

**SOAH DOCKET NO. 582-07-2673
TCEQ DOCKET NO. 2007-0204-WDW**

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| APPLICATION OF TEXCOM GULF | § | BEFORE THE STATE OFFICE |
| DISPOSAL, LLC FOR TEXAS | § | |
| COMMISSION ON ENVIRONMENTAL | § | OF |
| QUALITY UNDERGROUND INJECTION | § | |
| CONTROL PERMIT NOS. WDW410, | § | |
| WDW411, WDW412 AND WDW 413 | § | ADMINISTRATIVE HEARINGS |

**APPLICANT TEXCOM GULF DISPOSAL, LLC'S
EXCEPTIONS TO AMENDED PROPOSAL FOR DECISION**

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Pursuant to 30 Tex. Admin. Code § 80.257(a), TexCom Gulf Disposal, LLC, ("*TexCom*" or "*Applicant*") presents this, its Exceptions to the Administrative Law Judges' ("*ALJs*") amended Proposal for Decision ("*PFD*") issued November 8, 2010. In their PFD, the ALJs recommend that the Texas Commission on Environmental Quality ("*TCEQ*" or the "*Commission*") deny TexCom's UIC well application.¹ However, as discussed in more detail below, because TexCom proved by a preponderance of the evidence that its application complies with all applicable statutory and regulatory requirements, Applicant respectfully disagrees with the ALJs' ultimate recommendation and, instead, maintains that its Underground Injection Control ("*UIC*") Permit Nos. WDW410, WDW411, WDW412, and WDW413 should be issued by the Commission.

**I.
ARGUMENT**

The ALJs recommend that the Commission deny TexCom's UIC well application for two reasons: 1) TexCom did not demonstrate by a preponderance of the evidence that fresh ground and surface water would be protected if Protestant Denbury Onshore, LLC ("*Denbury*")

¹ *Amended Proposal for Decision After Remand*, SOAH Docket No. 582-07-2673; TCEQ Docket No. 2007-0204-WDW, at 118 (Nov. 8, 2010) [hereinafter *PFD*].

produces TexCom’s injected nonhazardous wastewater at the surface;² and 2) that a reasonably available alternative to TexCom’s UIC wells for the disposal of nonhazardous wastewater, i.e., the City of Conroe’s publicly owned treatment works (“*POTW*”), is already permitted.³ With respect to other issues raised in this proceeding, the ALJs’ findings and recommendations are either consistent with or acceptable to the Applicant. Thus, the Applicant’s exceptions to the PFD address only the two issues enumerated above.

A. APPLICANT’S BURDEN OF PROOF

The purpose of a contested case hearing, such as the above-captioned proceeding (i.e., one resulting from a direct referral to the State Office of Administrative Hearings (“*SOAH*”) at the request of the applicant), is to determine “whether the application complies with all applicable statutory and regulatory requirements”⁴ “by a preponderance of the evidence.”⁵ Proof by a preponderance of the evidence “does not require the quality of absolute certainty nor does it require that [the applicant] preclude every other possibility. . . . All that is required is that the circumstances point to the ultimate fact sought to be established with that degree of certainty as to make the conclusion reasonably probable.”⁶ The preponderance of the evidence standard does

² See PFD at 97.

³ See PFD at 90.

⁴ TEX. WATER CODE § 5.557(a).

⁵ 30 TEX. ADMIN. CODE § 80.17(a) (2010).

⁶ *State Farm Mut. Ins. Co. v. Davis*, 576 S.W.2d 920, 921 (Tex. Civ. App.—Amarillo 1979, writ ref’d n.r.e.) (internal citations omitted); see also *Bufkin v. Tex. Farm Bureau Mut. Ins. Co.*, 658 S.W.2d 317, 230 (Tex. App.—Tyler 1983, no writ); *First State Bank v. Md. Cas. Co.*, 918 F.2d 38 (5th Cir. 1990).

not necessarily require that the party with the burden “explain or disprove the allegations of its opponent.”⁷

B. PROTECTION OF FRESH SURFACE AND GROUND WATER

In their PFD, the ALJs acknowledged – and Applicant agrees – that the following is true:

- TexCom’s existing Class I well is and other wells will be sited in geologically suitable areas;⁸
- the Jackson Shale formation is an effective confining zone;⁹
- TexCom “demonstrated that the geology of the area will prevent the upward migration of wastewater into a USDW and fresh and surface water;”¹⁰
- “the evidence did not support Denbury’s theory that cross-flow between well bores would endanger USDWs”¹¹ and “there is no evidence to show that Denbury’s theory of cross-flow between well bores would actually occur within the area of TexCom’s waste plume to allow the injected wastewater to migrate from the Lower Cockfield to the Upper Cockfield;”¹² and
- “TexCom properly modeled the extent of the waste plume at 2,770 feet from the well bore Thus, a preponderance of the evidence established that the waste plume will not reach the EW-4400-S fault to allow further migration up through

⁷ *Gooch v. Davidson*, 245 S.W.2d 989, 991 (Tex. Civ. App.—Amarillo 1952, no writ).

⁸ *PFD* at 24; *id.* (“Dr. Langhus, Mr. Santos, and Mr. Grant agreed that the proposed Class I injection wells would be located in a geologically suitable area.”).

⁹ *See PFD* at 37; *see also id.* at 93.

¹⁰ *Id.* at 45 (discussing evidence and arguments from the original hearing). A “USDW” is an underground source of drinking water.

¹¹ *Id.* at 51.

¹² *Id.* at 51-52.

the Middle Cockfield to the Upper Cockfield” from the Lower Cockfield injection interval,¹³

Additionally, after the first hearing on the merits, the ALJs found that the “Lower, Middle, and Upper Cockfield Members are separated from one another by 30 to 40-foot layers of shale, which will prevent injected wastewater or any other substances from passing vertically between them.”¹⁴ Despite these findings and recommendations, after the remand hearing, the ALJs can no longer recommend issuance of TexCom’s permits because Denbury “presented new evidence about the interaction between TexCom’s operation and its operation that may increase the risk of contaminating groundwater.”¹⁵ More specifically, the ALJs concluded that evidence regarding the continuity of the shale layers separating the Cockfield members was insufficient to overcome Denbury’s concern that its current and future operations may result in Denbury producing TexCom’s injected wastewater at the surface.¹⁶ Even assuming this to be the case, which the Applicant disputes, the ALJs conclude that potential production of the injected wastewaters violates the Texas Water Code’s requirement “that, with proper safeguards, both ground and surface fresh water can be adequately protected from pollution”¹⁷ in an unexplained manner. The preponderance of the evidence, however, establishes that there will be no migration

¹³ *Id.* at 52.

