

AMENDMENT – MARK-UP

RULE B-26: GENERAL LEASE OPERATING REQUIREMENTS

- a) Definitions for purposes of this rule
- 1) “ADEQ” means the Arkansas Department of Environmental Quality.
 - 2) “Crude Oil Tank Battery” means ~~a combination of saltwater and~~ crude oil storage tanks and other vessels commonly used in the production and temporary storage of crude oil.
 - 3) “Director” means the Arkansas Oil and Gas Commission Director of Production and Conservation.
 - 4) “EPA” means the United States Environmental Protection Agency
 - 5) “Gas Well Produced Fluids Storage Tanks” means tanks or other vessels commonly used for the temporary storage of fluids, produced with natural gas, prior to disposal.
 - 6) “Lease” means a tract of land under agreement by an owner or person, for the purpose of producing oil and or gas and allocating that production for himself or the owners of the oil and gas rights under that tract of land.
 - 7) “Permit Holder” shall mean the operator or person, who is duly authorized to develop a lease or unit as owner or through agreement and has the right to drill and produce from any field or reservoir and to appropriate the production for himself or others.
 - 8) “Produced Fluids” shall mean those fluids produced or generated during the crude oil production and separation process and shall include crude oil, crude oil bottom sediment and shall include all waters regardless of chloride content associated with production of oil and or gas.
 - 9) “Oil Well Produced Fluids Storage Tanks” means tanks or other vessels commonly used for the temporary storage of fluids produced with crude oil prior to disposal.
 - 910) “RCRA” means Subtitle C of the Federal Resource Conservation Recovery Act of 1976.
 - 4011) “USDW” means Underground Source of Drinking Water which is defined as an aquifer or its portion which:
 - A) supplies any public water system; or
 - B) contains a sufficient quantity of groundwater to supply a public water system and currently supplies drinking water for human consumption or contains fewer than 10,000 mg/l total dissolved solids; and

C) Which is not an exempted aquifer (see 40 CFR).

b) Well Identification

- 1) Each oil and or gas well shall have a legible sign placed at the well showing the Permit Holder and the well name and number as shown on the permit as listed in the Commission records. If the lease is a single well lease, the well sign may be placed at the associated tank battery or lease entrance.
- 2) Every entrance from a public road to north Arkansas gas well sites shall have a legible sign placed at that entrance. The sign shall show the name of the Permit Holder, a list of all wells accessed by that entrance, the section, township and range, and a telephone number at which the Permit Holder or his authorized agent can be reached during an emergency.
- 3) For any newly drilled well, the required sign shall be posted within 45 days after cessation of drilling operations.
- 4) Any changes or corrections in the well information, required to be posted in accordance with this rule, shall be made to the well signs within sixty (60) days after the change occurs, or in the case of a transfer of well ownership, within sixty (60) days after the effective date of the transfer in the Commission records. All prior signs, if not correct, shall be removed.

c) Crude Oil Tank Batteries and Oil Well Produced Fluids Storage Tanks

- 1) All existing and newly constructed Crude Oil Tank Batteries and Oil Well Produced Fluids Storage Tanks ~~tank-batteries~~ shall be registered with the Commission and assigned a Commission registration number. Registration shall be reported to the Commission utilizing information as reported on the existing AOGC Form 6 Monthly Producers Report.
- 2) All Crude Oil Tank Battery and Oil Well Produced Fluids Storage Tanks ~~tank battery~~-registrations, shall be transferred, at the time of associated well transfers, utilizing the approved notice of well transfer forms filed with the Commission.
- 3) Each Crude Oil Tank Battery and Oil Well Produced Fluids Storage Tanks ~~tank battery~~ shall have a legible sign in a conspicuous place on or near the near the crude oil storage tank(s). The sign shall show the name of the Permit Holder who holds the Commission permit to operate the lease or unit, the lease name, the section, township and range, and a telephone number at which the Permit Holder or his authorized agent can be reached during an emergency.
- 4) All Crude Oil Tank Batteries and Oil Well Produced Fluids Storage Tanks ~~tank batteries consisting of tanks containing produced fluids or crude oil storage tanks or containing tanks equipped to receive produced fluids~~, shall be surrounded by containment dikes or other containment structures as may be appropriate under the circumstances, as approved by the Director. All containment dikes or other approved structures shall be constructed or installed in accordance with subparagraph (e) below.

