oil, shall not be disposed of into the waters of the lake.

7.2. Liquid or solid waste materials containing substances that may be harmful to aquatic life or wildlife, or injurious in any manner to life and property, or that in any way unreasonably adversely affects the chemicals or minerals in the lake shall not be disposed of into the waters of the lake.

7.3. Waste materials, exclusive of cuttings and drilling media, shall be transported to shore for disposal.

8. All spills or leakage of oil and liquid or solid pollutants shall be immediately reported to the division. A complete written statement of all circumstances, including subsequent clean-up operation, shall be forwarded to said agencies within 72 hours of such occurrences.

9. Standby pollution control equipment consistent with the state of the art, shall be maintained by, and shall be immediately available to, each operator.

R649-3-34. Well Site Restoration.

1. The operator of a well shall upon plugging and abandonment of the well restore the well site in accordance with these rules.

2. For all land included in the well site for which the surface is federal, Indian, or state ownership, the operator shall meet the well site restoration requirements of the appropriate surface management agency.

3. For all land included in the well site for which the surface is fee or private ownership, the operator shall meet the well site restoration requirements of the private landowner or the minimum well site restoration requirements established by the division.

4. Well site restoration on lands with fee or private ownership shall be completed within one (1) year following the plugging of a well unless an extension is approved by the division for just and reasonable cause.

5. These rules shall not preclude the opportunity for a private landowner to assume liability for the well as a water well in accordance with R649-3-24.6.

6. The operator shall make a reasonable effort to establish surface use agreements with the owners of land included in the well site prior to the commencement of the following actions on fee or private surface:

6.1. Drilling a new well.

6.2. Reentering an abandoned well.

6.3. Assuming operatorship of existing wells.

7. Upon application to the division to perform any of the aforementioned and prior to approval of such actions by the division, the operator shall submit an affidavit to the division stating whether appropriate surface use agreements have been established with and approved by the surface landowners of the well site.

8. If necessary and upon request by the division, the operator shall submit a copy of the established surface use agreements to the division.

9. If no surface use agreement can be established, the division shall establish minimum well site restoration requirements for any well located on fee or private surface for the purposes of final bond release.

10. Established surface use agreements may be modified or terminated at any time by mutual consent of the involved parties; however, the operator shall notify the division if such is the case and if a surface use agreement is terminated without a new agreement established, the division shall establish minimum well site reclamation requirements.

11. The operator shall be responsible for meeting the requirements of any surface use agreement, and it shall be assumed by the division until notified otherwise that surface use agreements remain in full force and effect until all the requirements of the agreement are satisfied or until the agreement has been terminated by mutual consent of the involved parties.

12. The surface use agreement shall stipulate the minimum well site restoration to be performed by the operator in order to allow final release of the bond.

13. The final bond release by the division shall include a determination by the division whether or not the operator has met the requirements of an established surface use agreement, and the division may suspend final bond release until the operator has completed all the requirements of the surface use agreement.

14. The agreement may state requirements for well site grading, contouring, scarification, reseeding, and abandonment of any equipment or facilities for which the landowner agrees to assume liability.

15. The agreement shall not address operations regulated by the rules and orders of the board such as:

15.1. Disposal of drilling fluid, produced fluid, or other fluid waste associated with the drilling and production of the well.

15.2. Reclamation or treating of waste crude oil.

15.3. Any other operation or condition for which the board has jurisdiction.

16. If the operator cannot establish surface use agreements then the operator shall so notify the division.

17. Within 30 days of the notification or as soon as weather conditions permit, the division shall conduct an inspection and evaluation of the well site in order to establish minimum well site restoration requirements for the purpose of final bond release.

18. The operator shall be given notice by the division of the date and time of the inspection, and if the operator cannot attend the inspection at the scheduled date and time, the division may reschedule the inspection to allow the operator to participate.

19. The surface landowner, agent or lessee shall be given notice by the operator of such inspection and may participate in the inspection; however, if the surface landowner cannot attend the inspection, the division shall not be required to reschedule the inspection in order to allow the surface landowner to participate.

20. The evaluation shall consider the condition of the land prior to disturbance, the extent of proposed disturbance, the degree of difficulty to conduct complete restoration, the potential for pollution, the requirements for abating pollution, and the possible land use after plugging and restoration are completed.

21. Within 30 days after performing the inspection, the division shall provide the operator with the results of the inspection and the evaluation listing the minimum well site restoration requirements established by the division.

22. The division shall retain a record of the inspection and the evaluation, and if necessary and upon written request by an interested party, the division shall provide a copy of the minimum well site restoration requirements established by the division.

23. If any person disagrees with the results of the inspection and the evaluation and desires a reconsideration of the minimum well site restoration requirements established by the division, such person may submit a request to the board for a hearing and order to modify the requirements.

24. The board, after proper notice and hearing, may issue an order modifying the minimum well site restoration requirements established by the division.

25. The minimum well site restoration requirements established by the division or by board order shall be considered part of any permit granted by the division to conduct operations at a well site, and the inability of the operator to meet such requirements shall be considered grounds for forfeiture of the bond.

26.If the minimum well site restoration requirements suggest to the division that bond coverage for a well should be increased, the division shall take action as stated in R649-3-1.

R649-3-35. Wildcat Wells.

1. For purposes of qualifying for a severance tax exemption under Section 59-5-102(5)(b), an operator must file an application with the division for designation of a wildcat well.

1.1. The application may be filed prior to drilling the well, and a tentative determination of the wildcat designation will be issued at that time. An application or request for final designation of

wildcat status as appropriate, must be filed at the time of filing of Form 8, Well Completion or Recompletion Report and Log.

1.2. The application shall contain, where applicable, the following information:

1.2.1. A plat map showing the location of the well in relation to producing wells within a one mile radius of the wellsite.

1.2.2. A statement concerning the producing formation or formations in the wildcat well and also the producing formation or formations of the producing wells in the designated area, including completion reports and other appropriate data.

1.2.3. Stratigraphic cross sections through the producing wells in the designated area and the proposed wildcat well.

1.2.4. A statement as to whether the well is in a known geologic structure. However, whether the well is in a known geologic structure shall not be the sole basis of determining whether the well is a wildcat.

1.2.5. Bottomhole pressures, as applicable, in a wildcat well compared to the wells producing in the designated area from the same zone.

1.2.6. Any other information deemed relevant by the applicant or requested by the division.

2. Information derived from well logs, including certain information in completion reports, stratigraphic cross sections, bottomhole pressure data, and other appropriate data provided in R649-3-35-1 will be held confidential in accordance with R649-2-11 at the request of the operator.

3. The division shall review the submitted information and advise the operator and the State Tax Commission of its decision regarding the wildcat well designation as related to Section 59-5-102(5)(b).

4. The division is responsible for approval of a request for designation of a well as a wildcat well. If the operator disagrees with the decision of the division, the decision maybe appealed to the board. Appeals of all other tax-related decisions concerning wildcat wells should be made to the State Tax Commission.

R649-3-36. Shut-in and Temporarily Abandoned Wells.

1. Wells may be initially shut-in or temporarily abandoned for a period of twelve (12) consecutive months. If a well is to be shut-in or temporarily abandoned for a period exceeding twelve (12) consecutive months, the operator shall file a Sundry Notice providing the following information:

1.1. Reasons for shut-in or temporarily abandonment of the well,

1.2. The length of time the well is expected to be shut-in or temporarily abandoned, and

1.3. An explanation and supporting data, for showing the well has integrity, meaning that the casing, cement, equipment condition, static fluid level, pressure, existence or absence of Underground Sources of Drinking Water and other factors do not make the well a risk to public health and safety or the environment.

2. After review the Division will either approve the continued shut-in or temporarily abandoned status or require remedial action to be taken to establish and maintain the well's integrity.

3. After five (5) years of nonactivity or nonproductivity, the well shall be plugged in accordance with R649-3-24, unless approval for extended shut-in time is given by the Division upon a showing of good cause by the operator.

4. If after a five (5) year period the well is ordered plugged by the Division, and the operator does not comply, the operator shall forfeit the drilling and reclamation bond and the well shall be

properly plugged and abandoned under the direction of the Division.

R649-3-37. Enhanced Recovery Project Certification.

1. In order for incremental production achieved from an enhanced recovery project to qualify for the severance tax rate reduction provided under Subsection 59-5-102(7), the operator on behalf of the producers shall present evidence demonstrating that the recovery technique or techniques utilized qualify for an enhanced recovery determination and the Board must certify the project as an enhanced recovery project.

2. For enhanced recovery projects certified by the Board after January 1, 1996:

2.1. As part of the process of certifying incremental production that qualifies for a reduction in the severance tax rate under Subsection 59-5-102(7), the operator shall furnish the Division:

2.1.1. An extrapolation (projection) and tabulation of expected non-enhanced recovery of oil and gas production from the project.

2.1.2. The projection shall be for not less than seventy-two (72) months commencing with the first month following the project certification by the Board.

2.1.3. The projection shall be based on production history of all wells within the project area for not less than twelve (12) months immediately preceding either certification or commencement of the project; reservoir and production characteristics; and the application of generally accepted petroleum engineering practices.

2.1.4. The projected production volumes approved by the division shall serve as the base level production for purposes of determining the incremental oil and gas production that qualifies for a reduction in the severance tax rate.

2.2. The operator shall provide a statement as to all assumptions made in preparing the projection and any other information concerning the project that the division may reasonably require in order to evaluate the operator's projection.

2.3. An operator's request for incremental production certification may be approved administratively by the Director or authorized agent. The Director or authorized agent shall review the request within 30 days after its receipt and advise the operator of the decision. If the operator disagrees with the Director or authorized agent's decision, the operator may request a hearing before the Board at its next regularly scheduled hearing. The Director or authorized agent may also refer the matter to the Board if a decision is in doubt.

2.4. Upon approval of a request for incremental production certification, the Director or authorized agent shall forward a copy of the certification to the Utah Tax Commission.

R649-3-38. Surface Owner Protection Act Provisions.

1. These rules and all subsequent revisions as approved by the board are developed pursuant to the requirements of the Surface Owner Protection Act of 2012 in Title 40, Chapter 6. It is the intent of the board and the division to encourage owners or operators and surface land owners to enter into surface use agreements. Surface use agreements should fairly consider the respective rights of the owner or operator and the surface land owner and also comply with the requirements of R649-3-34.

2. For the purposes of R649-3-38, these definitions are utilized.

2.1. "Crops" means any growing vegetative matter used for an agricultural purpose, including forage for grazing and domesticated animals.

2.2. "Oil and gas operations" means to explore for, develop, or produce oil and gas.

2.3. "Surface land" means privately owned land overlying privately owned oil and gas resources, upon which oil and gas operations are conducted, and owned by a surface land owner.

2.4. "Surface land owner" means a person who owns, in fee simple absolute, all or part of the surface land as shown by the records of the county where the surface land is located. Surface land owner does not include the surface land owner's lessee, renter, tenant, or other contractually related person.