¹⁴ *Proposed Order Granting the Application for Permit Nos. WDW410, WDW411, WDW412 and WDW413 to TexCom Gulf Disposal, LLC*; TCEQ Docket No. 2007-0204-WDW, SOAH Docket No. 582-07-2673, at 77, Finding of Fact (“*FOF*”) 77 (Apr. 25, 2008) [hereinafter *Original Proposed Order*].

¹⁵ *PFD* at 93; *see also id.* at 96-97.

¹⁶ *See PFD* at 3-4, 53.

¹⁷ *See PFD* at 97.

of wastewater from the injection interval and that, even if there were migration, TexCom's injected wastewater will not contaminate ground or surface fresh water.

1. Denbury's Proposed Operations Should Not Be Given Any Weight

With regard to TexCom's ability to protect ground and surface fresh water, only Denbury's current operations – if any – should be considered as there is no evidence that Denbury's future plans are possible and will be implemented. Denbury's witness Mr. Jon Herber explained that Denbury has not yet determined how many CO₂ injection wells it will need to drill, and that its “planning is still in the very preliminary stages.”¹⁸ Mr. Mark Swadener testified that Denbury's plan is for it to commence CO₂ injection in four years.¹⁹ However, the four years are more likely the minimum planning period as none of Denbury's enhanced oil recovery activities in the Conroe Field have yet been authorized or permitted by any state regulatory agency.²⁰ Indeed, Mr. Swadener testified that some of Denbury's proposed wells illustrated in Denbury Exhibits 20 and 21 may need to be relocated from “non-optimal locations,”²¹ such as those proposed near or on daycares, lakes, elementary schools, and cemeteries.²² Additionally, Denbury has not even started the pipeline project that would be needed to bring CO₂ from Oyster Bayou to Conroe.²³ And if the price of oil declines in the future, Denbury might curtail its

¹⁸ Remand Tr. at 949:24 to 950:11 (Herber).

¹⁹ See Remand Tr. at 1489:19-21 (Swadener).

²⁰ See Remand Tr. at 939:21-24 (Herber).

²¹ Remand Tr. at 1564:2-13 (Swadener); see also *id.* at 1505:15-16 (Swadener) (“I think since we're in the planning stages still, we're designing where this pattern goes.”).

²² See Remand Tr. at 1564-18 to 1565:13 (Swadener).

²³ See Remand Tr. at 988:3 to 989:19 (Herber).

planned operations in Conroe.²⁴ Accordingly, while Denbury *may*, at some time in the next decade, implement CO₂ injection in the Upper Cockfield, there is no evidence in the record that Denbury's plans are even reasonably probable or implementable. Requiring the consideration of the hypothetical business plans of Denbury, when even Denbury representatives cannot describe these plans with certainty, sets the bar for permit issuance unrealistically high. Effectively, the ALJs' recommendation burdens an applicant to prove that any future actor or action will not interfere with the applicant's ability to comply with applicable statutory and regulatory requirements. As summarized above and detailed more fully in the record, Denbury's plans for future operations are kindly described as uncertain and, consequently, it is impossible for Applicant to address this moving and potentially non-existent target. Furthermore, as discussed below, Denbury's current operations have no effect on TexCom's Injection Interval, the Lower Cockfield Formation, and are not producing water from that formation currently.

2. There Will Be No Migration Of Wastewater From The Injection Interval

As described above in Part I.A, the preponderance of the evidence standard requires only that the evidence "point to the ultimate fact sought to be established with that degree of certainty as to make the conclusion *reasonably probable*."²⁵ In this case, three of the five experts who were qualified to testify regarding the geology of the Cockfield Formation (Mr. Greg Casey, Dr. Bruce Langhus, and Protestant witness Mr. Phil Grant) agreed that the shale layers between the Cockfield members sufficiently segregate the members so as to prevent fluid migration.²⁶

²⁴ See Remand Tr. at 952:3-11 (Herber).

²⁵ *State Farm Mut. Ins. Co. v. Davis*, 576 S.W.2d 920, 921 (Tex. Civ. App.—Amarillo 1979, writ ref'd n.r.e.) (internal citations omitted) (emphasis added).

²⁶ See PFD at 36 (referencing Mr. Casey's testimony that multiple layers of shale separate the Lower Cockfield from the Jackson Shale formation and serve to prevent vertical migration of fluids); *id.*

Similarly, Denbury's witness, Mr. Robert Sutherland, agreed that, according to Denbury Ex. 3, there is an approximately 30-foot shale layer separating the Lower Cockfield from the Middle Cockfield.²⁷ Mr. Sutherland also testified that the 1999 fall-off test²⁸ indicated no vertical migration pathway exists within a 1,500-foot radius around the well bore.²⁹ The ALJs also acknowledged that the fifth expert, Mr. Herber, agreed that the shale layer is continuous towards the EW-4400-S fault, but admitted that his contrary opinion regarding the shale layer's lack of continuity to the north was merely a hypothesis.³⁰

Furthermore, evidence taken from Denbury's expert disclosures clearly indicates that the Cockfield strata are not in communication.³¹ The table on TexCom Ex. 102 lists 12 pressure gradients ranging from 0.286 to 0.397 psi/ft based on pressure and depth measurements taken in Wapiti Well 2315D at the time it was drilled.³² Mr. Sutherland testified that if the Upper Cockfield sands were equalizing because they are in communication with each other, the

at 50 (referring to Mr. Grant's testimony that a 30-to-35 foot continuous shale layer separates the Lower and Middle Cockfield strata for *several miles* to the north and south of TexCom's proposed wells which prevent any communication between the Lower and Middle Cockfield strata within human time); *id.* at 52 (acknowledging that Mr. Grant and Dr. Langhus consistently and persistently testified that the shale layer between the Lower and Middle Cockfield within the area of review ("**AOR**") was persistent and would prevent fluid migration between those two layers within the AOR). For purposes of the PFD, the AOR is 2.7 miles north, 3.2 miles east and west, and 3.4 miles southeast and southwest of WDW315. *See id.* at 76.

²⁷ *See* Remand Tr. at 1643:14 to 1645:18, 1668:20 to 1669:9 (Sutherland).

²⁸ The ALJs indicated that this 1999 fall-off test was the most trustworthy because "no contested case was pending so there was no motive to slant the results." *See PFD* at 66.

