

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

<b>APPLICATION OF TEXCOM GULF DISPOSAL, LLC FOR TEXAS COMMISSION ON ENVIRONMENTAL QUALITY UNDERGROUND INJECTION CONTROL PERMIT NOS. WDW 410, WDW 411, WDW 412 AND WDW 413</b>	<b>§ § § § § § § §</b>	<b>BEFORE THE STATE OFFICE   OF  ADMINISTRATIVE HEARINGS</b>
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**DENBURY ONSHORE, LLC'S EXCEPTIONS TO THE  
STATE OFFICE OF ADMINISTRATIVE HEARINGS' PROPOSAL  
FOR DECISION AND FINDINGS OF FACT AND CONCLUSIONS OF LAW**

## TABLE OF CONTENTS

	Page
<b>I. Introduction</b> .....	1
<b>II. Denbury Excepts to Particular Findings of Fact and Conclusions of Law as Against the Weight of the Evidence</b> .....	2
<b>A. Notice was improperly given</b> .....	2
<b>B. The Texas Railroad Commission’s “no harm” letter is no longer valid</b> .....	8
<b>C. TexCom’s operations will impair mineral rights</b> .....	11
<b>D. The proposed site is not geologically suitable</b> .....	15
<b>E. TexCom ignored the presence of additional faults and fractures</b> .....	18
<b>F. TexCom used the wrong permeability in its reservoir modeling</b> .....	20
<b>G. The cone of influence/area of review demonstrated by reservoir modeling is greater than five miles</b> .....	22
<b>H. The injection zone cannot contain TexCom’s proposed waste</b> .....	26
<b>I. TexCom failed to accurately calculate its proposed waste plume</b> .....	28
<b>J. TexCom failed to account for cross-flow among wellbores</b> .....	30
<b>K. TexCom’s well does not possess adequate mechanical integrity</b> .....	32
<b>L. The transcription costs in the Amended PFD are miscalculated</b> .....	34
<b>M. Miscellaneous exceptions</b> .....	35
<b>III. TexCom’s Application Should be Denied Based on the False and Misleading Statements in the Application in Accordance with 30 TEX. ADMIN. CODE § 305.66</b> .....	36
<b>IV. Conclusion</b> .....	38

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FOR DECISION AND FINDINGS OF FACT AND CONCLUSIONS OF LAW**

TO THE HONORABLE COMMISSIONERS:

Denbury Onshore, LLC, protestant in this case ("Denbury"), submits these exceptions and would respectfully show the following:

**I. Introduction**

Denbury agrees with the ultimate conclusion and recommendation of the Administrative Law Judges ("ALJs") that the Texas Commission on Environmental Quality ("TCEQ" or "Commission") deny TexCom's UIC well applications.<sup>1</sup> Specifically, the ALJs found, after thousands of pages of testimony, that ground and surface fresh water cannot be protected from pollution<sup>2</sup> and that the proposed injection well is not in the public interest.<sup>3</sup> However, Denbury believes that additional grounds exist upon which the Commission should deny TexCom's UIC

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<sup>1</sup> Amended Proposal for Decision After Remand ("Amended PFD") at 118.

<sup>2</sup> Amended PFD Conclusion of Law No. 46.

<sup>3</sup> Amended PFD Conclusion of Law No. 42.

**Denbury Onshore, LLC's Exceptions to the Amended  
Proposal for Decision, Findings of Fact, and Conclusions of Law**

TCEQ Docket No. 2007-0204-WDW  
SOAH Docket No. 582-07-2673

well application. The evidence at hearing establishes, and the Commission should find, that existing rights, specifically mineral rights, will be impaired. Further, Denbury also disagrees with and excepts to a number of findings of fact and conclusions of law in the Amended PFD. These exceptions, and the reasoning for them, are set forth herein.

## **II. Denbury Excepts to Particular Findings of Fact and Conclusions of Law as Against the Weight of the Evidence.**

Denbury agrees with the ALJs' ultimate conclusion and recommendation that TexCom's UIC well applications be denied, but Denbury disagrees with certain findings of fact and conclusions of law set forth in the Amended PFD. For convenience, Denbury has divided the findings of fact and conclusions of law into subject matter, and addressed its exceptions to each subject identified. Denbury has also revised each finding of fact and conclusion of law so that it reflects the revision that Denbury seeks, and/or Denbury has proposed additional findings of fact and conclusions of law.

### **A. Notice was improperly given.**

Denbury excepts to the following findings of fact and conclusions of law from the Amended PFD, and would propose the following revisions and additions:

#### Proposed Revised Finding of Fact

24. Evidence was insufficient to show that ~~placed into the record that~~ on September 16, 2005, the TCEQ mailed the Notice of Receipt of Application and Intent to Obtain Underground Injection Control Permits to adjacent landowners, public officials, and other persons entitled to receive notice under TCEQ rules or who requested notice.
  
33. Evidence was insufficient to show that ~~placed into the record that~~ on July 3, 2006, the TCEQ mailed the Notice of Application and Preliminary Decision to adjacent

landowners, public officials, and other persons entitled to receive notice under TCEQ rules or who requested notice.

40. Evidence was insufficient to show that ~~placed into the record that~~ on June 5, 2007, the TCEQ mailed notice of the hearing to interested persons, public officials, and other persons entitled to receive notice under TCEQ rules or who requested notice.

#### Proposed Revised Conclusions of Law

2. Notice was not provided in accordance with TEX. WATER CODE § 27.018(b), 30 TEX. ADMIN. CODE Chapter 39, and TEX. GOV'T CODE §§ 2001.051 and 2001.052; and all affected persons were not provided an opportunity to request a hearing on TexCom's application in the manner required by law. Proper notice of the hearing and prehearing conference was not given to affected persons pursuant to TEX. GOV'T CODE §§ 2001.051 and 2001.052 because the Applicant failed to notify the owners of mineral rights underlying the proposed injection well facility.
3. SOAH ~~has~~ lacks jurisdiction to conduct a hearing and to issue a Proposal for Decision on contested cases referred by TCEQ. TEX. GOV. CODE § 2003.47.
4. As required by TEX. WATER CODE § 27.012-.014, TexCom ~~submitted~~ failed to submit a complete permit application that included all information required by 30 TEX. ADMIN. CODE §§ 281.5, 305.45, 305.49 and 331.121.

#### Proposed Additional Findings of Fact

- F-1. *TexCom is not the owner of mineral rights underlying the existing or proposed injection well facility. The Sabine Royalty Trust is the owner of mineral rights underlying the existing or proposed injection well facility.*
- F-2. *On September 16, 2005, TCEQ mailed the Notice of Receipt of Application and Intent to Obtain Underground Injection Control Permits to adjacent landowners, public officials, and other persons entitled to receive notice under TCEQ rules or*

*who requested notice. However, since TexCom falsely claimed it owned the mineral rights underlying the proposed injection well facility, notice was not provided to the mineral rights owner(s), as required by statute and rule.*

F-3. *On July 3, 2006, TCEQ mailed the Notice of Application and Preliminary Decision to adjacent landowners, public officials, and some persons entitled to receive notice under TCEQ rules or who requested notice. However, since TexCom falsely claimed it owned the mineral rights underlying the proposed injection well facility, notice was not provided to the mineral rights owner(s), as required by statute and rule.*

F-4. *On June 5, 2007, TCEQ mailed notice of the hearing to interested persons, public officials, and some persons entitled to receive notice under TCEQ rules or who requested notice. However, since TexCom falsely claimed it owned the mineral rights underlying the proposed injection well facility, notice was not provided to the mineral rights owner(s), as required by statute and rule.*

Proper notice was not given because TexCom failed to notify the owners of mineral rights pursuant to 30 TEX. ADMIN. CODE § 39.651. Section 27.018 of the Injection Well Act directs the Commission to determine who are “affected persons” entitled to receive notice of an injection well permit application and public hearing.<sup>4</sup> The rule defines “affected persons” entitled to receive notice of a contested case hearing in subchapter L, Public Notice of Injection Well and Other Specific Applications.<sup>5</sup> The five classes of affected persons entitled to receive notice include:

- (i) persons who own the property on which the existing or proposed injection well facility is or will be located, if different from the applicant;

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<sup>4</sup> 27 TEXAS WATER CODE § 27.018(b).

<sup>5</sup> 30 T.A.C. § 39.

- (ii) landowners adjacent to the property on which the existing or proposed injection well facility is or will be located;
- (iii) persons who **own mineral rights underlying** the existing or proposed injection well facility;
- (iv) persons who own mineral rights underlying the tracts of land adjacent to the property on which the existing or proposed injection well facility is or will be located; and
- (v) any groundwater conservation district established in the county in which the existing or proposed injection well facility is or will be located.<sup>6</sup>

Affected persons are entitled to receive: (1) mailed notice of receipt of application and intent to obtain permit;<sup>7</sup> (2) mailed notice of an application and preliminary decision;<sup>8</sup> and (3) mailed notice of a contested-case hearing<sup>9</sup> 30 days prior to the hearing.

The owner of the mineral rights underlying TexCom's proposed injection well facility is the Sabine Royalty Trust ("Sabine").<sup>10</sup> However, TexCom did not provide Sabine mailed notice of the Commission's receipt of application and intent to obtain permit,<sup>11</sup> mailed notice of the Commission's application and preliminary decision,<sup>12</sup> or mailed notice of a setting for a contested-case hearing.<sup>13</sup> TexCom provided no notice whatsoever to Sabine, and as of the date the record closed in this matter on September 7, 2010, has provided no notice to Sabine of any kind.

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<sup>6</sup> See 30 T.A.C. § 39.651(f) (emphasis added).

<sup>7</sup> 30 T.A.C. § 39.651(c).

<sup>8</sup> 30 T.A.C. § 39.651(d).

<sup>9</sup> 30 T.A.C. § 39.651(f).

<sup>10</sup> See Exhibit A to *Denbury Onshore, LLC's Plea to the Jurisdiction or, in the Alternative, Motion for Leave to Provide Additional Evidence* (filed June 15, 2010); see also *Denbury Onshore, LLC's Motion for Leave to Present the Testimony of Dennis Ray Powell* (filed June 22, 2010). The ALJs committed a fundamental error in denying Denbury's motion to present additional testimony on this point.

<sup>11</sup> 30 T.A.C. § 39.651(c).

<sup>12</sup> 30 T.A.C. § 39.651(d).

<sup>13</sup> 30 T.A.C. § 39.651(f).

TexCom not only failed to notify the owner of mineral rights pursuant to 30 T.A.C. § 39.651—TexCom erroneously claimed that it owned the minerals underneath its proposed facility.<sup>14</sup> In the current version of its pending UIC well application, TexCom states that it owns the mineral rights for minerals underneath its proposed facility,<sup>15</sup> with no mention of Sabine. In the application, TexCom representatives affirmed under oath that TexCom owned the subject minerals.<sup>16</sup>

Upon discovering TexCom’s failure to notify persons who own mineral rights beneath the proposed injection well facility, Denbury filed a Plea to the Jurisdiction arguing that the contested-case hearing must be abated until notice is given to all affected persons,<sup>17</sup> and that the Commission lacked jurisdiction to continue the hearing because Texas Water Code § 27.018(c) was a jurisdictional prerequisite that TexCom had not satisfied.<sup>18</sup> Denbury also filed a Motion for Leave to Present the Testimony of Dennis Ray Powell to complete the evidentiary record on ownership of minerals.<sup>19</sup>

Only after being faced with incontrovertible proof at the remand hearing did TexCom concede that it did not own the mineral rights under the proposed facility.<sup>20</sup> Yet TexCom did not explain how or why it concluded that it owned the subject minerals.

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<sup>14</sup> TexCom Exh. 6 at 201.

<sup>15</sup> TexCom Exh. 6 at 201.

<sup>16</sup> TexCom Exh. 6 at 2.

<sup>17</sup> *Denbury Onshore, LLC’s Plea to the Jurisdiction or, in the Alternative, Motion for Leave to Provide Additional Evidence* (filed June 15, 2010).

<sup>18</sup> *See* Texas Water Code § 27.018(c) (“Before the commission begins to hear testimony in a contested case as defined by Chapter 2001, Government Code, evidence must be placed in the record to demonstrate that proper notice regarding the hearing was given to affected persons.”).

<sup>19</sup> *Denbury Onshore, LLC’s Motion for Leave to Present the Testimony of Dennis Ray Powell* (filed June 22, 2010).

<sup>20</sup> *Applicant TexCom Gulf Disposal, LLC’s Response in Opposition to Denbury Onshore, LLC’s Plea to the Jurisdiction* at 10 (filed June 21, 2010).

The Executive Director argued, and the ALJs presumably accepted, that “substantial compliance” with the notice provisions is sufficient. However, even assuming that substantial compliance is the correct standard for compliance with notice requirements, TexCom’s evidence falls short of substantial compliance. TexCom’s notice deficiency was not a typographical error on the form of notice given, or the omission of certain information about proposed activities in the notice—TexCom failed to give notice to an entire class of persons entitled to notice.

Moreover, the failure to provide proper notice is not the result of a mere oversight by TexCom. The failure of proper notice rests solely upon TexCom’s misrepresentation to the TCEQ. TexCom made no attempt to explain why it misrepresented mineral ownership in its sworn application. However, TexCom had an obligation to provide accurate information to the Commission. As the Executive Director’s own witness testified, the Commission depends upon applicants to be truthful throughout the application process.<sup>21</sup>

By adopting the findings of fact and conclusions of law excepted above, the ALJs ignore a fact that even the applicant does not contest—an entire class of affected persons entitled to three separate mailed notices under 30 T.A.C. § 39.651 received none. However, the ALJs argue that because TexCom placed some evidence of proper notice into the record, all statutory notice prerequisites are satisfied.<sup>22</sup> The ALJs express the policy fear that allowing parties to halt a contested case hearing every time a notice defect is uncovered would result in unfair gamesmanship of the hearing process.<sup>23</sup> While this argument gives some justification as to why the ALJs did not find that the notice provisions were jurisdictional and halt the hearing, it fails to

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<sup>21</sup> Remand Trial Tr. at 1881:23—1882:8 (Flegal on cross).

<sup>22</sup> Amended PFD at 9.

