November 3, 2023 (5 pm)

Via rulescoordinator@rrc.texas.gov

Rules Coordinator Railroad Commission of Texas Office of General Counsel P.O. Drawer 12967 Austin, TX 78711-2967

Re: Comments on Informal Draft Amendments to Statewide Rules 8, 57 and Subchapter B

Dear Rules Coordinator:

Commission Shift appreciates the opportunity to provide input on the Railroad Commission's informal draft Amendments to Statewide Rules 8, 57 and Subchapter B.

Commission Shift is a nonpartisan non-profit focused on reforming oil and gas oversight in Texas by building public support to hold the Railroad Commission of Texas accountable to its mission in a shifting energy landscape. We have met with community members affected by oil and gas waste pits and collected feedback relevant to these proposed amendments.

In line with these goals, Commission Shift respectfully submits the following comments. Commission Shift's comments suggest how the Railroad Commission's oversight of oil and gas waste pit operations could be improved by (1) allowing for actual meaningful public participation in this rule-making; (2) incorporating rules that better protect the public and environment during the permitting process and during operation of waste management units; and (3) strengthening the Commission's ability to reject bad applications and improving the Commission & public's ability to enforce against bad actors.

Note that these comments are divided into three parts. The first portion places the rule in context, highlighting community experience with the regulation of oil and gas waste management and providing historical background. The second part outlines overarching themes to Commission Shift's concerns. The third part provides specific, line-item comments on the proposed rules.

Commission Shift welcomes a dialogue with the Commission as any questions or concerns arise during the Commission's review of these comments, just as industry has been allowed to dialogue with the Commission for the past two years in the drafting of these rules. There is still opportunity for the Commission to allow for meaningful public participation in this process and to draft rules that address the human health and environmental concerns raised by Texans.

Sincerely,

[Virginia Palacios]

Enclosures

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PART I – CONTEXT & COMMUNITY EXPERIENCE WITH SWR 8 & CHAPTER B

1. <u>Communities have been harmed by facilities regulated under the current</u> <u>rule and by lack of enforcement.</u>

Texans across the state have struggled for years with how oil and gas waste operations are regulated under the current rules, and how the current rules are being enforced. Commission Shift has talked to many community members living near these operations and offers the following vignettes to give context to the proposed rulemaking.¹

Petro Waste's Hohn Landfill Facility near Nordheim, TX (DeWitt County). Citizens of Norheim and DeWitt County have experienced firsthand how the Commission and Rule 8 has failed to keep polluting



facilities from being permitted and operated in inappropriate locations.² Less than one mile outside of Nordheim lies Petro Waste Environmental LP.'s 140-acre+ Hohn Facility, a commercial waste separation and landfill disposal facility.³

To help the Commission visualize how close facilities like Hohn are to sensitive receptors like homes, water bodies, floodplains and water wells, Commission Shift has created maps of some of these facilities using publicly available data.⁴ Reported residences are shown as red dots; many are

² The story of citizens' on-going struggles with the landfill near Nordheim has been documented in a number of news outlets. See e.g., Ex. 2 Tiny Nordheim Sues State Over Drilling Waste Dump (Texas Tribune) (August 2016) <u>https://www.texastribune.org/2016/08/02/eagle-ford-tiny-nordheim-keeps-battling-drilling-w/;</u> South Texas Drilling Country Saying No to Waste (October 2, 2013) <u>https://www.nytimes.com/2014/10/03/us/south-texas-drilling-country-saying-no-to-waste.html;</u> Ex. 3 Nordheim loses fight as Railroad Commission OKs oil field landfill. (May 3, 2016) <u>https://www.mysanantonio.com/business/eagle-ford-energy/article/Nordheim-loses-fight-as-Railroad-Commission-OKs-7390449.php</u>. Those struggles include: dealing with a permitting process that allows applicants to continue redesigning and amending their application even after it is declared administratively complete; and struggling to obtain adequate stormwater controls and air monitoring.

⁴ These and other maps can be found at <u>https://commissionshift.org/our-work/cleaning-up-oil-gas/waste-pits/</u>

¹ Other stories include: Ex. 1 Fehling, Dave. How 'Landfarms' For Disposing Drilling Waste Are Causing Problems In Texas. NPR. (Nov. 12, 2012). <u>https://stateimpact.npr.org/texas/2012/11/12/landfarms-for-disposing-drilling-waste-causing-problems-in-texas/</u>

³ Petro Waste Environmental Obtains Nordheim Landfill Permit (May 3, 2016) <u>https://tailwatercapital.com/petro-</u>waste-environmental-obtains-nordheim-landfill-permit/

Commission Shift notes that it makes no claims as to the accuracy of this data (though it has used publicly available sources, including the Commission's list of active waste sites) and these maps are not intended to make any claims about the accuracy of permitting or enforcement, but are intended to help the Commission put the facilities in context with nearby sensitive sites.

Commission Shift

within one mile of the facility, some closer than 500 feet. Only surface owners within 500 feet of the property line would have received notice under the proposed rules—but as the complaints from this facility show, the facility's ill effects have been felt far beyond 500 feet. This is another reason that setbacks should be expanded from beyond what is proposed in the rules—500 ft from the permitted pit (not the property boundary)—is too little. Also included in this map is the 100-year floodplain, which appears to extend near one of the pits visible in the satellite image.

The McBride Waste Separation facility near Waskom, TX (Harrison County) is another example of how difficult living next to a waste facility can be with the way the current rules are implemented and enforced. Through Public Information Act requests, Commission Shift obtained numerous records detailing citizen complaints and operator violations for this facility.



In just one example of troubling conditions from July 2023 (below), an inspection reported an unpermitted pit with off-the-chart readings of salinity (over 80,000 ppm).⁵ (For context, the proposed rules would require such a pit to get a permit if its contents exceeds 3,000 ppm chloride (under the current rules, 80,000 ppm is also not allowed without a permit).) During that visit, trucks were observed actively unloading saltwater into the pit while fluids with a salinity of over 20,000 ppm had spilled out of the pit into the woods for a distance of 335 feet.⁶



In addition, on TCEQ's groundwater contamination map, the Waskom Waste Separation Facility is listed as facility with an active groundwater contamination case since 2021 (File number OCP#5237), with the contaminants described to include

⁵ Ex. 4, McBride Waskom STF Facility RRC Inspection Reports (July) Figure – Snapshot of YSI salinity meter reading at McBride Waskom STF facility (2023). Note: meter shows "OVER" for salinity reading – upper limit for meter is 80 ppt or 80,000 ppm salinity (per YSI handheld salinity/conductivity/temp meter: Ex. 5 https://www.enviroequipment.com/product/ysi-30-conductivity/salinity-temperature-rental)
⁶ As the inspection report describes it, "The brush limbs and vegetation on the spill path appears to be dea[d]."

benzene, TPH, and chloride.⁷ This facility also appears to be located near many sensitive receptors. The map here shows that the 100-year floodplain seems to extend onsite, with homes located as close as 500 feet. At least two public supply wells (large blue droplets) appear to be located within a mile of the facility, and other wells (small blue droplets) even closer.

The same operator, McBride, has also forced the community of Paxton, TX to spend a small fortune fighting to convince the Commission that another proposed site is no place for a permanent landfill.⁸ The site, which "has two ponds and a wetland . . . [and a] creek [that] originates there and then meanders into the Sabine River," is located some 500 yards from the town's wells, is on top of the Carrizo-Wilcox Aquifer, and is just upstream from multiple private drinking water wells.⁹ Yet as the Texas Tribune reported, McBride's application for this facility keeps being revived:

Permit applications [under Rule 8] are typically approved unless challenged by a third party, such as the residents of Paxton, who have found that threats to public health must reach a high bar to compete against economic interests for the commission's sympathies.

When the commission met last December, its technical permitting division rejected the Paxton project's permit for the second time in four years over concerns about groundwater contamination. But Commissioner Jim Wright, a former rodeo cowboy and landfill developer, wasn't ready to let the project die.

"I myself have constructed safe landfills in similar conditions," Wright told the meeting in the Texas Capitol. "It can be done."

Instead of issuing a final rejection, Wright suggested the commission provide the developer, McBride Operating LLC, with a list of edits and additions to the application and invite them to resubmit. The commission had already asked the firm to amend its application at least four times since 2019.

Fighting this application has cost community members hundreds of thousands of dollars in legal and expert fees.¹⁰ Community members are exhausted of being the ones who must protect Texas lands and waters from pollution, when they should be able to rely on the Commission. In conversation after conversation, Commission Shift has heard community members ask—will this rulemaking fix things? And unfortunately, based on the current draft, it does not appear so.

Blackhorn Environmental near Orange Grove, TX (Jim Wells County). Another site that highlights the importance of strengthening the human and environmental health protections in Rule 8

https://www.texastribune.org/2023/01/30/east-texas-oilfield-dump-railroad-commission-paxton/).

⁷ TCEQ Groundwater Contamination Viewer (Accessed October 31, 2023).

https://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=5a36690f56bc4f128588b19b092cbf91 Commission Shift has not found this map hosted on the Commission's own site, but it should be. As early as 2000, STRONGER has recommended that similar such information be published to the Commission's website for abandoned sites as well. Ex. 6 STRONGER Texas Review (2000 Guidelines 6.7.1) (stating that the "RRC should release to the public, perhaps via its web page, a periodically updated list presenting the location, extent of contamination, and status of remediation of abandoned sites").

⁸ Ex. 7 Baddour, Dylan. In East Texas, a town fights to keep an oilfield waste dump from opening near wetlands and water wells. (Jan. 30, 2023) (originally appeared in The Texas Tribune at

⁹ Id. ¹⁰ Id.

is Blackhorn Environmental in Jim Wells County. The problems at this disposal site have generated extensive media coverage.¹¹ Community members of Orange Grove suffered health issues such as nausea and headaches following the construction of the Blackhorn Environmental Services facility. Members of the community attempted to bring concerns to the Commission regarding the facility, but the Commission decided to renew the permit anyway. Facilities like Blackhorn show why oil and gas waste facilities should be setback from sensitive receptors, with no exceptions allowed.



2. <u>Communities have been shut out of the drafting process and denied</u> <u>anything resembling an equal seat at the table</u>

Industry representatives and the Commission have been co-drafting these rules since at least 2022, but the general public, front-line communities, and community-minded groups like Commission Shift have been excluded from these meetings and discussions. In fact, Commission Shift explicitly asked in August 2023 to be included in any follow up meetings with the industry about the rule (and to be sent any additional drafts shared with industry); no invitations were forthcoming even though afterwards multiple meetings with industry were held and at least two other full drafts exchanged (one of Subchapter A and one of Subchapter B). Only through Public Information Act requests has Commission Shift been able to learn that before public comment opened, dozens of conversations occurred between Industry representatives and the Commission over the last two years. Meetings were held both in-person and virtually, in small and large groups, and at least eight drafts had been

¹¹ E.g. Ex. 8, Bradshaw, Robin. TCEQ investigates Blackhorn Environmental Services in Orange Grove. Alice Echo-News Journal. (December 7, 2020) <u>https://www.caller.com/story/news/2020/12/02/tceq-investigates-blackhorn-</u> <u>environmental-services-orange-grove/3798642001/;</u> Ex. 9 Buch, Jason. For Texans, Fighting State-Regulated Oilfield Waste Dumps Can Be a Costly, Do-It-Yourself Effort. Public Health Watch. (August 15, 2023) <u>https://publichealthwatch.org/2023/08/15/texas-oilfield-waste-dumps-railroad-commission/</u>

exchanged—four of Subchapter A and four of Subchapter B.¹² Industry and its representatives provided hundreds of pages of comments and many sessions of in-person feedback. Voices outside of industry were deliberately excluded.¹³

The public was finally allowed to participate in this rulemaking only through the informal public notice and public comment process that started October 1, 2023. However, the Commission's engagement of the public is minimal and only included one in-person meeting that was held in Austin far from any substantial oil and gas impacted communities and lasted about 30 minutes. The virtual meeting held the following day. Both public input meetings were offered during the work day and not in the evenings when the general public would be more likely to attend without missing work.

Conversely, in 2002—the last time major changes were contemplated to Rule 8—rule-making meetings were held throughout the state and input was received from a variety of stakeholders, not just industry.¹⁴

According to the 2022 STRONGER Guidelines for oil and gas regulations, an effective state program should include public participation as follows: ¹⁵

Where public input is sought, the agency should utilize communication methods that will most effectively reach affected communities. Effective communication should include creating short, plain-language summaries of proposed actions that are understandable by people with a variety of educational attainment and levels of English proficiency. States should consider factors that may limit meaningful involvement of affected communities in public comment opportunities, such as non-English speaking populations, timing of meetings, and availability of internet access. When translation is required comment periods should be extended to allow adequate time for both translation and outreach to the population. States should interface with community groups in the affected community to inform and plan for translation needs. States should also consider offering interpretation services for any hearings or public meetings about proposed permits or licenses, to make those meetings accessible to non-English speakers.

¹² Many of these drafts were shared as word documents, which are easy to edit, copy and add track changes or comments to. In contrast, the drafts published in October on the Commission's website for the public to review were pdfs. Pdfs are much harder to edit, copy from, and compare, especially without a commercial subscription (which the public does not typically have), and when converted to a word document tend to not recognize that line numbers are separate features than text.

¹³ This was made clear throughout the process and explicitly acknowledged. Ex. 10 (2022 PIA Disclosure) "My instructions were to share with the associations, expecting the associations to selectively share with you and other consultants/lobbyists/members."

¹⁴ The 2002 draft—which was similar in breadth to the current rulemaking but was ultimately was not adopted—was shaped by a series of workshops held for informal public comment, held in Midland, Wichita Falls, Houston, Kilgore, Austin, and Amarillo. "A total of 188 people attended, including 152 representing industry, six representing land and royalty owners, seven with groundwater conservation districts, and 23 who identified themselves as rep resenting 'other.'" 27 TexReg 4265. Comments were received from 120 persons, many who were not in attendance at the workshops. Id.

¹⁵ STRONGER is an organization that publishes guidelines for state regulators as to the appropriate elements of a state oil and gas regulatory program. Ex. 11, 2022 STRONGER Guidelines at 26. For more background about STRONGER, see the History section of Commission Shift's comments.

The agency should consider methods to enhance the responsiveness of its public participation such as responding to comments and sharing how the program considered comments in its decision making.

Language access is also an essential part of facilitating meaningful public participation and is in fact required under federal law for state agencies that receive federal funds.¹⁶ In addition, the Commission, not Commission Shift, should be bearing the brunt of outreach to and engagement of community members, as the 2022 STRONGER Guidelines recommend:¹⁷

States should use advisory groups of industry, government, and public representatives, or other similar mechanisms, to obtain input and feedback on the effectiveness of state programs for the regulation of E&P activities. Provision should be made for education or training as is appropriate to give such advisory groups a sound basis for providing input and feedback. States should seek opportunities to partner with community groups to gather information on unique community needs and input. States should seek to foster positive relationships with such community groups to develop open lines of communication and improve the transparency and availability of data. When community members serve on advisory groups in a purely volunteer capacity (i.e., are not paid by their employer for their participation), states should explore providing stipends or participation incentives (i.e., gift cards) to compensate the community members for their time.

The two hearings held on October 26 and 27, 2023 did little to encourage and cultivate meaningful public participation. The meetings were held in the morning and concluded well before noon rather than remaining open in case folks that could not take off work might find time to comment during their lunch break. In addition, the hearing officer's instructions were not translated although the Commission presentation was translated in Spanish. Commission staff's presentation overviewing the changes was extremely abbreviated and lasted less than ten minutes. Commission staff was not allowed to answer any questions that commentors and attendees might have had.

Oral comments at both the in-person and virtual public meetings was limited to 3 minutes per speaker even though very few people offered to speak and both meetings concluded in an hour or less. In fact, even operators commented that three minutes was not enough time to voice their concerns. The participants were only told they would be limited to three minutes at the meeting and not in advance. Recordings of the meetings were not made available to the public after the meetings concluded nor before the informal public comment deadline submittal.

The Commission clearly has failed to meaningfully engage the public in this rulemaking up until this point, despite ample opportunity to do so.¹⁸

¹⁶ Specifically under Title VI of the Civil Rights Act of 1964.

¹⁷ Ex. 11, 2022 STRONGER Guidelines at 27.

¹⁸ Ex. 12 Commission Shift's August 2023 Handout of Recommendation for Public Participation. This was shared with Commission staff at the August meeting.

3. <u>The need for updates to Rule 8 is long-standing as Rule 8 has not been</u> <u>seriously revised in forty years.</u>

Statewide Rule 8 has been largely unchanged since 1983. Since that time the Commission has been failing to protect public health and the environment in front-line communities that have been subjected to pollution generated by oil and gas activities without consistent and meaningful public participation. To put this rule-making in context, Commission Shift provides the following abbreviated history of Rule 8, ¹⁹ including an aborted attempt to revise these rules in 2002:²⁰

Prior to Rule 8. Rule 8 was first codified in 1976, but the Commission has been regulating pits since at least 1969, when it prohibited unauthorized use of saltwater disposal pits in a statewide order.²¹ Piecemeal modifications to Rule 8 occurred in 1977 (regarding rules on salt-water hauling²²); and in 1980 (regarding exemptions to the saltwater pit rule²³).

Rule 8 is born. In 1983, major modifications were proposed, spurred in part by House Bill 2005, which was codified at TNRC Subchapter K (91.451 et seq). Supporters of the bill recognized the long-term threat of groundwater contamination, which could occur many years after the fact with the potential to render the water unusable "practically forever."²⁴ Those opposed were concerned that the bill wasn't strong enough.²⁵ Even then, those opposed recognized that plastic liners "almost invariably leak," and wanted liners to be made of a truly impervious material.²⁶ Opponents also wanted pit operators to post a bond that would be forfeited if the pits leaked saltwater into the ground.²⁷ In addition, opponents recognized that the Commission even then did not have a good record of enforcing pollution-control laws and rules.²⁸ The House Natural Resources Committee had concluded in an interim report that "the [C]ommission ha[d] been guilty of lax and selective enforcement in cases of water pollution by the oil and gas industry."²⁹ At the same time there was a push in the Senate to give concurrent enforcement authority to TPWD and the Department of Water Resources (precursor to the Texas Water Commission and the Texas Water Development Board). That effort failed.³⁰ But nonetheless, by 1984, the bulk of Rule 8 as it appears today was adopted.³¹

²⁷ Id.

²⁹ Id.

¹⁹ The commercial recycling rules found in Subchapter B have a shorter history, and were drafted largely in 2012. ²⁰ The Commission has acknowledged that the rewrite to Rule 8 is informed by the 2002 rule draft. Ex. 13 (PIA Request) (Cover Email).

²¹ Committee Report on HB 2005, at 1 (May 6, 1983).

²² 2 TexReg 359.

²³ 5 TexReg 3794.

²⁴ Committee Report on HB 2005, at 2.

²⁵ Id.

²⁶ Id.

²⁸ Id. at 3.

³⁰ 68th SB 895

³¹ 9 TexReg 1549.

Minor amendments are made after 1984. More amendments were proposed in 1985, most to dovetail with the addition of another rule about discharge to waters of the state.³² When that new rule fell through, only a few amendments were made, including reasserting the scope of an applicant's duty to identify and notify nearby landowners of an application and not merely through publication.³³

In December 1986, the RRC clarified the scope of oil and gas activities that would trigger its jurisdiction, including under Rule 8, by largely tracking language passed by the Legislature.³⁴ In January 1992, amendments were adopted to comply with statutory requirements related to the funding of an Oilfield Cleanup fund.³⁵

When the first Texas Coastal Management Plan (CMP) was adopted in 1994, changes to Rule 8 were required, largely in section (j).³⁶ Regulations for oil and gas waste haulers were updated again in 1994.³⁷

Major changes to Rule 8 fail in 2002. In 1992, the RRC's programs were reviewed by stakeholders coordinated by the Interstate Oil and Gas Compact Commission (IOGCC) and funded by the EPA.³⁸ The Review Team's suggestions were published in 1993; some but not all were implemented by 2002.³⁹ Changes proposed to Subchapter B in 2002 would have addressed the remaining recommendations.⁴⁰ However, the proposal was officially withdrawn by the RRC on November 19, 2002,⁴¹ and the push to seriously reform Rule 8 in 2002 failed.⁴²

The 2002 draft had been shaped by a series of workshops held for informal public comment, held in Midland, Wichita Falls, Houston, Kilgore, Austin, and Amarillo. "A total of 188 people attended, including 152 representing industry, six representing land and royalty owners, seven with groundwater conservation districts, and 23 who identified themselves as representing 'other."⁴³ Comments were received from 120 persons, many who were not in attendance at the workshops.⁴⁴

According to the RRC then (as now), the 2002 rule proposal was generally consistent with existing practices. The proposed changes specifically intended to: clarify and strengthen requirements for the prevention of pollution of surface and subsurface waters; conform to the

³⁷ 20 TexReg 3529-32.

⁴³ 27 TexReg 4265.

³² 10 TexReg 3044 (Aug. 13, 1985).

³³ 11 TexReg 948-49.

³⁴ 11 TexReg 5092 (citing House Bill 2358, 69th Legislature, 1985).

³⁵ 17 TexReg 321-22 (clarifying preamble).

³⁶ See 20 TexReg 2578-81 (proposed rule); see also 20 TexReg 8442-45 (adopted rule).

³⁸ 27 TexReg 4273. In 1999, the IOGCC created the State Review of Oil and Natural Gas Environmental Regulations, Inc. ("STRONGER") to revitalize and carry the state review program forward. STRONGER publishes guidelines for state regulators as to the appropriate elements of a state oil and gas regulatory program. Ex. 11 2022 STRONGER Guidelines at 7. https://www.strongerinc.org/wp-content/uploads/2022/07/2022-Edition-STRONGER-Guidelines.pdf ³⁹ Id.

⁴⁰ Id.

⁴¹ Ex. 6 STRONGER Texas Review at 9 (pdf 15)

⁴² See 27 TexReg 4264 (proposed rule).

⁴⁴ Id.

wording of rules to reflect current practices cutting costs for industry (automatically transferring a non-commercial pit from one operator to another with a P-4 change of filing; lengthening the term of a minor permit from 30 days to 60 days; eliminating the need for a minor permit when the activity is licensed by another entity); incorporating guidance into the rules; and respond to recommendations that arose out of the 1992 IOGCC state review:

For authorized pits, the Review Team Report included the following recommendations: (1) revise §3.8 to include requirements applicable to authorized pits based on specific geologic, topographic, hydrologic, or other conditions; (2) require prior notice of construction and use of authorized pits; (3) prohibit the use of unlined basic sediment pits for the disposal of oily wastes; (4) develop rules specifying site restrictions, prohibitions, construction notice requirements for the various types of authorized pits; and (5) amend §3.8 to define minimum construction standards for all rule-authorized pits, to include general operating standards for rule-authorized pits, and to add general pit closure standards for rule-authorized pits.

For pit permits, the Review Team Report included the following recommendations: (1) amend §3.8 regulatory standards for permits to specify that: pit size should be sufficient to ensure adequate storage until closure, taking into account historical precipitation patterns; pit depth should be such that the bottom does not penetrate groundwater, or such that pit contents do not adversely impact groundwater or surface water; and berm height, slope, and material should be such that the pit is structurally sound, and that pit integrity is not compromised by terrain or breached by heavy rains, winds, seepage or other natural forces; (2) impose a fixed term limit on all individual pit permits; (3) amend §3.8 to include specifications for site restrictions for various types of permitted waste management facilities, to include general operating standards for permitted pits, and to add general pit closure standards for permitted pits.

For land treatment and road spreading, the Review Team Report included the following recommendations: (1) publish a guideline document for land treatment, including current "rules of thumb" standards and considering amendment of §3.8 to include minimum operational requirements for land treatment; and (2) adopt minimum regulatory requirements for road spreading and publishing guidelines for application.

For commercial and large centralized facilities, the team recommended that the Commission: (1) continue to require construction, operating, and closure plans for commercial/centralized facilities (2) require a siting plan for these facilities; (3) amend rules to reflect the requirement that applicants provide written notice to adjacent landowners of permit applications for commercial/centralized facilities; (4) impose permit term limits for pits associated w/commercial/centralized facilities and municipal landfills; (5) specify, by rule, construction, maintenance, operation, and closure requirements for commercial facilities; and (6) review permits for commercial and centralized disposal facilities at least once every five years.

In 2002, the RRC also recognized that (as it is still):⁴⁵

Current §3.8 is silent on management of certain oil and gas wastes, such as sewage and storm water. **Technically under the current rule an operator would be required to get a permit to dispose of such wastes**; however, the Commission has received very few applications for such permits. The proposed new rules authorize management of such wastes under certain conditions so that a permit is not required. To avoid

^{45 27} TexReg 4277.

duplication, the proposed new rules authorize disposal of sewage in accordance with regulations that already exist under the TNRCC or county health departments.

The RRC also recognized that "there is a clear legislative determination that *interested persons*--not just *affected persons*--are entitled to know the agency's rationale for the originally proposed rule. Following receipt of comments, the agency is obliged to consider fully the legal, factual, and policy-related issues raised by the rule, especially in the comments; the agency is obligated to evaluate such data and arguments in order to decide whether the proposed rule will be adopted verbatim, modified, or rejected in its entirety. The agency must write in its final order adopting the rule a reasoned justification that openly and adequately explains the agency's real reasons for the choices it makes."⁴⁶

In sum, Rule 8's history shows the long-standing need of better regulations to protect Texas from the hazards of oil and gas waste management operations. The Commission has a unique opportunity to build back public trust with its rulemaking that it should not squander.

⁴⁶ 27 TexReg 4277-78 (emphasis in original).

PART 2 – SUMMARY OF OVERARCHING THEMES

The breadth and intricacy of this rulemaking makes it extremely difficult for meaningful participation by public stakeholders and community-based groups like Commission Shift who have been shut out of the drafting process thus far. No stakeholder group but industry has had the opportunity to sit side-by-side with Commission staff and walk through the 150+ pages of rule changes to understand how each section relates to each other, provide suggested changes and improvements to the rule, and to understand the intent behind each word.⁴⁷

Nonetheless, Commission Shift has compiled a lengthy set of section-by-section comments on the rule draft, which is included herein as Part 3. To help the Commission navigate the comments in Part 3, Commission Shift overviews some of its top concerns here in Part 2. Commission Shift's comments have been shaped by the following three goals that it believes the Commission should return to throughout this drafting process. The Commission's goals with this rulemaking should be to:

- (1) Better protect human health and the environment from waste pits and other waste operations.
- (2) Lessen the burden on the public to protect their communities from unsuitable facilities.
- (3) Improve the Commission & public's ability to enforce against bad actors.

Commission Shift is frustrated by what has and hasn't changed in the rulemaking process. While Commission Shift is glad for some of the smaller changes it has noticed—e.g., that registration will be required for authorized pits and that eventually waste hauling manifests will be tracked electronically—much more must be improved. Setbacks are still not protective enough and should not be eligible for exceptions without public input. Hardly any changes appear to have been proposed that would:

- (1) improve the public's ability to participate in the permitting process;
- (2) provide better and more widespread notice of applications;
- (3) increase public access to data;
- (4) improve the Commission's track record of enforcing these rules

To this end, Commission Shift makes suggestions in three key areas: public participation; permit approval; and data access / enforcement.

⁴⁷ As a Permian Basin Petroleum Association spokesperson put it in informal comments sent to the Commission dated September 20, 2023, "given the vast change being proposed, it takes time and consideration by a wide range of operational divisions within our member's organizations to provide the prudent feedback that has been requested[.]" "[O]ur members . . . set aside a significant amount of time from their daily duties to work internally to provide this feedback and know that the Commission recognizes the amount of analysis that a proposal like this demands from operators." Ex. 14, PBPA Comments (September 20, 2023). In contrast, the public and all other groups were given only thirty days to digest this proposed rulemaking.

1. Suggestions re: Public Participation

1. Let the public participate on equal footing with industry in rewriting the rules.

Commission Shift and members of the public themselves have had to lead the charge in outreach on these rules, while industry has had dozens of closed-door talks and access to the Commission for over 2 years. The Commission itself should host presentations and meetings with the public and concerned groups just like it has with industry; the public bears the biggest risk if the rules continue to be flawed. Staff at the Commission needs to actively answer and address the public's concerns, not just passively receive comments.

2. Create a more participatory permitting process, for example one that would:⁴⁸

- require a published "notice of intent" to apply for a permit at least 30 days before applying
- send notice to all surface owners and groundwater conservation districts within one mile of the property boundary (in at least English and Spanish)
- set all applications for a hearing once the application is complete, regardless if a protest is received (i.e., remove the need to protest in 15 days)
- give at least 30 days notice of the hearing (same time frame applicants have to respond to protests)
- prohibit modifications or supplements to the application once it is set for hearing (no costly moving target for the public & Commission to review)
- at the hearing, allow all interested persons the opportunity to present testimony, facts, or evidence related to the application or to ask questions
- Require explicit surface landowner consent before a pit can be built onsite.⁴⁹
 Landowners should get to approve what types of waste are going to be put in any pit on their property before it happens. This was in a previous draft but removed after industry pressure.⁵⁰
- 4. Create a mailing list for all applications. Commission should maintain an electronic mailing list open for anyone to subscribe so they can automatically be notified of applications in their area.