²⁹ *See* Remand Tr. at 1663:21 to 1665:2 (Sutherland).

³⁰ *See PFD* at 50 (referring to Mr. Herber's testimony that the shale layer between the Lower and Middle Cockfield strata was continuous to the south, towards the EW-4400-S fault, and that he merely hypothesized that the shale layer grew thinner and eventually disappeared to the north).

³¹ *See* TexCom Ex. 102. TexCom Ex. 102 is also labeled "Den-B 00018" and was created at the direction of Mr. Herber. *See* Remand Tr. at 901:24 to 902:23 (Herber); *see also id.* at 1058:20 to 1059:1 (Herber) (indicating that the pressure measurements could only be taken at the time the well is drilled).

³² *See* Remand Tr. at 917:5 to 918:3 (Herber).

pressure gradients would all be the same.³³ But as indicated on TexCom Ex. 102, the pressure gradients are not the same. Indeed, as Mr. Herber pointed out, the pressure gradients, which are adjusted for depth, are “gradiationally getting larger as you go down” in depth from the 0.286 psi/ft calculated at 4,940 feet to the 0.397 psi/ft calculated at 5,504 feet.³⁴ The dissimilar pressure gradients measured throughout the Upper Cockfield in the same well (Well 2315D) at the same time by the same analytical tool show that the various sands within the Upper Cockfield are not even in communication with each other, much less the sands of the Lower Cockfield hundreds of feet below.³⁵

Additional evidence also proves that the Lower and Upper Cockfield Formations are not in communication. In his testimony at the remand hearing, Dr. Langhus explained that the shale layer must be sufficiently dense to isolate the Lower Cockfield given that the pressure gradients in the Lower Cockfield calculated by Mr. James Fairchild’s consulting firm in 1999 and by ALL Consulting in 2009 are identical to three significant figures – 0.406 psi/foot³⁶ – despite continuous and substantial oil and water production from the Upper Cockfield during the intervening ten years.³⁷ As Dr. Langhus explained, if there were connectivity between the Lower

³³ See Remand Tr. at 1649:15 to 1650:19 (Sutherland).

³⁴ See Remand Tr. at 925:2 to 927:23 (Herber).

³⁵ As indicated on TexCom Ex. 102, the unitized interval of the Upper Cockfield formation is at 4,680 feet to 5,420 feet as measured in WDW315. The Lower Cockfield formation is approximately 600 feet below the unitized interval at 6,045 feet to 6,390 feet as measured in WDW315. See, e.g., TexCom Ex. 27 at 2. And as recognized by Mr. Casey, Mr. Grant, and Mr. Herber, vertical permeability is an order of magnitude lower than horizontal permeability so the injected wastewater would have to overcome the path of *most* resistance to move upward. See Remand Tr. at 314:4-10 (Casey); *id.* at 553:8 to 554:19 (Grant); *id.* at 895:11-17 (Herber).

³⁶ See Remand Tr. at 1904:23 to 1910:19 (Langhus).

³⁷ See Remand Tr. at 1906:20 to 1907:3 (Langhus); see also Individual Protestants’ Closing Argument at 17 (“Knowing that the Upper Cockfield has been produced (sic) during the 10 year period,

and Upper Cockfield, one would expect the pressure gradient in the Lower Cockfield to have decreased over the past decade as pressure in the Upper Cockfield depleted, but it has not.³⁸ And despite Denbury's argument to the contrary,³⁹ the 0.406 psi/ft measured in the Lower Cockfield in WDW315 and the 0.397 psi/ft in Well 2315D are not "the same."⁴⁰ The 0.406 psi/foot measured in the Lower Cockfield in WDW315 in 1999, and the 0.406 psi/foot measured in the Lower Cockfield at WDW410 in 2009, however, *are* "the same," proving that production in the Upper Cockfield over a ten-year period has had no effect in the Lower Cockfield. Accordingly, the preponderance, if not the great weight, of the evidence proves that the shale layer separating the Lower and Middle Cockfield is thick enough and persistent enough to seal the Lower Cockfield injection interval from the remainder of the Cockfield Formation for at least 1,500 feet, if not further,⁴¹ in all directions around the WDW315 well bore and, according to credible testimony, the entire distance to the EW-4400-S fault.

Moreover, Applicant agrees with the ALJs' finding that "TexCom properly modeled the extent of the waste plume at 2,770 feet from the well bore [and thus], a preponderance of the evidence established that the waste plume will not reach the EW-4400-S fault to allow further migration up through the Middle Cockfield to the Upper Cockfield" from the Lower Cockfield injection interval.⁴² If so, then the waste plume will also never reach Denbury's existing

one would expect the Lower Cockfield pressure to be slightly reduced in 2009 if communication existed between the sands.").

³⁸ See Remand Tr. at 1904:23 to 1910:19 (Langhus).

³⁹ See Denbury's Closing Argument at 32.

⁴⁰ See Remand Tr. at 1901:9-17 (Langhus).

⁴¹ See Remand Tr. at 1663:21 to 1665:2 (Sutherland) (referring to radius of investigation of the 1999 fall-off test).

⁴² *Id.* at 52.

production wells. As Mr. Sutherland and Mr. Swadener testified, Denbury's *closest* production well is 3,000 feet from the WDW315 well,⁴³ which is clearly further than the distance TexCom estimates its plume will reach *after* 30 years of injection at maximum permitted injection rates 24 hours per day, seven days per week.⁴⁴ Furthermore, Mr. Swadener admitted that he had no modeling or calculations to support Denbury's theory of pressure sinks:

Q. This migration that you testify about from the Lower Cockfield to the Upper Cockfield, do you have any modeling that you've done that demonstrates that fluid movement?

A. No.

Q. Do you have any map that demonstrates that fluid movement?

A. No.

Q. How fast is that fluid going to move, in your opinion, from the Lower Cockfield to the Upper Cockfield?

A. I don't know how fast.⁴⁵

Accordingly, there is no evidence that TexCom's waste plume will ever reach Denbury's production wells or the EW-4400-S fault.

The only remaining concern of the ALJs is that the permit application designates the entire Cockfield Formation as the injection zone.⁴⁶ This, too, however, is overwhelmed by the preponderance of the evidence. Since the first hearing, Applicant has consistently maintained

⁴³ See *PFD* at 93 (citing Denbury Ex. 1 at 6:17-18 (Sutherland) (“[W]e have one well which was producing 3000 feet from TexCom’s WDW410 well.”); Denbury Ex. 18 at 19:14-15 (Swadener) (“The closest of these wells is within 3000 feet of TexCom’s well . . .”). This fact is also significant because it means that any pressure effects created by Denbury’s existing production wells should have been detected by both the 1999 and 2009 fall-off tests.

