

RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL & GAS DOCKET NO. 03-0286285

THE APPLICATION OF VERGO PATIO GARDENS, INC. PURSUANT TO 16 TEX. ADMIN. CODE §3.8 TO CONSIDER RENEWAL OF A PERMIT FOR COMMERCIAL OIL AND GAS WASTE LANDFARM, A.E. LONGRON, JR., PERMIT NO. LF-0032, NEWTON COUNTY, TEXAS

PROPOSAL FOR DECISION

HEARD BY:

Brian Fancher, P.G. Marshall F. Enquist

Technical Examiner Administrative Law Judge

APPEARANCES:

APPLICANT:

William W. Thompson, III, Attorney Donald H. Grissom, Attorney Alysa Baker, Paralegal Artie Longron, Owner Chad Copeland, Environmental Consultant Daniel Airey, Consulting Geologist

REPRESENTING:

Vergo Patio Gardens, Inc.

PROTESTANTS:

REPRESENTING:

Kathy Keils, Attorney
Adam Goodlett, Attorney
Sean Avitt, Geoscientist
James (Rusty) Woodburn, Engineering Specialist
Artemis Harbert, Engineering Specialist
Grant Chambless, Manager

Railroad Commission's Oil & Gas Division

PROCEDURAL HISTORY

Application Published: March 13 and March 20, 2013

Application Filed: August 4, 1998 Administratively Denied: October 3, 2013 Notice of Hearing: January 10, 2014

Hearing Held: October 3, 4, and 5, 2016

Transcript Received: October 20, 2016
Record Closed: November 22, 2016

Proposal for Decision Issued: April 21, 2017

STATEMENT OF THE CASE

Vergo Patio Gardens, Inc. ("Vergo") seeks renewal of its landfarm permit ("LF-0032") that provides for commercial disposal of freshwater base drilling mud and fluid to the 632-acres of the A.E. Longron, Jr. property in Newton County, Texas ("Facility"). Vergo submitted an application for renewal of LF-0032 on August 4, 1998. By letter dated October 3, 2013, the Railroad Commission's Oil & Gas Division ("Staff") ultimately denied Vergo's renewal request. Vergo subsequently submitted a request for hearing on the merits to consider renewal of LF-0032 ("Subject Application").

The Subject Application was protested by Staff, which asserted Vergo failed to submit adequate information for administrative renewal of LF-0032. Furthermore, Staff alleged Vergo failed to demonstrate that use of LF-0032 at the Facility would not result in the pollution of surface or subsurface waters.¹ Staff argued, therefore, the Subject Application should be denied.

DISCUSSION OF THE EVIDENCE

Applicant's Direct Evidence (Vergo)

Longron's Supporting Testimony

Artie Longron, owner and operator of Vergo, testified as a fact witness on behalf of Vergo. Mr. Longron is the sole owner of Vergo.² Mr. Longron testified that he became owner of Vergo in 2003. He indicated that his father was the owner of Vergo prior to 2003, and that his involvement with Vergo included day-to-day tasks on the ranch during his father's tenure as owner of Vergo.³

¹ Tr., Vol. I., Pg. 13, L. 5 – 12.

² Tr., Vol. I., Pg. 21, L. 2 – 3.

³ Tr., Vol. I., Pg. 75 – 76.

Chronology of Permit Applications and Correspondence for LF-0032

Original Application

On October 27, 1986, the Commission granted Vergo its original authority to operate the Facility in accordance with the provisions provided by LF-0032 ("Original Permit").⁴ The Original Permit (enclosed as PFD Attachment No. 1) consists of sixteen provisions, and a condition that states, "[n]on-compliance with the terms of this order and the Statewide Rules of the Commission in the exercise of this grant of authority may result in further Commission action pursuant to Tex. Nat. Res. Code Ann. §91.101 to revoke this grant of authority." By its own terms, the Original Permit expired November 1, 1996, or at the time the Facility accepted 1,101,200 barrels of permitted waste.⁵

1989 Amendment

By letter dated February 1, 1989, Vergo submitted a written request to the Commission that indicates Vergo sought to amend the Original Permit to allow for the disposal of waste generated in Lousiana.⁶

Effective April 23, 1990, the Commission granted Vergo that permit amendment to the Original Permit ("1st Amended Permit"). Compared to the Original Permit, the 1st Amended Permit's requirements expanded from 16 provisions to 26 provisions. In part, the 1st Amended Permit provides that Vergo may landfarm freshwater-based drilling mud and freshwater-based drilling fluids originating from within Railroad Commission District 03, or in Lousiana within 200 miles of the A.E. Longron, Jr. property. By its own terms, the 1st Amended Permit's expiration date is coterminous with the Original Permit. 9

1996 Renewal

By letter dated September 26, 1996, Vergo submitted a written request to the Commission, with regard to the 1st Amended Permit, seeking a renewal of that permit. ¹⁰ By letter dated April 14, 1997, a representative of the Commission responded to Vergo's September 26th letter indicating that Vergo's 1st Amended Permit remains in effect due to Vergo's timely request for renewal. ¹¹

On August 12, 1997, Staff issued a renewal permit to Vergo for the LF-0032 ("2nd Amended Permit"). Compared to the 1st Amended Permit, the 2nd Amended Permit's

⁴ Vergo Exh. No. 1. – Copy of Final Order 3-87,766: Approving the Application of Vergo Patio Gardens, Inc. for a Commercial Landfarming Permit on the A.E. longron, Jr. Property, Newton County, Texas.
⁵ *Id* at Paragraph No. 16.

⁶ Vergo Exh. No. 2.

⁷ Vergo Exh. No. 3. Copy of Oil and Gas Final Order 3-93-567: Application of Vergo Patio Gardens, Inc. for Amendment of its Commercial Landfarming Permit on the A.E. Longron, Jr. Property, Newton County, Texas.

⁸ Id. Paragraph No. 2.

⁹ Id. Paragraph No. 26.

¹⁰ Vergo Exh. No. 4.

¹¹ Vergo Exh. No. 5,¶2.

¹² Vergo Exh. No. 7.

requirements includes 24 provisions. The final page of the 2nd Amended Permit states, in part, "Note: Amended to delete Condition Nos. 20 and 23 of previous permit, which were duplicates of Condition Nos. 10 and 4. Amended to delete Condition No. 24 which pertained to baseline sampling.". Condition No. 23 of the 2nd Amended Permit states, "This permit ... expires on August 12, 2002, or at such time as the volume of freshwater-based drilling mud and/or freshwater-based drilling fluid accepted for landfarming totals 1,101,200 barrels, whichever occurs first."

January to February 1998 Correspondence

On January 22, 1998, Staff issued a letter to Vergo with regard to LF-0032. That letter demonstrates that Staff received Vergo's 1996 annual report for LF-0032 on November 12, 1996. However, Staff had yet to receive the 1997 annual report as of January 22nd. The letter also indicates that upon Staff's review of information submitted by Vergo regarding LF-0032, Staff determined that Vergo had not complied with Condition Nos. 18 and 19 of the 2nd Amended Permit, which required copies of all manifests for waste originating in Lousiana brought to the Facility, and reporting of all test results made for wastes tested prior to disposal at the Facility, respectively. The letter concludes in a request for the 1997 annual report within 30 days, and that Vergo begin reporting the information specified in Condition Nos. 18 and 19.

On January 26, 1998, the Commission received a two-page document from Vergo that is also dated January 22, 1998, responding to Staff's January 22nd letter. Page 1 of Vergo's January 22nd response includes copies of all manifests (*i.e.* two) related to fresh water base drilling mud and water accepted from Texas and Lousiana through December 1997. The second page of Vergo's response appears to be a copy of an electronic document dated January 12, 1998, that basically memorializes conversations amongst Staff as to LF-0032.

On January 30, 1998, Staff issued a second letter to Vergo regarding LF-0032.¹⁵ The January 30th letter references Condition Nos. 13, 23, and 8 of the 2nd Amended Permit, respectively. In short, the January 30th letter asserts that Vergo has exceeded the permitted capacity of freshwater based drilling mud or fluids by a volume of 14,184 barrels. As a result, the Facility was directed to no longer accept wastes received for disposal and begin final closure of the Facility. The letter concludes by requesting that Vergo submit a timetable for closure of the Facility to Staff within 30 days.

By letter dated February 5, 1998, counsel for Vergo submitted a response to Staff's January 30th letter. In summary, Vergo requested to further amend the 2nd Amended Permit to provide Vergo the authority to spread up to six inches of "mud" across the 631.9-acre Facility, and to increase the distance of waste accepted at the Facility originating in Louisana from 200 to 350 miles from the Facility. The February 5th letter asserted that soil testing at the Facility revealed at least 28 feet of impervious clay beneath it, and that additional soil tests were ordered by Vergo to evaluate every ten acres within approximately 325 to 375-acres that was utilized for all deposition of "mud" at the Facility. The letter also requested that Vergo be granted an emergency 30 day

15 Vergo Exh. No. 9.

¹³ Compare with Vergo Exh. No. 7, Paragraph No. 17.

¹⁴ Vergo Exh. No. 8, Pg. 1. Condition No. 18 states that conductivity analysis of waste received from Lousiana be reported monthly to the Commission. Condition No. 19 states that weekly composite samples be analyzed and reported monthly for pH, organic halide on toluene extract, oil and grease, and inorganic chloride.

period to continue accepting wastes from parties that had previously relied on the Facility. Finally, it alleged that, "... the requested tests will show that the mud [fresh-water based wastes] has not only not harmed the area but in addition has been very beneficial to it for vegetation, rice farming and other forage that cattle eat on the place." ¹⁶

May 1998 Amendment

On May 11, 1998, Staff issued a cover letter and a renewed, amended permit for LF-0032 ("3rd Amended Permit"). Staff's May 11th cover letter explained several stipulations regarding the 3rd Amended Permit: (1) it expired on July 10, 1998 (*i.e.* 60 days); (2) it increased the authorized disposal capacity from 1,101,200 to 2,453,647 barrels; (3) it allows a total 6-inch waste application thickness; and (4) it removes the previous distance restriction from the Facility for waste that originates in Louisiana.

In addition, Staff's May 11th cover letter two more issues beyond that described in the above paragraph. First the letter addresses concerns regarding storm water runoff at the Facility. It states, "It has come to our attention that rainwater runoff from the landfarm area is diverted to two (2) stock ponds. Permit Condition Nos. 8, 9, and 11 of the permit issued August 12, 1997 [2nd Amended Permit] prohibit runoff from exiting the landfarm site or entering any water course or drainage way, including any ditch, dry creek, flowing creek, river, or any othe body of surface water. Therfore, the permit has been renewed for only 60 days. In order to amend the expiration date beyond 60 days, you must submit detailed plans to address storage and disposal of any runoff from the landfarm site." Second, Staff's May 11th cover letter informs Vergo that it has failed to submit reporting the conductivity of Lousiana waste accepted at the Facility, and weekly composite sample results. It re-encourages Vergo to begin that type of reporting, and to submit the requested rainwater plans within 30 days. Due to the Facility's design, rainwater runoff is predominately contact water runoff.

Vergo's Response to Staff's May 11th Correspondence

By letters dated June 9 and July 13, 1998, Vergo submitted its response to Staff's May 11th cover letter through a consulting firm identified as HLP Engineering, Inc. in Lafayette, Lousiana ("HLP").¹⁹ In the letters, Vergo attempted to address Staff's concerns related to rainwater runoff at the Facility, and amend the 3rd Amended Permit by extending its 60 day effective time period by an additional 45 days (*i.e.* expiration date of August 24, 1998).²⁰

¹⁶ Vergo Exh. 10. Pg. 2, ¶3.

