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2008 MAY 15 PM 4: 31

CHIEF CLERKS OFFICE

May 15, 2008

*Via Hand Delivery*

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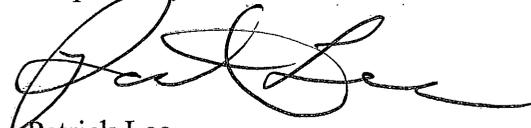
RE: *Application of TexCom Gulf Disposal, LLC for Texas Commission on Environmental Quality Underground Injection Control Permit Nos. WDW410, WDW411, WDW412 and WDW413, SOAH Docket No. 582-07-2673, TCEQ Docket No. 2007-0204-WDW; and*

*Application of TexCom Gulf Disposal, LLC for Texas Commission on Environmental Quality Industrial Solid Waste Permit No. 87758, SOAH Docket No. 582-07-2674, TCEQ Docket No. 2007-0362-IHW*

Dear Ms. Castañuela:

Please find one original and twelve copies of Applicant TexCom Gulf Disposal, LLC's Exceptions to the Administrative Law Judges' Proposals for Decision in each of the above-referenced dockets. Please return one file-stamped copy of each to the courier. Thank you.

Respectfully submitted,



Patrick Lee

cc: Service List (Via Electronic Mail)

ORIGINAL

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

APPLICATION OF TEXCOM GULF § BEFORE THE STATE OFFICE  
DISPOSAL, L.L.C. 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 THE ADMINISTRATIVE LAW JUDGES' PROPOSAL FOR DECISION**

TO: THE HONORABLE ADMINSTRATIVE LAW JUDGES

In accordance with 30 TEX. ADMIN. CODE § 80.257(a), TexCom offers for the Administrative Law Judges' ("ALJs") consideration the following proposed revisions. Each of the ALJs' 227 Findings of Fact and 53 Conclusions of Law are supported by the record, but for the sake of consistency and clarity, Applicant respectfully recommends revisions to a small number.

**I.  
FINDINGS OF FACT**

**Finding of Fact No. 68:**

*The geology of the area was described confidently and the limits of waste fate and transport ~~can be~~ were accurately predicted through the data obtained from the existing well and the use of analytical and numerical models.*

TEXAS  
COMMISSION  
ON ENVIRONMENTAL  
QUALITY  
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**Finding of Fact No. 69:**

*The proposed injection wells are located ~~on~~ in the Conroe Oil Field.*

**Finding of Fact No. 79:**

*Because the Cockfield Members are potentially in communication with each other at the EW-4400-S fault, The the proposed “injection zone” (as opposed to the “injection interval,” which is the formation into which TexCom will inject wastewaters) is the entire Cockfield Formation, which is approximately 1,222 feet thick.*

The distinction between the “injection zone” and the “injection interval,” explained by Greg Casey<sup>1</sup> and recognized by the PFD, was not disputed. TexCom believes these proposed revisions will assist the Commissioners and others in distinguishing between the two concepts.

**Finding of Fact No. 87:**

*The ~~COI~~ cone of influence (COI) is the area within which the reservoir pressure build-up over the lifetime of the facility is sufficient to, theoretically, displace a drilling mud plug in an abandoned well exposed to that pressure build-up.*

The abbreviation for “cone of influence” is not introduced in an earlier Finding.

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<sup>1</sup> TexCom Ex. 49 (Casey pre-filed), 33:25-34:9.

**Finding of Fact No. 115:**

*The water in the lower part of the Catahoula Aquifer is not likely treatable to health and aesthetic standards to serve as drinking water.*

As recognized by the PFD,<sup>2</sup> TexCom demonstrated compliance with 30 TEX. ADMIN. CODE § 331.121(c)(4)(D) relating to abandoned boreholes and other conduits; therefore, pursuant to TCEQ's rules, TexCom was not required to demonstrate compliance with § 331.121(c)(4)(A) relating to the presence of a "buffer zone." This Finding, therefore, has no bearing on any demonstration TexCom was required to make. Nevertheless, we believe it does not accurately reflect the relevant testimony and therefore should be revised.

Dr. Langhus' testimony was that the lower part of the Catahoula "is certainly not a source of – not current source of drinking water and not in any shape or form a future source of drinking water."<sup>3</sup> When asked whether technology may advance such that the lower part of the Catahoula could be used as drinking water in the foreseeable future, Dr. Langhus said no.<sup>4</sup> TexCom does not find any testimony contradicting Dr. Langhus on this point.

**Finding of Fact No. 118:**

*As recently as 2002, the ~~Lower~~ lower part of the Catahoula Aquifer was being used for permitted disposal of produced oilfield brine and other ~~Class II~~ wastes via Class II well.*

The reference to the disposal of oilfield wastes in the Catahoula was to Class II wells.<sup>5</sup> TexCom does not recall any testimony specifically addressing any Class II wastes, defined by 30 TEX. ADMIN. CODE § 335.1(19).