⁴⁴ See *PFD* at 52.

⁴⁵ Remand Tr. at 1470:18 to 1471:4 (Swadener).

⁴⁶ See *PFD* at 97.

that “the ‘injection zone’ is the entire Cockfield Formation because each of its Members are *potentially* in communication with each other *at the fault* located to the south of the TexCom site,”⁴⁷ i.e., the EW-4400-S fault. At the time the application was drafted, Applicant *believed*, but had not yet *proven*, that its waste plume would never reach the EW-4400-S fault.⁴⁸ Now that Applicant has proved by a preponderance of the evidence that the waste plume will not reach the EW-4400-S fault, and therefore, that the injected waste will not migrate vertically out of the injection interval through the fault,⁴⁹ Applicant’s request that the entire Cockfield Formation be designated as the injection zone is not indicative of anything except perhaps Applicant’s consistent efforts to be conservative. Therefore, there is sufficient evidence to conclude that there will be no migration of injected wastewater out of the injection interval, i.e., Applicant has demonstrated by a preponderance of the evidence that there will be no migration from the injection interval.

3. Even If Denbury Produces TexCom’s Injected Wastewater, Only Denbury Potentially Threatens Fresh Surface Or Groundwater

In order to issue a UIC permit for the disposal of nonhazardous wastewater, the Commission must find:

- (1) that the use or installation of the injection well is in the public interest;
- (2) that no existing rights, including, but not limited to, mineral rights, will be impaired;

⁴⁷ TexCom Ex. 49 at 34 (Casey) (emphasis added); *see also* TexCom Ex. 6 at 75 (Application Vol. 1) (“Because no thick shales divide the Lower and Middle members, the two are likely connected *across the 100 to 150-foot fault* to the south of the well.”) (emphasis added); *See* Remand Tr. at 233:23 to 234:4 (Casey); *id.* at 1916:15 to 1922:3 (Langhus); TexCom Ex. 114 (Dr. Langhus’s log data).

⁴⁸ *See* TexCom Ex. 6 at 135 (Application Vol. 1).

⁴⁹ *See PFD* at 52.

- (3) that, with proper safeguards, both ground and surface fresh water can be adequately protected from pollution;
- (4) that the applicant has made a satisfactory showing of financial responsibility if required by Section 27.073 of this code;
- (5) [limited to hazardous waste injection wells];
- (6) [limited to hazardous waste injection wells]; and
- (7) [limited to hazardous waste injection wells].⁵⁰

The ALJs focus their analysis regarding migration of TexCom’s injected wastewater on § 27.051(a)(3) (the third prong listed above). However, nothing in this provision or the implementing rules⁵¹ indicates that the production of injected wastewater alone violates the requirement that ground and surface fresh water be adequately protected from pollution.⁵² Indeed, the only way that production of injected wastewater could threaten ground or surface fresh water is if the producing entity improperly disposes of it. In this case, there is no evidence that Denbury will not or cannot operate in compliance with its permits and applicable statutes and regulations and, in fact, the evidence is to the contrary. Accordingly, there is no reason to believe Denbury’s production of TexCom’s injected wastewater threatens surface and ground fresh water.

During the hearing, Mr. Swadener explained that Denbury uses Class II wells to dispose of produced water⁵³ and that these wells “have received the appropriate permitting from the

⁵⁰ TEX. WATER CODE § 27.051(a).

⁵¹ See TEX. ADMIN. CODE Ch. 331.

⁵² The ALJs do not indicate that they are concerned about the integrity of the structure of TexCom’s or Denbury’s wells or potential leaking from those wells.

⁵³ See Remand Tr. at 1521:6-22 (Swadener). “Produced water” is “oil and gas waste,” as that term is defined in the Texas Water Code. See TEX. WATER CODE § 27.002(6) (“The term includes but is not limited to salt water, brine, sludge, drilling mud, and *other liquid or semi-liquid waste material.*”)

[Railroad Commission of Texas].”⁵⁴ There is no question that “produced water” is subject to regulation by the Railroad Commission.⁵⁵ Similar to Class I wells regulated by TCEQ, Class II well applications are subject to public comment and a public hearing if requested, and the wells are required to comply with casing, monitoring and reporting, mechanical integrity testing, and pressure testing requirements.⁵⁶ Nothing in the record indicates that Denbury cannot comply with its Class II well permits and applicable statutes and regulations.

Additionally, in his prefiled testimony, Mr. Swadener explained that Denbury currently “produces approximately 2,500 barrels of oil per day from the Conroe Field and approximately 240,000 barrels of produced water a day.”⁵⁷ In other words, of the total fluids currently produced *daily* by Denbury, only approximately 1% is oil and 99% is waste. TexCom’s permitted maximum injection rate is 350 gallons per minute,⁵⁸ which equates to approximately 12,000 barrels per day. Accordingly, if Denbury produced all of TexCom’s maximum daily

(emphasis added); *see also* 16 TEX. ADMIN. CODE § 3.8 (“The term “oil and gas wastes” includes, but is not limited to, saltwater, other mineralized water, sludge, spent drilling fluids, cuttings, waste oil, spent completion fluids, and *other liquid, semiliquid, or solid waste material.*”) (emphasis added).

⁵⁴ *See* Remand Tr. at 1523:1-3 (Swadener); *see also id.* at 1526:8-18 (explaining that the Railroad Commission of Texas permits Denbury’s Class II wells to inject “produced waters or produced fluids . . . into a hydrocarbon productive zone[,] meaning that the zones that [Denbury] would be injecting this produced water would have at some point, or still are producing hydrocarbons.”); *id.* at 1555:6-12 (confirming that all of Denbury’s Class II wells are permitted).

⁵⁵ While Texas Water Code Chapters 26 and 27 governing water quality and injection wells apply to both TexCom’s and Denbury’s wastewater injection wells, the “Railroad Commission of Texas is solely responsible for the control and disposition of waste and the abatement and prevention of pollution of surface and subsurface water resulting from . . . activities associated with the exploration, development, and production of oil or gas or geothermal resources.” TEX. WATER CODE § 26.131(a)(1) (the quoted language is identical in both versions of § 26.131, i.e., the version effective until delegation of RCRA authority to the Railroad Commission and the version effective upon delegation of RCRA authority to the Railroad Commission).