<sup>23</sup> Amended PFD at 10

explain why a conclusion of law that notice was properly given is appropriate, or why undisputed findings regarding the mineral interest ownership were not made. It is undisputed that the “evidence placed in the record” by TexCom does not demonstrate that “proper notice regarding the hearing was given to affected persons.” In fact, the evidence placed in the record demonstrates the opposite.

The Commission has a duty to protect the rights of third-parties, as well as the integrity and legitimacy of the UIC application process. Adopting the ALJs findings would give future applicants little incentive to comply with 30 T.A.C. § 39.651 in good faith, and would unfairly reward an applicant who makes material misrepresentations on notice that prejudice the rights of innocent third-parties. Denbury therefore excepts to these findings of fact and conclusions of law on proper notice.

**B. The Texas Railroad Commission’s “no harm” letter is no longer valid.**

Denbury excepts to the following findings of fact and conclusions of law from the Amended PFD, and would propose the following revisions and additions:

Proposed Revised Finding of Fact

37. TexCom also submitted its UIC Application to the Railroad Commission of Texas (RRC). By letter dated September 16, 2005, the RRC indicated that it had conducted a review of the UIC Application, specifically studied aspects relating to injection operation, geology, and artificial penetrations within ¼ mile of the Facility, and concluded that operation of the Facility would not injure or endanger any known oil or gas reservoir. On November 19, 2010, the technical and legal examiners for the Railroad Commission issued their Examiners’ Report and Proposal for Decision recommending that the September 16, 2005 letter be rescinded.

Proposed Revised Conclusion of Law

13. In accordance with TEX. WATER CODE § 27.051, the Railroad Commission of Texas has not issued a letter concluding that drilling or using the disposal well and injecting industrial waste into the subsurface stratum would not endanger or injure any known oil or gas reservoir.

Proposed Additional Finding of Fact

- F-5. *TexCom acquired its “no harm” letter by submitting false information to the Railroad Commission. TexCom did not inform the Railroad Commission about the status of oil and gas production in the Conroe Field or the identity of the owner of mineral rights underneath their proposed facility.*
- F-6. *On November 19, 2010, the technical and legal examiners for the Railroad Commission issued their Examiners’ Report and Proposal for Decision recommending that TexCom’s “no harm” letter be rescinded.*

Proposed Additional Conclusion of Law

- L-1. *TexCom has failed to submit a valid “no harm” letter pursuant to TEX. WATER CODE § 27.051. The “no harm” letter obtained by TexCom is not a final agency action and can be given no evidentiary weight because technical and legal examiners for the Railroad Commission have recommended that the letter be rescinded.*

Denbury excepts to this finding of fact and conclusion of law regarding the “no harm” letter because examiners for the Texas Railroad Commission (“Railroad Commission”) have recommended, after notice and hearing, that the Railroad Commission rescind the “no harm” letter.<sup>24</sup> When the remand hearing began, the Railroad Commission had already called a hearing

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<sup>24</sup> Examiners’ Report and Proposal for Decision at 12 (“recommend that the September 16, 2005 ‘no harm’ letter issued by the Railroad Commission to TexCom Gulf Disposal, LLC, be rescinded.”) (attached hereto as **Exhibit A**).

to consider rescinding the “no harm” letter. Denbury asked at that time that the remand hearing be continued.<sup>25</sup> The Railroad Commission subsequently conducted a hearing to examine the impact that TexCom’s operations will have on the Conroe Oil Field. In Oil & Gas Docket No. 03-0266270,<sup>26</sup> the Railroad Commission heard a complete contested-case hearing on the letter. On November 19, 2010, the technical and legal examiners for the Railroad Commission issued their Examiners’ Report and Proposal for Decision recommending that the “no harm” letter be rescinded.<sup>27</sup> By reopening consideration of the “no harm” letter, the Railroad Commission demonstrated that it does not consider the “no harm” letter a final agency action. Because the Railroad Commission does not consider the “no harm” letter a final agency action, the letter should be given no evidentiary weight or preclusive effect. Further, it now appears that the “no harm” letter will be rescinded. The letter is a prerequisite for a UIC applicant obtaining a permit, and without such letter, TexCom’s application must be denied.

In addition to the fact that Railroad Commission examiners have recommended the “no harm” letter be rescinded, evidence of the irregularities that surrounded TexCom’s acquisition of the letter demonstrate that the Commission should give the letter no weight. Despite discovery requests from the District at the original hearing,<sup>28</sup> and from Denbury at the remand hearing, TexCom failed to produce the documents it provided the Railroad Commission in order to obtain the “no harm” letter. While we cannot be sure what TexCom told the Railroad Commission, we

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<sup>25</sup> Denbury’s Motion for Continuance (filed June 14, 2010).

<sup>26</sup> *Complaint-Called Hearing on the Complaint of Denbury Onshore, LLC Regarding The “No Harm” Letter Issued Administratively to TexCom Gulf Disposal, LLC by the Railroad Commission’s Environmental Services Section on September 16, 2005, Regarding Class I Nonhazardous Waste Disposal Well Nos. 1, 2, 3, and 4 at the TexCom Gulf Disposal Facility in Montgomery County, Texas.*

<sup>27</sup> Examiners’ Report and Proposal for Decision at 12 (“recommend that the September 16, 2005 ‘no harm’ letter issued by the Railroad Commission to TexCom Gulf Disposal, LLC, be rescinded.”). Denbury requests that the commission and the ALJs take official notice of the Examiners’ Report and Recommendation.

<sup>28</sup> Original Hearing Tr. at 79:1-5 (Ross on cross).

**Denbury Onshore, LLC’s Exceptions to the Amended Proposal for Decision, Findings of Fact, and Conclusions of Law**

do know that TexCom did not inform the Railroad Commission about the status of oil and gas production in the area when it sought the letter.<sup>29</sup> Further, we know that if TexCom provided the Railroad Commission with a copy of its pending UIC Application, TexCom similarly misrepresented to the Railroad Commission that it owned the mineral interests underlying its proposed facility.<sup>30</sup> Because TexCom additionally failed to be forthcoming with the Railroad Commission when it obtained the “no harm” letter, any evidentiary weight it carried must be disregarded.

**C. TexCom’s operations will impair mineral rights.**

Denbury excepts to the following findings of fact and conclusions of law from the Amended PFD, and would propose the following revisions and additions:

Proposed Revised Findings of Fact

178. The injected wastewater should ~~not~~ will reach the fault 4,400 feet south of the site, and would not remain contained in the Lower Cockfield.
179. The proposed injection wells ~~would not~~ will impair any existing mineral rights given the geological structure of the site.

Proposed Revised Conclusions of Law

47. ~~In accordance with TEX. WATER CODE § 27.015, no impairment of oil or gas mineral rights would result from drilling or using the disposal wells and injecting industrial waste into the subsurface stratum.~~
48. ~~In accordance with TEX. WATER CODE § 27.051(a)(2), existing rights, including, but not limited to mineral rights, will not be impaired by operation of~~

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<sup>29</sup> Original Hearing Tr. at 79:1-5 (Ross on cross).

<sup>30</sup> See **Exhibit A**, Examiner’s Report and Proposal for Decision at 8 (“TexCom indicated that the minerals under the tract were owned by TexCom. This is clearly not accurate.”).

~~the proposed wells in accordance with the specifications listed in TexCom's UIC Application and the requirements of the draft permits.~~

Proposed Additional Findings of Fact

- F-7. *The lower, middle, and upper Cockfield members are in communication with each other at the fault 4,400 feet south of the site, the EW-4400-S fault.*
- F-8. *The Cockfield members are in direct communication because there are no separating shale layers within the Cockfield and because there are additional faults and fractures in the formation.*
- F-9. *TexCom's proposed injection activities would allow waste to migrate into the productive oil and gas zone, damaging mineral interests and the oil and gas reservoir. Current and future oil and gas operations in the Conroe Oil Field will result in injected waste being produced at the surface.*

Proposed Additional Conclusions of Law

- L-2. *In violation of TEX. WATER CODE § 27.015, impairment of oil or gas mineral rights will result from drilling or using the disposal wells and injecting industrial waste into the subsurface stratum.*
- L-3. *In violation of TEX. WATER CODE § 27.051(a)(2), existing rights, including, but not limited to mineral rights, will be impaired by operation of the proposed wells in accordance with the specifications listed in TexCom's UIC Application and the requirements of the Draft Permits.*

Denbury excepts to these findings of fact and conclusions of law because they are wholly without evidentiary support in the record. TexCom's only proof that its activities would not impair oil or gas mineral rights is the Railroad Commission's "no harm" letter. As discussed above, that letter should not be regarded as sufficient evidence.

**Denbury Onshore, LLC's Exceptions to the Amended Proposal for Decision, Findings of Fact, and Conclusions of Law**

TCEQ Docket No. 2007-0204-WDW  
SOAH Docket No. 582-07-2673

Certain facts are clear from the evidentiary record. TexCom's proposed injection operation is within the Conroe Field, an active oil and gas field with hundreds of active wells.<sup>31</sup> TexCom's proposed injection zone overlaps, by several hundred feet, the portion of the geologic zone from which oil and gas is currently being produced.<sup>32</sup> The closest production well to TexCom's operations is within 3,000 feet of TexCom's proposed injection well.<sup>33</sup> That TexCom's operations will impair mineral interests seems self-evident from these undisputed facts.

TexCom had the burden to come forward with evidence of non-impairment. At hearing, TexCom argued that the TCEQ was precluded by section 27.015(c) of the Water Code from accepting evidence contrary to the Railroad Commission's letter. TexCom's argument reflects a misreading of section 27.015(c). Section 27.015(a) and (b), which requires that a UIC applicant obtain a letter from the Railroad Commission and prohibits the TCEQ from proceeding to a hearing in the absence of a "no harm" letter, were adopted several years prior to section 27.015(c). Section 27.015(c), added in 1993, by its terms applied only to an application pending **on the effective date** of the 1993 amendments to section 27.015.<sup>34</sup> In fact, the language in the adopting legislation is striking in its difference between subsection (a) and (c). Subsection (a)

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<sup>31</sup> Denbury Exh. 18 at 12 (Swadener on prefiled direct).

<sup>32</sup> Denbury Exh. 3.

<sup>33</sup> Denbury Exh. 18 at 19:10-19 (Swadener on prefiled direct).

<sup>34</sup> In 1993, Section 2 of House Bill 2043 added Subsection (c) to Section 27.015 of the Texas Water Code. Act of June 18, 1993, 73rd Leg., R.S., ch. 802, § 2, 1993 Gen. Laws 3195 (codified at TEX. WATER CODE 27.015 (c)). Section 8 of House Bill 2043 indicates that "[s]ection 27.015(c), Water Code, as added by this Act, applies only to an application before the [Commission] which is pending on the effective date of this Act." Act of June 18, 1993, 73rd Leg., R.S., ch. 802, § 2, 1993 Gen. Laws 3197 (not codified). The addition of Subsection (c) was codified in the Texas Water Code in 1993. By standard practice, the "effective date" provisions of House Bill 2043 were not codified. In order to determine the effective date of Section 27.015(c), reference to the Texas General Laws is required. As set forth in the Texas General Laws for 1993, Section 27.015(c) applies only to applications pending on June 18, 1993.

“applies to an application on which a final decision is rendered...on or after the effective date of this Act.” Subsection (c) “applies only to an application before [the Commission] which is pending on the effective date of this Act.” Given the plain meaning of this language, subsection (c) is not applicable to TexCom’s application. Thus, the Commission was not bound by the Railroad Commission’s no harm letter, the ALJs should have received evidence on the issue of impairment of mineral interests, and TexCom had an obligation, which it has not met, to come forward with evidence to meet its burden on impairment of mineral interests.

The ALJs wrongly excluded Denbury from offering evidence regarding the impairment of mineral rights and injury to the oil and gas reservoir by TexCom’s proposed injection activities.<sup>35</sup> Because all of Denbury’s direct evidence on impairment of mineral interests was excluded by the ALJs, Denbury made an offer of proof regarding impairment of mineral interests by TexCom’s activities.<sup>36</sup> Denbury’s offer of proof establishes the impairment of mineral interests in the Conroe Field.<sup>37</sup>

Aside from the “no harm” letter, the only piece of “evidence” relied upon by the ALJs to show non-impairment of mineral rights comes from TexCom’s assertions about its lawsuit with Wapiti, a prior operator in the Conroe Field. The ALJs reliance upon TexCom’s counsel’s representation—which is not evidence—that Wapiti’s decision to settle its lawsuit with TexCom is mistaken.<sup>38</sup> TexCom offers nothing in support of this representation beyond counsel’s

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<sup>35</sup> Remand Trial Tr. at 83:1-9, 84:4-5 (sustaining objection to evidence regarding mineral interest damage); 1810:4-22 (recognizing Denbury’s offer of proof on mineral interests and excluding evidence of same).

<sup>36</sup> Remand Trial Tr. at 1804—1807 (Denbury offer of proof).

<sup>37</sup> In addition to Denbury’s offer of proof, other protestants, including the individual protestants, presented evidence that TexCom’s proposed activities would damage mineral interests in the Conroe Field. *See, e.g.* Remand Trial Tr. at 833:2-7 (Wilson on cross) (describing the interference that a Class One well could have on oil and gas operations).

<sup>38</sup> Amended PFD at 46.

assertion that Wapiti dismissed its lawsuit. It simply is not evidence, and certainly not evidence sufficient to support a finding of no mineral impairment. Because TexCom's "no harm" letter is no longer reliable, and because TexCom presented no evidence of non-impairment of mineral rights, Denbury excepts to the findings and conclusions above.

**D. The proposed site is not geologically suitable.**

Denbury excepts to the following findings of fact and conclusions of law from the Amended PFD, and would propose the following revisions and additions:

Proposed Revised Findings of Fact

84. The geology of the area was not described confidently by the Applicant, and the limits of waste fate and transport cannot be accurately predicted through the data obtained from the existing well and the use of analytical and numerical models.
92. The Lower Cockfield ~~has~~ lacks sufficient thickness, areal extent, and lateral continuity to contain the proposed amount of injected fluid.

