PIONEER
NATURAL RESOURCES

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Via Email: rulescoordinator@rrc.texas.gov
Rules Coordinator
Railroad Commission of Texas
Office of General Counsel
P.O. Drawer 12967
Austin TX 78701

Re: Proposed Changes to 16 TAC §3.8 and §3.57, and 16 TAC Chapter 4

Pioneer Natural Resources USA Inc., (Pioneer) appreciates this opportunity to submit comments on the proposed changes to 16 TAC §3.8 and §3.57, and 16 TAC Chapter 4, Subchapter A.

Pioneer is a large independent oil and gas exploration and production company headquartered in Irving, Texas. We are one of the largest producers in the state with 964,000 gross acres in the Permian Basin area, with operations concentrated in the Midland Basin, and production in excess of 840,000 BOE per day. We also operate through Pioneer Water Management LLC(PWM) an extensive water supply system that includes reuse and recycling and delivers 800,000 to more than 900,000 barrels per day and allows Pioneer to minimize use of fresh water sources and have optionality to move water around our development areas via pipeline for frac demand and produced water management. Pioneer is committed to delivering oil and natural gas in a safe and environmentally responsible manner.

Pioneer notes the following areas of concern or necessary clarification, and provides suggestions for alternative rule language:

DIVISION 1: GENERAL

- §4.109(a) An applicant or permittee may request an exception to the provisions of this subchapter by submitting to the Director a written request and demonstrating that the requested alternative is at least equivalent in the protection of public health and safety, and the environment, as the provision of this subchapter to which the exception is requested. The following provisions are ineligible for exceptions:

  Comment: We believe the rule is not clear that the exception provision applies to all authorized operations as well. Adding “operator” to the language to clarify that exceptions are available for all provisions of the rule including authorized pits is recommended. The current language of “applicant or permittee” implies applicability limited to permitted activities, not authorized activities.

  Propose: “An **operator,** applicant or permittee may request an exception to the provisions of this subchapter by submitting to the Director a written request…”

DIVISION 2: DEFINITIONS

- §4.110(40) Fresh makeup water pit – A pit used in conjunction with drilling rig, completion operations, or a workover for storage of fresh water used to make up drilling fluid or completions fluid.

  Comment: This definition leads to uncertainty as it relates to water makeup pits that contain brackish water, or a combination of water sources, and where these pits are specifically regulated under the proposed rule.

  In §4.115(d)(2)(B), pits containing water with less than 3,000 mg/L chlorides do not require a liner and §4.115(d)(2)(C) requires liners for pits containing water with greater than 3,000 mg/L chlorides. This suggests that the threshold for "fresh water" is with a chloride concentration of 3,000 mg/L or less, which we agree with. Utilizing the term "fresh" in section §4.115(d)(2)(C) where a liner is required may create further confusion. We recommend definition §4.110 (40) "Fresh makeup water pit" be replaced with "Makeup Water Pit". Within this category, makeup water pits containing water with a chloride concentration of 3,000 mg/L or less should be exempt from the new requirements (liners, GW monitoring, closure timelines, etc.) proposed under this chapter. Alternatively, have definitions of both fresh water and makeup water pits.

  Propose new definition: Makeup water pit – A pit used in conjunction with drilling rig, completion operations, or a workover for storage of water used to make up drilling fluid or completions fluid."

- §4.110(60) Non-commercial fluid recycling--The recycling of fluid produced from an oil or gas well, such as produced formation fluid, workover fluid, and completion fluid (including fluids produced from the hydraulic fracturing process):

  Comment: The proposed definition is supportive of current NCFR practices. However, we request that a third option be provided under §4.110(60)(A)(iii) that allows for use of Non-Commercial Fluid Recycling in conjunction with an existing Commission-designated lease, pooled unit, acreage, or drilling permit to account for NCFR facilities that are located on surface properties that do not have a unique RRC identifier assigned. Implementing this change will further the Commission's progress in adopting regulations that encourage water reuse and recycling and will eliminate unnecessary time delays associated with the H-11 permitting process simply based on location, not purpose.