2.5. "Surface land owner's property" means a surface land owner's surface land, crops on the surface land, and existing improvements on the surface land.

2.6. "Surface use agreement" means an agreement between an owner or operator and a surface land owner addressing the use and reclamation of surface land owned by the surface land owner and compensation for damage to the surface land caused by oil and gas operations that result in loss of the surface land owner's crops on the surface land, loss of value of existing improvements owned by the surface land owner on the surface land, and permanent damage to the surface land.

3. Oil and gas operations shall be conducted in such manner as to prevent unreasonable loss of a surface land owner's crops on surface land, unreasonable loss of value of existing improvements owned by a surface land owner on surface land, and unreasonable permanent damage to surface land.

4. In accordance with Section 40-6-20, an owner or operator may enter onto surface land under which the owner or operator holds rights to conduct oil and gas operations and use the surface land to the extent reasonably necessary to conduct oil and gas operations and consistent with allowing the surface land owner the greatest possible use of the surface land owner's property, to the extent that the surface land owner's use does not interfere with the owner's or operator's oil and gas operations.

4.1. Except as is reasonably necessary to conduct oil and gas operations, an owner or operator shall mitigate the effects of accessing the surface land owner's surface land, minimize interference with the surface land owner's use of the surface land owner's property, and compensate a surface land owner for unreasonable loss of a surface land owner's crops on the surface land, unreasonable loss of value to existing improvements owned by a surface land owner on the surface land, and unreasonable permanent damage to the surface land.

4.2. An owner or operator may but is not required to obtain location or spacing exceptions from the division or board or utilize directional or horizontal drilling techniques that are not technologically feasible, economically practicable, or reasonably available.

5. In accordance with Section 40-6-21, non-binding mediation may be requested by a surface land owner and an owner or operator, by providing written notice to the other party, if they are unable to agree on the amount of damages for unreasonable crop loss on the surface land, unreasonable loss of value to existing improvements owned by the surface land owner on the surface land, or unreasonable permanent damage to the surface land.

5.1. A mediator may be mutually selected by a surface land owner and an owner or operator from a listing of qualified mediators maintained by the division and the Utah Department of Agriculture and Food, which includes the mediators identified on the Utah State Courts website with "property" or "real estate" as an area of expertise, or a mediator may be selected from any other source.

5.2. The surface land owner and the owner or operator shall equally share the cost of the mediator's services.

5.3. The mediation provisions of this subsection do not prevent or delay an owner or operator from conducting oil and gas operations in accordance with applicable law.

6. A surface use bond shall be furnished to the division by the owner or operator, in accordance with the following provisions of Subsection R649-3-38-6.

6.1. A surface use bond does not apply to surface land where the surface land owner is a party to, or a successor of a party to:

6.1.1. A lease of the underlying privately owned oil and gas;

6.1.2. A surface use agreement applicable to the surface land owner's surface land; or

6.1.3. A contract, waiver, or release addressing an owner's or operator's use of the surface land owner's surface land.

6.2. The surface use bond shall be in the amount of $6,000 per well site and shall be conditioned upon the performance by the owner or operator of the duty to protect a surface land owner against unreasonable loss of crops on surface land, unreasonable loss of value of existing improvements, and unreasonable permanent damage to surface land.

6.3. The surface use bond shall be furnished to the division on Form 4S after good faith negotiation and prior to the approval of the application for permit to drill. The mediation process identified in R649-3-38-5 may commence and is encouraged to be completed.

6.4. The division may accept a surface use bond in the form of a cash account as provided in R649-3- 1-10.2.1 or a certificate of deposit as provided in R649-3-1-10.2.3. Interest will remain within the account.

6.5. The division may allow the owner or operator, or a subsequent owner or operator, to replace an existing surface use bond with another bond that provides sufficient coverage.

6.6. The surface use bond shall remain in effect by the operator until released by the division.

6.7. The surface use bond shall be payable to the division for the use and benefit of the surface land owner, subject to the provisions of these rules.

6.8. The surface use bond shall be released to the owner or operator after the division receives sufficient information that:

6.8.1. A surface use agreement or other contractual agreement has been reached;

6.8.2. Final resolution of the judicial appeal process for an action for unreasonable damages, as defined in R649-3-38-6.2, has occurred and have been paid; or

6.8.3. Plugging and abandonment of the well is completed.

6.9. The division shall make a reasonable effort to contact the surface land owner prior to the division's release of the surface use bond.

R649-3-39. Hydraulic Fracturing.

1. Chemical disclosure.

1.1. The amount and type of chemicals used in a hydraulic fracturing operation shall be reported to www.fracfocus.org within 60 days of hydraulic fracturing completion for public disclosure.

2. Wellbore integrity.

2.1. The operator shall comply with R649-3-8, Casing Program.

1. The method of cementing casing in the hole shall be by pump and plug method, displacement method, or other method approved by the division.

2. When drilling in wildcat territory or in any field where high pressures are probable, the conductor and surface strings of casing must be cemented throughout their lengths, unless another procedure is authorized or prescribed by the division, and all subsequent strings of casing must be securely anchored.

3. In areas where the pressures and formations to be encountered during drilling are known, sufficient surface casing shall be run to:

3.1. Reach a depth below all known or reasonably estimated, utilizable, domestic, fresh water levels.

3.2. Prevent blowouts or uncontrolled flows.

4. The casing program adopted must be planned to protect any potential oil or gas horizons penetrated during drilling from infiltration of waters from other sources and to prevent the migration of oil, gas, or water from one horizon to another.

2.2. The operator shall comply with R649-3-9, Protection of Upper Productive Strata.

1. No well shall be deepened for the purpose of producing oil or gas from a lower stratum until all upper productive strata are protected, either permanently by casing and cementing or temporarily through the use of tubing and packer, to the satisfaction of the division.

2. In any well that appears to have defective, poorly cemented, or corroded casing that will permit or may create underground waste or may contaminate underground or surface fresh water, the operator shall proceed with diligence to use the appropriate method and means to eliminate such hazard of underground waste or contamination of fresh water. If such hazard cannot be eliminated, the well shall be properly plugged and abandoned.

3. Natural gas that is encountered in substantial quantities in any section of a drilled hole above the ultimate objective shall be shut off with reasonable diligence, either by mudding, casing or other approved method, and shall be confined to its original source to the satisfaction of the division.

2.3. The operator shall comply with R649-3-13, Casing Tests.

1. In order to determine the integrity of the casing string set in the well, the operator shall, unless otherwise requested by the division, perform a pressure test of the casing to the pressures specified under R649-3- 7.4 before drilling out of any casing string, suspending drilling operations, or completing the well.

2.4. The operator shall comply with R649-3-6, Drilling Operations.

1. Drilling operations shall be conducted according to the drilling program submitted on the original APD and as approved by the division. Any change of plans to the original drilling program shall be submitted to the division by using Form 9, Sundry Notices and Reports on Wells and shall

receive division approval prior to implementation. A change of plans necessary because of emergency conditions may be implemented without division approval. The operator shall provide the division with verbal notice of the emergency change within 24 hours and written notice within five days.

2. An operator of a drilling well as designated in R649-2-4 shall comply with reporting requirements as follows:

2.1. The spudding in of a well shall be reported to the division within 24 hours. The report should include the well name and number, drilling contractor, rig number and type, spud date and time, the date that continuous drilling will commence, the name of the person reporting the spud, and a contact telephone number.

2.2. The operator shall file Form 6, Entity Action Form with the division within five working days of spudding in a well. The division will assign the well an entity number that will identify the well on the operator's monthly oil and gas production and disposition reports.

2.3. The operator shall notify the division 24 hours in advance of all testing to be performed on the blowout preventer equipment on a well.

2.4. The operator shall submit a monthly status report for each drilling well on Form 9, Sundry Notices and Reports on Wells. The report should include the well depth and a description of the operations conducted on the well during the month. The report shall be submitted no later than the fifth day of the following calendar month until such time as the well is completed and the well completion report is filed.

2.5. The operator shall notify the division 24 hours in advance of all casing tests performed in accordance with R649-3-13.

2.6. The operator shall report to the division all fresh water sand encountered during drilling on Form 7, Report of Water Encountered During Drilling. The report shall be filed with Form 8, Well Completion or Recompletion Report and Log.

2.5. The operator shall comply with R649-3-7, Well Control.

1. When drilling in wildcat territory, the owner or operator shall take all reasonably necessary precautions for keeping the well under control at all times and shall provide, at the time the well is started, proper high pressure fittings and equipment. All pressure control equipment shall be maintained in good working condition at all times.

2. In all proved areas, the use of blowout prevention equipment "BOPE" shall be in accordance with the established and approved practice in the area. All pressure control equipment shall be maintained in good working condition at all times.

3. Upon installation, all ram type BOPE and related equipment, including casing, shall be tested to the lesser of the full manufacturer's working pressure rating of the equipment, 70% of the minimum internal yield pressure of any casing subject to test, or one psi/ft of the last casing string depth. Annular type BOPE are to be tested in conformance with the manufacturer's published recommendations. The operator shall maintain records of such testing until the well is completed and will submit copies of such tests to the division if required.

4. In addition to the initial pressure tests, ram and annular type preventers shall be checked for physical operation each trip. All BOPE components, with the exception of an annular type blowout preventer, shall be tested monthly to the lesser of 50% of the manufacturer's rated pressure of the BOPE, the maximum anticipated pressure to be contained at the surface, one psi/ft of the last casing string depth, or 70% of the minimum internal yield pressure of any casing subject to test.

5. If a pressure seal in the assembly is disassembled, a test of that seal shall be conducted

prior to the resumption of any drilling operation. A shell test of the affected seal shall be adequate. If the affected seal is integral with the BOP stack, either pipe or blind ram, necessitating a test plug to be set in order to test the seal, the division may grant approval to proceed without testing the seal if necessary for prudent operations.

6. All tests of BOPE shall be noted on the driller's log, IADC report book, or equivalent and shall be available for examination by the director or an authorized agent during routine inspections.

7. BOPE used in possible or probable hydrogen sulfide or sour gas formations shall be suitable for use in such areas.

2.6. The operator shall comply with R649-3-23, Well Workover and Recompletion.

1. Requests for approval of a notice of intention to perform a workover or recompletion shall be filed by an operator with the division on Form 9, Sundry Notices and Reports on Wells, or if the operation includes substantial redrilling, deepening, or plugging back of an existing well, on Form 3, Application for Permit to Drill, Deepen or Plug Back.

2. The division shall review the proposed workover or recompletion for conformance with the Oil and Gas Conservation General Rules and advise the operator of its decision and any necessary conditions of approval.

3. Recompletions shall be conducted in a manner to protect the original completion interval(s) and any other known productive intervals.

4. The same tests and reports are required for any well recompletion as are required following an original well completion.

5. The applicant shall file a subsequent report of workover on Form 9, Sundry Notices and Reports, or a subsequent report of recompletion on Form 8, Well Completion or Recompletion Report and Log, within 30 days after completing the workover or recompletion operations.