2. Suggestions re: Approving Good Projects

1. Make the applicant, not communities, bear the burden of showing whether a project is protective of human or environmental health and safety. Applicants should have the

⁴⁸ This applies at least to sections 4.125(a),(b), 4.133, 4.134(g),(h), 4.135(a),(b), (4.125(a), (b)), 4.134, 4.135), 4.204(2), 4.207, 4.212(c), 4.230(c), 4.246(c), 4.262(c),(d), 4.278(c),(d)

⁴⁹ This applies at least to 4.111(a).

⁵⁰ Compare Ex. 15, Excerpt of May 2023 Subchapter A Draft (§ 4.111) (highlights in original) with Ex. 16, Permian Basin Petroleum Association Comments (June 6, 2023) at 2; with proposed § 4.111.

actual and financial responsibility to collect accurate information to prove that their projects will be protective. Under both the current and draft rules, it falls to landowners and communities to pay to prove when projects won't protect health and safety. Prohibiting modifications of an application once its set for a hearing should help, but the Commission needs to demand that applicants provide more rigorous information when applying. rigorously guestion the claims in the application, and not simply award a permit once the application is "administratively complete." The rules should say that if a complete application "does not meet the requirements of [Chapter A] or other laws, rules, or orders of the Commission" the Commission "shall" deny it; not "may deny," as the current draft proposes.⁵¹

2. Improve setbacks from sensitive sites and places. Negative effects from these facilities extend far beyond the setbacks proposed, which are no more than 500 feet for even the largest landfills and no more than 1000 feet for commercial recycling facilities. Setbacks should be measured from the property boundary, not from an individual pit.⁵² No exceptions or exemptions should be available without public input. Applicants should be required to describe clear risk mitigation measures meeting specific criteria in order to qualify for an exception.

3. Improve design, operating, and monitoring for all pits.

- Groundwater investigations and monitoring should be required more often with fewer exceptions—once polluted, groundwater is basically impossible to clean up.53
- Liner requirements (when and what to install) are still too lax.⁵⁴ •
- Too much leakage is allowed—1,000 gallons/day or more for a synthetically lined 1-acre pit is too much55
- More sampling should be required, for all potential contaminants.⁵⁶. •
- 4. Don't allow a broad swath of exceptions, especially without public input. New section 4.109 (and 4.205) would allow exceptions for anything other than financial security, notice, and sampling & analysis if the Commission finds the alternative is at least as protective of health and environment: i.e., siting, applications, design, construction, operation, closure, reporting, pilot programs, water protection, and waste hauling rules. The draft should be changed to vastly narrow allowable exceptions and all permits seeking exceptions should automatically go to hearing where any interested person should be allowed to participate. The Commission and Commissioners should not be granting exceptions without public input.

⁵¹ This applies at least to 4.134 and 4.206(b). See also 4.204(2), 4.262(c), 4.278(c),

This applies at least to 4.150(g), 4.219(b)(2), 4.256(b)(2), 4.272(b)(2), 52 This applies at least to 4.150(g), 4.219(b)(2), 4.256(b)(2), 4.272(b)(2), 53 This applies at least to 4.114(h), 4.133(b), 4.241(d), 4.257(d), 4.273(d), 4.289(d). 54 This applies at least to 4.114(6)(D), 4.115(b)(2)(A), (c)-(g), 4.119(g), 4.128(a), 4.151(a),(b)(3), 4.152(a),(b)

⁵⁵ This applies at least to (4.151(a), 4.152(b)(1), 4.266(a), 4.275(a), 4.282(a), 4.291(a)).

⁵⁶ This applies at least to 4.114(h), 4.133(b), 4.241(d), 4.257(d), 4.273(d), 4.289(d)

3. Suggestions re: Data Access and Enforcement

- Give the public access to all data collected. So bad actors can be found, all data on pits, waste, and waste hauling that operators collect should be sent to the Commission and made easily accessible by the public in a timely manner, not just kept available "upon request." The data available should not just be summaries, but the full documents.
- Create institutional memory of on-site & nearby applications. All application files including public comments—should be kept and made easily accessible by the public so similarly bad projects don't get proposed in inappropriate locations. Applicants should be required to review this data and analyze it in their applications.⁵⁷
- 3. **Improve enforcement and apply meaningful penalties.** Communities largely agree—the existing rules aren't well enforced. The draft doesn't offer much in the ways to fix it. The penalty section, which is copied from 3.107, should strongly commit the Commission to vigorous, transparent, and speedy enforcement of the new rules. The remaining rules should be drafted to provide no wiggle room for bad actors to escape liability through wordsmithing.

In short, the regulations established in Subchapter A and B are for the express purpose of **"protecting public health, public safety, and the environment.**"⁵⁸ Revisions that have been included in this draft for other purposes—e.g., expediency for the regulated community—should take a back seat, as they often run counter to the purpose of this chapter⁵⁹ and the goal of protecting preventing pollution.

⁵⁷ This applies at least to 4.124, 4.212, 4.230, 4.246, 4.262, 4.278, 4.302.

⁵⁸ § 4.101(b) This subchapter establishes, for the purpose of protecting public health, public safety, and the **environment** within the scope of the Commission's statutory authority, the minimum permitting, operating, monitoring, and closure standards and requirements for the management of oil and gas wastes under the jurisdiction of the Commission.

⁵⁹ §4.101 (a) No person conducting activities subject to regulation by the Railroad Commission of Texas may cause or allow pollution of surface or subsurface water in the state; § 4.110 (71) Pollution--The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any surface or subsurface water that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property, or to public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

PART 3 — SECTION-BY-SECTION COMMENTS

Commission Shift provides the following section-by-section comments on the draft revisions to Subchapters A and B. These line-item edits should be read in context with its comments in Parts 1 and 2. Commission Shift welcomes a dialogue with the Commission as any questions or concerns arise during the Commission's review of these comments, just as industry has been allowed to dialogue with the Commission for the past two years in the drafting of these rules. Commission Shift reserves the right to alter, refine, and expand its position from those stated herein as it obtains more information about the proposed changes and their impact on communities and environmental health.

Subchapter A

1. DIVISION 1

§4.101. Prevention of Pollution, Page 1 of Draft Rules

Commission Shift notes that the language of 4.101(a) is already found in current rule 3.8(b), and despite its seemingly strong tone requiring the protection of **all** surface or subsurface water in the state,⁶⁰ it has failed to enforce the previous rules to protect the health and environmental safety of Texans, as discussed above. Thus, Commission Shift urges the Commission to better enforce the policies of prohibiting pollution that are espoused in this section. Commission Shift suggests adding a section (d) asserting the agency's commitment to investigations and enforcement: "<u>The</u> <u>Commission shall enforce these rules to prevent pollution, including by promptly and thoroughly investigating alleged violations of these rules.</u>"

§4.102. Responsibility for Oil and Gas Wastes, Page 1

Commission Shift disagrees that "process knowledge" is sufficient to characterize wastes, as §4.102(a)(1) and §4.102(a)(3) would allow. Process knowledge does not rely on laboratory analysis, but presumes what pollutants will be in a waste based on where the waste came from and what it may have been mixed with. However, unexpected contaminants can exist downhole, and additional contaminants can be introduced to the waste stream as it is transferred from generator to receiver and beyond, either deliberately or inadvertently. Process knowledge also does not identify constituent levels, i.e., the quantity of contaminant that is present in the waste.

It is imperative that laboratory analyses—and not process knowledge—be used when waste is generated at or will be transferred to a commercial facility (or between facilities)⁶¹ and when

⁶⁰ This includes both drinking water aquifers and any other subsurface waters, no matter if "percolating, perched or otherwise." § 4.110(84).

⁶¹ In other words, §4.102(a)(2) should be rewritten to say: "Laboratory analysis of waste may <u>shall</u> be required for waste generated at a commercial facility, as that term is defined in §4.110 of this title, or when waste is transferred from one commercial facility to another."

determining if a waste is hazardous.⁶² The treatment and disposal mechanisms that will suffice for any given waste stream depending on what's in the waste (and in what quantities). If the waste stream is sufficiently contaminated, a facility may not be legally allowed to accept such waste. The waste may also pose serious hazards for nearby residents, drinking water supplies, and the environment. The Commission should identify a specific list of parameters that the waste must be tested for. All laboratory testing should be conducted by an accredited third-party lab, as described in § 4.124(e)(3)(A).

As for subsections (b) – (d), Commission Shift understands that this language may be included because of legislation.⁶³ However, negligent and reckless action should be prohibited as well. Requiring that the Commission or others show a "knowing" violation of (b) – (d) can be exceedingly difficult. Nor does subsection (e) solve the problem for communities; all of these subsections are from current rule 3.8(d)(5). Commission Shift urges the Commission to use this rulemaking to go beyond the business-as-usual regulations and create real incentives for operators to use only properly permitted entities.

As for §4.102(f),⁶⁴ Commission Shift requests that the Commission explain why the Commission has emphasized that it is a person "who plans to utilize" the services of a carrier who is under a duty to investigate, as opposed to "a person who utilizes" such services. The Commission should confirm in writing that this is not a loophole operators could exploit to avoid investigating whether a carrier has a permit or not. Subsection (f)(2) should also include liability negligence: A generator should be liable for improper disposal if the generator was negligent in failing to recognize that the carrier or receiver was likely to improperly dispose of wastes and negligently failed to take reasonable steps to prevent improper disposal.

§4.104. Coordination Between the Commission and Other Regulatory Agencies, Page 3

Commission Shift supports the retention of § 4.104(b) in the new draft, which is also in current 3.8, and prohibits the operation of a facility before it has all required permits. However, section (b) should also require the applicant to forward a copy of any additional required authority to the Commission before the receipt of waste. This way the Commission can better direct concerned

⁶² In other words, §4.102(a)(3) should be rewritten to say: "The generator of an oil and gas waste that is not exempt from regulation under Subtitle C of the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended, 42 USC §6901, et seq. as described in 40 CFR §261.4(b), shall determine if such waste is a hazardous oil and gas waste by applying process knowledge of the hazard characteristics of the waste in light of the materials or processes used or by conducting laboratory analysis of testing the waste."

⁶³ E.g., Tex. Water Code § 29.043, which states "No person may knowingly utilize the services of a hauler to haul or dispose of oil and gas waste off the lease, unit, or other oil or gas property where it is generated if the hauler does not have a permit as required under this chapter."

⁶⁴ §4.102(e) states: "Any person who plans to utilize the services of a carrier or receiver is under a duty to determine that the carrier or receiver holds the appropriate authority from the Commission to manage or transport oil and gas wastes."

community members to the proper regulatory authority if and when complaints arise. Commission Shift also urges the Commission to be more proactive in determining jurisdiction and coordinating with the TCEQ.

§4.107. Penalties, Page 4

The Commission has largely copied existing Rule 3.107 into 4.107, and has not proposed penalties related to Rule 73.⁶⁵ The Commission should clarify what will happen to Rule 107 and take this opportunity to revise the language in 4.107 to address the enforcement problems that communities keep experiencing.

The Commission may be somewhat limited by statute from enacting all of following changes but the fact is that while voluntary corrective action **can be** an effective component of the enforcement action, that is not always so, thus the language used in (a) should be "can be an effective component" but not "is an effective component."

Again, unless it is barred by statute, the Commission should omit the last two sentences of (b) because it hamstrings the Commission's abilities to enforce its rules and penalizes good actors over bad actors. This Commission should not foreclose its ability to automatically enforce its rules (the penultimate sentence). Nor can all violations be corrected by operators before being referred to legal enforcement (the last sentence). This language would prohibit the Commission from referring egregious, deliberate violations contrary to public and environmental health & safety directly to legal enforcement. While some minor violations (e.g., lack of signage) might be suitable for voluntary correction, other violations are not. The Commission should omit these sentences or clarify that the Commission reserves the right to immediately pursue legal action or any other means necessary to enforce its rules and protect the public.

§4.108. Electronic Filing Requirements, Page 6

All filed documents should be made publicly available and searchable through the Commission's public-facing electronic database (e.g., including monthly quarterly, semi-annual, and annual reports as described in 4.130).

All of the documents that operators are required to retain on request should be instead filed automatically and made available to the public, including as stated in (a non-exhaustive list):

4.111 (closure compliance for operations authorized by rule),

4.112 (distilled water sampling proof),

4.114 (compliance documentation for authorized pits for 4.113 and 4.115; closure documentation),

4.115 (pit liner integrity for a variety of authorized pits),

 $^{^{65}}$ It is not possible to provide meaningful feedback on penalties without having Tables 1 – 5.

- 4.130 (waste reporting for permitted facilities),
- 4.142 (commercial spill and stormwater plans),
- 4.172 (reclamation plant operation)
- 4.194 (waste profile, manifest, and other documentation).

Making these documents publicly available lets the public help monitor the compliance at these facilities and inspires confidence that good-actor facilities are being responsibly run. It also dovetails with recommendations made as early as 2000 by the interdisciplinary review board.⁶⁶ As such, Commission Shifts request that each of these sections listed above be edited to require that these documents be timely filed with the Commission and uploaded to the public-facing electronic database.

§4.109. Exceptions, Page 7

Commission Shift objects strongly to §4.109. Exceptions to water-protection rules aren't contemplated in the current version of 16 TAC § 3.8 and shouldn't be allowed in the new rules. Exceptions are a dangerous loophole and will allow existing facilities to continue operating even if evidence exists that public and environmental health is being put at risk. Charging an exception fee does not address the problems with the lack of meaningful participation in reviewing exceptions. The public should be automatically allowed to weigh in when exceptions are requested—any application that includes a request for exception should automatically be set for hearing, and the 15-day deadline to protest should be waived—any person with relevant information should be allowed to present that information at the hearing.⁶⁷

As written in subsection a, an applicant can request an exception for anything other than financial security, notice, and sampling and analysis. This means that an applicant can receive an exception on things like (a non-exhaustive list): applications, siting, design & construction, operation, monitoring, closure, reporting, all of the miscellaneous permits (Division 9), all of the waste transportation rules (Division 10); and all of the surface water protection requirements (Division 11). Subsection (c) gives a 1-year grace period for permitted facilities, as it states that:

until [insert one year after effective date of rulemaking] the director may grant special exceptions solely for the purpose of issuing permits for facilities and waste management units that were authorized pursuant to §3.8 of this title (relating to Water Protection) prior to [insert the effective date of rulemaking] but that are no longer authorized pursuant to this subchapter.

⁶⁶ "The review team encourages RRC to diligently pursue efforts to upgrade its information technology to allow the district offices to routinely share information with management and the public." Ex. 6 STRONGER Texas Review, 2003 (citing 2000 Guidelines 4.2.8.3, 8.2).

⁶⁷ And under no circumstances should operators or any other person be able to apply for exceptions outside of a permitting process and outside of a forum that allows the public to weigh in.

The Commission should confirm that § 4.109 combined with § 4.122 means that after one year, the conditions in every permit that comes up for renewal, transfer, or amendment will have to conform to these new rules.

Commission Shift also has concerns about subsection (e), which limits when a hearing is granted. A hearing should automatically be held whenever a permit application is filed (including amendments, transfers, and renewals) and at a bare minimum, should be automatic whenever an exception is requested. It should not just be for rejections of exceptions, and anyone should be able to request one, not just the applicant or permittee.⁶⁸ The public has a stake in exceptions and must be allowed to weigh in as to whether the requested alternative is "at least equivalent in the protection of public health and safety, and the environment."

2. DIVISION 2: DEFINITIONS

§4.110. Definitions, Page 7

Commission Shift expresses concern about the following definitions:

(1) 25-year, 24-hour rainfall event

Commission Shift objects to allowing Technical Permitting to define these rainfall events based on any source other than the National Oceanic and Atmospheric Administration. NOAA is the only source known to Commission Shift that regularly updates its data.⁶⁹ As such the definition in §4.110(1) should be revised to state that a 25-year, 24-hour rainfall event is:

The maximum 24-hour precipitation event with a probable recurrence interval of once in 25 years, as defined by the National Weather Service and published by the National Oceanic and Atmospheric Administration or other source approved by Technical Permitting.

(2) 100-year flood

Commission Shift objects to the vague language in this definition. The Commission should not invent a vague definition that might be subject to debate by applicants or operators.⁷⁰ The Commission should use a standard definition. The definition in §4.110(2) should be revised to remove debate over what constitutes "a significantly long period":

A flood that has a 1.0% or greater chance of occurring in any given year or a flood of a magnitude equaled or exceeded once in 100 years on the average over a significantly long period.

⁶⁸ The 2022 STRONGER Guidelines urges that "The right to appeal or seek administrative and/or judicial review of agency action **should be available to <u>any</u> person** having an interest which is or may be adversely affected, or who is aggrieved by any such action." Ex. 11 2022 STRONGER Guidelines at 23.

⁶⁹ For an explanation of why NOAA's Atlas 14 is more appropriate than other outdated methods like TP-40, see Ex. 17 Under Water & Unaware. (June 1, 2022) https://www.citizen.org/article/under-water-unaware/

⁷⁰ This definition differs even from the one now proposed to be stricken from Subchapter B, which stated: "a 100-year flood . . . is a flood that has a one percent or greater chance of occurring in any given year." § 4.204(1).

(3) 100-year flood plain

Soils maps are not appropriate ways to determine the location of a floodplain. If FEMA data is not available, an acceptable alternative method could be a flood zone analysis done by a professional engineer with FEMA-approved software for flood mapping.⁷¹ The definition in §4.110(3) should be revised to state that a 100-year flood plain is:

The lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, that are inundated by the 100-year flood, as determined from maps or other data from the Federal Emergency Management Agency (FEMA), or, if not mapped by FEMA, from the United States Department of Agriculture (USDA) soil maps. or a flood zone analysis done by a professional engineer with FEMA-approved software for flood mapping.

(4) action leakage rate:

The proposed definition "The fluid flow rate into a leak detection system that constitutes a primary liner failure" is too simplistic. In actuality, the Action Leakage Rate is "the calculated volume of waste liquid that has bypassed the primary liner into the leak detection layer at a rate of gallons per acre per day that if exceeded indicates severe failure of the primary liner and triggers the requirement to find the cause(s) of the failure and repair the liner."

(8) "affected person"

The definition of affected person is ambiguous and difficult for citizens to understand whether they fall within this definition. It has happened in the past that a nearby resident has spent significant time, energy, and money in protesting an application before ultimately being told that they do not have affected-persons status. The Commission should eliminate this guesswork and define affected person to explicitly include **at a minimum** all persons within one mile of the property boundary on which the authorized or permitted activity takes place. The definition in §4.110(8) should be revised to state that an affected person is:

A person who, as a result of the activity sought to be permitted, has suffered or may suffer actual injury or economic damage other than as a member of the general public or a competitor. Affected persons include at a minimum those surface owners, groundwater conservation districts, and **residents** within one mile of the property boundary on which the activity takes place.

(10) aquifer

Commission Shift does not have explicit feedback on this definition at the moment, but notes that the Commission's directive is to protect all subsurface water, not simply aquifers "capable of yielding significant quantities of groundwater." Shallow water bearing zones that won't give sufficient quantities of groundwater still merit protection.⁷² In the current draft, the term aquifer is used in only

⁷¹ FEMA identifies HEC-RAS as such software from the US Army Corps of Engineers, which incorporates watershed and topography data.

⁷² Such zones can also be hydrologically connected to surface water and/or water bearing formations at depth via infiltration.

two other locations in Subchapter A and in a manner that appears to recognize that other groundwater is also protected. However, Commission Shift requests that the Commission reiterate in its rulemaking that **all** subsurface water—whether it is located in an aquifer or not—will be protected equally.

(13) Basic sediment

Basic sediment has been defined in this draft to be:

A mixture of crude oil or lease condensate, water, sediment, and other substances or hydrocarbon-bearing materials that are concentrated at the bottom of tanks and pipeline storage tanks (formerly known as tank bottoms).

However, this term could lead to confusion because it is common in industry to define a mixture of sediment and water as just that—as "basic sediment **and** water" (BS&W). The Commission should clarify if there is a substantive difference between BS&W, basic sediment, and tank bottoms (which was the term previously used in Rule 57).

(21) "commercial facility"

Commission Shift strenuously objects to the proposed definition of a "commercial facility" because it is too narrow as proposed:

A facility permitted under this chapter, whose operator receives compensation from third parties for the management of oil and gas wastes, whose primary business purpose is to provide such services for compensation, and receives oil and gas wastes by truck. In this paragraph, a third party does not include an entity that wholly owns the operator of the facility permitted under this chapter.

There are four major problems with this definition: (1) its unconventional nature; (2) its exclusion of certain third parties, (3) its definition based on transportation method; and (4) its lack of parallel syntax.

Unconventional definition. It is important to have a sufficiently broad definition of commercial facility, because the proposed regulations impose stricter standards and permitting requirements on facilities defined to be "commercial."⁷³ At first glance, stricter standards for commercial would seem to make sense—the conventional understanding of a commercial facility is a larger operation that handles more waste and operates for much longer when compared to a non-commercial facility. In other words, commercial facilities are typically understood to be larger, riskier, with higher traffic and with potentially some portion or all of the waste stored in-place for a longer period or perpetuity. However, the proposed definition of "commercial facilities" does not incorporate any of such factors, it instead refocuses the concept of commercial to operations accepting waste for compensation from third-parties that don't also own the facility. But such a narrow definition does nothing to meet the

⁷³ The commercial definition also affects what facilities can be built in sensitive commercial areas: as proposed, 4.197(a)(1) only prohibits "commercial" disposal pits from being built in coastal natural resource areas. Non-commercial disposal pits, pits holding waste for anything other than "permeant interment," and every other waste disposal facility is not prohibited by rule.

regulations' stated purpose of "protecting public health, public safety, and the environment"⁷⁴— commercial facilities should not be defined from the perspective of who is bringing the waste and how, but with the inherent risks and hazards associated with the facility.

This definition is also out-of-step with how other states define commercial facilities.⁷⁵ Louisiana defines a commercial facility as "a storage, treatment and/or disposal facility which receives, treats, reclaims, stores and/or disposes of oil and gas waste for a fee or other consideration." 43 La. Admin. Code Pt XIX, § 501.⁷⁶ The RRC could harmonize Louisiana's definition with the terminology used in Texas to be "a facility that manages oil and gas wastes for a fee or other consideration."

Third-parties. At a bare minimum, this definition should not create a new definition to "thirdparties" and should include facilities whose operators receive compensation from entities that wholly own the operator of the facility.⁷⁷ As written, if the facility is a wholly-owned subsidiary of the generator (i.e. if the generator is the facility's parent), it would not be a commercial facility. Corporate entities sometimes choose to form subsidiaries to protect assets and mitigate liability. Subsidiaries are typically treated as separate entities when it comes to holding them responsible for each other's actions and protecting the parent company from the action of its subsidiaries. The proposed definition for commercial facility would blur wholly-owned subsidiaries back into their parents, creating a loophole for facilities to not fall within the commercial definition (and the elevated protections for communities the rules provide) as long as they are accepting mostly their parent company's wastes. In other areas of the law, this sort of preferential treatment is not allowed.⁷⁸

A subsidiary relationship between a receiver and third party is possible. For example, Waste Connections reports owning R360 Environmental Solutions as a subsidiary and operating waste treatment and disposal facilities, one of which is in Stanton, Texas.⁷⁹ Such a large operator as Waste

⁷⁴ § 4.101(b).

⁷⁵ The definition recommended by STRONGER, a "non-profit corporation . . . formed to educate regulators and the public as to the appropriate elements of a state oil and gas exploration and production regulatory program" is similar:

[&]quot;Commercial Disposal Facility: A facility whose owner(s) or operator(s) receives compensation from others for the temporary storage, reclamation, treatment, and/or disposal of produced water, drilling fluids, drilling cuttings, completion fluids, and any other RCRA exempt E&P waste, and whose primary business objective is to provide these services. These facilities may, under certain circumstances, also accept non-exempt, non-hazardous wastes generated from E&P operations. This definition also includes facilities whose owner(s) or operator(s) receives compensation from others for E&P NORM-related storage, decontamination, treatment, or disposal." Ex. 11 20222 STRONGER Guidelines at 7, 49. https://www.strongerinc.org/wp-content/uploads/2022/07/2022-

Edition-STRONGER-Guidelines.pdf

⁷⁶ The full definition is: "Commercial Facility--a legally permitted E and P Waste storage, treatment and/or disposal facility which receives, treats, reclaims, stores, and/or disposes of E and P Waste for a fee or other consideration. For purposes of this definition, Department of Environmental Quality (DEQ) permitted facilities, as defined by LAC 33:V and VII, which are authorized to receive E and P Waste, are not covered by this definition. However, such facilities must comply with the reporting requirements of § 545.K herein if E and P Waste is accepted."

⁷⁸ E.g., the corporate veil between a subsidiary and its parent protects the two entities from liability except under very narrow circumstances.

⁷⁹ Ex. 18 Waste Connections Sustainability Report (2022) at 27.

https://cdn.wasteconnections.com/resources/documents/sustainability/2022/Waste+Connections+2022+Sustainability +Report.pdf. See also Ex. 19, Allan Gerlat. Waste Connections to Buy Oil Field Waste Company for \$1.3 Billion

Connections is clearly a commercial entity engaged in commercial activities at a commercial facility (by any conventional and logical definition of the term); large commercial facilities should not fall outside the definition of a commercial simply because their operators are vertically integrated and own the facilities where they dispose of waste.⁸⁰ The Commission should clarify that operators with corporate relationships like Waste Connections and R360 would be treated as commercial facilities. For the sake of public trust and transparency, the Commission should also disclose why this definition was rewritten so many times, and which companies stand to benefit.

Transportation loophole. The definition of commercial also should not hinge on whether the waste is delivered by "truck" or not. Waste delivered in any manner—by vessel, barge, shipping container, pipeline, car, rail, drone, air, horseback, or foot—should be covered by this rule.⁸¹ Current Rule 78's definition of commercial is not so narrow (includes waste "partially trucked or hauled,"⁸² nor are the several versions that were considered in the two years industry had to create this rule.⁸³

⁸¹ Waste transfer by barge or rail is possible. For example, across the country Waste Connections owns or operates "E&P waste transfer stations with marine access. Transfer stations receive, compact and/or load waste to be transported to landfills or treatment facilities *via truck, rail or barge*." Ex. 20 2022 Waste Connections SEC Report at 10. <u>https://www.sec.gov/Archives/edgar/data/1318220/000155837023001404/wcn-20221231x10k.htm</u> As that company explained in its 2012 filing, other methods are possible too: "We receive flowback water, produced water and other drilling and production wastes at our facilities *in vacuum trucks, dump trucks or containers deposited by roll-off trucks. In certain markets we offer bins and rails systems* that capture and separate liquid and solid oilfield waste streams at our customers' well sites and deliver the drilling and production wastes to our facilities. *Waste generated by offshore drilling is delivered by supply vessel from the drilling rig to one of our transfer stations, where the waste is then transferred to our network of barges* for transport to our treatment facilities." Ex. 21 2012 SEC filing at 6.

https://www.sec.gov/Archives/edgar/data/1057058/000119312513085841/d431432d10k.htm

(A) the facility is permitted under §3.8 of this title (relating to Water Protection);

- (B) the facility is permitted under §3.57 of this title (relating to Reclaiming Tank Bottoms, Other
- Hydrocarbon Wastes, and Other Waste Materials);
- (C) the facility is permitted under §3.9 of this title (relating to Disposal Wells) and a collecting pit permitted under §3.8 is located at the facility; or
- (D) the facility is permitted under §3.46 of this title (relating to Fluid Injection into Productive Reservoirs) and a collecting pit permitted under §3.8 is located at the facility.

⁸³ The October 2022 version proposed a simple, bright-line definition that Commission Shift would favor instead of the one proposed now: "Commercial facility--A facility whose owner or operator receives compensation from others for the receipt, handling, storage, treatment, reclamation, recycling, or disposal of oil field fluids or oil and gas wastes." Ex. 23, October 2022 Subchapter A draft, (excerpt).

⁽Sept. 17, 2012) <u>https://www.waste360.com/mergers-and-acquisitions/waste-connections-buy-oil-field-waste-company-13-billion</u>

⁸⁰ Ex. 20, 2022 SEC Filing at 8. ("As of December 31, 2021, we owned or operated 71 MSW landfills, 12 E&P waste landfills, which only accept E&P waste and 14 non-MSW landfills, which only accept construction and demolition, industrial and other non-putrescible waste. Eight of our MSW landfills also received E&P waste during 2021. *We generally own landfills to achieve vertical integration in markets where the economic and regulatory environments make landfill ownership attractive.*") (emphasis added)

https://www.sec.gov/Archives/edgar/data/1318220/000155837023001404/wcn-20221231x10k.htm

⁸² Rule 78 sets the requirements for financial security. 16 TAC § 3.78(a)(3) Commercial facility--A facility whose owner or operator receives compensation from others for the storage, reclamation, treatment, or disposal of oil field fluids or oil and gas wastes **that are wholly or partially trucked or hauled** to the facility and whose primary business purpose is to provide these services for compensation if:

The "commercial" definition in the commercial recycling rules is also not so narrow and contains no limitation based on mode of transportation.⁸⁴ In addition, Subchapter A's proposed definition of "container" (§4.110(25)) includes waste receptacles beyond those that are transported by truck (including receptacles transported by vessel and barge).⁸⁵ The waste hauling rules do carve out only certain transportation methods for regulation but with different phrasing: in one place applying to the transport of wase "by any method other than by pipeline,"⁸⁶ and another regulating transport "by vehicle."⁸⁷ The Commission should use standardized language wherever possible to avoid confusion and potential litigation.