⁵⁶ *See* 16 TEX. ADMIN. CODE § 3.9.

⁵⁷ Denbury Ex. 18 at 6:4-5 (Swadener).

⁵⁸ *See, e.g.,* TexCom Ex. 27 at 3 (draft permits).

injection volume – which is extremely unlikely even if the sands were in unrestricted communication – it would only comprise 5% of Denbury’s daily volume of produced water and, according to the only evidence in the record and the law, Denbury would and must properly dispose of this produced water, thereby protecting “both ground and surface fresh water” from pollution.

During the hearing, ALJ Walston asked Mr. Swadener about the nature of his concerns regarding TexCom’s injected wastewater:

Q And I guess what I was leading to is your concern about the TexCom operations, it’s not so much the quantity or amount of water or fluids that might be produced, but the nature of those, that it could be Class 1 non-hazardous waste? Is that the concern?

A I think there’s a couple of concerns. The first would be that as they increase the pressure in the Lower Cockfield, it’s going to drive water up to our producers, which could inhibit our recovery of oil even before the CO₂ flood. And then secondly, if their fluids are injected and then we were to recover those, that would also be a concern.⁵⁹

In other words, Denbury is primarily concerned about increased pressure in the Lower Cockfield driving water that is naturally occurring in the Cockfield Formation – ironically, a water-drive field⁶⁰ – to its producing wells and somehow preventing the production of oil. Denbury is only secondarily concerned about producing *nonhazardous* wastewaters injected by TexCom. Clearly Denbury is not advocating on behalf of the public interest or for environmental protection, it

⁵⁹ Remand Tr. at 1561:25 to 1562:11 (Swadener).

⁶⁰ See Remand Tr. at 941:5-8, 990:23 to 991:5 (Herber) (explaining that the Conroe Field is a water-drive field); *id.* at 1616:14-25 (Sutherland) (same).

simply favors its business interests over others: Denbury would prefer that another business venture it perceives to be potentially detrimental to its plans not be allowed to proceed.⁶¹

In addition, the ALJs and Commission should note that Mr. Sutherland, on behalf of Denbury, admitted during the hearing that Denbury can avoid the theoretical potential production of TexCom's injected wastewater – a theory that TexCom disputes – by, as one example, establishing a water fence.⁶² Specifically, water fences can and have been used to isolate two projects.⁶³ The ALJs and Commission should consider, then, that the hypothetical production of injected wastewater can be eliminated by Denbury, and, if Denbury believes in its theory, it can take appropriate steps to prevent the occurrence.

4. Proposed Permit Condition To Resolve Migration Concerns

To the extent necessary to resolve any remaining migration concerns, TexCom would accept a revision to the permit that redefines the injection zone as the injection interval, i.e., the Lower Cockfield formation at well log depths of 6,045 feet to 6,390 feet. Additionally, or alternatively, because TexCom must conduct a fall-off test on its wells after permit issuance and

⁶¹ Remand Tr. at 1705:2-8 (Sutherland) (testifying as follow:

Q Sir, you would have – we have two business ventures, Denbury's business venture and TexCom's business venture. Correct?

A Correct.

Q And you would have TexCom forego its business venture in favor of Denbury's. Is that true?

A Yes.).

⁶² Remand Tr. at 1671:10 to 1672:11 (Sutherland) (implying also that there were other options besides establishing water fences, but not going into detail).

⁶³ Remand Tr. at 1699:5-11 (Sutherland).

before putting them into operation,⁶⁴ TexCom could be specifically required to verify that there are no preferential pathways that could allow migration of the injected wastewater out of the Lower Cockfield within 3,000 feet of the well bore and, consequently, that there will be no migration of the injected wastewater out of the Lower Cockfield that could lead to production of wastewater in a Denbury well.

C. TEXCOM'S PROPOSED UIC WELLS SERVE THE PUBLIC INTEREST

In order to grant a UIC permit, the Commission must also find that “that the use or installation of the injection well is in the public interest”⁶⁵ and is instructed to consider the following non-exclusive list in making that finding: “(1) [the] compliance history of the applicant . . .; [and] (2) whether there is a *practical, economic, and feasible alternative* to an injection well *reasonably available*. . . .”⁶⁶ Here, the ALJs recommended that the Commission deny TexCom’s UIC permit application because, while “[n]o one method [of disposal] is free from complications,” “currently there is a reasonable alternative to the disposal of nonhazardous waste, the [Conroe] POTW that is already permitted to dispose of Class I nonhazardous waste.”⁶⁷ Respectfully, Applicant maintains that this recommendation is contrary to the preponderance of the evidence that clearly establishes that the Conroe POTW is **not** economic, feasible, or reasonably available pursuant to the Texas Water Code.

As acknowledged in the PFD, “[t]he evidence presented shows that the injection method of disposal for Class I nonhazardous wastewater is a practical, economic, and feasible disposal

⁶⁴ See 30 TEX. ADMIN. CODE § 331.45 (regarding Executive Director approval of construction and completion).

⁶⁵ TEX. WATER CODE § 27.051(a).

⁶⁶ TEX. WATER CODE § 27.051(d)(1), (2) (emphasis added).

⁶⁷ PFD at 90.

method for Class I wastewater.”⁶⁸ In contrast, the Conroe POTW’s Assistant Plant Superintendent/Pretreatment Coordinator Mr. Melvin Solomon testified that the POTW currently serves only 10 industrial generators, which he estimated is likely less than half the number of industrial generators operating in the Conroe area.⁶⁹ Likewise, the Conroe POTW’s service area does not include even half of Montgomery County.⁷⁰ In order to use the Conroe POTW, an industrial generator must be connected to a Conroe sewer line⁷¹ and in order to connect to the sewer line, the generator must apply for a building permit to *begin* the process.⁷² Even if a generator is located within the POTW’s service area, successfully applies for a building permit, and connects to the City of Conroe’s sewer line (at the generator’s expense), there is no guarantee that the POTW will be able to take that generator’s specific waste stream, even if pretreated, or that the POTW will be able to accept the entire waste stream.⁷³ For these reasons, the Conroe POTW is not economic, feasible, or reasonably available to all industrial wastewater generators in Montgomery County, much less out-of-county generators.⁷⁴ In other words, the Conroe POTW and TexCom’s proposed UIC wells serve different functions and different communities of wastewater generators. There is no better and objective evidence of this reality than the fact that large industrial generators like Huntsman currently ship their wastewater to

⁶⁸ PFD at 89.