3. Management of flowback water and surface protection.

3.1. The operator shall comply with R649-3-15, Pollution and Surface Damage Control.

1. The operator shall take all reasonable precautions to avoid polluting lands, streams, reservoirs, natural drainage ways, and underground water.

1.1. The owner or operator shall carry on all operations and maintain the property at all times in a safe and workmanlike manner having due regard for the preservation and conservation of the property and for the health and safety of employees and people residing in close proximity to those operations.

1.2. At a minimum, the owner or operator shall:

1.2.1. Take reasonable steps to prevent and shall remove accumulations of oil or other materials deemed to be fire hazards from the vicinity of well locations, lease tanks and pits.

1.2.2. Remove from the property or store in an orderly manner, all scrap or other materials not in use.

1.2.3. Provide secure workmanlike storage for chemical containers, barrels, solvents, hydraulic fluid, and other non-exempt materials.

1.2.4. Maintain tanks in a workmanlike manner that will preclude leakage and provide for all applicable safety measures, and construct berms of sufficient height and width to contain the quantity of the largest tank at the storage facility.

1.2.4.1. The use of crude or produced water storage tanks without tops is strictly prohibited except during well testing operations.

1.2.5. Catch leaks and drips, contain spills, and cleanup promptly.

1.2.6. Waste reduction and recycling should be practiced in order to help reduce disposal

volumes.

1.2.7. Produced water, tank bottoms and other miscellaneous waste should be disposed of in a manner that is in compliance with these rules and other state, federal, or local regulations or ordinances.

1.2.8. In general, good housekeeping practices should be used.

3.2. The operator shall comply with R649-3-16, Reserve Pits and Other On-site Pits.

1. Small onsite oil field pits including, but not limited to, reserve pits, emergency pits, workover and completion pits, storage pits, pipeline drip pits, and sumps shall be located and constructed in such a manner as to contain fluids and not cause pollution of waters and soils. They shall be located and constructed according to the Division guidelines for onsite pits. See Ranking Criteria for Reserve and Onsite Pit Liner Requirements, on the Oil, Gas and Mining web page.

2. Reserve pit location and construction requirements including liner requirements will be discussed at the predrill site evaluation. Special stipulations concerning the reserve pit will be included as part of the Division's approval to drill.

3. Following drilling and completion of the well the reserve pit shall be closed within one year, unless permission is granted by the Division for a longer period.

4. Pit contents shall meet the Division's Cleanup Levels (guidance document for numeric clean-up levels) or background levels prior to burial.

5. The contents may require treatment to reduce mobility and/or toxicity in order to meet cleanup levels.

6. The alternative to meeting cleanup levels would be transporting of material to an appropriate disposal facility.

3.3. The operator shall comply with R649-9-2, General Waste Management.

1. Wastes addressed by these rules are E and P Wastes that are exempt from the RCRA hazardous waste management requirements.

1.1. Before using a commercial disposal facility the operator may contact the Division to verify the status of the facility. The Division regularly updates this information on the Division of Oil, Gas and Mining web site.

1.2. Each site and/or facility used for disposal must be permitted and in good standing with the division.

2. Reduction of the amount of material generated that must be disposed of is the preferred practice.

2.1. Recycling should be used whenever possible and practical.

2.2. In general, good housekeeping practices shall be used.

2.3. Operators shall catch leaks, drips, contain spills, and cleanup promptly.

3. The method of disposal used shall be compatible with the waste that is the subject of disposal.

3.1. RCRA exempt waste shall not be mixed with nonexempt waste.

4. Every operator shall file an Annual Waste Management Plan by January 15 of each year to account for the proper disposition of produced water and other E and P Wastes.

4.1. If changes are made to the plan during the year, then the operator shall notify the division in writing of this change.

4.2. This plan will include the type and estimated annual volume of wastes that will be or have been generated.

4.3. The disposal facilities private or to be used for disposal,

4.4. The description of any waste reduction or minimization procedures.

4.5. Any onsite disposal/treatment methods or programs to be implemented by the operator.

3.4. The operator shall comply with R649-5-1, Requirements for Injection of Fluids Into Reservoirs.

1. Operations to increase ultimate recovery, such as cycling of gas, the maintenance of pressure, the introduction of gas, water or other substances into a reservoir for the purpose of secondary or other enhanced recovery or for storage and the injection of water into any formation for the purpose of water disposal shall be permitted only by order of the board after notice and hearing.

2. A petition for authority for the injection of gas, liquefied petroleum gas, air, water, or any other medium into any formation for any reason, including but not necessarily limited to the establishment of or the expansion of waterflood projects, enhanced recovery projects, and pressure maintenance projects shall contain:

2.1. The name and address of the operator of the project.

2.2. A plat showing the area involved and identifying all wells, including all proposed injection wells, in the project area and within one-half mile radius of the project area.

2.3. A full description of the particular operation for which approval is requested.

2.4. A description of the pools from which the identified wells are producing or have produced.

2.5. The names, description and depth of the pool or pools to be affected.

2.6. A copy of a log of a representative well completed in the pool.

2.7. A statement as to the type of fluid to be used for injection, its source and the estimated amounts to be injected daily.

2.8. A list of all operators or owners and surface owners within a one-half mile radius of the proposed project.

2.9. An affidavit certifying that said operators or owners and surface owners within a one-half mile radius have been provided a copy of the petition for injection.

2.10. Any additional information the board may determine is necessary to adequately review the petition.

3. Applications as required by R649-5-2 for injection wells that are located within the project area, may be submitted for board consideration and approval with the request for authorization of the recovery project.

4. Established recovery projects may be expanded and additional wells placed on injection only upon authority from the board after notice and hearing or by administrative approval.

5. If the proposed injection interval can be classified as an USDW, approval of the project is subject to the requirements of R649-5-4.

3.5. The operator shall comply with R649-5-2, Requirements for Class II Injection Wells Including Water Disposal, Storage and Enhanced Recovery Wells.

1. Injection wells shall be completed, equipped, operated, and maintained in a manner that will prevent pollution and damage to any USDW, or other resources and will confine injected fluids to the interval approved.

2. The application for an injection well shall include a properly completed UIC Form 1 and the following:

2.1. A plat showing the location of the injection well, all abandoned or active wells within a one- half mile radius of the proposed well, and the surface owner and the operator of any lands or producing leases, respectively, within a one-half mile radius of the proposed injection well.

2.2. Copies of electrical or radioactive logs, including gamma ray logs, for the proposed well run prior to the installation of casing and indicating resistivity, spontaneous potential, caliper, and porosity.

2.3. A copy of a cement bond or comparable log run for the proposed injection well after casing was set and cemented.

2.4. Copies of logs already on file with the division should be referenced, but need not be refiled.

2.5. A description of the casing or proposed casing program of the injection well and of the proposed method for testing the casing before use of the well.

2.6. A statement as to the type of fluid to be used for injection, its source and estimated amounts to be injected daily.

2.7. Standard laboratory analyses of:

2.7.1. The fluid to be injected,

2.7.2. The fluid in the formation into which the fluid is being injected, and

2.7.3. The compatibility of the fluids.

2.8. The proposed average and maximum injection pressures.

2.9. Evidence and data to support a finding that the proposed injection well will not initiate fractures through the overlying strata or a confining interval that could enable the injected fluid or formation fluid to enter any fresh water strata.

2.10. Appropriate geological data on the injection interval with confining beds clearly labeled,

2.10.1. Nearby Underground Sources of Drinking Water, including the geologic formation name,

2.10.2. Lithologic descriptions, thicknesses, depths, water quality, and lateral extent;

2.10.3. Information relative to geologic structure near the proposed well that may effect the conveyance and/or storage of the injected fluids.

2.11. A review of the mechanical condition of each well within a one-half mile radius of the proposed injection well to assure that no conduit exists that could enable fluids to migrate up or down the wellbore and enter improper intervals.

2.12. An affidavit certifying that a copy of the application has been provided to all operators, owners, and surface owners within a one-half mile radius of the proposed injection well.

2.13. Any other additional information that the board or division may determine is necessary to adequately review the application.

3. Applications for injection wells that are within a recovery project area will be considered for approval:

3.1. Pursuant to R649-5-1-3.

3.2. Subsequent to board approval of a recovery project pursuant to R649-5-1-1.

4. Approval of an injection well is subject to the requirements of R649-5-4, if the proposed injection interval can be classified as an USDW.

5. In addition to the requirements of this section, the provisions of R649-3-1, R649-3-4, R649-3-24, R649-3-32, and R649-8-1 and R649-10 shall apply to all Class II injection wells.

3.6. The operator shall comply with R649-5-3, Noticing and Approval of Injection Wells.

1. Applications for injection wells submitted pursuant to R649-5-1-3 shall be noticed in conformance with the procedural rules of the board as part of the hearing for the recovery project. Any person desiring to object to approval of such an application for an injection well shall file the

objection in conformance with the procedural rules of the board.

2. The receipt of a complete and technically adequate application, other than an application submitted pursuant to R649-5-3-1, shall be considered as a request for agency action by the Division and shall be published in a daily newspaper of general circulation in the city and county of Salt Lake and in a newspaper of general circulation in the county where the proposed well is located. A copy of the notice of agency action shall also be sent to all parties including government agencies. The notice of agency action shall contain at least the following information:

2.1. The applicant's name, business address, and telephone number.

2.2. The location of the proposed well.

2.3. A description of proposed operation.

3. If no written objection to the application for administrative approval of an injection well is received by the division within 15 days after publication of the notice of agency action, or an aquifer exemption is not required in accordance with R649-5-4, and a board hearing is not otherwise required, the application may be considered and approved administratively.

4. If a written objection to an application for administrative approval of an injection well is received by the division within 15 days after publication of the notice of application, or if a hearing is required by these rules or deemed advisable by the director, the application shall be set for notice and hearing by the board.

5. The director shall have the authority to grant an exception to the hearing requirements of R649-5- 1.1 for conversion to injection of additional wells that constitute a modification or expansion of an authorized project provided that any such well is necessary to develop or maintain thorough and efficient recovery operations for any authorized project and provided that no objection is received pursuant to R649-5-3-3.

6. The director shall have authority to grant an exception to the hearing requirements of R649-5-1-1 for water disposal wells provided disposal is into a formation or interval that is not currently nor anticipated to be an underground source of drinking water and provided that no objection is received pursuant to R649-5-3-3.

3.7. The operator shall comply with R649-5-4, Aquifer Exemption.

1. The board may, after notice and hearing and subject to the EPA approval, authorize the exemption of certain aquifers from classification as an USDW based upon the following findings:

1.1. The aquifer does not currently serve as a source of drinking water.

1.2. The aquifer cannot now and will not in the future serve as a source of drinking water for any of the following reasons:

1.2.1. The aquifer is mineral, hydrocarbon or geothermal energy producing, or it can be demonstrated by the applicant as part of a permit application for a Class II well operation, to contain minerals or hydrocarbons that, considering their quantity and location, are expected to be commercially producible.