¹⁷ Vergo Exh. No. 11. The 3rd Amended Permit contains 23 Permit Conditions. The final page of that permit (Pg. 6) contains a note that describes why the permit was amended. It states, "Note: Permit amended to: (1) Clarify that permitted landfarm site is in both the S.P. RR and H.T.&B RR Surveys; (2) remove restriction on distance from which waste can be accepted (Condition Nos. 2 and 4 of previous permit); (3) Increase total waste accumulation thickness from 2.7 inches to 6 inches; (4) Increase total volume of waste that can be landfarmed from 1,101,200 barrels to 2,453,647 barrels (Condition Nos. 12 and 22); and (5) Require map showing landfarm area be to a scale of 1 inch representing 400 feet (Condition No. 16).

¹⁹ Vergo Exh. Nos. 12 and 13

²⁰ Vergo Exh. No. 12, Pg. 2, ¶1.

July 1998 Amendment

On July 15, 1998, Staff issued another amended permit to Vergo for LF-0032 ("4th Amended Permit").²¹ The 4th Amended Permit appears virtually the same as the 3rd Amended Permit, except for a description on the final page of the permit. That description states, "Note: Permit renewed for 45 days").²²

August to October 1998 Correspondence

On August 6, 1998, HLP submitted a letter to Staff, accompanied by a simplified map of the Facility boundaries and a copy of hand-written calculations, aimed at addressing Staff's concerns related to stormwater runoff at the Facility (*i.e.* the concerns mentioned in Staff's May 11th letter). In short, HLP provided estimated calculations of storm water runoff at the Facility, and further requested to extend the 4th Amended Permit's expiration date to August 28, 2003.²³

On September 24, 1998, Staff issued a response to HLP's August 6th correspondence. It included five questions aimed at seeking necessary, additional information and/or clarification prior to approving Vergo's request to extend the 4th Amended Permit's expiration date to August 28, 2003.²⁴ For instance, Staff's first question states, "You had previously indicated as testimony for Oil and Gas Docket No. 3-93,566 & 3-93,567, that the excess water from the drilling mud is used to irrigate your rice farms and to fill the lakes where you raise crawfish, catfish, and bass. Please indicate if there is public fishing from the ponds." Mr. Longren's father responded to Staff's September 24th letter through written reply dated September 30, 1998.²⁵ He asserted, in part, that public fishing is prohibited in the ponds at the Facility.²⁶

By letter dated October 2, 1998, Staff issued a letter to Vergo stating the information submitted by HLP on behalf of Vergo, as to the stormwater runoff at the Facility, was under review. The letter also indicates that Vergo had until October 24, 1998, to submit further information as to the ponds on the Facility. It states, "You may continue to accept waste until the Commission makes a determination on your management of runoff from the referenced landfarm area." With regard to Staff's October 2nd letter, Mr. Longren testified as follows: ²⁸

Mr. Grissom (Vergo counsel): Okay. So as of this time, you know, they said they exceeded it, they are allowing Vergo Patio to continue to operate pending determination of the –

Mr. Longron: Correct.

²¹ Vergo Exh. No. 14.

²² The Examiners calculate that 45 days from July 15, 1998, falls on Saturday, August 29, 1998.

²³ Vergo Exh. No. 15, Pg. 1, ¶5.

²⁴ Vergo Exh. No. 16. That exhibit also includes what appears to be two pages of notes, as a well as a copy of a map of the Facility's boundaries, from Staff with regard to Vergo's correspondence dated June 9 through August 4, 1998.
²⁵ Vergo Exh. No. 17.

²⁶ Compare Vergo Exh. No. 17, Item 1 with Tr., Vol. I., Pg. 74, L. 22 to Pg. 75. L. 1.

²⁷ Vergo Exh. No. 18.

²⁸ Compare Vergo Exh. No. 19 with Tr., Vol. I., Pg. 76, L. 20 – 23.

It is noteworthy that he did not refute that excess water from the drilling mud is used to irrigate rice farms, or fill the lakes to raise crawfish, catfish and bass in his response.

1999 Correspondence

By letter dated July 22, 1999, an attorney for Vergo requested that Staff issue a letter stating that, "the permit issued August 12, 1997 [2nd Amended Permit] did not expire of its own terms, and that land farming was legal until you advised to not take anymore drilling mud or drilling fluids, on or about January 28, 1998. ..." When asked about that letter at the hearing, Mr. Longron testified as follows:²⁹

Mr. Grissom: Okay. And do you understand what he was making

a request for here?

Mr. Longron: I don't know what – I think I know what this is, but I'm

not for sure. I think this is – we had a – we had a couple – another company – disposal company that turned in a bunch of false allegations, and I think this is a letter of Mr.

Fisher asking him to –

Mr. Grissom: Well, basically it's asking for a letter saying that the permit

did not expire by its own terms and so it was continued?

Mr. Longron: Correct

Counsel for Vergo later represented that he was unable to locate any correspondence dated January 28, 1998, as referenced in the July 22nd letter.³⁰

By letter dated July 30, 1999, Staff issued a response to Vergo regarding it's July 22nd letter. Staff's July 30th letter states, "... Our letter dated January 30, 1998, ³¹ indicates that the permit expired at such time as the volume of waste accepted for landfarming totaled 1,101,200 barrels. According to our records at that time, 1,115,384 barrels of waste had been received for landfarming. Therefore, the permit expired under its own terms when the permitted capacity was reached."

On August 27, 1999, Staff issued a letter to Vergo that indicates the letter was in response to a telephone conversation between the parties. In essence, the apparent purpose of that letter was Staff communicating to Vergo that LF-0032 remained in effect, pursuant to Tex. Gov't. Code § 2001.054(b), for the following two reasons: (1) HLP timely requested a renewal of the permit [4th Amended Permit]; and (2) the Railroad Commission had not yet taken final action on Vergo's renewal application.³²

²⁹ Tr., Vol. I., Pg. 77, L. 9 – 20.

³⁰ Tr., Vol. I,. Pg. 78, 1. 7 – 10.

³¹ See supra at note 12.

³² Vergo Exh. No. 21.

2004 Amendment Request

On March 16, 2004, Mr. Longron submitted a letter to Staff requesting to further amend the 4th Amended Permit for LF-0032. His letter states, "[w]e would like to have an amendment added to our Land Farm Permit 0032 about not having to take a sample from each load of water base mud brought to us for disposal."

When asked by his attorney at the hearing as to the reason for his March 16th request, Mr. Longron indicated he believed that retaining those samples was of no further value. For example, he testified, "[w]e've been taking samples for years, and we had a couple of school buses full of them, and none of the Railroad Commission inspectors wanted them or needed them...[a]nd the cost tripled on the containers, the geologist told us after 48 hours a sample was useless anyways to analyze ... So it was no sense ... They were expensive... [W]e was [sic] asking them to let us not have [sic] keep all these sample jars, just like they didn't want all our load tickets in Austin mailed to them, we don't want all the samples."³³

2004 Commission Correspondence

By letter dated April 23, 2004, with attachments,³⁴ Staff issued a three-page response to Mr. Longron's March 16th amendment request that administratively denied renewal of the 4th Amended Permit for a litany of reasons.³⁵ It states, "[w]e have completed our review and investigation on the management of stormwater runoff from the referenced landfarm site [Facility]. The application to renew the landfarm permit cannot be approved administratively because the facility discharges stormwater that has contacted oil and gas waste." (enclosed as PFD Attachment No. 2)³⁶

For example, Staff's April 23rd letter references two Commission inspections performed at the Facility on November 3-4, 1998, that revealed stormwater being pumped over the Facility's dikes following large rain events. It cites that type of operation is a violation of Statewide Rule 8(d)(1), and Conditions 8 and 10 of the 4th Amended Permit. It indicates that during the November 1998 inspection, an 8-cylinder diesel engine attached to a large pump with approximately a 36-inch diameter discharge pipe was discovered near the southern permit boundary. That pipeline traversed the Facility's dike into a non-permitted area outside the Facility. Staff's April 23rd letter states, "[w]hen questioned on the use of the diesel-powered pump, Mr. A.E. Longron, Jr. [Mr. Longron's father] stated that stormwater must be periodically pumped out after heavy rains, and that this had been done for the preceding 12 years (the life of the permit to that point)."³⁷ As to Staff's April 23rd letter, Mr. Longron testified that a Commission representative from the Houston District Office verbally granted Vergo authority to discharge stormwater during a telephone conversation on November 6, 1998.³⁸

³³ Tr., Vol. I., Pg. 80, L. 12 – Pg. 81, L. 4.

³⁴ Vergo Exh. No. 23.

³⁵ *Id.* Pg. 1, ¶1 indicates that Vergo also requested to amendment on October 5, 1998, to remove the requirement for weekly analyses of composite samples of incoming waste for organic halides and oil and grease. The Examiners find no other mention of that request in the record evidence.

³⁶ *Id.* Pg. 1, ¶3.

³⁷ *Id.* Pg. 1, ¶4.

³⁸ Tr., Vol. I., Pg. 87.

Staff's April 23rd letter also indicates that the closure cost estimate dated November 6, 2000, was too low. Ultimately, the letter indicates that because Vergo's request to renew the permit was denied administratively, any request for a hearing on the application must be received within 30 days.³⁹ Vergo did not request a hearing within 30 days of April 23, 2004.

Next, Staff issued a letter dated September 1, 2004, ⁴⁰ to Vergo that appears to contradict the previously mentioned April 23, 2004, correspondence. Staff's September 1st letter substantively contains a small, single paragraph that states:

"[t]his letter is in response to a request by Lloyd Muennink on this date, requesting clarification on the permit expiration date. As provided in §2001.054(b) of the Texas Government Code, the permit remains in effect because Vergo Patio Gardens Inc. applied for renewal of the permit before the expiration date of August 4, 1998, and the Railroad Commission has not yet taken final action on the application for renewal." (emphasis added)

Mr. Longron offered no testimony regarding Staff's September 1st letter other than indicating that Vergo operated under the same permit [4th Amended Permit] with the exception being that the capacity increased from roughly 1.1 million barrels to 2.45 million barrels of waste.⁴¹

2012 Correspondence

On February 28, 2012, Staff issued a five-page letter to Vergo regarding LF-0032 that indicates it renewal application dated August 4, 1998, along with additional information specific to November 6, 2000 and monthly reports through January 2012, were received by Staff.⁴² After reviewing that information, however, Staff requested additional information that is memorialized in the letter. That additional information appears as a litany of 11 items as to LF-0032. For instance, Staff required specific soil analyses to be performed at the Facility in order for renewal of the application to be considered because the waste receipt reports submitted by Vergo to that point in time indicated that approximately 2,656,085 barrels of waste were disposed of at the site since April 1987.⁴³ Staff's February 28th letter requires the requested information within 45 days, and requires that soil analyes results be submitted within 120 days.⁴⁴

Mr. Longron presented lengthy testimony with regard to Staff's February 20, 2012, correspondence.⁴⁵ He began by asserting his understanding that his father addressed Staff's request for core sampling in 1998 by performing whatever was required of him in that regard at the time Vergo submitted its application for renewal in 1998.⁴⁶ Subsequently, his attorney more or less performed a "Q&A style" approach with Mr. Longron to address each of Staff's concerns in its February 28th letter. Those responses are reflected on Vergo's subsequent December 30,

³⁹ Id. Pg. 2, ¶7 and 8, respectively.

⁴⁰ Vergo Exh. No. 25.

⁴¹ Tr., Vol. I., Pg. 90, L. 3 = 10.

⁴² Vergo Exh. No. 26.

⁴³ *Id.* Pg. 3, Item No. 6.

⁴⁴ *Id.* Pg. 5, Final ¶.

⁴⁵ Tr., Vol. I., Pgs. 91 – 100.

⁴⁶ Tr., Vol. I., Pg. 90, L. 22 – Pg. 91, L. 91.