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<sup>2</sup> At Conclusions of Law 29 and 45.

<sup>3</sup> Tr. at 403:3-15 (Langhus on cross) (emphasis added).

<sup>4</sup> Tr. at 456:1-23 (Langhus on cross).

<sup>5</sup> See Tr. at 443:4-446:17 (Langhus on re-direct).

**Finding of Fact No. 123:**

*The multiple layers of shale that separate the Lower, Middle and Upper different member Members of the Cockfield Formation formations and separate the Upper Cockfield member from the Jackson Shale formation will prevent the upward migration of fluids out of the Lower Cockfield and into the Middle and Upper Cockfield except possibly at the EW 4400 S fault.*

TexCom believes that, without the proposed revisions, this Finding could be misread to imply that injection fluids might be capable of escaping the Cockfield Formation altogether via the EW 4400 S fault. As recognized by Finding of Fact No. 164, the injected wastewater will not reach the EW 4400 S fault and will remain contained in the Lower Cockfield. But even if it were capable of reaching the fault, as recognized by Findings of Fact Nos. 95 and 102, the EW 4400 S fault is not capable of propagating upward through the 1,000-foot Jackson Shale, which acts as a confining unit, preventing any upward migration of liquids out of the Cockfield Formation.

**Findings of Fact Nos. 138, 139, 140, 141, 146, 158 & 159:**

TexCom proposes that these Findings be revised to use the correct abbreviation for millidarcy, which is “mD.”

**Finding of Fact No. 146:**

*Although TexCom plans to re-perforate WDW-315, it ~~should~~ could have used the 80.9 ~~mD~~ mD permeability measured by the 1999 fall-off test in its reservoir modeling to ~~conservatively calculate~~ be more conservative in calculating the area of the COI.*

Even though there is no rule requiring any particular level of conservatism, TexCom's modeler, Greg Casey, made conservative assumptions in performing his modeling.<sup>6</sup> The PFD acknowledges this. For example, Finding of Fact No. 132 states, "Based on TexCom's current modeling, the pressure increase at the wellbore as a result of continuous injection at maximum rates for 30 years is *conservatively* predicted through reservoir modeling to be 599 psi."<sup>7</sup> For another example, Finding of Fact No. 162 states, "TexCom's model *conservatively* assumed that reservoir pressures will be increasing continuously for 30 years without interruption, while in reality the pressures will dissipate each time the pumps are turned off, reducing the actual pressure build-up."<sup>8</sup> In all of Mr. Casey's experience, he has never seen the monitored pressure build-up at a Class I UIC even approach what the reservoir model predicted.<sup>9</sup>

This conservatism extended to Mr. Casey's selection of a permeability value. As acknowledged by the PFD, permeability is one of the modeling parameters for which TCEQ's UIC program requires verification by actual testing after a proposed well is drilled and perforated (which TexCom will be required to do after it re-perforates Well WDW-315). This is because, unlike some other parameters, the permeability cannot be known until the well is perforated in the exact locations at which wastewater will be injected.

In order to perform preliminary, pre-testing modeling, Mr. Casey used a value for permeability of 500 mD. As acknowledged by the PFD, this is *lower* than the permeability

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<sup>6</sup> Mr. Casey discussed various examples of conservatism throughout the hearing and in his pre-filed testimony. Tr. at 191:25-192:13, 241:9-11 (Casey on cross); Tr. at 289:25-290:15 (Casey on re-direct); TexCom Ex. 49 (Casey pre-filed), 43:25-44:8.

<sup>7</sup> Emphasis added.

<sup>8</sup> Emphasis added.

<sup>9</sup> Tr. at 242:5-8 (Casey on cross). All UIC permittees (including TexCom when it receives its permit), are required to perform an annual fall-off-test to determine the reservoir pressure build-up. Tr. at 241:25-242:5 (Casey on cross).

values indicated for the section planned for re-perforation by core analysis performed when WDW-315 was drilled in 1999.<sup>10</sup> Mr. Casey explained that, based on the results of that core analysis, a literature review and other sources, he expected the permeability to be between 600 and 800 mD after re-perforation of WDW-315.<sup>11</sup> The 500 mD value, therefore, was conservative and, ultimately, must be confirmed as such through subsequent testing of the re-perforated well before any waste will be injected.