1.2.2. The aquifer is situated at a depth or location that makes recovery of water for drinking water purposes economically or technologically impractical.

1.2.3. The aquifer is contaminated to the extent that it would be economically or technologically impractical to render water from the aquifer fit for human consumption.

1.2.4. The aquifer is located above a Class III well mining area subject to subsidence or catastrophic collapse.

1.3. The total dissolved solids content of the water from the aquifer is more than 3,000 and less than 10,000 mg/l, and the aquifer is not reasonably expected to be used as a source of fresh or

potable water.

2. Interested parties desiring to have an aquifer exempted from classification as a USDW, shall submit to the division an application that includes sufficient data to justify the proposal. The division shall consider the application and if appropriate, will advise the applicant to submit a request to the board for an aquifer exemption.

3.8. The operator shall comply with R649-5-5, Testing and Monitoring of Injection Wells.

1. Before operating a new injection well, the casing shall be tested to a pressure not less than the maximum authorized injection pressure, or to a pressure of 300 psi, whichever is greater.

2. Before operating an existing well newly converted to an injection well, the casing outside the tubing shall be tested to a pressure not less than the maximum authorized injection pressure, or to a pressure of 1,000 psi, whichever is lesser, provided that each well shall be tested to a minimum pressure of 300 psi.

3. In order to demonstrate continuing mechanical integrity after commencement of injection operations, all injection wells shall be pressure tested or monitored as follows:

3.1. Pressure Test. The casing-tubing annulus above the packer shall be pressure tested not less than once each five years to a pressure equal to the maximum authorized injection pressure or to a pressure of 1,000 psi, whichever is lesser, provided that no test pressure shall be less than 300 psi. A report documenting the test results shall be submitted to the division.

3.2. Monitoring. If approved by the director, and in lieu of the pressure testing requirement, the operator may monitor the pressure of the casing-tubing annulus monthly during actual injection operations and report the results to the division.

3.3. Other test procedures or devices such as tracer surveys, temperature logs or noise logs may be required by the division on a case-by-case basis.

3.4. The operator shall sample and analyze the fluids injected in each disposal well or enhanced recovery project at sufficiently frequent time intervals to yield data representative of fluid characteristics, and no less frequently than every year.

3.5. The operator shall submit a copy of the fluid analysis to the division with the Annual Fluid Injection Report, UIC Form 4.

3.9. The operator shall comply with R649-5-6, Duration of Approval for Injection Wells.

1. Approvals or orders authorizing injection wells shall be valid for the life of the well, unless revoked by the board for just cause, after notice and hearing.

2. An approval may be administratively amended if:

2.1. There is a substantial change of conditions in the injection well operation.

2.2. There are substantial changes to the information originally furnished.

2.3. Information as to the permitted operation indicates that an USDW is no longer being protected.

KEY: oil and gas law
Date of Enactment or Last Substantive Amendment January 23, 2013
Notice of Continuation February 3, 2012
Authorizing, Implemented, or Interpreted Law 40-6-1 et seq.; 40-6-5; 40-6-20; 40-6-21

R649-5. Underground Injection Control of Recovery Operations and Class II Injection Wells.
R649-5-1. Requirements for Injection of Fluids Into Reservoirs.

1. Operations to increase ultimate recovery, such as cycling of gas, the maintenance of

pressure, the introduction of gas, water or other substances into a reservoir for the purpose of secondary or other enhanced recovery or for storage and the injection of water into any formation for the purpose of water disposal shall be permitted only by order of the board after notice and hearing.

2. A petition for authority for the injection of gas, liquefied petroleum gas, air, water, or any other medium into any formation for any reason, including but not necessarily limited to the establishment of or the expansion of waterflood projects, enhanced recovery projects, and pressure maintenance projects shall contain:

2.1. The name and address of the operator of the project.

2.2. A plat showing the area involved and identifying all wells, including all proposed injection wells, in the project area and within one-half mile radius of the project area.

2.3. A full description of the particular operation for which approval is requested.

2.4. A description of the pools from which the identified wells are producing or have produced.

2.5. The names, description and depth of the pool or pools to be affected.

2.6. A copy of a log of a representative well completed in the pool.

2.7. A statement as to the type of fluid to be used for injection, its source and the estimated amounts to be injected daily.

2.8. A list of all operators or owners and surface owners within a one-half mile radius of the proposed project.

2.9. An affidavit certifying that said operators or owners and surface owners within a one-half mile radius have been provided a copy of the petition for injection.

2.10. Any additional information the board may determine is necessary to adequately review the petition.

3. Applications as required by R649-5-2 for injection wells that are located within the project area, may be submitted for board consideration and approval with the request for authorization of the recovery project.

4. Established recovery projects may be expanded and additional wells placed on injection only upon authority from the board after notice and hearing or by administrative approval.

5. If the proposed injection interval can be classified as an USDW, approval of the project is subject to the requirements of R649-5-4.

R649-5-2. Requirements for Class II Injection Wells Including Water Disposal, Storage and Enhanced Recovery Wells.

1. Injection wells shall be completed, equipped, operated, and maintained in a manner that will prevent pollution and damage to any USDW, or other resources and will confine injected fluids to the interval approved.

2. The application for an injection well shall include a properly completed UIC Form 1 and the following:

2.1. A plat showing the location of the injection well, all abandoned or active wells within a one-half mile radius of the proposed well, and the surface owner and the operator of any lands or producing leases, respectively, within a one-half mile radius of the proposed injection well.

2.2. Copies of electrical or radioactive logs, including gamma ray logs, for the proposed well run prior to the installation of casing and indicating resistivity, spontaneous potential, caliper, and porosity.

2.3. A copy of a cement bond or comparable log run for the proposed injection well after

casing was set and cemented.

2.4. Copies of logs already on file with the division should be referenced, but need not be refiled.

2.5. A description of the casing or proposed casing program of the injection well and of the proposed method for testing the casing before use of the well.

2.6. A statement as to the type of fluid to be used for injection, its source and estimated amounts to be injected daily.

2.7. Standard laboratory analyses of:

2.7.1. The fluid to be injected,

2.7.2. The fluid in the formation into which the fluid is being injected, and

2.7.3. The compatibility of the fluids.

2.8. The proposed average and maximum injection pressures.

2.9. Evidence and data to support a finding that the proposed injection well will not initiate fractures through the overlying strata or a confining interval that could enable the injected fluid or formation fluid to enter any fresh water strata.

2.10. Appropriate geological data on the injection interval with confining beds clearly labeled,

2.10.1. Nearby Underground Sources of Drinking Water, including the geologic formation name,

2.10.2. Lithologic descriptions, thicknesses, depths, water quality, and lateral extent;

2.10.3. Information relative to geologic structure near the proposed well that may effect the conveyance and/or storage of the injected fluids.

2.11. A review of the mechanical condition of each well within a one-half mile radius of the proposed injection well to assure that no conduit exists that could enable fluids to migrate up or down the wellbore and enter improper intervals.

2.12. An affidavit certifying that a copy of the application has been provided to all operators, owners, and surface owners within a one-half mile radius of the proposed injection well.

2.13. Any other additional information that the board or division may determine is necessary to adequately review the application.

3. Applications for injection wells that are within a recovery project area will be considered for approval:

3.1. Pursuant to R649-5-1-3.

3.2. Subsequent to board approval of a recovery project pursuant to R649-5-1-1.

4. Approval of an injection well is subject to the requirements of R649-5-4, if the proposed injection interval can be classified as an USDW.

5. In addition to the requirements of this section, the provisions of R649-3-1, R649-3-4, R649-3-24, R649-3-32, and R649-8-1 and R649-10 shall apply to all Class II injection wells.

R649-5-3. Noticing and Approval of Injection Wells.

1. Applications for injection wells submitted pursuant to R649-5-1-3 shall be noticed in conformance with the procedural rules of the board as part of the hearing for the recovery project. Any person desiring to object to approval of such an application for an injection well shall file the objection in conformance with the procedural rules of the board.

2. The receipt of a complete and technically adequate application, other than an application submitted pursuant to R649-5-3-1, shall be considered as a request for agency action by the Division

and shall be published in a daily newspaper of general circulation in the city and county of Salt Lake and in a newspaper of general circulation in the county where the proposed well is located. A copy of the notice of agency action shall also be sent to all parties including government agencies. The notice of agency action shall contain at least the following information:

2.1. The applicant's name, business address, and telephone number.

2.2. The location of the proposed well.

2.3. A description of proposed operation.

3. If no written objection to the application for administrative approval of an injection well is received by the division within 15 days after publication of the notice of agency action, or an aquifer exemption is not required in accordance with R649-5-4, and a board hearing is not otherwise required, the application may be considered and approved administratively.

4. If a written objection to an application for administrative approval of an injection well is received by the division within 15 days after publication of the notice of application, or if a hearing is required by these rules or deemed advisable by the director, the application shall be set for notice and hearing by the board.

5. The director shall have the authority to grant an exception to the hearing requirements of R649-5-1.1 for conversion to injection of additional wells that constitute a modification or expansion of an authorized project provided that any such well is necessary to develop or maintain thorough and efficient recovery operations for any authorized project and provided that no objection is received pursuant to R649-5-3-3.

6. The director shall have authority to grant an exception to the hearing requirements of R649-5-1-1 for water disposal wells provided disposal is into a formation or interval that is not currently nor anticipated to be an underground source of drinking water and provided that no objection is received pursuant to R649-5-3-3.

R649-5-4. Aquifer Exemption.

1. The board may, after notice and hearing and subject to the EPA approval, authorize the exemption of certain aquifers from classification as an USDW based upon the following findings:

1.1. The aquifer does not currently serve as a source of drinking water.

1.2. The aquifer cannot now and will not in the future serve as a source of drinking water for any of the following reasons:

1.2.1.The aquifer is mineral, hydrocarbon or geothermal energy producing, or it can be demonstrated by the applicant as part of a permit application for a Class II well operation, to contain minerals or hydrocarbons that, considering their quantity and location, are expected to be commercially producible.

1.2.2. The aquifer is situated at a depth or location that makes recovery of water for drinking water purposes economically or technologically impractical.

1.2.3. The aquifer is contaminated to the extent that it would be economically or technologically impractical to render water from the aquifer fit for human consumption.

1.2.4. The aquifer is located above a Class III well mining area subject to subsidence or catastrophic collapse.

1.3. The total dissolved solids content of the water from the aquifer is more than 3,000 and less than 10,000 mg/l, and the aquifer is not reasonably expected to be used as a source of fresh or potable water.

2. Interested parties desiring to have an aquifer exempted from classification as a USDW,

shall submit to the division an application that includes sufficient data to justify the proposal. The division shall consider the application and if appropriate, will advise the applicant to submit a request to the board for an aquifer exemption.

R649-5-5. Testing and Monitoring of Injection Wells.