  Propose: Add section under §4.110(60)(A)(iii), "upon land leased or owned by the operator and strategically located to support that operator's development in the area on an existing Commission-designated lease, pooled unit, acreage, or drilling permit.

- §4.110(61) Non-commercial fluid recycling pit--A pit used in conjunction with one or more oil or gas leases or units that is constructed, maintained, and operated by the operator of record of the lease or unit for the storage of fluid for the purpose of non-commercial fluid recycling or for the storage of treated fluid that occurs:

Comment: See comments above under §4.110(60).

Propose: Add option under §4.110(61)(C), "upon land leased or owned by the operator and strategically located to support that operator's development in the area on an existing Commission-designated lease, pooled unit, acreage, or drilling permit.

Alternatively, define as "a pit used in conjunction with non-commercial fluid recycling as defined in §4.110(60)".

- §4.110(80) Small sump – A subsurface pit that is lined with concrete, corrosion resistant metal, or pre molded synthetic material, and that has a working capacity of 500 gallons or less while maintaining a freeboard of one foot.

  Comment: The one-foot freeboard requirement significantly reduces the working capacity of a small sump. For example, a 6" deep secondary containment partially buried beneath a transfer pump, or a drip pan partially buried beneath a load line for containment could be defined as a small sump under this rule and would not meet the one-foot freeboard requirement. Sumps should be operated as engineered and designed which includes prevention of unauthorized discharges. Reporting of all unauthorized discharges maintains RRC oversight. Additionally, we request further interpretation in the preamble to provide clarity that this section does not apply to secondary containment.

  Propose: "A subsurface pit that is lined with concrete, corrosion resistant metal, or pre molded synthetic material, and that has a maximum working capacity of 500 gallons." ~~**or less while maintaining a freeboard of one foot.**~~

DIVISION 3: OPERATIONS AUTHORIZED BY RULE

- §4.114(a)(5) The operator of an authorized pit shall register the pit with the Commission once the Director has established a registration system for authorized pits.

  Comment: The rule should be modified to exclude small sumps from the registration requirement for authorized pits. Placing registration requirements on small sumps will require significant workforce and resource burden on both the Commission and industry for little value. Small sumps present a significantly lower risk of environmental impact relative to other authorized pits due to their smaller capacity, relatively shallow nature (often less than 5 ft deep), and requirement to be constructed of impermeable materials such as concrete, corrosion-resistant metal, or pre-molded synthetic material (§4.110(80) and § 4.115(f)(2)(A)). Given that there is no minimum volume threshold for a small sump, a 6-inch-deep secondary containment with a capacity of 5 gallons partially buried beneath a transfer pump or a drip pan partially buried beneath a load line for containment could be defined as a small sump and would be required to be registered under the draft rule as written.

  Propose: The operator of an authorized pit, **except small sumps**, shall register the pit with the Commission once the Director has established a registration system for authorized pits.

- §4.114(c) General design and construction requirements for authorized pits. All authorized pits shall comply with the following requirements.

    - §4.114(c)(2)
      Comment: Although we disagree with the need for any freeboard in small sumps (see comments above on small sumps), this section of the rule applies 2 feet of freeboard to the authorized pit and contradicts the need for one foot of freeboard as noted in the small sump definition. We recommend adding "except for small sumps" in this section.

      Propose: "**Except for small sumps**, an authorized pit shall be large enough to ensure adequate storage capacity to maintain two feet of freeboard and to contain:"

    - §4.114(c)(5)
      Comment: This section requires the authorized pit to be constructed to prevent rupture or tear to the liner and requires a 2H:1V slope. We agree that this is necessary for maintaining integrity of a lined earthen pit utilized for drill cuttings or non-commercial fluid recycling. However, small sumps are not constructed of liners and do not typically have a slope due to their small size (<500 gallons). Additionally, in §4.110(80) small sumps must be constructed of concrete, metal, or pre-molded synthetic material, which does not align with the definition of "Liner" in § 4.110(53). We recommend adding "except for small sumps" in this section.