- 5) All Crude Oil Tank Batteries and Oil Well Produced Fluids Storage Tanks, constructed after the effective date of this rule, shall not be located:
 - A) within 200 feet of an existing occupied habitable dwelling, unless the current owner of the structure has provided a written waiver consenting to the construction closer than 200 feet, in which case the tank battery shall be completely fenced to prevent unauthorized access; however, in no event may a tank battery may be constructed closer that 100 feet to an existing habitable dwelling; or
 - B) within 300 feet of a school, hospital or other type of public use building as defined in Arkansas Fire Prevention Code Section 3406.3.1.3.1; or
 - C) within 300 feet of a stream or river designated as an Extraordinary Resource Water (ERW), Natural and Scenic Waterways or Ecological Sensitive Waterbodies as defined by APC&E Regulation 2, or within 200 feet of other streams, waterways, rivers, ponds, lakes, wetlands (unless approved by other appropriate governmental agencies), or other bodies of water (as indicated by a blueline designation on a 7.5 minute USGS Topographic Map), unless the Permit Holder utilizes additional containment measures other than the required containment specified in sub-paragraph (e) below, as approved by the Director.
 - 6) All Crude Oil Tank Batteries and Oil Well Produced Fluids Storage Tanks or any part of such tanks shall not be buried below the ground surface.
 - 7) All Crude Oil Tank Batteries and Oil Well Produced Fluids Storage tanks shall be maintained in a leak-free condition.
 - 8) All open top tanks shall be covered with bird netting, or other system designed to keep birds and flying mammals from landing in the tank.
- d) Gas Well Produced Fluids Storage Tanks
- 1) Tanks or any part of such tanks shall not be buried below the ground surface.
 - 2) All tanks shall be maintained in a leak-free condition.
 - 3) All open top tanks shall be covered with bird netting, or other system designed to keep birds and flying mammals from landing in the tank.
 - 4) Tanks constructed after the effective date of this rule, shall not be located:
 - A) within 200 feet of an existing occupied habitable dwelling, unless the current owner of the structure has provided a written waiver consenting to the construction closer than 200 feet, in which case the tank battery shall be completely fenced to prevent unauthorized access; however, in no event may a tank battery may be constructed closer that 100 feet to an existing habitable dwelling; or

- B) within 300 feet of a school, hospital or other type of public use building as defined in Arkansas Fire Prevention Code Section 3406.3.1.3.1; or
- C) within 300 feet of a stream or river designated as an Extraordinary Resource Water (ERW), Natural and Scenic Waterways or Ecological Sensitive Waterbodies as defined by APC&E Regulation 2, or within 200 feet of other streams, waterways, rivers, ponds, lakes, wetlands (unless approved by other appropriate governmental agencies), or other bodies of water (as indicated by a blueline designation on a 7.5 minute USGS Topographic Map), unless the Permit Holder utilizes additional containment measures other than the required containment specified in sub-paragraph (e) below, as approved by the Director.

- 5) All tanks containing produced fluids or equipped to receive produced fluids shall be surrounded by containment dikes or other containment structures as may be appropriate under the circumstances, as approved by the Director. All containment dikes or other approved structures shall be constructed or installed in accordance with sub-paragraph (e) below.

e) Containment Dikes or Other Containment Structures

- 1) All Crude Oil Tank Batteries, Oil Well Produced Fluids Storage Tanks and Gas Well Produced Fluids Storage Tanks shall be surrounded by containment dikes or such other structure as may be appropriate under the circumstances, as approved by the Director to prevent waste, protect life, health or property, unless an exception is granted by the Commission following notice and hearing.
- 2) Required containment dikes or other approved structures shall be designed to have a capacity of at least 1½ times the largest tank the containment dike or approved structure surrounds.
- 3) The natural or man-made material utilized for the construction of the required containment dikes or other approved structures and the natural or man-made material used to line the bottom of the containment area shall be sufficiently impervious so as to contain fluids and resist erosion.
- 4) Vegetation on the top and outside surface of containment structures shall be properly maintained so as to not pose a fire hazard.
- 5) The area within the containment dike or other approved containment structure shall be kept free of excessive vegetation, stormwater, produced fluids, other oil and gas field related debris, general trash, or any flammable material. Drain lines installed through the firewall, for the purpose of draining stormwater, shall have a valve installed which shall remain closed and capped when not in use. Any fluids collected, spilled or discharged within such containment structures shall be removed as soon as practical, using the following proper disposal methods:
 - A) Stormwater, which has not been mixed with non-exempt RCRA waste as defined by the EPA, may be drained from the containment structure provided the following conditions are met:

- i) the chloride content shall not exceed applicable state water quality standards.
 - ii) there must be no visible evidence of hydrocarbons or hydrocarbon sheen present;
 - iii) the discharge shall only take place during daylight hours;
 - iv) a representative of the Permit Holder must be present during discharge; and
 - v) the Permit Holder shall maintain a record of each stormwater discharge, occurring in the previous 6 month period, and which shall be available for review upon request by Commission staff. The record shall indicate the location, quantity, chloride content, presence of any hydrocarbons (sheen), and date of discharge.
- B) Produced fluids which have not been mixed with non-exempt RCRA waste as defined by the USEPA, may be recycled through the production equipment or removed from the containment structure and disposed in a properly permitted Class II UIC Well.
- C) All stormwater and produced fluids which have been mixed with non-exempt RCRA waste as defined by the USEPA shall be removed and disposed in accordance with applicable Pollution Control and Ecology Commission regulations, as administered by ADEQ.
- D) Crude oil bottom sediments (BS&W) may be:
- i) applied on oil field lease roads under the following conditions:
 - a) application shall be in such a manner as to avoid runoff onto immediately adjacent lands or into Waters of the State; and
 - b) immediately following completion of the application, all liquid fractions shall be immediately incorporated into the road bed with no visible free-standing oil; and
 - c) no lease road shall be oiled more than twice a year; and
 - d) no lease road shall be oiled during precipitation events; and
 - e) the applied BS&W shall not have a produced water content greater than ten percent (10%) free water by volume; or
 - ii) injected into an inactive oil and gas production well:

- a) which has been equipped with tubing and packer, for the purpose of said injection, the packer to be set within the production casing, at least fifty (50) feet below the top of the production casing cement, but no less than five hundred (500) feet below the base of the deepest USDW, and
 - b) injection of the BS&W shall not exceed 45 days, after which time the well shall be immediately plugged in accordance with General Rule B-8, and
 - c) if the Director determines through field observations that the injection activities are endangering the USDW, the injection activities shall cease until the condition is corrected.
- 6) Any residual produced fluids remaining within the containment dike, after removal, as required in subsection (e) (5) above, shall be remediated in place in accordance with General Rule B-34.
- 7) Any spill, leak or discharge of produced fluids escaping from a containment dike shall be reported and remediated in accordance with General Rule B-34.
- 8) When a Crude Oil Tank Battery, Oil Well Produced Fluids Storage Tanks, or Gas Well Produced Fluids Storage Tank or a gas well separator is removed, the Permit Holder shall remove all above ground piping and flowlines coming into said tanks or separator and cap all below ground piping and flowlines, level and grade soil portion of the containment dikes, remove from site all non-soil containment structure construction material, and remediate all hydrocarbon contaminated soil at tank or separator site in accordance with General Rule B-34.
- f) Liquid Hydrocarbon Flowlines and Produced Fluid Flowlines
 - 1) All flowlines used in the production of liquid hydrocarbons, constructed after the effective date of this rule, shall be buried at least twenty-four (24) inches below the ground surface. Flowlines may be exempt from these burial requirements upon approval of the Director, in the following circumstances:
 - A) the topographical features, land uses or ground conditions prevent the efficient burial of flowlines; or
 - B) the suspected presence of numerous old abandoned flowlines, in old producing fields, render the burial of new lines impractical or which will significantly increase the likelihood of causing the discharge of crude oil from the old lines; or
 - C) the terms of the oil and gas lease or surface owner agreement, prohibit the burial of flowlines; or
 - D) the flowlines are installed or placed within the lease road right of way; or

- E) the flowlines from the well to the tank battery are entirely within the confines of the original drilling location.
- 2) All flowlines which cross and are not buried under natural drainage features such as creeks, streams, rivers or intermittent streams or ravines shall be constructed in such fashion as to bridge the drainage feature to protect the flowlines from damage due to lack of adequate support, resulting in potential discharge and violation of the state water quality standards.
 - 3) The Director shall have the authority to require active flowlines existing on the effective date of this rule to be replaced, buried or constructed in accordance with subsection (2) above or to require the visible aboveground inactive or abandoned portions of those abandoned flowlines to be removed and the open ends sealed, if the Director finds, based on field observation, that the flowlines constitute a hazard to public safety or can reasonably be expected to cause damage to the environment through leaks, spills or discharges.
 - 4) No flowlines transporting produced water shall have an outlet valve installed for the purpose of discharging produced water between the place or well of origin and the authorized storage or disposal point. A specialized valve, installed for the purpose of venting trapped air, following flowline maintenance is permissible.
 - 5) Any spill, leak or discharge from a flowline shall be reported and remediated in accordance with General Rule B-34.
- g) Natural gas production lines and gathering lines shall be installed and operated in accordance with General Rule D-17 – General Rule Relative to Establishing An Effective And Efficient Procedure For The Regulation Of Production Field Lines For Natural Gas As Well As Safety Standards or other applicable Commission rules.
 - h) Power Lines
 - 1) All power lines installed after the effective date of this rule, shall be installed in such a manner as to prevent contact by vehicle or pedestrian travel.
 - 2) The Director shall have the authority to require power lines existing on the effective date of this rule, to be in compliance with sub-paragraph (h) (1) above, if the Director finds, based on field observation, that the power lines constitute a hazard to public safety.
 - i) Equipment Use and Storage
 - 1) All well head areas shall be kept free of excessive vegetation.
 - 2) All production equipment, including but not limited to separators, heater treaters, piping, compressors, injection pumps, and chemical containers, shall be kept free of vegetation and maintained at all times in a safe and good working condition.