1. Before operating a new injection well, the casing shall be tested to a pressure not less than the maximum authorized injection pressure, or to a pressure of 300 psi, whichever is greater.

2. Before operating an existing well newly converted to an injection well, the casing outside the tubing shall be tested to a pressure not less than the maximum authorized injection pressure, or to a pressure of 1,000 psi, whichever is lesser, provided that each well shall be tested to a minimum pressure of 300 psi.

3. In order to demonstrate continuing mechanical integrity after commencement of injection operations, all injection wells shall be pressure tested or monitored as follows:

3.1. Pressure Test. The casing-tubing annulus above the packer shall be pressure tested not less than once each five years to a pressure equal to the maximum authorized injection pressure or to a pressure of 1,000 psi, whichever is lesser, provided that no test pressure shall be less than 300 psi. A report documenting the test results shall be submitted to the division.

3.2. Monitoring. If approved by the director, and in lieu of the pressure testing requirement, the operator may monitor the pressure of the casing-tubing annulus monthly during actual injection operations and report the results to the division.

3.3. Other test procedures or devices such as tracer surveys, temperature logs or noise logs may be required by the division on a case-by-case basis.

3.4. The operator shall sample and analyze the fluids injected in each disposal well or enhanced recovery project at sufficiently frequent time intervals to yield data representative of fluid characteristics, and no less frequently than every year.

3.5. The operator shall submit a copy of the fluid analysis to the division with the Annual Fluid Injection Report, UIC Form 4.

R649-5-6. Duration of Approval for Injection Wells.

1. Approvals or orders authorizing injection wells shall be valid for the life of the well, unless revoked by the board for just cause, after notice and hearing.

2. An approval may be administratively amended if:

2.1. There is a substantial change of conditions in the injection well operation.

2.2. There are substantial changes to the information originally furnished.

2.3. Information as to the permitted operation indicates that an USDW is no longer being protected.

R649-5-7. Unit or Cooperative Development or Operation.

Any person desiring to obtain the benefits of Section 40-6-7(1) insofar as the same relates to any method of unit or cooperative development or operation of a field or pool or a part of either, shall file a Request for Agency Action and a copy of such agreement with the board for approval after notice and hearing.

KEY: oil and gas law
Date of Enactment or Last Substantive Amendment: June 2, 1998

Notice of Continuation: February 3, 2012
Authorizing, and Implemented or Interpreted Law: 40-6-1 et seq.

R649-6. Gas Processing and Waste Crude Oil Treatment.
R649-6-1. Gas Processing Plants.

1. In accordance with Section 40-6-16 any operator of a facility or plant in which liquefiable hydrocarbons are removed from natural gas, including wet gas or casinghead gas, and the remaining residue gas is conditioned for delivery for sale, recycling, or other use, shall file monthly, Form 13-A and Form 13-B.

1.1. Reports shall be filed for all gas processing plants or facilities to account for the receipt, processing, and disposition of all gas by the plant.

1.2. Plant operators that are required by contractual arrangements to allocate the residue gas and extracted liquids processed by the plant or facility to the individual producing wells, shall identify each well or entity connected to the plant or facility by API number and report the metered wet gas volumes, residue gas volumes returned to the field, and all allocated residue gas and natural gas liquid volumes.

R649-6-2. Waste Crude Oil Treatment Facilities.

1. Prior to the construction of a waste crude oil treatment facility, an application shall be submitted to the division describing the ownership, location, type, and capacity of the facility contemplated; the extent and location of the surface area to be disturbed, including any pit, pond, or land associated with the facility; and a reclamation plan for the site. Approval of the application must be issued by the division before any ground clearing or construction shall occur.

2. As a condition for approval of any application, the owner or operator shall post a bond in an amount determined by the division to cover reclamation costs for the site. Failure to post the bond shall be considered sufficient grounds for denial of the application.

3. No waste crude oil treatment facility operator shall accept delivery of crude oil obtained from any tank, reserve pit, disposal pond or pit, or similar facility unless the delivery is accompanied by a run ticket, invoice, receipt or similar document showing the origin and quantity of the crude oil.

KEY: oil and gas law
Date of Enactment or Last Substantive Amendment: 1989
Notice of Continuation: July 28, 2008
Authorizing, and Implemented or Interpreted Law: 40-6-1 et seq

R649-8. Reporting and Report Forms.
R649-8-1. General Report Forms.

1. The forms listed below, as modified by the Division from time to time shall be used for the purpose indicated in accordance with the instructions and the applicable rule.

Form 1 Application for Permit to Conduct Seismic Exploration R649-8-2
Form 2 Seismic Exploration Completion Report R649-8-3
Form 3 Application for Permit to Drill, Deepen, or Plug Back (APD) R649-8-4
Form 4 Bond R649-8-5
Form 5 Designation of Agent or Operator R649-8-6
Form 6 Entity Action Form R649-8-7

Form 7 Report of Water Encountered During Drilling R649-8-8
Form 8 Well Completion or Recompletion Report and Log R649-8-9
Form 9 Sundry Notices and Reports on Wells R649-8-10
Form 10 Monthly Oil and Gas Production Report R649-8-11
Form 11 Monthly Oil and Gas Disposition Report R649-8-12
Form 12 Report of Transferred Oil R649-8-13
Form 13-A Monthly Summary Report of Gas Processing Plant Operations R649-8-14
Form 13-B Monthly Report of Gas Processing Plant Product Allocations R649-8-15
Form 14 Monthly Report of Waste Crude Oil Treatment Facility Operations R649-8-16
Form 15 Designation of Workover or Recompletion R649-8-17
UIC Form 1 Application for Injection Well R649-8-18
UIC Form 2 Monthly Report of Enhanced Recovery Project R649-8-19
UIC Form 3 Monthly Injection Report R649-8-20
UIC Form 4 Annual Fluid Injection Report R649-8-21
UIC Form 5 Transfer of Authority to Inject R649-8-22

2. Any permitted well which is referenced on a report form, correspondence, or well log should be identified by its assigned API number.

R649-8-2. Form 1, Application for Permit to Conduct Seismic Exploration.

At least seven days prior to commencing any type of seismic exploration operations, an Application for Permit to Conduct Seismic Exploration shall be submitted in duplicate to the division by the seismic contractor in accordance with R649-3-26.

R649-8-3. Form 2, Seismic Exploration Completion Report.

Within 60 days of the completion of each seismic exploration project, a Seismic Exploration Completion Report shall be submitted to the division by the seismic contractor in accordance with R649-3-26.

R649-8-4. Form 3, Application for Permit to Drill, Deepen, or Plug Back (APD).

Prior to the commencement of drilling, deepening, or plugging back any well or the commencement of exploratory drilling such as core holes and stratigraphic test holes, and prior to the commencement of any surface disturbance associated with such activity, the operator shall submit in duplicate an Application for Permit to Drill, Deepen, or Plug Back in accordance with R649-3-4.

R649-8-5. Form 4, Bond.

Except where a bond in satisfactory form has been filed by the operator in accordance with state, federal, or Indian lease requirements and evidence has been furnished to the division that such bond has been approved by the appropriate agency, the division shall require from the operator a good and sufficient bond in accordance with R649-3-1.

R649-8-6. Form 5, Designation of Agent or Operator.

Prior to the commencement of operations, a Designation of Agent or Operator shall be filed with the division in accordance with R649-2-4.

R649-8-7. Form 6, Entity Action Form.

1. For the purpose of accurately establishing the division's computerized oil and gas production accounting system and properly maintaining division of interest data for each well in the system, the operator shall file an Entity Action Form with the division within five working days of any of the following actions:

1.1. Spudding of a well, R649-3-6.

1.2. A change in operations which requires adding or removing a well from a group of wells that have identical division of interests, produce from the same formation, have product sales from a common tank, LACT meter, or gas meter, and have the same operator.

1.3. A change in operations when a service well is converted to a producing oil or gas well.

1.4. A change in operations when a well is recompleted and is capable of producing from another formation, R649-3-23.

1.5. A change in interest which requires adding or removing a well from a participating area of a properly designated unit.

2. Upon receipt of an Entity Action Form, the division will assign an entity number to a new well or change the entity number as needed for an existing well.

2.1. This number identifies the well on the operator's monthly oil and gas production and disposition reports.

2.2. Entity numbers are used by the State Tax Commission and other state government agencies to properly account for all production taxes and the divisions of royalty interest on state leases.

3. This form does not take the place of Form 9, Sundry Notices and Reports on Wells, which is to be used to provide detailed accounts of physical operations on wells.

R649-8-8. Form 7, Report of Water Encountered During Drilling.

The operator shall report to the division all fresh water sands encountered during drilling in accordance with R649-3-6. The report shall be filed with the Well Completion or Recompletion Report and Log, Form 8.

R649-8-9. Form 8, Well Completion or Recompletion Report and Log.

In accordance with R649-3-11, R649-3-21, R649-3-23, and R649-3-24, the operator shall file a Well Completion or Recompletion Report and Log and a copy of the electric and radioactivity logs, if run, within 30 days after completing, recompleting, or plugging a well.

R649-8-10. Form 9, Sundry Notices and Reports on Wells.

1. This report form shall be used to notify the division of the intention to do miscellaneous work on any well for which a specific report form is not provided, and to report the subsequent results of that work.

1.1. A notice of intention to do work on a well located on lands with state, fee or privately owned minerals or to change plans previously approved shall be submitted in duplicate and must be received and approved by the division before the work is commenced.

1.2. The operator is responsible for receipt of the notice by the division in ample time for proper consideration and action. In cases of emergency the operator may obtain verbal approval to commence work.

1.3. Within five days after receiving verbal approval, the operator shall submit a Sundry

Notice describing the work and acknowledging the verbal approval.

2. In addition to the types of work listed on the form, a Sundry Notice is required for the following:

2.1. Monthly status report for each drilling well in accordance with R649-3-6.

2.2. Application for permit to complete a well into more than one pool in accordance with R649-3-22.

2.3. Notice of intent to plug and abandon a well in accordance with R649-3-24.

2.4. Notice of intent to pull casing in accordance with R649-3-24.

2.5. Notice of change of operator. The report form should be submitted by both the previous operator and the new operator.

R649-8-11. Form 10, Monthly Oil and Gas Production Report.

1. The division will provide this report monthly to operators of all oil and gas wells within the state. Each operator shall complete the form to properly account for all oil, gas, and water produced from each well.

2. This report shall be submitted in conjunction with Form 11, Monthly Oil and Gas Disposition Report before the fifteenth day of the second calendar month following the month of production.

R649-8-12. Form 11, Monthly Oil and Gas Disposition Report.

1. All oil and gas well operators shall complete this form monthly to account for all oil and gas dispositions from each entity.

1.1. The report should account for the physical dispositions of all oil and gas produced during the report month from each well or group of wells (entity).

1.2. Only the initial disposition of each product as it leaves the well site or is used at the well site should be reported.