Proposed Revised Conclusions of Law

21. In ~~accordance with~~ violation of 30 TEX. ADMIN. CODE § 331.121(c)(2), TexCom's proposed wells would not be sited in an area that is geologically suitable.

Proposed Additional Findings of Fact

- F-10. *The lower Cockfield is a fluvial-deltaic depositional complex. The formation is not homogeneous or uniform. Because the setting is a deltaic, fluvial, shoreface environment, some sands within the strata have channels with various different grain sizes, which create a preferential pathway for the fluids to radiate through the formation.*

F-11. *There is no adequate confining layer within the Cockfield formation. TexCom's Application states that the shales within the Cockfield appear not to be thick enough to isolate the individual sand members either stratigraphically or across the fault.*

Denbury excepts to these findings of fact and conclusions of law because the evidence at hearing demonstrated that the lower Cockfield is not sufficiently isolated from the middle and upper Cockfield to contain TexCom's proposed injectate.

TexCom unequivocally stated in its application that "these three thick sand packages are separated by persistent shales, but the shales appear not to be thick enough to isolate the individual sand members either stratigraphically or across the fault."<sup>39</sup> TexCom geologist Bruce Langhus acknowledged writing this portion of the application during cross-examination,<sup>40</sup> as well as authoring an e-mail stating that "I don't know if there is a competent confining zone anywhere within the Cockfield."<sup>41</sup>

The evidence presented at the hearing also shows that the "shale layer" between the lower Cockfield and the middle Cockfield does not extend far enough out from the wellbore to seal off the lower sands from the middle sands. Denbury expert Jon Herber, a geologist with more than 20 years of experience, testified that the shale layer is not as continuous as TexCom has claimed.<sup>42</sup> At trial, Herber testified that he reviewed additional well logs that penetrated the lower Cockfield near the WDW410 well.<sup>43</sup> Herber testified that these additional penetrations into the lower Cockfield revealed that north and east of the TexCom's wellbore, the shale begins

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<sup>39</sup> TexCom Exh. 6 at 85.

<sup>40</sup> Remand Trial Tr. at 1937:2 (Langhus on cross).

<sup>41</sup> Remand Trial Tr. at 1945: 4-7 (Langhus on cross); Denbury Exhibit 27.

<sup>42</sup> Remand Trial Tr. at 1034: 16-19 (Herber on redirect).

<sup>43</sup> Remand Trial Tr. at 1034: 1-14 (Herber on redirect).

to thin, and as the distance increases, disappears completely.<sup>44</sup> This geology is consistent with his prefiled testimony, in which Herber stated that “the shales in the Cockfield formation do not have fieldwide continuity and vary in thickness, such that they would not be thought of as a confining layer in the sense that we talk about the Jackson being a confining layer.”<sup>45</sup> Robert Sutherland, an engineer with more than 20 years of experience in evaluating reservoirs, voiced a similar concern regarding the continuity of the shale layer. Sutherland testified that the shales see “episodic changes of quality and material because of the type of geologic environment.”<sup>46</sup>

Denbury also offered extensive evidence to show that the “shale” layer between the lower Cockfield and the middle Cockfield will not confine the waste to the lower Cockfield. This “shale” layer, if it exists, is not a true shale; it is more permeable and more porous than a true shale.<sup>47</sup> Denbury expert Jon Herber testified that this layer, as it was identified by TexCom, is definitely “not a shale,” but instead more likely “thin silts” or “fine grain sands.”<sup>48</sup> Looking at the logs TexCom submitted with its application, Herber testified that the “shale layer” identified by TexCom was actually “alternating thin beds of sand, silt, and shale.”<sup>49</sup> Denbury expert Robert Sutherland offered a similar opinion on the quality of the shale layer, testifying that the shale is not an effective confining layer to prevent migration of fluids between the sand layers of the Cockfield.<sup>50</sup>

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<sup>44</sup> Remand Trial Tr. at 1034:19-23 (Herber on redirect).

<sup>45</sup> Denbury Exh. 13 at 13:10-12 (Herber on prefiled direct).

<sup>46</sup> Remand Trial Tr. at 1701: 19-20 (Sutherland on re-cross).

<sup>47</sup> Remand Trial Tr. at 1009: 1-2, 5-8 (Herber on redirect).

<sup>48</sup> Remand Trial Tr. at 1009: 5-7 (Herber on redirect).

<sup>49</sup> Remand Trial Tr. at 1015:15-21 (Herber on redirect).

<sup>50</sup> Remand Trial Tr. at 1701:1 (Sutherland on re-cross).

Denbury asserts that the sporadic and sandy “shale” layer between the lower and middle Cockfield makes TexCom’s proposed injection site not geologically suitable, and hence Denbury excepts to these findings of fact and conclusions of law.

**E. TexCom ignored the presence of additional faults and fractures.**

Denbury excepts to the following findings of fact and conclusions of law from the Amended PFD, and would propose the following revisions and additions:

Proposed Revised Findings of Fact

116. There are ~~two~~ at least three relevant faults within the AOR. ~~The first is the EW-4400-S fault, which has a 100 to 150-foot down-to-the-basin off-set. The second is a parallel fault with up to approximately 75 feet of down-to-the-basin offset, mapped on the extreme southern edge of the AOR.~~
120. ~~If other small faults with limited offset exist in the area, they would not influence the engineering or the safety margins of the project.~~

Proposed Revised Conclusions of Law

23. In ~~accordance with~~ violation of 30 TEX. ADMIN. CODE § 331.121(c)(3)(B)(i), the confining zone is not laterally continuous ~~and free of~~ and contains transecting, transmissive faults or fractures over an area insufficient to prevent the movement of fluids through faults or fractures ~~into a USDW or freshwater aquifer anywhere within the Cockfield formation, where it will be produced by Denbury at the surface.~~

Proposed Additional Findings of Fact

- F-12. *There are at least three relevant faults within the AOR. The first is an east-west fault located approximately 4,400 feet to the south of the TexCom site with a 100 to 150-foot down-to-the-basin off-set (the EW-4400-S fault). The second is a*

*parallel fault with up to approximately 75 feet of down-to-the-basin offset, mapped on the extreme southern edge of the AOR. The third is located approximately half the distance from the WDW410 wellbore to the EW-4400-S fault, less than 2,200 feet from the wellbore.*

F-13. *The three faults within the AOR are vertically transmissive.*

F-14. *TexCom failed to identify the third fault in its application or take the third fault into account in its modeling.*

F-15. *Well WDW410's wellbore has a fracture between 6,300 feet and 6,310 feet.*

Denbury excepts to these findings of fact and conclusions of law because they fail to account for evidence of additional faults located through seismic imaging, as well as relevant fractures ignored by TexCom.<sup>51</sup> The Conroe Field exhibits a wide spectrum of faults and fractures within the geologic strata.<sup>52</sup> The faults and fractures characteristic of the lower Cockfield are manifested in the WDW410 wellbore itself, as Denbury geologist Jon Herber identified a fracture in WDW410's wellbore between 6300' and 6310' below the surface, which is within the injection interval,<sup>53</sup> noting the location of the fracture on Denbury Exhibit 23.<sup>54</sup> TexCom did nothing to explain, model, investigate, or refute this fracture. TexCom failed to demonstrate that this fracture will not compromise the well integrity, as is their burden.

In their Amended PFD, the ALJs mistakenly state that "Mr. Herber never mentioned additional faults in his prefiled direct testimony."<sup>55</sup> However, Herber's prefiled testimony clearly indicated that "I know from other information that I have reviewed, including seismic

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<sup>51</sup> Remand Trial Tr. at 1029:9-11 (Herber on redirect), 1109:5-7 (Herber on cross); Denbury Exh. 23.

<sup>52</sup> Remand Trial Tr. at 971:17-20 (Herber on cross).

<sup>53</sup> Remand Trial Tr. at 1000:1-23 (Herber on redirect).

<sup>54</sup> Denbury Exh. 23.

<sup>55</sup> Amended PFD at 32.

data, there are more faults in the field than are shown on the Geomap or on TexCom's maps."<sup>56</sup> Herber also testified that his review of seismic data revealed two additional faults, other than EW-4400-S, within the cone of influence/area of review near the WDW410 wellbore.<sup>57</sup> Herber testified that one fault is approximately 2,200 feet north (2200-N fault) of the WDW410 wellbore, and that the fault runs parallel to the EW-4400-S fault.<sup>58</sup> Herber also testified that he saw a second fault that was further out from the WDW410 wellbore than the EW-4400-S fault, and was also parallel to the EW-4400-S fault.<sup>59</sup> TexCom's witnesses stated that seismic data is a very important factor in determining the presence of faults in a formation.<sup>60</sup> TexCom did not reflect any faults at approximately 2,200 feet from WDW410 wellbore in its application or its modeling. TexCom has not shown the impact that these faults, particularly the 2200-N fault, would have upon the cone of influence, the pressures generated by its injectate, or the migration of its waste. To be conservative, TexCom should have modeled the 2200-N fault as non-transmissive; it did not do so, and thus has failed to meet its burden.

The presence of these multiple faults and of the fracture in TexCom's wellbore further demonstrates that the facility is not located in a geologically suitable area, in support of Denbury's proposed conclusions and findings above.

**F. TexCom used the wrong permeability in its reservoir modeling.**

Denbury excepts to the following findings of fact and conclusions of law from the Amended PFD, and would propose the following revisions and additions:

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<sup>56</sup> Denbury Exh. 13 at 12:21-23.

<sup>57</sup> Remand Trial Tr. at 1029:9-11 (Herber on redirect), 1109:5-7 (Herber on cross).

<sup>58</sup> Remand Trial Tr. at 1030:19-22 (Herber on redirect).

<sup>59</sup> Remand Trial Tr. at 1031:23-25—1032:1-7 (Herber on redirect).

<sup>60</sup> Original Trial Tr. at 1323:22-25 (Langus on cross) ("we don't have any seismic here, but that's another very important locator, a very important determinant for whether or not a fault is—actually exists in the subject area.").

Proposed Revised Findings of Fact

148. Based on the 1999 fall-off test and the 2009 fall-off test, an appropriate permeability factor for reservoir modeling is less than 80.9 millidarcies (mD).
159. The fall-off test conducted on WDW315 in 2009 indicated a permeability of less than 80.9 mD.

Proposed Additional Findings of Fact

- F-16. *The most conservative permeability estimates based on the 2009 fall-off test calculated the permeability for the formation at 42-62 millidarcies.*
- F-17. *To be conservative, an appropriate permeability factor for reservoir modeling is 42 millidarcies. TexCom presented no reservoir modeling using 42 millidarcies.*

Denbury excepts to these findings of fact because the evidence presented at the hearing establishes that TexCom failed to use conservative permeability calculations in its modeling. After the initial hearing, TexCom elected to re-perforate the WDW410 well and run a new fall-off test. The EPA reviewed the results of TexCom's new 2009 fall-off test to determine permeability and radius of investigation,<sup>61</sup> determining the average permeability of the lower Cockfield at approximately 42 millidarcies.<sup>62</sup> Reservoir engineer Robert Sutherland interpreted the 2009 fall-off test for Denbury, calculating the permeability of the formation as low as 62 millidarcies.<sup>63</sup> District expert Phil Grant reviewed the 2009 fall-off test and estimated that the average permeability of the lower Cockfield to be less than 50 millidarcies.<sup>64</sup> Given the new

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<sup>61</sup> District Exh. 26 at 20.

<sup>62</sup> District Exh. 26 at 20.

<sup>63</sup> Denbury Exh. 1 at 14: 16-19 (Sutherland on prefiled direct).

<sup>64</sup> District Exh. 22 at 14:4-5 (Grant on prefiled direct).

data generated by TexCom, use of 80.9 millidarcies does not reflect the Commission's intent to be conservative in this calculation and was an inappropriate number.

**G. The cone of influence/area of review demonstrated by reservoir modeling is greater than five miles.**

Denbury excepts to the following findings of fact and conclusions of law from the Amended PFD, and would propose the following revisions and additions:

Proposed Revised Findings of Fact

150. The COI and AOR for TexCom's proposed operation, based on appropriate reservoir modeling and assumptions, ~~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~~ extends at least five miles from the WDW410 wellbore.
151. TexCom did not adequately investigated and accounted for artificial penetrations within the AOR.
157. ~~TexCom determined through its remand hearing modeling that if it injected at the maximum permitted rates continuously for 30 years, the reservoir pressure at the wellbore would increase over 30 years to a maximum of 3,897 psi, which is lower than the "bottom hole fracture pressure," or the bottom hole pressure that could theoretically cause fracture of the formation, of 4,848 psi.~~
166. 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~~ extends at least five miles from the WDW410 wellbore.

### Proposed Additional Findings of Fact

F-18. *The proper area of review (AOR) and cone of influence (COI) is at least 5 miles from the proposed wells. However, TexCom only examined artificial penetrations as far as 4.5 miles from the wellbore.*

Denbury disputes these findings of fact because they are against the weight of the evidence, which established that the proper cone of influence/area of review extended more than five miles from the WDW410 wellbore, and that TexCom failed to investigate artificial penetrations to this distance.

Denbury expert Jim Fairchild created a model using the variables selected by the Commission and corrected the multiple errors<sup>65</sup> in the TexCom modeling. Fairchild's modeling establishes that TexCom's operation will result in a substantially larger cone of influence/area of review that stretches at least five miles from the WDW410 wellbore.<sup>66</sup>

The ALJs appear to discount Fairchild's testimony because he calculated a cone of influence/area of review of greater than five miles, as opposed to providing a definite distance. However, this converts the applicant's burden to Denbury. TexCom bears the burden of calculating a definitive cone of influence/area of review for its application. Fairchild demonstrated that TexCom had not properly calculated the cone of influence/area of review and thus had not investigated artificial penetrations in at least a portion of the cone of influence/area of review. Fairchild's testimony was not effectively challenged or refuted by TexCom, and no

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<sup>65</sup> In addition to using the variables selected by the Commission, Fairchild corrected Casey's modeling by revising Casey's erroneous inputs. Fairchild first corrected Casey's use of a 168 productivity index ("PI"). Fairchild next corrected the boundary condition errors made by Casey in the TexCom modeling. For his last modeling run, Fairchild developed a grid structure to more accurately represent the regional geology surrounding the WDW410 well. For a complete discussion of TexCom's modeling flaws, see Denbury's Closing Arguments at 10-13.