TexCom proposed to, and will be required to, re-perforate the existing well precisely to *avoid* the sand strata measured as having a permeability of 80.9 mD. TexCom believes that, given that Mr. Casey's modeling was, in fact, conservative in many respects, and that a particular degree of conservatism is not required, it is more appropriate to say that TexCom "could" have been "more" conservative by using a permeability of 80.9 mD. Of course, a value lower than 80.9 mD could also have been arbitrarily chosen to add even more conservatism into the model but, again, the modeled permeability will have to be demonstrated as conservative before waste injection may occur.

**Finding of Fact No. 147:**

*For this Facility, the COI is the area of pressure increase within the injection zone of 421 psi or greater, which would, theoretically, be sufficient to displace a drilling-mud plug in an abandoned well completed in the Lower Cockfield and thus create a potential pathway to contaminate a USDW or freshwater aquifer.*

As stated in Findings of Fact Nos. 77, 123 & 164, the injected wastewaters will not be capable of escaping the Lower Cockfield (i.e., the injection interval of 6,045 to 6,390 feet). Therefore, as stated in Finding of Fact No. 98, in order for an abandoned well within the COI to even potentially create a pathway for upward migration, it would have to be completed in the Lower Cockfield. There are no such wells, as stated in Finding of Fact No. 91.

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<sup>10</sup> Finding of Fact. No. 140.

<sup>11</sup> Tr. at 199:1-2, 202:10-14 (Casey on cross).

**Finding of Fact No. 154:**

*To be additionally conservative and protective of USDWs, TexCom ~~should~~ could have assumed that the EW-4400-S fault was not horizontally transmissive for purposes of determining the extent of the COI.*

See explanation above regarding Finding of Fact No. 146.

**Finding of Fact No. 158:**

*TexCom calculated the COI in this case through reservoir modeling to be 750 feet. In this reservoir modeling, TexCom used a permeability factor of 500 ~~md~~ mD, ~~and assumed the EW-4400-S fault was laterally and vertically transmissive, between the Lower and Middle Cockfield segments, resulting in an assumed injection interval that is~~ and conservatively assumed a thickness of 145 feet thick before the fault and 401 feet beyond the fault.*

Greg Casey explained why using a *thickness* (which is related to the perforated interval, not the injection interval)<sup>12</sup> of 145 feet was conservative.<sup>13</sup>

**Finding of Fact No. 169.b:**

*If the fall-off indicates a permeability of < 500 mD or that fault EW-4400-S is not laterally transmissive, 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*

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<sup>12</sup> Tr. at 192:14-18 (Casey cross).

<sup>13</sup> Tr. at 191:19-192:13, 238:19-239:11, 241:2-12 (Casey cross).

**Finding of Fact No. 169.c:**

*the results of the new fall-off test shall be provided to ~~counsel for Lone Star, the Aligned Protestants, the Individual Protestants, and PIC TCEQ's Executive Director and Office of Public Interest Counsel; Michael Gershon and Jason Hill of Lloyd Gosselink Blevins Rochelle & Townsend, P.C. (counsel for the Lone Star Groundwater Conservation District); David Walker and Julie Stewart of the Montgomery County Attorney's Office (counsel for Aligned Protestants Montgomery County and City of Conroe); and Kevin Forsberg of The Forsberg Law Firm, P.C. (counsel for the Aligned Individual Protestants).~~*

**Finding of Fact No. 180:**

*Creighton Road is weight restricted, having a 30,000 pound maximum capacity, and has two 90-degree turns between FM 1314 and the TexCom Facility. ~~one at Creighton and Albert Morehead Road and the other into TexCom's entrance.~~*

The reference in the record to sharp turns on Creighton Road appears in Scott Graves' pre-filed rebuttal testimony: "There are also two sharp curves on Creighton Road between FM-1314 and the TexCom facility that would be difficult for tanker trucks to negotiate and would require substantial speed reduction."<sup>14</sup> These 90-degree turns are depicted on TexCom Ex. 82 as being approximately 1¼ mile West of the Facility on Creighton Road.

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<sup>14</sup> TexCom Ex. 80 (Graves pre-filed rebuttal testimony), 13:14-26.

**Finding of Fact No. 192:**

*Relocating the entrance to FM 3083 will obviate traffic concerns along Creighton Road. After relocation of the entrance, the conditions of the roads that the tanker trucks would use to access the facility will be adequate, and there will be no geometric roadway features or roadway conditions that pose safety problems with regard to trucks traveling to and accessing the facility.*

TexCom believes that these affirmative findings about the condition and geometry of the roads to be used after relocation of the entrance to FM 3083 are appropriate in light of the testimony given by Mr. Graves.<sup>15</sup>

**Finding of Fact No. 196:**

*The area around the TexCom site is changing from residential and industrial to residential, industrial and commercial with the influx of new residents.*

As the Aligned Protestants acknowledge in their Brief, “the area surrounding the facility is both residential and industrial.”<sup>16</sup>

**Finding of Fact No. 200:**

*TexCom received a notice of violation from TCEQ at this facility for failing to submit an injection zone annual report, respond to non-report notices, failing to post signs, and failing to paint the wellhead of the existing well, and perform other actions at the site, which has never been put into waste disposal service.*

The Notice of Violation is in the record as Lone Star Ex. 16.