      Propose: "**Except for small sumps**, an authorized pit shall have a properly constructed foundation and interior slopes…"

    - §4.114(c)(6)
      Comment: This section discusses liner requirements for authorized pits. However, in §4.110(80) small sumps must be constructed of concrete, metal, or pre-molded synthetic material, which does not align with the definition of a "Liner" in §4.110(53). We recommend adding "except for small sumps" in this section.

      Propose: "**Except for small sumps**, authorized pits shall be lined."

- §4.114(d)(1) A freeboard of at least two feet shall be always maintained in authorized pits, except for small sumps which shall maintain a minimum of one foot.

  Comment: See comments above related to 4.110(80).

  Propose:
  §4.114(d)(1) "A freeboard of at least two feet shall be always maintained in authorized pits, except for small sumps." ~~**which shall maintain a minimum of one foot.**~~
  §4.115(f)(2)(B) "Small sumps shall maintain ~~an operational~~ **a working** capacity of **less than** 500 gallons. ~~**while maintaining a freeboard of one foot.**~~

- §4.114(d)(2) "Equipment, machinery, waste, or other materials that could reasonably be expected to puncture, tear, or otherwise compromise the integrity of the liner shall not be used or placed in lined pits."

  Comment: We agree that equipment and machinery should not be placed in lined pits during the construction and operation of the lined pit. However, certain pits must be entered with equipment to properly close them. Under this proposed rule, the RRC requires dewatering of all fluids, allows for mixture of pit contents with clean material, requires stabilization, and requires the contents to pass a paint filter test. A common practice is to stage equipment within the pit to effectively meet these closure requirements.

  Propose: §4.114(d)(2) "Equipment, machinery, waste, or other materials that could reasonably be expected to puncture, tear, or otherwise compromise the integrity of the liner shall not be used or placed in lined pits **during construction and operation of the pit**."

- §4.114(g)(2) "The operator shall stabilize or solidify the remaining authorized pit contents to a physical state sufficient to support the final cover of the authorized pit. The operator shall not mix the remaining pit contents with soil or other material at a mixing ratio of greater than 3:1, soil or other material to remaining pit contents. The resulting waste mixture must pass the paint filter liquids test (EPA 17 SW-846, Method 9095)."

  Comment: Solidification of the waste material for in place burial of waste may pose logistical challenges if the waste material does not meet the closure criteria and would thus require the liner to remain intact in accordance with §4.114(g)(5)(A)(ii). Physical blending of the in-place pit material to achieve stabilization without damaging the liner may be physically impossible. Therefore, we request that equipment be allowed in the pit during closure operations (see comment above regarding §4.114(d)(2)) and an alternative closure standard be allowed (see comment below regarding §4.114(g)(5)).

- §4.114(g)(5): Untreated waste material that does not meet the constituent limits in the Figure in subsection (f) of this section:
  (A) may be buried by containment in a pit that:
  (i) has a double liner with a leak detection system; or
  (ii) has a single liner for which the operator demonstrates the liner is intact and maintains the liner intact; and

  Comment: During the pit closure, the liner may be punctured by the equipment entering the pit. However, the combination of stabilization of the waste and a cap would prevent leaching. It is a widely accepted practice by various state and federal environmental agencies to allow soil capping. The cap is designed to restrict surface water and rainwater infiltration into the subsurface waste body. This further reduces the potential for leaching of site contaminants and provides equal to or superior protection compared to untreated waste with an intact bottom liner. See also comments above regarding §4.114(d)(2) and §4.114(g)(2).

We propose an additional option under §4.114(g)(5) **to utilize cap methods in lieu of meeting cleanup requirements in the Figure in Subsection f.**
Propose: § 4.114(g)(5)(A) – "may be buried by containment in a pit that:

(i) has a double liner with a leak detection system; ~~or~~
(ii) has a single liner for which the operator demonstrates the liner is intact and maintains the liner intact; ~~and~~ or
(iii) install a liner cover over the waste material in the pit.