<sup>66</sup> Denbury Exh. 11.

witness testified that Fairchild's model was wrong or that he selected incorrect variables. And unlike TexCom's witness Greg Casey, Fairchild was able to testify about the theories and justifications for his modeling. TexCom presented no witness with the ability to explain the variables TexCom chose for its modeling.

The ALJs also ignore the undisputed evidence that TexCom made additional changes to its modeling to reduce the simulated pressure build-up. Despite the Commission's direction to model the reservoir adding two more conservative assumptions, TexCom inexplicably changed the model and its assumptions on remand to make it less conservative. Instead of using a closed boundary as it had done in its application, TexCom's remand modeling switched to an "open boundary," using an estimated porosity at the model's edges of approximately 340%.<sup>67</sup> TexCom offered no testimony in support of this change. TexCom's changed boundary conditions offset the pressure buildup the Commission sought to investigate, and underestimated the true pressure increase from TexCom's proposed injection.<sup>68</sup>

TexCom witness Greg Casey testified about the modeling done by TexCom pursuant to the Commission's remand instructions. In his prefiled testimony from the first hearing, Casey testified that the model submitted as part of its application "was configured for closed outer boundaries."<sup>69</sup> Casey cited this boundary condition as one of the reasons TexCom considered its modeling to be "very conservative" and part of "worst-case assumptions" made by TexCom.<sup>70</sup> Casey testified that closed outer boundaries were chosen because closed boundaries "provide a

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<sup>67</sup> Denbury Exh. 4 at 9:17-20 (Fairchild on prefiled direct).

<sup>68</sup> Denbury Exh. 4 at 10: 16-17 (Fairchild on prefiled direct); Denbury Exh. 8.

<sup>69</sup> TexCom Exh. 49 at 2-3.

<sup>70</sup> TexCom Exh. 49 at 38:21-27 (Casey on prefiled direct).

very conservative approach (higher build-up of pressures) to the model pressure buildup as compared to using an infinite acting outer boundary condition.”<sup>71</sup>

Yet during his remand hearing testimony, Casey expressed confusion over which boundary conditions TexCom used in its remand modeling.<sup>72</sup> At first, Casey testified that TexCom had made only two changes in the remand modeling—adjusting to 80.9 millidarcy permeability and a non-transmissive fault.<sup>73</sup> He made the same claims in his prefiled testimony on remand, stating that “all of my methodologies were the same, with the exception of the two inputs we have been discussing.”<sup>74</sup> However, on cross-examination, Casey changed his story, and reluctantly admitted that TexCom’s newest modeling had also changed the model’s boundary conditions.<sup>75</sup> TexCom’s remand model was actually performed with an “infinite-acting outer boundary” instead of a closed outer boundary as had been used before.<sup>76</sup> Casey offered no explanation for this change. One can only assume, given the lack of explanation, it was performed solely for the purpose of lowering the pressure and abandoning the conservative assumptions TexCom previously used. Moreover, neither Casey<sup>77</sup> nor Mark Layne<sup>78</sup> refuted Fairchild’s analysis (discussed above) establishing that this change to the outer boundary condition resulted in a significant pressure drop in TexCom’s remand model.<sup>79</sup> TexCom’s unilateral adjustment to the model, without any explanation, created a model with an erroneously

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<sup>71</sup> TexCom Exh. 49 at 39:3-5 (Casey on prefiled direct).

<sup>72</sup> Remand Trial Tr. at 296: 8-24 (Casey on cross).

<sup>73</sup> Remand Trial Tr. at 273:18-25, 274: 1-3 (Casey on cross).

<sup>74</sup> TexCom Exh. 84 at 6:13-15 (Casey on prefiled direct).

<sup>75</sup> Remand Trial Tr. at 296:5—297:1-5 (Casey on cross).

<sup>76</sup> Remand Trial Tr. at 297: 6-9 (Casey on cross).

<sup>77</sup> Remand Trial Tr. at 292:1-5 (Casey on cross).

<sup>78</sup> Because of TexCom’s failure to designate Layne as an expert witness, Layne could only discuss what the inputs were, and not why particular inputs were chosen.

<sup>79</sup> Remand Trial Tr. at 1304: 7-15 (Fairchild on redirect).

low pressure result, and as a result an erroneous cone of influence/area of review that should be disregarded.<sup>80</sup>

Finally, TexCom failed to investigate artificial penetrations for the entire five mile cone of influence/area of review. TexCom claims that it “researched and compiled well records for all well locations out to a distance of 4.5 miles from the proposed wells.”<sup>81</sup> TexCom did not make any attempt to identify well records or artificial penetrations for wells beyond that distance. Therefore, TexCom has failed to account for artificial penetrations for more than seven square miles surrounding the WDW410 wellbore. Because TexCom calculated an improper cone of influence/area of review, and failed to account for all artificial penetrations, Denbury excepts to the above findings and conclusions.

**H. The injection zone cannot contain TexCom’s proposed waste.**

Denbury excepts to the following findings of fact and conclusions of law from the Amended PFD, and would propose the following revisions and additions:

Proposed Revised Conclusion of Law

22. In accordance with 30 TEX. ADMIN. CODE § 331.121(c)(3)(A), TexCom’s proposed wells would not be sited such that the Injection Zone has sufficient permeability, porosity, thickness, and areal extent to hold the injected wastewater.

Proposed Additional Finding of Fact

- F-19. *The top of TexCom’s injection zone is not sealed by shale or any other confining layer at a depth of 5,134 feet.*

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<sup>80</sup> Remand Trial Tr. at 298:1-10 (Casey on cross).

<sup>81</sup> TexCom Closing Arguments at 14.

F-20. *TexCom is incapable of preventing waste that migrates to the top of the injection zone at a depth of 5,134 feet from migrating upward another 200 feet to a depth of 4,900 feet, at the base of the Jackson shale.*

F-21. *TexCom's injection zone is not geologically capable of containing TexCom's injected waste.*

Denbury disputes this conclusion of law because it fails to account for the uncontroverted evidence presented at the hearing that the injection zone will not contain TexCom's proposed waste as required by the proposed permit.

TexCom's planned operations would allow its waste to migrate outside of the injection zone and throughout the Cockfield formation from depths of 4,900' to 5,134', strata not included within the injection zone of TexCom's draft permits. In defining the injection zone for the project, TexCom chose what it called the lower, middle, and upper portions of the Cockfield formation, at depths between 5,134' to 6,390' below ground surface. The confining unit for purposes of the proposed project was identified as the Jackson Shale.<sup>82</sup> Yet TexCom geologist Bruce Langhus and Denbury geologist Jon Herber recognized that the bottom of the Jackson shale is at approximately 4,900' below ground surface.<sup>83</sup> This leaves more than 200 feet of sand between the top of the injection zone and the base of the Jackson shale.<sup>84</sup> On cross examination, Langhus agreed with the formation geology as depicted in Denbury's correlation, which showed that the bottom of the Jackson shale is at a depth of approximately 4,900' below ground. Langhus also confirmed that the proposed injection zone ends below the Jackson Shale.<sup>85</sup>

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<sup>82</sup> TexCom Exh. 49 at 34:17-19 (Casey on prefiled direct).

<sup>83</sup> Denbury Exh. 3.

<sup>84</sup> Remand Trial Tr. at 1935:18-24 (Langhus on cross).

<sup>85</sup> Remand Trial Tr. at 1936:3-6 (Langhus on cross).

TexCom's proposed plan has left more than 200 feet between the top of its injection zone and the confining layer, with no evidence as to how its waste will remain within the injection zone, as required by the permit, when it reaches the top of the upper Cockfield. TexCom cannot prevent injectate from migrating into this area, and therefore Denbury excepts to this conclusion of law.

**I. TexCom failed to accurately calculate its proposed waste plume.**

Denbury excepts to the following findings of fact and conclusions of law from the Amended PFD, and would propose the following revisions and additions:

Proposed Revised Finding of Fact

153. ~~The reservoir modeling results were used to calculate an estimated lateral extent of the injected effluent into the Lower Cockfield through volumetric analysis. This analysis determined that the injected waste fluids would travel 2,770 feet from the wellbore within the Lower Cockfield over the lifetime of the facility.~~

177. ~~The injected wastewater (waste plume) was conservatively determined to travel a maximum of 2,770 feet from the wellbore within the Lower Cockfield over the lifetime of the Facility.~~

Proposed Additional Findings of Fact

F-22. *TexCom failed to account for numerous factors in estimating its waste plume, including formation permeability, oil and gas production, other wells in the Conroe Oil Field, and other permitted injection wells.*

F-23. *TexCom's waste plume calculation is not a reliable or conservative estimate of the distance that TexCom's waste will migrate during the life of the facility.*

Denbury excepts to these findings of fact because it wrongly suggests that TexCom's anticipated waste plume has actually been modeled by TexCom.

Denbury presented uncontroverted evidence that the waste plume calculation was not representative of real-world conditions and did not accurately predict the flow of TexCom's waste. The formula TexCom used to calculate a waste plume is nothing more than a crude calculation for the volume of a cylinder.<sup>86</sup> In making the calculation, TexCom admits that it assumed a purely "radial flow pattern" as well as a perfectly "homogeneous reservoir" to calculate the plume.<sup>87</sup> Neither of these are realistic assumptions.

Denbury expert Mark Swadener explained the problems with TexCom's assumption of "purely radial flow" away from the wellbore at the remand hearing.<sup>88</sup> As Swadener testified, reservoirs "are rarely if ever purely homogeneous both horizontally from a wellbore and vertically along a wellbore."<sup>89</sup> Because of the way it was laid down over geologic time, the Cockfield formation's geology is not homogeneous or uniform.<sup>90</sup> It contains various channels, shoreface sands, bay/lagoons, and point bars that cause asymmetric—not radial—flow through the reservoir.<sup>91</sup> Asymmetric flow is significant because when fluids radiate through the formation and along preferential sand channels, they are more likely to hit one of the numerous faults and fractures present within the Cockfield formation.<sup>92</sup> The interaction between these sand channels and the faults and fractures within the formation are a path for TexCom's waste to reach distances well beyond 2,770 feet from the wellbore.<sup>93</sup> TexCom has admitted that it made

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<sup>86</sup> TexCom Exh. 20 at 7-9.

<sup>87</sup> TexCom Exh. 20 at 7-9.

<sup>88</sup> Denbury Exh. 18 at 19:22-23 (Swadener on prefiled direct).

<sup>89</sup> Denbury Exh. 18 at 20:1-4 (Swadener on prefiled direct).

<sup>90</sup> Denbury Exh. 13 at 5: 18 (Herber on direct).

<sup>91</sup> Denbury Exh. 13 at 5:18-20 (Herber on direct).

<sup>92</sup> Remand Trial Tr. at 958:12-20 (Herber on cross).

<sup>93</sup> Remand Trial Tr. at 957:15-25 (Herber on cross).

no investigations or calculations to account for preferential flow paths in attempting to calculate its waste plume.<sup>94</sup>

The fact that the waste plume has not changed, even though TexCom has been ordered to reduce the permeability of its model location to less than 20% of the original permeability used, and that TexCom has added perforations to extend the injection interval, demonstrates that the calculation is unreliable and unrealistic. TexCom's calculation offers little guidance on exactly where TexCom's waste will ultimately travel. Therefore, Denbury excepts to these findings of fact because TexCom has done nothing to accurately model and estimate real-world conditions in the reservoir, or the fate and transport of its waste.

**J. TexCom failed to account for cross-flow among wellbores.**

Denbury excepts to the following findings of fact and conclusions of law from the Amended PFD, and would propose the following revisions and additions:

Proposed Revised Finding of Fact

99. ~~Even if the field operator had drilled a well to a lower depth looking for oil, the operator would likely have plugged that well back to the Upper Cockfield with cement or mechanical plugs in order to prevent the inward flow of brine from the lower zones and for oil production.~~
107. ~~The Jackson shale formation would likely have collapsed into and sealed any uncased, abandoned boreholes drilled into the Upper Cockfield during the 1930's or earlier.~~

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<sup>94</sup> Remand Trial Tr. at 318:10-14 (Casey on cross).

Proposed Revised Conclusion of Law

28. In accordance with 30 TEX. ADMIN. CODE § 331.121(c)(4)(D), because of the geology of the site, uncased abandoned boreholes ~~would not~~ will endanger the USDWs, and the fresh or surface water.

Proposed Additional Findings of Fact

F-23. *Cross-flow among wellbores will cause TexCom's injected waste to migrate up out of the injection interval and endanger fresh or surface water.*

Denbury disputes these findings of fact and conclusion of law because it is against the weight of the evidence. TexCom has failed to account for the possibility of cross-flow among wellbores that could endanger USDWs, as well as fresh or surface water. Cross-flow is flow within a plugged borehole below where the plug was set by the operator. In areas where artificial penetrations extend as deep as the lower Cockfield, if the wells were not plugged at a depth within the lower Cockfield, these wells act as a direct conduit for injectate and formation fluid to migrate from the lower portion of the formation to the upper Cockfield productive zone, and above, up to the depth of the plug.<sup>95</sup> This could occur through any type of casing damage or any path of communication inside the wellbore.<sup>96</sup> Denbury presented evidence that cross-flow among wellbores could lead to contamination of freshwater resources, and TexCom did nothing to account for cross-flow within wellbores.<sup>97</sup> Therefore, Denbury excepts to these findings of fact and conclusion of law.

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<sup>95</sup> Remand Trial Tr. at 1474:2-7 (Swadener on cross).

<sup>96</sup> Remand Trial Tr. at 1474:15-17 (Swadener on cross).

<sup>97</sup> Remand Trial Tr. at 1474:15-17 (Swadener on cross).

**K. TexCom's well does not possess adequate mechanical integrity.**

Denbury excepts to the following findings of fact and conclusions of law from the Amended PFD, and would propose the following revisions and additions:

Proposed Revised Conclusion of Law

15. TexCom's wells, if constructed and operated in accordance with the specifications listed in the UIC Application and the requirements of the Draft Permits, would not possess mechanical integrity as required by 30 TEX. ADMIN. CODE § 331.4 and would not exhibit the mechanical integrity standards listed at 30 TEX. ADMIN. CODE § 331.43(a).
16. TexCom's wells, if constructed and operated in accordance with the specifications listed in the UIC Application and the requirements of the Draft Permits, would not conform to the construction standards listed at 30 TEX. ADMIN. CODE § 331.62.