2012 correspondence,⁴⁷ which Mr. Longron testified substantially complied with Staff's requests for information in Staff's February 20th correspondence.⁴⁸

2013 Correspondence

On January 28, 2013, Staff issued a three-page response to Mr. Longron's December 30, 2012, correspondence that essentially sought information from Vergo regarding its permit renewal request for LF-0032 that apparently did not fully address Staff's requests in its February 20, 2012 correspondence.⁴⁹ In short, Staff's January 28th letter sought clarification from Vergo regarding 11 items. It indicates that Vergo could make no more than two supplemental filings to complete its renewal application, and requires that Vergo's response be submitted within 45 days.⁵⁰

As to Staff's January 28, 2013 correspondence, Mr. Longron provided extensive testimony that addresses each of the 11 items in that letter.⁵¹ In short, he testified, "... [s]o we just gave them everything we could possibly give them. ... We were kind of confused about what all they actually wanted." Vergo's letter of response to Staff's January 28, 2013 correspondence is dated March 12, 2013.⁵² However, it appears that Vergo's March 12th response was not submitted to Staff until May 3, 2013.⁵³

In response to Vergo's correspondence dated March 12, 2013, Staff issued a seven-page denial letter dated October 2, 2013, that provides its reasons for not approving Vergo's request to renew LF-0032.⁵⁴ Staff's reasons for denial of Vergo's permit renewal generally are as follows:

- 1. Pollution of Subsurface Waters: Staff asserted that Vergo's original application was denied on January 16, 1996, for potential pollution to subsurface waters due to the Upper Chicot Aquifer's shallow depth, and that it maintains that determination is correct ("Staff's First Allegation");
- 2. Pollution of Surface Waters: Staff asserted that Vergo's original application was denied on January 16, 1996, for potential pollution of surface waters because the Facility is prone to flooding, and that it maintains that determination is correct ("Staff's Second Allegation");
- 3. Mismanagment of Waste and Statewide Rule 8 Violations: Staff asserted mismanagement by Vergo greatly increased potential for pollution at the subject property due to animals inside the Facility, washout water, missing reports, suspect data, exceedance of waste application at the Facility, unauthorized discharges, inappropriate applications of drilling fluid at the Facility, and soil pollution due to exceedances of RCRA metals ("Staff's Third Allegation").

⁴⁷ Vergo Exh. No. 27.

⁴⁸ Tr., Vol. I., Pg. 103, L. 7 – 20.

⁴⁹ Vergo Exh. No. 28.

⁵⁰ *Id.* Pg. 3, Final ¶.

⁵¹ Tr., Vol. I., Pg. 104 – 108.

⁵² Vergo Exh. No. 29.

⁵³ Id. Pg. 1. The "stamp date" on the first page of that exhibit reflects it was received by the Commission's Oil & Gas Division in Austin, TX on May 3, 2013.

⁵⁴ Vergo Exh. No. 30.

When asked by his attorney whether he agrees with Staff's determination for denying the application, Mr. Longron testified, "[t]he original engineers – that was the same subject when we first got permitted, and it was proven at that time that the upper – Chicot Aquifer is nowhere near our property. It comes through Jasper County. So I do not agree with it because it was proven it is not true --."55 When asked about the confinement of stormwater runoff at the Facility, he asserted that levees surround the permitted area, and that those levees prevent any material, fluids, or solids from escaping the permitted area. Furthermore, he alleged that the Facility is constructed in a manner that allows Vergo to adequately manage stormwater runoff within the permitted boundaries. He stated, "I can put water anywhere I want or take water anywhere I want at any given time." When asked by Vergo's counsel, "[s]o again, none of the water inside the permit [sic] is coming in contact with any ditches outside the permitted area," he replied, "[c]orrect. [t]he outside of the berm – the water out there, it never comes in contact with the interior. ... [t]here's no way it can get out." With regard to the remaining allegations listed in Staff's October 2nd denial letter, Mr. Longron provided a lengthy response about why he disagrees with its assertions.

In support of its position, Vergo submitted a copy of a Commission guidance document entitled, "Surface Waste Management Manual" ("SWMM").⁶⁰ In short, Mr. Longron testified that Vergo satisfactorily performed each of the five requirements listed in the SWMM for renewal of LF-0032.⁶¹

Vergo submitted copies of various documents that included the following: (1) a copy of a two page Commission inspection report of the Facility performed on December 10, 1997; (2) a copy of an email from Jill Hybner to Leslie Savage regarding the Facility; (3) a copy of HLP's June 9, 1998 correspondence to Staff [also Vergo Exh. No. 12]; (4) a copy of HLP correspondence to Staff dated August 4, 1998 [also Vergo Exh. No. 15]; (5) a copy of a Commission internal record, "Note To File"; (6) a copy of a Commission record entitled, "Record of Communication"; (7) a copy of a single-page inspection report performed on April 4, 2012; and (8) a copy of a three-page inspection report performed on or about July 12, 2013. 62

Mr. Longron provided extended testimony regarding Vergo Exhibit No. 32.⁶³ He referenced a comment made by a Commission inspector in December 1997 that states, "[t]oured facility. Very clean and well kept. This is a model commercial landfarming facility."⁶⁴ He also referenced the inspection performed on July 11-12, 2013 that stated, "[t]here is no water pollution in any of the canals. There is no threat of pollution. From what we see it is clean. As a result, no threat to subsurface is present." He agreed with the inspectors' conclusions, and testified, "[t]hat has been since day one."⁶⁵ That inspection report also includes comments that state, "[w]e

⁵⁵ Tr., Vol. I., Pg. 116, L. 4 – 11.

⁵⁶ Tr., Vol. I., Pg. 118, L. 4 – 10.

⁵⁷ Tr,. Vol. I., Pg. 118, L. 25.

⁵⁸ Tr., Vol. I., Pg. 120, L. 7 – 22.

⁵⁹ Tr., Vol. I., Pg. 115 – 133.

⁶⁰ Vergo Exh. No. 31.

⁶¹ Tr., Vol. I., Pg. 136, L. 7 – Pg. 137, L. 16.

⁶² Vergo Exh. No. 32.

⁶³ Tr., Vol. I., Pg. 137, L. 22 – Pg. 152.

⁶⁴ See Vergo Exh. No. 32; Pg. 1; comments.

⁶⁵ Tr., Vol. I., Pg. 150, L. 2 – 19.

observed no pollution to surface waters from natural soil, no odor of landfarming activies was dectected. Landfarming locations are well maintained and continuously tilled giving life to native vegetation. Landfarming locations are designed to allow for rainwater to drain into irrigation canals..." With regard to those comments, Mr. Longron testified, "I remember that inspection vividly that – they were impressed with my facility, and that's why I was floored to receive a letter stating how much violations had done [sic] over the years."

Near the end of his direct testimony, Mr. Longron summarily asserted that he believes Vergo has met all the required regulations in place for renewal of LF-0032.⁶⁷ As a result, he requested that it be renewed and amended to allow a greater amount of waste to be accepted at the Facility than the amount its 4th Amended Permit currently provides. He stated:

"... instead of renewing every few years because we still have appropriately more land ... I would say let's look at the number that's left of acreage and let's re-permit that for the amount of barrels that will cover that. We already know how many barrels it takes for 300. I have 300 more acres that has not been applied to ... I haven't added it up. It's the 1 million something original and then there's the 2.45 the second one. I mean, we're looking at three, three and half if you combine them over 300 acres. So three and a half for the other 300 and let's see how she goes."

In other words, Mr. Longron indicated that although LF-0032 includes a permitted area of roughly 632-acres, Vergo has chiefly utilized an area of about 300-acres for its disposal operations. Therefore, a difference of 332-acres has not been primarily utilized for its disposal operations at the Facility. He also apparently considered the capacity limitations (*i.e.* the original volume and subsequent amended volume) granted to Vergo as addends resulting in a sum of roughly 3 to 3.5 million barrels of waste for the 300-acres that Vergo had primarily utilized for disposal. He then presumably copied that 3 to 3.5 million sum over to the 332-acre area within the existing permitted Facility that Vergo had not primarily utilized to end with a total of roughly 3 to 3.5 million barrels of capacity for 332-acres as his requested permit amendment. That amount apparently does not take in to account the volume of waste that Vergo has historically accepted at the Facility for the 332-acres mentioned by Mr. Longron.

Contradictory to his earlier testimony, Mr. Longron later stated that Vergo only utilized roughly 67-acres of the Facility for disposal of freshwater-based drilling fluids, and provided approximate locations of the areas used for disposal of that waste. He alleged that through negotiations with Staff, Vergo settled on claiming that it had instead utilized 300-acres of the Facility due to Staff's concerns. However, the Examiners find no record of such an agreement between Vergo and Staff as previously mentioned.

⁶⁶ Tr., Vol. I., Pg. 151, L. 24.

⁶⁷ Tr., Vol. I., Pg. 153, L. 18 – Pg. 154, L. 2.

⁶⁸ Tr., Vol. I., Pg. 154, L. 11 – 25.

⁶⁹ Tr., Pg. 155, L. 19 – 13.

⁷⁰ Compare Staff Cross Exh. No. 2 with Tr., Vol. I., Pg. 186, L. 2 – 16.

⁷¹ Tr., Vol. I., Pg. 183, L. 8 – 184.

Airey's Supporting Testimony

Daniel Airey, a consulting geologist with Ranger Environmental Services, Inc. ("Ranger"), testified as an expert in geology, Railroad Commission regulatory compliance, and hydrology.⁷² He is a registered professional geoscientist in Texas.

Mr. Airey testified that after reviewing Staff's October 3, 2013 denial letter, he was subsequently tasked with addressing Staff's concerns through investigating the geology and hydrogeology at or around the Facility. With regard to Staff's First Allegation, he stated "I've drilled the Chico Aquifer probably over 50 times, so I know all about it." He asserted that the Chicot Aquifer ("Chicot") is within the Beaumont Formation, which consists of clays, silts, and sands. He stated that he did not personally drill wells at the Facility as part of his investigation; however, he has drilled in counties surrounding Newton County. He testified, "... [w]hat you see is pretty much the exact [sic] thing. You have about 20 feet of clays, 20 plus or minus, and then you'll hit a sand which will be water bearing that will exist under confining conditions..."

When asked by Vergo's counsel whether or not the potential for contamination of subsurface waters exists by any activities of Vergo, Mr. Airey testified, "[n]o, I – I don't think so at all, for multiple reasons." In describing those reasons, he focused on the soil types present at the Facility. He referenced the soil types, and their respective characteristics, mentioned by Staff in its October 2, 2013 denial letter that states, "... the areas reported as used for landfarming by Vergo consist of Evadale silt loam and Evadal-Gist complex. Neither of these soils are suitable for landfarming based on their estimated depth to the water table, which is 0 to 18 inches." He testified that those soil types drain very poorly, and have low permeability. Therefore, water at the surface in contact with those soils does not easily travel below the surface.

Next, Mr. Airey focused on the relationship of those soil types with potential contaminants from drilling mud. He stated, "... [m]etals, chorides, things of this nature. They want to be absorbed onto the soil. ... [Y]ou've got soil that doesn't want to let anything in; then you're dealing with a material that wants to bind with clays. So you're not going to have contaminant migration of metals at this location. You're not. ... Metals contamination want to grab hold of clays. That's what they do. ... [T]hey migrate easier if you have sands. But if you've got 20 feet of clay, which I'm anticipating at this location, you're going to have to go through 20 feet of clay to get to the water, and that is really – that's very – it's not going to happen." Vergo referenced a landfill operated by Waste Management roughly three miles north of the Facility ("WM's Landfill"). When asked by Vergo's counsel about the type of soils generally conducive for the placement of a landfill, Mr. Airey testified, "Clays. That's what landfills want. Landfills want clays. They are a natural barrier to leachate going through their landfill."

⁷² Tr., Vol. I., Pg. 192, L. 22 – Pg. 193, L. 10.

⁷³ Tr., Vol. I., Pg. 193, L. 12 – 24.

⁷⁴ Tr., Vol. I., Pg. 194, L. 8 – 12.

⁷⁵ Tr., Vol. I., Pg. 196, L. 3 – 6.

⁷⁶ Tr,. Vol. I., Pg. 196, L. 16 – 18.

⁷⁷ See Vergo Exh. No. 30, Pg. 1, ¶3.