Parallel syntax. Parallel syntax—in which all items of a list have a parallel structure—helps operators and their counsel parse regulations. The commercial definition includes a non-parallel 3 part list ("whose operator . . . , whose primary business purpose. . . , and requires"). Commission Shift urges the Commission to fix these drafting errors throughout this proposed rulemaking and before the formal comment period begins so that its meaning can be parsed and meaningful feedback given.

Finally, Commission Shift requests that the Commission clarify that once a facility qualifies as commercial, **every** waste management unit in that facility must be addressed and included in the permit. In other words, pits and sumps that might otherwise be permitted-by-rule under Division 3 (for example if they were located at the drill site) should not be allowed to be permitted by rule if they are part of a commercial facility. It is too confusing for the public and regulators to have both permitted and "authorized" activities at the same property and could tempt bad operators to use "authorized" operations to circumvent the notice that goes along with permitting (and subsequent review). The definition in §4.110(21) should be revised to state that a commercial facility is:

A facility whose owner or operator receives compensation from others for the management of oil and gas wastes. ⁸⁸ All waste management units on the same

⁸⁴ § 4.204(3) contains no "transportation" limitation. 16 TAC 4.204(3) Commercial recycling facility--A facility whose owner or operator receives compensation from others for the storage, handling, treatment, and recycling of oil and gas wastes and the primary business purpose of the facility is to provide these services for compensation, whether from the generator of the waste, another receiver, or the purchaser of the recyclable product produced at the facility. Includes recycling of solid oil and gas wastes on or off lease. Does not include non-commercial fluid recycling as defined in §3.8 of this title.

⁸⁵ §4.110(25): "Container--A pit, sump, tank, vessel, truck, barge, or other receptacle used to store or transport oil and gas waste."

⁸⁶ §4.193(a): "Prohibitions. A person who transports oil and gas waste for hire *by any method other than by pipeline* shall not haul or dispose of oil and gas waste off a lease, unit, or other oil or gas property where it is generated without a valid oil and gas waste hauler permit. A permittee under this division shall not gather oil, gas, or geothermal resources unless otherwise authorized by Commission rules. An oil and gas waste hauler shall not transport oil, gas, or geothermal resources in the same vehicle being used to transport oil and gas wastes other than incidental volumes of skim oil normally present in produced water or other oil and gas wastes. (emphasis added).
⁸⁷ See § 4.191(a). Division 10 is the only place in Subchapter A where vehicle is defined: For the purposes of this permit, "vehicle" means any truck tank, trailer tank, tank car, vacuum truck, dump truck, garbage truck, or other container in which oil and gas waste will be hauled by the permittee." 4.193(e)(2).

⁸⁸ This language is substantively identical to the language proposed to the Commission in October 2022 before industry pushback, except the phrase "receipt, handling, storage, treatment, reclamation, recycling, or disposal of oil

property as a commercial facility must be permitted. No such waste management unit may be authorized through Division 3 of this subchapter.

(#) Construction Quality Control (CQC)

Commission Shift suggests that the Commission consider defining a new term "Construction Quality Control (CQC)." CQC refers to the quality control systems used to ensure that a construction project (such as the installation of a liner) is properly performed. Many liner installers already have QA/QC practices to ensure their work is quality and complies with applicable regulations. The TCEQ also already regularly collects this information from operators to ensure that the liners for municipal waste landfills are installed correctly.⁸⁹ The Commission should consider modifying TCEQ's liner CQC form for waste pit operations and requiring operators to submit this form as part of the information collected when pits are constructed. Commission Shift proposed the following definition for construction guality control:⁹⁰

Construction Quality Control (CQC) - A planned system of inspections that is used to directly monitor and control the quality of a construction project. Construction quality control is normally performed by the geosynthetics installer and is necessary to achieve quality in the constructed or installed system. Construction quality control (CQC) refers to measures taken by the installer or contractor to determine compliance with the requirements for materials and workmanship as stated in the plans and specifications for the project.

CQC plans should be required for all permitted operations, at a minimum. A permitted operation should not be allowed to operate until a CQC form has been received and reviewed by the Commission.

(24) contact stormwater; (62) non-contact stormwater; and (83) stormwater

As an initial matter, Commission Shift believes that the Commission should have a means of protecting the public and environment from water that has come into contact with oil and gas waste (or areas used to contain such waste) that is not just precipitation but that is also water from other sources (e.g., hauled in by truck, diverted from streams, pumped from wells, or otherwise). One way to do so could be revising the definition of stormwater to include water of any kind, as follows:

(83) Stormwater--Precipitation <u>Water</u> that falls onto and flows over the ground surface and does not infiltrate into the soil. See also "Contact stormwater" and "Non-contact stormwater."

field fluids or" has been replaced with "management of," to accommodate the revised definitions in the October 2023 draft.

⁸⁹ Ex. 23 Municipal Solid Waste Facility Geomembrane/Geosynthetic Liner Evaluation Report. (TCEQ) <u>https://www.tceq.texas.gov/downloads/permitting/waste-permits/msw/forms/10070.docx</u> (describing how "This liner evaluation report is required to document that the liner was constructed as designed in accordance with the issued registration or permit and meets the TCEQ regulatory requirements prior to unit operation. This report is to be supplemented with those quality-assurance/quality-control (QA/QC) tests as detailed in the liner quality control plan (LQCP) and shall be the basis of documentation of the quality control and acceptance of the constructed liner.").
⁹⁰ This definition can be found in Ex. 24 Field Integrity Evaluation of Geomembrane Seams (and Sheet) Using Destructive and/or Nondestructive Testing (2013) at 4 https://geosynthetic-institute.org/grispecs/gm29.pdf

Then logically the definition of stormwater could be divided between contact and non-contact, with no ambiguous third category of stormwater. That is not the case, however, because (24) and (62) use different language (highlighted in bold).

(24) Contact stormwater--Stormwater that has **come into contact with oil and gas wastes** or areas that are **permitted** to contain oil and gas wastes, regardless of whether oil and gas waste is currently being contained in the area. See also "Non-contact stormwater" and "Stormwater."

(62) Non-contact stormwater--Stormwater that, **by design or direction**, has not come into contact with areas containing oil or gas wastes or areas permitted to contain oil and gas wastes. See also "Contact stormwater" and "Stormwater."

Commission Shift offers the following revised definitions, which is intended to fully capture all scenarios:

(24) Contact stormwater--Stormwater that has come into contact with oil and gas wastes or <u>with areas that are permitted or authorized</u> to contain oil and gas wastes, regardless of whether oil and gas waste is currently being contained in the area. See also "Non-contact stormwater" and "Stormwater."

(62) Non-contact stormwater--Stormwater that, by design or direction, has not come into contact with <u>oil and gas wastes nor with areas containing oil or gas wastes or</u> areas <u>that are permitted or authorized</u> to contain oil and gas wastes, <u>regardless of</u> whether oil and gas waste is currently being contained in the area. See also "Contact stormwater" and "Stormwater."

The Commission should ensure that whatever definition is used for these terms, contact stormwater should include stormwater that has come in contact with any oil and gas waste that has been tracked throughout the facility and is no longer in an authorized or permitted waste management facility.

(25) "container" and (70) "pit"

Commission Shift requests clarity on why the definition of "container" has been expanded to include a "pit" and why "pit" is defined to include a container. In other words, when viewed together, the definitions of "pit" and "container" are circular, rendering them difficult to parse. As part of its rulemaking, the Commission should provide examples as to what is and is not included as a pit so that the regulated community and the public can better understand the scope of these regulations.

(27) dewater

Commission Shift requests that the Commission incorporate the definition of "free liquids" into this term.

(39) freeboard

Freeboard for pits should be at least two feet *plus* the 24-hour 25-year rainfall event. This appears to be the Commission's intent for authorized pits;⁹¹ but appears to have been inadvertently

⁹¹ See § 4.114(c)(2) ("An authorized pit shall be large enough to ensure adequate storage capacity to maintain two feet of freeboard and to contain:

left out from the permitted pit rules.⁹² Freeboard that includes the 24-hour, 25-year rainfall event is important because water isn't static—especially during storms—wind and wave effects can cause waste spills, so liquids should never be allowed to approach the lid of containers, sumps or pits. In addition, the rules for permitted operations allow delay before contact stormwater need be collected and removed, running the risk that additional water will build up in the pit during that time.⁹³ The definition in §4.110(39) should be revised to state that freeboard is:

The vertical distance between the top of a pit or berm and the highest point of the contents of the pit or berm, which shall be two feet plus the distance needed to contain the 24-hour 25-year rainfall event.

(45) "groundwater"

The proposed rules define groundwater as "[s]ubsurface water in a zone of saturation." This was not previously defined in Rule 8. The Commission should confirm that the definition of groundwater includes any water under the surface of the ground, both aquifers and any subsurface water, regardless of quantity and quality.⁹⁴

(48) land farming

The proposed definition of land farming '(50) Landfarming--A land application waste management practice in which oil and gas waste is mixed with or applied to land in such a manner that the waste will not migrate from the authorized or permitted landfarming cell" does not include the most important part – that the waste is treated so that the hydrocarbons are utilized by microbes and heavy metals are attenuated in soils. Commission Shift recommends the following definition:

(48) Landfarming--A land application waste management practice in which oil and gas waste is mixed with or applied to appropriately prepared soils in a treatment cell in such a manner that the waste will be reduced using monitored microbial degradation and does not migrate from the authorized or permitted landfarming cell.

(49) Land application

In the previous draft rule, the definition of "land application" included the phrase "in such a manner than the waste will not migrate off the area," and the proposed definition of "land farming"

⁽A) the volume of material to be managed; and

⁽B) the volume of precipitation from a 25-year, 24-hour rainfall event.")

 $^{^{92}}$ See § 4.151(b)(2) ("Freeboard. Unless otherwise required by permit or rule, the permittee shall maintain all pits such that each pit maintains a freeboard of at least two feet."); §§ 4.161(b) & 4.162(b)(2)(B)(failing to include the 24-hour, 25-year flood in the rules on landfarm construction). The Commission should modify the language in § 4.151 and 4.161 to mirror that in § 4.114(c)(2), so that all pits can handle the 24-hour 25-year flood while still maintaining at least two feet of freeboard.

⁹³ § 4.128(b)(4) requires stormwater to be collected "within 24 hours of *accessibility*," which may not be possible for several days during sever weather events. It is therefore imperative that the Commission require sufficient freeboard on all waste management units.

⁹⁴ E.g., congruent with TCEQ RULE § 297.1 ("(22) Groundwater--Water under the surface of the ground other than underflow of a stream and underground streams, whatever may be the geologic structure in which it is standing or moving.") and the definitions in other states, like Oklahoma's 785:30-1-2 ("Groundwater" means fresh and marginal water under the surface of the earth regardless of the geologic structure in which it is standing or moving outside the cut bank of any definite stream. [82:1020.1(1)]).

includes a similar limitation. The current proposed definition for land application—"An authorized or permitted waste management practice in which oil and gas waste is placed directly on the ground surface"—does not include this caveat. Commission Shift supports adding this phrase back in the definition of land farming because it would be more protective of human health and the environment. In the alternative, Commission Shift requests that the Commission clarify that this limitation is incorporated in this definition despite it not being made explicit.

(52) Leak detection system

The way this definition is written has the potential to cause confusion, thus the Commission should revise this definition to be clearer. The draft proposes to define this term as:

A system used to detect leaks **below the liner of pits**. A leak detection system may be installed **in a location other than below the liner** of pits.

In the first sentence, the leak detection systems are defined to be systems used to detect leaks from pits only. Conventional leak detection systems for pits are installed between the primary and secondary liners of a pit (as in the figure), yet as drafted, the proposed definition envisions (in the second sentence) that these systems could be installed in some "other" location.



Commission Shift requests that the Commission clarify what pit leak detection systems are acceptable that are *not* installed below the liner and elaborate on how leaks would be detected, tracked, and regulated that would be accurate enough to detect a loss of liquids not otherwise accounted for.⁹⁶ If instead the Commission meant to describe leak detection systems used for other structures that are not pits (e.g., detecting leaks under a road), it still would need to redefine this term because as is, the draft defines a leak detection system as "[a] system used to detect leaks below the liner of *pits*[.]"

(58) "Natural gas or natural gas liquids processing plant"

⁹⁵ Ex 25 Process Ponds. Figure 1. <u>https://ndep.nv.gov/uploads/land-mining-faq-docs/Process_Ponds.pdf</u>

⁹⁶ For example, would the Commission allow a mass-balance approach to monitoring the contents of a pit, and if so, how would the operator keep track of the inputs (flow rates, volume per depth, evaporation, rainfall, etc.) that would be accurate enough to detect a loss of liquids not otherwise accounted for in the process?

"Natural gas or natural gas liquids processing plant" is a new definition from current SWR8 and has been revised during drafting. It now also includes plants whose "primary function" includes "the production of pipeline-quality gas for transportation by a natural gas transmission pipeline." This term is only cited in delineating the activities that the Commission regulates. Commission Shift requests clarity on why this definition has changed and whether this changes who regulates these plants.

(60) "non-commercial fluid recycling"

Commission Shifts requests that the Commission clarify with examples what type of recycling operations would qualify as non-commercial. As written, it appears that non-commercial use would extend to any sort of fluid recycling done as long as it was on *land* associated with a drilling permit, no matter the magnitude of the operation or if money was exchanged. It would also extend to recycling on *land* where a non-commercial disposal or injection well was owned. But neither of these categories explain *how* the fluid is to be recycled. It's also unclear why the definition in part (2)(B) mentions both "a person" and wholly-owned subsidiaries—that would appear to be redundant given that 4.110(69) defines persons to include corporations and "any other legal entity." Moreover, Commission Shift is concerned that what would appear to be a commercial transaction (contracting to accept fluid from other leases or persons) would be treated as non-commercial under these rules. Also confusing about this definition is the fact that (76) "recycle" excludes injection pursuant to a permit issued under §3.46, yet the non-commercial definition incorporates land used for the purposes of operating a §3.46-permitted well.

(67) "operator"

Commission Shift requests clarity why "operator" is being defined for the first time—operator is not defined in the current SWR8—and why the following definition was chosen:

A person, acting for itself or as an agent for others, designated to the Railroad Commission of Texas as the person with responsibility for complying with the rules and regulations regarding the permitting, physical operation, closure, and post-closure activities of a facility regulated under this chapter, or such person's authorized representative.

Commission Shift suggests that the list of activities "permitting, physical operation, closure, and post-closure" be broader, e.g., to include construction, maintenance, and management activities.

(80) Small sump

Feedback from communities struggling with poorly managed waste facilities in their backyards strongly suggest that a single foot of freeboard on a sump is insufficient to prevent spills and has been a source of stormwater contamination. Sumps should be required to have an automatic sump pump that maintains the level of liquid below the freeboard height.

(88) "Waste management unit"

"Waste management unit" now includes in its definition a "container," which is defined to include pits. As part of its rulemaking, the Commission should provide examples as to what is and is not included as a waste management unit so that the regulated community and the public can better understand the scope of these regulations.

(90) "washout pit"

Commission Shift notes that "washout pit" is never used elsewhere in Subchapter A. Commission Shift requests the Commission's confirmation that such a pit would need to apply for a permit because it is not one of the enumerated "authorized" operations listed in Division 3.

(93) wetland

Commission Shift suggest that the Commission include in this definition the proper way to assess whether a wetland is in fact a wetland—by using National Wetlands Inventory (NWI) maps or through an onsite wetlands determination. Applicants and operators should be required to assume that wetlands are present when indicated on NWI maps, unless an onsite determination shows otherwise. The definition in §4.110(93) should be revised to state that a wetland is:

Wetland--An area including a swamp, marsh, bog, prairie pothole, or similar area having a predominance of hydric soils that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and that under normal circumstances supports the growth and regeneration of hydrophytic vegetation. The term "hydric soil" means soil that, in its undrained condition, is saturated, flooded, or ponded long enough during a growing season to develop an anaerobic condition that supports the growth and regeneration of hydrophytic vegetation. The term "hydrophytic vegetation" means a plant growing in water or a substrate that is at least periodically deficient in oxygen during a growing season as a result of excessive water content. The term "wetland" does not include irrigated acreage used as farmland; a man-made wetland of less than one acre; or a man-made wetland for which construction or creation commenced on or after August 28, 1989, and which was not constructed with wetland creation as a stated objective, including but not limited to an impoundment made for the purpose of soil and water conservation which has been approved or requested by soil and water conservation districts (Texas Water Code §11.502.). Wetlands are to be presumed present onsite if so indicated by an NWI map, unless an onsite wetlands determination concludes otherwise.

3. DIVISION 3 OPERATIONS AUTHORIZED BY RULE

Commission Shift reiterates its position that once a facility qualifies as commercial, **every** waste management unit on the property must be permitted. In other words, pits and sumps that might otherwise be permitted-by-rule under Division 3 (for example if they were located at the drill site) should not be allowed to be permitted by rule if they are part of a commercial facility. It is too confusing for the public and regulators to have both permitted and "authorized" activities at the same property and could tempt bad operators to use "authorized" operations to circumvent the notice that goes along with permitting (and subsequent review).

§4.111. Authorized Disposal Methods for Certain Wastes, Page 18

In a previous draft of this rule, the Commission proposed requiring explicit surface owner consent prior to disposal authorized by rule (i.e., without a permit). That language has been removed in this draft, after some members of industry objected.⁹⁷ The Commission was right to have included that language initially and should not bow to industry pressure to have that language removed. Indeed, other members of industry have supported adding that language back in, pointing out that Texas is one of the *only* states that does not require landowner permission prior to disposal.⁹⁸ The Commission should add it back in as subsection(a) as follows:

§4.111 (a) Surface owner informed consent. All authorized disposal requires the written consent of the surface owner of the property on which the disposal will occur. Without surface owner consent, oil and gas waste shall be removed from the property and disposed of in an authorized manner.

(1) The operator shall inform the surface owner in writing that disposal authorized under this section may not necessarily meet the requirements of TCEQ's Texas Risk Reduction Program (30 Texas Administrative Code Chapter 350) regarding protective concentration levels for residential or commercial land use, or other land use restrictions.

(2) The operator shall inform the surface owner in writing of the type and quantity of waste to be disposed of onsite and the duration during which disposal will occur.⁹⁹

(2) (3) The operator shall obtain written consent from the surface owner authorizing disposal on the property.

Other edits to § 4.111 include the following:

Commission Shift is concerned that constituents beyond BTEX may be present in water condensate, and thus urges the Commission to test additional parameters beyond those in Figure 16 TAC §4.111(a) (Page 85). Water condensate may also have other residual chemicals from hydraulic fracturing, fracturing flow back, and other formation liquids that could end up in the water condensate. In addition, the fact that this waste is often land applied on agricultural lands makes

⁹⁷ Compare Ex. 15, Excerpt of May 2023 Subchapter A Draft (§ 4.111) (highlights in original) with Ex. 16, Permian Basin Petroleum Association Comments (June 6, 2023) at 2; with proposed § 4.111.

⁹⁸ Ex. 26, Milestone Comments, at 1. Milestone (operator of commercial disposal sites) explains: "Reserve pits are often large, de facto mini-landfills capable of storing hundreds to thousands of barrels of waste (see Figure 1). Texas landowners should be afforded the right to decide whether their land is used for this purpose because permanent disposal includes potential financial, environmental, and health risks for the landowner. Therefore, obtaining consent prior to permanent burial not only protects the landowner, it also protects the operator, the Railroad Commission, and ultimately Texas taxpayers from bearing the burden of future financial liability and remediation costs."

⁹⁹ This aligns with the notifications required in Louisiana, which include: a detailed explanation of the method(s) used to generate the waste material, including types and volumes of the additives used, amounts of waste material generated...and written approval from the surface owner of the property where the processed material is to be applied, and any other pertinent information required by the Commissioner. La. Admin. Code title 43 § XIX-313(G).

testing for constituents that can cause adverse effects on crops¹⁰⁰ and livestock¹⁰¹ all that more important. Testing for TPHs as well as BTEX should be required at a minimum. Operators should also be required to test for the traditional suite of general water quality parameters including: pH, Electrical Conductivity, Total Dissolved Solids (measure of salinity), Chlorides, Volatile Organic Compounds (VOCs), and Total nitrogen.¹⁰² Testing for hazardous compounds should include: BTEX, PAHs¹⁰³ and NORM.¹⁰⁴

Subsection (a)(5) of the draft also should be revised so that adjacent surface owner consent is required if the water condensate *may* leave the property, not only if only if it "will."¹⁰⁵ The

permit-types/norm-waste/ (""Because the levels are typically low, **NORM** in produced waters and natural gas is not a problem in Texas unless it becomes concentrated. Through temperature and pressure changes that occur during oil and gas production operations, Radium 226 and 228 found in produced waters may co-precipitate with barium sulfate scale in well tubulars and surface equipment. Concentrations of Radium 226 and 228 may also occur in sludge that accumulates in oilfield pits and tanks. These solids become sources of oil and gas NORM waste. In gas processing activities, NORM generally occurs as radon gas in the natural gas stream. Radon decays to Lead-210, then to Bismuth-210, Polonium-210, and finally to stable Lead-206. Radon decay elements occur as a film on the inner surface of inlet lines, treating units, pumps, and valves principally associated with propylene, ethane, and propane processing streams.") See also EPA TENORM https://www.epa.gov/radiation/tenorm-oil-and-gasproduction-wastes (explaining how an API industry-wide survey showed that "TENORM radioactivity levels tend to be highest in water handling equipment," at an average level "about five times background.")

¹⁰⁵ "(5) the water condensate is applied to the ground surface in such a manner that it will not leave the boundaries of the property; or, if it is applied such that it will may leave the property and enter an adjoining property, the operator has obtained written permission from the surface owner of the adjoining property;"

¹⁰⁰ Ex. 27. Application of Water-base Drilling Mud to Winter Wheat: Impact of Application Timing on Yield and Soil Properties. https://extension.okstate.edu/fact-sheets/application-of-water-base-drilling-mud-to-winter-wheat-impact-ofapplication-timing-on-yield-and-soil-properties.html (describing how the application of water based mud to winter wheat fields resulted in high electrical conductivity in the top soil at a level detrimental to most plants, including their germination rates. Contamination rates only decrease after 6 inches of rainfall-rates much higher than those in much of the state). See also Ex. 28 https://twon.tamu.edu/wp-content/uploads/sites/3/2021/06/irrigation-water-qualitystandards-and-salinity-management-strategies-1.pdf (explaining how soils with high levels of total salinity can simulate drought conditions for the root zone even if the soil appears to have plenty of moisture) ¹⁰¹ West Texas in particular has a significant population of dairy cows, which can be adversely affected by the contaminants in water condensate. See Ex. 29 Interpreting Drinking Water Tests for Dairy Cows https://extension.psu.edu/interpreting-drinking-water-tests-for-dairy-cows "Levels above 3,000 mg/L are more likely to cause poor tasting water that may result in reduced water intake and milk production again depending on the exact pollutants causing the high TDS concentration. Overall, water with a TDS above 1,000 mg/L has the potential to cause livestock problems[.]" . . . "Chlorides above 250 mg/L can impart a salty taste to water which could result in reduced water intake and milk production ... High chlorides should also be considered when formulating diets to prevent an excess which could be detrimental to rumen function ... Sulfate concentrations below 1,000 mg/L are generally thought to be safe for adult animals but some authors have suggested limits as low as 500 mg/L."¹⁰² Monitoring for TDS, Chlorides, VOCs and Total nitrogen identifies what else is in the water condensate that might adversely impact crops and livestock (besides being a potential threat to shallow groundwater). ¹⁰³ According to the EPA, PAHs can constitute 20 to 60 percent of diesel fuel, which has not been prohibited as an additive to hydraulic fracturing fluid, making it a possible contaminant of water condensate. See Ex. 30 EPA Study at 5-6. https://www.epa.gov/sites/default/files/2015-05/documents/revised_dfhf_guid_816r14001.pdf; see also RRC Hydraulic Fracturing website. https://www.rrc.texas.gov/about-us/faqs/oil-gas-faq/hydraulic-fracturing-faqs/ ("Commission regulations do not prohibit the use of diesel fuel in hydraulic fracturing activities. Such use would not be a violation of Commission rules, unless the operator caused or allowed pollution during such use, of which there is no evidence.") Diesel fuel may also be used a component in drilling muds-another source of contamination for water condensate, Ex. 30 EPA Study at 7. ¹⁰⁴ The Commission has recognized that NORM can be a problem in produced waters and natural gas if it gets concentrated, as condensate does. https://www.rrc.texas.gov/oil-and-gas/applications-and-permits/environmental-
Commission—and therefore operators—have a duty to be proactive in preventing pollution, as the Commission recognized in 1984:¹⁰⁶

Whether or not an activity actually causes pollution can only be determined after the pollution has occurred. The commission has the duty to prevent pollution, and therefore must regulate activities which might result in pollution.

Subsection b. Commission Shift requests that the Commission clarify whether disposal of inert oil and gas wastes in (b) would be allowed by other potentially dangerous means, such as burning (which should not be allowed).

Subsection c. Subsection (c) raises a concern Commission Shift has throughout this rulemaking. Subsection (c) uses the chloride concentration of a waste as a proxy for toxicity and potential harm to groundwater and the environment.¹⁰⁷ However, drinking water is regulated using total dissolved solids, which captures the chloride content but also other dissolved ions.¹⁰⁸ Even electrical conductivity is another proxy that would capture additional constituents of concern to human, animals, and the environment.¹⁰⁹ (And indeed, the May draft of Subchapter A used electrical conductivity instead of chloride).¹¹⁰ Commission Shift requests that the Commission explains why it believes that chloride content is the appropriate proxy for regulation of oil and gas waste; Commission Shift suggests that both chloride and electric conductivity limits be set on waste.

Also in subsection (c), Commission Shift objects to the idea that the District Director could approve a greater slope for landfarming. Leaving this decision up to the Districts removes transparency from the process and makes it more difficult to track whether such decisions were appropriate to avoid pollution and protect human and environmental health. Section (c)(3) should be revised as follows:

the slope of the area to be landfarmed is three percent or less, or any greater slope is approved in writing by the District Director;

Subsection d. As for subsection(d), in a previous draft the operator would have been required to test the waste prior to burial.¹¹¹ Commission Shift requests that the Commission clarify if this requirement was removed as redundant because testing would already be required under 4.114. If not, Commission Shift urges the Commission to add the testing requirement back in.

Subsection e. Commission Shift notes that when subsection (e)(4) states that documentation of closure requirements for completion / workover pits should be filed with the Commission, that

¹⁰⁶ 9 TexReg 1550 (March 16, 1984) (rejecting the suggestion that the Commission regulate only activities that affirmatively cause pollution).

¹⁰⁷ It is also used as a proxy in § 4.115(b),(d), § 4.162 and in Figures 16 TAC § 4.114(f) and (g). ¹⁰⁸ The Texas Water Development Board defines water quality based on total dissolved solids. <u>https://www.twdb.texas.gov/innovativewater/desal/faq.asp#title-02</u>

¹⁰⁹ Electrical of conductivity of less than 4 mmhos/cm could be a more appropriate threshold.

¹¹⁰ Ex. X5 May Draft at 79 (Figure §4.114(e)(1)(D)) (copying Louisiana regulations).

¹¹¹ Stating that "The disposal [of other drilling fluid] is authorized provided: . . . the waste meets the analytical requirements in the Figure in 4.114(e)(1)(D) of this title." Ex. 15 May Draft at 19, 79.

documentation should also be made publicly available, not simply maintained available upon request. (See comments on § 4.108).

As for the setbacks proposed in this section, Commission Shift has consolidated its comments on setbacks to its discussion of § 4.150.

§4.112. Authorized Recycling. Page 21

In May, the Commission proposed requiring that operators "register[] the location of buried pipelines connecting non-commercial fluid recycling pits within 30 days of the pipelines entering service after the Director has established a registration system."¹¹² Given that these pipelines can also be sources of pollution, the Commission and future operators should at a minimum be advised of their location, just as authorized pits will now be required to be registered. Commission Shift supports adding this registration requirement back in.

Also removed from the May draft was the requirement that "Fluid recycling pits that do not meet the definition of non-commercial fluid recycling pits and are not commercial pits shall be permitted pursuant to Divisions 4 and 6 of this subchapter."¹¹³ This appears to have been removed in favor of a more vague "miscellaneous" permitting scheme in Division 9 that would ignore Divisions 4-8 (see Commission Shift's comments on Division 9, below). Commission Shift objects to allowing for the miscellaneous permitting schemes of Division 9 which would allow new permitting schemes be created without notice-and-comment rulemaking.