Proposed Additional Findings of Fact

- F-24. *The proper packer setting for TexCom's proposed well is directly above the injection interval at a depth of 6,045 feet.*
- F-25. *TexCom's current and proposed packer setting at approximately 935 feet above the injection interval risks direct emplacement of waste outside the injection interval, and therefore TexCom's well design lacks sufficient mechanical integrity.*

Denbury disputes these conclusions of law because it fails to account for TexCom's improper packer setting.

TexCom's expert Greg Casey testified at the hearing that the packer should be set right above the injection interval—in this case, the top of the lower Cockfield at 6,045 feet.<sup>98</sup> TexCom and its witnesses said placing the packer “just above the injection interval”<sup>99</sup> is important because the proper packer setting is needed to prevent the waste from exiting the well prior to the injection interval.<sup>100</sup> Yet in its application, TexCom is seeking to permit a well where the packer is set at a depth of approximately 5,108 feet.<sup>101</sup> As TexCom witness Greg Casey acknowledged, this leaves nearly 935 feet between the packer setting and the top of the injection interval.<sup>102</sup> TexCom offered no explanation for why its packer was set so high, even in light of TexCom's own statements that the proper packer placement is just above the injection interval.

As evidence at the hearing demonstrated, placing the packer so high in the formation creates the “risk of direct emplacement outside of the injection zone.”<sup>103</sup> District expert Phil Grant confirmed that even with annual testing, a leak below the packer could exist for as long as a year before it was discovered at the next test.<sup>104</sup> Therefore, Denbury opposes any conclusion of law that asserts that TexCom's well, as designed, would exhibit sufficient mechanical integrity to obtain a permit pursuant to 30 Tex. Admin. Code § 331.4 or would comply with 30 Tex. Admin. Code § 331.62. Further, this packer setting leads to the conclusion that TexCom's proposed wells will not comply with the permit's requirement related to the injection interval.

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<sup>98</sup> Remand Trial Tr. at 305:24 - 306:1-4 (Casey on cross).

<sup>99</sup> TexCom Exh. 49 at 23:23-27 (Casey on prefiled direct).

<sup>100</sup> TexCom Exh. 49 at 23:27 - 24:1 (Casey on prefiled direct).

<sup>101</sup> Remand Trial Tr. at 478:25 - 479:1-3.

<sup>102</sup> Remand Trial Tr. at 414:12-13 (Casey on re-cross).

<sup>103</sup> Remand Trial Tr. at 649:17-19 (Grant on re-cross).

<sup>104</sup> Remand Trial Tr. at 473:11-16 (Grant on cross).

**L. The transcription costs in the Amended PFD are miscalculated.**

In the Amended PFD, the ALJs assess a cost of \$14,715 divided among the applicant and the protestants.<sup>105</sup> However, this figure includes items that should only be chargeable to TexCom. TexCom provided to Denbury a detailed invoice for the transcription fees.<sup>106</sup> That invoice shows many costs in addition to costs for a copy of the transcript for the TCEQ file and a copy for SOAH.

Several items on the invoice are troubling. First, there is a charge for an additional copy, beyond the original and two copies, of what we presume is the transcript. Denbury is unaware of the ALJs requesting or the rules requiring an additional transcript. Second, there is a charge for “8” additional formats. This too does not appear to be any item required by the ALJs or the rules. Third, there is an administrative expense fee. And fourth, there are substantial charges for oversize exhibit copies. Denbury sees no justification in making the parties bear the cost of TexCom's copies of exhibits, given that each party supplied copies of exhibits for the record and for the ALJs. Denbury paid the costs for providing its own oversize and color exhibits, and expects TexCom to do the same.<sup>107</sup>

Considering all the relevant factors, as directed by 30 TEXAS ADMINISTRATIVE CODE chapter 80, only the first item on the invoice in the amount of \$12,570, should be divided among the parties.

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<sup>105</sup> Amended PFD at 116.

<sup>106</sup> A true and correct copy of the invoice provided by TexCom is attached hereto as **Exhibit B**.

<sup>107</sup> Denbury notes that there does not appear to be a charge on these invoices that is clearly identified as TexCom purchasing its own copy of the transcript. Denbury assumes, but would ask that TexCom provide documentation, that the charges on the invoice do not result in the parties paying for a copy of the transcript for TexCom. Denbury purchased its own copy of the transcript and would expect that TexCom did the same.

**M. Miscellaneous exceptions.**

Denbury excepts to the following findings of fact and conclusions of law from the Amended PFD, and would propose the following revisions and additions:

Proposed Revised Finding of Fact

90. Within the Cockfield formation, most historical and current oil production within the Conroe Oil Field has been from the Upper Cockfield. None has been from the lower Cockfield.

Proposed Revised Conclusion of Law

6. The evidence in the record is not sufficient to meet the requirements of applicable law for issuance of such permit, including the TEX. WATER CODE, Chapter 27 (the Injection Well Act) and 20 TEX. ADMIN. CODE Chapter 331.
10. The contents of the permits to be issued to the Facility do not meet the requirements of the TEX. WATER CODE §§ 27.011 and 27.051.

Proposed Additional Findings of Fact

- F-26. *TexCom's Class V injection permit contained various limits including a limit on the specific gravity of fluid to be injected. This limit was to protect the formation from fracturing.*
- F-27. *TexCom injected a fluid with a greater specific gravity than permitted by its Class V permit.*
- F-28. *In conducting its 2009 fall off test, TexCom violated its Class V injection permit.*

**III. TexCom's Application Should be Denied Based on the False and Misleading Statements in the Application in Accordance with 30 TEX. ADMIN. CODE § 305.66.**

The ALJs note that it is within the Commission's authority to deny an application based on the applicant's misrepresentations to the Commission.<sup>108</sup> TexCom provided a copy of a 2005 email received by Lou Ross, TexCom's president showing TexCom did not own the minerals.<sup>109</sup> Section 305.66 of the Commission's rules states in pertinent part (emphasis added):

- (f) The commission may deny, suspend for not more than 90 days, revoke an original or renewal permit if the commission finds after notice and hearing, that:
  - (3) the permit holder or applicant made a **false or misleading statement** in connection with an original or renewal application, either in the formal application or in any other written instrument relating to the application submitted to the commission, its officers, or its employees.
- (g) Before denying, suspending, or revoking a permit under this section, the commission must find:
  - (1) that a violation or violations are significant and that the permit holder or applicant has **not made a substantial attempt to correct** the violations.

The Commission should deny the TexCom's UIC permit application based on the false and/or misleading statements in the application and related documents concerning: (1) ownership of the mineral rights; and (2) mailed notice. Both violations are significant, and there is no dispute that TexCom has not corrected its application.

TexCom's application claimed it owned the mineral interest under the proposed injection facility. TexCom now admits that it does not—and never did—own the mineral interest. TexCom's false claims of ownership were not based on ignorance by TexCom, because TexCom

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<sup>108</sup> 30 TEX. ADMIN. CODE § 305.66.

<sup>109</sup> Email, July 15, 2005, attached to the affidavit of Gladden Walters, filed as a part of TexCom's response.

knew that it did not own the minerals in question.<sup>110</sup> TexCom admits that it was aware of this issue when it submitted its application.<sup>111</sup> However, TexCom never shared this information with the TCEQ, nor changed this representation in its application in any of the numerous amendments and revisions it submitted.

This is not an insignificant error. The TCEQ relies upon the applicant for this information. In fact, the TCEQ acted on this incorrect information and issued notice to the incorrect parties. While TexCom's purpose in supplying incorrect information is unknown, the end result was that the party whose property interest was likely the most affected—the mineral interest owner—was denied notice.

The only way for TexCom to correct the violations is to correct its application to reflect the owner of mineral rights as Sabine, and to send proper notice to Sabine. However, TexCom has made no attempt to amend its application.<sup>112</sup> Because the violations are significant and TexCom has made no attempt to correct them, the Commissioner should deny the permit under 30 TEX. ADMIN. CODE § 305.66.

Denbury acknowledges that the provisions of section 305.66 are not mandatory. However, these provisions clearly were enacted to emphasize to applicants the importance of accuracy and truthfulness in their dealings with the Commission. As the Executive Director's

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<sup>110</sup> *Applicant TexCom Gulf Disposal, LLC's Response in Opposition to Denbury Onshore, LLC's Plea to the Jurisdiction* at 10 (June 21, 2010). ("TexCom's Response")

<sup>111</sup> *See id.* at 10, in which TexCom states: "At the time the applications were submitted to TCEQ, TexCom determined that the mineral rights for the T.C. Howell Survey were held by Sempra Energy Production." Despite this mineral right ownership determination, TexCom told TCEQ that TexCom was the owner of the mineral rights.

<sup>112</sup> In response to Denbury's motion, TexCom produced an affidavit from an employee at Providence Energy Corp., who is believed to have executive rights on behalf of Sabine, the owner of the mineral rights, stating that Providence Energy Corp. had no objection to TexCom's proposed activities. *See Exhibit D to Applicant TexCom Gulf Disposal, LLC's Response in Opposition to Denbury Onshore, LLC's Plea to the Jurisdiction* at 10 (filed June 21, 2010).

witness made clear, the Commission relies upon the accuracy of the application.<sup>113</sup> This is a practical necessity. To require the TCEQ to verify each statement from the applicant would be impractical and overly burdensome. To allow an applicant such as TexCom to submit false information to the TCEQ and then refuse—as TexCom did—to mitigate the damages by correcting notice sends the wrong message to applicants.

#### **IV. Conclusion**

Denbury agrees with the Administrative Law Judges (“ALJs”) conclusion and recommendation that the Commission deny TexCom’s UIC well applications.<sup>114</sup> In addition to the reasons outlined by the ALJs, Denbury believes that TexCom’s UIC well applications should be denied based on numerous other deficiencies in TexCom’s application, as well as under the Commission’s authority pursuant to 30 TEX. ADMIN.CODE § 305.66.

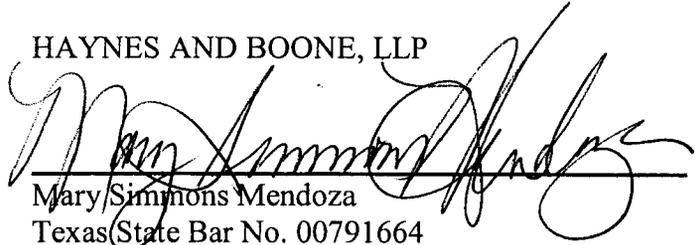
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<sup>113</sup> Remand Trial Tr. at 1881:23—1882:8 (Flegal on cross).

<sup>114</sup> Amended PFD at 118.

Respectfully submitted,

HAYNES AND BOONE, LLP



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**ATTORNEYS FOR PROTESTANT DENBURY  
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**CERTIFICATE OF SERVICE**

**SERVICE LIST**

I hereby certify that, on this of 29th day of November, 2010, a true and correct copy of the foregoing has been served upon the following via the methods indicated below:

State Office of Administrative Hearings

*via hand delivery*

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Honorable Catherine C. Egan  
Administrative Law Judges  
State Office of Administrative Hearings  
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**Denbury Onshore, LLC's Exceptions to the Amended  
Proposal for Decision, Findings of Fact, and Conclusions of Law**

TCEQ Docket No. 2007-0204-WDW  
SOAH Docket No. 582-07-2673

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**Denbury Onshore, LLC's Exceptions to the Amended  
Proposal for Decision, Findings of Fact, and Conclusions of Law**

TCEQ Docket No. 2007-0204-WDW  
SOAH Docket No. 582-07-2673

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**Denbury Onshore, LLC's Exceptions to the Amended  
Proposal for Decision, Findings of Fact, and Conclusions of Law**

TCEQ Docket No. 2007-0204-WDW  
SOAH Docket No. 582-07-2673

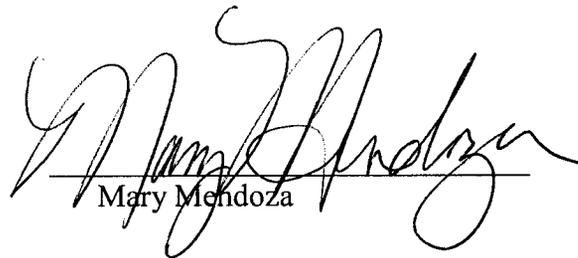
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Mary Mendoza

**Denbury Onshore, LLC's Exceptions to the Amended  
Proposal for Decision, Findings of Fact, and Conclusions of Law**

TCEQ Docket No. 2007-0204-WDW  
SOAH Docket No. 582-07-2673

# **Exhibit A**

VICTOR G. CARRILLO, CHAIRMAN  
ELIZABETH A. JONES, COMMISSIONER  
MICHAEL L. WILLIAMS, COMMISSIONER



LINDIL C. FOWLER, JR., GENERAL COUNSEL  
COLIN K. LINEBERRY, DIRECTOR  
HEARINGS SECTION

# RAILROAD COMMISSION OF TEXAS

## OFFICE OF GENERAL COUNSEL

Date: November 19, 2010

Oil & Gas Docket No. 03-0266270

### NOTICE TO THE PARTIES

The attached document is a Proposal for Decision and recommended Final Order issued by the examiner(s) in this case. Under Section 1.141 of the Commission's General Rules of Practice and Procedure, we are required to circulate the document to each party or its authorized representative. This is only a proposal and is not to be interpreted as a final decision unless an official order adopting the proposal is signed and issued by the Commission.

Under Section 1.142 of the General Rules of Practice and Procedure (16 T.A.C. §1.142), you have the right to file a written statement disagreeing with the proposal and setting out your reasons for this position. This document is referred to as "Exceptions" and must be filed with the Docket Services Section of the Office of General Counsel (Room 12-123) within 15 days of the date above. You have the right to respond in writing to any exceptions filed by another party. This document is referred to as "Replies to Exceptions" and must be filed with the Docket Services Section of the Office of General Counsel (Room 12-123) within 10 days after the deadline for filing exceptions.

