

AMENDMENT - MARK-UP

RULE H-1: CLASS II DISPOSAL, ~~AND~~ CLASS II COMMERCIAL DISPOSAL, ENHANCED OIL RECOVERY INJECTION (EOR), AND CLASS V BRINE DISPOSAL WELL PERMIT APPLICATION PROCEDURES

- a) Definitions:
- 1) "Class II Disposal Well"-- means:
 - A) A permitted Class II well in which Class II Fluids are injected into zones not productive of oil and gas, and brine used to produce bromine, within the field boundary established by an order of the Commission for the production of liquid hydrocarbons or brine used to produce bromine, where the well is located or will be located, for the purpose of disposal of those fluids; or
 - B) A permitted Class II well in which Class II Fluids are injected into a zone or zones which are not commercially productive of dry gas, within the same common source of supply, where the well is located or will be located, for the purpose of disposal of those fluids."
 - 2) "Class II Commercial Disposal Well"-- means a permitted Class II well in which Class II Fluids are injected, for which the Permit Holder receives deliveries of Class II Fluids by tank truck from multiple oil and gas well operators, and either charges a fee at the disposal well facility or purchases the Class II Fluids at the source for subsequent transport to the disposal well facility for the specific purpose of disposal of the delivered Class II Fluids.
 - 3) "Class II Enhanced Oil Recovery Injection Well (EOR Well)" means a permitted Class II well into which Class II Fluids are injected into zones productive of oil and gas contained within an enhanced oil recovery unit established, by an order of the Commission, for the production of liquid hydrocarbons.
 - 34) "Class II Fluids" means:
 - A) Produced water and/or other fluids brought to the surface in connection with: i) drilling, completion, or fracture treatments, workover or recompletion and plugging of oil and natural gas wells; ii) Class II ~~or~~ wells that are required to be permitted as water supply wells by the Commission; iii) enhanced recovery operations; or iv) natural gas storage operations; or
 - B) Produced water and/or other fluids from (A) above, which prior to re-injection have been used on site for purposes integrally associated to oil and natural gas well drilling, completion, or fracture treatments, workover or recompletion and plugging of oil and natural gas wells; Class II or wells that are required to be permitted as water supply wells by the Commission; enhanced recovery operations; or natural gas storage

operations, or chemically treated or altered to the extent necessary to make them usable for purposes integrally related to oil and natural gas well drilling, completion, workover and plugging, oil and gas production, enhanced recovery operations, or natural gas storage operations, or commingled with fluid wastes resulting from fluid treatments outlined above, and including any other exempted oil and gas related fluids under the Resource Conservation and Recovery Act, provided the commingled fluid wastes do not constitute a hazardous waste under the Resource Conservation and Recovery Act; or

C) Waste fluids from gas plants (including filter backwash, precipitated sludge, iron sponge, hydrogen sulfide and scrubber liquid) which are an integral part of oil and gas production operations; and waste fluids from gas dehydration plants (including glycol-based compounds and filter backwash), unless the gas plant or gas dehydration plant wastes are classified as hazardous under the federal Resource Conservation and Recovery Act.

- 5) “Class V Brine Disposal Well” means a permitted Class V well, located within an established unit (voluntary or Commission established) created for the production of brine used to produce bromine and/or other chemical and mineral constituents of economic value, into which spent brine, following processing and removal of useable constituents, is injected into the zone of production for the purpose of disposal.
- 46) “Confining layer” means a geological formation, group of formations, or part of a formation that is capable of limiting fluid movement above an injection zone. It is composed of rock layers that are impermeable or distinctly less permeable than the injection zone beneath it. There may be multiple confining layers above an injection zone.
- 7) “Disposal system” means a system for disposing of Class II Fluids.
- 8) “High volume disposal system” means a disposal system with an on-site storage capacity of greater than 1000 barrels of Class II Fluids.
- 59) “Permit Holder” means the entity or person to whom the permit is issued and who is responsible for all regulatory requirements relative to the Class II Disposal, ~~or~~ Class II Commercial Disposal, Class II EOR, or Class V Brine Disposal Wells.
- 10) “Spent Brine Fluid” means brine fluid, which prior to re-injection, was produced for the purpose of processing the brine fluid to remove bromine and other chemical and mineral constituents of economic value from the brine fluid.
- 11) “UIC Well” means any of the Class II Disposal, Class II Commercial Disposal, Class II EOR, or Class V Brine Disposal Well types.
- 612) “USDW” means Underground Source of Drinking Water which is defined in Title 40, Code of Federal Regulations (40 CFR) Section 144.3, as an aquifer or its portion which:

- A) Supplies any public water system (see 40 CFR); or
 - B) Contains a sufficient quantity of groundwater to supply a public water system (see 40 CFR) and currently supplies drinking water for human consumption; or
 - C) Contains fewer than 10,000 mg/l total dissolved solids (see 40 CFR); and
 - D) Which is not an exempted aquifer (see 40 CFR).
- b) No person shall drill, deepen, re-enter, recomplete or operate any ~~UIC Well for use as a Class II Disposal or Class II Commercial Disposal Well~~ or inject into any UIC Well, without the applicable permits, except as specified in subparagraph b) 1) below, from the Commission, application for which shall be made on forms prescribed by the Director. Permits are valid only for the Permit Holder stated on the permit, and shall remain valid only with ongoing compliance with established operating requirements specified in General Rule H-2 or H-3, except that permits to drill, deepen, or re-enter shall automatically expire six (6) months from the date of issuance, unless commencement of the drilling, deepening or re-entry of plugged well operations authorized by the permit has occurred, which are to be continued with due diligence, but not to exceed one (1) year from the date of commencement of the drilling, deepening or re-entry of plugged well operations authorized by the permit, at which time the well shall be plugged, injection casing set, or a new permit application, along with a new permit fee and plat, must be filed. ~~Failure to comply with the operating requirements in General Rule H-2 or H-3 may result in revocation of the Class II Disposal Well, Class II Commercial Disposal Well permit in accordance with subparagraph q) below.~~
- 1) Authority to conduct an injectivity test, step rate test or trial injection test prior to, or after the issuance of a permit may be approved as follows:
 - A) An injectivity test, step rate test or trial injection test of less than twelve (12) hours duration may be approved by the Director upon review of the well construction to determine well mechanical integrity for the protection of the USDW's and oil and gas resources during the test. The Director shall establish the protective parameters of the test, require the submittal of any information or test data deemed necessary and may require the witnessing by Commission staff of the test.
 - B) An Applicant may request approval from the Commission, by filing an application in accordance with General A-2 and A-3 and other applicable hearing procedures, of an injectivity test, step rate test or trial injection test of twelve (12) hours or more in duration.
 - 2) No ~~Class II Disposal UIC Well or Class II Commercial Disposal Well~~ may be drilled at a surface location other than that specified on the permit, except that if a permit holder has commenced drilling operations and the ~~Class II Disposal UIC Well or Class II Commercial Disposal Well~~ is lost due to adverse drilling conditions prior to surface casing being set, the permit holder may request an amendment of the permit without a fee for the new location, provided the UIC Class II Disposal Well or Class II Commercial Disposal Well remains on the

same surface owners property where the ~~UIC Class II Disposal Well or Class II Commercial Disposal~~ Well was originally permitted and all other aspects of the permit request remain the same. Movement of the ~~UIC Class II Disposal Well or Class II Commercial Disposal~~ Well location off the original surface owners' property, or after surface casing has been set, will require the filing of a new permit application, along with a new permit fee and plat. Drilling may not commence prior to the issuance of a new permit.

- 3) Permits to recomplete or operate shall automatically expire one year from the date of issuance, unless commencement of the operations authorized by the permit has occurred, or a new permit application, along with a new permit fee has been filed.
 - 4) Upon issuance of a permit, a copy of the permit shall be displayed at the site where the ~~UIC Class II Disposal Well or Class II Commercial Disposal Well~~ is being drilled for review by Commission staff.
 - 5) Permits to drill, deepen, or re-enter a UIC ~~Class II Disposal Well or Class II Commercial Disposal Well~~ may only be issued if the location complies with General Rule B-3.
- c) Failure to comply with the operating requirements in General Rule H-2 or H-3 may result in revocation of the UIC Well permit in accordance with subparagraph s) below.
- d) All surface facilities, included but not limited to storage tanks, flowlines, injection equipment, related to UIC Wells shall be regulated as follows:
- 1) Any surface facility associated with a Class II Disposal Well which is not associated with a High Volume Disposal System shall be maintained and operated in accordance with AOGC General Rule B-26.
 - 2) Any surface facility associated with a Class II Commercial Disposal Well or a Class II Disposal Well that is associated with a High Volume Disposal System shall be permitted and operated in accordance with Arkansas Department of Environmental Quality requirements specified in PC&E Regulation 1.
 - 3) Any surface facility associated with a Class II EOR and Class V Brine Disposal Well shall be maintained and operated in accordance with AOGC General Rule B-26.
- ee) The application to drill, deepen, re-enter, recomplete or operate a ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well shall include at a minimum:
- 1) The information required by subparagraph (h) below, for the existing or proposed ~~UIC Well Class II Disposal or Class II Commercial Disposal well~~ and any additional information deemed necessary by the Director for the protection of USDWs; and
 - 2) Accompanied by a drilling permit fee in the amount of \$300.00 if the ~~Class II Disposal or Class II Commercial Disposal~~ UIC Well is drilled, deepened, or re-entered; and