⁶⁹ See Remand Tr. at 1318:12-24 (Solomon).

⁷⁰ See *id.* Tr. at 1320:1-8 (Solomon).

⁷¹ See *id.* at 1319:9-19 (Solomon).

⁷² See *id.* at 1319:3-8 (Solomon).

⁷³ See *id.* at 1330:13 to 1331:6 (Solomon).

⁷⁴ Applicant does not intend to limit consideration of the public interest to Montgomery County, but presumes that if the POTW is not reasonably available to potential industrial users in Montgomery County, it is also not reasonably available to potential users outside of Montgomery County.

injection wells in other counties⁷⁵ and do not use the Conroe POTW.⁷⁶ Indeed, Aligned Protestants' witness Dr. William Wilder testified that Huntsman, alone, generates approximately 120,000 gallons per day Monday through Friday,⁷⁷ and sends about 18-20 trucks per day to Jefferson and Liberty Counties for wastewater disposal.⁷⁸

Furthermore, while the Commission must consider the public interest in determining whether or not to grant a UIC permit, the Commission need not give it the same weight as other factors. "Administrative agencies have wide discretion in determining what factors to consider when deciding whether the public interest is served."⁷⁹ However, "the existence of the Commission's statutory power to consider 'public interest' factors does not imply how the Commission should exercise it in determining the weight any particular proffered 'public interest' consideration should be given."⁸⁰ Accordingly, even if the Conroe POTW were a practical, economic, and feasible alternative that is reasonably available to all industrial wastewater generators in Montgomery County, which as a practical reality it is not, the Commission is authorized to also permit TexCom's UIC wells.

⁷⁵ See TexCom Ex. 92 at 17:4-7 (Bost).

⁷⁶ See PFD at 115. Regardless of the exact numbers, according to TCEQ records, hundreds of millions of pounds of wastewater are generated annually in Montgomery County and are not treated by the Conroe POTW. See *id.*

⁷⁷ See Remand Tr. at 1357:20-24 (Wilder).

⁷⁸ See Remand Tr. at 1384:5-11 (Wilder); AP Remand Ex. 10 at 24:1-3 (Wilder).

⁷⁹ *Tex. Citizens for a Safe Future & Clean Water v. R.R. Comm'n of Tex.*, 254 S.W.3d 492, 499 (Tex. App—Austin, pet. granted, 2008).

⁸⁰ *Tex. Citizens*, 254 S.W.3d at 504 (Pemberton, B., concurring); see also *id.* at 507 (Waldrop, G., concurring) ("The Commission is charged with considering the 'public interest' in granting or denying an injection well permit and may give public interest considerations the weight it considers appropriate within its statutory grant of authority.").

**II.
PROPOSED REVISIONS TO PROPOSED ORDER**

For the reasons set forth above, TexCom respectfully proposes the following revisions to the ALJs' Proposed Order:

| PAGE NO(S). | PROVISION | PROPOSED REVISION(S) | BASIS FOR PROPOSED REVISION(S) |
|--------------------|----------------------------|---|---|
| 1 | Introduction | Replace "Denying" with "Granting" | See Applicant's Exceptions to Amended PFD. |
| 8 | Finding of Fact 55 | Replace "full-off" with "fall-off" | Typographical error. |
| 8 | Findings of Fact 62, 63 | Replace "parties" with "Parties" | Consistency (<i>See, e.g.</i> , Finding of Fact (" FOF ") 61. |
| 8 | Finding of Fact 63 | Replace "20" with "10" | Typographical error. |
| 9 | Finding of Fact 65 | Revise second line to read: "is between <u>well log depths</u> of 5,134 and 6,390 feet below ground <u>as measured in WDW315</u> , and it includes" | Clarity |
| 9 | Finding of Fact 65 | If necessary, revise to read: TexCom's proposed Injection Zone, the geological formation that receives fluid through the well, is between well log depths 6,045 and 6.390 feet below ground as measured in WDW315, and it includes the formation known as the Lower Cockfield. | See Applicant's Exceptions to Amended PFD at 15. |
| 9 | Finding of Fact 68 | Replace "Well" with "well" | Consistency (<i>See, e.g.</i> , FOF 66). |

| PAGE No(s). | PROVISION | PROPOSED REVISION(S) | BASIS FOR PROPOSED REVISION(S) |
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| 10 | Finding of Fact 76 | Well WDW315 was initially perforated <u>across</u> 100 feet <u>of wellbore</u> in various sand intervals from 6,184 to 6,372 feet. In 2009, TexCom perforated WDW315 for <u>across</u> a total of 145 feet . . . | Clarity. |
| 11 | Finding of Fact 86 | Replace "March" with "December" | Typographical error. |
| 12 | Finding of Fact 91 | . . . the lower boundary of a <u>persistent</u> 35-foot thick layer of alternating beds of shale, silt, and sand at the base of the Middle Cockfield. | See Applicant's Exceptions to PFD at 6-11. |
| 12 | Finding of Fact 92 | The Lower Cockfield has sufficient thickness, <u>porosity, permeability,</u> areal extent, and lateral continuity to <u>safely</u> contain the proposed amount of injected fluid. | No explanation in the PFD for ALJs' revisions to this provision. |
| 12 | Finding of Fact 93 | The Lower, Middle, and Upper Cockfield Members are separated from one another by 30- to 40-foot <u>shale</u> layers which will of alternating beds of shale, silt, and sand. It was not established by a preponderance of the evidence that these layers would prevent injected wastewater or any other fluids from passing vertically between the Lower, Middle, and Upper Cockfield. | See Applicant's Exceptions to PFD at 6-11. |
| 13 | Finding of Fact 94 | The <u>only place</u> evidence was uncertain as to whether the Lower, Middle, and Upper Cockfield Members may be are in communication with each other within the Area of Review (AOR) <u>is</u> at the east-west running fault located 4,400 feet south of the site, the EW-4400-S fault. | See Applicant's Exceptions to PFD at 9. |
| 14 | Finding of Fact 104 | Replace "site" with "wells" | The site already exists. |