Commission Shift requests that documentation envisioned in (c) be forwarded to the Commission and made public, consistent with Commission Shift's earlier comments in § 4.108.

§4.113. Authorized Pits. Page 22

Commission Shift reiterates its opinion that no authorized pits should be allowed on the same property as a commercial facility—all waste management units described in § 4.113(a) (including small sumps) should be applied for and permitted. This could be effected by modifying (a) as follows:

(a) <u>Unless such waste management units are located on the same property as a commercial facility, a</u>An operator may, without a permit, maintain or use a reserve pit, mud circulation pit, completion/workover pit, fresh makeup water pit, fresh mining water pit, water condensate pit, non-commercial fluid recycling pit, or small sump. <u>If such waste management units are located on the same property as a commercial facility, they must be permitted.</u> Authorized pits are required to comply with the applicable requirements of §4.114 of this title (relating to Requirements Applicable to All Authorized Pits), and §4.115 of this title (relating to Specific Requirements Applicable to Authorized Pits). Authorized pits may be subject to certain additional containment guidelines at the Director's discretion based on factors such as the characteristics of the pit location.

¹¹² Ex. 15 May draft at 20.

¹¹³ Ex. 15 May draft at 20 (4.112(b)(2)).

Commission Shift also understands this proposed rule to allow the vast majority of pits that were authorized under Rule 8 to be grandfathered in and not need to comply with these new rules (except for rules on closure, see (b)(3)). This runs counter to the idea that this rule will improve environmental and human health. Subsection (b) should be modified to require that all authorized pits—not just the ones that cause pollution—must become compliant with the new rules or be closed:

An authorized pit that was constructed pursuant to and compliant with §3.8 of this title (relating to Water Protection) as that rule existed prior to [insert effective date of this rulemaking], is authorized to continue to operate subject to the following:

(1) Authorized pits that cause pollution shall be brought into compliance with this subchapter or closed according to this division.

(2) By [insert one year after the effective date of this rulemaking], basic sediment pits, flare pits, water condensate pits, and other unpermitted pits not authorized by this section shall be: (A) permitted according to this subchapter; or (B) closed according to this division.

(3) At the time of closure, authorized pits shall be closed according to this division.

Regardless, the Commission should also clarify that a pit originally authorized under the prior Rule 8 would need to comply with the updated rules if it was redesignated to be a different pit type, as contemplated in 4.114(a)(6).¹¹⁴ Otherwise, a loophole might exist in that an operator could continue to redesignate pit types based on the prior Rule 8 as long as the footprint of the pit pre-dated the rule updates.

Commission Shift is also concerned that subsection (c) does not require immediate action by an operator in the event of a release. Commission Shift urges the Commission to incorporate the language used in Division 10 as follows:¹¹⁵

(c) In the event of an unauthorized release of oil and gas waste, treated fluid, or other substances from any pit authorized by this section, the operator shall take <u>immediate</u> <u>corrective action and</u> any measures necessary to stop or control the release and report the release to the District Office within 24 hours of discovery of the release.

¹¹⁴ § 4.114(a)(6) "An authorized pit may be designated as more than one type of pit provided it meets the requirements in this section for each type of pit. An authorized pit of one type may be redesignated as an authorized pit of another type (for example, a reserve pit may be redesignated as a completion pit) provided the pit was constructed to meet the more stringent design and construction requirements, and the operator notifies the District Director of the redesignation pursuant to the procedure described in paragraph (5) of this subsection."

¹¹⁵ Compare with § 4.196(b)(7) "Immediate corrective action shall be taken in all cases where pollution has occurred. An operator responsible for the pollution shall remove immediately such oil, oil field waste, or other pollution materials from the waters and the shoreline where it is found. Such removal operations will be at the expense of the responsible operator." The Commission should also reiterate that all other responsibilities in (b)(7) apply to operators of authorized pits.

§4.114. Requirements Applicable to All Authorized Pits, Page 22

Subsection a. Commission Shift supports the creation of a registration system for all authorized pits (as in 4.114(a)(5)) and encourages the Commission not to delay in establishing such a publicly-accessible registration system.¹¹⁶ Commission Shift suggests that the rules should be amended to set a time limit on the Commission to establish such a registration system by adding as a final sentence to § 4.114(a)(5):

"The Director shall establish a registration system for authorized pits by [insert one year after the effective date of this rulemaking]."

Commission Shift also urges the Commission to require pits be registered within 30 days of the registration system becoming available—registration simply requires the operator to report data that it should already have. Allowing a full year to elapse before registration is required is excessive. As such, Commission Shift recommends that § 4.114(a)(5)(B) be amended as follows:

(B) Pits existing at the time the registration system is established shall be registered or closed within <u>30 days</u> one year.

The registration should also ask operators to include the following information, all of which should be readily available to operators. These additional requests could be appended to § 4.114(a)(5)(C) as follows:

(v) the history of the pit: when it was constructed, if and when it has changed type (as envisioned by § 4.114(a)(6);

(vi) the construction methods, including as-built diagrams, liner materials, and leak detection systems (if any);

(vii) the compliance inspection frequency (as set in § 4.114(d)(3)); and

<u>(viii) how closure sampling will be conducted (e.g., background vs. regulatory limits set in § 4.114(f)(3)(A) or § 4.114(g)(3)(A)).</u>

It also appears that there is a typo in section (a)(6), which directs operators to notify "the District Director of the redesignation pursuant to the procedure described in paragraph (5) of this subsection." Paragraph (a)(5) does not reference the District at all—perhaps the Commission meant to require that the operator reregister the pit (the final clause of (a)(6)):

the operator notifies the District Director of the redesignation reregisters the pit pursuant to the procedure described in paragraph (5) of this subsection

Subsection b.

Commission Shift strenuously objects to the idea that operators can request exceptions of setbacks. As proposed, the public would have no notice or opportunity to participate in the review of exceptions requested by authorized pits and no guidelines have been given as to what information

¹¹⁶ Commission Shift understands that the Commission's guidance sates that authorized pits must be registered with the appropriate RRC District Office, but does not see evidence of a registry online. <u>https://www.rrc.texas.gov/media/rouciyfm/section_j.pdf#page=18</u> "Authorized pits, listed under SWR 8(d)(4), do not

<u>https://www.rrc.texas.gov/media/rouciyfm/section_j.pdf#page=18</u> "Authorized pits, listed under SWR 8(d)(4), do not require an individual permit, but must be registered with the appropriate RRC District Office."

the Commission would consider when deciding whether an exception to a setback is appropriate. Commission Shift fears that exceptions would be routinely granted, with no system in place to monitor whether such an exception ultimately caused pollution or endangered human and environmental health. Especially since the District Directors, and not Technical Permitting staff in Austin that make this decision, where there might be some centralization and tracking of this information across districts. Subsection b should be revised to prohibit exceptions for authorized pits. As for the setbacks proposed in this section, Commission Shift has consolidated its comments on setbacks to its discussion of § 4.150.

Subsection c. Commission Shift is concerned that § 4.114(c)(3) could inadvertently allow authorized pits to be constructed in highly permeable soils because it includes no limitation on the soil type. Commission Shift suggests that § 4.114(c)(3) be modified to require a 2-foot section of low permeability material (1.0 x 10⁻⁷ cm/sec or less) be required within those 20 feet such that subsurface water will be protected:

Commission Shift also notes that the instructions on constructing natural liners ($\S 4.114(c)(6)(D)$) do not mention ensuring that the lifts are properly joined together such that there are no preferential pathways for leaks at the interconnections. The Commission should add language specifying the need to ensure each lift is properly seated to avoid such failure routes and in additional require operators to request and retain the QA/QC documentation provided by liner installers for three years after the pit has been closed.¹¹⁷ Liner installers that do not already have QA/QC procedures should be directed to the Commission's CQC forms or those used by TCEQ for liner installation.¹¹⁸ QA/QC documentation should also be required and retained when synthetic liners are used (as described in 4.114(c)(6)(E)). Commission Shift interprets 4.114(a)(4)¹¹⁹ to already require that the operator maintain such QA/QC documentation, but if that is not the case, the Commission could modify (E) as follows:120

(E) A synthetic liner shall meet the following requirements, and the operator shall maintain documentation demonstrating these requirements have been met. The operator shall maintain these records for at least three years from the date of closure and provide copies of these records to the Commission upon request:

¹¹⁸ Ex. 23 Municipal Solid Waste Facility Geomembrane/Geosynthetic Liner Evaluation Report. https://www.tceq.texas.gov/downloads/permitting/waste-permits/msw/forms/10070.docx (describing how "This liner evaluation report is required to document that the liner was constructed as designed in accordance with the issued registration or permit and meets the TCEQ regulatory requirements prior to unit operation. This report is to be supplemented with those quality-assurance/quality-control (QA/QC) tests as detailed in the liner quality control plan (LQCP) and shall be the basis of documentation of the quality control and acceptance of the constructed liner."). ¹¹⁹ "The operator shall maintain documentation demonstrating compliance with §4.113 of this title (relating to Authorized Pits), this section [§4.114], and §4.115 of this title (relating to Specific Requirements Applicable to Authorized Pits) for at least three years from the date of closure of the authorized pit. The operator shall provide copies of these records to the Commission upon request." ¹²⁰ This language is intended to mirror the language the Commission has already proposed in this rulemaking.

¹¹⁷ Many liner installers already have internal QA/QC procedures as well. E.g., Ex. 31 GeoChem. Field Installation Quality Assurance Manual. https://www.geocheminc.com/pdf/GeoCHEM-Field-Installation-QC.pdf;

Commission Shift has additional feedback on the synthetic liner requirements found in § 4.114(c)(6)(E). As an initial matter, it is difficult for the public to provide meaningful feedback on the ASTM methods cited in this section (and elsewhere throughout the rule) because ASTM methods are often behind a paywall online. The Commission should endeavor to provide the public a summary of the important aspects of each ASTM Method during the formal comment period so that the public is not at a disadvantage when providing comments.

Commission Shift was able to identify some publicly available information about ASTM D882, which is referenced in § 4.114(c)(6)(E)(v). ASTM D882 is only to be used for liners less than 1 mm (40 mil) thick; for thicker liners, ASTM D638 is recommended.¹²¹ The Commission should revise § 4.114(c)(6)(E)(v) accordingly and also confirm that it has set a minimum thickness for authorized pit liners to be 40 mil:¹²²

(iv) A synthetic liner shall have a breaking strength of 40 pounds per inch using test method ASTM D882 or ASTM D638, as appropriate.

Subsection f (and Figure: 16 TAC §4.114(f). Page 86.) Commission Shift suggests that confirmation sampling for closure not mix sidewall samples with pit bottom samples as envisioned in (f)(3) ("the five-point sample"). If the pit had leaked, the bottom would be expected to be more contaminated than sidewalls (since the pit may not always have been full). Thus confirmation sampling should sample the pit floor separate from sidewalls.

Commission Shift is also concerned whether true background can be determined (as contemplated in subsections f and g), given the density and intensity of drilling in Texas. Because of the drilling density in Texas, clean up standard should be set to prescribed levels, not background. Commission Shift joins operators like Milestone¹²³ in requesting this change: normally, "background concentrations" means native soil, in its naturally occurring state. However, as currently drafted, "background concentrations" could also include soil that has been highly contaminated by prior waste disposal (or spills) because there are no prescribed concentration limits associated with "background concentrations" and because there is no definition of "background concentrations".

¹²¹ Ex. 32 ASTM D882. Standard Test Method for Tensile Properties of Thin Plastic Sheeting.

https://www.micomlab.com/micom-testing/astm-d882/ ("ASTM D882 is used to measure tensile properties including ultimate tensile strength, yield strength, elongation, tensile energy to break and tensile modulus of elasticity of thin plastic sheeting and films. The samples are cut in strips that minimally have to be eight times longer than wide. No dumbbell shape is cut for materials of that thickness. Cut samples need to be free of nicks and other cutting defects since they will have an important impact on the test results variation. The samples are tested in specific conditions of pre-treatment, sample orientation, temperature, humidity, and rate of pulling. ASTM D882 can be used for testing materials thinner than 1mm in thickness. Thicker materials should be tested using ASTM D638.")

¹²² The Commission should consider including a table similar to ones offered by USDA and other agencies one so that operators know how thick a liner needs to be depending on the material it is made of (HDPE, LLDPE, PVC, etc). See Ex. 33 Natural Resources Conservation Service. Conservation Practice Standard. Pond Sealing Or Lining, Geomembrane Or Geosynthetic Clay Liner.

https://efotg.sc.egov.usda.gov/api/CPSFile/84/521_TX_CPS_Pond_Sealing_or_Lining%2c_Geomembrane_or_Geos ynthetic_Clay_Liner_2018 at 1-2 (specifying thickness based on liner type). ¹²³ Ex. 26 (Milestone comments) at 2-3.

Therefore, an operator could permanently bury new waste at the highly contaminated levels because those highly contaminated levels are the "background concentrations". This would result in an increased likelihood of pollution to groundwater, which is antithetical to the purpose of New Chapter 4, Subchapter A.

If background sampling is allowed, at a minimum a certified professional (e.g., a professional geologist) should be involved in closure in order to ensure that background levels are calculated correctly and are truly representative of background.

Commission Shift also requests that the Commission explain how an operator would comply with the requirement in (f)(5) that allows burial-in-place of waste if "the operator demonstrates the liner is intact **and** maintains the liner intact."¹²⁴ §§ 4.114(f)(5)(A) and (g)(5)(A). Commission Shift is aware of in-situ testing methods that could be used to test the integrity of a synthetic liner¹²⁵—the Commission should clarify if this is what is envisioned. Additionally, the Commission should also explain how the operator will ensure that the liner is maintained intact (or that leaks do not overwhelm the leak detection system, as in (f)(5)(A)(i)). Commission Shift recommends that the Commission require at post-closure monitoring program of at least 10 years if the waste is left in place so that operators ensure that no leaks develop after the waste has settled and after the pit has had the opportunity to weather a wide range of weather events.¹²⁶ This should be required for both authorized and permitted facilities.

¹²⁴ 4.114(f)(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; ¹²⁵ Synthetic liner testing with electrodes is a service offered by liner companies in Texas. *E.g.*, TRI Environmental (offices in Austin) <u>https://tri-environmental.com/electrical-leak-location-services/</u>; Mustang Extreme Environmental Services (offices in the Permian Basin) <u>https://mustangextreme.com/about/our-history/</u> (stating that as of 2019 Mustang Extreme Environmental Services installed over 1.0 billion square feet of liner) (note that Commission Shift is not necessarily endorsing the quality of service provide by these companies). There are also ASTM standards for using electrical methods for locating leaks in geomembranes that the Commission could explore adopting. E.g., ASTM Standard D6747 (2004), "Standard Guide for Selection of Techniques for Electrical Detection of Potential Leak Paths in Geomembranes," <u>https://www.astm.org/d6747-21.html</u>; ASTM D7007-16 "Standard Practices for Electrical Methods for Locating Leaks in Geomembranes Covered with Water or Earthen Materials."

https://www.astm.org/d7007-16.html; ASTM D8265-21 (2021), "Standard Practices for Electrical Methods for Mapping Leaks in Installed Geomembranes" https://www.astm.org/d8265-21.html; ASTM D7002-22 (2022), Standard Practice for Electrical Leak Location on Exposed Geomembranes Using the Water Puddle Method.

https://www.astm.org/d7002-22.html See also Ex. 34 2000 Nosko and Touze Geomembrane liner failure Modelling of its Influence on Contaminant Transfer.

https://www.researchgate.net/publication/258000268 Geomembrane liner failure modelling of its influence on co ntaminant transfer (describing damage detection systems, noting how "the majority of damage were caused by stones within the protection layer and heavy equipment" and that "most failures were located within flat areas"). ¹²⁶ In comparison, hazardous waste landfills and Class 1 and Class 2 nonhazardous landfills typically require a monitoring period of 30 years. TCEQ Draft Technical Guideline No. 10 at 4-5 (Revised Dec. 7, 2017) https://www.tceq.texas.gov/downloads/permitting/waste-permits/ihw/docs/tg10.pdf

Subsection g. (Figure: 16 TAC §4.114(g). Page 87) Commission Shift strenuously objects to the theory that "dilution is the solution to pollution" adopted in § 4.114(g)(2) which would allow clean soils to be mixed with wastes in order to lower the concentration of pollutants:¹²⁷

(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 SW-846, Method 9095).

Commission Shift expects operators and industry to argue that the dilution prohibition applies only to what is legally defined to be hazardous waste. Even if dilution is technically not prohibited, it is widely irresponsible policy to allow clean soils of Texas to become polluted in this manner. The Commission should unequivocally prohibit operators from using soils or other materials to lower the concentration of pit contents. If the contents of a pit are too polluted, then the wastes should not be buried in an authorized pit—they should be disposed of in a permitted landfill.

The paint filter test also is inappropriate here. The Paint Filter test determines whether liquid will leak out of a material within five minutes. It says nothing about whether pollutants will continue to leach out of the waste if the material is rewetted by precipitation.

As for the closure procedures described in (g)(7)(C)-(D) and (f)(3)(D)(iii)-(iv), Commission Shift suggests that the Commission provide additional guidance as to the maximum slopes allowed at the former pit site and consider incorporating its existing guidance on revegetation and erosion controls from its surface mining rules.

Finally, for ease of readability, Commission Shift requests that before the Commission publishes these rules for formal comment, the Commission refer to Figures (g) and (f) by their full names instead of "the Figure in this subsection."

Subsection h. There are several improvements that can be made to subsection (h), which describes groundwater monitoring requirements for authorized pits. Commission Shift is opposed to the leniency on groundwater monitoring introduced in subsections (h)(1)-(3).¹²⁸ This section was stronger (and less open to multiple interpretations) in a previous version of this rulemaking that Commission Shift obtained through a Public Information Act request—Ground water monitoring requirements for authorized pits were relaxed after the Permian Basin Petroleum Association sent its

¹²⁷ To be clear, Commission Shift advocates for the bold language to be stricken from the rule.

¹²⁸ Additional specific problems include that Commission has not defined what acceptable "readily available public information" may be used to determine if groundwater is likely to be present within 100 feet of ground surface. Applicants should review local water well permits and driller's logs in the immediate vicinity, the presence of groundwater management areas, USGS, and survey nearby residents. In addition, the absence of any water wells within 100 feet does not show that there is not any groundwater within 100 feet—subsurface water of smaller quantities and quality may still be present near the surface.

complaints to the Commission.¹²⁹ Commission Shift urges the Commission to return to the language in the May draft which would require monitoring wells be installed for **all** authorized pits that do not have a leak detection system. That language, which Commission Shift supports to replace parts (1) – (4) subsection h, is:¹³⁰

(h) Groundwater monitoring requirements for authorized pits.

(1) Groundwater monitoring is required for authorized pits that do not have a **double synthetic liner with a operational** leak detection system.

(2) An authorized pit with an active life of more than one year shall have at least three groundwater monitoring wells, at least two of which are installed in a **hydrologic** downgradient location and one of which is installed in an upgradient location relative to the pit.

(3) An authorized pit with an active life of less than one year shall have at least one groundwater monitoring well that is installed downgradient to the pit.

(4) Groundwater monitoring wells shall be sited, installed, and constructed according to §4.131 of this title (relating to Monitoring Standards).

As for subsection (h)(5), Commission Shift is generally encouraged by the level of specificity required in the well construction. It should be made clearer though that static water level should be measured during every sampling event and a potentiometric surface map created for every event: as is, the retention requirements set in (h)(5)(J)(iv)-(v) do not clarify this information must be developed for each and every sampling event—compare this to the language in (vi), which does specify record retention of reports and chains of custody "from each groundwater sampling event." All of the data developed and required to be retained in (J) should also be made publicly available contemporaneously—in particular, the results from each sampling event. Without concurrently sharing this information with the Commission and public, the operator is the only one reviewing whether "potential pollution" is indicated (the standard in (h)(8)). Just as the Commission requires that operators use independent labs to conduct the sampling analysis (see section 4.124(e)(3)(A)), an independent reviewer should be the one assessing if pollution has potentially occurred—not the operator itself. The sample collection itself should also be conducted by independent samplers neither owned nor operated by the pit operator. This is already recognized practice in Louisiana.¹³¹

Commission Shift also urges the Commission to modify (h)(5)(A) to require continuous collection of soil samples, not simply "periodic." Periodic soil sampling skips over whole intervals of the subsurface—areas where subsurface water may be present. It is impossible for operators to identify

¹²⁹ Compare Ex. 15, Excerpt of May 2023 Subchapter A Draft (§ 4.114(f)) (highlights in original) with Ex. 16, Permian Basin Petroleum Association Comments (June 6, 2023) at 2; with proposed § 4.114(h).

¹³⁰ Bold is additional language that Commission Shift believes would add clarity.

 ¹³¹ "Sampling and testing must be performed by an independent professional consultant and third-party laboratory."
43 La. Admin. Code Pt XIX, 517

"the shallowest groundwater zone" (as required by (h)(5)(C)) and to ensure that they are not "caus[ing] or allow[ing] pollution of surface or subsurface waters in the state" without collecting the soil samples that would indicate the presence of subsurface waters. A desktop review of TWDB and TCEQ does not suffice. As such, § 4.114(h)(5)(A) should be modified as follows:

(5) The following is required for each soil boring or groundwater monitoring well drilled.

(A) The drilling method shall allow for periodic or continuous collection of soil samples for field screening and soil characterization in order to adequately characterize site stratigraphy and groundwater bearing zones.

Subsection (h)(7) should also be amended to include sampling for any additional parameter that the Director deems necessary, including BTEX (not just benzene). Commission Shift also supports amending (h)(6) to allow for sampling on a more frequent schedule than only quarterly, if the Director deems it necessary (e.g., in the event of suspected pollution or other problems). The Commission included such language in 4.131(b)(4)(D), which should be incorporated into 4.114(h)(8) with the following modifications:

If any of the parameters identified in paragraph (h)(7) of this subsection indicate potential pollution, or the potential failure of the liner system: (A) the operator shall notify the District Director by phone or email within 24 hours of receiving the analytical results; and (B) the District Director will determine whether additional remediation, monitoring, or other actions are required; and (C) in the meantime, the operator shall be prohibited from accepting additional waste at the pit until the pit no longer is a source of potential pollution.

§4.115. Specific Requirements Applicable to Authorized Pits, Page 32

Commission Shift understands section 4.115 to add additional requirements to certain authorized pits, yet notes there seem to be a number of internal inconsistencies as drafted.

Section 4.115(2)(A) allows reserve pits or mud circulation pits to be constructed in alluvium or Quaternary sand and gravel. No pit should be constructed in such strata, even with a liner. The presence of alluvium or Quaternary sand and gravel are known to be associated with surface water systems and thus indicate that the area is in a potential floodplain of a surface water system. It also is a highly permeable soil type. Waste that leaks out could migrate both unpredictably and much faster than waste leaked into soils with lower permeability and thus pose an unacceptably greater risk to water quality.

Section 4.115(a)(2)(B) requires the operator to "routinely monitor" the liner's integrity, but doesn't explain how that will be accomplished or define what routinely would be. As Commission Shift summarized in its comments on § 4.114, there are companies in Texas that are able to inspect the integrity of a liner in-situ, as well as several ASTM standards explaining how geomembrane integrity can be monitored. The Commission should confirm that those methods will be required and create a form and guidelines that operators use to keep track of pit liner integrity. If liner integrity is to be inspected by periodically emptying the pit and making visual inspections, operators should be

required to photograph all actual and potential failure points and include that in the documentation required in (a)(2)(C). Commission Shift suggests that Commission set a frequency for these inspections to take place.¹³² Commission Shift also urges the Commission to require similar monitoring of the liners in completion and workover pits (subsection (c)) and fresh makeup water pits and fresh mining water pits (subsection (d)); neither of these subsections not appear to include any liner monitoring requirement, even though the potential for pollution exists.

Commission Shift remains concerned that subsection f, regulating small sumps, is insufficient to protect neighboring surface owners and the environment from inadvertent spills from sumps. Commission Shift also requests clarification as to what is meant by a "small sump pit"—a term that appears only once in the rules:

(f) Small sump.

(1) Authorized pit contents. A person shall not deposit or cause to be deposited into **a** *small sump pit* any oil field fluids or oil and gas wastes other than the following:

(A) oil field fluids or oil and gas wastes collected in a pit and in a manner meeting the requirements of 40 Code of Federal Regulations (CFR) Part 279 or Part 280 or oil field fluids or oil and gas wastes collected in a pit that is excluded from the definition of underground storage tank under 40 CFR Part 280 because it is a pipeline facility regulated under the Natural Gas Pipeline Safety Act of 1968, the Hazardous Liquid Pipeline Safety Act of 1979, or comparable state law; or

(B) oil field fluids or oil and gas wastes collected in a small sump as defined in this subchapter, provided the contents of the sump are removed for proper disposal at regular intervals to avoid overfilling the small sump.

The Commission should clarify what rules apply to "small sump pits" so that the public can provide meaningful comment on this section. Commission Shift also notes that the size of a sump is not necessarily the best proxy for how waste is processed through it (and thus the amount of risk it poses to human and environmental health). There is a difference between a "small" sump that is used to collect a couple of barrels of liquid a day versus a sump that is part of system that moves thousands of barrels per day. The Commission should regulate the latter more strictly.

Action leakage rates. Section 4.115(g) raises an issue that applies anywhere in the rules synthetic liners are discussed. This section discusses rules applicable only to non-commercial fluid recycling pits and proposes that it is acceptable for a pit built with a synthetic liner to leak 1,000 gallons per acre per day or more, if the calculated action leakage rate is larger.

 $^{^{132}}$ As drafted, section (g)(2)(B) implies that "routine" monitoring might be as little as annually. That is not frequent enough to protect human health and the environment, and the Commission should revise (g)(2)(B) to require more frequent inspections.

First, Commission Shift requests that the Commission clarify why only non-commercial fluid recycling pits have action leakage rates —and not any other type of authorized pit with a leak detection system.

Second, Commission Shift requests that the Commission explain why such a high leakage rate is allowed through a synthetic liner, which when properly installed should not leak. The Commission has not offered any justification for setting the allowable leakage rate so high. The leakage rate for any given pit will vary based on the pit's design and the amount of liquid in the pit, and very likely may be less than 1000 gallons/acre/day. At a minimum the rules should set the leakage rate to be the *lower* of the default rate or the calculated rate.

Third, even though the acceptable leakage rate is based on a daily value, the rule requires only monthly monitoring. A leaking pit that is in intermittent use may be able to pass a monthly test, even though it in fact leaks at an excessive rate any time the pit is full.¹³³ The Commission should require monitoring whenever the pit is in use,¹³⁴ and also specify the methods used for monitoring and how the "water passing through the primary liner" would be measured. Simply dividing by the number of days between measurements does not take into consideration the days that the pit is not in use—nor in the case of a leak on the inside berms, when the liquid level is below the portion of the liner that is damaged. The rules should reflect the purpose of an action leakage rate, which is to determine if the liner is damaged and to trigger plans for locating and repairing the damage before the pit is put back into use.

Taking all of the previous concerns into consideration, section 4.115(g)(2)(D) should thus be revised as follows:

(D) If the operator does not propose to empty the non-commercial fluid recycling pit and inspect the pit liner on at least <u>a monthly</u> an annual basis, the operator shall install a double liner and leak detection system. A leak detection system shall be installed between a primary and secondary liner. The leak detection system shall be monitored on a monthly basis each day the pit is in use to determine if the primary liner has failed. The primary liner has failed if the volume of water passing through the primary liner exceeds the action leakage rate, as calculated using accepted procedures, or 1,000 gallons per acre per day, whichever is larger smaller.

¹³³ E.g., a pit that leaks 2,000 gallons/acre/day when full could pass a monthly monitoring inspection if it is empty more than half the month.

¹³⁴ It is not unreasonable to require more frequent monitoring than monthly. Non-commercial fluid recycling pits are often used at the well pad while the well is actively being worked on. Personnel are already onsite everyday conducting operations and frequent monitoring, like that required for permitted pits, is appropriate and will better protect human and environmental health.

4. <u>DIVISION 4 REQUIREMENTS FOR ALL PERMITTED WASTE MANAGEMENT</u> <u>OPERATIONS</u>

§4.121. Permit Term. Page 37

Commission Shift urges the Commission to make clear in its rulemaking that when permits that have been grandfathered in through subsection (b) come up for renewal or modification, the Commission shall review and update all permit conditions to ensure each facility is in full compliance with the new rules **and** that the public will be included in the process.

