From:	Nic McClymond
To:	Rules Coordinator
Cc:	Christi Craddick; Wayne Christian; Jim Wright
Subject:	Comments to Proposed Rule - 16 TAC Chapter 4--Environmental Protection.
Date:	Thursday, November 2, 2023 10:29:38 AM
Attachments:	image001.png Comments on Rule 8 Proposal Concerning O&G Industry Economics 10-23-2023.pdf Exceptions to Proposed Rule lkt 10-27-23.pdf Crownquest comments-ch4-informal-draft.pdf

Ladies and gentlemen of the Railroad Commission,

Please find the attached comments, desired exceptions and requests regarding your proposed 'pit rules' as written and previously provided to you by my peers at Stasney Well Service, Texland Petroleum and Crownquest Operating. Alongside them, I stand in direct opposition to the rule as written.

In my opinion, the pit rule will have an immediate and significant negative economic impact on conventional oilfield operators and their ability to sustain – let alone grow, the livelihood of their associated employees and customers and ultimately, the vitality of small communities that lean on their tax base across Texas. While we all agree with the adage, 'leave it better than you found it', I believe this rule goes too far in its attempt to regulate as if one size fits all.

As a stripper operator (I wear that badge with pride by the way), I hope you'll take the time to digest this situation from our perspective, and I hope you'll put in the effort necessary to make the right decision, not necessarily the easy one. I will happily make myself available for any questions on the matter, and I appreciate your time and service.

Texas RRC Mission Statement (per Google): Our mission is to serve Texas by our stewardship of natural resources and the environment, our concern for personal and community safety, and our support of enhanced development and economic vitality for the benefit of Texans.

Nic McClymond, P.E.

PETEX

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Dear Rules Coordinator and Commissioners,

Please see my attached proposed Exceptions/exemptions, comments, recommendations and requests regarding the proposed pit rules together with consequential economic analysis of the proposed rule by Texland.

I plan to submit other comments before the Nov. 3rd deadline.
I drove 5 hours in the pouring rain to make oral comments at the oral hearing in Austin; however, the 3 minutes that I was allotted to comment on this 100 page proposal was not nearly adequate to share all of our concerns regarding this wasteful and economically devastating proposal.

I would appreciate the opportunity to speak to any Commissioner.

Sincerely,

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Texland Comments on Rule 8 Proposal on Texas Oil & Gas Industry Economics

10/23/2023

- These comments are based on experience operating in New Mexico where a similar pit rule as the RRC proposed Rule 8 exists.
- Because of mandatory soil sampling if a temporary inground pit is used, operators are unwilling to assume the risk of having expensive cleanups if a liner leak occurs. Any liner leak, no matter the size, will result in additional soil sampling, excavation and replacement of the soil at very high cost (risk-adjusted average cost of a liner leak is about $590,000 in New Mexico). This additional cost has greatly decreased development by independent operators because of the unfavorable economics.

Statistics

- There are currently about 3,049 oil and gas operators in the state of Texas.
- The top 20 large operators (ie. Anadarko, Apache, Chevron, COG, Diamondback, Marathon, Occidental, Pioneer, XTO, etc.) operate about 21.4% of the wells while producing about 52% of the oil and 40% of the gas.
- The remaining 3,029 operators operate about 78.6% of the wells while producing about 48% of the oil and 60% of the gas.
- Many of the 3,029 operators are small independents who support the state and their communities through local purchases, tax payments and employment opportunities.
- There are currently about 304 rigs running in Texas on any given day, with about 289 rigs drilling horizontally (95% of the total) and 15 rigs drilling vertically (5% of the total).
- Many of the horizontal rigs are using equipment to remove cuttings from oil-based mud systems so that the mud can be reused. The cuttings are typically buried at a well's location. In this analysis, 90% of horizontal rigs are assumed to be using oil-based mud while the remainder utilize water-based systems without the cuttings removal equipment.
- Additionally, because most oil and gas producers have fixed budgets for capital projects, added costs will result in a proportional drop in drilling activity. Although this assumption was made for both horizontal projects and vertical projects, increases in vertical well expenses will likely have a much larger impact due to lower budgets and marginal economics.

Winners/Losers

- The proposed Rule 8 with its mandatory soil sampling and pit registration creates a market for numerous businesses. When all of the potential gross revenue for disposal facilities, trucking companies, closed loop system equipment suppliers and environmental remediation companies is tallied, this new regulation-driven market will be worth $513,310,000 annually. There is little wonder that disposal facility & environmental companies are filing for permits even before the proposed Rule 8 is finalized.
- However, the losses to oil and gas operators, service and equipment companies, landowners, working and mineral interest owners, and the state of Texas and its local governments, will be about $1,588,770,000 annually.
- With 3767 horizontal wells drilled and 456 vertical wells drilled annually in Texas, the proposed Rule 8 will result in a cost of $513,310,000 to the oil and gas industry annually. Vertical wells will be most affected and will cost at least 20% or more on average.
- With budgets constrained by either stockholder expectations, cashflow or limited access to capital markets, the added expense will result in a reduction of at least 47 horizontal wells and 80 vertical wells per year. This reduction in drilling and production means a loss of about $54,100,000 in state severance tax and about $36,800,000 in local taxes (ad valorem) annually.
- The reduction in drilling will also directly affect working and royalty interest owners. Working interest owners stand to lose a whopping $367,200,000 annually and royalty owners will lose about $99,600,000 annually.