⁷⁸ Tr., Vol. I., Pg. 196, L. 25 – Pg. 197, L. 2.

⁷⁹ Tr., Vol. I., Pg. 197, L. 7 – 11 and Pg. 198, L. 8 – 16.

⁸⁰ Tr., Vol. I., Pg. 198, L. 17 – Pg. 199, L. 2.

Ranger's May 2013 Sampling Results

In response to Staff letters dated February 28, 2012, and January 18, 2013, Vergo submitted a copy of a report dated May 1, 2013, performed by Ranger ("Ranger's 2013 Report") to document soil sampling results performed at the Facility from areas utilized by Vergo for disposal of drilling mud and drilling fluids at Staff's request. The scope of that work included sampling at 78 locations within the Facility from three depth intervals: 0 to 12 inches, 12 to 24 inches, and 24 to 36 inches below ground surface ("bgs"). In addition, background samples were collected to provide a baseline of elements that naturally occur within those soils. Mr. Airey testified, "... [t]he purpose of that is to demonstrate if you have contaminant migration. Since you're land applying at the surface, you're just proving whether or not this stuff has gone at depth." **

Ranger's 2013 Report generally includes the following information:

- 1. Cover letter (one-page);
- 2. Google Earth maps showing the soil sample locations (six-pages);
- 3. GPS coordinates for 78 soil sample locations described as SS-1 through SS-78 (one-page);
- 4. Soil Metals Summary for locations described as SS-1 through SS-64 measured in mg/Km (two-pages);
- 5. Soil Metals Summary for background sample locations described as BGSS-2 through BGSS-4 measured in mg/Km (one-page);
- 6. Soil Electric Conductivity Summary for samples described as SS-1 through SS-78 and BGSS 1 through BGSS-4 measured in mS/cm (nine-pages);
- 7. CHEMTEX electric conductivity lab results for samples described as SS-25 through SS-78 (eleven-pages);
- 8. CHEMTEX Chain of Custody Records for samples described as SS-25 through SS-78 (twenty-four pages);
- 9. CHEMTEX electric conductivity lab results for samples described as SS-1 through SS-24, and BGSS 1 through BGSS 4 (seven-pages);
- 10. CHEMTEX Chain of Custody Records for samples described as SS-1 through SS 24, and BGSS 1 through BGSS-4 (twelve-pages);
- 11. CHEMTEX Total RCRA Metals (Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver, and Mercury) lab results for samples described as Composite SS-1 through SS-78, and Composite BGSS 1 through BGSS-4 (thirty two-pages);
- 12. CHEMTEX Chain of Custody Records for samples described as Composite SS 1 through SS-78, and Composite BGSS 1 through BGSS-4 (twelve-pages).

Upon review of Ranger's 2013 Report, Mr. Airey testified, "... there were six locations in the [0-12 inches] interval that did exceed levels ... that the Railroad Commission has historically used on other landfarm permits that I have been associated with. ... [T]here was nothing at any depth below that that [sic] exceeded their values." He later stated that the 4th Amended Permit does not include limitations as to the amount or volume of pollutants that may exist at the Facility through use of LF-0032. Thus, Vergo did not violate its permit. In other words, Mr. Airey

⁸¹ Compare Vergo Exh. No. 33 with Tr., Vol. I., Pg. 199, L. 9 - Pg. 200, L. 20.

⁸² Tr., Vol. I., Pg. 203, L. 3 – 7.

⁸³ Tr., Vol. I., Pg. 203, L. 14 – 23.

⁸⁴ Tr., Vol. I, Pg. 206, L. 17 – Pg. 207, L. 5.

asserted that despite Staff's request of Vergo to perform soil sample analyses aimed at determining whether or not pollution exists at the Facility through Vergo's use of LF-0032, and Vergo's discovery of numerous locations where pollutants were found to exceed the Commission's historic pollutant limitations, he believes that Vergo did not violate its permit simply because the 4th Amended Permit does not contain any form of acceptable limits for pollutants at the Facility. When asked by Vergo's counsel if a remedy exists to alleviate pollutant exceedences for those six locations, Mr. Airey stated, "[a]ll you have to do is go till it and turn it and resample the interval again. ... it's, as they like to say, dilution is the solution to pollution." As to Ranger's 2013 Report, he concluded that the soil analyses demonstrated that nothing below the 12-inch interval (i.e. 0-12 inches) exceeded historic Commission values. Therefore, migration had not occurred below that interval. Vergo did not present evidence demonstrating that it had performed remedial operations at the Facility, as previously described by Mr. Airey, to correct the exceedances discovered by Vergo.

The Commission's historic standards of limitation for metals in the soil, in ppm, are:⁸⁷

Arsenic	<u>Barium</u>	Cadmium	Chromium	Lead	<u>Selenium</u>	<u>Silver</u>	Mercury
10	10,000	10	100	200	10	10	200

Ranger's 2013 Report demonstrates that those six soil sample locations, identified by Mr. Airey as "hot spots", include, in part, as follows:⁸⁸

<u>Sample</u>	<u>Lat.</u>	Long.	Area	Exceedance (ppm)
SS-1	30.29409	93.83337	Area 1-South	Arsenic -25.06
SS-2	30.29417	93.83305	Area 1-South	Arsenic -25.06
SS-3	30.29414	93.83268	Area 1-South	Arsenic -25.06
SS-4	30.29484	93.83273	Area 1-South	Arsenic -25.06
SS-9	30.29552	93.83288	Area 1-South	Arsenic - 11.06
SS-10	30.29603	93.83293	Area 1-South	Arsenic - 11.06
SS-11	30.29585	93.83362	Area 1-South	Arsenic - 11.06

⁸⁵ Tr., Vol. I,. Pg. 204, L. 4 – 11.

⁸⁶ Tr., Vol. I., Pg. 204, L. 25 – Pg. 205, L. 6.

⁸⁷ See infra at note 150. Those values are expressed in parts per million (ppm).

⁸⁸ See Vergo Exh. No. 33, Attachment 2 with Vergo Exh. No. 27. Collectively, Area 1 is apparently identified as the "pink" shaded acreage on Vergo Exh. No. 27. The soil samples included in Exh. No. 33 appear to have been collected from the Facility primarily, if not entirely, throughout Area 1 on February 18, 2013. They were received by CENTEX's laboratory on March 21, 2013, composited for testing on March 25, 2013, analyzed by that lab for Total Metals on March 26, 2013, and analyzed by that lab for Total Mercury on March 27, 2013. The soil sample values, identified in the table as "Exceedence (ppm)" utilized measurement units of parts per million.

SS-12	30.2957	93.83411	Area 1-South	Arsenic - 11.06
SS-17	30.29672	-93.8338	Area 1-South	Arsenic -165; Lead - 599.04
SS-18	30.29655	93.83437	Area 1-South	Arsenic -165; Lead - 599.04
SS-19	30.29718	- 93.83477	Area 1-South	Arsenic -165; Lead - 599.04
SS-20	30.29726	-93.8343	Area 1-South	Arsenic -165; Lead - 599.04
SS-33	30.30009	93.83482	Area 1-Central	Arsenic - 25.79
SS-34	30.30062	93.83506	Area 1-Central	Arsenic - 25.79
SS-35	30.30046	93.83549	Area 1-Central	Arsenic - 25.79
SS-36	30.30029	93.83621	Area 1-Central	Arsenic - 25.79
SS-49	30.30418	93.83678	Area 1-North	Arsenic - 11.99
SS-50	30.30412	93.83599	Area 1-North	Arsenic - 11.99
SS-51	30.30377	-93.8353	Area 1-North	Arsenic - 11.99
SS-52	30.30474	93.83509	Area 1-North	Arsenic - 11.99

Again, Mr. Airey testified that six soil sample locations were found to have contaminent levels that exceeded the Commission's historic allowances for landfarms. To clarify, he identified those hot spots collectively as six locations because they were separated into groups of four in order to perform the composite sampling technique, as instructed by Staff's February 28, 2012 correspondance. For instance, SS-1, 2, 3, and 4 make for one of the six locations mentioned by Mr. Airey. The remainder follow suit. When asked by the Examiners to clarify those exceedences, Mr. Airey testified, "... [t]wo metals, sir. ... I believe, six arsenics and in one of the samples there was one lead that exceeded it. So just those. Arsenic was the main one. The arsenics are a very common additive in drilling mud. It's like a co-metal with barium... Again, I was not surprised to see those values." Comparing the locations of the six hot spots identified by Mr. Airey to the list of independent soil sample locations reveals 24 soil sample locations that recorded the aforementioned exceedance values. Those 24 soil sample locations only include depths from 0-12 inches below ground surface across the majority of Area 1.

Next, Vergo presented copies of information entitled, "State of Texas Well Reports" for three water monitoring wells and one domestic water well. Those wells are identified as Tracking Nos. 299358, 299353, 24366, and 208695, respectively. Mr. Airey stated: Mr. Air

⁸⁹ Vergo Exh. No. 35.

⁹⁰ Tr., Vol. I., Pg. 210, L. 21 – Pg. 211, L. 25.

... Water well drillers are great people. ... However, part of this well reports, they always want to know the subsurface lithology that they observed when they are going down the hole. ... [I]t's very much like oil drilling. They use a drilling mud. It's very difficult to describe lithologies when you're looking at churned up rock, clay, sands in the subsurface through drilling mud. They do the best they can, ... Conversely, ... [m]onitor wells are generally installed using drilling methodologies that are not drilling mud-based technologies. ... [O]ther times they use hollow stem augers. But, generally when a monitor well is installed, it is generally observed by a more qualified person looking at the lithology they encountered, a geologist, a geoscience person. [Thus], [i]t is more reliable [monitoring well].

In comparing Staff's October 2, 2013 denial letter [Vergo Exh. No. 30], regarding the information Staff utilized for its basis to deny the Subject Application due to potential contamination of subsurface waters, Mr. Airey asserted, "... the well reports that are out there on the Texas Water Development Board database, you have to kind of rank their reliability on it. The data from the Waste Management Newton County Regional Landfill, that lithology would be much more reliable than a water well driller's best attempt at drilling." He asserted, therefore, that the lithology descriptions made for the monitoring wells nearest the Facility are more reliable than the nearest water well. He stated that the separation of those three monitoring wells from the Facility is about three miles.⁹² He opined that the report created for monitoring well 399358 indicates clay from the surface to 33 feet bgs before any sand-bearing unit is encountered. 93 He later compared similar information made for water well 208695, and testified, "... [i]n this particular situation they've got 50 feet of clay prior to encountering the water bearing sand.⁹⁴

When asked by Vergo's counsel, "[d]id you ever reach an opinion as to whether or not Vergo has operated and managed its business and its operation in compliance with its permit," Mr. Airey stated, "I mean, I think he's done a wonderful job out there. I mean, the inspection reports from the Railroad Commission, you know, they agree with my assessment of it. And it's -they've done a good job out there."95

Copeland's Supporting Testimony

Chad Copeland, a environmental consultant at Ranger, testified on behalf of Vergo as an expert witness regarding landfarm permitting, stormwater permitting and jurisdiction, and wetlands assessments. He is certified as a corrective action project manager with the Texas Commission on Environmental Quality, and as a wetlands scientist through The Society for Wetlands Scientists.96

⁹¹ Tr., Vol. I., Pg. 212, L. 1 – 6.

⁹² Tr., Vol. I., Pg. 213, L. 4.

⁹³ Tr., Vol. I., Pg. 213, L. 16 – 18.

⁹⁴ Tr., Vol. I., Pg. 214, L. 14 – 16.

⁹⁵ Tr., Vol. I., Pg. 215, L. 1 – 8. ⁹⁶ Tr., Vol. I., Pgs. 228 – 231.

Wetlands Determination vs. Jurisdictional Wetlands of the U.S.

Staff's October 3, 2013 denial letter, in part, states:97

... Designated wetlands and surface water at this property [Facility] may not allow construction of berms to isolate the landfarm cells, because the cells would fill up with water without the drainage ditches to drain them. For these reasons, it seems that no reasonable or economical engineering controls can be put in place to avoid pollution of surface waters of the state at the subject property and the property is not suitable for landfarming. ...