In addition to written exceptions and replies, the parties may file with the Commission a one page summary of the case. The summary shall be filed with the Commission **at the time exceptions are due**. The summary is specifically limited to one page and shall contain only information of record or argument based on the record. The summary shall not be submitted in reduced print. If the summary contains any material not of record, has reduced print, or exceeds one page (8-1/2" x 11"), the examiner(s) will reject the summary and it will not be submitted to the Commissioners for their review.

The summary shall contain the name of the party, the status of the party, the name and docket number of the case, the issue(s), the key facts, the legal principles involved (including proposed conclusions of law), and the action requested. (See enclosed form.)

In view of the due dates stated above, all parties are reminded that pleadings are considered filed only upon **actual receipt by the Docket Services Section of the Office of General Counsel** (Room 12-123). Furthermore, each pleading must be served upon all Parties of Record and a statement certifying such and giving complete names and addresses must be included. Exceptions and replies may not be filed by telephonic document transfer unless otherwise directed by the examiner(s). **An original plus**

**THIRTEEN copies of exceptions, replies and summaries should be submitted to the Commission. PLEASE DO NOT STAPLE.** Further, a copy of these pleadings must be submitted to each party. **IN ADDITION, IF PRACTICABLE, PARTIES ARE REQUESTED TO PROVIDE THE EXAMINERS WITH A COPY OF ANY FILINGS ON A DISKETTE IN WORD OR WORDPERFECT FORMAT. THE DISKETTE SHOULD BE LABELED WITH THE DOCKET NUMBER, THE TITLE OF THE DOCUMENT, AND THE FORMAT OF THE DOCUMENT.**

The proposal for decision, and all exceptions and replies will be submitted to the Commissioners for their consideration at one of their regularly scheduled conferences. The agenda for the scheduled conferences will be published in the *Texas Register* and posted in the office of the Secretary of State. The conferences are open meetings; you may attend and listen to the presentation of the case.

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Osborn & Griffith  
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Legislative Director  
P O Box 12068  
Austin TX 78782

Mike Ward  
16015 Creighton  
Conroe TX 77302

Gil Bujano - RRC, Austin  
Ramon Fernandez - RRC, Austin  
Doug Johnson - RRC, Austin

CASE SUMMARY

PREPARED BY:

STATUS:

EXAMINER(S):

DOCKET NO./CASE NAME:

ISSUE(S):

KEY FACTS:

LEGAL PRINCIPLES INVOLVED:

ACTION REQUESTED:

VICTOR G. CARRILLO, *CHAIRMAN*  
ELIZABETH A. JONES, *COMMISSIONER*  
MICHAEL L. WILLIAMS, *COMMISSIONER*



LINDIL C. FOWLER, JR., *GENERAL COUNSEL*  
COLIN K. LINEBERRY, *DIRECTOR*  
*HEARINGS SECTION*

# RAILROAD COMMISSION OF TEXAS

## OFFICE OF GENERAL COUNSEL

OIL AND GAS DOCKET NO. 03-0266270

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COMMISSION CALLED HEARING ON THE COMPLAINT OF DENBURY ONSHORE, LLC REGARDING THE NO-HARM LETTER ISSUED ADMINISTRATIVELY TO TEXCOM GULF DISPOSAL GULF DISPOSAL LLC BY THE COMMISSION'S ENVIRONMENTAL SERVICES SECTION ON SEPTEMBER 16, 2005 REGARDING CLASS I NONHAZARDOUS WASTE DISPOSAL WELL NOS. 1, 2, 3 AND 4 AT THE TEXCOM GULF DISPOSAL FACILITY IN MONTGOMERY COUNTY, TEXAS

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Heard by: Donna K. Chandler, Technical Examiner  
James M. Doherty, Hearings Examiner

**Appearances:**

**Representing:**

Brian Sullivan  
Greg Friend  
Matthew Baab  
Patricia Moore  
Melissa Denard  
Mary Mendoza  
James Fairchild  
Jon Herber  
Mark Swadener  
Robert Sutherland

Denbury Onshore LLC

William Osborn  
Ana Maria Marsland-Griffith  
Rick Johnston

TexCom Gulf Disposal LLC

Angus Lupton

Senator Robert Nichols

Mike Ward

Citizens/Residents Opposing Well

**Procedural history:**

Notice of Hearing: June 25, 2010  
Hearing held: August 16-17, 2010  
Transcript date: August 23, 2010  
Record Closed: September 14, 2010  
PFD issued: November 19, 2010

**EXAMINERS' REPORT AND PROPOSAL FOR DECISION****STATEMENT OF THE CASE**

In 1993, a permit for injection of Class I non-hazardous waste was issued to Crossroads Environmental Corporation by a predecessor agency to the Texas Commission on Environmental Quality ("TCEQ"). The facility was to be located in Montgomery County, within the boundaries of the Conroe Field Unit ("CFU"), which was established in 1978. At the time of the 1993 application, Exxon was the operator of the Conroe Field Unit. As part of the application to TCEQ, Crossroads obtained a letter from the Railroad Commission which stated that "...disposal of non-hazardous industrial waste into the Lower Cockfield Formation, in the subsurface perforated interval from 6,110 feet to 6,540 feet, will not endanger any known oil and gas reservoirs." Letters of this type are known as "no harm" letters.

In 2002, a permit for injection of Class I non-hazardous waste was issued to Huntsman Petrochemical Corporation by a predecessor agency to the TCEQ. Huntsman had applied for the permit to inject waste into two wells to be located at the same Montgomery County facility as the Crossroads wells were proposed. No injection had commenced under the 1993 permit. In conjunction with this application, the Railroad Commission issued a "no harm" letter to Huntsman in 2001. Exxon was still the operator of the CFU at that time.

In 2005, TexCom Gulf Disposal, LLC ("TexCom") filed an application with the TCEQ for authority to inject Class I non-hazardous waste into four wells at the same facility in Montgomery County. A new application was required by TCEQ because injection had not been commenced by Huntsman. TexCom requested a "no harm" letter from the Railroad Commission in 2005 in conjunction with its application to the TCEQ. The "no harm" letter was issued on September 16, 2005. Exxon was still the operator of the CFU at the time of TexCom's application and that application is still pending before the TCEQ.<sup>1</sup>

Denbury Onshore LLC ("Denbury") purchased the Conroe Field Unit from Wapiti Operating, LLC (the successor operator to Exxon of the CFU) in December 2009, with the intention of conducting a carbon dioxide ("CO<sub>2</sub>") flood. Denbury believes that the Railroad Commission's "no harm" letter of September 16, 2005 should be rescinded because the formation into which disposal authority is requested overlaps the unitized formation of the CFU. Denbury believes that injection of waste by TexCom will interfere with its proposed CO<sub>2</sub> injection, resulting in the loss of 125 million BO which is expected to be recovered as a result of proposed CO<sub>2</sub> injection.

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<sup>1</sup> On November 8, 2010, a Proposal for Decision in TCEQ Docket No. 2007-0202-WDW was issued by the State Office of Administrative Hearings recommending denial of TexCom's application.

Senator Robert Nichols was represented at the hearing. A letter was submitted from Senator Nichols and Representative Brandon Creighton. Both are legislators representing Montgomery County. They support Denbury's efforts to produce additional oil from the Conroe Field Unit by means of Denbury's proposed carbon dioxide injection project, and do not believe that operation of the TexCom wells are in the public interest.

Mr. Mike Ward appeared at the hearing representing a group comprised of over 3,000 citizens of Montgomery County who are opposed to TexCom's application.

### **DISCUSSION OF THE EVIDENCE**

#### **Denbury's Evidence**

The Conroe Field was discovered in 1931 and has produced 734 million BO and 1,069 BCF of gas. In 1978, the CFU, comprising 18,829 acres, was formed for purposes of secondary recovery. Exxon Corporation was the operator of the CFU at the time of unitization. The unitized interval is from 4,680 feet to 5,420 feet, as shown on the log of the D. A. Madeley No. 45. This interval is directly beneath the Jackson Shale and includes six separate Upper Cockfield and Main Conroe sands. The Upper Cockfield and Main Conroe sands are separated by about 130 feet of shale. Current production from the CFU is about 2,500 BOPD and 200,000 BWPD. Under current operations, Denbury estimates that remaining recoverable reserves from the CFU are 20 million BO.

Denbury purchased the Conroe Field from Wapiti in 2009 for over \$400 million, with the intention of conducting a CO<sub>2</sub> flood in the field. Denbury has been conducting CO<sub>2</sub> floods in similar fields for the past 10 years and has its own CO<sub>2</sub> source in Mississippi. A pipeline has already been built to transport the CO<sub>2</sub> to various operations in Louisiana, Alabama, Mississippi and southeast Texas. In its projects, Denbury currently injects almost 2 BCF per day of CO<sub>2</sub>, including purchased and recycled CO<sub>2</sub>.

Injection of CO<sub>2</sub> into suitable reservoirs results in decreased viscosity of the residual oil, allowing it to move to producing wells. In the Oyster Bayou field, Denbury is currently injecting over 40 MMCFD of CO<sub>2</sub>. Denbury plans to initiate CO<sub>2</sub> injection in the Hastings Field by the end of 2010. Initiation of injection into the Conroe Field would be the next project, which would require building an 80 mile pipeline spur. Since 1999, Denbury's production as a result of CO<sub>2</sub> injection has increased from 1,300 BOPD to almost 30,000 BOPD for 16 projects. In the Conroe Field, Denbury expects to recover approximately 17% of original oil-in-place for the field as a result of CO<sub>2</sub> flooding. This equates to at least 125 million BO.

TexCom's proposed injection "zone" includes Upper, Middle and Lower Cockfield sands. This zone overlaps the unitized interval for the CFU by several hundred feet. The injection "interval" (perforated zone) proposed to be used by TexCom for disposal is in the Lower Cockfield only. Denbury believes that any injection of waste into the Lower Cockfield

in the TexCom wells will be communicated to the producing sands within the CFU unitized interval. (See Attachment A, Denbury Exhibit No. 8).

The TexCom WDW No. 410 well is the only one of the four proposed disposal wells which has already been drilled and logged. The well was drilled in late 1999 by Crossroads to a total depth of 6,578 feet. The well is perforated from 6,046 feet to 6,390 feet in the lower Cockfield. A packer is set at 5,108 feet, or 938 feet above the current top perforation. In its application to TCEQ, TexCom requested an injection "zone" of 5,134 feet to 6,390 feet, with a requested injection "interval" of 6,045 feet to 6,390 feet.

The Conroe Field has very complex faulting as a result of deep seated salt movement, which is common in southeast Texas. TexCom's proposed disposal wells are near the northern boundary of the Conroe Field Unit, on the upthrown side of a major fault identified as the 4400 foot fault.<sup>2</sup> (See Attachment B, Denbury Exhibit No. 6).

Since 1936, it has been documented that the extensive faulting in the Conroe Field allows migration of fluids throughout the Cockfield sands. Over the years, gas from the deeper main Conroe sands leaked up into the Upper Cockfield sands, despite the presence of the 130 foot shale between the zones. Numerous published studies also confirm that the original contacts in the entire Cockfield series have moved up uniformly over time, demonstrating that the entire Cockfield is in communication. Water production from the CFU is believed to be the result of the natural water drive from the Lower Cockfield.

Denbury believes that TexCom must also believe that the entire Cockfield series is in communication. In its TCEQ application, TexCom's documents state the following:

"The Jackson Formation forms the Upper Confining Zone for the TexCom injection project in Montgomery County, Texas."

"The Injection Zone in the subject facility includes the Upper, Middle, and Lower Cockfield Sand Members. These three thick sand packages are separated by persistent shales but the shales appear not to be thick enough to isolate the individual sand members either stratigraphically or across faults in the AOR."

Denbury believes that TexCom's statements confirm that waste injected into the Lower Cockfield will not be confined to the Lower Cockfield.

Denbury's interpretation of 3-D seismic data obtained in 2009 confirms the presence of faults and fractures at various depths in the Cockfield sands. The existence of these numerous faults and fractures within the Cockfield further confirm Denbury's opinion that there is no confining shale within the Cockfield.

At Denbury's request, Halliburton processed and interpreted the electrical micro

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<sup>2</sup> This fault is known as the 4400 foot fault because of its location approximately 4,400 feet south of TexCom's proposed wells.

imager log between 4,850 and 6,577 feet in the No. 410 well. In that interval, Halliburton identified 32 mineralized fractures, 18 open fractures, and 152 more possible fractures. These fractures are paths for the injected waste to migrate from the injection interval in the No. 410 well into the Upper Cockfield productive sands. The only confinement is the thick Jackson Shale above the unitized interval.

It is not disputed that the original oil-water contact in the Conroe Field was at a subsea depth of 4,990 feet, in the bottom portion of the Upper Cockfield. The log of the No. 410 well shows increasing resistivity above the original oil-water contact, demonstrating that residual oil exists in the Upper Cockfield in the area of the disposal wells. Denbury further believes that some of the uppermost sands in the immediate area of the No. 410 well have remaining primary oil, based on the log of the No. 410 well.

Denbury presented results of two pressure falloff tests (periods of injection followed by shut-in) conducted on the No. 410: one conducted in 1999 when Crossroads drilled the well and the second conducted by TexCom in 2009 after additional perforations were added. In the 1999 test, the radius of investigation was determined to be 1,650 feet from the wellbore. The 2009 test, which was run over a period approximately twice as long as the 1999 test, was requested by TCEQ. The 2009 test was designed to reach a radius of investigation of approximately 5,400 feet, which exceeds the distance from the well to the 4,400 foot fault. However, the 2009 test only reached out approximately 2,385 feet. A tenfold increase in permeability was encountered only 950 feet from the well, indicating a path of communication and movement of fluids within the formation. Denbury believes these tests are further evidence of the communicating faults within the Cockfield formation.

Denbury calculated the differential pressure required to move fluids from TexCom's disposal well to Denbury producing wells located near the 4,400' fault. Assuming 11,000 barrels of oil and water per day producing from the eight wells along the fault, a pressure increase of only 159 psi in the Lower Cockfield disposal interval will move fluids up to the lower portion of the Upper Cockfield producing zone.