Conclusions

- The Oil & Gas Industry has a shared goal with the TCEQ and Texas Railroad Commission of preventing water contamination.
- Because of the economic cost to the State of Texas and to its energy producers, regulations should be based on real problems and not perceived problems.
- It has been clearly shown that the current Rule 8 Chapter 3.8 has served the RRC and its citizens well since no cases of groundwater contamination have been identified by the TCEQ with regard to temporary pits over the last 40 years.
- Despite the potentially large profit for environmental services and Closed Loop equipment companies that would come with the proposed Rule 8 pit regulations, there is a serious question concerning equipment and services availability (including cuttings control equipment, haul trucks, roll-off bins, fluids storage tanks, commercial waste disposal facilities, environmental services and lab resources). The costs of delayed projects were not part of the analysis but could lead to larger losses for state severance and ad valorem taxes.
- As experienced in New Mexico, real damage has been caused by increased truck traffic on roads and highways while hauling cuttings. Based on the required additions of Closed Loop Systems and cuttings haulers, the new regulations will lead to an additional $\pm$300 haul trucks on the road daily and about 40,000,000 miles driven between locations and disposal facilities annually. The miles for Closed Loop equipment delivery were not

included. Also, about 5,000,000 gals of diesel would be burned while hauling drill cuttings or soil. When drilling in areas close to or in towns or cities occurs, this can lead to nuisance issues and lots of road repairs.

- Lastly, landowners are concerned that a pit registration system would lead to a loss in the real value of their land, especially in areas where developers are active. Landowners, who already could lose millions of dollars in damage payments because of fewer wells drilled, would also face the prospect of having lower land valuations and forfeited sales because of a registered temporary pit. All of this occurring despite the fact that there was no impact on groundwater in the area.

Recommendations

- Based on current experience, knowledge, and a proven track record over the last 40 years, the current Rule 8 guidelines in Chapter 3.8 on **temporary** drilling, completion and workover pits should be followed for most of the state. Temporary pits should be defined as having a service life of the drilling operation plus no more than a year. The RRC Districts should modify the temporary pit rules only in the event that there is a clear, demonstrable risk to the water table.
- Pit registration for **temporary** drilling, completion and workover pits should be eliminated. Pit registration mimics 40 CFR 280 and should not apply to temporary pits unless there is a clear, demonstrable risk. Pit registration can easily lead to litigation. This was clearly demonstrated In New Mexico.

Summary of Revenue Changes

	Horizontal Wells			*Vertical Wells*			Total
Winners	Wells Drilled/Yr	Gross Add'l Rev Per Well	Δ Gross Rev Per Year	Wells Drilled/Yr	Gross Add'l Rev Per Well	Δ Gross Rev Per Year	Δ Gross Rev Per Year
Disposal Facilities =	3,767	$27,149	$102,270,904	456	$11,328	$5,165,778	$107,436,683
Trucking Companies =	3,767	$14,661	$55,226,288	456	$6,117	$2,789,520	$58,015,809
Closed Loop Equipment Suppliers =	376	$504,000	$189,504,000	387	$216,000	$83,592,000	$273,096,000
Env Remediation Companies =	377	$188,317	$70,995,547	20	$188,317	$3,766,342	$74,761,889
Winners Total =	3,767	$110,963	$417,996,739	456	$209,021	$95,313,640	$513,310,380

	Horizontal Wells			*Vertical Wells*			Total
Losers	Wells Drilled/Yr	Gross Add'l Rev Per Well	Δ Gross Rev Per Year	Wells Drilled/Yr	Gross Add'l Rev Per Well	Δ Gross Rev Per Year	Δ Gross Rev Per Year
Oil & Gas Operators =	3,767	($110,963)	($417,996,739)	456	($209,021)	($95,313,640)	($513,310,380)
Service & Equipment Companies =	3,767	($111,867)	($421,402,000)	456	($206,316)	($94,080,000)	($515,482,000)
State of Texas Severance Tax =	3,720	($12,420)	($46,203,321)	376	($20,916)	($7,864,395)	($54,067,716)
Local Government Ad Valorem Tax =	3,720	($8,449)	($31,428,534)	376	($14,227)	($5,349,538)	($36,778,072)
Landowners =	3,767	($312)	($1,175,000)	456	($2,632)	($1,200,000)	($2,375,000)
Working Interest Owners =	3,720	($81,962)	($304,898,400)	376	($165,631)	($62,277,120)	($367,175,520)
Mineral Interest Owners =	3,720	($20,490)	($76,224,600)	376	($62,111)	($23,353,920)	($99,578,520)
Losers Total =	3,767	($344,924)	($1,299,328,595)	456	($634,734)	($289,438,613)	($1,588,767,208)

Net Gain (Loss) From Proposed Rule 8	(47)	($233,961)	($881,331,855)	(80)	($425,713)	($194,124,973)	($1,075,456,828)

Assumptions:	Numbers in the chart above reflect net changes
	Annual Drilling Projects continue at same rig count (304) and budgets
	Horizontals continue to make up 95% of new drills
	Horizontals are 2 mile laterals with $9,000,000 budgets with 28 days of drilling
	Vertical wells assume $1,200,000 budgets with 12 days of drilling
	Tax Calculations are based on $85 WTI and $3.12 HH Gas
	Assumes 90% of Horizontal wells are already using Closed Loop Systems because of oil-based mud systems
	Assumes all Horizontal and Vertical wells are currently burying cuttings
	Assumes Closed Loop System spill risk is 10% per project
	Tax decreases are based on well drilling reductions due to fixed budgets
	(i.e. more capitol required, less drilling proportionately)
	Landowner losses are based on loss of damage payments because of decreased drilling activity
	Average statewide statistics for tract size and land value were used

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Exceptions to Proposed Rule - 16 TAC Chapter 4--Environmental Protection.

First, the proposed pit rules should be tabled until more study has been done and local stakeholders have had ample opportunity to contribute. **TODAY**, **the vast majority of independent operators and royalty owners HAVE NO IDEA THIS ECONOMICALLY DEVESTATING AND RESOURCE WASTING RULE has been proposed** (See attached Texland economic analysis). Giving stakeholders 30 days notice and 3 minutes to speak at a meeting in Austin or 3 minutes to speak on a ZOOM meeting to address significant concerns regarding a 100 page economically devesting rule is grossly inadequate and is not just.