Mr. Copeland asserted that Staff relied upon a cursory investigation tool, known as the U.S. Fish and Wildlife Wetland Inventory Mapper, to reach its conclusion as previously stated. He testified, "… [i]ndustry standard doesn't allow you to take the National Wetland Inventory Mapper and roll it over a site and say this is definitively a wetland. … It's nothing more than just a tool. It's not – it can't be used to make a [wetland] determination or a delineation." Instead, he stated, the U.S. Army Corps of Engineers generally performs determinations as to whether or not a location qualifies as a "jurisdictional wetland," which is an act that must be determined by the U.S. Army Corps of Engineers. 99

When asked by Vergo's counsel if a wetland could be created by installing man-made berms, he testified, "... [f]or sure. A lot of wetlands out there are man-made wetlands. Any time you put four walls up around something and you allow water to be inundated, you have the potential to convert those soils to hydric soils. ...It does not mean it's jurisdictional." 100

On cross-examination, however, Mr. Copeland stated that the only way to determine if a location is a wetland is to perform a field investigation, absent a U.S. Army Corps of Engineers determination, or a mapper.¹⁰¹ He then clarified that he has not performed such an investigation at the Facility. When asked by Staff's counsel if he had identified any wetlands at or near the Facility, he testified:¹⁰²

... There's a difference in a wetland and a jurisdictional wetland. ... I have identified wetlands at this property. That in no way is me saying that they're jurisdictional in the sense that every landfarm I've ever been to has held water. This one is no exception. ... That does not necessarily make it jurisdictional. ... What I have not done is a wetland investigation. I have not popped that soils to check for hydric soils. I have not done a study for the hydrology. I haven't gone as far as to do anything with the hydrofitting vegetation. But I have observed things that appear to be wetlands."

⁹⁷ See Vergo Exh. No. 30, Pg. 3, ¶1.

⁹⁸ Tr., Vol. I., Pg. 232, L 8; Pg. 233, L. 9 – 11.

⁹⁹ Tr., Vol. I., Pg. 233, L. 18; Pg. 236, L. 1 – 4.

¹⁰⁰ Tr., Vol. I., Pg. 234, L. 4 – 14; Pg. 235, L. 1 – 3.

¹⁰¹ Tr., Vol. I., Pg. 239, L. 8 – 10.

¹⁰² Tr., Vol. I., Pg. 239, L. 25 – Pg. 240, L. 16.

He subsequently stated that no one knows whether or not the Facility is a jurisdictional wetland because such a determination has yet to be made. 103

Stormwater

In this regard, Mr. Copeland provided general testimony describing his experience with stormwater permitting in Texas, and the jurisdictional boundaries between the Commission and the TCEQ. He indicated that he has obtained about 100 stormwater permits for opertions under the TCEQ. He did not clarify what those operations included. When asked by Vergo's counel, however, if the Railroad Commission has jurisdiction or authorization to demand or require any type of stormwater permit, he testified, "[w]ith the exception of this permit [LF-0032] ... I have never heard of any other –any other time that the Railroad Commission has ever asked for that." 105

On the other hand, when he was asked by Staff's counsel if the Railroad Commission has jurisdiction over contact stormwater affected by oil and gas waste, he stated, "Yes. We're talking about something very different now. Contact stormwater is a waste. To discharge contact stormwater – and this is where we've kind of gone back and forth for two years – those are two different things. They're apples and oranges." He later testified that he is not aware if the Railroad Commission's rules, regulations, or forms of guidance documents require persons to obtain a permit for contact stormwater. He asserted, "... I've also seen on the Railroad Commission's website that they actually will not authorize the discharge of contact stormwaters specifically for landfarms." 107

Protestant's Direct Evidence (Staff)

Avitt's Supporting Testimony

Sean Avitt, an employee of the Commission's Oil and Gas Division since February 2012, testified on behalf of Staff as an expert geoscientist. Mr. Avitt is registered as a Professional Geoscientist in Texas. With regard to the Subject Application, his role included reviewing it to determine whether or not it should be renewed.¹⁰⁸

On February 28, 2012, Staff issued a response letter to Vergo seeking additional information portrayed as 11 items, that included:

- 1. A plat drawn to scale showing the tract of land composing the Facility's boundaries clearly outlined, and the identity and locations of all offsetting surface owners;
- 2. A copy of Vergo's notice to the Facility's surface owner, and a copy of the lease agreement executed between Vergo and that surface owner;

¹⁰³ Tr., Vol. I., Pg. 240, L. 19 – 22.

¹⁰⁴ Tr., Vol. I., Pgs. 236 – 238.

¹⁰⁵ Tr., Vol. I., Pg. 238, L. 18 – 21.

¹⁰⁶ Tr., Vol. I., Pg. 241, L. 10 – 14.

¹⁰⁷ Tr., Vol. I., Pg. 242, L. 2 – 5.

¹⁰⁸ Compare Tr., Vol. II., Pgs. 9 – 12 with Staff Exh. No. 1.

- 3. Copies of Vergo's notice to all offsetting surface owners, and a copy of the affidavit affirming the names, addresses, and dates that those surface owners were provided notice of the Subject Application;
- 4. Instruction to publish notice of the Subject Application pursuant to House Bill 480, with outlining directions, and submit copies of those newspaper clippings and sworn affidavits simultaneously;
- 5. A plan by Vergo for the installation of monitor wells at the Facility utilizing specific drilling and completion techniques, and a copy of map demonstrating their locations;
- 6. Soil sample analyses from the Facility (*i.e.* 632-acres) including one-grab sample representative of 0-12 inches, 12-24 inches, and 24-36 inches bgs for each one-acre area, and tested for electrical conductivity and RCRA Metals;
- 7. Details of all changes made to the Facility's operations since July 15, 1998, including planned changes;
- 8. An updated plat drawn to scale showing all roads, landfarm cells, stormwater ponds, berms/levees, irrigation canals, piping, pumps, etc;
- 9. A top view and two cross-sectional diagrams of all irrigation ponds at the Facility, including all dimensions and elevations of pit bottoms, sides, berms/levees, natural grade, pumps, and associated piping;
- 10. Details regarding the management of stormwater at the Facility; and
- 11. Clarification as to whether or not Vergo's stormwater management at the Facility includes discharging water.

On December 30, 2012, Vergo submitted its response to Staff's February 28th correspondence that included as follows:

- 1. Three-page cover letter;
- 2. Attachment A Copy of Staff's February 28th correspondence:
- 3. Attachment B Plat of the Facility totaling 631.9-acres by Verrett & Associates, Inc.;
- 4. Attachment C Copy of a letter dated December 27, 2012, notifying the Facility's surface owner of Vergo's intent to renew LF-0032 (the letter is written to "Mr. Longron" and signed by Artie Longron);
- 5. Attachment D Copies of letters dated December 27, 2012, notifying offset surface owners immediately adjacent to the Facility of Vergo's intent to renew LF-0032 (those persons include Waste Management of TX, Inc., John Hancock Life Insurance San Jacinto, John Hancock Life Insurance Co. et al.,), and a copy of a plat identifying the names and locations of those offset surface owners;
- 6. Attachment E Copy of Ranger's December 11, 2012, three-page letter that outlines Vergo's proposed monitoring well plan;
- 7. Attachment F Copy of a satellite image in black and white print labeled as, "Updated Facility Map";
- 8. Attachment G Copies of two hand-drawn cross-sections of the Facility and Ponds 1, 2, and 3 (dated September 17, 1998); copy of a computer generated map showing lines of cross-section A-A' and B-B' that traverse portions of the Facility; copies of computer generated cross-sections A-A' and B-B' (oversimplified);

- 9. Attachment H Copy of Ranger's December 27, 2012 estimated closure costs for the Facility that includes a two-page cover letter and table; and
- 10. Attachment I Copy of a satellite image in black and white print entitled, "Proposed Area to Have Drilling Mud Applied". Vergo supplemented a color print version of that map at the October 2016 hearing.

It is noteworthy that the final paragraph of Vergo's cover letter states that approximately 330-acres of the originally permitted 632-acre Facility were historically utilized for waste disposal. Therefore, Vergo requested to renew only 300-acres of the original 632-acre Facility.

In response to Vergo's December 30, 2012 correspondence, Staff requested additional information from Vergo in a three-page letter dated January 28, 2013, that requested the following clarification:

- 1. An executed copy of the lease agreement between Artie Longron and Vergo (Item No. 2 in Staff's February 28th correspondence);
- 2. Copies of notice by publication for the Subject Application, and a copy of the newspaper tearsheets and publisher's affidavit (Item No. 4);
- 3. A copy of the map associated with Vergo's proposed monitoring well plan, and an updated monitoring well plan that competently intercepts or observes the first groundwater aturated zone of soil nearest the surface (Item No. 5);
- 4. The previously stated soil sample analyses (Item No. 6);
- 5. Descriptions as to the use of Ponds 1, 2, 3, and 4 at the Facility (Item No. 7), and whether or not they contain oil and gas wastes;
- 6. An updated plat that accurately depicts the previously stated attributes at the Facility (Item No. 8);
- 7. Better cross-sectional diagram data for the four ponds at the Facility (Item No. 9);
- 8. Descriptions about the ultimate disposition of stormwater at the Facility (Item No. 10);
- 9. A diagram demonstrating the 330-acres Vergo historically utilized for waste disposal at the Facility; information that explains if the remaining 300-acres originates from the originally permitted 632-acres, and if Vergo utilized that 300-acre area for waste disposal.

In response to Staff's January 28, 2013, correspondence, Vergo submitted additional information on May 3, 2013, that included the following:

- 1. A three-page cover letter dated March 12, 2013, signed by Artie Longron;
- 2. Attachment A Copy of Staff's January 28, 2013, correspondence;
- 3. Attachment B Copy of a nine-page lease agreement absent signatures;
- 4. Attachment C Copy of a receipt from the Newton County News; Publisher's Affidavit from the Newton County News dated signed March 28, 2013; a single-page copy of a newspaper tearsheet;
- 5. Attachment D Proposed monitoring well location map through Google Earth (black and white print);

- 6. Attachment E Proposed soil sample location maps through Google Earth (black and white print);
- 7. Attachment F Updated aerial image of the Facility and its surface feature attributes (black and white print). Vergo submitted a supplemental color copy of that map at the October 2016 hearing.

Mr. Avitt stated that he utilized the Commission's Surface Waste Management Manual in his review of the Subject Application. He testified, "[t]he Surface Waste Management Manual is an online document that is used to communicate application requirements for [sic] environmental permit [Staff] to applicants. And environmental permits uses it to compare to when we receive applications to ensure the information was submitted sufficiently." He also referenced Statewide Rule 8(d)(6)(B), and testified that rule provides that the director may require any information necessary such that the applicant needs to demonstrate the permit, should it be issued, will not pollute surface or subsurface water. 111

Facility's Boundaries

Upon review of Vergo's latest response (*i.e.* March 12, 2013 cover letter and attachments previously mentioned), Mr. Avitt testified that Vergo's nine-page lease agreement is incomplete, and that Vergo never provided Staff with a copy of its executed lease. Staff also submitted a copy of a Google Earth image that indicates its understanding of the Facility's permitted boundaries. When asked by Staff's counsel if he was able to determine where Vergo proposed to landfarm in the future, he asserted:

"No, not really. ... Because ... the only depiction they've ever made of a proposed area was the -- described as 300-acres in Attachment I of their December 2012 letter [Vergo Exh. No. 27, also described as Vergo's December 30, 2012 correspondence]. And in their subsequent submittal in March 2013 they stated that all of the areas that were being proposed were within the 632-acres and have never been applied to. But that same 300-acre area was now being called 51-acres and was called Area 1, which was designated as historically used for landfarming."