| PAGE NO(S). | PROVISION | PROPOSED REVISION(S) | BASIS FOR PROPOSED REVISION(S) |
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| 14 | Finding of Fact 107 | Insert "or improperly cased" between "uncased" and "abandoned" | See TexCom Ex. 84 at 14:12 to 15:13 (Casey). |
| 14 | Finding of Fact 110 | Replace "200,000" with "240,000" | See Denbury Ex. 18 at 6:4-5 (Swadener). |
| 15 | Finding of Fact 112 | Insert "may" between "wells" and "creates" | See Applicant's Remand Response to Closing Argument at 29-33. |
| 15 | Finding of Fact 113 | The evidence was uncertain as to whether the layers of shale, silt, and sand that separate the different members of the Cockfield formations <u>and separate the Upper Cockfield from the Jackson Shale formation</u> would prevent the upward migration of fluids from the Lower Cockfield Injection Interval to the Middle and Upper Cockfield members of the Injection Zone. | See Applicant's Exceptions to PFD at 6-11; typographical error. |
| 15 | Finding of Fact 114 | <u>Even</u> if TexCom's wastewater plume migrates from the Lower Cockfield Injection Interval to the Upper Cockfield portion of the Injection Zone, it could <u>eventually would not</u> be pumped to the surface through Denbury's production wells. | See Applicant's Exceptions to PFD at 6-11. |
| 17 | Finding of Fact 138 | Except for artificial penetrations, <u>The geology of the AOR, specifically the Cockfield layers of shale and the Jackson Shale</u> would prevent the vertical migration of fluid that might endanger the USDWs and fresh or surface water. | See Applicant's Exceptions to PFD at 6-11. |

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| 21 | Finding of Fact 166 | <p>For TexCom's proposed facility, the AOR extends 2.7 miles (14,300 feet) to the north of well WDW315; 3.2 miles (17,130 feet) to the east and west; and 3.4 miles (18,140 feet) to the southeast and southwest along the EW-4400-S fault.</p> <p><u>A permit condition should be added for WDW410 specifying that:</u></p> <p><u>a. _____ before injection operations begin, TexCom shall conduct a fall-off test on the existing well in order to confirm the reservoir modeling predictions within 3000 feet of the well bore.</u></p> <p><u>b. _____ TexCom shall remodel and recalculate the COI based on the new information and determine whether any artificial penetrations extend into the injection interval of the recalculated COI or adjust operating parameters to limit the area of the COI, as necessary; and</u></p> <p><u>c. _____ the results of the new fall-off test shall be provided to counsel for Lone Star, the Aligned Protestants the Individual Protestants, Denbury, PIC, and the Executive Director.</u></p> | Redundant provision (See FOF 149); <i>see also</i> Applicant's Exceptions to PFD at 9. |
| 22 | Finding of Fact 175 | Replace "continuous" with "continuously" | Typographical error. |
| 22 | Finding of Fact 178 | The injected wastewater should <u>is not predicted to reach the EW-4400-S fault 4,400 feet south of the site,</u> and would remain contained in the Lower Cockfield | Clarity. |

| PAGE No(s). | PROVISION | PROPOSED REVISION(S) | BASIS FOR PROPOSED REVISION(S) |
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| 22 | new after Finding of Fact 178 | <p><u>It will not be possible for wastewater injected by TexCom to travel upward through existing artificial penetrations and into a USDW.</u></p> <p><u>The maximum operating surface injection pressure of 1,250 psi will not cause movement of fluid out of the injection zone and subsequent contamination of USDWs and fresh or surface water.</u></p> | See Applicant's Exceptions to PFD at 6-11. |
| 24 | Finding of Fact 187 | Replace "this" with "that" | Typographical error. |
| 24 | Finding of Fact 190 | Replace "does not" with "may" | See PFD at 89. |
| 25 | Finding of Fact 196 | Conroe's POTW is <u>not</u> a reasonably <u>available</u> alternative to <u>TexCom's proposed UIC wells</u> for the disposal of Class I nonhazardous waste that is practical, economical, and feasible to a UIC in the Montgomery County area. | See Applicant's Exceptions to PFD at 16-18. |
| 25 | Finding of Fact 197 | If necessary, revise to read: TexCom's Injection Zone <u>should be limited to</u> includes not only the Lower Cockfield, but the Middle and Upper Cockfield formation. | See Applicant's Exceptions to Amended PFD at 15. |
| 25 | Finding of Fact 198 | Even if the wastewater injected by TexCom migrates to the Upper Cockfield, the oil and gas production in the Conroe Oil Field, particularly the proposed carbon dioxide enhanced oil recovery, could <u>would not</u> pull the wastewater back to the surface. | See Applicant's Exceptions to Amended PFD at 11-15. |
| 25 | Finding of Fact 199 | Delete "failed to" and replace "prove" with "proved" | See Applicant's Exceptions to Amended PFD at 6-15. |

| PAGE No(S). | PROVISION | PROPOSED REVISION(S) | BASIS FOR PROPOSED REVISION(S) |
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| 25 | Finding of Fact 200 | Delete “did not” and replace “establish” with “established” | See Applicant’s Exceptions to Amended PFD at 6-15. |
| 27 | Finding of Fact 212 | The overall increase in traffic because of TexCom’s facility <u>will be minimal except along the 700 feet of Creighton Road used by all truckers to get to TexCom’s facility would be substantial.</u> | See Applicant’s Remand Response to Closing Argument at 55-60. |
| 27 | Finding of Fact 216 | The access manual sets out <u>TxDOT’s guidelines for the safest distance requirements between access points along a roadway.</u> | See PFD at 106. |
| 27 | Finding of Fact 219 | Replace “must” with “should” | See PFD at 106 (the access manual is not a promulgated rule that has the force of law). |
| 28 | Finding of Fact 220 | Replace “point” with “points” | Typographical error. |
| 28 | Finding of Fact 224 | Replace “motorist” with “motorists” | Typographical error. |
| 29 | new after Finding of Fact 237 | <u>In comparison to other counties in the area, only Harris County generates more liquid wastes than Montgomery County.</u> <u>The wastewaters generated in the Montgomery County area are generally not capable of being recycled because they are not concentrated, and do not contain substances of value in recoverable concentrations.</u> <u>The only in-county disposal options are a landfill at which solidification of liquid waste is not economical, and the public treatment plants, which are not reasonably available to accept all of the industrial wastewater generated in Montgomery</u> | See TexCom Ex. 92 at 15:13-22, 16:1-9, 16:16-17, 18:8 to 19:2, 19:4 to 21:17 (Bost); Remand Tr. at 1319:9-19, 1320:1-9, 1330:22 to 1331:6 (Solomon); see also Applicant’s Exceptions to PFD at 16-18. |