Second, RRC administrator Mr. Dubois stated or implied in the oral and zoom hearings that the purpose of revising the existing pit rules was to address issues raised by the horizontal well revolution. Regardless, the existing pit rules have worked extremely well for conventional vertical wells and operations as stated by the TCEQ and RRC in 2014 (well after horizontal drilling had been in existence for years) and affirmed by the EPA in 2019. Based on the exemplary environmental record of the current rule; the tremendously negative economic impact on vertical well operations; **and the massive WASTE of natural resources that will ensue upon shutting down stripper well operations across the state due to heavy and unnecessary costs of pit liner regulation, installation and testing**, I find it remarkably illogical that those in charge of eliminating waste of oil and gas resources in Texas would promulgate a rule that will most assuredly do so. To avoid the loss of natural resources and the ensuing loss of jobs, I propose the following general and specific exceptions and/or exemptions from the new proposed pit rule:

A. General Exceptions/Application (Section 4.109): The existing pit/waste rules shall remain in place for ALL conventional vertical wells and operations (See Tx RRC Existing Rule 8 -- TAC Title 16,

Part 1, Ch 3, Rule 3.8).

Since the TCEQ, RRC and the EPA find no resulting environmental faults or issues with the existing Rule 8, if the proposed rules must go forward, **the proposed rules should be limited to horizontal well operations only.**

B. Specific Exceptions: **Also, if the proposed rules must go forward, the following specific exceptions and/or exemptions should be plainly stated in the proposed rule (Section 4.109) for the following wells, operations and circumstances:**

1. Conventional vertical wells, operations and maintenance
2. All permitted vertical wells existing before the proposed rules take effect.
3. No proven aquaphor exists on the location or lease.
4. No proven drinkable ground water or drinking water table exists on the location or lease.
5. Aquaphor exists on the location or lease, but there is no actual proven evidence of damage or pollution to said Aquaphor in relation to the existence of existing wells, drilling, completion, or workover pit(s).
6. No friable sand or loose gravel layer exists in the pit(s).
7. **Pits contain in-situ clay, rock or soil type** that passes a simple field line perc test (water level drops less than one inch in 30 minutes after adequate saturation). Any district field inspector should be trained and authorized to observe and/or conduct this test. **If in-situ clay, rock or soil type exists that pass the field perc test, synthetic liners should be prohibited as unnecessary and wasteful pollution.**
8. The well is not located in a “sensitive” area.
9. The surface owner/tenant signs waiver for stock tank proximity and/or the stock tank, water body, pond is dry and/or not usable.
10. As long as, “drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas or geothermal energy,” are exempt under the Resource Conservation and Recovery Act (RCRA) hazardous

waste laws. See 42 U.S.C. Sec 6921 (b)(2)(A) and/or its successor act or codification.

11. Pits designed or dug to hold less than 500 barrels of fluid.
12. The use of earthen pits for the exploration, development, or production of crude oil or natural gas or geothermal energy Drilling pits only use water-based mud systems, to move and collect cuttings, cement and/or completion materials and fluids. (All of these are exempted by EPA RCRA)
13. Earthen plugging pit(s). Without this exception the orphan well plugging will halt and/or slow considerably and costs will increase significantly.
14. Any earthen pit in use less than 120 days.

Other case specific exceptions: Because of tremendous variations in lithologic and hydrologic properties across the state of Texas and the advancement of new technologies or techniques, exceptions and exemptions in addition to the ones listed above should be determined by local district inspectors, district field engineers and/or administrators. Appeals from the field should be handled by the District Director or engineer.

Essentially, removing the exception/exemption process to Austin would remove the decision from persons most familiar with local conditions and operations.

Again, operators and other stakeholders have had very little time to respond to the proposed one-size-fits-all pit rules. Frankly, the proposed rules will devastate oil and gas production by independent operators on which rule communities, schools and counties heavily rely for jobs, income and property tax revenue. (See attached Texland economic evaluation).

CROWNQUEST
CROWNQUEST OPERATING, LLC

October 30, 2023

Via email
Rules Coordinator
Railroad Commission of Texas
Office of General Counsel
rulescoordinator@rrc.texas.gov

RE: Comments on Proposed Changes to 16 TAC §3.8 and §3.57, and 16 TAC Chapter 4

CrownQuest Operating appreciates the opportunity to comments on the proposed changes.

Executive Summary

CrownQuest appreciates the opportunity to comment on the Commission's draft of the new Chapter 4 rules. The Commission's intention to clarify and improve the safety and prevention of pollution of pits and waste management is laudable. However, this draft proposal will do little to improve the prevention of pollution but will add new and significant burdens to the regulated community. This rule confuses which aspects and even what is an authorized process with what is a permitted process by creating a multitude of definitions then using some but also mixing in several non-defined technical terms in the rules themselves. This rule also often references itself as well as combines parts of Rules 3.8, 3.58, & 3.98 (and others). This rule also creates a significant paperwork and record keeping obligation for what are generally minor operations. If this rule goes into effect, it will likely have a significant negative effect on the drilling and completion operations in Texas with little to no waste management benefits and likely more potential environmental issues. While it is understandable the Commission would want to change the original pit rule allowing single unlined pit to be used for recycling produced water (which has helped spur a massive recent increase in use of recycled produced water), this rule goes too far by placing such onerous requirements that will undo many of the gains made by the industry over the past several years without meaningfully adding to protection from pollution. The Commission would better serve Texas and the oil and gas industry by keeping their permit by rule approach and not placing emphasis on record filing permits and record keeping.