- 3) Used refined oil from any production equipment such as pumpjacks, injection pumps and compressors shall not be improperly disposed or placed in storage tanks containing produced water. All used refined oil shall be disposed in accordance with Arkansas Pollution Control and Ecology Commission Regulation 23, Section 279.
- 4) Excess usable or operable production equipment, not integrally related to production activities on the lease, established drilling unit, or other unitized production area shall not be stored on any surface property unless written consent from the current surface owner where the production equipment is located, has been granted to the Permit Holder to store such equipment, unless the equipment has been designated by the Permit Holder to be used in the future on that lease, established drilling unit, or other unitized production area and the equipment and storage area, which shall be limited to an area in close proximity to existing well site(s) or production area(s), and are maintained and kept free of excessive vegetation.
- 5) Other trash and debris, including but not limited to, abandoned, unusable or unrepairable, junk tanks, treaters, tubulars, injection pumps, pump jacks, concrete, above ground piping and flowlines, and any other general junk equipment or machinery shall not be stored on any surface property except that owned by the Permit Holder. Removed trash and debris shall be disposed in accordance with applicable ADEQ or other state agency regulations.

j) Production Pits

- 1) "Production Pit", as used in this Section, is an earthen surface impoundment, whether a man-made excavation or a diked area which was or currently is used for temporary storage of produced fluids prior to disposal.
- 2) Construction of production pits, other than those pits previously authorized by Commission Orders are prohibited.
- 3) All other production pits in existence as of the effective date of this rule shall cease to be used on the effective date of this rule and closed within 90 days after the effective date of this rule in a manner prescribed by the Commission and in accordance with all applicable state laws and regulations, unless exempted in accordance with subsection (4) below.
- 4) Any production pit in existence as of the effective date of this rule, may not be subject to closure in accordance with subsection (j) (3) above if:
 - A) the pit is no longer used for temporary storage of produced fluids; and
 - B) the water quality in the pit is less than 1500 TDS with no visible sheen of oil; and
 - C) a written, notarized authorization from the current surface owner has been received by the Director requesting the pit not be closed and demonstrating an acceptable alternative use for the pit; and

- D) in determining not to require the pit be closed, the Director shall:
 - i) review the current location of the pit relative to any ongoing production operations in the area; and
 - ii) review the proposed alternative use relative to public health and safety considerations and potential use for agricultural, recreational or wildlife habitat purposes.
- E) If the Director determines, based on a review of the information submitted by the operator and surface owner, the pit is not exempted, the pit shall be closed, within six (6) months, by the operator, in accordance with subsection (3) above.

k) Leaking Permitted Well

Where any oil and gas reservoir fluids or salt waters or other produced fluids are potentially leaking into the USDW as determined by geologic and field investigation or are leaking onto the surface, through a permitted well transferred to the Permit Holder, the permitted well shall be plugged by the Permit Holder. Pending plugging of the well, all injection wells within a 1/4 mile radius of the leaking drill hole shall be shut-in until the well is plugged.

l) Leaking Previously Plugged Well

Where any oil and gas reservoir fluids or salt waters are potentially leaking into the USDW or to the surface as determined by geologic and field investigation, through a well plugged under applicable Commission rules, the well shall be replugged by the original Permit Holder responsible for plugging the leaking well. If the original Permit Holder is no longer in existence or cannot be located, the well shall be eligible for plugging through the Arkansas Orphan and Abandoned Well Plugging Fund. Pending plugging of the well all injection wells within a 1/4 mile radius of the leaking well shall be shut-in until the leaking well is plugged.