Stormwater Management

Mr Avitt stated that Vergo's cross-sectional diagrams were insufficient for renewal of the Subject Application because they were generalized. He testified:

"It wasn't really clear how stormwater was being managed at the facility, and this facility gets a lot of rain. ... [i]n addition ... the cross section demonstrates that there's a pipe that goes through the irrigation ditch levee that allows communication with the surface water in the canal. ... it's basically a void in the berm that allows the water -- the surface waters in

¹⁰⁹ See Vergo Exh. No. 31.

¹¹⁰ Tr., Vol. II., Pg. 12, L. 23.

¹¹¹ Compare 16 Tex. Admin. Code §3.8(d)(6)(B) with Tr., Vol. II., Pg. 13, L. 6 – 10.

¹¹² Tr., Vol. II., Pg. 14, L. 3 – 7.

¹¹³ Staff Exh. No. 2.

the canal to freely flow back and forth to the area designated as the landfarm where the waste is. ..."114

When asked by Staff's counsel whether or not Vergo's cross-sectional diagrams are representative of what landfarm applicants typically submit to the Commission, he testified, "No. We typically receive what we request. ... so that we know that the waste won't migrate off the permitted area and so that we understand how stormwater is going to be managed at the facility." In support of Mr. Avitt's previously mentioned testimony, Staff referenced Vergo's March 12, 2013, cover letter that states, in part, "[i]n regards to your request to cross sections, we do not see the need to incur the costs to generate said documents when a verbal description should suffice. ..."

Staff submitted a copy of several pictures taken at the Facility during a site visit on March 27, 2014.¹¹⁷ Mr. Avitt testified that exhibit demonstrated an unpermitted pit near the Facility's entrance that allowed oil and gas wastes to flow into a nearby drainage ditch (enclosed as PFD Attachment No. 3).¹¹⁸ He also stated that the drainage ditch meanders to the Facility's eastern canal, which represents LF-0032's permitted boundary line, where it communicates with the Facility's surface waters, that is, the canal surrounding the Facility (enclosed as PFD Attachment No. 4). He asserted, "[a]nd I'll also note that there is no berm along the left side of ths picture that would stop anything from going into the canal or off the permitted area." ¹¹⁹

With regard to the Facility's southern boundary (i.e. southwestern-most portion of Area 1), Mr. Avitt testified, "[y]ou can see the drilling mud in the forefront of the picture. And you can see the blue-green pipe at the end of the internal berm. ... [a]nd then ... you can see the rusty pipe that goes from the canal across the exterior berm. Both of these pipes go across the exterior berm of the southern side of the property." [20] (enclosed as PFD Attachment No. 5) He further clarified, "[y]ou can see the drilling mud, and then you can see the internal berm, then you can see the canal and the exterior berm. ... the blue-green pipe goes from the inside in the landfarm across the internal berm, across the canal and out the exterior berm." [21]

Moving north from that location, within Area 2, Mr. Avitt discussed a photograph that captures a drainage ditch that he alleged is full of drilling mud, in part. He stated, [t]his is a picture of drilling mud in the drainage ditch. You can see the surface water meeting the drilling mud there. The drilling mud ... it's basically filling up the drainage ditch. ..." (enclosed as PFD Attachment No. 6)

Staff submitted copies of documents entitled, "Summary of Monthly Normals 1981-2010" ("Monthly Normals") and "Atlas of Depth – Duration Frequency of Precipitaiton Annual Maxima

¹¹⁴ Tr., Vol. II., Pg. 16, L. 6 – 8; L. 17 – 25.

¹¹⁵ Tr., Vol. II., Pg. 17, L. 13; L. 18 – 21.

¹¹⁶ See Vergo Exh. No. 29, Pg. 2, Item No. 7.

¹¹⁷ Staff Exh. No. 4.

¹¹⁸ Compare Staff Exh. No. 4; Pgs. 17 and 18 with Tr., Vol. II., Pg. 24, L. 12; 23 – 25; Pg. 25, L. 1 – 8.

¹¹⁹ Compare Staff Exh. No. 4, Pgs. 19 and 20 with Tr., Vol. II., Pg. 25, L. 9 – 18.

¹²⁰ Compare Staff Exh. No. 4, Pgs. 31 – 36 with Tr., Vol. II., Pg. 26, L. 10.

¹²¹ Compare Staff Exh. No. 4, Pg. 34 with Tr. Vol. II., Pg. 27, L. 2.

¹²² Compare Staff Exh. No. 4, Pgs. 79 and 80 with Tr., Vol. II., Pg. 34, L. 12 – 15.

for Texas." ("Atlas")¹²³, ¹²⁴ The first page of Monthly Normals is based on a weather station nearest the Facility, approximately seven miles southeast. The first page includes rainfall averages over a 30 year period, and the second page is a daily summary of the precipitation observed during January 2015. The Atlas depicts the approximate depth of rain for a 25-year, 24-hour rain event.

When asked to describe what a "monthly normal" reprents, Mr. Avitt stated it is based on a 30-year period, and that it is utilized to compare data in determining whether or not it falls within a normal. With a probability of 75%, the maximum monthly precipitation was 10.26 inches, while the overall average was 7.25 inches. He asserted that the Facility is located immediately south of the 10-inch contour line on the Atlas, suggesting that it would encounter between 10 and 11 inches of rainfall during a 25-year, 24-hour event. 128

Staff submitted numerous photographs capturing various portions of the Facility at a site inspection on January 29-30, 2015, taken by Mr. Avitt. He testified that Picture No. 9, located outside the Facility's southern boundary line, demonstrates standing water was observed on both sides of the property. As he walked east from that point, he stated, "[w]e walked ... along the southern propery line. It was heavily wooded, and there was a lot of water. The soils were saturated. And. ... we would smell like gas, like – like fermenting or vegetation, like kind of an egg sour smell, which can be indicative of marshes." 130

Continuing east outside the Facility's southern boundary, Staff observed a pipe protruding through a berm beyond the Facility. ¹³¹ Mr. Avitt testified, "... through the trees there's a black spot – black circle. And that's the end of the pipe, the rusty pipe in the previous set of pictures [Staff Exh. No. 4, Pgs. 35-36] in the southern Area 1 ... of the same pipe and the surface waters underneath it, and the berm – the pipe going through the berm." Moving further east, he identified a second pipe extending completely through the Facility's exterior berm. ¹³³ He stated, "... [t]his is the end of the blue-green pipe [Staff Exh. No. 4, Pgs. 33-34] ... this pipe, as opposed to the previous one, goes across both berms into Area 1, whereas the rusty pipe goes across the exterior berm and down into the canal." He asserted that the blue-green pipe is a conduit from Area 1 outside both berms to surface waters outside the Facility. However, he was not certain whether or not that pipe is open (*i.e.* it includes a valve). He approximated that blue-green pipe to be roughly 24-inches in diameter.

Moving throughout the Facility, Staff provided multiple photographs demonstrating large areas of standing water observed during Staff's January 2015 inspection. 136 (enclosed as PFD)

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123 Staff Exh. No. 5
124 Staff Exh. No. 6.
125 Tr., Vol. II., Pg. 36, L. 20 – 24.
126 Tr., Vol. II., Pg. 40, L. 22 – 24.
127 Staff Exh. No. 5, Final column entitled "Monthly Precipitation vs. Probability Levels".
128 Tr., Vol. II., Pg. 44, L. 13 – 16.
129 Staff Exh. No. 7.
130 Compare Staff Exh. No. 7, Pg Nos. 24 – 27 with Tr., Vol. II., Pg. 46, L. 15 – 20.
131 Staff Exh. No. 7, Pgs. 31 – 34.
132 Tr., Vol. II., Pg. 47, L. 1 – 4; L. 14 – 15.
133 Staff Exh. No. 7, Pgs. 35 and 36.
134 Tr., Vol. II., Pg. 49, L. 9; 10 – 13.
135 Tr., Vol. II., Pg. 50, L. 3 – 7.
136 Staff Exh. No. 7, Pgs. 67 – 128.
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Attachment No. 7) Mr. Avitt testified it rained 1.8 inches the day prior to Staff's visit, and that it had not rained significantly at the site since January 12, 2015, which was 4 inches of rain. Nonetheless, the Facility had not endured a 25 year, 24-hour event. He stated, "[m]y point of — I suppose is that there is a complex system here, and it allows the drilling mud and contact stormwater to drain to drainage ditches, canals and ponds and lakes, that can pollute those surface water bodies. ... Canals, lakes and ponds are defined as surface waters. And the permit prohibits discharge to drainage ditches." With regard to the 4th Amended Permit (i.e. the existing permit), Mr. Avitt asserted that Provision No. 10 prohibits discharge of oil and gas waste into drainage ditches and other water courses. In other words, he believes that the existing permit precludes discharge of oil and gas waste to surface waters within the Facility, including its man-made ponds. In other words, Including its man-made ponds.

Staff provided evidence that refutes Mr. Longron's account as to the locations historically utilized by Vergo for waste disposal at the Facility (enclosed as PFD's Attachment No. 1). Again, Mr. Longron previously identified those approximate disposal locations to Staff during his cross-examination. Ranger's 2013 Report more or less identified those portions of the Facility as four areas (*i.e.* Areas 1, 2, 3, and 4). When asked by Staff's counsel why Staff Exh. No. 8 shows additional locations of waste that were not identified in Areas 1 through 4, Mr. Avitt testified: 143

[b]ecause Areas 1, 2, 3 and 4 were the areas that were described to us as being the only areas where they had applied drilling mud, and they tested those areas to demonstrate that pollution was not occurring at the property. But several areas have been applied to where they have not tested it.

In short, Staff Exh. No. 8 shows approximately 14 to 16 locations within the Facility where Staff identified waste outside Areas 1 through 4. (enclosed as PFD Attachment No. 8)

Staff provided evidence demonstrating that the surface geology at the site consists of the Beaumont Formation in two predominant types – areas dominantly sand ("Quaternary Beaumont Sand, or QBS") and areas dominantly clay ("Quaternary Beaumont Clay, or QBC"). 44 Mr. Avitt testified that both soil types exist at the Facility. 45

Staff submitted a copy of a water well report for Well No. 6242401, located immediately north of the Facility's Pond 1. 146 Mr. Avitt stated that the first four entries made for that water well describe its lithology as follows: (1) 0 to 30 feet – sand; (2) 30 to 60 feet – shale; (3) 60 -102 feet fine sand; and 4) 102 to 170 feet -gumbo. 147 In other words, he stated that the lithology for

¹³⁷ Tr., Vol. II., Pg. 55, L. 24 – Pg. 56, L. 4.

¹³⁸ Tr. Vol. II., Pg. 62, L. 3 – 8; Pg. 72, L. 25 – Pg. 73, L. 1-2.

¹³⁹ Tr., Vol. II., Pg. 75, L. 16 – 20.

¹⁴⁰ Tr., Vol. II., Pg. 76, L. 12 – 19.

¹⁴¹ Compare Staff Exh. No. 8 with Staff Cross Exh. No. 2. Staff Exh. No. 8 is a copy of a map created by Vergo, with the addition of picture locations associated with Staff's photographs in Staff Exh. Nos. 4 and 7.

¹⁴² See Staff Cross Exh. No. 2.

¹⁴³ Tr., Vol. II., Pg. 79, L. 13 – 18.

¹⁴⁴ Staff Exh. Nos. 9 and 10. Those exhibits area based off of information provided by The Geologic Atlas of Texas through the Bureau of Economic Geology, and the Texas Water Development Board (Tr. Vol. II., Pg. 81, L. 13 – 15; 84, L. 11 – 12). ¹⁴⁵ Tr., Vol. II., Pg. 82, L. 22.

¹⁴⁶ Compare Staff Exh. No. 12 with Tr. Vol. II., Pg. 93, L. 6.