Suggested Draft Proposed Rule Changes

Clarity. The Commission should not create a new sub chapter A in Chapter 4. The Commission should instead edit Rules 3.98, 3.57, & 3.8 to incorporate the proposed changes into the existing rules that regulate pits and waste management. By using the same rule numbers that have been active the past 40 years, it will allow the regulated community to clearly understand what is expected of it and what activities fall under each regulation imposed by the Commission. If the Commission has new activities it perceives are not currently regulated, it would then be appropriate to write new rules for those activities.

An example where the Commission could easily provide clarity is in identifying ground water to use their own GAU system to determine the shallowest depth rather than "likely ground water", which could be contested in a hearing. This new rule contemplates exhaustive studies for groundwater for any pit but

completely ignores the Commission has an entire unit within its organization that identifies groundwater depths.

Jurisdictional issues. These rules attempt to be very broad and yet very defined. The Commission should continue to adopt rules that fit in its permit-by-rule approach that clearly layout the expectations of performance.

For example, the Commission has included all freshwater pits in 4.115 (d) that would now be regulated. This rule might inadvertently bring all freshwater ponds under the Commission's jurisdiction. There are many freshwater "pits" or ponds that are used for recreation or agricultural purposes that would be all but identical to the type of constructed pits the Commission is attempting to regulate. Many of these pits have dual uses and only are periodically used for what the definition in 4.110 (40). There is no foreseen benefit to the Commission, the general Texas public, the environment, or the regulated community to regulate these bodies of water.

Another example is the Commission would regulate how all pits must be closed and the state the surface should be returned to. This is a federal-like approach which assumes all surface belongs to the State. Most surface in Texas is privately owned and pits, locations, and surface restoration will normally be governed by private contract. The Commission has little business being involved in this aspect of land rights and private contracts.

The Commission should not attempt to broaden their scope with prescriptive and detailed rules in a catch all rule that is not specifically tailored to a known issue. The Commission should keep the more generic rules they currently have for future unforeseen waste management and recycling projects and make specific rules for the ones they know exist today.

Pit Registration. The Commission could accomplish a large portion of their goals by requiring pits not connected to an existing registered facility or wellsite to register with the Commission. The Commission could significantly clarify and protect the environment as well as the draft rule by general inspections, a requirement to repair leaks immediately or drain the pit, and general good workmanship along with a new registration requirement. Pits connected to existing Commission regulated facilities are unnecessary to register as they are already known and are easily identifiable to Commission staff and the general public.

Measuring and Monitoring Pollution. The Commission's new emphasis on monitoring pollution is overbroad and stated as a discretionary choice of the District Director. While there are places it makes sense to require continually monitoring, the default in this rule will be to require it on all pits and waste management locations. Also, many of these requirements will limit any pits from being used and built and cause a significant concentration of what would otherwise be mostly harmless and dispersed oil and gas waste. Each drilling of a well might create 600 yards of cuttings which will be far and away the most waste generated in the life of a well. Even with a multi-well pad, this is a small amount of exempt and relatively harmless material that can and has been buried on site with no notable instances of pollution.

But if 100 wells are forced to concentrate their waste in one spot, it creates an issue of now 5,000 truckloads and tens of thousands of cubic yards concentrated in one spot. This along with other

associated expenses, creates a needless expense of about $500,000 per well, will put thousands of new trucks on the road, and concentrate what was otherwise a de minimis amount of waste in an area where is will no longer be in de minimis amounts.

The Commission already proposes to prohibit waste disposal in sensitive areas. If the Commission determines there are circumstance that warrant continual pollution monitoring, it should create waste storage classification that explain the size. For example, if a waste storage pit has over a million cubic yards of total space and there is groundwater shallower than 100 feet, it must put in pollution monitoring wells. The water wells and soil testing should be used on concentrated or otherwise hazardous waste, not on de minimis and scattered sites.

Paperwork and Record Keeping. Chapter 4 puts a new emphasis on record keeping, planning documents, and other paperwork. Texas geography and land size make it unreasonable to have a one-size-fits-all rule to address all construction and operation needs. Attempting to specify construction designs and even materials will create more problems than whatever issue is attempting to address. Leaving each construction and operation facility up to the specific experts and local conditions is a far superior regulatory approach. The Commission would give better regulations to follow the general principle in 4.128 (a) (6) where it states, "All liner system shall be installed and maintained in a manner that will prevent pollution and/or the escape of the contents of the pit." This type of language makes it clear the Commission and regulated communities' intents and expectations without trying to make a set of prescriptive guidelines trying to cover the rocky foothills of Hudspeth County at 3500' above sea level to the sandy plains of Refugio County at sea level.

Increasing the level of design paperwork, record keeping, and lab testing procedures will have little to no effect decreasing pollution. Most oil and gas drilling, completion, and production activities only generate small amounts of solid waste (outside of produced water) and periodically haul it off. Creating a rigid system for periodic transportation of waste will not decrease the potential for pollution but will create a needless headache for operators and unproductive tax dollars in new State hiring for regulatory staff to review these documents. These new rules will create cottage industries that will revolve around process and record keeping rather than preventing pollution. The Commission should instead prioritize pre-service inspections and monthly inspections by Commission staff on recycling facilities and commercial pits the Commission deems a potential to pollute.

The Commission should use their existing flexible rules that can adjust to the specific circumstances of each pit or facility to allow permitting and authorized pit use with the appropriate oversight. Creating a standardize form and requiring cottage industries for most to manage will not serve the public of Texas or the regulated community. In the end, it will create a significant burden on the Commission's Technical Permitting department and take away their focus of the truly important issues that affect pollution. For example, if a permit holder submits a reapplication 59 days before the permit expires instead of the required 60 days, this will unlikely have any effect on a renewal. While it is understandable for the Commission to want ample time to review permits, as there is no clear consequence for not filing in time and it is likely this will create an administrative headache for really a minor reason.