- 3) Accompanied by a non-refundable application fee of \$100.00 for a Class II Disposal, Class II EOR, or Class V Brine Disposal Well or \$500.00 for a Class II Commercial Disposal Well to recomplete or operate the ~~Class II Disposal or Class II Commercial Disposal~~ UIC Well; and
 - 4) Accompanied by the required financial assurance in accordance with General Rule B-2; and
 - 5) Accompanied by a Form 1 Organizational Report in accordance with General Rule B-13; and
 - 6) Be executed under penalties of perjury; and
 - 7) If the applicant is a corporation, limited liability company, limited liability partnership or other business entity, it must be incorporated, organized, or authorized to do business in the State of Arkansas, and by filing an application, the applicant irrevocably waives, to the fullest extent permitted by law, any objection to a hearing before the Commission or in a court of competent jurisdiction in Arkansas; and
 - 8) If the applicant is an individual, partnership, or other entity that is not a resident of Arkansas, the applicant must be authorized to do business in Arkansas, and by filing an application, the applicant irrevocably waives, to the fullest extent permitted by law, any objection to a hearing before the Commission or in a court of competent jurisdiction in Arkansas; and
 - 9) Proof that the UIC ~~Class II Disposal or Class II Commercial~~ Well location complies with General Rule B-3; and
 - 10) If the application is for a Class II Disposal Well associated with a Disposal System that is not a High Volume Disposal System, (i) a plat showing the location and proposed or existing configuration of the storage tank disposal facility, (ii) the total disposal storage capacity of Class II Fluids at the facility, and (iii) a list of the production wells utilizing the Class II Disposal Well.
- df) No person shall inject into USDWs or be issued a permit to inject into USDWs unless an aquifer exemption has been granted in accordance with US Environmental Protection Agency procedures.
- eg) Unless otherwise approved by the Commission, no person shall inject into a UIC well which does not have at a minimum, five hundred (500) feet for a Class II Disposal Well or seven hundred-fifty (750) feet for a Class II Commercial Disposal or Class V Brine Disposal Well, of confining layers between the base of the lowermost USDWs and the top of the injection interval, with no individual confining layer being less than 50 feet in thickness. A lesser amount of confining layer(s) may be approved, provided the Applicant provides substantial information as to the integrity of the confining layers to inhibit the upward migration of the injection fluids so as not to endanger the lowermost USDW in the area of the UIC well.

- ~~fh~~) If the application does not contain all of the required information or documents, the Director shall notify the Applicant in writing. The notification shall specify the additional information or documents necessary for an evaluation of the application and shall advise the Applicant that the application will be deemed denied unless the information or documents are submitted within sixty (60) days following the date of notification.
- ~~gi~~) Applications for a Class II Disposal Well shall contain the names of all permit holders who are to utilize the proposed disposal well.
- ~~hj~~) Contents of Application
- 1) A specification as to the type of UIC Well ~~Class II well~~ being permitted, ~~as a Class II Disposal Well or a Class II Commercial Disposal Well.~~
 - 2) If the application is for a Class II Disposal or Class II Commercial Disposal Well, ~~The~~ Applicant shall provide the name, address, phone, fax and e-mail (if available) of the local or on-site supervisory or field personnel responsible for the disposal well.
 - 3) If the Class II Disposal well is not located within the boundaries of an operating oil and gas leasehold or drilling unit, the Applicant shall provide documentation, in the form of a surface use agreement or an affidavit of a surface use agreement, indicating the Applicant's right to drill and to operate the proposed ~~disposal~~ Class II Disposal well. If the Class II Disposal well is located within the boundaries of an operating oil and gas leasehold or drilling unit, and the Applicant is someone other than the operator of the leasehold or drilling unit, the Applicant shall provide documentation, in the form of a surface use agreement, or an affidavit of a surface use agreement, indicating the Applicant's right to drill and to operate the proposed ~~disposal~~ Class II Disposal well. If the well is a Class II Commercial Disposal Well, the Applicant shall provide documentation, in the form of a surface use agreement, or an affidavit of a surface use agreement, indicating the Applicant's right to drill and to operate the proposed Class II Commercial Disposal Well.
 - 4) A survey plat of the location and ground elevation of the proposed ~~disposal~~ UIC Wwell or if the application is for an previously permitted existing well, the well name and permit number of the previously permitted existing well. A new survey is not required for a well to be converted or deepened well or a plugged well to be re-entered, if the original well location was surveyed, a copy of which shall be submitted with the application.
 - 5) The name, geologic description and the approximate top and bottom elevation, from sub-sea, of the formation (indicating the perforated or open hole interval) into which fluid will be injected and the geologic description and top and bottom elevation, from sub-sea, of the above confining layers, in the proposed or previously permitted existing ~~disposal~~ UIC Wwell. If an previously permitted existing well is to be converted, a geophysical log of the previously permitted existing well shall be submitted showing the above information. For a proposed well, an induction log from a well in the immediate vicinity of the proposed UIC ~~disposal~~ wWell shall be submitted. If the geologic name of the interval is unclear include

any additional geological evidence such as a cross section, structure or isopach map that may be necessary to adequately define the proposed injection interval.