1.3. Residue gas and/or load oil received from another well, plant, or field should not be shown on this report.

2. This report shall be submitted in conjunction with Form 10, Monthly Oil and Gas Production Report and Form 12, Report of Transferred Oil on or before the fifteenth day of the second calendar month following the month of production.

R649-8-13. Form 12, Report of Transferred Oil.

1. This report is to be used only in accounting for oil that is transferred from one entity to another entity or oil that is acquired and used during remedial operations on a well.

This includes situations such as the following:

1.1. Oil that is produced at one entity or is acquired from another company, is then used as load oil at a "second" entity, and is then recovered and sold, or

1.2. Oil that is produced and then transferred to a "second" entity for treatment and sale due to mechanical problems at the producing entity.

2. Load oil that is recovered at the "second" entity and non-load oil that is transferred to the "second" entity should be excluded from all reported production, dispositions, and stocks of the "second" entity on Form 11, Monthly Oil and Gas Disposition Report. This allows the reporting of the "second" entity's true production and sales on Form 11, while the remainder of any sales is accounted for on this form.

2.1. The transported volumes reported on this form plus the transported volume for the "second" entity on Form 11 should equal the total run ticket volume as reported by the trucking or pipeline company serving this entity.

2.2. This report is to be filed as an attachment to Form 11, Monthly Oil and Gas Disposition Report during the month in which recovered load oil or any other transferred oil (non-load oil) is sold from the "second" entity.

R649-8-14. Form 13-A, Monthly Summary Report of Gas Processing Plant Operations.

1. Gas processing plant operators shall complete and submit a monthly report in accordance with R649-6-1, to account for the receipt, processing and disposition of all gas by the plant.

2. The report is due on or before the fifteenth day of the second calendar month following the operations month covered by the report.

R649-8-15. Form 13-B, Monthly Report of Gas Processing Plant Product Allocations.

1. Gas processing plant operators that are required by contractual arrangements to allocate residue gas and extracted liquids to the individual producing wells must complete and submit this form monthly in accordance with R649-6-1.

2. The report is to be filed as an attachment to Form 13-A, Monthly Summary Report of Gas Processing Plant Operations on or before the fifteenth day of the second calendar month following the operations month covered by the report.

R649-8-16. Form 14, Monthly Report of Waste Crude Oil Treatment Facility Operations.

1. Each operator of treatment or reclaiming facilities handling tank bottoms, oil from pits or ponds, or any other waste crude oil, shall complete and submit this report monthly in accordance with R649-6-2 to account for stocks, receipts, and deliveries of processed and unprocessed waste crude oil.

2. The report is due on or before the fifteenth day of the second calendar month following the operations month covered by the report.

R649-8-17. Form 15, Designation of Workover or Recompletion.

1. In accordance with Rule R649-3-23, each operator desiring to claim a tax credit for workover or recompletion work performed must submit this report within 90 days after the workover or recompletion work is completed. Upon determination and notification by the division that the described work qualifies for a tax credit under this rule, the operator may claim the tax credit on reports submitted to the Tax Commission during the third quarter after completion of the work.

2. The following workover and recompletion operations qualify for a tax credit:

2.1. Perforating,

2.2. Stimulation (e.g., acid jobs, frac jobs, solvent treatments, nitrogen cleanouts),

2.3. Sand control,

2.4. Water control or shut-off,

2.5. Wellbore cleanout,

2.6. Casing or liner repair,

2.7. Well deepening,

2.8. Initiation of enhanced recovery (excluding surface equipment and associated costs),

2.9. Change of lift system (excluding surface equipment and associated costs),

2.10. Gas well tubing changes (i.e., down-sizing),
2.11. Thief zone identification and elimination.
3. The following workover and recompletion operations do not qualify for a tax credit:
3.1. Pump changes,
3.2. Rod string fishing and repair/replacement,
3.3. Tubing repair/replacement,
3.4. Surface equipment installation and repair,
3.5. Operations generally classified as routine maintenance or repair.
4. Division approval is conditional subject to audit, and actual final expenses may be disallowed if they are not appropriate workover or recompletion expenses.

R649-8-18. UIC Form 1, Application for Injection Well.

Prior to the commencement of operations for injecting any fluid into a well for the purpose of enhanced recovery, disposal, or storage, the operator shall submit an Application for Injection Well and obtain division approval in accordance with R649-5-2.

R649-8-19. UIC Form 2, Monthly Report of Enhanced Recovery Project.

1. The operator shall submit this report monthly to report the injection pressure, rate, and volume for each enhanced recovery injection well or project.
2. The report is due within 30 days following the end of the month of operations.

R649-8-20. UIC Form 3, Monthly Injection Report.

1. The operator shall submit this report monthly to report the daily injection pressure, rate, and volume for each disposal well and/or storage well.
2. The report is due within 30 days following the end of the month of operations.

R649-8-21. UIC Form 4, Annual Fluid Injection Report.

1. The operator of disposal wells, storage wells, or enhanced recovery projects shall file an annual report with the division using this form.
2. The report is due within 60 days following the end of the year.

R649-8-22. UIC Form 5, Transfer of Authority to Inject.

1. The authority to inject for any injection well shall not be transferred from one operator to another without the approval of the division. The transfer of authority to inject for any injection well from one operator to another shall be submitted to the division on this form prior to the date of the proposed transfer.
2. The division shall, within 30 days after receipt of a properly completed form, return a copy of the form to each operator indicating approval or denial of the transfer of authority to inject. If approved, a copy of the order authorizing injection shall be attached to the form returned to the new operator.

KEY: oil and gas conservation, reporting
Date of Enactment or Last Substantive Amendment: June 2, 1998
Notice of Continuation: February 3, 2012
Authorizing, and Implemented or Interpreted Law: 40-6-1 et seq.

R649-9. Waste Management and Disposal.

R649-9-1. Introduction.

1. Section 40-6-5 UCA authorizes the board to regulate the disposal of salt water and oil-field wastes. It is the intent of the Board and Division to regulate E and P wastes and facilities for the disposal of these wastes in a manner that protects the environment, limits liability to producers, and minimizes the volume of waste.

2. These rules specify the informational and procedural requirements for waste management and disposal, the permitting of disposal facilities and the cleanup requirements for E and P waste related sites.

R649-9-2. General Waste Management.

1. Wastes addressed by these rules are E and P Wastes that are exempt from the RCRA hazardous waste management requirements.

1.1. Before using a commercial disposal facility the operator may contact the Division to verify the status of the facility. The Division regularly updates this information on the Division of Oil, Gas and Mining web site.

1.2. Each site and/or facility used for disposal must be permitted and in good standing with the division.

2. Reduction of the amount of material generated that must be disposed of is the preferred practice.

2.1. Recycling should be used whenever possible and practical.

2.2. In general, good housekeeping practices shall be used.

2.3. Operators shall catch leaks, drips, contain spills, and cleanup promptly.

3. The method of disposal used shall be compatible with the waste that is the subject of disposal.

3.1. RCRA exempt waste shall not be mixed with nonexempt waste.

4. Every operator shall file an Annual Waste Management Plan by January 15 of each year to account for the proper disposition of produced water and other E and P Wastes.

4.1. If changes are made to the plan during the year, then the operator shall notify the division in writing of this change.

4.2. This plan will include the type and estimated annual volume of wastes that will be or have been generated.

4.3. The disposal facilities private or to be used for disposal,

4.4. The description of any waste reduction or minimization procedures.

4.5. Any onsite disposal/treatment methods or programs to be implemented by the operator.

R649-9-3. Permitting of Disposal Pits.

1. All commercial disposal pits and disposal pits located off of an existing mineral lease shall be bonded in accordance with R649-9-9, Bonding of Disposal Facilities to assure proper operation, maintenance, and closure of the pits.

2. Application shall be made to the Division for approval of any disposal pit.

2.1. The pit shall be designed appropriately for the intended purpose.

2.2. Commercial disposal pits shall be designed and constructed under the supervision of a registered professional engineer.

2.3. The application and site shall meet the following requirements:

2.3.1 The pit shall be located on level, stable ground, and an acceptable distance away from any established or intermittent drainage.

2.3.2. The pit shall not be located in a geologically and hydrologically unsuitable area, such as aquifer recharge areas, flood plains, drainage bottoms, and areas near faults.

2.3.3. The pit shall have adequate storage capacity to safely contain all produced water even during those periods when evaporation rates are at a minimum.

2.3.4. The pit shall be designed and constructed so as to prevent the entrance of surface water.

2.3.5. The pit shall be designed, maintained and operated to prevent unauthorized surface or subsurface discharge of water.

2.3.6. The pit shall be fenced and maintained to prevent access by livestock, wildlife and unauthorized personnel and if required, equipped with flagging or netting to deter entry by birds and waterfowl.

2.3.7. The pit levees for produced water pits receiving volumes in excess of five barrels per day, shall be constructed so that the inside grade of the levee is no steeper than 3:1 and the outside grade no steeper than 2:1. The top of the levee shall be level and of sufficient width to allow for adequate compaction.

2.3.8 All approved produced water pits not located at a well site shall be identified with a suitable sign.

2.3.9. The artificial materials used in lining pits shall be impervious and resistant to weather, sunlight, hydrocarbons, aqueous acids, alkalies, salt, fungi, or other substances that might be contained in the produced water.

3. If rigid materials are used, leak proof expansion joints shall be provided, or the material shall be of sufficient thickness and strength to withstand, expansion, contraction and settling movements in the underlying earth, without cracking.

3.1. If flexible materials are used, they shall be of sufficient thickness and strength to be resistant to tears and punctures.

3.2. Commercial disposal pits shall be lined with a minimum liner thickness of 40 mils or as approved by the Division.

3.3. Lined pits constructed in relatively impermeable soils shall have an underlaying gravel filled sump and lateral system or suitable leak detection system.

3.4. Lined pits constructed in relatively permeable soils shall have a secondary liner underlaying the leak detection system, that is graded so as to direct leaks to the observation sump.

3.5. Test borings shall be taken in sufficient quantity and to an adequate depth to satisfactorily define subsurface conditions and assure that the liner will be placed on a firm stable base and to determine the appropriate leak detection system.

4. Requirements for Unlined Disposal Pits.

4.1 An application for disposal of produced water into an unlined pit will be considered if such disposal does not demonstrate significant pollution potential to surface or ground water and meets at least one of the following criteria:

4.2. The water to be disposed of does not have a higher total dissolved solids "TDS" content than ground water that could be affected and provided that the water does not contain objectionable levels of constituents and characteristics including chlorides, sulfates, pH, oil, grease, heavy metals and aromatic hydrocarbons.

4.3. That all, or a substantial part of the produced water is being used for beneficial purposes such as irrigation and livestock or wildlife watering and a water analysis indicates that the water is acceptable for the intended use.

4.4. The volume of water to be disposed of does not exceed five barrels per day on a monthly basis.

5. Application Requirements for Produced Water Pits.

5.1. Applications for disposal of produced water into lined pits shall include the following information:

5.2. A topographic map and drawing of the site, on a suitable scale, that indicate the pit dimensions, cross section, side slopes, leak detection system and location relative to other site facilities. The drawings shall be of professional quality.