(a) The operator shall install the liner cover in a manner that prevents the collection of infiltration water over the pit and on the liner cover after the soil cover is in place.
(b) The liner cover shall meet the requirements as described in §4.114(c)(6) of this section."

- §4.114(h)(1) For all authorized pits except small sumps, the operator shall evaluate whether groundwater is likely to be present within 100 feet of the ground surface…"

  Comment: Under §4.115(d)(B), freshwater makeup pits with chloride concentrations <3,000 mg/liter are not required to have a liner. Fresh water makeup pits with chloride concentrations less than 3,000 mg/liter pose no threat to groundwater as evidenced by the rule not requiring liners; therefore, groundwater monitoring should also be exempt.

  Propose: "For all authorized pits except small sumps **and fresh makeup water pits with chloride concentrations less than 3,000 mg/liter**, the operator shall…"

- §4.114(h)(3)(B) the authorized pit has a liner and an active life less than one year.

  Comment: Current practices for horizontal drilling include multi-well pads consisting of anywhere from 2 wells to over 20 wells per pad location, which could take 6 to 9 months, or even longer in some cases, to complete drilling all wells. Based on the lifespan of a horizontal drilling location, it is possible that a reserve pit would be required to be open for 18 months from initial use to allow for proper dewatering and stabilization of the drill cuttings.

  We agree with the requirement in section §4.115(b)(3)(A) requiring closure of the authorized reserve pit within one year of cessation of drilling operations. However, on multi well pads, pits are likely to be active for more than 12 months and, according to §4.114(h)(3)(B), would require monitoring well installation for single lined pits. Groundwater monitoring requires significant resource allocation for the Commission and industry while adding little to no additional monitoring protection for the additional 6-month period. Therefore, we request that the Commission consider changing active life of less than one year to "active life of less than 18 months". Propose: §4.114(h)(3)(B) the authorized pit has a liner and an active life less than 18 months ~~one year~~.

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DIVISION 10: REQUIREMENTY FOR OIL AND GAS WASTE TRANSPORTATION

§4.190 Oil and Gas Waste Characterization and Documentation

Overall Comments: We support waste characterization and proper documentation, although it is recommended that a Waste Profile Form (WPF) be allowed to be more generic when characterizing RRC oil and gas E&P Exempt waste streams. Typically, a Waste Profile is copied to each specific Generator location when the same waste stream is generated at multiple generator locations, with the same process generating the waste. Most operators generate the same waste streams at hundreds or thousands of facilities. Requiring a unique Waste Profile Form for the same waste streams generated at each facility would be over burdensome and provide little value, since the Waste Manifest includes all of the site-specific information requested (e.g., generator location, quantity, etc.). We propose the following changes:

§4.190(b) A generator of any waste subject to Commission jurisdiction shall document the waste characterization by completing and retaining a Waste Profile Form that documents the **activity generating the waste** ~~**origin, approximate quantity,**~~ and characteristics of the waste generated.
§4.190(b)(1)(C) identification of the **activity generating the waste** ~~**producing lease or property and Commission-assigned identifier;**~~
§4.190(b)(1)(E) ~~**the estimated quantity of the waste;**~~
§4.190(b)(2) The generator shall associate the Waste Profile Form and the generator-assigned identifier with a specific waste stream ~~**manifest or group of manifests for shipment of the media**~~ so the material can be easily correlated to the correct shipping documents.
§4.190(b)(3) ~~**A generator of waste that chooses to dispose of or recycle such waste shall provide the Waste Profile Form to the waste hauler receiver**~~

In addition to these comments, Pioneer shares many of the same concerns submitted by the trade associations including TXOGA, PBPA, TIPRO, and The Alliance.

We appreciate the Commission's consideration of our concerns and look forward to working with you as this rulemaking process moves forward.

Regards,

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