- 6) A well bore diagram of the proposed or previously permitted existing well showing ~~casing for the injection well, indicating~~ from the well head to total depth of the well, all casings and cementing of casings, any obstructions within well, all plugs set, tubing and packer setting depth, and all perforations and or open hole intervals. If application is for ~~a~~ previously permitted existing well, a cement bond log (CBL) shall be submitted with the application, or if submitted after the application is filed, the CBL shall be submitted prior to commencement of operations as a condition of the permit.
- 7) The proposed daily amounts to be injected, the source and the type of fluid to be injected, and standard laboratory report from an accredited laboratory reporting the laboratory results of a representative sample of the proposed ~~disposal~~ fluids to be injected, for the following parameters: chloride, pH, specific gravity, total dissolved solids (TDS) and total percent hydrocarbon (TPH). The sample shall be obtained and analyzed no earlier than one hundred-eighty (180) days prior to the date of filing of the application and analyzed in a timely fashion after collection.
- 8) The maximum injection pressure.
 - A) The Director shall determine the maximum permitted injected pressure, measured at the wellhead, by multiplying the results of the formula below by ninety percent (90%):
 - i) A maximum fracture gradient not to exceed 1.1 psi/ft (x) depth to injection formation (-) weight of fluid column (specific gravity of injection fluid) (+) injection tubing friction loss in Ashley, Bradley, Calhoun, Columbia, Hempstead, Lafayette Miller, Nevada, Ouachita, and Union counties for injection into formations below the Midway Shale Formation; or
 - ii) A maximum fracture gradient not to exceed 1.0 psi/ft (x) depth to injection formation (-) weight of fluid column (specific gravity of injection fluid) (+) injection tubing friction loss in all other counties for injection into formations below the Fayetteville Shale Formation in the areas covered by General Rule B-43 (c) and (d), General Rule B-44, and the portions of Franklin, Logan, Scott, Sebastian, and Yell Counties not covered by General Rule B-44; or
 - iii) A maximum fracture gradient not to exceed 0.73 psi/ft (x) depth to injection formation (-) weight of fluid column (specific gravity of injection fluid) (+) injection tubing friction loss for all other formations and/or counties.

The following calculation is included only as an example, and for informational and demonstrative purposes only. For purposes of this example, assume the well is in Columbia County, the total depth to the injection formation is 2,500 feet, the specific gravity is 1.085, and

the injection tubing friction loss is 250 psi. Using the formula provided above, the maximum permitted injection pressure for the well would be 1,642 psig, calculated as follows:

Step 1: $0.9 \times [(1.1 \text{ psi/ft} \times 2500 \text{ ft}) - [0.433 \text{ psi/ft} \times 2500 \text{ ft}] \times 1.085 \text{ (specific gravity)}] + 250 \text{ tubing friction loss}$

Step 2: $0.9 \times [2750 \text{ psi} - 1175 + 250 \text{ tubing friction loss}]$

Step 3: $0.9 \times [1825]$

Step 4: Result = 1642 psig

- B) An Applicant may request an increase in the maximum injection pressure specified in subparagraph **h**) 8) A) above, or appeal a Director's decision to issue a permit utilizing a fracture gradient less than the maximum fracture gradient specified in subparagraph **h**) 8) A) above, by filing an application in accordance with General A-2, A-3 and other applicable hearing procedures. Any increase in the maximum injection pressure may be granted if the Applicant presents sufficient evidence to justify the requested increased injection pressure will not initiate or propagate fractures in the overlying confining layer(s) that could enable the injection fluid or the fluid in the injection interval to leave the permitted injection intervals or cause movement of the injection fluid or formation fluids into USDWs.
- 9) A map showing:
- A) The surveyed location of the **UIC W** well proposed to be drilled, deepened or converted, showing distances to the nearest property or lease lines; and
 - B) The location of all known plugged and unplugged wells, which penetrate the proposed injection interval, within the 1/2 mile radius from the proposed disposal well, and showing the status of each well as producing, shut-in, disposal, enhanced recovery, plugged and abandoned, or other status.
- 10) The Applicant shall submit evidence, where available, that all plugged and unplugged wells which penetrate the injection formation, within the 1/2 mile radius shown on the above plat in subparagraph **h**) 9) B), contain an adequate amount of cement and are constructed or plugged in a manner which will prevent the injection fluid and the fluid in the injection formation from entering USDWs. The types of evidence that will be considered acceptable include, but are not limited to: well completion reports, cementing records, well construction records, cement bond logs, tracer surveys, oxygen activation logs, and plugging records.
- 11) The Applicant shall submit evidence and/or information showing that the proposed injection interval or formation is not a USDW.