§4.122. Permit Renewals, Transfers, and Amendments. Page 37

Commission Shift is concerned that this section as drafted with not allow for robust and meaningful public participation in renewals, transfers, and amendments to permits. Flaws include the fact that according to the proposed § 4.122(b) (renewal applications) notice is in the same manner as the initial application; (c) is silent as to notice for transfer applications; and in (d) notice is not guaranteed during amendment applications—it is left to the Commission's discretion based "on materiality" of the amendment. This language is insufficient to safeguard the public and allow for meaningful participation: notice should automatically be required for all renewals, transfers, and amendments. Such language could be added to section a.¹³⁵

If the Commission prefers to make such alterations in a piecemeal fashion, subsection b(3) (renewals), could be altered as follows to guarantee notice:

4.122 (b)(3) If the initial application for the permit type required notice, nNotice of the renewal shall be made in the same manner as in if it were an the initial application.

Without these changes, the proposal does not guarantee notice **and** limits the way notice is delivered to potentially more archaic methods that are not as successful in delivering notice. This language grandfathers in archaic notice requirements and restricts the Commission's ability to modernize the ways notice are given (e.g., adding electronic notification in addition to mailed or published notice). Notice should be delivered to the current surface owners in the manner most likely to be effective, not based on what was done in the past.

As for subsection (d)(2)(C) (amendments), Commission Shift suggests the following revisions:

4.122(d)(2)(C) Depending on the materiality of the proposed permit amendments, t<u>T</u>he applicant shall Director may require provide notice as described in § 4.125 and, if the permit is for a commercial facility, as described in § 4.141. to surface owners, adjacent landowners, notice by publication, and/or notice to any persons the Director determines may be affected by the proposed amendment.

¹³⁵ For example, by appending the following sentence to § 4.122(a): "Notice shall be required for all renewals, transfers, and amendments in the same manner as if it were an initial application."

This edit is intended to ensure that notice is given for all amendment applications automatically, not just "depending on the materiality of the proposed permit amendment," which is vague.¹³⁶ A bright-line requirement removes ambiguity for operators, the Commission, and the public and encourages transparency.

In addition, the Commission should make clear that it will require all renewals, transfers, and amendments comply with the rules in effect at the time a request is received. The Commission should consider rewriting this 4.122(a) to include this mandatory language as follows:

(a) Compliance with rules in effect at the time of permit renewals, transfers, or amendments. To ensure compliance with the rules in effect at the time of a request to renew, transfer, or amend a permit, the Commission may review and revise permit conditions when it receives the request <u>so that all permit conditions shall comply with the rules in effect at the time the permit renewal, transfer, or amendment is granted.</u>

Finally, Commission Shift agrees that both a facility and a records inspection is essential before an amendment is approved under (d)(5) ("The permit shall not be renewed unless the facility is compliant with Commission rules and permit conditions, as verified by a facility and records inspection.") The results of that inspection should be published to the Commission's electronic public-facing database as well.

As for transfers (4.122(c)), Commission Shift urges the Commission to establish strong rules that would prevent transfers between substantially similar entities in order to obscure a history of rule violations. The rules should have a compliance history element that would prevent bad actors from cleaning their record with new company names and histories; transfer applications should require that the applicant identify all former and related entities owned by the same operator or group of individuals and should take an applicant's compliance history into account. The Commission should prevent an owner of a non-compliant facility purchasing that facility using a new 'clean' LLC by requiring applicants to identify all related entities in an application.¹³⁷

In addition, the Commission should explore limiting transfers until only after a facility has been constructed according to the permitted specifications.¹³⁸ It is the original applicant, not a transferee, who certifies that an application is "true, correct, and complete to the best of my knowledge," 4.124(c), and not all operators have the same compliance history and experience operating facilities. Especially if the only opportunity for public involvement is at the application stage, the public should be able to rely on the assumption that the original applicant will be the one constructing the facility. The Commission has allowed transfers prior to construction in the past, including the Hohn Facility in

¹³⁶ Especially considering that the Commission has not given any examples of what might be "material" or not, or what might constitute a major or minor amendment.

¹³⁷ The Commission could add this as a requirement in § 4.124(d)(7) (information required to be provided about applicant).

¹³⁸ This prohibition should extend to commercial recycling facilities as well. Compare with 4.218.

DeWitt County, a facility that has caused reoccurring pollution concerns for neighbors.¹³⁹ Commission Shift thus respectfully requests that the Commission confirm that the rules prohibit transfer before construction, as 4.122(d)(6) implies:

4.122(d)(6) The permit shall not be transferred unless the facility is compliant with Commission rules and permit conditions, as verified by a facility and records inspection.

§4.123. Permit Modification, Suspension and Termination. Page 39

Commission Shift suggests that the Commission expressly acknowledge as part of this rulemaking that citizen-collected evidence can support a finding of good cause to modify, suspend, or terminate a permit. Adding this acknowledgement would encourage communities that the Commission respects and values the public's contribution to protecting human health and the environment.

§4.124. Requirements Applicable to All Permit Applications and Reports. Page 40

Commission Shift strongly urges the Commission to require that all permit applications include a plan for community relations and public information for the facility.¹⁴⁰ The plan should provide a point of contact for the community, a list of all operations at the facility (both permitted and unpermitted), the facility's plan for severe weather events and stormwater, the contact information for other regulatory agencies with jurisdiction over the facility, and an explanation of how concerns can be raised with the operator and with regulatory agencies. The facility should make copies of the plan available in both Spanish and English, and any other language appropriate based on the population living near the facility.

Commission Shift also suggests that each application should include a proposed inspection checklist that would include site-specific features, providing direction for an inspector to confirm that the actual operations conform to the authorized and permitted operations. The current inspection forms used at many facilities are generic and do not describe the permitted operations. The inspection form should make it easy for inspectors to confirm things like freeboard, setbacks, maximum waste height, etc. It should also indicate where photographs should be taken from (and of what), so that a consistent record is made across inspections.

Commission Shift also suggests that each application include a review and discussion of the application and permitting files for all previous oil and gas waste permit applications filed within a 30-

¹³⁹ Ex. 35 Garcia, Karina. Waste spills at a disposal site near Nordheim. (May 17, 2023) <u>https://www.crossroadstoday.com/news/waste-spills-at-a-disposal-site-near-nordheim/article_e941bce0-f390-11ed-a3ec-df18b668a357.html</u> Ex. 36, 2017 STF-062 Pyote to Petro_Transfer.

¹⁴⁰ This dovetails with recommendations in the (Ex. 11) 2022 STRONGER Guidelines ("A community relations or public information plan should be considered.") at 53.

mile radius in the last ten years.¹⁴¹ These applications and permits should contain information about the site suitability, and would aid communities, the applicant, and the Commission in determining whether the facility should be permitted.

These three suggestions could be added to § 4.124 with the following language:¹⁴²

(f) The permit application shall contain the following documents:

(1) A proposed community relations and public information plan;

(2) A proposed inspection form that is site-specific, which contains sufficient information for operators and inspectors to document compliance with the site-specific requirements set for all authorized and permitted operations; and

(3) A review and analysis of all previous oil and gas waste permit applications and permits (both filed and issued) within a 30-mile radius of the property boundary in the last ten years, including a review and analysis of the data contained therein regarding the suitability of the site for the proposed operations.

Commission Shift strongly supports the Commission's requirement that any lab analyses done in as part of Subchapters A and B must be as described in $\S4.124(d)(3)$ and conducted by an independent, accredited laboratory and meet federal sampling standards. It is also essential that the full lab reports and chains of custody be submitted to the Commission and made publicly available so that the data can be reviewed and understood within the context of sampling methods and their limitations. The sample collection itself should also be conducted by independent samplers neither owned nor operated by the permittee. This requirement should be added as a third requirement under (d)(3).

Commission Shift is concerned that several terms in (e)(4) are vague and could be left open to interpretation. The Commission should consider adding more specificity to what "relevant calibration records" for NORM screening equipment includes. In addition, it is not clear to Commission Shift what would suffice for a survey that is conducted "in a systematic grid pattern." The Commission should consider defining the maximum spacing of this grid that would be acceptable.

§4.125. Notice Applicable to All Permitted Activities. Page 41

Commission Shift strenuously urges the Commission to take this rulemaking opportunity to increase the notice given for all permitted activities, both commercial and non-commercial.¹⁴³ These comments thus apply to the language in § 4.125, § 4.133, and in § 4.141.

¹⁴¹ Thirty miles was the radius proposed for a statement of need and 10 years is the length of time an applicant must consider when reviewing flooding hazards.

¹⁴² This language might also be incorporated in § 4.128(a), which describes the information that shall be submitted with each permit application.

¹⁴³ Especially since the distinction between commercial and non-commercial is not based on the size or type of facility, the volume of waste processed, nor its risks to human and environmental health.

Direct notice (subsection a) should not be limited to the surface owner of the property, as it is in § 4.125(a)(1)(A). Permitted oil and gas operations have the potential to impact nearby residents and landowners living further away, and contaminate subsurface waters off site. Direct notice for all permitted activities should be sent to all surface owners within a mile of the proposed facility's property boundary. This prompts meaningful public participation *and* will help identify risks to human and environmental health. It is well known that it is difficult to identify water wells within a one-mile radius of the facility from a records review¹⁴⁴—one of the best ways to identify wells is by actually talking to the residents living within one mile of the facility. Notice should also be sent any groundwater district within one mile of the proposed facility.

Notice should be sent in English and Spanish, and any other language that the Commission determines is appropriate given the languages spoken in the area.¹⁴⁵ This is imperative in order to adequately identify and engage with the frontline and environmental justice communities that may be living near the proposed operations. To meet these goals, section 4.125(a) could be amended as follows:

(1) The applicant shall give notice of the permit application by registered or certified mail to the following persons on or before the date the application is filed with the Commission:

(A) the surface owners of the tract upon which the facility will be located

(B) all surface owners within one mile of the facility's property boundary;

(C) the appropriate official(s) for all groundwater conservation districts within one mile of the facility's property boundary;

 (\underline{D}) the city clerk or other appropriate official if the tract upon which the facility will be located lies within the corporate limits of an incorporated city, town, or village; and

 (\underline{E}) any other class of persons, such as offset operators, adjacent surface owners, or an appropriate authority, that the Director determines should receive notice of an application.

. . .

(3) The notice of the permit application, the complete copy of the application, including all attachments, and the letter required by § 4.125(a)(2) shall be translated into Spanish and any other language that the Director deems appropriate based on the languages spoken in the area. These translated materials shall be included as part of the direct notice.

Published notice (subsection b) should be required for all facilities as well, regardless of whether a facility is commercial or not. Notice should be published both in print and electronically. Printed notice should not be limited to the county where the facility is built (as b(1) proposes), because

 ¹⁴⁴ § 4.126(d)(6) rightfully requires applicants to identify all water wells within one mile of the facility boundary.
¹⁴⁵ Commission Shift suggests that notice should be published in the major languages spoken in all counties within one mile of the proposed facility, taking into consideration the populations with limited English proficiency.

facilities may be proposed on the border of two counties. Instead, notices should be required to be printed a publication that has a circulation in every county that is within a mile of the facility. Section 4.125(b)(1) should thus be amended as follows:

Electronic notice should also be required. Both TCEQ and Louisiana's Department of Environmental Quality already do this. TCEQ maintains a public notice website in which anyone can search for notices and which is updated daily.¹⁴⁶ TCEQ also maintains permanent mailing lists based on applicant or county that anyone may request to join.¹⁴⁷ Those who sign up by county are sent all air, water, and waste notices for that county.

Louisiana's Department of Environmental Quality's also does better than the Commission when it comes to public notice. LDEQ posts public notice information to their websites and offer listservs that anyone may join to receive permit public notices by email or by hardcopy.¹⁴⁸ A screenshot of LDEQ's website (<u>https://www.deq.louisiana.gov/public-notices</u>) is shown below:

¹⁴⁶ Search for TCEQ Public Notices. <u>https://www.tceq.texas.gov/agency/decisions/cc/pub_notice.html</u> (a search run October 31, 2023 returned multiple notices that were dated October 31, 2023).

¹⁴⁷ From the TCEQ at https://www.tceq.texas.gov/agency/decisions/participation/permitting-participation/public-participation-9-1-2015

Getting Placed on a Mailing List

If you submit a comment, request a public meeting, or request a contested case hearing regarding a specific permit application, the TCEQ will automatically add you to the mailing list for that application. You may also request to be on either of these two kinds of mailing lists:

The permanent mailing list for a specific applicant name and permit number.

The permanent mailing list for a specific county (which includes all air, water, and waste notices in that county). To get on either of these additional mailing lists, you must send a request to the chief clerk. In your request, specify the mailing list or lists you want to be on, and include your name and address.

¹⁴⁸ Ex. 37 LDEQ. Updating of DEQ Permits Public Notice Mailing List. (describing how both a hardcopy and an electronic mailout list is offered) (Accessed October 31, 2023).

https://www.deq.louisiana.gov/assets/docs/Public Notices/UpdatingDEQPermitsPublicNoticeMailingList.pdf

PUBLIC NOTICES

Permit records are available for review at the DEQ, Public Records Center, 602 North 5th Street, Baton Rouge, LA 70802. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). If you wish to receive permit public notices by email, you can subscribe to the listserv at https://internet.deq.louisiana.gov/portal/SUBSCRIBES/PUBLIC-NOTIFICATION, or you can contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at deq.publicnotices@la.gov or by contacting the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

For any questions related to permits public participation activities, please call LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

- Updating of DEQ Permits Public Notice Mailing List
- Public Participation Group

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PUBLIC NOTICE INFO	PUBLICATION DATE	COMMENT DEADLINE	HEARING DATE	ISSUE DATE	ADDITIONAL INFORMATION

The Commission should require that all applicants prepare public notice materials and post them online. Like Louisiana and the TCEQ, the Commission should maintain a list of every person who has signed up to receive notices of any oil and gas application filed in Texas and ensure that all who have requested notice receive it.

Deadline for protests. Commission Shift is also strenuously objects to the narrow window provided for protests. Having a long enough protest period is important because typically only those who register a protest within this window can provide feedback on whether the application is sufficiently protective of human health in the environment. Commission Shift would support the creation of a more participatory permitting process, for example, one that would:

- require applicants to provide direct and published "notice of intent" to apply for a permit at least 30 days before applying
- set all applications for a hearing once the application is complete, regardless if a protest is received¹⁴⁹
- give at least 30 days direct and published notice of the hearing (which is same time frame applicants have to respond to protests)¹⁵⁰
- prohibit modifications or supplements to the application once it is set for hearing (i.e., not allowing applicants to endlessly amend applications and create costly moving targets for the public & Commission to review)¹⁵¹ After all, "it is prejudicial to a protesting party when the administratively complete permit and its volumes of supporting Application documents

¹⁴⁹ I.e., remove the need to protest in 15 days, which is found at least in sections 4.125(a),(b), 4.133, 4.134(g),(h), 4.135(a),(b))

¹⁵⁰ Which would affect at least sections 4.125(a) and (b).

¹⁵¹ This would affect at least sections 4.134, 4.135.

referred to the Hearings Division, is not the permit or Application that is presented in a hearing"¹⁵²

• at the hearing, allow all interested persons the opportunity to present testimony, facts, or evidence related to the application or to ask questions

Both Louisiana and the TCEQ implement more inclusive processes like the one described above. However, if the Commission rejects this proposal, at a minimum potential protestants should be given the longer of either 30 calendar days from the date of application or 30 calendar days from the date of last publication in which to file a protest.¹⁵³ This would come closer to aligning with the notice periods provided in almost all TCEQ applications¹⁵⁴ and match the 30-days of notice that applicants currently have to respond to protests of their waste permit applications.

§4.126. Location and Real Property Information. Page 44

Commission Shift is concerned that the map features identified in (d) will not be used in the decision of whether a facility is appropriate for the location. For example, as the rule is drafted now, the applicant is directed to collect information about nearby schools, churches, and hospitals, but not required to use this in any way and not required to provide notice to them. Facilities should be prohibited next to sensitive receptors like these (for more on setbacks, see Commission Shift's comments on § 4.150). Likewise, the applicant is asked to identify all water wells within one mile—and all residences and commercial buildings within the same radius if the facility is for disposal—but is not required to send them notice of the application. Commission Shift's proposed changes to who gets notice attempts to address this disconnect (see comments on § 4.125).

§4.127. Engineering and Geologic Information. Page 46

Commission Shift urges the Commission to require site investigations for all operations seeking to be permitted. As discussed in its comments in Division 3 (§ 4.114(h) related to groundwater

¹⁵² This quote comes from the opinion of one of the hearing examiners tasked with reviewing a waste permit application proposed for San Augustine County, acknowledging how burdensome it is to the Commission and protestant when the facility's scope at the hearing was "ever-evolving." (OG-20-00004639) (PA Prospect in San Augustine County) at *44.

¹⁵³ In other words, § 4.125(a)(2)(F) would be amended to state "(F) a statement that any protest to the application must be filed with the Commission within $45 \underline{30}$ calendar days of the date the application is filed with the Commission or within $45 \underline{30}$ calendar days of the last date of publication, whichever is later. § 4.125(b)(2)(F) would need to be amended to state "(F) state that affected persons may protest the application by filing a protest with the Commission within $45 \underline{30}$ calendar days of the last date of publication <u>or within 30 calendar days of the date the application is filed</u> with the Commission, whichever is later;"

¹⁵⁴ This is actually an additional notice period once the agency has completed its preliminary review, during which time any member of the public may submit additional comments. TCEQ. Overview: Public Participation in Environmental Permitting--for Applications Filed on or after Sept. 1, 2015

https://www.tceq.texas.gov/agency/decisions/participation/permitting-participation/public-participation-9-1-2015 ("Except for certain air applications, the public comment period ends no earlier than 30 days from the last publication date of the NAPD [Notice of Application and Preliminary Decision]. If a public meeting is held after the close of the comment period, the comment period extends to the end of the public meeting.")

monitoring), the location of subsurface water can only be determined through soil borings and companion soil boring logs that capture continuous soil samples and log continuous descriptions by depth. As such Commission Shift encourages the Commission to amend section 4.127(b) as follows:

(b) If information is not available to address subsection (a) of this section, a site investigation including soil boring, sampling, and analysis is required.

Commission Shift also urges the Commission to require both documents and photographs documenting the as-built condition of the entire facility, not just the permitted waste management units. Photographs are necessary to confirm that the facility has been built to comply with all requirements, including setbacks. As such, Commission Shift suggests §4.127(d) be modified to state:

Prior to commencement of operations at a commercial facility, the permittee shall provide the Director with drawings and photographs documenting the as-built condition of the permitted waste management units at the facility the facility, including all equipment and waste management units. Photographs shall include at least one aerial photograph. All photographs shall include sufficient detail to confirm that the facility has been built in compliance with all permitted conditions.

§4.128. Design and Construction. Page 46

In it comments on § 4.124, Commission Shift suggested three additional items that should be included in each permit application. The need for each of those items could also be appended to § 4.128(a) as items 7-9 as follows:

(a) Application. The following information shall be submitted with each permit application: . . .

(7) A proposed community relations and public information plan;

(8) A proposed inspection form that is site-specific, which contains sufficient information for operators and inspectors to document compliance with the site-specific requirements set for all authorized and permitted operations; and

(9) A review and analysis of all previous oil and gas waste permit applications and permits (both filed and issued) within a 30-mile radius of the property boundary in the last ten years, including a review and analysis of the data contained therein regarding the suitability of the site for the proposed operations.

Commission Shift requests that the Commission clarify subsection (b)(3)'s statement on acceptable firewalls. If a firewall surrounds more than one tank, it should be able to withstand the maximum capacity of **all** tanks (not just the largest tank) within the firewall, plus freeboard to withstand a 25-year, 24-hour rainfall event. Subsection (b)(3) should be revised accordingly. Likewise, Commission Shift reiterates its concern that § 4.128(b)(4) requires stormwater to be collected "within 24 hours of accessibility," which may not be possible for several days during severe weather events. It is therefore imperative that the Commission require sufficient freeboard on all waste management units.

§4.129. Operation. Page 48

Commission Shift urges the Commission to require immediate action on spills, as it does in Division 10. Commission Shift urges the Commission to incorporate the language used in Division 10 as follows:¹⁵⁵

(b)(4) <u>The permitee shall take immediate corrective action in the event of any spill of</u> waste, chemical, or any other material. <u>The permittee shall take any measures</u> <u>necessary to stop or control the release and spills</u> shall be collected and containerized within 24 hours and processed through the treatment system or disposed of in an authorized manner. <u>The release shall be reported to the District Office within 24 hours of discovery of the release.</u>

§4.130. Reporting. Page 49

In its comments on § 4.108, Commission Shift discussed the need for all records, including those required by § 4.130, to be made publicly available, not just made "available for review and/or copying upon request," as subsection (c) is currently drafted. Making these documents publicly available lets the public help monitor the compliance at these facilities and inspires confidence that good-actor facilities are being responsibly run.

§4.131. Monitoring. Page 50

Commission Shift strongly urges the Commission to require groundwater investigations and monitoring at every site. Subsection (b) must be revised.¹⁵⁶ Commission Shift suggests that better language would be moving the language from (b)(2)(D) up into (b)(1) as follows:

(1) If shallow groundwater is present within 100 feet below ground surface <u>at the site</u>, <u>a minimum of three</u> groundwater monitoring wells <u>shall be installed</u> may be required for some facilities, including but not limited to: brine pits, disposal pits, reclamation plants, commercial waste separation facilities, commercial recycling facilities, and commercial landfarming facilities. Factors that the Commission will consider in assessing whether groundwater monitoring is required <u>at depths beyond 100 feet</u> include:

(A) the volume and characteristics of the oil and gas waste to be managed at the facility;

(B) depth to and quality of groundwater within <u>beyond</u> 100 feet below ground surface; and

(C) presence or absence of natural clay layers in subsurface soils; and

(D) any other factor the Director deems relevant to preventing pollution.

¹⁵⁵ Compare with § 4.196(b)(7) "Immediate corrective action shall be taken in all cases where pollution has occurred. An operator responsible for the pollution shall remove immediately such oil, oil field waste, or other pollution materials from the waters and the shoreline where it is found. Such removal operations will be at the expense of the responsible operator." The Commission should also reiterate that all other responsibilities in (b)(7) apply to operators of permitted operations.

¹⁵⁶ Even as drafted, it is confusing—it only states that wells **may** be required at certain facilities, which is a truism for all other facilities not listed—so why list any facilities by name at all? It also appears to conflict with 4.131(b)(2)(D), which would require groundwater monitoring whenever groundwater is present within 100 feet below ground surface

Commission Shift reiterates that it is all subsurface waters that the Commission is under a duty to protect—not just strata containing sufficient water for drinking or agriculture. Low-bearing formations may take additional time—more than 24 hours—to develop sufficient water that can be sampled and before a driller can confirm whether subsurface water is present.

Commission Shift urges the Commission to also prohibit operators from installing a monitoring well at the same exact location where it has taken soil borings during the geological investigation phase. Soil borings used to investigate the presence or absence of subsurface water are typically conducted before the site's groundwater gradient has been fully understood. The monitoring well locations should be established only after the soil boring data has been fully analyzed and reviewed by a certified professional. Soil borings should be fully plugged and abandoned to prevent pollution.

Commission Shift also urges the Commission to have operators pause operations for as long as a monitoring well is not operational. Commission Shift is aware of at least one operator that was allowed to continue operations without a full suite of operational wells, even though reports of contamination had been made about the facility. Section 4.131(b)(2)(B) should be revised as follows:

(b)(2)(B) The monitor wells shall be able to provide representative samples of groundwater underlying the site for the duration of facility operations. If a monitor well is not capable of providing a representative sample, the operator shall notify the Technical Permitting Section within 24 hours and cease operations at the facility immediately until the monitoring well has been replaced.

As for (b)(2)(D), the Commission appears to have omitted a requirement for upgradient wells to be installed. Upgradient wells are necessary to obtain groundwater samples that are representative of regional conditions and are not affected by the permitted site. Commission Shift thus suggests the following revision:

(b)(2)(D) If shallow groundwater is present within 100 feet below ground surface at the site, a minimum of three groundwater monitoring wells shall be installed. Wells shall be spaced around the facility or pit, close to the facility operational area, with at least two wells on the estimated down-gradient side of the operational area, and at least <u>one well on the estimated up-gradient side of the operational area</u>. Additional wells may be required for larger facilities.

As for (b)(2)(L)(ii), the Commission should clarify that a professional, licensed land surveyor¹⁵⁷ should be the one to survey the well head elevations. An accurate survey is essential for determining groundwater gradients and identifying if these gradients have shifted over time, as is possible especially over the long lifetime expected for some of these facilities. Commission Shift suggests the following language to achieve this goal:

(b)(2)(L)(ii) a survey elevation for each well head reference point (top of casing) relative to a real or arbitrary on-site benchmark and relative to mean sea level. <u>Surveys shall be conducted by a licensed land surveyor.</u>

¹⁵⁷ Licensed State Land Surveyor (LSLS) at <u>https://pels.texas.gov/lsls.htm</u>

As for subsection(b)(4)(C), Commission Shift believe that the Commission has inadvertently omitted BTEX from the list of parameters sampled. This subsection should therefore be modified as follows:

(C) The following measurements and analyses shall be reported to Technical Permitting Section after any sampling event no later than 15 days after the permittee receives the laboratory analysis results: static water level, pH, and concentrations of benzene, <u>toluene</u>, <u>ethylbenzene</u>, <u>xylene</u>, total petroleum hydrocarbons, total dissolved solids, soluble cations (calcium, magnesium, potassium, and sodium), and soluble anions (bromides, carbonates, chlorides, nitrates, and sulfates).

Finally, Commission Shift believes that human and environmental health is best protected if operations cease when potential pollution or potential liner failure is indicated. Commission Shift recommends that (b)(4)(D) be amended as follows:

If any of the parameters identified in subparagraph (C) of this paragraph indicate potential pollution, or the potential failure of the liner system, the Commission may require additional monitoring events and/or may require analysis of additional parameters. In the meantime, the operator shall be prohibited from accepting additional waste at the facility until the facility no longer is a source of potential pollution.

§4.132. Closure. Page 53

Commission Shift understands that these closure requirements apply to all permitted operations, including disposal pits, waste separation, landfarming and reclamation plants. As drafted, the rules state that operators must submit detailed closure plans at two separate times: first as part of the application process (4.132(a)) and second at least 30 days before commencing closure activities 4.132(b)(2). Operators should not be allowed to weaken their closure plans after the permit has been granted (i.e., after the only opportunity for public involvement has concluded). The final closure plan approved must be equal to or more protective of human health and the environment than the one approved during the application process. Any deviations from the plan should be treated as a request to amend the permit and trigger a requirement for public notice and comment. As such, Commission Shift suggests that the following addition to 4.132(b)(2) could address this problem:

(2) The permittee shall submit a detailed closure plan to the Technical Permitting Section at least 30 days prior to commencement of any closure activity. The Technical Permitting Section must approve the detailed closure plan before the permittee may initiate closure operations. If the detailed closure plan differs from the permitted closure plan, the permittee must seek a permit amendment per § 4.122(d) and the Director shall require notice be given per § 4.122(d)(C). The Technical Permitting Section shall not approve a closure plan that is less protective of human health and the environment than the plan approved during the application process.

Section 4.132(b)(3) should also be amended to state that if the soil samples taken during closure exceed the authorized limits or if the Commission determines additional remediation is required, the Commission "shall require" (not "may require") additional closure operations:

(3) Once the permittee has removed all waste, equipment, concrete pads, contaminated soil, and any other material in accordance with the closure plan, the permittee shall conduct soil sampling in accordance with the approved soil sampling plan. Soil samples shall be analyzed for the parameters in the permit and/or soil sampling plan and submitted to the Technical Permitting Section no later than 30 days after the permittee receives the laboratory results. The Technical Permitting Section may shall require the permittee to conduct additional closure operations if the soil sample results exceed the authorized limits and/or the Technical Permitting Section determines that additional remediation is required to prevent pollution caused or contributed to by operations at the facility.

§4.133. Protests. Page 54

Commission Shift reiterates its deep concern that the time frame allotted for protests does not allow for meaningful participation by frontline groups and environmental justice communities (see Commission Shifts previous comments on § 4.125). At a bare minimum, a 30-day protest period must be allotted. Furthermore, participation in the hearing process should be open to any interested person who may have relevant information about the application.

Section 4.133(a) would then be rewritten as:

(a) The Technical Permitting Section shall notify the applicant if an affected any person files a written protest with the Commission within 15 30 calendar days of the date the application is date-stamped at the Commission or the date notice was last published, whichever is later.

§4.134. Application Review and Administrative Decision. Page 55

Commission Shift remains unconvinced that sections 4.134 and 4.135 will solve the deep flaws inherent in the Commission's system for processing permits. There appears to still be no means for Technical Permitting Section staff to deny technically flawed permits outright—no matter what an applicant has provided in its application, it appears that the applicant would be able to request a hearing on that application, even if it is declared administratively incomplete and denied. This is a profound waste of the resources of the Commission and frontline communities who then must spend time and money in a hearing defending against a facility or pit that continues to fail at providing adequate information to support the drafting of a facility permit and its subsequent approval. Moreover, it appears that this rulemaking does nothing to change the fact that Commissioners may overrule both technical permitting staff and hearing examiner's final orders when they determine that an application should be denied.