Denbury has identified three plugged wellbores in the area of the proposed disposal well which are possible conduits for communication between the disposal interval and the productive unitized interval of the Conroe Field. These three wells have plugs set above and below the Cockfield Sands, but not between the Upper and Lower Cockfield. Any casing leak in these wellbores within the Cockfield could result in well-to-well communication between the productive interval in the Upper Cockfield and the disposal interval in the Lower Cockfield.

If TexCom is allowed to dispose of waste into the Lower Cockfield, Denbury's operating costs will increase due to a need to lift additional fluids as pressure increases in the Upper Cockfield. Additionally, because a CO<sub>2</sub> flood is planned for the field, if the waste injected by TexCom is transmitted to the Upper Cockfield, these wastes are likely to be incompatible with formation fluids and production equipment, again resulting in increased costs.

Denbury's 20 year development plan for the CFU includes the drilling of 314 new wells, 79 workovers of active wells, and reactivation of 104 wells. It is anticipated that in the final development stage, there will be 271 producing wells and 225 injection wells.

### **TexCom's Position and Evidence**

By letter dated August 31, 2005, TCEQ notified TexCom that its application for the subject disposal wells was administratively complete and TCEQ notified various entities of the application, including Exxon, on September 6, 2005. On July 3, 2006, TCEQ notified TexCom that the technical review of the application had been completed and draft permits had been prepared. On the same date, TCEQ notified various entities, including Exxon, of the progress of the application and the intention to issue permits. Exxon, as operator of the CFU at the time, did not respond to either TCEQ letter. TexCom believes that Denbury's request to rescind the Commission's "no harm" letter four years after it was issued, is without legal basis. TexCom believes that Denbury is bound by the non-action of its predecessor operator.

TexCom's position is that its proposed disposal will not adversely affect the CO2 injection project proposed by Denbury. The proposed disposal wells are located at the northern edge of the CFU boundary. Further, TexCom plans to dispose of the waste in a section of the Cockfield formation which is hundreds of feet deeper than the section of the Cockfield into which Denbury plans to conduct its CO2 operations.

According to TexCom, the injection "interval" for the disposal wells is the interval which is allowed to be perforated for disposal of waste. The larger injection "zone" referred to in the TCEQ documents includes a buffer interval. As long as injected waste is confined to the injection "zone", the operations are in compliance with the permit. TexCom does not disagree that the top of the injection "zone" includes several sands within the correlative unitized interval for the CFU.

TexCom's analysis of the log for the No. 410 disposal well indicates 199 feet of sand between 6,045 feet and 6,394 feet (the injection "interval") which has porosity sufficient to accept waste. This is thicker than the 145 feet estimated by Denbury. The effective porosity within the interval studied is 24.6% and the average water saturation within the interval is 93.4%. Using these log derived values and Denbury's 145 feet of thickness, TexCom calculated that the plume radius of the injected fluids to be 866 feet, assuming 3 years of injection at a rate of 12,000 barrels per day. After 10 years of injection at the same rate, the calculated plume radius is 1,582 feet, and after 20 years of injection, the calculated plume radius is 2,236 feet. The 10 year volume is most pertinent because the TCEQ permits have a 10 year authority, at which time permits must be reviewed. If the 199 feet of effective thickness was used in the calculations, the plume radii would be smaller.

TexCom performed pressure-front calculations to determine the pressure increase due to waste injection which would occur at the 4,400 foot fault. The nearest producing wells are to the north of the fault, about 3,000 feet away from the proposed disposal wells.

After 10 years of injection, the reservoir pressure at the fault would be increased by a maximum of 242 psi. This is less pressure than required to raise fluid 827 feet vertically from the top perforation at 6,045 feet in the No. 410 well to the original oil-water contact found at 5,218 feet in that well. Denbury alleges that its project will target reserves only above the original oil-water contact, and therefore, TexCom's proposed disposal into the non-productive deeper Cockfield interval in the No. 410 well will not affect Denbury's operations.

TexCom submitted exhibits from a Railroad Commission hearing held in 1996 in which Exxon Company requested and was granted, authority to "blow down" the gas cap in the Conroe Field. Conclusions from that hearing included 1) no discrete oil column remained in the field, 2) remaining oil reserves were located in small isolated pods thought to be trapped by small faults and stratigraphy, and 3) field average water cut was 97.5%. The conclusions from that hearing were supported by structure maps of three different Conroe producing sands which depicted the water invaded zones and the very small, high water cut oil producing areas remaining at the time of blow down. These conclusions support TexCom's position that its proposed disposal will not harm oil production from the CFU.

The No. 2315D well drilled by Wapiti encountered pressure gradients of 0.38 - 0.39 psi/foot in the lower sands of the unitized interval. This compares to a gradient of 0.406 psi/ft encountered in the TexCom No. 410 well at 6,000 feet, which is several hundred feet below the unitized interval. The two wells are on opposite sides of the large 4,400' fault previously discussed. TexCom agrees that these pressures indicate communication across the fault, but TexCom believes the communication to be a result of juxtaposition of the sands and not vertical communication between the various sands due to the presence of faults, as argued by Denbury.

#### EXAMINERS' OPINION

Pursuant to §27.015(a) of the Texas Water Code, a person making an application to the TCEQ for a disposal well permit under Chapter 27 of the Code must submit with the application a letter from the Railroad Commission concluding that drilling or using the disposal well and injecting industrial and municipal waste into the subsurface stratum will not endanger or injure any known oil or gas reservoir. The examiners have considered the question of whether the Commission has authority to rescind a "no harm" letter once TCEQ has initiated a hearing on the application for a disposal well permit to which the "no harm" letter pertains.

The 2005 "no harm" letter relating to the TexCom application was issued as a result of informal administrative review of materials submitted by TexCom. No adjudicative process was followed in the issuance of the "no harm" letter, and there is no longer any record of what staff considered in issuing the letter. Even more formal agency decisions are subject to modification where conditions have changed materially, new or unforeseen problems have arisen, or mistakes have been discovered. *Railroad Commission v. Aluminum Co. of Amer.*, 380 S.W.2d 599, 602 (Tex. 1964). Section 27.015 of the Texas Water Code does not expressly prohibit rescission of a "no harm" letter once issued.

Pursuant to §85.049 of the Texas Natural Resources Code, the Commission may hold a hearing to determine whether or not waste is taking place or is reasonably imminent and if any rule or order should be adopted or if any other action should be taken to correct, prevent, or lessen the waste, and under §85.201 of the same Code, the Commission is mandated to make and enforce orders for the prevention of the waste of oil or gas. The examiners have concluded that the Commission has authority and discretion to rescind a "no harm" letter, particularly if it is shown as a result of subsequent contested case adjudication that the injection proposed in the application to TCEQ will result in endangerment or injury to a known oil or gas reservoir by causing waste of oil or gas.<sup>3</sup>

The examiners recommend that the Railroad Commission's "no harm" letter issued to TexCom be rescinded. Substantial information obtained over the last 75 years indicates that the entire Cockfield series of sands is in communication. Therefore, it cannot be determined that the disposal of waste into the Lower Cockfield as proposed by TexCom will not endanger an oil and gas reservoir, as previously indicated by the Commission's administrative review in 2005.

There are no records indicating the type of data which was reviewed by the Commission prior to issuance of the "no harm" letter in 2005. Apparently, no notice is given by the Commission during the administrative review of such requests. However, on the TCEQ application, TexCom indicated that the minerals under the tract were owned by TexCom. This is clearly not accurate, as the proposed "injection zone" overlaps the unitized interval for the CFU. TexCom admits that this representation to TCEQ was a "mistake" and notes that Exxon was given notice of the TCEQ application and did not object. The examiners note that the TCEQ notice sent to ExxonMobil was sent to its property tax office and not to ExxonMobil's P-5 address.

The Commission's foremost statutory duty is to prevent waste. Based on information presented in this proceeding, the examiners believe that waste will occur as a result of TexCom's proposed disposal of industrial nonhazardous waste into an interval which is vertically connected to the unitized interval of the CFU, whether it be the current production from the unit or the CO<sub>2</sub> injection proposed by Denbury. Though reserves under current operations is substantial, the fluids proposed for disposal into TexCom's well are not compatible with CO<sub>2</sub>, putting an additional 125 million barrels of oil at risk.

TexCom presented limited evidence at the hearing which did not refute Denbury's substantial evidence that the entire Cockfield Series is in vertical communication as a result of natural faults and fractures. The communication is confirmed by the migration of hydrocarbons within the Cockfield and by the presence of a uniform water contact throughout the field. The water production occurring from the CFU is a result of the natural water drive in the Lower Cockfield. Additionally, a modern log of the No. 410 well indicates numerous fractures within the Cockfield and recent 3-D seismic indicates significant

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3

While the examiners conclude that the Commission has authority to rescind the 2005 "no harm" letter relating to the TexCom application, the issue of what effect, if any, such rescission should have on the TexCom proceeding before TCEQ is believed by the examiners to be an issue beyond the Commission's purview.

faulting. Finally, a pressure fall-off test conducted in 2009 indicates a tenfold increase in permeability only 950 feet from the No. 410 well, indicating some type of pathway for migration of fluids.

TexCom's own documents indicate that the Jackson Shale is the confining zone because there are no competent shales within the Upper, Middle or Lower Cockfield which would confine fluids to the deeper "injection interval", which is the actual perforated interval to be used for disposal in the No. 410 well. The examiners are persuaded by the statements made by TexCom regarding the lack of confining interval. The statements are indicative of TexCom's belief at the time of the TCEQ application.

TexCom's study indicates that the plume created by its disposal will not extend far enough away from the disposal well to affect any producing well in the CFU. The examiners believe the study to be unreliable because it does not consider vertical movement of fluids from the disposal interval in the Lower Cockfield. Instead, it assumes radial flow in a blanket formation. This is entirely inconsistent with the known geologic features of the Cockfield.

#### FINDINGS OF FACT

1. Notice of this hearing was given on June 25, 2010 to all parties entitled to notice.
2. The Conroe Field was discovered in 1931 and has produced 734 million BO and 1,069 BCF of gas. The Conroe Field Unit ("CFU") was established in 1978 and comprises 18,829 acres in the Conroe Field.
  - a. The CFU was formed for purposes of secondary recovery in the Conroe Field.
  - b. The unitized interval is from 4,680 feet to 5,420 feet, as shown on the log of the D. A. Madeley No. 45. The unitized interval is directly beneath the Jackson Shale and includes six separate sands within the Upper Cockfield.
  - c. Current production from the CFU is about 2,500 BOPD and 200,000 BWPD.
  - d. Under current operations, remaining recoverable reserves from the CFU are estimated to be 20 million BO.
3. In conjunction with a 1993 application TCEQ for a permit to inject of Class I non-hazardous waste, the Railroad Commission issued a "no harm" letter stating that "...disposal of non-hazardous industrial waste into the Lower Cockfield Formation, in the subsurface perforated interval from 6,110 feet to 6,540 feet, will not endanger any known oil and gas reservoirs."

- a. The application to TCEQ was made by Crossroads Environmental Corporation.
- b. The proposed disposal facility was to be located in Montgomery County, within the boundary of the Conroe Field Unit ("CFU").
4. The permit issued by the TCEQ based on the 1993 application expired and in 2002, a new permit for injection of Class I non-hazardous waste was issued to Huntsman Petrochemical Corporation for the same Montgomery County facility as the Crossroads facility. In conjunction with Huntsman application, the Railroad Commission had issued another "no harm" letter to Huntsman in 2001.
5. The Huntsman permit expired and in 2005, TexCom Gulf Disposal, LLC ("TexCom") filed an application with the TCEQ for authority to inject Class I non-hazardous waste into four wells at the same facility in Montgomery County. In conjunction with the TexCom application, the Railroad Commission issued another "no harm" letter on September 16, 2005.
6. Exxon Corporation (or predecessor companies) was the operator of the CFU at the time of issuance of the permits by TCEQ. Exxon did not object to any of the TCEQ applications.
7. Denbury Onshore LLC ("Denbury") purchased the Conroe Field Unit from Wapiti Operating, LLC (the successor operator to Exxon of the CFU) in December 2009, with the intention of conducting a carbon dioxide ("CO2") flood.
8. As a result of the proposed CO2 flood, Denbury expects to recover approximately 17% of original oil-in-place for the field as a result of CO2 flooding. This equates to at least 125 million BO.
9. The proposed injection "zone" for TexCom's disposal operations includes Upper, Middle and Lower Cockfield sands. This zone overlaps the unitized interval for the CFU by several hundred feet.
10. The proposed injection "interval" (perforated zone) for TexCom's disposal operations is in the Lower Cockfield only.
11. There are numerous faults and fractures within the Cockfield series which will serve as conduits for migration of fluids injected into the Lower Cockfield as proposed by TexCom.
  - a. Recent 3-D seismic data confirms the presence of faults and fractures at various depths in the Cockfield sands.

- b. The electrical micro imager log between 4,850 and 6,577 feet in the No. 410 well disposal well indicates numerous fractures.
  - c. The log of the CFU Well No. 2315D, drilled in 2009 by Wapiti approximately 8,000 feet southeast of the No. 410 well indicates no significant barriers to stress, and therefore no confining barriers within the Cockfield, to prevent migration of fluids from TexCom's proposed injection.
  - d. A recent pressure falloff test performed on the No. 410 well demonstrated a tenfold increase in permeability only 950 feet from the well, indicating a path of communication and movement of fluids within the formation.
12. The Railroad Commission's "no harm" letter issued to TexCom should be rescinded because waste of hydrocarbons will be caused by migration of injected fluids from the TexCom wells into the productive Upper Cockfield sands in the CFU.
- a. The entire Cockfield series of sands is in communication, as confirmed by the migration of hydrocarbons within the Cockfield over time, and by the presence of a uniform water contact throughout the field.
  - b. The only confining barrier to migration of fluids injected into the Lower Cockfield is the Jackson Shale, which is found above the Upper Cockfield.
  - c. The waste proposed for disposal are incompatible with CO<sub>2</sub> and Denbury's proposed CO<sub>2</sub> project will not be successful if the waste migrates into the productive Upper Cockfield sands.