¹⁴⁷ Tr., Vol. II., Pg. 94, L.

that water well includes predominately sand from the surface to 30 feet bgs. Staff submitted several other copies of water well reports to show that a variation occurs in the lithology in and around the Facility. That is, lithology descriptions for water wells in and around the Facility indicate that QBS occurs at the surface to a depth of 30 feet bgs, while QBC occurs at or near the surface to a depth of approximately 10 to 15 feet bgs. ¹⁴⁸ Mr. Avitt testified that Vergo did not submit any information to show that clay exists across the Facility. ¹⁴⁹

Staff referenced a section entitled the "Commission's Permit Limits" listed in Vergo's Soil Metals Summary found in Ranger's 2013 Report, in ppm, which state: 150

Arsenic	<u>Barium</u>	<u>Cadmium</u>	Chromium	<u>Lead</u>	<u>Selenium</u>	Silver	Mercury
10	10,000	10	100	200	10	10	200

Then, Staff referenced the soil analyses found in that report, and identified that exceedances of arsenic and/or lead were discovered, as previously mentioned. When asked why Vergo performed composite sampling, Mr. Avitt stated, "[c]omposite samples are usually allowed at landfarms as a cost saving measure because landfarms are typically very large." He asserted that composite sampling is allowed because permittes are required to disperse oil and gas wastes evenly at landfarms. He further stated that the concentration of analytes are assumed to be equally displaced if drilling mud is tilled and evenly applied across an area. However, if the drilling mud is not applied equally across an area, then it may result in a sample containing unusually high or low analyte concentrations.

When asked by Staff's counsel, why the Commission places limits on metal concentrations in soils, Mr. Avitt testified, "[t]o ensure that no pollution of surface or subsurface waters occurs as a result of oil and gas waste disposal." ¹⁵³

Woodburn's Supporting Testimony

James Woodburn, an employee of the Commission's Oil and Gas Division since October 2012, testified on behalf of Staff. He holds a Bachelor Science and Master's of Science in Geology. His role is to review permitting applications for the management and treatment of oil and gas waste against their impact on surface and subsurface waters, engineering designs that include stormwater management, clutter cost estimates, and groundwater analyses, and remediation activities associated with groundwater pollution.¹⁵⁴

¹⁴⁸ See Staff Exh. Nos. 12 and 13.

¹⁴⁹ Tr., Vol. II., Pg. 98, L. 4.

¹⁵⁰ See Vergo Exh. No. 33, Attachment 2. Those values are expressed in parts per million.

¹⁵¹ Tr., Vol. II., Pg. 102 – 103.

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¹⁵³ Tr., Vol. II., Pg. 101, L. 3.

¹⁵⁴ Tr., Vol. III., Pgs. 50 – 51.

Staff submitted two exhibits that include a "Web Soil Survey" map, and its corresponding soil description data for the Facility. ¹⁵⁵ In short, Mr. Woodburn identified a soil type known as Camptown A ("CamA") as being a prevalent soil throughout the Facility. He stated:

[a]nd, essentially, where Camptown A is, there would be a frequency of flooding. So that means frequently when it rains – as Sean Avitt pointed out in his testimony with the precipitation and how much it rains there would be a frequency of ponding in this CamA, and it's kind of hard to allow disposal of water-based muds inside of other water because they can't drive out there ... we just wanted to point out that there's ... ponding in those areas."¹⁵⁶

He testified that the CamA makes up about 40% of the Facility's surface soils.¹⁵⁷ He stated that it rains 56 inches per year with an annual evaporation rate of 46.7 inches per year in the area. In other words, he believes that the precipitation rate exceeds the evaporation rate by 9.5 inches per year in the area.

He asserted that the Vidor-Gist ("VigA") is the dominant soil type that Vergo has historically utilized for waste disposal at the Facility. Similar to the CamA, it poorly drains fluids, allowing for high runoff. It also composes higher elevation points at the Facility. If stormwater enters the Facility, it will drain towards the CamA. He stated: 159

... [s]o there would be influence of ponding shown by Mr. Avitt's pictures and that was the concern about how much water there is on-site and how to control that stormwater and the issue of them putting it into these ponds [Ponds 1, 2, and 3], and if we don't know that they're surface waters of this state or surface waters at all by the determination of an applicant should we allow contact stormwater to be discharged into surface waters."

Mr. Woodburn testified that Vergo's stormwater management plan, as previously mentioned, includes non-contact and contact stormwater drainage into the Facility's canals. From there, it is pumped into Ponds 1, 2, and 3. If contact stormwater enters those ponds, and those ponds are determined to be surface waters of the state, then it is a violation of Statewide Rule 8 because that rule prohibits discharge of oil and gas waste into surface waters of the state. ¹⁶⁰

When asked by the Examiners what has changed at the Facility, with regard to stormwater management, since 1998 (i.e. the 4th Amended Permit, or existing permit), he stated, "... the first time we had a stormwater management plan submitted was August of 1998 which was after the submittal of – after the issuance of that permit. So we didn't know – we didn't have written information about how they were handling their stormwater until that point which was after the

¹⁵⁵ Staff Exh. Nos. 42 and 43, respectively. The source of those exhibits is from the USDA's Natural Resource Conservation Service's National Cooperative Soil Survey.

¹⁵⁶ Tr., Vol. III., Pg. 103, L. 2 – 12.

¹⁵⁷ Tr., Vol. III., Pg. 105, L. 9.

¹⁵⁸ Tr., Vol. III., Pg. 106.

¹⁵⁹ Tr,. Vol. III., Pg. 109, L. 8 – 18.

¹⁶⁰ Tr., Vol. III., Pg. 112.

permit was issued."¹⁶¹ He indicated that a determination of whether or not Ponds 1, 2, and 3 are surface waters of the state can only be made by the EPA, or the U.S. Army Corps of Engineers, and that determination has yet to be made. ¹⁶²

Harbert's Supporting Testimony

Artemis Harbert, an employee of the Commission's Oil and Gas Division since June 2014, testified on behalf of Staff as an expert witness in information studies and information management. She holds a Bachelor of Science in Geology and a Master's of Science in Information Studies. Her role is to review and assess surface waste management facilities. 163

Ms. Harbert stated that in her role at the Commission, she typically compiles data tables to track the amounts of waste received at a facility for determinations as to whether or not it is within its permitted limitations. Staff submitted a table for the Facility to demonstrate the total and cumulative monthly and annual freshwater-based drilling muds received by Vergo from September 1990 through June 2014 ("Table 1"). 165

Staff submitted a second table that is based on the monthly waste receipt reports submitted to Staff from March 1991 through September 2013 ("Table 2"). Staff submitted a third table comprised of annual reports submitted by Vergo for the Facility that is presented by month from September 1990 through September 2012.

Based on Tables 1-3, Ms. Harbert testified that Vergo exceeded its permitted capacity of 2.453 million barrels in March 2010. She testified that the last waste report received from Vergo included the May 2013 monthly report, and that she does not know why Vergo stopped submitting them since that time. 167

Applicant's Rebuttal Case (Vergo)

Longron's Supporting Testimony

Mr. Longron attempted to clarify the Facility's boundaries from memory by drawing in marker on Vergo's demonstrative Exhibit No. 34. He stated: [t]o my understanding of what I recollect from my father and the years of doing this, the 632 acres will be outlined by the way I've drawn it..." His recollection of the Facility's boundaries excludes the "handle" at the northernmost portion of the Facility, and includes an additional larger area outside the boundaries previously included on Vergo's Exh. No. 34.

Nonetheless, he indicated that the Facility is composed of roughly 632-acres out of 870-acres of land that he owns, and that the 870-acre property is surrounded by berms that are 15 to 17

¹⁶¹ Tr., Vol. III., Pg. 114, L. 9 – Pg. 115, L. 2.

¹⁶² Tr., Vol. III., Pg. 115, L. 7 – 25.

¹⁶³ Tr., Vol. III., Pgs. 170 – 171.

¹⁶⁴ Tr., Vol. III., Pg. 172, L. 20.

¹⁶⁵ Staff Exh. No. 44.

¹⁶⁶ Staff Exh. No. 45.

¹⁶⁷ Tr., Vol. III., Pg. 176.

¹⁶⁸ Tr., Vol. III., Pg. 7, L. 21.

feet tall and 12 to 14 feet wide. 169 He stated, "... [s]o it's a giant complex of one giant levee system around the whole thing with dikes and levees on the inside of that breaking it down even further." Vergo did not submit any pictures or exhibits in support of Mr. Longron's recollection regarding the dimensions of those levees surrounding that 870-acre property.

With regard to the blue-green pipe that extends through the Facility's berms near the southwestern portion of the Facility, as previously described by Staff, Mr. Longron testified that pipe is not used for anything. He stated, "[t]here is a half-inch steel plate that is bolted shut on that pipe. If you enlarge that picture [Staff Exh. No. 4, Pg. 34] you will see it's shut and bolted. ... It is closed and there is a stud with a nut tightened down ceiling [sic] that pipe." When asked by the Examiners if he could simply unbolt it, he asserted, "[i]f we needed to we could use that, yes. ...[but,] I haven't for several years." 172

Mr. Longron was asked by Vergo's counsel as to the capacity of oil and gas waste that Vergo may accept in the Subject Application. He responded:

"[w]e've come up with the numbers ... of how many acres they think we have used. I believe we've rounded it off at 300 acres, and the permit is for 632. If we add up the barrels that Vergo has been awarded since the '86 original permit, I think it comes up to three-and half or right at four-million barrels. ... So if we still have half as much, instead of renewing ever so many years, let's just go ahead and ask for the same amount for the other half ... [s]o 3.5 million barrels, Your Honor." 173

He later stated that he was uncertain whether or not the original permit, and its subsequent amendments, were considered to be additive. He ultimately ended up asking for 2.4 million barrels of capacity for 300-acres in the Subject Application. He did not clarify the location of that 300-acres he previously mentioned.

On cross-examination, Mr. Longron was asked to clarify the Facility's boundaries. Ultimately, he was unsure. He provided testimony as to the metes and bounds from the lease Vergo provided Staff that summarily portray a 632-acre area. However, he stated that was incorrect. As a result, he testified that he would commission a survey of the Facility's boundaries, and that he would provide a certified copy of the results. The record shows that no survey was submitted to the Commission, as previously stated by Mr. Longron. In the end, therefore, the record does not demonstrate where the Facility's boundaries begin and end.

¹⁶⁹ Tr., Vol. III., Pg. 9.

¹⁷⁰ Id

¹⁷¹ Tr., Vol. III., Pg. 11, L. 4.

¹⁷² Tr., Vol. III., Pg. 13, L. 20 -24.

¹⁷³ Tr., Vol. III., Pgs. 15 – 17.

¹⁷⁴ Tr., Vol. III., Pg. 18.

¹⁷⁵ Tr., Vol. III., Pg. 37, L. 11-16; Pg. 45, L. 3 – 11.

EXAMINERS' OPINION AND DISCUSSION

Based on the record evidence, the Examiners believe that Vergo failed to provide sufficient evidence demonstrating that its operations at the Facility are not a potential source of pollution to surface and subsurface waters. The Examiners also find that pollution of soils at the Facility, and Vergo's failure to provide sufficient evidence demonstrating the Facility's boundaries, are further cause for denial of the Subject Application. Therefore, the Examiners recommend that it be denied.

Governing Rules

Statewide Rule 8(d)(1) Prohibited disposal methods – states, in part:

... no person may dispose of any oil and gas wastes by any method without obtaining a permit to dispose of such wastes. The disposal methods prohibited by this paragraph include, but are not limited to, the unpermitted discharge of oil field brines, geothermal resource waters, or other mineralized waters, or drilling fluids into any watercourse or drainageway, including any drainage ditch, dry creek, flowing creek, river, or any other body of surface water.

Statewide Rule 8(d)(6)(A) Standards for permit issuance- states, in part:

... A permit to dispose of oil and gas wastes by any method, including disposal into a pit, may only be issued if the commission determines that the disposal will not result in the waste of oil, gas, or geothermal resources or the pollution of surface or subsurface water. ...

Statewide Rule 8(d)(6)(B) Application – states, in part:

... The director may require the applicant to provide the commission with engineering, geological, or other information which the director deems necessary to show that issuance of the permit wil not result in the waste of oil, gas, or geothermal resources or the pollution of surface or subsurface water.