Commission Shift would welcome the opportunity to collaborate with the Commission on creating a more equitable system for processing permits.¹⁵⁸ Until then, Commission Shift urges the

¹⁵⁸ Both TCEQ and LDEQ have procedures that appear more sensible, which include issuing multiple notices, providing for 30-day or more comment periods, and allow participation from all interested persons.

Commission to at a minimum amend section (f) to state that applications that fail to meet the

Commission's minimum standards shall be denied:

(f) The Technical Permitting Section may <u>shall</u> administratively deny the application if it does not meet the requirements of this subchapter or other laws, rules, or orders of the Commission. The Technical Permitting Section shall provide the applicant written notice of the basis for administrative denial.

§4.135. Hearings. Page 56

Again, Commission Shift does not see how sections 4.134 and 4.135 will meaningfully improve the currently broken system of permitting oil and gas waste operations. Commission Shift is of the opinion that applicants should not be allowed to request hearings on applications that have been administratively denied, and suggests the following language be added as a subsection (c):

(c) The applicant may not request a hearing if the application has been administratively denied.

5. DIVISION 5 ADDITIONAL REQUIREMENTS FOR COMMERCIAL FACILITIES

§4.140. Additional Requirements for Commercial Facilities. Page 56

Omitted from this draft is a proposal that was in a previous draft—that operators should show a need for a commercial facility before being eligible for a permit. Too many communities have had to expend their own capital to challenge facilities proposed in close proximity without a statement of need.¹⁵⁹ Requiring a "statement of need" / "market analysis" has support from community members and operators alike, and should be added back in to § 4.140.¹⁶⁰ Commission Shift also joins other commentors in arguing that also needed is a *forward*-looking market analysis, i.e., to consider permit applications that are going to be drilled in the future. It is the wells that have not yet been drilled that will generate the most waste needing disposal. Commission Shift thus requests that § 4.140 be amended to include the following:

An application for a commercial waste facility shall include a statement of need, detailing the necessity for an additional commercial facility in the geographical market where the property and proposed facility are located. The statement of need shall include a map showing, within a 30-mile radius around the proposed facility:

(1) All permitted commercial waste facilities;

(2) All oil and/or gas wells drilled within the 12-month period prior to the date of the permit application submission; and

(3) All oil and/or gas wells that have applied for a permit to be drilled within 12-month period after the permit application submission.

§4.141. Notice. Page 60

Commission Shift strongly urges the Commission to expand the notice given to frontline communities for all applications, including commercial applications. Insufficient notice is a common and frustrating complaint echoed by communities and landowners across the state. Meaningful

¹⁵⁹ Ex. 38 Sneath, Sara. Residents learn risks of possible facilities. Victoria Advocate. (March 14, 2014) <u>https://www.victoriaadvocate.com/counties/dewitt/residents-learn-risks-of-possible-facilities/article_12bdb914-5536-58bd-89a7-dec61f6ae6f8.html</u> (Facilities approximately 31 miles apart).

¹⁶⁰ As one disposal facility operator explains in favor of a statement of need:

Commercial disposal facilities must be operated by companies with regulatory, operational and safety expertise. The consequences of (i) mismanagement of commercial facilities and/or (ii) the financial instability of some commercial facility operators, negatively impacts the Railroad Commission, landowners and Texas taxpayers....

Operators known for cutting operational and safety corners to maintain profitability must be discouraged from opening new facilities. A market analysis and an associated statement from the Commercial Facility applicant, detailing the necessity for an additional facility in the market where the proposed facility is to be located, should be a part of the Commission's assessment criteria for new commercial facility permits. The commercial facility operator seeking a new facility permit must provide a (i) statement outlining their operational experience/background and (ii) a "Statement of Need" providing supportive information related to historical drilling activity in the defined area and other disposal options in the market) for a new facility in the market area for the Commission's consideration.

Ex. 26 (Milestone comments) at 5.

participation is impossible on a short timescale, and many are disenfranchised from participating because they simply are never sent direct notice.

Commission Shift recognizes that the Commission has expanded the timeframe for notice & protest for commercial facilities from 15 days to as little as 22 days from the date of application¹⁶¹ but this is *still* less than the 30 days applicants have to respond to protests (see § 4.133(b))—which by virtue of having filed the application they will already be on the lookout to expect—and will already have money, engineers, experts and lawyers lined up to respond and will already be familiar with the many new pages of 16 TAC Chapter 4 Subchapter A. In contrast, landowners, groundwater conservation districts and cities will have been caught unawares by a notice and yet will be forced to scramble with less time to secure the same resources, advise and knowledge—not to mention the time it takes to obtain copies of files from the Commission. As explained in Commission Shift's comments on section 4.125, all potential protestants should have at a minimum of 30 calendar days either from the date of published application or the last date of publication (whichever is longer).

The list of people and entities who receive direct notice must expand as well. Adverse impacts from permitted facilities are felt at a greater distance than 500 feet from the facility's fenceline—i.e., there are affected persons who are not being given notice of applications, which disenfranchises them. Groundwater conservation districts should also be given direct notice of all applications. Commission Shift refers the Commission its comments on § 4.125 above as to who should receive notice for all applications.

Also, as Commission Shift's comments in § 4.125 state, all published notice should also be posted electronically to the Commission's website with that notice automatically and electronically sent to a list of any interested person, who may sign up with the Commission to receive notices of any application filed in Texas. This is already standard practice at TCEQ and LDEQ and will better facilitate meaningful participation, which is a key to ensuring the public interest is protected.

§4.142. Operating Requirements Applicable to Commercial Facilities. Page 60

In its comments on Division 4, § 4.124, Commission Shift urged the Commission to require all applicants to include a community relations / public information plan and site-specific inspection forms as part of its permit application. The Commission should include these requirements in this section as well, adding to subsections to § 4.142 as follows:

(d) The operator shall develop and maintain a community relations and public information plan. The plan shall be maintained on-site and made available to the

¹⁶¹ The draft does not make it easy to calculate the notice period, since it is now based on the latter of two options (see 4.125(b)), which includes 15 days after the last date of published notice, which could be as quickly as 22 days after the application is filed. Under (b)(1) it is possible that the notice period could extend longer (if publication was delayed), but it is not guaranteed. The lack of a guaranteed 30-day notice period is problematic—thirty days should be the floor for all permitted activities.

Commission upon request. A copy of the plan shall be posted publicly to the operator's website.

(e) The operator shall develop and maintain a site-specific inspection form for all authorized and permitted operations at the facility. The inspection form shall be used for inspections. The form shall be maintained on-site and made available to the Commission upon request.

§4.143 Design and Construction. Page 60

Commission Shift urges the Commission to require both documents and photographs that clearly identify and describe the as-built condition of the facility (including all authorized and permitted operations). Photographs are necessary to confirm that the facility has been built to comply with all requirements, including setbacks. As such, Commission Shift suggests §4.143 be modified to state:

Prior to commencement of operations at a commercial facility, the permittee shall provide the Director with drawings and photographs documenting the as-built condition of the facility, including all equipment and waste management units. <u>Photographs shall include at least one aerial photograph. All photographs shall include sufficient detail to confirm that the facility has been built in compliance with all permitted conditions.</u>

6. DIVISION 6 ADDITIONAL REQUIREMENTS FOR PERMITTED PITS

§4.150. Additional Requirements Applicable to Pits Authorized by Permit, Page 61

Commission Shift strongly urges the Commission to adopt more protective setbacks for all of the activities covered by Subchapter A (both "authorized" and permitted), with no exceptions allowed. As described in Part I, there are many communities and affected individuals who live further away from a pit than the distances described in (g) who have suffered and are continuing to suffer ill effects from these facilities.

Commission Shift is also concerned that no setbacks are required from sensitive residential, commercial, and other buildings, contrary to recommended practice and what's become typical in Louisiana. For example, the 2022 STRONGER Guidelines urge: ¹⁶²

Where necessary to protect human health, E&P waste management facilities should not be located in close proximity to existing residences, schools, hospitals or commercial buildings. The need for minimum distance criteria from residences or other buildings to the boundary of E&P waste management facilities should be considered.

Louisiana has been protecting its communities and water better, prohibiting commercial facilities and transfer stations "within 1/4 mile [1320 ft] of a public water supply water well or within 1,000 feet of a private water supply well," and setting default setbacks from buildings, schools, and churches up to 2000 feet.¹⁶³ Louisiana's setbacks also vary based on the toxicity of the waste being handled.

¹⁶² Ex. 11 2022 STRONGER Guidelines at 36. https://www.strongerinc.org/wp-content/uploads/2022/07/2022-Edition-STRONGER-Guidelines.pdf

¹⁶³ LAC § 507. https://casetext.com/regulation/louisiana-administrative-code/title-43-natural-resources/part-xix-office-of-conservation-general-operations/subpart-1-statewide-order-no-29-b/chapter-5-off-site-storage-treatment-andor-

The Commission has even proposed stronger setbacks for certain commercial recycling facilities—facilities that unlike commercial disposal landfills, by rule do not exist for more than 2 years.¹⁶⁴

Even these setbacks would place frontline communities too close to facilities for safety, as the communities in Nordheim, Orange Grove, and Waskom can confirm.¹⁶⁵ The cone of depression (or area of drawdown) for a public supply well can extend quite far, depending on the aquifer. It is also inappropriate to allow applicants to seek exceptions to setbacks, especially without public input (see comments on § 4.109). The Commission should also take into consideration the presence of environmental justice communities when considering whether a site is appropriate (e.g., by incorporating a review of EJScreen's data¹⁶⁶ or other comparable methods). In addition, Commission Shift supports measuring setbacks from the facility's property boundary, not from the pit or facility's fenceline. Waste does not necessarily stay in a pit—it can be tracked through a site and/or be washed via stormwater beyond the waste management unit—setbacks should recognize this likelihood. Measuring from the property boundary avoids the problem of pits inadvertently expanding beyond their permitted bounds. (Buffer zones sufficient to allow equipment to operate are also necessary as well.)

Commission Shift proposes that setbacks be required for at least the following receptors:

- surface water, including wetlands
- public water system well or intake
- domestic water well or irrigation water well
- 100-year flood plain
- residential, commercial, or public buildings; schools, hospitals, institutions, public parks and churches
- other sensitive areas, as defined in § 4.110(79).

Setbacks should be based on the risks and nuisances associated with the particular oil and gas waste operation. The risk of an operation will depend on the type and volume of waste handled and how long it will be at that location. For example, pits that are used for days or weeks with low levels of pollutants would typically be less cause for concern than permanent disposal landfills. Instead of

 $[\]label{eq:section-disposal-of-exploration-and-production-waste-generated-from-drilling-and-production-of-oil-and-gas-wells/section-xix-507-location-criteria$

¹⁶⁴ §4.264(a) (off-lease commercial recycling) states "A pit permitted under this division shall not be located:

⁽¹⁾ where there has been observable groundwater within 100 feet of the ground surface unless the pit design includes a geosynthetic clay liner (GCL); (2) within a sensitive area as defined by §4.204 of this title (relating to Definitions); (3) within 300 feet of surface water, domestic supply wells, or irrigation water wells; (4) within 500 feet of any public water system wells or intakes; (5) within 1,000 feet of a permanent residence, school, hospital, institution or church in existence at the time of the initial permitting; (6) within 500 feet of a wetland; or (7) within a 100-year floodplain" ¹⁶⁵ These communities have experience problems at greater distances than those proposed in these rules.

¹⁶⁶ EJScreen is EPA's Environmental Justice Screening and Mapping Tool. https://www.epa.gov/ejscreen

regulating based on whether an operation is authorized or not, the Commission should propose a (potentially three-tiered) system of setbacks tied to volume, pollutant level, and duration of operation and waste storage. To be clear the proposed setback distances in § 4.150 are not sufficient for permitted or commercial operations—communities have been affected well beyond these distances

Commission Shift generally supports the language in subsection (b) that if at any time a pit that no longer meets the requirements for a permit-by-rule, the operator must apply for a permit. However, Commission Shift urges the Commission to require an application to be filed promptly, "within 30 days."

Commission Shift supports the requirement in subsection (f) that in the event of an unauthorized release, the operator must take any measures necessary to stop or control the release. However, Commission Shift urges the Commission to also require the operator to notify the public as well within 24 hours of the release. As such, the Commission should adopt the following changes:

(f) In the event of an unauthorized release of oil and gas waste, treated fluid, or other substances from any pit permitted by this subchapter, the operator shall take <u>immediate corrective action and</u> any measures necessary to stop or control the release and report the release to the District Office <u>and the public</u> within 24 hours.

§4.151. Design and Construction of Pits Authorized by Permit. Page 62

Again, Commission Shift urges the Commission to require freeboard on all pits to be two feet plus a volume sufficient to contain the 25-year, 24-hour rainfall event:

(b)(2) Freeboard. Unless otherwise required by permit or rule, the permittee shall maintain all pits such that each pit maintains a freeboard of at least two feet <u>plus a</u> <u>volume sufficient to contain the 25-year, 24-hour rainfall event</u>.

As for the installation procedures for liner (subsection b(3)), Commission Shift refers the Commission to its comments in Division 3. In addition, the Commission rule should require dual hot wedge seams for all permitted pits that are required to be lined with synthetic liners. A standard hot wedge creates a single uniform-width seam, while a dual (or split) hot wedge forms two parallel seams with a uniform unbounded space between them. The dual hot wedge seam is considered in the literature to be the preferred seaming method for all thermoplastic geomembranes.

§4.152. Monitoring of Pits Authorized by Permit. Page 63

Commission Shift urges the Commission to give operators more guidance on how to document and conduct the annual inspection of a pit liner so that the integrity of the liner is actually reviewed. Liner integrity cannot be determined from photographs taken at a distance, yet the current language would allow it. Commission Shift suggests adding the following language to 4.152(a)(1):

(1) The permittee shall empty the pit and conduct a visual inspection on an annual basis. The permittee shall photograph the interior of the and otherwise record each inspection. <u>Photographs shall include liner conditions at all welded seams</u>, appurtenances, and prior repairs. The annual inspection photographs shall include

field notes that explain where each photograph was taken and what was observed. The annual inspection shall include documentation of any liner wrinkles, tears, and other indicators of liner failure. The permittee shall maintain the photographs, documentation, and records from each inspection for the life of the pit.

Commission Shift is also troubled by the action leakage rates and monitoring plan described in 4.152(b)(1). These rules codify the existing amount of leakage allowed from some permitted facilities, but when examined, these rates make little practical sense and the Commission has provided no reasoning for these thresholds.¹⁶⁷ In addition, solid waste would presumably have no fluids in it, and indeed be able to retain rainfall in most circumstances, so any leakage at all would presumably represent a liner failure.

Commission Shift also requests clarification on section (b)(1) regarding what shall constitute a liner failure. This section appears to include drafting errors, especially when (A)-(C) are read in context with (D):

(1) Failure of the primary liner in a double liner and leak detection system occurs if:

(A) a volume of fluid is withdrawn from the leak detection system that is greater than the calculated action leakage rate, the standard action leakage rate of 1,000 gallons per acre per day (GPAD) for pits that manage fluid waste, or 100 gallons per acre per day (GPAD) for pits that manage solid oil and gas wastes;

(B) any failure in the leak detection and return system or any component of the system occurs;

(C) any detected damage to or leakage from the secondary liner occurs; or

(D) the volume of fluid withdrawn from a pit with a leakage detection system exceeds the volume stated in the permit for 15 consecutive days or the weekly reported volume exceeds the volume stated in permit at least once a month for three consecutive months, in which case the operator shall notify the appropriate District Office and the Technical Permitting Section.

It would make sense for items (A), (B),and (C) to be thresholds for failure (as long as the allowable action leakage rate was lowered); however (D) seems to be redundant in light of (A)—any exceedance in (D) should have triggered action under (A). Barring any contrary explanation by the Commission, Commission Shift recommends that (D) be moved into its own section or omitted entirely. Any time the criteria in (A)-(C) are met, the operator should be required to notify Technical Permitting within 24 hours and immediately cease operations until the pit is emptied and repaired, as (b)(3) would require. This could be accomplished with the following language:

(1) <u>In the event of failure of the primary liner in a double liner and leak detection system,</u> the operator shall notify the appropriate District Office and the Technical Permitting <u>Section within 24 hours and immediately cease operations until the pit is emptied an</u>

¹⁶⁷ If these values have been pulled from other studies, the Commission must ensure that the assumptions used in the literature are appropriate for the pits it seeks to regulate in this rule. For example, leakage rates will vary based on the head of liquid in the pit and in the leak detection system, as well as the permeability of all materials involved.

<u>repaired according to (b)(3).</u> Failure of the primary liner in a double liner and leak detection system occurs if:

(A) a volume of fluid is withdrawn from the leak detection system that is greater than the calculated action leakage rate, the standard action leakage rate of 1,000 gallons per acre per day (GPAD) for pits that manage fluid waste, or 100 gallons per acre per day (GPAD) for pits that manage solid oil and gas wastes;

(B) any failure in the leak detection and return system or any component of the system occurs; or

(C) any detected damage to or leakage from the secondary liner occurs; or

(D) the volume of fluid withdrawn from a pit with a leakage detection system exceeds the volume stated in the permit for 15 consecutive days or the weekly reported volume exceeds the volume stated in permit at least once a month for three consecutive months, in which case the operator shall notify.

Section (b)(1)(D) is additionally ambiguous because it's unclear what "the volume of fluid withdrawn from a pit with a leakage detection system" means—is it the volume withdrawn from the leakage detection system, as in A? Or is it the volume of liquid removed in general from the pit through normal operation and use of the pit? In addition, not all pits are used every day—so section (D), which appears to allow weekly monitoring to calculate a daily leakage rate—may mask the identification of large leaks if the leakage rate is monitored infrequently. Prior to formal rulemaking, the Commission should clarify subsection (b)(1) as a whole.

Additionally, section (b)(3)(C) should include a requirement that the operator file a report describing the incident and the remedy taken, including an explanation for what happened to the waste emptied from the pit once the liner leak was found. Reporting this information is important so that the Commission and public can confirm that the waste was disposed of properly.

§4.153. Commercial Disposal Pits. Page 64

Commission Shift understands that section (a) was added as part of a legislative mandate for the 10-year flood history of a site to be considered during site approval. Commission Shift is very concerned that the Commission will not commit to wholeheartedly incorporating this factor into its analysis of an application—as written the section only requires documentation of a "good-faith" investigation of whether an area is flood-prone but it does not commit the agency to considering this information in its analysis. It also does not list what investigations would be considered good-faith. The Commission should modify this section accordingly.

Subsection c ("Closure") is problematically worded because it relies on a non-parallel list, rendering the subsection confusing.¹⁶⁸ Commission Shift suggests that subsection (c) be slightly reworded to clarify that the default post-closure monitoring period is at a minimum ten¹⁶⁹ (not five)

¹⁶⁸ https://blog.harwardcommunications.com/2021/08/31/what-is-parallel-structure-and-why-does-it-matter/

¹⁶⁹ For more details on why a minimum of ten years is more appropriate, see the comments on § 4.114.

years for any commercial disposal pit or facility where a commercial disposal pit is located, and that if it is not set to be ten years by the permit, the Director still retains discretion to implement a longer monitoring period if after-the-fact circumstances indicate a longer period is necessary. That intent could be conveyed with the following revision:

Unless otherwise required by permit <u>or if the Director determines that such post-</u> <u>closure monitoring is necessary to prevent pollution</u>, a post-closure monitoring period of no less than five <u>ten</u> years is required for any commercial disposal pit, <u>and</u> a facility where a commercial disposal pit is located, or if the Director determines that such postclosure monitoring is necessary to prevent pollution."

7. DIVISION 7 ADDITIONAL REQUIREMENTS FOR LANDFARMING

Commission Shift requests that the Commission consider whether these rules incorporate all types of land farming, land application, and land spreading that are used in the oil and gas industry, including those that the Commission currently regulates.¹⁷⁰ Practices that may be appropriate for disposal on-lease may not be appropriate off-lease and at commercial facilities and so should be prohibited, and vice versa. As part of this rulemaking, the Commission must ensure that landfarms that have been allowed to violate permits and cause pollution in the past will no longer be allowed to

Land application permits are an alternative to discharge of fluid wastes. Gas plant effluent or low-chloride produced water may be applied to a controlled area via sprinkler or other irrigation systems.

¹⁷⁰ The Commission's website (<u>https://www.rrc.texas.gov/oil-and-gas/applications-and-permits/environmental-permit-types/landfarming-landtreatment-and-land-application-facilities/</u>) describes the activities regulated as follows: There are three types of permitted land-spreading facilities:

Landfarming facilities can treat and dispose of only freshwater-based drilling fluids and associated cuttings. Landtreatment facilities can treat and dispose of oil and gas wastes including oil-based drilling fluids and oilimpacted soils.

Land-spreading utilizes the physical, chemical and biological capabilities of the soil-plant system to control waste migration and to provide a safe means of disposal without impairing the potential of the land for future use. Land-spreading facilities should be located on fine or medium grained soil with a thickness of at least 20 inches and a slope of less than five percent. Stormwater runoff must be controlled by either natural drainage features or by diversion structures. Land-spreading facilities should not be located in any area prone to flooding.

Landfarming of the following oil and gas wastes is authorized without a permit by Statewide Rule 8(d)(3), provided the wastes are disposed of on the same oil or gas lease where they are generated, and provided written consent of the surface owner of the tract where the landfarming will occur is obtained:

⁻water base drilling fluids with a chloride concentration of 3000 mg/l or less;

⁻drill cuttings, sands and silts obtained while using water base drilling fluids with a chloride concentration of 3000 mg/l or less; and

⁻wash water used for cleaning drill pipe and other equipment at the well site.

Other landfarming operations require a permit. Any facility land-applying oil-based drilling fluids and associated cuttings will require a permit."

do so.¹⁷¹ It should also address why many of the guidelines it currently uses in permitting these facilities (including closure standards) have not been incorporated here.¹⁷²

In reviewing whether the Commission should add additional rules to regulate different types of landfarming practices, the Commission should show its work by including an analysis of the landfarming and land spreading practices in adjacent states for wastes with similar waste characterization profiles. It appears that with this rulemaking, the Commission will be regulating inor on-ground disposal methods, both which envision that the land will be suitable for agriculture and other such purposes in the future. The biological and chemical processes relied on to treat waste in this way can be temperamental and require in-depth understanding of the waste, receiving soil, and climatic conditions. The Commission must therefore ensure that it requires careful testing of the incoming waste, receiving soil, and treated material, as well as sufficient monitoring during the treatment process in order to protect human and environmental health. Commission Shift strongly urges to include more detail throughout this Division.

§4.160. Additional Requirements for Landfarming Permits. Page 66

Commission Shift suggests that this section be edited to refer to "Divisions 4-6" as applying to landfarms, as some may be commercial facilities and the setbacks applicable to permitted pits (§4.150) should also apply to landfarms.

§4.161 Design and Construction Requirements for Landfarming Permits. Page 66

Overall Commission Shift has serious concerns that this Division lacks sufficient detail for human and environmental health to be protected in addition to surface waters, as is required by 4.161(a)(1)(B). To ensure that these setbacks are maintained, the applicant should be required to submit a topographic map and aerial photos (e.g., from Google Earth) to confirm that all applicable setbacks are addressed. This requirement could be included as follows:

¹⁷¹ Ex. 1 Fehling, Dave. How 'Landfarms' For Disposing Drilling Waste Are Causing Problems In Texas (2012). <u>https://stateimpact.npr.org/texas/2012/11/12/landfarms-for-disposing-drilling-waste-causing-problems-in-texas/</u> ("The Texas Environmental Enforcement Task Force, run out of the Travis County District Attorney's Office but with statewide jurisdiction, recently won a criminal conviction and a \$1.35 million fine against the company that had operated the landfarm, Pemco Services, Inc. "For over a decade the company was out of compliance with their permit and there was little done to regulate them," said Patricia Robertson, the task force's environmental crimes prosecutor. Robertson credits the efforts of a couple officers from Texas Parks and Wildlife for investigating the site and then alerting her office. The task force would later allege that from 2002 to 2009, a total of nearly 57 million gallons of drilling fluids were deposited on the landfarm in violation of the permit issued by the Railroad Commission. Yet the Commission, which has the power to take "enforcement action," never did. In 2010, the Texas Environmental Enforcement Task Force got search warrants to go on the site and take water samples. Prosecutors said lab tests confirmed the site was causing water pollution. They headed to court and eventually got a conviction and then earlier this month, a judge in Travis County imposed the big fine on Pemco Services, Inc.")

¹⁷² Application Information for Landfarm and Landtreatment Permits. <u>https://www.rrc.texas.gov/oil-and-gas/applications-and-permits/environmental-permit-types/landfarming-landtreatment-and-land-application-facilities/landfarm-and-landtreatment-permit-application/</u>

(a)(4) The applicant shall submit a topographic map and aerial photographs that show the facility boundary, location of all landfarm areas, any drainage features or surface waters, and all setbacks required in Divisions 4 through 7.

Commission Shift urges the Commission to require landfarm applicants to collect and submit more data with their applications, beyond minimal requirements such as those in 4.161(a) that "The applicant shall submit information to demonstrate that the area has at least 20 inches of tillable soil *that is suitable for the application, treatment, and disposal of oil and gas waste*"¹⁷³ and those in 4.162(a) that require the estimated chloride concentration of waste to be accepted to be included in the application. Detailed soil sampling is necessary for the Commission to evaluate the application, and also should be conducted prior to each delivery of waste being tilled into the soil, as is recommended by a variety of groups.

The 2022 STRONGER Guidelines state "Soil analyses should be performed prior to landspreading and again upon closure of the Site,"¹⁷⁴ and other expert groups agree.¹⁷⁵ A 2009 report from Texas A&M summarizes the sampling that should take place before the land application of fluids, emphasizing that no single measurement (like chloride) is sufficient to manage disposal: ¹⁷⁶

The decision to land apply drilling fluids should be based on the chemical composition of the drilling fluid, and the amount and characteristics of the land area available. The first step is to obtain a chemical analysis of the drilling fluid and a representative (composite) sample of the native soil from the proposed land application area. No single measurement, such as a simple chloride analysis, is sufficient to properly evaluate and manage drilling fluid disposal. A thorough analysis should include the following measurements for both the drilling fluid and native soil unless otherwise specified:

1. **Total salts** – measured as the electrical conductivity (EC) of the saturated paste extract and reported in parts per million (ppm) or millimhos per cm (mmhos/cm).

2. **Extractable individual ions** – calcium, magnesium, sodium, boron, chloride, and sulfate-sulfur measured in the saturated paste extract and reported in milligrams per kilogram (mg/kg) or ppm.

3. **Sodium Adsorption Ratio (SAR)** – calculated from the saturated paste analyses for calcium, magnesium, and sodium.

¹⁷³ Commission Shift also requests that prior to formal rulemaking, the Commission explains why 20-inches has been used—if it is a limitation on plow depth, it should be clarified as such.

¹⁷⁴ Ex. 11 2022 STRONGER Guidelines at 45. https://www.strongerinc.org/wp-content/uploads/2022/07/2022-Edition-STRONGER-Guidelines.pdf

¹⁷⁵ Commission Shift urges the Commission to require testing of the E&P waste prior to land treatment and the RRC should develop a standard loading rate. (2000 Guidelines 5.6.3.d and 5.6.3.i.)

¹⁷⁶ Ex. 39 McFarland, M.L. et al. Land Application of Drilling Fluids: Landowner Considerations, Texas AgriLife Extension Service (Aug. 2009) at 4 <u>http://soiltesting.tamu.edu/publications/SCS-2009-08.pdf</u>. The report goes on to state: "A qualified professional can utilize the results of these tests to determine if land application is appropriate for a particular situation. If so, they can provide the proper rate of application (barrels per acre, tons per acre, or inches of depth) of drilling fluid so that the process does not cause long-term adverse effects on soil properties. These results also can be used to determine if additional soil amendments may be needed to promote treatment of the waste. For example, gypsum (calcium sulfate) may be recommended to offset high levels of sodium in the drilling fluid and prevent problems with soil structure. In other cases, nutrients are applied to support the growth of soil microbes capable of decomposing hydrocarbons, and to enhance plant growth for site recovery." *Id.* at 5.
4. **Total heavy metals** – arsenic, barium, chromium, copper, lead, nickel, and zinc reported in mg/kg.

5. Total petroleum hydrocarbons (TPH) – drilling fluid only, reported in mg/kg.

6. **Routine + micronutrient soil nutrient test** – pH, and extractable nitrate-nitrogen, phosphorus, potassium, calcium, magnesium, sodium, sulfur, copper, iron, manganese, and zinc.

7. Soil texture – native soil only.

8. Cation exchange capacity - native soil only.

The Commission should add these sampling requirements to § 4.161(a)(2) as a list of sampling information that "the applicant shall submit" as subitems (A) – (H) plus any additional analysis that the Director states is necessary to determine that the receiving land is suitable for landfarming. The Commission requires these parameters to be analyzed for wells;¹⁷⁷ monitoring the integrity of authorized pits —or landfarming units that require permits- should be no different.