Another example of what the Commission should be using is in 4.115 (g) (2) (A) "All non-commercial fluid recycling pits shall be designed to prevent stormwater runoff from entering the pit. If a non-

commercial fluid recycling pit is constructed with a dike or berm, the height, slope, and construction materials of such dike or berm shall be such that it is structurally sound and does not allow seepage." Using this language put the burden on the regulated community to build and operate to a high standard without adding burdens that take away from that task and risk missing major issues. This type of language should be for all types of pits and recycling operations. This rule is written to catch a future number of processes without really digging into the processes it already knows. Allow the existing rules that have worked in Texas for years and make new rules for new processes when they are discovered and the commercial work is done.

Surety for the Regulated. This rule stakes out a significant number of procedural pre-authorization and very few new operating procedures. This can get best defined in 4.120 (b) stating "The Commission may issue a permit to manage oil and gas wastes only if the Commission determines that the activity will not result in the endangerment of human health or the environment, the waste of oil, gas, or geothermal resources, or pollution." It appears the intent of most of the rest of the terms is to make it easier for applicants and staff to determine how to satisfy 4.120 (b). However, this falls short of doing so. Most of the permit rules are vague or overly prescriptive and more about process rather than fulfilling the heart of these rules in 4.120 (b). There are so many requirements spread throughout 80 plus pages that it's inevitable that some will be missed. Commission staff will spend large amounts of time checking boxes instead of trying to ensure the mission of 4.120 (b) is fulfilled. Likewise permit applicants will be more concerned providing the appropriate paperwork rather than demonstrating how their permitted activity will comply with 4.120 (b).

The Commission should have a simpler list of requirements in this rule. The rule fails to discriminate between projects that are simple and have minimal impact on the public and those that are high risk. The Commission's approach will lead to a burdensome and process driven procedure that is not necessary for the majority.

Specific Comments of Chapter 4 A

4.102 (a) (3) – Would be helpful to quote/ explain the rule the Commission is attempting to show makes some waste not exempt and is hazardous and must be handled under Federal rules.

4.103 (d) – The Commission is mixing defined terms with undefined terms (here "oilfield solids", maybe is referring to (81) solid oil and gas waste or just (65) oil and gas wastes). In general, following the Commission's use of defined terms and undefined terms is difficult and creates confusion in following the requirements of the draft rules. The Commission could simplify this by using Rules 3.8, 3.57, & 3.98 instead of creating a new subchapter. Also using specific activities for each rule rather than global and partial rules for some activities leads to confusion for the regulator and regulated communities.

4.105 – It is unclear why the Commission is adopting Federal regulations they do not have primacy for relating to used motor oil. If the Commission were to state what those rules are, which I think is mainly that used motor oil cannot be disposed of as oil and gas waste (liquid or solid) it would help both the Commission and regulated communities.

4.110 (1) – As there are only 252 counties in Texas, it would be significantly easier for the Commission to adopt a 25-year rain total by county (or by District most likely) that they want evaluated. Having a vague reference will likely only lead to confusion and returned permits over trivial sources of information. Since the Technical Permitting will eventually choose the source, they should also supply it.

4.110 (30) – It is confusing that "injecting" is not a defined use of disposal since this is the method used to dispose of most oilfield waste.

4.110 (32) – By including any facility that receives oil and gas waste but excluding non-commercial recycling centers, this in effect drags in all saltwater disposal wells. This should not be included in the list of activities as saltwater disposal is regulated by other rules. This is an example potentially over defining the terms in an attempt to catch all activities but in effect creating more confusion. If the Commission created separate sections for each regulated activity (e.g., one section for reserve pits, one for non-commercial fluid recycling pits)

4.110 (45) – Should include GAU determination contestable by a hearing, as this is what the Commission currently uses for ground water identification.

4.110 (51) – Landfarming cell is "previously referred to as landfarming or landtreatment cell", but there is no reference to where or what this is replacing. It is difficult in this rule to know how it fits with or replaces existing Commission rules.

4.110 (61) – Would be much simpler to define as a pit used with 4.110 (60).

4.110 (65) (B) – The definition for oil and gas wastes starting with "but" in the first sentence should be moved to its own (C), as the first list that is included in (B) prior to the "but" are listed in the Texas Natural Resource code 91.1011.

4.110 (70) – Seems difficult to reconcile the definition of a pit to include a buried tank, which is covered under other regulations. This should not be in the definition.

4.110 (75) – It should be made clear that a reused fluid in oil and gas activity (mainly produced water) is not the same thing as a recycled product. The Commission could easily clarify this by writing a standalone heading under each activity rather than attempting a global catch-all rule.

4.110 (77) – The Commission should not use slang in definitions.

4.110 (78) – Instead of "typically", a more appropriate term in a definition would be "examples could be but are not limited to" is a better descriptor. The Commission could easily clarify this by writing a standalone heading under each activity rather than attempting a global catch-all rule.

4.110 (79) – This definition of "Sensitive Areas" is so broad it will encompass basically all of Texas. The Commission should define on a map or have a clearer definition that is not so all encompassing, or a defined distance to more defined lands. The Commission should observe the issues unclear and overreaching definitions have had with EPA's WOTUS in considering this definition.

4.110 (80) – It is unclear why this definition is needed when the Commission has already defined oil and gas wastes in (65). It is also unclear why it is necessary to refer to an EPA testing method rather than just referring to it as not to contain free liquids.

4.111 (a) – The point of this section is these types of waste are inert and harmless. The testing should be done once to confirm and then should not be needed again unless there is a reason brought by the Commission or by the Operator. If every application must be tested, it will likely lead to all water condensates just being disposed of at injection well locations, which is a waste of pore space and a waste of monetary resources for the industry and the public.

4.111 (c) – This section blurs the lines between burying pits and landfarming. The Commission could easily clarify this by writing a standalone heading under each activity rather than attempting a global catch-all rule.