| PAGE No(s). | PROVISION | PROPOSED REVISION(S) | BASIS FOR PROPOSED REVISION(S) |
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| | | <p>County.</p> <p>The area served by the City of Conroe's POTW is less than half of Montgomery County, and not all industrial wastewaters generated within that area would be eligible for treatment at the POTW.</p> <p>A need for more nonhazardous waste disposal services exists in the Montgomery County area to serve sources of nonhazardous wastewater in Montgomery and nearby counties, including Harris County, that cannot be served by existing alternatives.</p> <p>No other waste disposal option (discharge to surface waters, onsite storage, land disposal or incineration) is a practical, economic, feasible, and reasonably available alternative to injection.</p> <p>Local businesses could realize monetary savings by being able to dispose of wastewaters locally.</p> | |
| 34 | Conclusion of Law 8 | Replace "could" with "will not" | See Applicant's Exceptions to PFD. |
| 34 | Conclusion of Law 9 | If the Facility is operated in compliance with applicable law, issuance of the Draft Permits will not could adversely affect the environment nor and the public health and welfare. | See Applicant's Exceptions to PFD. |

| PAGE No(s). | PROVISION | PROPOSED REVISION(S) | BASIS FOR PROPOSED REVISION(S) |
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| 35 | new after Conclusion of Law 19 | Pursuant to 30 TEX. ADMIN. CODE § 331.65(a)(1), before operation begins, TexCom will be required to submit to TCEQ a report in which it must include the results of new fall-off testing, and if appropriate, a re-calculated AOR and COI based on the results of that testing. | See Applicant's Exceptions to PFD. |
| 35 | Conclusion of Law 22 | In accordance with 30 TEX. ADMIN. CODE § 331.121(c)(3)(A), TexCom's proposed wells would be sited such that the Injection Zone has sufficient permeability, porosity, thickness, and areal extent to prevent migration of fluids into USDWs or freshwater aquifers hold the injected wastewater. | See Applicant's Exceptions to PFD. |
| 36 | Conclusion of Law 29 | Denbury's hydrocarbon production wells completed in the Upper Cockfield portion of the Injection Zone could <u>not</u> pump to the surface the wastewater injected by TexCom into the Lower Cockfield Injection Interval that migrates to the Upper Cockfield. | |
| 38 | Conclusion of Law 44 | In accordance with 30 TEX. ADMIN. CODE § 331.5(a), TexCom's <u>proposed</u> wells, if constructed and operated in accordance with the specifications listed in the UIC Application and the requirements of the draft permits, will may not cause or allow prevent the movement of fluid that would result in the pollution of a USDW. | |
| 38 | new after Conclusion of Law 44 | In accordance with 30 TEX. ADMIN. CODE § 331.121(c)(4)(D), abandoned boreholes or other conduits will not cause endangerment of USDWs, and fresh or surface water. | |

| PAGE No(s). | PROVISION | PROPOSED REVISION(S) | BASIS FOR PROPOSED REVISION(S) |
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| 38 | Conclusion of Law 45 | Replaced "may" with "will not" | |
| 38 | Conclusion of Law 46 | Replace "may not" with "can" and insert "compliance" between "in" and "with" | |
| 39 | Conclusion of Law 49 | Replace "does not satisfy" with "satisfies" | |
| 39 | Conclusions of Law 52-54 | These should be renumbered to follow consecutively from previous provision. | Typographical error. |
| 39 | new after Conclusion of Law 49 | <p>Pursuant to the authority of, and in accordance with, applicable laws and regulations, Permit Nos. WDW410, WDW411, WDW412, and WDW413 should be granted with the addition of the following special condition to Permit No. WDW410:</p> <p>a) <u>Any changes to the plans and specifications in the UIC Application shall be performed in accordance with 30 TEX. ADMIN. CODE § 331.62(3).</u></p> <p>b) <u>Prior to commencement of waste injection, the reservoir characteristics and pressure response in the injection zone shall be monitored by means of a shutdown of the well for a sufficient time to conduct a valid observation of the pressure fall-off curve (a fall-off test). The radius of investigation of this falloff test shall be at least 3,000 feet.</u></p> <p>c) <u>Prior to commencement of waste injection, TexCom shall use the fall-off test results to determine the permeability of the injection</u></p> | |

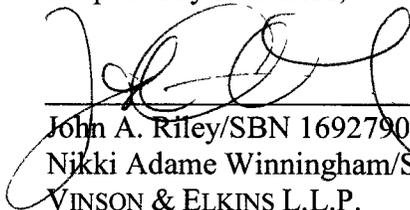
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| | | <p><u>interval and confirm that there are not migration pathways out of the Injection Interval.</u></p> <p>d) <u>If necessary, TexCom shall remodel and recalculate the COI using the new information and determine whether any artificial penetrations extend into the injection interval of the recalculated COI that would endanger any USDW or adjust operating parameters to limit the area of the COI as necessary to protect USDWs and freshwater resources.</u></p> <p>e) <u>Results of the fall-off test and of the new reservoir modeling shall be provided to the Executive Director and PIC, and counsel for Lone Star, the Aligned Protestants, Denbury, and the Individual Protestants.</u></p> <p>f) <u>Applicant shall submit a Completion Report to the Executive Director in accordance with 30 TEX. ADMIN. CODE §§ 331.45 and 331.65, as appropriate.</u></p> <p>g) <u>In compliance with 30 TEX. ADMIN. CODE § 331.65(a)(4), prior to beginning operations, Applicant must obtain written approval from the Executive Director.</u></p> | |
| 39 | Conclusion of Law 52 | Delete "If the permit is granted," | |

| PAGE No(s). | PROVISION | PROPOSED REVISION(S) | BASIS FOR PROPOSED REVISION(S) |
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| 39 | Ordering Provision 1 | Replace “denied” with “granted” | |
| 39 | new after Ordering Provision 1 | <u>Permit No. WDW410 shall contain the additional conditions described in Conclusion of Law No. 50.</u> <u>Permit Nos. WDW410, WDW411, WDW312, and WDW413 shall contain the additional condition described in Conclusion of Law No. 512.</u> | |

**III.
CONCLUSION**

For the foregoing reasons, TexCom respectfully requests that Permit Nos. WDW410, WDW411, WDW412, and WDW413 be issued and that the ALJs’ Revised Proposed Order be amended as proposed above.

Respectfully submitted,



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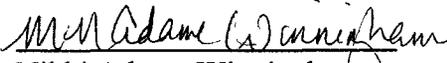
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