The Commission should also consider setting concrete limits to the type of waste that can be landfarmed. In general, the more complex a hydrocarbon is, the longer it takes to biodegrade during landfarming. EPA and other groups provide details on the constituents expected in oil and gas wastes and the capacity of landfarming to treat those wastes—the Commission should consider these references when developing its own standards.¹⁷⁸

Temperature is also an important variable in ensuring that the receiving soil will be able to handle the pollutants in the waste (including in how it effects breakdown and the moisture content of the soil). As Texas warms,¹⁷⁹ the Commission should evaluate whether certain parts of the state are no longer suitable for landfarming, or whether landfarming should be restricted to only certain months of the year.

In addition, the various soil amendments and microbes used to treat soil can lead to their own set of concerns.¹⁸⁰ The Commission should require applicants to not only document the amendments used (as in 4.162) but also defend how those amendments will not lead to further pollution.

¹⁷⁷ See 4.114(h)(7) "The wells shall be monitored and/or sampled for the following parameters: the static water level, pH, and concentrations of benzene, total petroleum hydrocarbons, total dissolved solids, soluble cations (calcium, magnesium, potassium, and sodium), and soluble anions (bromides, carbonates, chlorides, nitrates, and sulfates)."

¹⁷⁸ Ex. 40 How To Evaluate Alternative Cleanup Technologies For Underground Storage Tank Sites (2017, USEPA) Link: <u>https://www.epa.gov/sites/default/files/2014-03/documents/tum_ch5.pdf</u>; Petroleum Production on Agricultural Lands in Texas: Managing Risks and Opportunities.

https://agrilife.org/texasaglaw/files/2018/12/Petroleum-Production-on-Agricultural-Lands-in-Texas.pdf ¹⁷⁹ See e.g., Ex. 41 Five hottest days in Texas history. (August 2023) <u>https://www.saveonenergy.com/resources/five-hottest-days-texas-history/</u>; Ex. 42 Is there a limit to how hot it can get in West Texas? (June 2023) <u>https://www.newswest9.com/article/weather/how-hot-can-it-get-in-west-texas/513-8f116dc3-fd51-4af6-91bc-a8b0fe9d1d93</u>

¹⁸⁰ Soil amendments—which is not defined in these rules—can be a catchall phrase that might include char, byproducts of gasification/pyrolysis; digester solids; some types of biosolids; poultry litter; etc.

As for **subsection (b)**, the rules do not specify that berms should be properly maintained to prevent erosion and capture contaminated stormwater runoff. The Commission could incorporate such requirements with the following language:

(b) Berm construction. All berms shall be constructed and maintained:

(1) to fully enclose each landfarm area in a manner that shall prevent erosion and stormwater run-on and run-off

As discussed in its comments on § 4.150, Commission Shift also believes that the setbacks and buffers for landfarms (like facilities with permitted pits) should be increased beyond those proposed. Commission Shift also urges the Commission to categorically deny landfarm permits when shallow groundwater is present.¹⁸¹ Groundwater monitoring should also continue to be a requirement unless on-site borings taken to 100 feet demonstrate no shallow groundwater underlies the proposed location.¹⁸² The Commission should also set a maximum limit as to the size of each landfarm cell¹⁸³ —typically the equipment used in landfarming is only effective at smaller sizes, above which there is nonuniform application of waste, and the potential for overapplication, ponding, and hotspots. And given that only one sample is required per acre, it is highly unlikely that such hotspots would be identified.

§4.162. Operating Requirements for Landfarming Permits. Page 67

Commission Shift reiterates its concerns raised in § 4.161 that more than just the chloride concentration of the waste must be considered, as section (a) would envision.

Commission Shift also questions why section (a) is left as open-ended as it is. It appears that the decision as to whether or not a landfarm should be permitted will be largely left up to Technical Permitting staff to develop guidelines outside the notice-and-comment rulemaking process. Again Commission Shift reiterates its request that the Commission provide more details on the landfarming process and how it will ensure that landfarming does not endanger human or environmental health.

§4.163. Monitoring. Page 68

¹⁰² This requirement from the Commission's current guidelines appears to have disappeared from this draft. See Application Information for Landfarm and Landtreatment Permits. <u>https://www.rrc.texas.gov/oil-and-gas/applications-</u> and-permits/environmental-permit-types/landfarming-landtreatment-and-land-application-facilities/landfarm-andlandtreatment-permit-application/

¹⁸³ There is not a complete accounting of all landfarming and land applications in Texas currently, but land application facilities that EPA has identified in Texas range between 12 acres divided into 4 separate cells and 517 acres divided into 17 cells. Management of Exploration, Development and Production Wastes: Factors Informing a Decision on the Need for Regulatory Action ("EPA's Need for Action"), EPA (April 2019) at 4-9. https://www.epa.gov/sites/default/files/2019-

04/documents/management of exploration development and production wastes 4-23-19.pdf

¹⁸¹ New Mexico, for example, prohibits the landfarming of waste where groundwater is located less than 50 feet below the lowest elevation at which the operator will place oil field waste, and wastes with a chloride concentration that exceeds 500 mg/kg is prohibited at sites with groundwater within 100 feet. See 19.15.36.13(A)(2)-(3).
¹⁸² This requirement from the Commission's current guidelines appears to have disappeared from this draft. See

Commission Shift is deeply concerned that the minimal number of samples required by these rules will not ensure that the waste is fully treated. As drafted, as little as one composite sample per acre is required for each of the three compliance zones. Denser sampling should be required. In addition, the Commission should explicitly require the following parameters be monitored during each event:

Monitoring of landfarm treatment cells should include pH, moisture content, bacterial population (heterotrophic aerobes), nutrient content, and concentrations of pollutants that are being treated (TPH, heavy metals).

Commission Shift also urges the Commission to develop and publish expected sampling and analysis limitations for each zone. Sampling should also be conducted by independent third-parties and analyzed by accredited laboratories, as such Commission Shift suggests the following revision:

(c) The operator shall <u>have</u> analyze samples <u>analyzed</u> from each active cell according to the analysis requirements specified in the permit <u>and §4.124(e)(2)-(3).</u>

Commission Shift also opposes allowing operators to continue to add waste to a cell after sampling shows exceedances for pollutants. The cell should be temporarily closed from accepting new waste until the waste no longer exceeds recommended parameters. As such, the following revision should be made:

(d) (4) If the parcel exceeds the limitation after six months of sampling, that plot is not authorized to accept additional waste until a sample analysis does not exceed the particular limitation.

§4.164. Closure. Page 69

Commission Shift notes that there does not appear to be a procedure in place for public notice to adjacent landowners (and property owner) or the general public that a closure plan has been submitted for review and approval. There is also no mention of sampling groundwater to determine if pollution occurred that needs to be remediated. If that is because the closure requirements in Divisions 4-6 apply (including § 4.132), the Commission should reiterate that here.

Likewise, Commission Shift notes that closure sampling should also include independent thirdparty sampling and testing of the soil to verify site can support future vegetation. The Commission has stated in the past that this is required procedure, but this requirement does not appear to be included in the proposed rule.¹⁸⁴

Closure should also include sampling outside of the designated landfarm cells, to ensure that no waste has migrated outside the treatment cell or has not persisted in other areas. This is currently a similar requirement in the Surface Waste Management Manual, but it does not appear to have been

¹⁸⁴ Ex. 1, Fehling, David. How 'Landfarms' For Disposing Drilling Waste Are Causing Problems In Texas. NPR. (Nov. 12, 2012). https://stateimpact.npr.org/texas/2012/11/12/landfarms-for-disposing-drilling-waste-causing-problems-in-texas/

incorporated into this rulemaking.¹⁸⁵ Finally, Commission Shift notes that the Commission has published the closure parameters that it typically requires landfarms to meet. However, it has not proposed those for adoption in this rulemaking. The Commission should clarify why it has declined to do so and whether those will continue to be the closure levels that facilities must meet.¹⁸⁶

8. DIVISION 8 ADDITIONAL REQUIREMENTS FOR RECLAMATION PLANTS

Commission Shift understands that with this rulemaking, the Commission is moving the requirements of Rule 57 into Subchapter A. However, it appears that the Commission has not moved all of the definitions into § 4.110 yet. For example, there is no definition for "authorized person" in § 4.110, yet it is a term used throughout Division 8 and one that was defined in Rule 57.

Commission Shift also urges the Commission to ensure that reclamation plants operate with the strictest of standards so that environmental and human health is protected. Reclamation plants handle a vast variety of oil and gas waste, including the waste from oil and gas processing plants and underground storage of gas and hydrocarbons —basically only excluding RCRA hazardous waste. In a typical reclamation plant, incoming wastes are separated into water, oil and soild fractions by means of thermal, physical and chemical processes. Waste is kept in a variety of holding areas during the process, some open air, some in tanks. There is potential for noxious vapors and malodors with such facilities—air permits may be required from TCEQ.¹⁸⁷ Given the complexity of operations at reclamation plants it is essential that the waste is characterized by laboratory analysis and that surface and subsurface water is protected from possible contamination.

§4.170. Additional Requirements for Reclamation Plants. Page 70

Commission Shift requests that the Commission provide an example as to how many facilities might fall within subsection (a)(3), which exempts certain facilities from monthly reporting. The subsection allows a hearing only if the application is denied and does not contemplate notice or input from surrounding landowners. All interested parties—community members included—should be allowed to participate in that permitting process, and appeal administratively if necessary. This one-sided appeals right is unfair everywhere it appears, including in subsection §4.171(d) and (e)—and

¹⁸⁵ <u>https://www.rrc.texas.gov/oil-and-gas/applications-and-permits/environmental-permit-types/landfarming-landtreatment-and-land-application-facilities/landfarm-and-landtreatment-permit-application/</u> (Detailed plans for closing the site when land-spreading operations cease, include plans for closing any boreholes used for vadose zone or groundwater monitoring, removing dikes, contouring, and reseeding. Also include plans for sampling and analyses of areas other than remediated waste in treatment cells (e.g., temporary holding cells, treatment cells from which the waste has been removed, leachate collection sumps, etc.) Provide an estimate for the amount of time required to close the site).

¹⁸⁶ Ex. 43 Railroad Commission of Texas (RRC). Version Dated January 24, 2019. Closure Table 2 Landfarm, Landtreatment, and Land Application permits: Standard Soil Sampling Closure Parameters.

https://portalvhdskzlfb8q9lqr9.blob.core.windows.net/media/49968/standard_closure_parameters-lf.pdf ¹⁸⁷ Though if these are "permitted-by-rule" there may be minimal scrutiny on the unique hazards of each site and nearby sensitive receptors.

should be altered to state: "The Commission's decision on a request for authorization may be appealed by any interested person."¹⁸⁸

As for the language in subsection (a)(6), Commission Shift is encouraged to see that all reclamation plants will be regulated as commercial facilities regardless of the definition of commercial that is adopted in section 4.110.

However, Commission Shift strenuously objects to the lengthy grandfathering of reclamation plants that were permitted prior to this rulemaking, as subsection (a)(7) would allow. Permits issued prior to this new rulemaking should expire one year after the effective date of the rulemaking, not five years. A facility can always seek to renew its permit before the one-year period has elapsed.

As for subsection (b), this subsection states that *applicants* and *permittees* operating reclamation plants must comply with Divisions 4-6. The Commission should also confirm that the *agency* itself will also follow the permit procedures as well, including the procedures in § 4.134 with respect to determining completeness prior to approval. In addition, Commission Shift notes that the Commission's current guidelines for reclamation plants is much more detailed than the rules proposed here.¹⁸⁹ The Commission should incorporate at least a similar level of detail into this rulemaking so that the public may weigh in.

§4.171. General Permit Provisions. Page 71

Subsection (b) represents a fundamental change in Commission practices—previously a permit to operate a reclamation plant was not transferable, and the Commission required the new operator to obtain a new permit by submitting a complete application (allowing a renewed opportunity for public participation).¹⁹⁰ *This should have been the practice that the Commission adopted in this rulemaking for all facilities.* At a minimum, this practice should be preserved for reclamation plants. Commission Shift strongly opposes this shift to water down the availability for public participation in the renewal, transfer, and amendment process for reclamation plants even if the procedures for public notice in § 4.133 are required (for more on Commission Shift's concerns related to renewals, transfers, and amendments, see § 4.122).

Commission Shift supports the mandatory reporting of Division 10 violations within 24 hours of occurrence (subsection (c)). However, the violation should also be reported to the Director and to the public at the same time.

¹⁸⁸ Instead of: "If the request for authorization is denied, the applicant may request a hearing." 4.170(a); 4.171(3),(d),(e). See also §4.135(a).

¹⁸⁹ See <u>https://www.rrc.texas.gov/oil-and-gas/applications-and-permits/environmental-permit-types/reclamation-plants/</u>

¹⁹⁰ Id. The Commission was also clear that "The reclamation permit may be cancelled if the facility has been inactive for 12 months" and that "Once an application package has been submitted, only minor modifications or staff-recommended amendments will be accepted during the review process. If the original application is fundamentally revised, the application must be withdrawn, and a new application may be filed."

As for subsection (e), the Commission should require lab analysis be completed for any waste that is being received by a reclamation plant. Commission Shift also questions what sort of waste an operator would send to a reclamation plant that is neither "tank bottoms or other oil and gas waste," as subsection (e) describes. Such waste should absolutely be tested to confirm that it is not hazardous and that it is compatible with the reclamation processes used onsite. This could be accomplished by the following suggested language:

(e) <u>All waste materials received shall be tested by laboratory analysis according to the requirements of § 4.124(e)(3)-(4)</u>. The receipt of any waste materials other than tank bottoms or other oil and gas wastes shall be authorized in writing by the Commission prior to receipt. The Commission may shall require the reclamation plant operator to submit an <u>laboratory</u> analysis of the waste materials prior to a determination of whether to authorize receipt. If the request for authorization is denied, the applicant may request a hearing.

§4.173. Minimum Permit Provisions for Reporting. Page 73

As Commission Shift's comments on § 4.108 reflect, Commission Shift urges the Commission to establish—within one year of the effective date of this rulemaking—an electronic filing system for reclamation plant reports that is public-facing, and thus urges the Commission to change the "may" to a "shall" in subsection b:

(b) The Commission may shall establish a form or electronic system for filing monthly reports for reclamation plants.

As for subsection (c), Commission Shift suggests that the Commission reexamine the language in (c)(1) and (c)(2). It is unclear if the intent is to differentiate based on whether the waste comes from a pipeline facility or from other sources (except (c)(2) also includes pipeline facilities) or if it is to differentiate between tank bottoms and "other" waste (except (c)(2) also addresses waste from "tanks"). More clarity would help operators comply and the public understand the rules.

For subsection (d), Commission Shift encourages the Commission to always require a laboratory analysis of the disposable material to be performed before approving a minor permit ("may" should be replaced with "shall" in the last sentence of (d)). Reference should also be made to § 4.124(e)(3)-(4), which describes how laboratory analysis and NORM sampling should be conducted.

9. DIVISION 9 MISCELLANEOUS PERMITS

§4.180. Activities Permitted as Miscellaneous Permits. Page 74

Commission Shift is greatly concerned that Division 9 creates unnecessary loopholes for waste management operations to take place without sufficient safeguards for human health and the environment and without the safeguards that properly conducted notice-and-comment rulemaking can provide. For many of the permits in this Division, the Commission is already operating under more detailed guidance (readily available on its website) that it has chosen not to incorporate into

this rulemaking, begging the questions of whether that guidance will continue to apply and why it has not been subjected to notice-and-comment rulemaking. Especially concerning is the fact that Division 9 waives the requirements set by Divisions 4-8, which even if flawed, provide more transparency than the guidelines.¹⁹¹ Commission Shift urges the Commission to delete the last line of § 4.180¹⁹² and the sections § 4.183, § 4.184 and § 4.185 in their entirety.

§4.181. Emergency Permits. Page 74

Commission Shift request clarification as to whether emergency permits might be granted for the purpose of "protecting public health, public safety, and the environment,"¹⁹³ in addition if needed to prevent waste and pollution of surface or subsurface water.¹⁹⁴ Commission Shift urges the Commission to confirm during the rulemaking that emergency permits will not be granted for convenience or any other reason. If the Commission insists on waiving notice for emergency permits, it should at a minimum require that the permit application and all reports be made publicly available contemporaneous with their filing (subsection (b)), including any oral applications made or permits rendered (subsection (c)). The Director's reasoning for alterations to the permit should also be made publicly available for review (subsection (d)). If it is truly an emergency, then the potentially affected public has a right-to-know and should be included in the permit process.

Commission Shift also is of the opinion that permits issued without notice-and-comment should expire after 15 days, not 30 days. In comparison, emergency orders of the Commission must expire after 15 days. Tex. Nat. Res. Code § 85.206(a)-(b)¹⁹⁵. The Commission should not by rule allow emergency permits issued without opportunity for notice-and-comment to last for a longer period than what the Legislature itself set for the Commission's emergency orders.

Finally, Commission Shift objects to District Directors being granted authority to issue emergency permits. The decision to grant an emergency permit should be centralized with the Technical Permitting Staff so that what constitutes an emergency can be standardized and consistent. Only when Technical Permitting is not available due to the nature of the emergency, and after the District has attempted to contact Technical Permitting, should the District have limited authority to act on an emergency permit. And if it has not already, the Technical Section in Austin should develop a

¹⁹¹ § 4.180 states that "Unless otherwise specified in this division or by the Director, the requirements of Divisions 4 through 8 of this subchapter do not apply to activities permitted under this division."

¹⁹² I.e., the Commission should delete the line that states: "Unless otherwise specified in this division or by the Director, the requirements of Divisions 4 through 8 of this subchapter do not apply to activities permitted under this division." By *including* this very strong language, the Commission makes itself vulnerable to an arbitrary-and-capricious challenge by an applicant if later on the Commission tries to apply the requirements of Division 4 through 8 to a Division 9 permit.

¹⁹³ As is enumerated in § 4.101(b).

¹⁹⁴ As is proposed in § 4.181(a).

¹⁹⁵ "The emergency order shall remain in force no longer than 15 days from its effective date." (b).

(publicly available) standardized list of what constitutes appropriate use of an emergency permit and provide training to District Offices on how to make good decisions in the event of an emergency.

§4.182. Minor Permits. Page 74

As it is with all of the permits in this Division, Commission Shift is frustrated by the lack of detail provided for notice-and-comment review of the minor permit program. Section 4.182 authorizes the issuance of permits for the storage or disposal of minor amounts of fluids or waste without defining what a minor amount is or limiting how often a minor permit may be issued for a single site (see section (a)). The Commission should define the threshold for "minor amount" and restrict operators from using minor permits as a means to avoid obtaining better scrutinized- and better-noticed permits.¹⁹⁶ As part of this rulemaking, the Commission should give examples of what it has considered to be a "minor amount" for each waste type. And going forward, applications for minor permits should be made publicly available and notice subject to the same rules as in Division 4.

Commission Shift requests clarification on the intent of subsection (c), which allows only minor permits issued without notice of application to be modified, suspended, or terminated at any time for good cause. It's unclear why the Commission grants itself this power only for non-noticed applications. The Commission should be able to modify, suspend, or terminate any permit, noticed or not, in the interest of the protection of human health and the environment.

Finally, Commission Shift objects to District Directors being granted authority to issue minor permits. The decision to grant a minor permit should be centralized with the Technical Permitting Staff so that what constitutes an minor amount (and how often minor permits can be used) can be standardized and the public can be informed. Likewise, Technical Permitting Staff should develop a standardized guidelines on issuing minor permits and seek public feedback on it before providing training to District Office on how to implement such a program.

§4.183. Miscellaneous Permits. Page 75

Commission Shift strongly believes that this section should not be added to these rules; any additional permitting schemes should go through notice-and-comment rulemaking.

¹⁹⁶ Commission Shift requests that the Commission clarify if its existing Guidelines for Minor Permits will remain in effect. See <u>https://www.rrc.texas.gov/media/gyolztfy/2005guidelinesrule8.pdf</u> The Commission's current guidelines state that: "no more than 5 minor permits, for no more than a total volume of 30,000 barrels from 5 wells, or 1 minor permit for waste from one well if the volume is greater than 30,000 barrels, will be issued for one disposal site." Id. at 4. Commission Shift is of the opinion that these limits far exceed what would be appropriate for a minor permit. According to the Commission, "Typically, these [minor] permits authorize a "one time" disposal of oil and gas waste. Minor permits are commonly issued for: One time, off-lease landfarming of water-based drilling fluid. One time, on-lease landtreatment of oily waste. Disposal of basic sediment by burial, or for reuse. Disposal of drilling fluid in casing or annulus. Hydrostatic Test Water Discharge Recycling of Domestic Wastewater" <u>https://www.rrc.texas.gov/oil-and-gas/applications-and-permits/environmental-permit-types/minor-permits-hydrostatic-test-discharges-domestic-wastewater-and-other-permits/</u>

Commission Shift strongly objects to section (a), which allows the Commission to establish permit requirements for "land application of high-quality produced water and land application of hydrostatic test waters not otherwise authorized by §4.111." This circumvents the public's ability to weigh in on what might be protective of human health and the environment. It also leaves undefined the phrase "high-quality produced water" and "hydrostatic test waters." Nor is "produced water" defined in Subchapter A. Furthermore, § 4.183 ignores Division 8's additional requirements for permitted landfarming.

Commission Shift strongly objects to the inclusion of subsection (b), which states:

(b) For any waste management operation not otherwise authorized by rule or permit, the Director may establish permit requirements necessary to prevent pollution and protect human health and safety.

This looks to be yet another large loophole in which the Commission would be able to create an entirely new permitting system without engaging in the rulemaking process and without including the minimum protections set forth in Divisions 4-8. Any waste management operation not authorized by rule or permit should be prohibited. If there becomes a need to permit additional operations, the Commission should first conduct a rulemaking subject to notice-and-comment.

Transparent, participatory processes are necessary to ensure that the miscellaneous permitting program is not misused. In that vein, the Commission should make public the entities that requested that § 4.183 be included—from the hearings, it was clear that this program was requested at the behest of at least the Permian Basin Petroleum Association.¹⁹⁷

§4.184. Permitted Recycling. Page 75

Commission Shift similarly objects to the grant of virtually unbounded authority for the Commission to create a permitting program for "non-commercial recycling not otherwise authorized by this subchapter."¹⁹⁸ As Commission Shift understands these rules, that would include all non-commercial recycling of solids and also the non-commercial recycling of fluids that is not covered by the definition in § 4.110(60)—in other words, *any* non-commercial recycling, with no limits on what recycling practices would look like or what waste streams might be used.

And by virtue of the proposed language in § 4.180, Divisions 5, 6, 7, and 8 would **not** apply to these permits—only Division 4 might be considered. But Division 4 contains **no** setbacks—that's all in Division 6 (§4.150). Division 6 also sets additional requirements on liners and what action is required if those liners leak. The Commission is unnecessarily limiting itself from fully protecting human and environmental health by tying its hands from considering Divisions 5-8. Subchapter B

 ¹⁹⁷ Oral comments by PBPA spokesperson Michael Lozano on October 26, 2023 (thanking the Commission for including the sections on pilot programs and miscellaneous permits).
 ¹⁹⁸ § 4.184(a).

Division 7 at least sets **some** limits in the form of analytical limits on the recycling of solids (i.e., reuse of drill cuttings), but § 4.184 is totally silent in this and any other matter.

Any waste management operation not authorized by rule or permit should be prohibited. If there becomes a need to permit additional operations, the Commission should first conduct a rulemaking subject to notice-and-comment. Transparent, participatory processes are necessary to ensure that the miscellaneous permitting program is not misused. In that vein, the Commission should make public the entities that requested that § 4.184 be included.

§4.185. Pilot Programs. Page 75

In general, Commission Shift is very skeptical that with the proposed regulations alone the Commission will have sufficient oversight over the programs envisioned by § 4.185, which includes very few protections for human and environmental health, and as such objects to the inclusion of this section entirely.¹⁹⁹ As an initial matter, if "pilot programs" are limited to recycling only, that should be stated in the section heading (i.e., "pilot recycling programs").

The Commission's addition of subsection b during the drafting process does not provide sufficient additional clarification as to the purpose of such pilot programs nor ensure that they are regulated in a manner protective of human health and environment. (It is also not clear if it's an exclusive list of what would qualify for a pilot program.") As written, there seem to be very few limits on what a pilot program would consist of. Pilot programs should certainly not be exempt from the requirements of Divisions 4 through 8 of this subchapter; given the experimental, untested nature of new programs, it is especially important that the pilot programs be vetted by all interested persons, that notice be given, that application and permit materials be public, hearings be available, setbacks required and appeals routes clear. Before a permit is issued, the Commission should set metrics and goals for each program that indicate whether the program is working or not. That list should be drafted with public input given equal weight as industry input. (This is the only way to establish the public's trust that treated produced water can be reused in certain activities that are safe and protective of human health and the environment.) In addition, as is, subsection (c) does not provide guidance on *how* the Director is to decide whether a pilot program presents a threat of pollution and encourages recycling of oil and gas.

¹⁹⁹ Public Information Act requests reveal that the Commission has been working with industry on "a draft document entitled *Produced Water Recycling Framework for Pilot Study Authorization.* This document provides (1) an understanding of how RRC staff understands this challenge (that is, what staff wants industry to know), and (2) guidelines for industry on seeking authorization for pilot studies. This is RRC staff's current approach to pilot study authorization." It thus appears that the Commission will be planning on regulating at least some pilot programs through guidance, without the notice-and-comment protections of rulemaking. Commission Shift urges the Commission to include the public and other non-industry groups in the process of defining pilot programs so that human and environmental health considerations are fully included.

Any pilot program should require the program operator to file periodic operating and monitoring reports (at least quarterly) that are publicly available, and the Commission should be required to publicize its analysis on the program's process. It should also subject its decision to extend a pilot program to notice, hearing, and participation by all interested parties (and subsection (c)(2) should be revised accordingly to incorporate the requirements of Divisions 4-8). Subsection (c) also grants decision-making authority on program extensions to "the Commission" as opposed to the Director, without listing a role for Technical Permitting, as is seen elsewhere in the draft rules. The Commission should clarify whether the opinions and suggestions of technical staff are part of pilot project approvals (as they should be).

In any event, a pilot program should absolutely not be allowed to continue past the five years that traditional permits are allowed without a mandatory hearing and input and review by the public. Transparent, participatory processes are necessary to ensure that the pilot program process is not misused. In that vein, the Commission should make public the entities that requested that § 4.185 be included—from the hearings, it was clear that this program was requested at the behest of at least the Permian Basin Petroleum Association.²⁰⁰

10. DIVISION 10 REQUIREMENTS FOR OIL AND GAS WASTE TRANSPORTATION

§4.190. Oil and Gas Waste Characterization and Documentation. Page 76

Commission Shift supports the Commission's decision to issue rules on waste handling and documentation of waste manifests. East Texas communities in particular have struggled for years with waste haulers delivering mischaracterized wastes to facilities, and it is common knowledge that wastes from Louisiana are often preferentially disposed of in Texas landfills because Texas does less to prevent hazardous wastes from being sent to oil and gas waste landfills. There is still room for improvement in the proposed rules, however.

As an initial matter, Commission Shift is troubled that subsection (c) operates to make § 4.190 effective only once the Commission makes an electronic filing system available (without setting a deadline to do so). The Commission should set a one-year deadline for itself and outline for the public the steps it will be taking to acquire the funding for software, hardware, and qualified employees/contractors to create the electronic filing system, so that the public can be a vocal proponent for Commission to secure these critical pieces of a working electronic filing system.

Commission Shift assumes (and requests that the Commission clarify) that the waste profile information described in subsection (b)(4) would be made publicly available as part of the periodic

²⁰⁰ Oral comments by PBPA spokesperson Michael Lozano on October 26, 2023 (thanking the Commission for including the sections on pilot programs and miscellaneous permits).

reporting required; if not, this subsection should be amended to require this information to be made publicly available.

For Commission Shift's comments on acceptable methods of waste characterization (mentioned in subsection (b)(1)(F)), see comments on §4.102. In any event, the following clause should be appended to the last sentence of subsection (b)(1)(F): "and include full laboratory analytical reports and corresponding chains of custody, performed in accordance as described in §4.124."

§4.191. Oil and Gas Waste Manifests. Page 77

For transparency, subsection (a)(2) should be revised to state that the "electronic manifest system . . . is accessible to the Commission, the public, and all parties . . ." Paper copies of manifests, if they are created, should also be made publicly available. Records also should be retained for more than a period of three years (see subsection (c))—this limited retention period dates back to an era in which records were paper, not electronic. Electronic storage is much cheaper than storing paper. Electronic files also take up much less space. Cradle-to-grave responsibility for waste can extend well past three years—the retention period should likewise extend beyond three years.²⁰¹

§4.193. Oil and Gas Waste Haulers. Page 78

Commission Shift requests clarification why subsection (a) both prohibits the hauling of waste but then creates a carveout for "incidental" waste without defining what an incidental volume would be.

As for subsection (b)(1), Commission Shift suggests that for clarity there should be one subpart for inert waste and then a separate subpart for the much more critical asbestos, PCBs, and hazardous oil and gas waste, given the different risks associated with these categories of waste.