4.111 (d) – "Other drilling fluid" is not a defined term and is unclear what the Commission is referring to in this subsection. It is also impossible to dewater "other drilling fluid" for disposal. Perhaps the Commission meant other drilling solids?

4.111 (e) – The requirement should be for pits to be closed in a good workmanship that keeps solids from returning to the surface. It is unclear what purpose holding record for 3 years or what those records could show, when the purpose is for the closed pit not to have solids show at the surface. If solids do reappear at the surface within 3 years, it will not matter if the Operator has records or not, the Operator should rebury the pit so they will not return to the surface. The records are pointless, the result of burying pits is what the Commission should be regulating.

4.112 (a) – The Commission should distinguish between reuse and recycling as the majority of what is considered by some reuse and other recycling is the reuse/ recycling of production water into drilling and completion operations. Adding the requirements of a solids recycler to operations that are generally the same as water disposal via injection will have a chilling effect on this beneficial operation that has become common in the industry.

4.112 (a) (3) –Restricting the commingling of "other treated fluid" keeps operators from mixing with fresh or brackish water. I think the Commission actually intends to keep from mixing fluid from other industries such as mining or other states. If the Commission were to ban operators from mixing reused produced water with any other fluid, it would have a chilling effect on the volume of reused produced water. Most completions require some amount of fresh or brackish water if only out of logistics.

4.112 (d) – It is confusing when the rule references itself for the definition and what fluid meets a requirement. Especially since the definition of a recyclable product includes "a legitimate commercial product". It is not uncommon for the owner of produced water to pay itself or another operator to take this produced water. The Commission could easily clarify this by writing a standalone heading under each activity rather than attempting a global catch-all rule.

4.113 (a) – Making authorized pits subject to the Director's discretion basically eliminates the "authorized" portion of the rule. This takes what is supposed to be authorized and makes it up to an

individual at the Commission to determine what can and cannot be processed. The pits should be authorized, and the onus is on the operator to prevent pollution, not on the Director to determine if an operator can have an "authorized" pit or not.

4.114 (a)(5) – There is no need to register drilling pits. Drilling permits are already obtained, and the Commission has the information needed to grant that with the drilling permits. There should be no need to double down on permitting for the same routine operations. This functionally makes getting a drilling permit another step that cannot be guaranteed by rule where the permit holder takes the risk of compliance. The Commission should not add additional permits to existing permits for small quantity generation sites.

4.114 (a)(6) - The Commission should combine drilling and completion pits into the same pit type as their waste is regulated under the same statute, the waste created in both processes is almost identical, and both are de minimis amounts. Asking for permission is a burden for both the regulator and regulated and provides no meaningful information exchange, pollution prevention, or public safety.

4.114 (b) – Similar to previous comments about clear definitions especially related to WOTUS, the commission should better define surface, subsurface, intake, and the 100-year flood plain. Also, with respect to pits being located within 300' of water wells, a depth should be specified that clears the concern. A drilling/ completion pit that is 200' away from an irrigation well that is 500' deep is not much of a concern where a drilling pit 300' away from a residential water well that's 20' deep is a major concern. The issue is the Commission is unlikely to make exceptions with a written distance. It should be a water well that is less than 100' deep and the owner of the well should have to protest the pit's location as effecting their lives/ resources.

4.114 (c) (4) – This makes sense for pits containing oil and gas wastes, but if applied to freshwater pits (which the Commission should not be attempting to regulate) using ponds or pits to collect storm water is a common and reasonable approach.

4.114 (c) (5) – Slope requirements will vary based on construction materials and where the pit is located. The Commission should rather specify that all pits should be constructed to withstand their intended purpose.

4.114 (c) (6) – Should just leave as authorized pits should be lined to withstand the expected life and use of the pits with workmanlike construction. The directions and specifications are overly prescriptive and not necessary. Trust operators who for 40+ years have handled pits correctly to choose the best materials and construct their pits for their own purposes. Operators take the risk of any operation, and they should not be steered into making bad decisions because of Commission rules. The Commission cannot foresee every circumstance an operator is likely to need to plan and react too.

4.114 (d) – A better rule would be something along the lines of "each operator should use the best operating practices to avoid unintentionally perforating the liner and make sure it is inspected periodically". The details and specifications are not helpful and will create a false sense of security if those are the only things an operator thinks about.

4.114 (e) (D) – The point of burying a pit is to leave the contents in the ground. Ensuring they didn't migrate is not a useful or enforceable term. Referring to future requirements in (g) is unhelpful and should be stated here. The Commission should only specify that the pits be dewatered and buried so the material does not migrate to the surface. It should be a performance-based approach, not a procedure-based approach.

4.114 (f) – These requirements should not be here. If an operator chooses to remove the contents of a pit, it should not have extra testing and monitoring requirements. The point of the authorized pits is that the amount of waste is de minimis and mostly inert which is why it can be buried in place. Testing for migration is a needless step likely to only create future litigation and consulting work. Also notifying the District Director prior to closing is unnecessary. The standard should be keeping the solids from migrating to the surface, not the procedure for how it was buried. Also returning the surface to original conditions is outside the purview of the Commission. Most operators have contracts with the landowners for these pits and the condition and use of the former site and the contracts with landowners that govern that should not be impinged on by the Commission.

4.114 (g) – These requirements should not be here. If an operator chooses to bury the contents of a pit, it should not have extra testing and monitoring requirements. The point of the authorized pits is that the amount of waste is de minimis and mostly inert which is why it can be buried in place. Testing for migration is a needless step likely to only create future litigation and consulting work. The mix of waste with material is inconsequential and unnecessary if the Commission would adopt a standard of no solids migrating to the surface.