#### CONCLUSIONS OF LAW

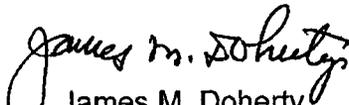
1. Proper notice of this hearing was timely served on all affected persons.
2. All things have occurred and been accomplished to give the Commission jurisdiction to decide this matter.
3. Pursuant to §27.015 of the Texas Water Code, a person making an application to the Texas Commission on Environmental Quality for a disposal well permit under Chapter 27 of the Code must submit with the application a letter from the Railroad Commission concluding that drilling or using the disposal well and injecting industrial and municipal waste into the subsurface stratum will not endanger or injure any known oil or gas reservoir.

4. Pursuant to §85.049 of the Texas Natural Resources Code, the Railroad Commission has continuing jurisdiction to determine whether waste of hydrocarbons is taking place or is reasonably imminent and to determine whether an order should be adopted or any other action taken to correct, prevent, or lessen the waste.
5. Pursuant to §85.201 of the Texas Natural Resources Code, the Railroad Commission has continuing jurisdiction, and the duty, to make and enforce orders for the prevention of waste of oil or gas.
6. The September 16, 2005, "no harm" letter relating to the TexCom Gulf Disposal, LLC application to the Texas Commission on Environmental Quality for a permit for injection of Class I non-hazardous waste was issued administratively by Railroad Commission staff without any adjudicative process.
7. The September 16, 2005, Railroad Commission "no harm" letter relating to the TexCom Gulf Disposal, LLC application to the Texas Commission on Environmental Quality for a permit for injection of Class I non-hazardous waste must be rescinded because the injection as proposed by TexCom Gulf Disposal, LLC will endanger and injure a known oil and gas reservoir by causing the waste of oil or gas.

**EXAMINERS' RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiners recommend that the September 16, 2005 "no harm" letter issued by the Railroad Commission to TexCom Gulf Disposal, LLC, be rescinded.

Respectfully submitted,

  
James M. Doherty  
Hearings Examiner

  
Donna K. Chandler  
Technical Examiner

# Conroe Field Unit Type Log

API # 423390048000

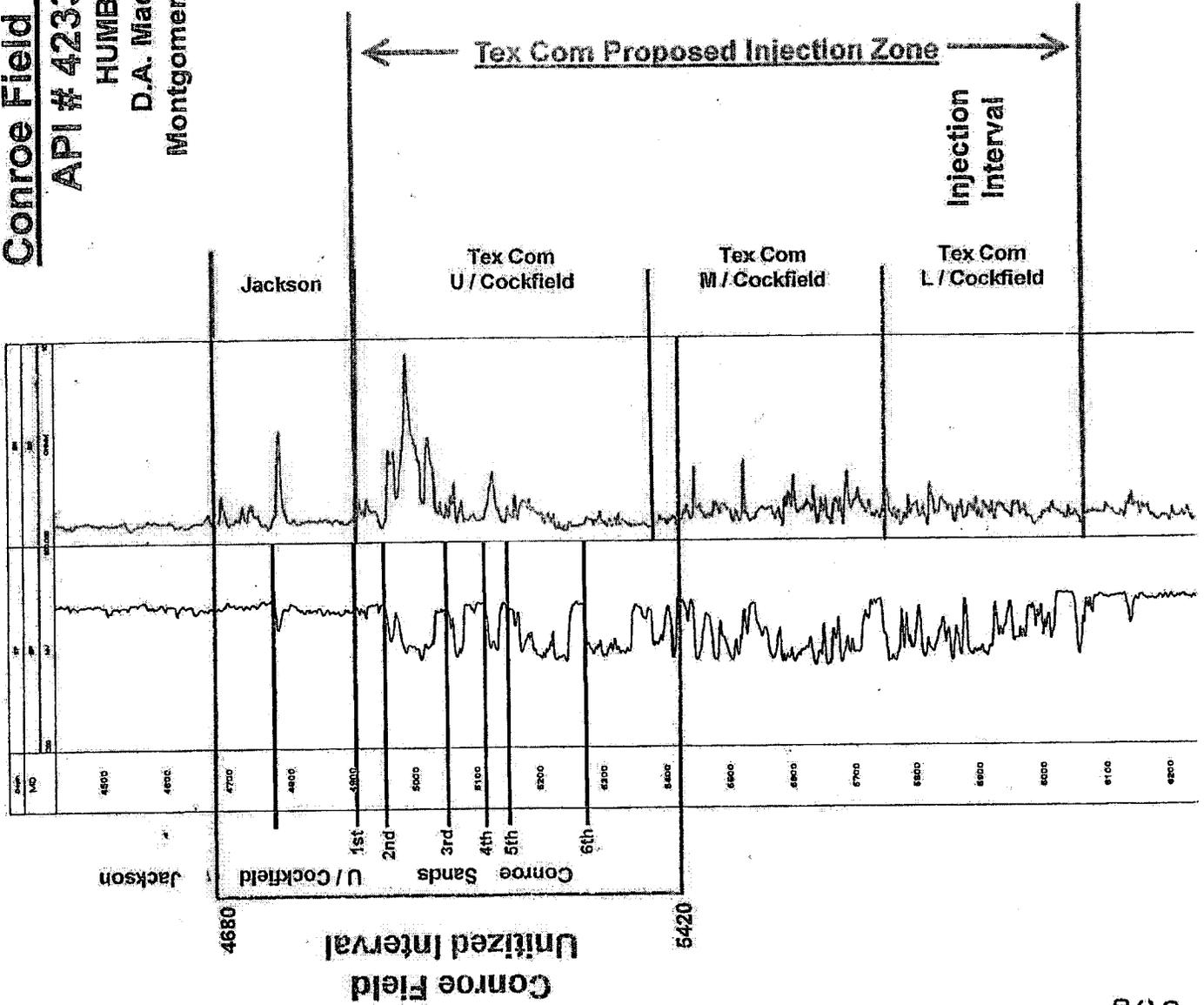
HUMBLE OIL

D.A. Madeley #45

Montgomery Co., Texas



Denbury Onshore, LLC  
A subsidiary of  
Denbury Resources, Inc.



## Appendix A

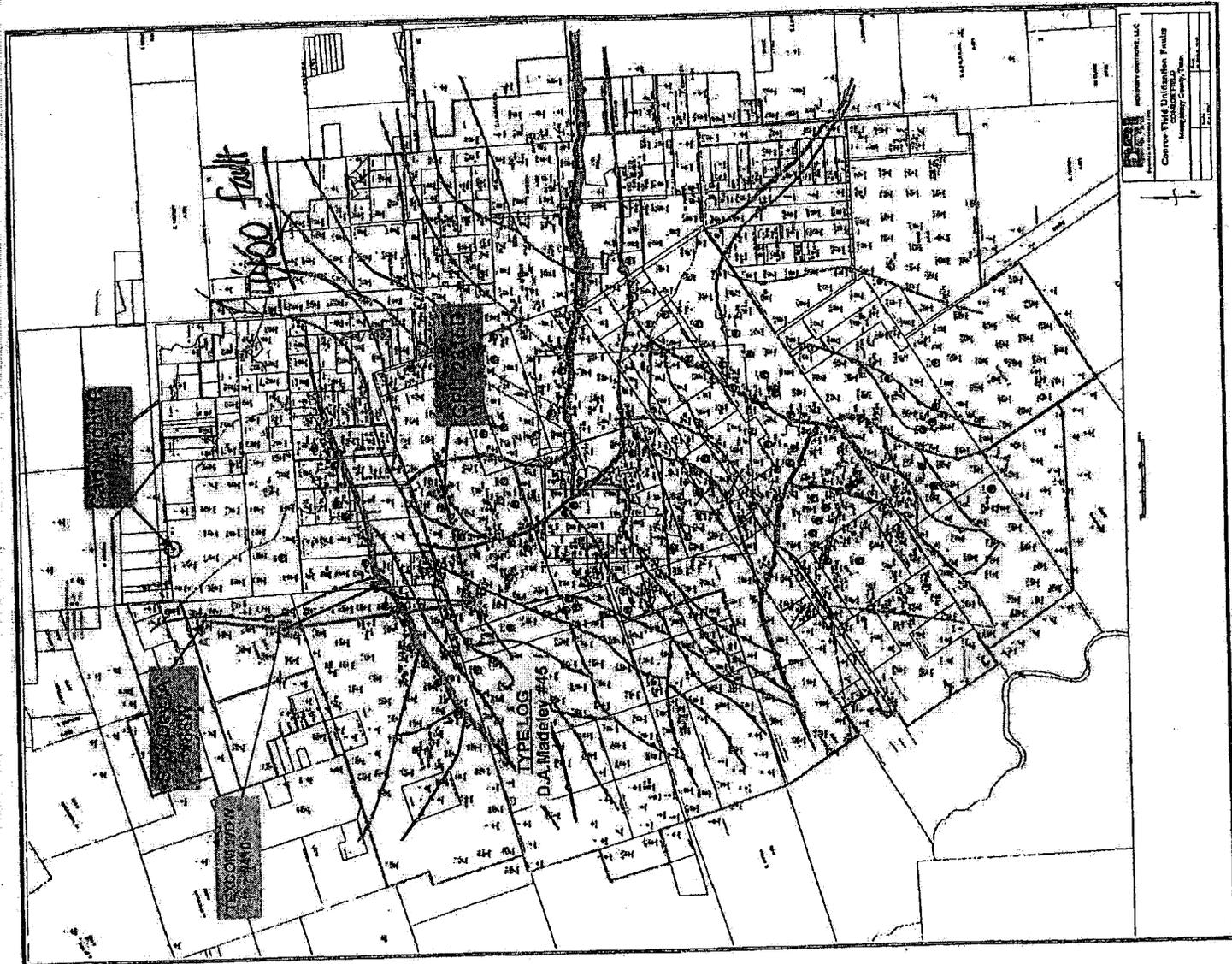
Docket No. 03-0266270  
Denbury Onshore, LLC  
Date: Aug 16, 2010  
Exhibit No. 8

**CONROE  
FIELD UNIT  
MONTGOMERY  
COUNTY TEXAS**

18,829.0876 Acres  
217 Tracts  
256 Working Interest Owners  
2,186 Royalty Owners



**Denbury Onshore, LLC**  
A subsidiary of  
Denbury Resources, Inc.



**Appendix B**

Docket No. 03-0266270  
Denbury Onshore, LLC  
Date: Aug 16, 2010  
Exhibit No. 10

**RAILROAD COMMISSION OF TEXAS  
OFFICE OF GENERAL COUNSEL**

**OIL AND GAS DOCKET  
NO. 03-0266270**

**FINAL ORDER  
RESCINDING THE "NO HARM" LETTER"  
DATED SEPTEMBER 16, 2005  
ISSUED TO TEXCOM GULF DISPOSAL, LLC.  
TEXCOM GULF DISPOSAL FACILITY  
MONTGOMERY COUNTY, TEXAS**

The Commission finds that after statutory notice in the above-numbered docket heard on August 16-17, 2010, the presiding examiners have made and filed a report and proposal for decision containing findings of fact and conclusions of law, which was served on all parties of record; that the proposed application is in compliance with all statutory requirements; and that this proceeding was duly submitted to the Railroad Commission of Texas at conference held in its offices in Austin, Texas.

The Commission, after review and due consideration of the examiners' report and proposal for decision, the findings of fact and conclusions of law contained therein, and any exceptions and replies thereto, hereby adopts as its own the findings of fact and conclusions of law contained therein

Therefore it is **ORDERED** by the Railroad Commission of Texas that the "no harm" letter issued by the Railroad Commission of Texas on September 16, 2005 to TexCom Gulf Disposal, LLC, regarding Class I Nonhazardous Waste Disposal Well Nos. 1, 2, 3 and 4 at the TexCom Gulf Disposal Facility, Montgomery County, Texas is hereby **RESCINDED**.

Each exception to the examiners' proposal for decision not expressly granted herein is overruled. All requested findings of fact and conclusions of law which are not expressly adopted herein are denied. All pending motions and requests for relief not previously granted or granted herein are denied.

This order will not be final and effective until 20 days after a party is notified of the Commission's order. A party is presumed to have been notified of the Commission's order three days after the date on which the notice is actually mailed. If a timely motion for rehearing is filed by any party at interest, this order shall not become final and effective until such motion is overruled, or if such motion is granted, this order shall be subject to further action by the Commission. Pursuant to TEX. GOV'T CODE §2001.146(e), the time allotted for Commission action on a motion for rehearing in this case prior to its being

overruled by operation of law, is hereby extended until 90 days from the date the order is served on the parties.

Done this \_\_\_\_\_ day of \_\_\_\_\_, 2011.

**RAILROAD COMMISSION OF TEXAS**

\_\_\_\_\_  
**CHAIRMAN**

\_\_\_\_\_  
**COMMISSIONER**

\_\_\_\_\_  
**COMMISSIONER**

**ATTEST:**

\_\_\_\_\_  
**Secretary**

# **Exhibit B**

Kennedy Reporting Service, Inc.

1801 Lavaca, Suite 115  
Austin, TX 78701

(512) 474-2233



# Invoice

DATE INVOICE NO.  
7/1/2010 1007001

BILL TO

Vinson & Elkins, LLP  
2801 Via Fortuna, Suite 100  
Austin, TX 78746

Thank you for your business.

JOB NUMBER

10232-1-8

SERVICE ORDERED BY

Elbert Ortiz

DOCKET NUMBER

582-07-2673 & 2674

CASE NAME

App. of TexCom Gulf Disposal

<u>DATE TAKEN</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>RATE</u>	<u>AMOUNT</u>
	State Office of Administrative Hearings Texas Commission on Environmental Quality			
	Hearing on the Merits, Volumes 1 - 8 June 15 - 24, 2010			
	Original & Two Copies - Expedited One Week Delivery	1,676	7.50	12,570.00
	One Copy - Intermediate Delivery (repaginate daily)	317	2.50	792.50
	Additional Format (PDF, Condensed or ASCII)	8	25.00	200.00
6/22/2010	Exhibit Copies - Oversize or Color	1	1,125.00	1,125.00
	Administrative Expense Fee	1	27.50	27.50
	Tax ID # 74-1837735			
TERMS:	Due on receipt	<b>Total</b>		\$14,715.00