The application for a waste hauler should include information regarding the applicant and the applicant's vehicle's record, including whether the hauler has caused pollution or been involved in incidents of waste management discrepancies (§4.194(b)) that were reported for that waste hauler in the last seven years. Those with a history of waste discrepancies, accidents, or pollution should be prohibited from receiving permits. Commission Shift also questions whether the certification in (c)(3) stating that the vehicle has been appropriately designed should not instead be a certification from the manufacturer of the vehicle—given that the hauler likely does not have the design experience necessary to make such a certification. It could still be a certification that the hauler is obligated to obtain (just not obligated to make him or herself).

²⁰¹ The Commission could consider implementing a tiered system for retention of records—i.e., one that recognizes waste transport data has differing levels of long-term importance with respect to preserving cradle-to-grave data. The proposed rule lumps all waste transfer paperwork into one category of perceived importance.

Commission Shift also notes that the Waste Haulers Act additionally requires that waste haulers must provide an affidavit from the receiver that the hauler may use its facility. Commission Shift questions why this statutory requirement has been removed here.

§4.194. Recordkeeping. Page 81

Commission Shift is encouraged that the Commission will require operators to report waste management discrepancies (per subsection b).²⁰² This has been recommended to the Commission since at least 1993. Like all reporting done by operators, this information too should be made publicly available contemporaneously.

§4.195. Waste Originating Outside of Texas, Page 81

Commission Shift is encouraged that the Commission will require out-of-state waste to be identified more specifically by regulatory identifier and location, as Commission Shift suggested in its May 2023 letter to the Commission on the related matter of P-18 forms. The Commission should require that waste haulers make this information available for the public as well.

11. DIVISION 11 REQUIREMENTS FOR SURFACE WATER PROTECTION

§4.196. Surface Water Pollution Prevention. Page 81

Commission Shift urges the Commission to clarify that **all** of its water-protection and anti-pollution rules (including 4.196(b)(6)-(7)) apply to activities on land (not just in offshore or in-land waters) that cause pollution of any state waters, whether inland, fresh, offshore, estuarine or otherwise. It could do so more clearly by moving (d) to follow (a):

(a) An operator shall not pollute the waters of the Texas offshore and adjacent estuarine zones (saltwater bearing bays, inlets, and estuaries) or damage the aquatic life therein.

(<u>b</u>d) The requirements of this section shall also apply to all oil, gas, or geothermal resource operations conducted on <u>land or on</u> the inland and fresh waters of the State of Texas, such as lakes, rivers, and streams.

Commission Shift supports the Commission's proposed revision that would no longer allow any cutting and fluids from mud systems to be disposed of in Texas offshore and adjacent estuarine zones.²⁰³ Furthermore, Commission Shift understands (e)(2)(A) was removed as the Commission no longer has jurisdiction over such discharges. (If that is not the case, then Commission Shift opposes removing regulations protecting waters from discharges.) Commission Shift requests confirmation

²⁰² "The RRC should adopt rules requiring the operator of a disposal facility to report waste management discrepancies." Ex. 6 STRONGER Texas Review, 2003 at 31 (citing 2000 Guidelines 5.10.2.3 d).

²⁰³ Compare 3.8(e)(2)(E) ("Drilling muds which contain oil shall be transported to shore or a designated area for disposal. Only oil-free cutting and fluids from mud systems may be disposed of into Texas offshore and adjacent estuarine zones at or near the surface.") with § 4.196.

that the Commission's deletions in $3.8(e)(2)(D)^{204}$ regarding the disposal of burned waste and edible waste into the ocean is an actual prohibition of this activity.

§4.197. Consistency with the Texas Coastal Management Program. Page 82

This section appears largely unchanged from the original rule and the May draft, except regulations regarding discharges have been removed (specifically 3.8(j)(1)(B) and 3.8(j)(3)(B)). The summary to the informal draft did not provide a rationale for this change, but Commission Shift believes this may be in recognition of the fact that many discharge permits previously issued by the RRC now fall under the TCEQ's jurisdiction. However, some discharges remain under the RRC's jurisdiction, and Clean Water Act Section 401 certifications continue to require the Commission to consider the effects of discharges from oil and gas activities. Commission Shift requests a rationale for why these sections were omitted from this draft. Whatever the reason, in making this amendment (and this rulemaking in general), the Commission must explain how this proposed rule amendment is consistent with the Coastal Management Plan, as required by 31 TAC 29.11(c).

Commission Shift notes that the language about large discharges into tidal waters found in the current rule at 3.8(j)(3)(B) and what would have been 4.197(c)(2) for "thresholds for referral" for a coastal consistency determination²⁰⁵ has been removed in this draft. Commission Shift requests a rationale for why the following discharges will no longer be referrable to the General Land Office for review to determine consistency with the Coastal Management Plan:

for discharges, any permit to discharge oil and gas waste consisting, in whole or in part, of produced waters into tidally influenced waters at a rate equal to or greater than 100,000 gallons per day.

By removing this language, such discharges will no longer be deemed to exceed thresholds for referral; in other words—as Commission Shift understands it—the General Land Office will not be able to review the Commission's determination on whether a permit is consistent with the state's coastal management plan, which is the federally-approved plan intended to "ensure the long-term environmental and economic health of the Texas coast."²⁰⁶ Again, the Commission must explain how this proposed rule amendment is consistent with the CMP.

The Commission should also take the opportunity to strengthen the water-protection rules in this section. As drafted, section 4.197(a)(1)(A) would allow non-commercial oil and gas waste disposal pits, temporary pits, waste separation facilities, landfarms, and recycling facilities to be built inside

²⁰⁴ This section stated: "Solid combustible waste may be burned and the ashes may be disposed of into Texas offshore and adjacent estuarine zones. Solid wastes such as cans, bottles, or any form of trash must be transported to shore in appropriate containers. Edible garbage, which may be consumed by aquatic life without harm, may be disposed of into Texas offshore and adjacent estuarine zones."

²⁰⁵ (c) begins by stating "Any Commission action that is not identified in this subsection shall be deemed not to exceed thresholds for referral for purposes of the [Coastal Management Plan] CMP rules."
²⁰⁶ https://www.glo.texas.gov/coast/grant-projects/cmp/index.html

the coastal zone.²⁰⁷ The only prohibitions are for "commercial" oil and gas "disposal pits"—i.e.: "pit[s] used for the *permanent interment* of oil and gas waste"²⁰⁸ that are located in:²⁰⁹

A facility permitted under this chapter, whose operator receives compensation from third parties for the management of oil and gas wastes, whose primary business purpose is to provide such services for compensation, and receives oil and gas wastes by truck. In this paragraph, a third party does not include an entity that wholly owns the operator of the facility permitted under this chapter

(for Commission Shift's arguments why "commercial" is too narrowly defined, see 4.110 above).

This leaves a lot of room for waste to be managed within the coastal zone. Nearby states like Louisiana have been prohibiting production pits from being constructed in the coastal zone since June 1989.²¹⁰ While the Commission must perform a "consistency review" of any permit that's requested in the coastal zone, as the rule is currently drafted it appears that only pits larger than 5 acres are subject to review of the commission's decision as to whether they are consistent with the state's plan for coastal management and protection. As the severity and frequency of severe storms increase, our coastal communities and the facilities built among them become more vulnerable. Open waste pits and waste operations, whether temporary or not, and whether commercial or not, are sources of compounding risk that our communities should be protected from with forward-thinking regulations.

²⁰⁷ 4.197(a)(1)(A) is as follows:

⁽a) Applicability. The provisions of this section apply only to activities that occur in the coastal zone and that are subject to the CMP rules.

⁽¹⁾ Disposal of oil and gas waste in pits. The following provisions apply to oil and gas waste disposal pits located in the coastal zone.

⁽A) No commercial oil and gas waste disposal pit constructed after October 25, 1995, shall be located in any CNRA.

⁽B) All oil and gas waste disposal pits shall be designed to prevent releases of pollutants that adversely affect coastal waters or critical areas.

²⁰⁸ 4.110(31) (defining disposal pit).

²⁰⁹ 4.110(21) (defining commercial facility).

²¹⁰ LAC 303.K.1. Except for exempt pits, no production pit may be constructed in the coastal area after June 30, 1989.

SUBCHAPTER B COMMERCIAL RECYCLING

Many of the same concerns Commission Shift expressed in comments on Subchapter A are relevant to the proposed rulemaking in Subchapter B; these general topics are summarized here before specific section-by-section feedback that focuses on Divisions 1, 5, 6, and 7.

Concerns related to Subchapter A comments:

The same concerns Commission Shift expressed in Subchapter A about the lack of meaningful public participation allowed for in the permitting process also apply to Subchapter B (including in § 4.207), and thus Commission Shift respectfully refers the Commission to its comments on Subchapter A on these topics.

The same concerns Commission Shift expressed in Subchapter A about the lack of meaningful public participation during permit renewals, amendments and transfers also apply to Subchapter B (including in §§ 4.209, 4.224, 4.261) and thus Commission Shift respectfully refers the Commission to its comments on Subchapter A on these topics (see § 4.122).

The same concerns Commission Shift expressed in Subchapter A about modifications, suspensions, and transfers also apply to Subchapter B (including in § 4.210), and thus Commission Shift respectfully refers the Commission to its comments on Subchapter A on these topics (see § 4.123).

The same concerns Commission Shift expressed in Subchapter A about penalties and the lack of meaningful enforcement also apply to Subchapter B (including in § 4.211), and thus Commission Shift respectfully refers the Commission to its comments on Subchapter A on these topics (see § 4.107).

The same concerns Commission Shift expressed in Subchapter A about: (1) the need for the Commission to have a mechanism to deny incomplete applications that do not meet the Commission's minimum standards (without allowing applicants to waste Commission resources in or a hearing or for the technical staff's decision to be overruled by Commissioners); and (2) the need for a mechanism to prevent applicants from continuing to modify their applications even during the hearing stage; also apply to Subchapter B (including in §§ 4.212, 4.230), and thus Commission Shift respectfully refers the Commission to its comments on Subchapter A on these topics.

The same concerns Commission Shift expressed in Subchapter A about the need for: (1) a community relations/public information plan; (2) site-specific inspection forms; and (3) a review of prior applications and permits; also applies to Subchapter B (including in §§ 4.214, 4.234, 4.250, 4.251, 4.266), and thus Commission Shift respectfully refers the Commission to its comments on Subchapter A on these topics (§§ 4.124, 4.128, 4.142).

The same concerns Commission Shift expressed in Subchapter A about the need for appropriate setbacks and location considerations also apply to Subchapter B (including §§ 4.219, 4.240, 4.256, 4.264, 4.278, 4.280), and thus Commission Shift respectfully refers the Commission to its comments on Subchapter A on these topics (§ 4.150).

The same concerns Commission Shift expressed in Subchapter A about the length of the notice period, who gets notice and how also apply to Subchapter B (including §§ 4.238, 4.254, 4.270, 4.272, 4.286), and thus Commission Shift respectfully refers the Commission to its comments on Subchapter A on these topics.

The same concerns Commission Shift expressed in Subchapter A about monitoring for leakage and leakage rates also apply to Subchapter B (including §§ 4.275, 4.291), and thus Commission Shift respectfully refers the Commission to its comments on Subchapter A on these topics.

1. DIVISION 1. GENERAL; DEFINITIONS

§4.202. Applicability and Exclusions. Page 1

Commission Shift objects to the grandfathering of permits issued prior to the current rulemaking (section h). The Commission should set a deadline by which all operations permitted under the previous rules must come into compliance. To ensure that human and environmental health is protected, Commission should retain the power to make changes to these permits even before the deadline is reached.

§4.204. Definitions. Page 2

Commission Shift recognizes that some changes are required by statute, like the definition of "drill cuttings." Others are left to the Commission's discretion, like the definition of "legitimate commercial product."²¹¹ The proposal defines this as "[a] product of a type customarily sold to the general public for a specific use and for which there is a demonstrated commercial market." 4.204(8). But this appears to be simply the definition of a commercial product²¹²—not necessarily a *legitimate* one.

The Commission has been given the opportunity to define the full term "legitimate commercial product"—it should use this opportunity to incorporate the fact that a legitimate commercial product is also one that does not risk harming human health and public safety or environmental receptors, that has been fully tested, and that has long-term viability.

²¹¹ Tex. Nat. Res. Code § 123.0015(b).

²¹² With plenty of vague language ripe for exploitation to allow for products that do not have any long-term viability and have not been fully tested.

Incorporating the concept of how a commercial product must (at a minimum) not be harmful to be considered "legitimate" makes sense because the term "legitimate commercial product" is used to define when use of drill cuttings is "beneficial." Tex. Nat. Res. Code § 123.0015(a) states:

(a) For the purposes of this chapter, **a use of drill cuttings is considered to be beneficial** if the cuttings are used:

(1) in the construction of oil and gas lease pads or oil and gas lease roads; or

(2) as part of a legitimate commercial product.

The Commission should thus revise the definition of "legitimate commercial product" to reflect the fact that this term must also be able to describe when a use of drill cuttings is actually "beneficial."

§4.205. Exceptions. Page 5

Commission Shift is concerned by the language in this section on exceptions, and in particular the language in (c)(1). It appears that the Commission is intending to incorporate legislation codified in Texas Natural Resources Code § 122.004(f), which states that "An application requesting a variance from the standards adopted under this section must be evaluated and determined to be substantially similar to previous variances approved by the commission."

On its face, this language states that one element of the Commission's review is to determine whether the exception is "substantially similar" to previous exceptions. While this may be a *necessary* finding, it is not *sufficient* to warrant granting the application—and the statutory language reflects this. Over and over again the Legislature has directed the Commission to always consider a *second* element—that the proposed operation is protective of public health and safety and the environment.²¹³ In other words, applicants must prove both elements *separately*. Simply because a requested variance is "substantially similar" to a previously-granted variance does not make it safe. The Commission should rewrite section (c)(1) to clarify that showing that an exception is "substantially similar" to one granted previously is *not* the same as showing that it is also sufficiently protective of health and the environment. Intervening events or data may show that the previously granted exception is no longer protective of health and the environment. Applicants should be required to affirmatively prove an exception is protective, and not simply rely on an asserting that is "substantially similar" to one granted in the past.

The same concerns Commission Shift expressed about the exceptions provided for in Subchapter A § 4.109 also apply to Subchapter B, and thus Commission Shift respectfully refers the Commission to its comments on Subchapter A on this topic.

²¹³ For example, in the context of drill cutting reuse, Tex. Nat. Res. § 123.005 (b) states that "A rule adopted by the commission under this chapter or a permit or order issued by the commission regarding the treatment and beneficial use of drill cuttings must be at least as protective of public health, public safety, and the environment as a rule, permit, or order, respectively, adopted or issued by the commission regarding the disposal of drill cuttings."

2. <u>DIVISION 3. REQUIREMENTS FOR OFF-LEASE OR CENTRALIZED</u> COMMERCIAL SOLID OIL AND 21 GAS WASTE RECYCLING.

§4.232 Minimum Siting Information. Page 15

Commission Shift notes that the siting information required to be in an application for off-lease or centralized commercial solid oil and gas waste recycling is much less detailed than the information required for operations in Subchapter A. In addition, more discretion is left to the operator to choose a source of this information (e.g., the source of flood plain information and characterization of subsurface water). The Commission could incorporate by reference Subchapter A's methods for acceptable means to gather this information (much of which is in § 4.114 and § 4.131), or repeat the information here—in any event it is relevant to both disposal and recycling operations.

These deficiencies are repeated in Division 4 and 5's (§4.248 and §4.264, respectively) requirements for stationary commercial solid oil and gas waste recycling facilities, and should be remedied there as well.

§4.241 Minimum Permit Provisions for Design and Construction. Page 19

For sections 4.241, 4.257, Commission Shift has similar concerns as those expressed in § 4.232 about how data is collected for the installation of monitoring wells and the assessment of whether groundwater is present. Subchapter A's provisions on soil investigations and monitoring well installation should be referenced or incorporated. In addition, the list of parameters that groundwater wells must be sampled for in § 4.259 should include at least toluene, ethylbenzene, and xylene (a complete BTEX suite for the same reasons as discussed in Commission Shift's comments on Subchapter A) metals, and pH. Commission Shift also questions why this list of sampling parameters does not apply to all operations under Subchapter B.

3. <u>DIVISION 5. REQUIREMENTS FOR OFF-LEASE COMMERCIAL RECYCLING</u> OF FLUID.

§4.263 Minimum Engineering and Geologic Information. Page 34

In this section and related ones about the minimum engineering and geologic information that is necessary, Commission Shift notes that the information required to investigate the subsurface geology is much less detailed than the information required for operations in Subchapter A. In addition, more discretion is left to the operator to choose a source of this information—e.g., subsection (b) allows site characterization information to come from "available information"—not necessarily site-specific investigations. For all the reasons Commission Shift explained in Subchapter A, the only way to fully characterize the subsurface and identify subsurface water (which the Commission has a duty to protect) is with site-specific investigations. Subsection (b) should be

revised to require this information before an application can be approved. Likewise, subsection (c) provides very little detail on how "background" is to be determined, in contrast to the detail in Subchapter A. Commission Shift raises the same concerns with respect to § 4.279, which is a similar section.

§4.266 Minimum Design and Construction Information. Page 35

The level of detail on pit construction that the Commission has proposed in § 4.266 (and § 4.282) in many ways exceeds the level of detail provided for in Subchapter A. Many of Commission Shift's recommendations appear to have been incorporated into this section—for example the requirements that quality assurance / quality control testing reports be obtained²¹⁴; that liners should be anchored into compacted earth; that very specific details have been given on the liner type, thickness, and leak detection system construction. Commission Shift reiterates however the freeboard in the pit should be able to handle the 25-year, 24-hour rain event *plus* two feet of vertical distance (subsection (a)(12)).

§4.272 Minimum Permit Provisions for Siting. Page 43

Commission Shift strongly objects to the new last sentence that has been added to § 4.272(a) and § 4.288(a) as follows:

§4.272(a) A permit for off-lease commercial recycling of fluid may be issued only if the <u>Director</u> [director] or the Commission determines that the facility is to be located in an area where there is no unreasonable risk of pollution or threat to public health or safety. The Director will presume that an application meeting the requirements of §4.264(a) of this title (relating to Minimum Siting Information) does not present an unreasonable risk of pollution or threat to public health or safety with regard to siting, unless extraordinary circumstances indicate otherwise.²¹⁵

Asking the Commission to disregard a risk of pollution "unless *extraordinary* circumstances" are shown is a dangerously high bar to put between the Commission and its duty to protect public health and safety and the environment. It will be virtually impossible for the public to surmount. It will force the Commission to disregard information that indicates that a site creates a risk of pollution or threat to public health or safety—only "extraordinary" information or circumstances would suffice. This standard is a risk to human and environmental health all its own.

Commission Shift sees no statutory mandate for this language to be included—the notice of informal comment disclosed House Bill 3516 as the *only* legislative driver for the changes to Divisions 5 and 6—and H.B. 3516 has no such language in it.²¹⁶ Commission Shift has been unable to find this language in any other law or statute. The last sentence of (a) should be omitted.

²¹⁴ Though these should also be reported to the Commission.

²¹⁵ The problematic last sentence of § 4.288(a) is identical to that of § 4.272(a).

²¹⁶ Ex. 44 (Enrolled version of H.B. 3516, 87th Legislature, Regular Session).

7. DIVISION 7. BENEFICIAL USE OF DRILL CUTTINGS.

§4.301. Activities Related to the Treatment and Recycling for Beneficial Use of Drill Cuttings. Page 67

This Division envisions allowing drill cuttings to be spread across all county roads, all oil and gas lease roads, and to be included in construction aggregate, fill material and concrete (and more). The potential for widespread pollution and harm to human health and public safety warrants much more detailed regulations and much more scrutiny than it has received, tucked in as last pages in a massive rewrite of Chapter 4. The minimal guidelines in this Division puts Texans at risk—the Commission needs to go back to the drawing board when it comes to regulating the use of drill cuttings and bring the public to the stakeholder table alongside industry immediately.

Commission Shift recognizes that the Legislature has directed the Commission to draft rules for the use of drill cuttings (i.e., this new Division), but it has been given significant leeway in the rules that can be set. The Commission appears to only be limited by the constraints that:²¹⁷

A rule . . . regarding the treatment and beneficial use of drill cuttings *must be at least as protective* of public health, public safety, and the environment as a rule . . . adopted . . . by the commission *regarding the disposal of drill cuttings*.

and²¹⁸

The commission by rule shall adopt criteria for beneficial uses to ensure that a beneficial use of recycled drill cuttings under this chapter is **at least as protective** of public health, public safety, and the environment **as the use of an equivalent product made without recycled drill cuttings**.

The Commission must thus take into consideration the protections provided when disposing of drill cuttings and the impacts of equivalent products made *without* drill cuttings. The Commission is free to enact standards that are more protective—which it must do. Drill cuttings as defined are not simply geologic material removed from the wellbore, but may include residual additives used in drilling muds (oil-based, water-based, and synthetic-based) cleaned out of the wellbore, including potentially hazardous materials.²¹⁹ These rules do not define how much, if any, pretreatment of drill cuttings must be done before the material is an appropriate ingredient—and whether that pretreatment would be done by the generator at the wellpad or at the facility conducting Division 7 operations. The rule assumes all drill cuttings are fungible rather than acknowledging the expected

²¹⁷ Tex. Nat. Res. Code § 123.005(b).

²¹⁸ Tex. Nat. Res. Code § 123.0015 (c).

²¹⁹ "Drill cuttings" is defined by statute to mean: "bits of rock or soil cut from a subsurface formation by a drill bit during the process of drilling an oil or gas well and lifted to the surface by means of the circulation of drilling mud. The term includes any associated sand, silt, drilling fluid, spent completion fluid, workover fluid, debris, water, brine, oil scum, paraffin, or other material cleaned out of the wellbore." Tex. Nat. Res. Code § 123.001(1).

[&]quot;Treatment" means "a manufacturing, mechanical, thermal, or chemical process other than sizing, shaping, diluting, or sorting." Tex. Nat. Res. Code § 123.001(4).

wide variation in characteristics of each incoming load of drill cuttings depending on type of well, mud additives, and other considerations.

As Subchapter A proposes, drill cuttings that are disposed of are typically placed in consolidated privately owned locations, becoming at most point source reservoirs of pollution—they are buried in a landfill or potentially landfarmed in a contained, monitored space. However, this Division envisions the use of cuttings publicly—along oil and gas lease roads (a use named in the statute) **and** along county roads—which is not a use that the statute requires the Commission to regulate or allow. There are over 300,000 lane-miles of certified county roads in Texas, according to The County Information Program,²²⁰ or 47% of all roads in the state, according to TxDOT and 2017 data from the Federal Highway Administration.²²¹ Division 7 creates the framework for all of these roads to become sources of pollution and human health and public safety risks if strict enough environmental protections and oversight are not set.

Section (b) also envisions the use of drill cuttings ""as a concrete bulking agent, oil and gas waste disposal pit cover or capping material, treated aggregate, closure or backfill material, berm material, or construction fill." Several of these categories of products could be used all over the state—like concrete bulking agent, treated aggregate, and construction fill.

Commission Shift strongly objects to rules being drafted to allow uses that are not envisioned in the statute. The Commission should disclose which entities or individuals are requesting to allow drill cuttings on county roads and "as a concrete bulking agent, oil and gas waste disposal pit cover or capping material, treated aggregate, closure or backfill material, berm material, or construction fill."

Thus at a minimum, section (b) should be modified as follows to restrict the applicable beneficial reuse to oil and gas roads that are not also public county roads and restructured so that requirements (3)(A) and (3)(B) must be demonstrated for all uses.

(b) The Commission may approve a permit for the treatment and recycling for beneficial use of drill cuttings if:

(1) the applicant can demonstrate that the product:

(A) meets the engineering and environmental standards for the proposed use; and

(B) is at least as protective of public health, public safety, and the environment as the use of an equivalent product made without treated drill cuttings;

(2) and the treated drill cuttings are used:

²²⁰ Ex. 45 Texas Counties: Lane Miles, Certified County Roads (Data source: Texas Department of Transportation. Annual Roadway Inventory Reports. (2022)) <u>https://txcip.org/tac/census/morecountyinfo.php?MORE=1079</u> Lanemiles are determined by multiplying centerline miles by the road's number of lanes so better capture the area of the roadway as compared to centerline miles, which are the total length of a road or road segment.
²²¹ Ex. 46 The State of Highways in Texas. At 3 <u>https://ftp.txdot.gov/pub/txdot-info/tpp/2050/meeting-materials/round-02/highway-intro.pdf</u>

(A) in a legitimate commercial product for the construction of oil and gas lease pads or oil and gas lease roads that are not also county roads;

(B) in a legitimate commercial product for the construction of county roads; or

(C) in a legitimate commercial product used as a concrete bulking agent, oil and gas waste disposal pit cover or capping material, treated aggregate, closure or backfill material, berm material, or construction fill.

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Section (a) gives two examples of how an applicant could show that there is a demonstrated commercial market for treated drill cuttings:

(a) An applicant for a permit to treat and recycle drill cuttings for beneficial use shall show that there is a demonstrated commercial market for the treated drill cuttings. The applicant may make this showing by providing:

(1) evidence that the same product made with drill cuttings or a product that is substantially similar is commonly used in the area where the product is created

(2) evidence of actual commitments from customers who intend to use the product made with drill cuttings, including information regarding the volume of product the customers intend to use annually; or

(3) other credible and verifiable means consistent with the rules in this chapter.

As an initial matter, Commission Shift notes that the Commission has substituted the word "demonstrated" for "legitimate" as what must be shown for a commercial product to be legitimate. "Demonstrated" is not necessarily a synonym for "legitimate," as Commission Shift explained in its comments on § 4.204. In addition "evidence" is not defined—as written it could simply be an email chain—which the applicant could argue is sufficient to show a permit is merited.

As for subsection (a)(1), "evidence that the same product made with drill cuttings or a product that is substantially similar is commonly used in the area where the product is created " is not relevant to whether there is a commercial market for drill cuttings in the location where they are to be used. This doesn't even require that the area producing the product is using drill cuttings at all—it just has to be a "substantially similar product," which is undefined, and "commonly" used, which is also undefined. Under this definition, evidence that roadbed material is being made and used in a location halfway around the world might suffice (it should not). Subsection (a)(1) doesn't even require "commercial use"—it could be still in a research phase, donated, or even dumped. Worse, section (a)(3) would expand the scope of (a)(1) as it would allow evidence that is "consistent with the rules in this chapter"... which includes (a)(1).

In short, section (a)(1) should be removed in its entirety.

In addition, (a) references the need for a permit to treat drill cuttings, but then gives no explanation for how that permit would be obtained, the public's ability to participate, and what it

would involve. This fundamental flaw reinforces the fact that this Division should not move to formal comment—it's not ready.

It appears that large portions of this Division are simply cut and paste from others in Subchapter B without careful consideration whether those borrowed rules apply to and are sufficient for Division 7. As for section (b), Commission Shift is very concerned that only a single "trial run" would be required to demonstrate the suitability of a drill cuttings-based product. Drill cuttings have been defined to be a product that contains "any wellbore material"—many experiments should be run using a variety of sources of drill cuttings feedstock in order to capture influence from a wider range of potential contaminants. A single trial run is also insufficient given the widespread intended application of this product—scattered on roads and in aggregate across the state—and thus this section should be altered accordingly. Requiring on-going sampling of the product (as contemplated in (c)(1)(B)) during its production is not the same thing as ensuring that the production process consistently produces material that will not put public health, safety, and the environment at risk.

This section also references ASTM standards that are behind paywalls. As Commission Shift has pointed out in comments on previous sections, the public will not be able to provide meaningful feedback unless the Commission provides summaries of these standards, including what these standards are suitable for (and not suitable for).

As for subsection (c), it only requires the reporting of lab analyses and a "letter of authority" application for materials that are in category § 4.130(b)(3). These requirements (c)(2)(D) and (c)(2)(E) must also be requirements for use of drill cuttings on roads (i.e., added as (b)(2)(D) and (b)(2)(E)). There is no legitimate reason for the distinction. As written, the rule only requires the reporting of lab tests and submittal of an application for a permit without an obvious public notice and participation component. The rule does not include a clear path for the Commission and the public to monitor the efficacy of the program through its operational lifespan. And then the Commission must add more detail to explain how a letter of authority would work (e.g., is it a single letter that suffices for all uses?). The "letter of authority" process should include the opportunity for the public near the site where this material is to be used to weigh in on the application, akin to the notice and protest provisions elsewhere in these rules.

As for the sampling required, the list of metals and organics does not seem to encompass all potential pollutants in drill cuttings and any 'treatment' additives used in the permitted process. The Division 7 Rule appears to be rushed and poorly conceived, especially given the lack of detail on the reuse process. The resulting 'beneficial use' material could conceivably be used in numerous public applications where the public would be unknowingly exposed, potentially every day.

The lesson learned throughout the history of Rule 8 is that vague and incomplete regulations are difficult to implement and enforce. Rather than learning from past mistakes, Division 7 will repeat that

history. Commission Shift strenuously requests that the Commission not include Division 7 in the upcoming formal rulemaking process.