- 12) The Applicant shall submit information as to the depth (subsea) of the fresh water supply in the nearest known private water well and in the nearest known public water system water well.
 - 13) If the application is for a Class II ~~UHC~~ Commercial Disposal Well, a listing of all previous and current violations of any statute, rule, regulation, permit condition, or order of the Commission, the Arkansas Department of Environmental Quality, the Arkansas Pollution Control and Ecology Commission, or any other state or federal environmental regulatory agency, including those of other states, regarding oil or gas related activities.
- ~~ik~~) Notice of the application shall be given by the Applicant by one (1) publication in a legal newspaper having a general circulation in the county, or in each county, if there shall be more than one, in which the one-half mile radius from the proposed disposal well is situated, and by mailing via certified mail, FedEx, UPS, or other method that provides proof of mailing and delivery, a copy of the application to each permit holder of all permitted, drilling or producing wells within a one-half mile radius of the proposed disposal well. Such notice shall be published or mailed no more than thirty (30) days, prior to the date on which the application is filed with the Commission. The cost of such notice and mailing of the application shall be paid for by the Applicant. Attached to the application shall be evidence that the application was mailed or sent as required and a proof of publication of the application from the newspaper.
- ~~jl~~) If notice is for a ~~Class II Commercial Disposal Well~~, in addition to compliance with subparagraph i) above, the ~~Class II Commercial Disposal Well~~ application shall also be sent via certified mail, FedEx, or UPS to the County Judge of the county where the well is located and to the landowner (surface owner) where the well is located. In addition, the public notice should be large font and surrounded by a printed border to highlight the published notice.
- ~~km~~) Objections received by the Director, must be received by the Director within fifteen (15) days after the publication date of the notice and the date of mailing or sending to all parties specified in subparagraphs ~~ik~~) and ~~jl~~) above.
- ~~ln~~) If an objection is received the application shall be deemed denied. If the application is denied under this section, the Applicant may request to have the application referred to the Commission for determination, in accordance with General Rules A-2 and A-3, and other applicable hearing procedures, except that no additional filing fee is required.
- ~~mo~~) If an objection is not received by the Director and the application is deemed complete, the permit shall be issued following the required notice period specified in subparagraph ~~ik~~) above, unless the Director deems it necessary, for the purpose of protecting USDWs or oil and gas resources, that the application may be referred to the Commission for determination, and no additional filing fee is required from the applicant.
- ~~np~~) If the application does not satisfy the requirements of this Rule, the application shall be denied. If the application is denied under this section, the Applicant may request to have the application referred to the Commission for determination, in accordance with General Rules A-2 and A-3, and other applicable hearing procedures.

eg) If the Applicant satisfies the requirements of all applicable statutes and this Rule, a permit shall be issued, unless:

- 1) The Applicant has falsified or otherwise misstated any material information on or relative to the permit application; or
- 2) For purposes of Class II Commercial Disposal Wells, the Applicant:
 - A) Has an owner, officer, director, partner, or member or manager of a limited liability company, or other person with an interest in the entity exceeding 5%;
 - i) That has failed to abate an outstanding violation of the oil and gas statutes or rules, regulations, or comply with an orders of the Commission as specified in a final administrative decision of the Commission; or
 - ii) For which funds have been obligated and remain outstanding from the Plugging and Restoration Fund to plug wells, under General Rule G-1 or G-2; or
 - iii) Who is delinquent in payment of any annual well fees under General Rule B-2.
 - B) Was an owner, officer, director, partner, or member or manager of a limited liability company, or other person with an interest exceeding 5%;
 - i) That has failed to abate an outstanding violation of the oil and gas statutes or rules, regulations, or comply with an orders of the Commission as specified in a final administrative decision of the Commission; or
 - ii) For which funds have been obligated and remain outstanding from the Plugging and Restoration Fund to plug wells, under General Rule G-1 or G-2; or
 - iii) Who is delinquent in payment of any annual well fees under General Rule B-2.
 - C) Is a Permit Holder or an owner, officer, director, partner, or member or manager of a limited liability company, or other person with an interest exceeding 5%;
 - i) That has failed to abate an outstanding violation of the oil and gas statutes or rules, regulations, or comply with an orders of the Commission as specified in a final administrative decision of the Commission; or
 - ii) For which funds have been obligated and remain outstanding from the Plugging and Restoration Fund to plug wells, under General Rule G-1 or G-2; or

iii) Who is delinquent in payment of any annual well fees under General Rule B-2.

D) If the Director determines that the applicant, or an owner, officer, director, partner, or member or manager of a limited liability company, or other person with an interest exceeding 5% in the applicant, has a history of violating an oil and gas statute, rule, regulation, permit condition or order of the Commission, the Arkansas Department of Environmental Quality, the Arkansas Pollution and Ecology Commission, or any other state or federal environmental regulatory agency, including those of other states, regarding oil or gas related activities, which pose a potential danger to the environment and public health and safety. In making the determination, the Director may consider:

i) The danger to the environment and public health and safety if the applicant's proposed activity is not conducted in a competent and responsible manner; and

ii) The degree to which past and present oil and gas related activities directly bear upon the reliability, competence, and responsibility of the applicant.

E) If a permit is not issued in accordance with subparagraph o) 2) above, the Applicant may request to have the permit application referred to the Commission for determination, in accordance with General Rules A-2 and A-3, and other applicable hearing procedures, except that no additional filing fee is required.

~~pr~~) The Commission retains jurisdiction to determine zones suitable for ~~disposal~~ injection based on the porosity, permeability, fluid capacity, structure, geology and overall suitability of the zone as a disposal injection interval with respect to protection of USDWs ~~and~~, oil and gas resources ~~and correlative rights~~.