4.114 (h) – These requirements should not be in the rule. The point of an authorized pit is that it is a minor source that poses little to no harm to the public and has little to no potential for pollution. This rule adds an arbitrary significant cost with little to no benefit. There have been hundreds of thousands of wells drilled in Texas over almost 100 years and most of the pits have been buried in place. There are basically no documented instances of buried pits polluting ground water. This is a rule looking for a problem. If the Commission insists on keeping this unnecessary rule, it should revise "likely ground water" to a depth determined by the GAU, which could be contested in a hearing. Also, as an improvement the Commission should only apply water wells monitoring to areas in a revised 4.110(77). Lastly, the Commission should not impose the prescriptive requirements in (4) & (5). Since authorized pits do not pose a significant harm and shallow aquifers are notoriously difficult to model and evaluate, it should be left to the individual operator to demonstrate through their own delineation program that there is not pollution. Scripting these requirements is excessive. Where the cost of a 100' water wells might be $5,000, these requirements could more than six times that cost.

4.115 (a)(2)(B) – When a hole is found the liner should be emptied below the failure, not just completely emptied.

4.115(a)(2)(C) – This should not be in the rule. This serves no purpose to record routine and insignificant events.

4.115(d) – The Commission does not have the jurisdiction or a reason to regulate freshwater pits. They pose no harm to the environment or public, nor do they relate to the waste of oil and gas resources. These

pits are similar to many other freshwater storage ponds and tanks built by landowners and other industries for multiple purposes. The Commission has no need of a rule stating "only freshwater can be in a freshwater pit" as if any oil field waste is put in a "fresh makeup water pit" it will no longer be a fresh makeup water pit.

4.115(e) – The same comment for freshwater pits applies to condensate pits.

4.115(f)(B)(2) – Placing burdens on the construction of sumps will ensure that industry likely avoids building sumps. The Commission should not do this but rather include the operating results in the rules instead of the process on how the Commission wants to see sumps built and operated.

4.115(g)(2)(D & E) - The Commission should allow the general leak language to stand and not prescribe a "action leakage rate", which is not a defined or common term. Keeping records of anything other than major events (like draining the pit annually) won't increase the pollution prevention. It will only take the focus off of Commission inspections, which should be focused on if the pits are operated in a way to prevent pollution, not if records have been kept.

4.120 (b) – Should be revised to say "shall" issue a permit instead of "may" and remove "only". There is no reason for the Commission not to issue a permit if the permit to manage oil and gas waste will not result in the endangerment of human health or the environment or the waste of oil and gas resources. Leaving this uncertainty in a rule serves no benefit to the regulator or the regulated community.

4.122 (c)(5) – This should be struck. A transfer should not be halted because the Director wants more information outside of the 5-year window. This is equivalent of requiring a new permit to be issued.

4.122 (d)(2) – The 90-day window should have a reason/ consequence involved. If the point is a permit holder can continue to operate if it is filed 90 days before the expiration and the Commission has not acted on this should be stated.

4.122 (d)(2)(C) – The materiality should be specified, or this will by default turn into a notification process for any changes to a permit. It should be limited to a 25% increase in site size.

4.122 (d)(4)(D)(4) – The site inspection should suffice and not require approval of the records kept. The point of the inspection is that a facility is operating to prevent pollution not that boxes have been checked.

4.123 – This entire section should be the standard to which facilities operate. The remainder of issues permits should primarily be by rule and not at the discretion of the Director or Technical permitting.

(b)(6) – should be operating outside of the permit not a material change. This could be interpreted as a plant that was permitted for 1000 yard per day but only handled 100 yard per day for 2 years then started handling 600 yard per day. That would be a material change but still within the permit.

(b)(8) – does not belong in this section. This rule puts a pit that is likely causing ground water pollution on the same level as a pit that files for renewal 59 days before the expiration date. The granting,

revoking, and denying of permits should be on a basis of the important issues and not minor record keeping or box checking exercises.

4.124 (e)(3)(A) – These EPA references are excessive and give little to no value other than to promote cottage industries and extra box checking work. Soil sampling and analysis is not complicated enough to warrant this amount of scrutiny.

4.125 – This section is confusing as to who it applies. It could be applied to pits in 4.113 as well. The Commission could easily clarify this by writing a standalone heading under each activity rather than attempting a global catch all rule.

4.125(a)(C) – This should include a specified radius rather than the discretion of the Director. There is no reason to make this discretionary on a case-by-case basis.

4.125(a)(4) – "Director may authorize" should be a "shall". There is no reason for discretion if an applicant has done this requirement.

4.126 (c) – The use of "pertinent information" is too generic to be in a rule making. This should be removed, and the maps should be sufficient.

4.126(c)(2) – This should be removed. Since the facility is regulated, this amount of specifics is not necessary and serves no purpose but will create regulator uncertainty. The term "regulated feature" is not a concept that shows up in this rule and is not a defined term. This will likely create more confusion and grounds for protest and procedural denials without providing useful information to non-professionals.

4.126(d) – This section should be removed. This is redundant with requirement (c). Mapping in society and even on the Commission's own website are sufficient for this information to be easily obtained if it is relevant to any party.

4.127 – This section should not be included. It is not clear what the Commission would use this information on. If there is a specific reason the District Director or Technical Permitting needs geological information (such as if it is in a known Karst area or within a municipality), this information can be requested. It should not be the standard information required as in most cases it will have little to do with if a permit is issued or not.

4.128 – This section is overly prescriptive on several fronts. The emphasis should be on the operation and results rather than the design and paperwork for permits or the sign sizes. Prescribing how containment structures must be built are not helpful as there are many differences in the materials and not all will be able to meet the standard. Some will have to be larger and some smaller. This limits the local expertise with dirt contractors and operators and attempts to regulate the entire environment of Texas from Austin. This should not be how the Commission regulates Texas oil and gas operations. This section should simply be (b)(6), which is the best way for the Commission to regulate pits and waste management.

4.129 (a)(1-2) – These should not be included unless the waste accepted is not typical exempt oil and gas wastes. The point of oil and gas wastes is they do not need to be tested as their general make up is known and relatively inert.