5.3. The maximum daily quantity of water to be disposed of and a representative water analysis of such water that includes the concentrations of chlorides and sulfates, pH, total dissolved solids "TDS", and information regarding any other significant constituents if requested.

5.4. Climatological data indicating the average annual evaporation and precipitation for the area.

5.5. The method and schedule for disposal of precipitated solids.

5.6. Drawings of unloading facilities and explanation of the method for controlling and disposing of any liquid hydrocarbon accumulation so that the evaporation process is not hampered.

5.7. The engineering data and design criteria used to determine the pit size that includes a 2-foot free-board.

5.8. The type, thickness, strength, and life span of material to be used for lining the pit and the method of installation.

5.9. A description of the leak detection method to be utilized,

5.9.1. The proposed inspection frequency of the detection system.

5.9.2. The proposed procedures for repair of the liner should leakage occur.

6. Applications for disposal of produced water into unlined pits shall include the following information:

6.1. A topographic map and drawing of the site on a suitable scale that indicate the pit dimensions, cross section, side slopes, size and location relative to other site facilities.

6.2. The daily quantity of water to be disposed of and a representative water analysis of such water that includes the total dissolved solids "TDS", pH, oil and grease content, the concentrations of chlorides and sulfates, and information regarding any other significant constituents if required.

6.3. Climatological data indicating the average annual evaporation and precipitation for the area.

6.4. The estimated percolation rate based on soil characteristics under and adjacent to the pit.

6.5. Estimated depth and areal extent of any USDW in the area and an indication of any effect or interaction of the produced water with any such water resources present at or near the surface.

6.6. If beneficial use is the basis for the application, written confirmation from the user should be submitted.

6.7. If the application is made on the basis that surface and subsurface waters will not be adversely affected by disposal in an unlined pit, the following additional information is required:

6.7.1. A map showing the location of surface waters, water wells, and existing water

disposal facilities within a one mile radius of the proposed disposal facility.

6.7.2. The weighted average concentration of total dissolved solids "TDS" of all surface and subsurface waters within a one mile radius that might be affected by the proposed disposal.

6.7.3. Any reasonable geological and hydrological evidence showing that the proposed disposal method will not adversely affect existing water quality or major uses of such waters.

7. Within 30 days of the submission of an application for disposal of produced water into a commercial disposal pit, the division shall review the application as to its completeness and adequacy for the intended purpose and shall require such changes that are found necessary to assure compliance with the applicable rules. If the application is in order, the Division shall provide for a public notice to be published in a newspaper of general circulation in the county where the pit is to be located.

R649-9-4. Permitting of Other Disposal Facilities.

1. Facilities used for the treatment and disposal of E and P wastes other than evaporation pits shall be permitted by the Division. This would include such activities as landfarming, composting, solidifying, bioremediation, and others.

2. All commercial treatment and disposal facilities must be bonded in accordance with R649-9-9, Bonding of Disposal Facilities, to assure proper operation, maintenance, and closure of the facility.

3. Application Requirements for Treatment and Disposal Facilities. The application shall contain the following:

3.1. A complete description of the proposed facility,

3.2. Processes involved including a complete list of all wastes to be accepted at the facility and products generated.

3.3. Maps and drawings of suitable scale showing all facilities and equipment.

3.4. Materials or products to be applied to the land surface or subsurface shall meet the Division's cleanup levels for contaminated soil and other wastes.

3.5. If leachability and/or toxicity is of concern due to the type or source(s) of wastes, tests will be required and may utilize the Toxicity Characteristic Leaching Procedure (TCLP).

3.6. The submission of an application to the Division of Water Quality, Department of Environmental Quality, for a discharge permit may be required if it is determined that the facility and associated activity will not have a de minimus actual or potential effect on ground water quality.

3.7. If the Division determines there is potential for discharge, or if the proposal involves a commercial disposal operation it will be forwarded to the Division of Water Quality for their review.

R649-9-5. Construction and Inspection Requirements for Disposal Facilities.

1. Division personnel shall be afforded a reasonable opportunity for inspection of any proposed disposal facility during the construction and operation of the facility.

2. The division shall be notified at least two working days prior to the installation of a pit liner so that an inspection of the leak detection system can be conducted.

3. In any case, the division shall be notified after completion of facility construction, at least two working days prior to its use, so that an inspection can be conducted to verify that the facility has been constructed in accordance with the approved application.

4. Disposal facilities shall be operated in accordance with an approved application and in a manner that does not cause pollution or safety and health hazards.

5. Failure to meet the requirements and standards for construction and operation of a disposal facility shall be considered as noncompliance and will result in the imposition of corrective actions and compliance schedules or a cessation of operations order.

R649-9-6. Reporting and Recordkeeping Requirements for Disposal Facilities.

1. All unauthorized discharges or spills from disposal facilities including water observed in a leak detection system shall be promptly reported to the division.

2. Each producer who utilizes any approved produced water disposal facility shall comply with the reporting requirements of R649-8-10.

3. Each operator of a disposal facility, excluding disposal wells, shall report to the Division on a quarterly basis. This report shall include the volume and type of wastes received at the facility during the quarter and results of the leak detection system inspections.

4. The occurrence of water in a leak detection system during operation of a pit constitutes liner failure and requires immediate action.

4.1. The Division has the option of allowing the operator a short period of time to take corrective action.

4.2. Further utilization of the pit will be allowed only after liner repairs and an inspection by the Division.

5. Each owner/operator of a commercial disposal facility shall keep records showing at a minimum the following: date and time waste was received, origin, volume, type, transporter, and generator of the waste. These records shall be available for inspection by the Division for at least six years.

R649-9-7. Final Closure and Cleanup of Disposal Facilities.

1. A plan for final closure of a disposal facility shall be submitted to the Division for approval. The closure plan shall include the following:

1.1. Provisions for removal of all equipment at the site.

1.2. Proposed plans and procedures for sampling and testing soils and ground water at the site.

1.3. Soils will need to meet the Division's Cleanup Levels for Contaminated Soils or background levels whichever is less stringent.

1.4. Provisions for a monitoring plan if required by the Division, and

1.5. A consideration of post disposal land use and landowner requests when the closure plan is developed.

2. A bond for a disposal facility will be released when the requirements of a closure plan approved by the Division has been met as determined by the Division.

R649-9-8. Variances from Requirements and Standards.

Requests for approval of a variance from any of the requirements or standards of these rules shall be submitted to the director in writing and provide information as to the circumstances that warrant approval of the requested variance and the proposed alternative means by which the requirements or standards will be satisfied. Variances may be approved only after proper notice and public hearing before the board.

R649-9-9. Bonding of Disposal Facilities.

1. Disposal facilities, other than injection wells, shall be bonded according to this rule in order to protect the State and oil and gas producers from unnecessary liabilities and cleanup costs in the future. The objectives are to provide the State with adequate security to allow rehabilitation of a site to the point of preventing further or future pollution, and health and safety hazards should a facility owner default.

1.1. The parameters used to calculate the proper bond amount are: pit area, storage capacity, and volume of waste stored.

1.2. Bonds accepted shall be of the same type as those accepted for wells i.e. surety, collateral, or a combination of the two as described in the R649-3-1.

1.2.1. In order to assist owners of facilities operating prior to 1997 to establish bonding, the total bond amount provided may consist of an initial amount as determined by the division and an additional amount collected at a price per barrel and/or price per cubic yard of waste collected until the total bond amount is reached.

1.2.2. The total bond will be held by the division or financial institution until the facility has been closed and inspected by the division in accordance with a division approved closure plan.

1.3. Total bond amount is calculated using values for pit area, pit storage capacity, and volume of stock piled waste material.

1.3.1. No salvage value of equipment or removal cost is used.

1.3.2. This bond will only be used by the State to treat or remove waste from the site and secure the facility to prevent any future contamination should the facility owner default on cleanup responsibilities.

1.3.3. Bond amounts will be calculated as follows, and the per volume or per acre figures may be adjusted periodically to compensate for change in cost to perform the necessary cleanup work:

$14,000 per acre of pit, partial acres will be calculated at the rate of $14,000 per acre; plus

$1.00 per barrel of produced water for one-quarter of the total storage capacity of the facility; plus

$30 per cubic yard of solid or semi-solid waste material stockpiled at the facility.

$10,000 Minimum bond amount.

1.4. All commercial disposal facilities (except injection wells covered by R649-3-1) will be covered by an adequate and acceptable bond before being permitted to accept any exploration and production waste. The initial and minimum bond payment will be at least $10,000. The total bond amount will be calculated as described in Subsection R649-9-9(1.3). If requested by the disposal facility owner, the bond beyond the initial amount may be posted at a rate of two cents per barrel of liquid or sixty cents per cubic yard of solid/semi-solid waste material accepted for disposal at the facility.

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R649-10. Administrative Procedures.
R649-10-1. Designation of Informal Adjudicative Proceedings.

1. Adjudicative proceedings which shall be conducted informally before the division in

accordance with these rules are all actions prescribed by the Oil and Gas Conservation General Rules as being specifically under the division's authority and jurisdiction including: R649-2 General Rules; R649-3 Drilling and Operating Practices; R649-5 Underground Injection Control of Recovery Operations and Class II Injection Wells; R649-6 Gas Processing and Waste Crude Oil Treatment; R649-8 Reporting and Report Forms; R649-9 Disposal of Produced Water.

2. Prior to the issuance of a final order in any adjudicative proceeding, the presiding officer may convert an informal proceeding to a formal adjudicative proceeding if:

2.1. Conversion of the proceeding is in the public interest.

2.2. Conversion of the proceeding does not unfairly prejudice the rights of any party.

3. Informal adjudicative proceedings shall be commenced and conducted in accordance with these rules and the provisions of the applicable Oil and Gas Conservation General Rules. In case of conflict between these rules and the Oil and Gas Conservation General Rules, these rules shall govern the informal adjudicative proceedings.

R649-10-2. Definitions.

As used in these rules:

1. "Adjudicative proceeding" means an agency action or proceeding that determines the legal rights, duties, privileges, immunities, or other legal interests of one or more identifiable persons, including all agency actions to grant, deny, revoke, suspend, modify, annul, withdraw, or amend an authority, right, or license; and judicial review of all of such actions.

2. "Agency" means the Board of Oil, Gas and Mining and the Division of Oil, Gas and Mining including the director or division employees acting on behalf of or under the authority of the director or board.

3. "Agency head" means an individual or body of individuals in whom the ultimate legal authority of the agency is vested by statute.

4. "Board" means the Board of Oil, Gas and Mining.

5. "Division" means the Division of Oil, Gas and Mining.

6. "License" means a franchise, permit, certification, approval, registration, charter, or similar form of authorization required by statute.