~~qs~~) ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well Drilling Permit or Transfer Revocation Procedures

1) The Director may revoke a ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well permit or transfer approval if the Permit Holder fails to meet permit conditions as specified in the ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well permit or transfer approval, the ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well permit or transfer approval was issued in error, or the Permit Holder falsified or otherwise misstated any material information in the application form.

2) The Director shall notify the Permit Holder of the ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well permit or transfer revocation in writing. Following the revocation notice the Permit Holder is required to plug the ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well. The Permit holder shall have thirty (30) days from the date of the ~~UIC Class II Disposal or Class II~~

~~Commercial Disposal~~ Well permit or transfer revocation to appeal the Director's Decision to revoke the ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well permit or transfer approval in accordance with General Rule A-2, A-3 and other applicable hearing procedures. Operations may not commence or continue during the appeal process. A revocation of a ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well permit or transfer approval for which an appeal has not been filed, shall become a final administrative decision of the Commission thirty (30) days following the date of the revocation.

rt) ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well Transfer Procedures

1) Definitions

A) "Current Permit Holder" means the individual or entity required to hold the permit or to whom the permit was issued and who is the owner of the right to operate said ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well(s), possesses the full rights and responsibilities for operating the ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well(s) in accordance with applicable Arkansas law and has the current obligation to plug said ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well(s), who is the assignor, transferor or seller (whether voluntary or involuntary) of the ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well(s).

B) "New Permit Holder" means the individual or entity acquiring the ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well(s) and the right to operate said ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well(s), who obtains the full rights and responsibilities for operating the ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well(s) in accordance with applicable Arkansas law and/or rule, regulation, or order of the Commission, whom will obtain the obligation to plug said ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well(s), and who as owner or operator in accordance with applicable Arkansas law and/or rule, regulation, or order of the Commission is required to hold the permit.

C) "Transfer" means any assignment, devise, release, transfer, takeover, buyout, merger, sale, conveyance, or other transfer of any kind, whether voluntarily or involuntarily.

2) The provisions of this subparagraph apply to all transfers of the interest of the individual or entity required to hold and to whom the ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well transfer approval is issued (Permit Holder), including but not limited to:

A) a change of ownership of the right to drill and/or operate said ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well(s), along with the full rights and responsibilities for operating the ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well(s) and the obligation to ultimately plug said ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well(s); or

- B) a change in the designation of the owner or operator under an operating or other similar agreement; or
 - C) a change pursuant to the action of the owners of separate interests who designate an owner to be Permit Holder; or
 - D) a change required by the appointment, by a court of competent jurisdiction, of a trustee or a receiver to exercise custody and control over the ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well(s), including the right to drill and/or operate said well(s) along with the full right and responsibilities for operating the ~~UIC w~~Well(s).
- 3) The provisions of this subparagraph shall not apply to the transfer of working interests not affecting the rights or responsibilities of the Permit Holder.
- 4) The provisions of this subparagraph shall not apply to transfers of ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well(s) abandoned or orphaned in accordance General Rule G-1 or G-2. Transfers of ~~UIC Class II Disposal or Class II Commercial Disposal~~ Wells deemed abandoned or orphaned are subject to the transfer provisions in General Rule G-3.
- 5) Notification of a transfer shall be given to the Director, or his designee, by the Current Permit Holder, on a form prescribed by the Director, of the transfer of any ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well or any ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well required to be permitted within thirty (30) days after the effective date of the transfer.
- 6) A separate form shall be completed for each lease, ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well, or other unit transferred.
- 7) The notification shall be signed by the Current Permit Holder and the New Permit Holder, or by authorized representatives specified on the Organizational Report filed in accordance with General Rule B-13, except as follows:
- A) In lieu of the signature of the Current Permit Holder, the New Permit Holder may submit a court order or other legal document evidencing ownership of the lease or unit to be transferred in the event that the Current Permit Holder cannot be located or refuses to sign the notification of transfer form.
 - B) In lieu of the signature of the New Permit Holder, the Current Permit Holder may submit documentation evidencing transfer of the ownership of the ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well, lease, or unit in the event the New Permit Holder refuses to sign the notification of transfer form.
- 8) A New Permit Holder may operate ~~UIC Class II Disposal or Class II Commercial Disposal~~ Wells covered by the ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well transfer request, until such time as the transfer request has been approved or denied by the Director or his designee, provided the request was

submitted within thirty (30) days of the actual transfer of the ~~UIC Class-II Disposal or Class-II Commercial Disposal~~ Well. However, ~~UIC Class-II Disposal or Class-II Commercial Disposal~~ Wells may not be operated by the New Permit Holder, until a ~~UIC Class-II Disposal or Class-II Commercial Disposal~~ Well transfer request is approved, if the request was received by the Director, or his designee, more than thirty (30) days after the actual transfer of the ~~UIC Class-II Disposal or Class-II Commercial Disposal~~ Well.