4.129 (b)(3 &5) – The term "in a leak free environment" should not be used. Leaks are almost always not planned for. A better term would be "shall be kept in good working condition".

4.129 (7) – This will likely inhibit innovation and good practices. There are already many rules on storing chemicals and disclosing chemicals such as the SDS and Tier II. If sites are using chemicals to improve environmental performance, specifically soil additives which would include fertilizers, that should not raise to the level of needing the Commission's approval. The Commission should focus on the outcomes and the prevention of pollution not the innerworkings of how solids and liquids are treated.

4.130 – Should specify this is not for authorized pits in the title. Again, using specific activities for each rule rather than global and partial rules for some activities leads to confusion for the regulator and regulated communities.

4.131 – The Commission already has a lot of this information. Some of this rule refers to applications for permits rather than monitoring requirements. Also using specific activities for each rule rather than global and partial rules for some activities leads to confusion for the regulator and regulated communities. If monitoring is required, section (b)(E-L) are mainly aspects for aquifer draw-down analysis. This should be site specific and left to a simple solution to monitor for pollution rather than this descriptive and bureaucratic process.

(b)(4)(D) – Shouldn't be included. If the Commission or operator determines pollution might be occurring, it should be mainly left to the operator on managing that rather than the Commission dictating what process must be done.

4.134 (c) – The Commission should not include this list as "may require" but rather should use the standard "if the Commission has specific technical reasons it may require". If left to staff's discretion, the default position will be to request this data as it costs them no extra work. Industry will have no issue providing this analysis or information if it is relevant, but the Commission should have to have as specific reason, data, knowledge, or study to request it.

4.134 (d) – Having the definition of administratively complete being when the Director says it is administratively complete is not a standard the Commission should adopt. Administratively complete should be when it has been demonstrated the application will not cause pollution nor the waste of oil and gas resources.

4.134 (h) – Protests should only be heard by parties that have standing, not at the discretion of the Director. This section should be modified to address standing or removed.

4.140 – It is confusing as to which rules this replaces or adds to. The Commission could clarify this by using specific activities for each rule rather than global and partial rules for some activities, which leads to confusion for the regulator and regulated communities. 4.140 (f) – This is overly prescriptive. Either

the Commission should specify what it wants to have calculated or leave the calculation to a Professional Engineer, not make a mismatch of both.

4.141 – Should not have (2-4). A radius should be sufficient. If the Commission thinks 0.5 miles is not enough, it should change to 1 mile. Leaving the notification area up in the air and at the discretion of the Director is not good policy for the regulator or the regulated community.

4.142 (a) – Should change to "A commercial facility shall have a waste acceptance plan" rather than making a waste acceptance plan a condition of a completed application.

(c) – Should not be included as this is part of the operating requirements.

4.143 – instead of requiring extra paperwork, this should be handled with an onsite inspection which is a higher burden of performance and assurance than documents.

4.150 – This is confusing as it seems to refer to authorized pits via the division 4 reference. The Commission could clarify this by using specific activities for each rule rather than global and partial rules for some activities, which leads to confusion for the regulator and regulated communities.

(e) – This seems to imply all pits need complete secondary containment. That was not clear in the rest of the rule and defeats the point of using large pits. The Commission should remove this vague reference in this part of the text.

(f & g) – Both of these are repeated from the rest of the rules.

4.151 & 4.152 – Both of these seem to be repeated in the other rules. The Commission could clarify this by using specific activities for each rule rather than global and partial rules for some activities, which leads to confusion for the regulator and regulated communities.

4.154 – It is unclear how this is different from the other requirements in this chapter. The Commission could clarify this using specific activities for each rule rather than global and partial rules for some activities, which leads to confusion for the regulator and regulated communities.

4.160 – This could cross into general spill remediation and subject minor spills that are land farmed into this complicated rule. The Commission should clarify the scope of what it considers land farming to keep from inadvertently dragging in small remediation operations.

4.161 – This is overly prescriptive. Should focus on the end results and not on the process and application.

4.170 (a)(3) – It is unclear what is meant by "reports not filed with the Commission". This could inadvertently exempt normal oil and gas activity such as tank bottoms from a satellite which technically does not file reports (the lease is where the reports are filed). Would be better to say it is not in the regulated sphere of the Commission.

(a) (7) – It is unclear if this section replaces 3.57. If the intent is to add onto 3.57, the Commission would be better off to just amend rule 3.57.

4.182 – The Commission should define the size and scope that qualifies for a minor permit. Most minor permits we have experience with are consolidating or moving drill cuttings from one lease to another. Most include less than a five mile move and less than 5,000 yards.

4.183 – "high-quality produced water" and "land application of hydrostatic test waters" are not defined terms, which makes this rule confusing.

4.190 – This entire rule is against the spirit and intent of the oil and gas waste exemption, which is that the waste generated is generally in small quantities and characterized as not a significant environmental threat. Creating a documentation and characterization process serves no purpose but to feed cottage industries and increase process documentation to something that has not been a significant issue in Texas for over 100 years. This portion of the rule should not be included in any rule making.

4.191 – The existing manifest system has worked for years. It is unclear why the additional reporting and process for this system is needed or even if the Commission intends to build an elaborate tracking system. This should not go into effect until the Commission determines it is needed and builds an electronic system to track waste movements.

4.194 – This section should not be included until the Commission builds and determines their own electronic reporting system and determines if this is necessary. Creating record keeping requirements for incidental and minor generation of waste that is above the Federal threshold is not wise policy for the State of Texas as it provides no material improvement on the environment or protects State resources.

Thank you for your consideration of our comments. Please don't hesitate to contact the undersigned should you have any questions.

Sincerely,

Luke Dunn
Vice President of Engineering and Operations
CrownQuest Operating, LLC