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<sup>15</sup> TexCom Ex. 80 (Graves pre-filed rebuttal testimony), 14:3-6; Tr. at 1432:18-1433:12; 1436: (Graves on cross).

<sup>16</sup> Aligned Protestants’ Closing Brief at 30.

**Finding of Fact No. 201:**

*TexCom's compliance history is classified as average and its compliance score is 3.1 2.*

Dr. Louis Ross testified that TexCom's compliance history score was "2, AVERAGE."<sup>17</sup>

**Finding of Fact No. 202:**

~~*TexCom's compliance history indicates that TexCom has no history with TCEQ.*~~

As Dr. Louis Ross testified,<sup>18</sup> TCEQ has previously inspected TexCom's site on multiple occasions. Inspections are specifically made one of the elements of compliance history by Chapter 60 of the TCEQ rules.<sup>19</sup>

**II.  
CONCLUSIONS OF LAW**

**Conclusion of Law No. 25:**

*In accordance with 30 TEX. ADMIN. CODE § 331.121(c)(3)(B)(ii), TexCom's wells will be sited such that the confining zone contains at least one formation of sufficient thickness and with lithologic and stress characteristics capable of ~~prevent~~ preventing initiation and/or propagation of fractures.*

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<sup>17</sup> TexCom Ex. 1 (Ross pre-filed), 23:18-24.

<sup>18</sup> TexCom Ex. 1 (Ross pre-filed), 24:8-25:18.

<sup>19</sup> 30 TEX. ADMIN. CODE § 60.1(c)(6).

**Conclusion of Law Nos. 26 & 27:**

TexCom proposes that the extra commas at the end of the sentences be removed to correct typographical errors.

**Conclusion of Law No. 47:**

*In accordance with Tex. Water Code § 27.051(a)(3), both ground and surface fresh water can be adequately protected from pollution if TexCom's proposed wells are operated in compliance with the specifications listed in the UIC Application and the requirements of the Draft Permits.*

**Conclusion of Law No. 51, subsection e:**

*If the fall-off indicates a permeability of < 500 mD or that fault EW-4400-S is not laterally transmissive, 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.*

**Conclusion of Law No. 51, subsection g:**

*Results of the fall-off test and of ~~the~~ any new reservoir modeling required by subsection e above shall be provided to the ~~ED and PIC~~ TCEQ's Executive Director and Office of Public Interest Counsel, and counsel for Lone Star, the Aligned Protestants, and the Individual Protestants Michael Gershon and Jason Hill of Lloyd Gosselink Blevins Rochelle & Townsend, P.C. (counsel for the Lone Star Groundwater Conservation District), David Walker and Julie Stewart of the Montgomery County Attorney's Office (counsel for Aligned Protestants*

Montgomery County and City of Conroe), and Kevin Forsberg of The Forsberg Law Firm, P.C. (counsel for the Aligned Individual Protestants).

**Conclusion of Law No. 51, subsections g, h & i:**

TexCom proposes that these subsections be re-labeled as subsections f, g & h to correct a typographical error.

**Conclusion of Law No. 52:**

*A special condition should be added to Permit Nos. WDW410, WDW411, ~~WDW312~~ WDW412, and WDW413 requiring relocation of the truck entrance of the Facility from Creighton Road to FM\_3083.*

**III.**

**FINAL ORDERING PROVISIONS**

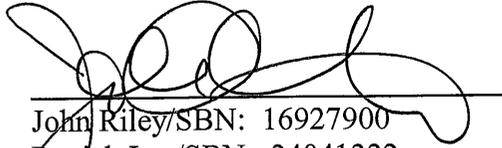
**Final Ordering Provision No. 3:**

*Permit Nos. WDW410, WDW411, ~~WDW312~~ WDW412, and WDW413 shall contain the additional condition described in Conclusion of Law No. 52.*

**Final Ordering Provision No. 5:**

*The effective date of this Order is the date the Order is final, as provided by 30 TEX. ADMIN. CODE § 80.273 and the Texas Administrative Procedure Act, TEX. GOV'T CODE ANN § 2001.144. ~~§ 2004.144 of the Texas Administrative Procedure Act, TEX. GOV'T CODE ANN.~~*

Respectfully submitted,



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**CERTIFICATE OF SERVICE**

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/s/  
Patrick Lee

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