7. "Party" means the board, division, or other person commencing an adjudicative proceeding, all respondents, all persons permitted by the board to intervene in the proceeding, and all persons authorized by statute or agency rule to participate as parties in an adjudicative proceeding.

8. "Person" means an individual, group of individuals, partnership, corporation, association, political subdivision or its units, governmental subdivision or its units, public or private organization or entity of any character, or another agency.

9. "Presiding Officer" means an agency head, or an individual or body of individuals designated by the agency head, by the agency's rules, or by statute to conduct an adjudicative proceeding. For the purpose of these rules, the board, or its appointed hearing examiner, shall be considered the presiding officer of all appeals or informal adjudicative proceedings which commence before the division as well as all adjudicative proceedings which commence before the board. The director or his designated agent shall be considered a presiding officer for all informal adjudicative proceedings which commence before the division. If fairness to the parties is not compromised, an agency may substitute one presiding officer for another during any proceeding.

10. "Respondent" means any person against whom an adjudicative proceeding is initiated

whether by an agency or any other person.

R649-10-3. Commencement of Informal Adjudicative Proceedings.

1. Except for emergency orders, all informal adjudicative proceedings shall be commenced by:

1.1. A Notice of Agency Action, if proceedings are commenced by the board or division; or

1.2. A Request for Agency Action, if proceedings are commenced by persons other than the board or division.

2. A Notice of Agency Action shall be filed and served according to the following requirements:

2.1. The Notice of Agency Action shall be in writing and shall be signed by a presiding officer and shall include:

2.1.1. The names and mailing addresses of all persons to whom notice is being given by the presiding officer, and the name, title, and mailing address of any attorney or employee who has been designated to appear for the agency.

2.1.2. The division's file number or other reference number.

2.1.3. The name of the adjudicative proceeding.

2.1.4. The date that the Notice of Agency Action was mailed.

2.1.5. A statement that the adjudicative proceeding is to be conducted informally according to the provision of these rules and Sections 63G-4-202 and 63G-4-203 if applicable.

2.1.6. A statement that the parties may request an informal hearing before the division within ten days, or such later period as may be provided for in the Oil and Gas Conservation General Rules, of the date of mailing or publication.

2.1.7. A statement of the legal authority and jurisdiction under which the adjudicative proceeding is to be maintained.

2.1.8. The name, title, mailing address, and telephone number of the presiding officer.

2.1.9. A statement of the purpose of the adjudicative proceeding and, to the extent known by the presiding officer, the questions to be decided.

2.2. The Division shall:

2.2.1. Mail the Notice of Agency Action to each party and any other person who has a right to notice under statute or rule.

2.2.2. Publish the Notice of Agency Action as required by statute or by the Oil and Gas Conservation General Rules.

2.2.3 Post a copy of the notice in a public area in the main office of the division at least 24 hours in advance of the scheduled agency proceeding.

2.3. A Request for Agency Action initiated by a person other than the board or the division shall be in writing and signed by the person seeking action by the agency or by his representative, and shall include:

2.3.1. The names and addresses of all persons to whom a copy of the request for agency action is being sent.

2.3.2. The agency's file number or other reference number, if known.

2.3.3. The date that the request for agency action was mailed.

2.3.4. A statement of the legal authority and jurisdiction under which the agency action is requested.

2.3.5. A statement of the relief or action sought from the division.

2.3.6. A statement of the facts and reasons forming the basis for relief or action.

2.4. The person requesting agency action shall file the request with the division and shall send a copy by mail to each person known to have a direct interest in the requested agency action unless previously waived in writing by each person entitled to receive notice of the requested agency action.

2.5. The person requesting the agency action may use the division forms as specified in the Oil and Gas Conservation General Rules as a request for agency action.

2.6. The presiding officer shall promptly review a Request for Agency Action and shall:

2.6.1. Notify the requesting party in writing whether the request is granted and when the adjudicative proceeding is completed;

2.6.2. Notify the requesting party in writing that the request is denied; or

2.6.3. Notify the requesting party that further proceedings are required to determine the agency's response to the request.

2.7. The division shall mail any required notice to all parties, except that any notice required by R649-10-3-2.6 may be published when publication is required by statute.

2.7.1. Give the division's file number or other reference number.

2.7.2. Give the name of the proceeding.

2.7.3. Designate that the proceeding is to be conducted informally according to the provisions of these rules and Sections 63G-4-202 and 63G-4-203 if applicable.

2.7.4. If a hearing is to be held in an informal adjudicative proceeding, state the time and place of any scheduled hearing, the purpose for which the hearing is to be held, and that a party who fails to attend or participate in a scheduled and noticed hearing may be held in default.

2.7.5. If the adjudicative proceeding is to be informal, and a hearing is required by statute or rule, or if a hearing is permitted by rule and may be requested by a party with the time prescribed by rule, state the parties' right to request a hearing and the time within which a hearing may be requested under the agency's rules.

2.7.6. Give the name, title, mailing address, and telephone number of the presiding officer.

R649-10-4. Procedures for Informal Adjudicative Proceedings.

1. Procedures for informal adjudicative proceedings should include the following:

1.1. Unless the agency by rule provides for and requires a response, no answer or other pleading responsive to the allegations contained in the notice of agency action or the request for agency action need be filed.

1.2. The agency shall hold a hearing if a hearing is requested within ten days or such later period as may be provided for in the Oil and Gas Conservation General Rules.

1.3. In any hearing, the parties named in the Notice of Agency Action or in the Request for Agency Action shall be permitted to testify, present evidence, and comment on the issues.

1.4. Hearings will be held only after timely notice to all parties.

1.5. Discovery is prohibited, but the agency may issue subpoenas or other orders to compel production of necessary evidence.

1.6. All parties shall have access to information contained in the agency's files and to all materials and information gathered in any investigation, to the extent permitted by law.

1.7. Intervention is prohibited, except where a federal statute or rule requires that a state permit intervention.

1.8. All hearings shall be open to all parties.

1.9. Within a reasonable time after the close of an informal adjudicative proceeding, the presiding officer shall issue a signed order in writing that states the following:

1.9.1. The decision.

1.9.2. The reasons for the decision.

1.9.3. A notice of any right of administrative or judicial review available to the parties.

1.9.4. A statement that the filing of an appeal or the requesting of a review shall be accomplished within 30 days of the issuance of the order.

1.10. The presiding officer's order shall be based on the facts appearing in the agency's files and on the facts presented in evidence at any hearings.

1.11. A copy of the presiding officer's order shall be promptly mailed to each of the parties and to all persons who request a copy.

2.1. The agency may record any hearing.

2.2. Any party, at his own expense, may have a reporter, approved by the agency, prepare a transcript from the agency's record of the hearing.

3.0. Nothing in this section restricts or precludes any investigative right or power given to an agency by another statute.

R649-10-5. Default In An Informal Proceeding.

1. The presiding officer may enter an order of default against:

1.1. A party in an informal adjudicative proceeding if after proper notice the party fails to participate in the informal adjudicative proceeding.

2.0. An order of default shall include a statement of the grounds for default and shall be mailed to all parties.

3.1. A defaulted party may seek to have the agency set aside the default order, and any order in the adjudicative proceeding issued subsequent to the default order, by following the procedures outlined in the Utah Rules of Civil Procedure.

3.2. A motion to set aside a default and any subsequent order shall be made to the presiding officer.

3.3. A defaulted party may seek board review under R649-10-6 only on the decision of the presiding officer on the motion to set aside the default.

4.0. In an adjudicative proceeding commenced by the agency, or in an adjudicative proceeding commenced by a party that has other parties besides the party in default, the presiding officer shall, after issuing the order of default, conduct any further proceeding without the participation of the party in default and shall determine all issues in the adjudicative proceeding, including those affecting the defaulting party.

5.0. In an adjudicative proceeding that has no parties other than the agency and the party(ies) in default, the presiding officer may, after issuing the order(s) of default, dismiss the proceeding.

R649-10-6. Appeal of Division Order.

1. A request for review of an order issued by the division shall be filed with the secretary to the Board within 30 days of issuance of the order and:

1.1. Be signed by the party seeking review.

1.2. State the grounds for review and the relief requested.

1.3. State the date upon which it was mailed.

1.4. Be sent by mail to the presiding officer and to each party.

2. Within 15 days of the mailing date of request for review, or within the time period provided by agency rule, whichever is longer, any party may file a response with the board. One copy of the response shall be sent by mail to each of the parties and to the presiding officer.

3. The board shall review the order within a reasonable time or within the time required by statute or the agency's rules.

4. To assist in review, the board may by order or rule permit the parties to file briefs or other papers, or to conduct oral argument.

5. Notice of hearings on review shall be mailed to all parties.

6.1. Within a reasonable time after the filing of any response, other filings, or oral argument, or within the time required by statute or applicable rules, the board shall issue a written order on review.

6.2. The order on review shall be signed by the board chairman or by a person designated by the board for that purpose and shall be mailed to each party.

6.3. The order on review shall contain:

6.3.1. A designation of the statute or rule permitting or requiring review.

6.3.2. A statement of the issues reviewed.

6.3.3. Findings of fact as to each of the issues reviewed.

6.3.4. Conclusions of law as to each of the issues reviewed.

6.3.5. The reasons for the disposition.

6.3.6. Whether the decision of the presiding officer or agency is to be affirmed, reversed, or modified, and whether all or any portion of the adjudicative proceeding is to be remanded.

6.3.7. A notice of any right of further administrative reconsideration or judicial review available to aggrieved parties.

6.3.8. The time limits applicable to any appeal or review.

R649-10-7. Emergency Orders.

Notwithstanding the other provisions of these rules, the director or any member of the board is authorized to issue an emergency order without notice and hearing in accordance with Section 40-6-10. The emergency order shall remain in effect no longer than until the next regular meeting of the board, or such shorter period of time as shall be prescribed by statute.

1. An emergency order may be issued if:

1.1. The facts known by or presented to the director or board member are supported by affidavit to show that an immediate and significant danger of waste or other danger to the public health, safety, or welfare exists; and

1.2. The threat requires immediate action by the director or board member,

2. Limitations. In issuing its emergency order, the director or board member shall:

2.1. Limit its order to require only the action necessary to prevent or avoid the danger to the public health, safety, or welfare;

2.2. Issue promptly a written order, effective immediately, that includes a brief statement of findings of fact, conclusions of law, and reasons for the agency's utilization of emergency adjudicative proceedings;

2.3. Give immediate notice to the persons who are required to comply with the order; and

2.4. If the emergency order issued under this section will result in the continued infringement or impairment of any legal right or interest of any party, the division shall commence a

formal adjudicative proceeding in accordance with the procedural rules of the board.

R649-10-8. Exhaustion of Administrative Remedies.

A person aggrieved by a division order in an adjudicative proceeding must seek review of that order by the board as provided in R649-10-6.

R649-10-9. Waivers.

Notwithstanding any other provision of these rules, any procedural matter, including any right to notice or hearing, may be waived by the affected person(s) by a signed, written waiver in a form acceptable to the division.

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