- 9) A New Permit Holder that acquires the right to operate a ~~UIC Class-II Disposal or Class-II Commercial Disposal~~ Well(s) pursuant to a transfer shall apply for and must receive transfer approval from the Director, or his designee, prior to operating the ~~UIC Class-II Disposal or Class-II Commercial Disposal~~ Well(s) beyond the timeframe specified in subparagraph ~~(r)~~(8) above.
- 10) Prior to the Director, or his designee, approving the transfer request, the New Permit Holder shall provide the required financial assurance, if applicable, in accordance with General Rule B-2, and file the required organizational report, if applicable, in accordance with General Rule B-13.
- 11) A transfer to a New Permit Holder may be denied by the Director, or his designee, if the New Permit Holder meets any of the conditions specified in subparagraph ~~(q)~~ above.
- 12) The New Permit Holder shall be responsible for all regulatory requirements relative to all ~~UIC Class-II Disposal or Class-II Commercial Disposal~~ Wells and all other surface production facilities in existence at the time of the transfer related to the ~~UIC Class-II Disposal or Class-II Commercial Disposal~~ Well. The New Permit Holder shall not be responsible for regulatory requirements relative to spills of crude oil or other production fluids which occurred prior to the date of the transfer, unless the New Permit Holder has otherwise agreed with the Current Permit Holder.
- 13) If any ~~UIC Class-II Disposal or Class-II Commercial Disposal~~ Well, or any lease or other unit associated with the ~~UIC Class-II Disposal or Class-II Commercial Disposal~~ Well, is in violation at the time of the transfer request to the New Permit Holder, the transfer request shall be denied pending abatement of all violations by the Current Permit Holder. However, if the New Permit Holder, after being notified of the violation(s), agrees in writing to the transfer approval including conditions to abate all violations, the transfer may be approved by the Director, or his designee. Failure to abate the violations within the time period specified by the Director or his designee may result in revocation of the transfer approval in accordance with subparagraph ~~(q)~~ above, and/or other applicable enforcement actions in accordance with General Rule A-5.
- 14) The Current Permit Holder is not responsible for any regulatory violation caused by the actions of the New Permit Holder during the permit transfer process, after notice is given to the Director, or his designee, by the Current Permit Holder of the pending transfer if the transfer is approved. However, if the transfer is denied by the Director or his designee, the Current Permit Holder assumes all responsibility for the violations caused by the New Permit Holder. Nothing in this subsection shall affect the contractual rights and obligations between the

person or entity transferring the ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well(s) and the person or entity acquiring the ~~UIC Class II Disposal or Class II Commercial Disposal~~ Well(s).

- 15) The transfer approval pursuant to this subparagraph shall not affect the rights of the Commission, or any obligation or duty of the Current Permit Holder arising under any applicable Arkansas laws, or rules, regulations, or orders of the Commission. Any cause of action accruing or any action or proceeding which has commenced, whether administrative, civil or criminal, may be instituted or continued without regard to the transfer approval.
- 16) The Director shall notify the Current and New Permit Holder of the transfer approval or denial in writing. Following the approval or denial of the transfer approval request, the Current or New Permit holder shall have thirty (30) days from the date of the approval or denial to appeal the Director's Decision in accordance with General Rule A-2, A-3 and other applicable hearing procedures. A transfer request approval or denial, for which an appeal has not been filed, shall become a final administrative decision of the Commission thirty (30) days following the date of the approval or denial.

su) Miscellaneous Provisions and Requirements for Class II Disposal or Class II Commercial Disposal Wells Within General Rule B-43 Section c) lands.

- 1) Definitions:
 - a. "Regional Fault" means the identified fault zones named by the Arkansas Geological Survey as the Clinton, Center Ridge, Heber Springs, Enders and Morrilton Fault zones; and which are part of a general east-west turning north-east (approximately N55°E to N75°E) trending, down thrown to the south, fault system generally occurring below the Fayetteville Shale Formation displacing the Lower Mississippian through Precambrian strata and truncating upward at the unconformity between the Mississippian and Pennsylvanian age strata; and which are identified on the Arkansas Geological Survey map attached hereto as Exhibit 1 to this Rule; and as updated for purposes of this Rule following notice and a hearing in accordance with General Rule A-2.
 - b. "Moratorium Zone Deep Faults" means deeper faults associated with the Guy-Greenbrier Earthquake Swarm; and which are part of a general northeast-southwest (approximately N30°E) trending deeper fault system displacing the Lower Ordovician through Precambrian strata occurring in the general B-43 Section c) lands area.
- 2) Unless otherwise approved by the Commission after notice and a hearing, no permit to drill, deepen, re-enter, recomplete or operate a Class II Disposal or Class II Commercial Disposal Well may be granted for any Class II or Class II Commercial Disposal wells in any formation within the following area ("Moratorium Zone") located in Cleburne, Conway, Faulkner, Van Buren, and White Counties:

<u>Sections</u>	<u>Township</u>	<u>Range</u>
<u>ALL</u>	<u>4N</u>	<u>13W</u>
<u>ALL</u>	<u>5N</u>	<u>12W</u>
<u>ALL</u>	<u>5N</u>	<u>13W</u>
<u>ALL</u>	<u>5N</u>	<u>14W</u>
<u>ALL</u>	<u>6N</u>	<u>12W</u>
<u>ALL</u>	<u>6N</u>	<u>13W</u>
<u>ALL</u>	<u>7N</u>	<u>11W</u>
<u>ALL</u>	<u>7N</u>	<u>12W</u>
<u>ALL</u>	<u>7N</u>	<u>13W</u>
<u>ALL</u>	<u>8N</u>	<u>11W</u>
<u>ALL</u>	<u>8N</u>	<u>12W</u>
<u>ALL</u>	<u>8N</u>	<u>13W</u>
<u>ALL</u>	<u>9N</u>	<u>10W</u>
<u>ALL</u>	<u>9N</u>	<u>11W</u>
<u>ALL</u>	<u>9N</u>	<u>12W</u>
<u>ALL</u>	<u>10N</u>	<u>10W</u>
<u>ALL</u>	<u>10N</u>	<u>11W</u>
<u>ALL</u>	<u>11N</u>	<u>10W</u>
<u>ALL</u>	<u>11N</u>	<u>11W</u>
<u>1-12, 14-23, 27-33</u>	<u>4N</u>	<u>12W</u>
<u>1-30, 35-36</u>	<u>4N</u>	<u>14W</u>
<u>1-2, 10-15, 23-25</u>	<u>4N</u>	<u>15W</u>
<u>4-9, 17-20, 30-31</u>	<u>5N</u>	<u>11W</u>
<u>25, 35-36</u>	<u>5N</u>	<u>15W</u>
<u>6</u>	<u>6N</u>	<u>10W</u>
<u>1-23, 26-34</u>	<u>6N</u>	<u>11W</u>
<u>1-4, 9-36</u>	<u>6N</u>	<u>14W</u>
<u>24-25, 36</u>	<u>6N</u>	<u>15W</u>
<u>3-9, 16-20, 29-31</u>	<u>7N</u>	<u>10W</u>
<u>1, 11-14, 22-27, 34-36</u>	<u>7N</u>	<u>14W</u>
<u>6-7</u>	<u>8N</u>	<u>9W</u>
<u>1-24, 26-35</u>	<u>8N</u>	<u>10W</u>
<u>25, 36</u>	<u>8N</u>	<u>14W</u>
<u>3-10, 15-21, 29-32</u>	<u>9N</u>	<u>9W</u>
<u>1-5, 7-36</u>	<u>9N</u>	<u>13W</u>
<u>1-23, 27-34</u>	<u>10N</u>	<u>9W</u>
<u>1-3, 9-17, 19-36</u>	<u>10N</u>	<u>12W</u>
<u>25, 33, 34, 36</u>	<u>10N</u>	<u>13W</u>
<u>17-22, 27-35</u>	<u>11N</u>	<u>9W</u>
<u>13, 23-27, 34-36</u>	<u>11N</u>	<u>12W</u>

- 3) Unless otherwise approved by the Commission after notice and a hearing, no permit to drill or re-enter, a new Class II Disposal or Class II Commercial Disposal Well may be granted within one (1) mile of a Regional Fault or within five (5) miles of a known or identified Moratorium Zone Deep Fault within any remaining B-43 Section c) lands.
- 4) Unless otherwise approved by the Commission after notice and a hearing, no permit to deepen or re-complete any existing Class II Disposal or Class II Commercial Disposal Well in a zone stratigraphically below the Fayetteville Shale formation, may be granted within one (1) mile of a Regional Fault or within five (5) miles of a known or identified Moratorium Zone Deep Fault within any remaining B-43 Section c) lands.
- 5) Unless otherwise approved by the Commission after notice and a hearing, the following provisions shall apply to any permit to drill, deepen, or operate a new Class II Disposal or Class II Commercial Disposal Well proposed to be located within in any remaining B-43 Section c) lands:
 - a) No Class II Disposal or Class II Commercial Disposal Well disposing in a zone occurring stratigraphically below the Fayetteville Shale formation shall be located within five (5) miles of another Class II Disposal or Class II Commercial Disposal Well disposing in a zone occurring stratigraphically below the Fayetteville Shale formation.
 - b) No Class II Disposal or Class II Commercial Disposal well disposing in a zone occurring stratigraphically above the Fayetteville Shale formation shall be located within one-half (1/2) mile of another Class II Disposal or Class II Commercial Disposal Well disposing in a zone occurring stratigraphically above the Fayetteville Shale formation.
- 6) The Applicant shall provide technical information to the Director in support of the application. The technical justification shall include information related to the location of any Moratorium Zone Deep Fault within five (5) miles or Regional Fault within two miles (2) of the proposed location of the Class II Disposal or Class II Commercial Disposal Well, with special emphasis on identifying any deep faults occurring below the Fayetteville Shale formation which extend to the basement rock.
- 7) Flow meters, or other measuring devices approved by the Director, shall be installed on all Class II Disposal and Class II Commercial Disposal Wells and Permit Holders shall submit accurate injection volume and pressure information, on no less than a daily basis, on a form prescribed by the Director.