Discharge to Areas Outside the Facility

Vergo provided evidence demonstrating that it routinely discharged contact stormwater for a period of at least 12 years, from 1986 to 1998, from the southwestern portion of the Facility through a 36-inch pipeline that travels through the Facility's exterior levee. That 36-inch pipeline was connected to a V-8 motor that provided suction for that pipeline to pull contact stormwater from the Facility and discharge it to areas outside the Facility that are not authorized to accept oil and gas wastes (enclosed as PFD's Attachment No. 2). Therefore, Vergo definitively

¹⁷⁶ See Vergo Exh. No. 23.

showed that it routinely violated Commission rules by discharging oil and gas wastes from the Facility to unpermitted areas outside the Facility.

Vergo repeatedly raised the point that it had never received a violation letter from the Commission, as a result of its operations at the Facility. The Examiners, however, give that argument little weight because Vergo's own evidence demonstrates that it clearly violated Commission rules, as well as Permit Condition No. 8 when it routinely discharged contact stormwater from the Facility to areas outside the Facility that are not authorized to accept oil and gas wastes.

On November 3-4, 1998, Staff visited the Facility to perform a site inspection. Vergo submitted a copy of Staff's notes during that memorialized Staff's findings during that site visit. ¹⁷⁷ Staff recorded the following observations, in part: ¹⁷⁸

... Traveled to southern border and dike of landfarm. Found large V-8 diesel motor & pump. Appears to be used to pump water out of landfarm when in operation. Found another pump (belt-driven) but no motor was attached. ... At diesel V-8 pump. Mr. Longron stated repeatedly that no water ever left facility, but when questioned on use of diesel pump, Mr. Longron stated that water must be pumped out over levee after heavy rains. He used pump twice this year. He also stated that he has been pumping water out of landfarm area over levee by diesel pump for the last 12 years. This is the only location where Dave & I found where water has been discharged.

At the hearing, Mr. Longron's attorney asked him if he had any understanding of what occurred during that time period. He testified:¹⁷⁹

We had a – we had a big flood at that time, and if I'm not mistaken it was – I think it was Pete Fisher or Gabe Macias ... that gave father permission to pump to keep the integrity of the levees that surround the landfarm from collapsing because we had a catastrophic flood and there was a bunch of water back then ... It was a lot of rain, a lot of rain. We had feet of floodwater. And to keep the integrity of the levees, he got permission from them to pump some water is what I understand. ... It's like a hurricane. It was just flooded. Everything was flooded. The whole country was flooded.

Vergo did not submit any record of that conversation supporting Mr. Longron's claim that it was granted verbal authority by Staff to discharge contact stormwater from the Facility to areas outside the Facility, as alleged by Mr. Longron. With regard to Vergo's actions in routinely discharging contact stormwater from the Facility to areas outside of it, Mr. Longron testified that he has never discharged water over the Facility's exterior levee. 180 He also stated that he was

¹⁷⁷ See Vergo Exh. No. 32. Five page document entitled, "Note to File" by Pete Fisher.

¹⁷⁸ *Id.* Pgs. 2 and 3. The record is unclear as to whether or not the individual described as Mr. Longron in that document is Artie Longron, the current owner of Vergo, or his father.

¹⁷⁹ Tr., Vol. I., Pg. 83, L. 12; Pg. 84, L. 13.

¹⁸⁰ Tr., Vol. I., Pg. 87, L. 24.

present at the time because his job duties were associated with Vergo's daily operations.¹⁸¹ He later testified that pipeline is constructed in a manner that Vergo could utilize it if necessary. When asked by Vergo's counsel if he uses it, Mr. Longron testified, "... no, I haven't for several years."¹⁸² In other words, Mr. Longron appeared to contradict his earlier testimony that he has never used that pipe to discharge water from within the Facility to areas outside the Facility, and that he could use it if necessary.

Vergo submitted a second document that details a phone conversation between Staff and Vergo on November 6, 1998. In it, Mr. Fisher memorialized his conversation with A.E. Longron of Vergo. It states, in part:

... He also told me that he has always had verbal permission from RRC to pump out rainwater after a big storm and if he wasn't able to do that in the future then how could he operate? I told him this is one of our concerns and not sure what will happen until a final decision is made (emphasis added).

Vergo submitted no record demonstrating that it had authority to discharge contact stormwater that originates within the Facility to areas outside of it that are not permitted to accept oil and gas wastes.

Based on those documents that detailed Staff's November 1998 site inspection, and telephone conservation with Mr. Longron, Vergo also demonstrated that if it could not routinely discharge contact stormwater that resulted from rain, then it could not continue to operate the Facility. Despite Mr. Longron's recollection that Vergo was granted verbal permission from some unknown Staff member to discharge contact stormwater from the Facility due to a hurricane-type event, Vergo admitted that it routinely discharged stormwater that came into contact with waste from the Facility for a period of at least 12 years. In fact, Vergo's own evidence shows that it discharged contact stormwater at least two times in 1998. Other than Mr. Longron's contradicting testimony as to whether or not he discharged water from the Facility to areas outside the Facility, and that he could if Vergo found it necessary, the Examiners opine that Vergo did not present substantial evidence to refute its earlier position that if it cannot discharge contact stormwater from outside the Facility, then it cannot operate the Facility.

Potential for Pollution of Surface and Subsurface Waters

Staff denied Vergo's request to renew its existing permit for the Facility on October 3, 2013.¹⁸⁴ At the hearing, Vergo repeatedly pointed out that it had yet to obtain a letter from the Commission that cites any rule violations, as a result of its operations at the Facility, despite the fact that recent soil analyses from the Facility exceeded the Commission's historic standards for soil pollution levels, and its own evidence demonstrating that it routinely discharged contact stormwater from within the Facility to areas outside the Facility because of flooding due to rainwater.

¹⁸¹ Tr., Vol. I., Pg. 83, L. 21.

¹⁸² Tr., Vol. III., Pg. 13, L. 22 – 24.

¹⁸³ See Vergo Exh. No. 32. A single page, Commission document entiled, "Record of Communication" by Pete Fisher.

¹⁸⁴ Vergo Exh. No. 30.

Staff replied that it does not issue permit renewals based on a lack of cited rule violations. Instead, it relies on forward-looking materials submitted by applicants. Wergo argued that it met the renewal requirements listed in the Surface Waste Management Manual for renewal of its existing permit. Therefore, it's request should be granted. However, Staff argued that Statewide Rule 8 provides it authority to seek additional information in reviewing such applications. For example, Ranger's 2013 Report.

The record evidence shows that although Staff requested Vergo to perform soil sample analyses from each one-acre area across the entire Facility, Vergo instead selected four areas (*i.e.* Areas 1 through 4). Those areas do not span the entire Facility. Vergo argued that those four areas encompassed the historic places within the Facility that it utilized for oil and gas waste disposal, despite the fact that the Facility was repeatedly inundated with stormwater that in turn created large areas of contact stormwater. Staff submitted pictures taken from site visits that showed numerous other areas utilized for waste disposal that were not included in Ranger's 2013 Report. Staff also provided evidence demonstrating that the surface soils in and around the Facility vary from predominant sand to predominant clay within the Beaumont Formation. Therefore, it remains unclear whether or not those additional areas discovered by Staff also exceed Commission soil analytic standards, and if they adequately protect surface and groundwater due to predominant sand-bearing soils being observed at or near the Facility.

The Examiners find no substantial evidence in the record to reflect that Vergo performed, or attempted to perform, soil sample or lithologic descriptions of water or monitoring wells at the Facility, as requested by Staff. Without any clear explanation about why it ignored Staff's request, Vergo chose to primarily rely upon lithologic descriptions made for monitoring wells approximately three miles north of the Facility. Vergo also submitted lithologic descriptions made for a water well outside the Facility. However, Vergo's expert geologic witness testified that in general, he does not consider lithologic descriptions made by water well drillers reliable compared to descriptions made for monitoring wells because monitoring well descriptions are usually observed by a person that is more qualified. As a result, he depended on those lithologic descriptions made for those three monitoring wells roughly three miles north of the Facility because they were presumably made by a person more qualified than the water well driller for water well 208695. He stated, "... [w]ater well drillers are great people ... [h]owever ... they always want to know the subsurface lithology that they observed when they are going down the hole. ... They do the best they can. ... But generally when a monitor well is installed, it is generally observed by a more qualified person [than a water well driller] looking at the lithology they encountered, a geologist, a geoscience person."188 Despite his opinion in that regard, the Examiners find no other evidence in the record to support that claim.

Based on those three monitoring wells, Vergo's expert geologist testified that he anticipated roughly 20 feet of clay exists beneath the Facility, and that it is immediately above a subsurface water interval. 189 He later stated, "I included the water well data ... basically to show

¹⁸⁵ Tr., Vol. II., Pg. 192.

¹⁸⁶ Compare Vergo Exh. No. 26, Pg. 3, ¶ 6 with Vergo Exh. No. 33.

¹⁸⁷ See Staff Exh. Nos. 4, 7, and 8...

¹⁸⁸ Tr., Vol. I., Pg. 210, L. 21 – Pg. 211, L. 18.

¹⁸⁹ Tr., Vol. I., Pg. 198, I. 1 – 16.

how things can vary between a water well driller and a monitor well driller." ¹⁹⁰ In contradiction to his earlier testimony regarding the competency of a water well driller to reliably perform lithologic descriptions, he later depended upon a water well driller's ability to identify and describe 50 feet of clay in the subsurface as being stratigraphically situated immediately above a water bearing sand described as "white sand coarse" in water well 208695 as support for Vergo's position that adequate clay is present above water-bearing sands at the Facility. ¹⁹¹ What's more, he simultaneously dismissed the fact that the same water well driller for that water well identified a soil-type of "topsoil sandy" from the surface to 30 feet bgs at that water well's location. ¹⁹²

When asked on cross-examination whether the 20 feet of clay he projected to be beneath the Facility is continuous over several miles, he responded "I'm saying that what I have observed in the drilling is very consistent when you drill the Beaumont Formation, which is continually present in several of those counties. Basically, you observe clay at the surface, down to some depth, at which point you encounter a sand that is going to be a saturated sand ..." However, he later stated that the Beaumont Formation is also known to include surficial sands. ¹⁹³ He testified that he has not completed any monitoring wells at the Facility, nor has he performed any lithologic descriptions of soil borings at the Facility. ¹⁹⁴

Vergo's expert geologist indicated that water well drillers generally use "mud' during the drilling of water wells, very much like oil drilling.¹⁹⁵ Based on that understanding, he opined that it is difficult for water well drillers to perform lithologic descriptions because rock cuttings are mixed with drilling mud.¹⁹⁶ He then stated that monitoring wells are generally drilled with technologies that do not utilize drilling mud, such as hollow stem augers.¹⁹⁷ In other words, he concluded that lithologic descriptions made by persons observing monitoring wells being drilled are more reliable because they are generally drilled with hollow-stem augers, and they are observed by a more competent person (*i.e.* a geologist or geoscientist) than a water well driller. However, Vergo's own evidence contradicts that position on two points.

First, Vergo's Exh. No. 35 demonstrates that the reports used to compile that exhibit relate to three monitoring wells, as well as one water well, that were all drilled using methods described as "mud (hydraulic) rotary." That is, none of those monitoring wells were drilled with hollow-stem augers. Instead, all of those wells were drilled with drill-mud technology. Vergo did not distinguish whether or not a competent individual in Vergo's perspective (*i.e.* a geoscientist) has the same difficulty in reliably describing rock cutting lithologies as a less competent person (*i.e.* a water well driller) when everyone utilized drilling mud as the drilling method to drill those wells. Therefore, the record demonstrates that Vergo's preference to rely on the lithologic descriptions made for the monitoring wells is of no greater value because they were also drilled with the same

¹⁹⁰ Tr., Vol. I., Pg. 214, L. 10 – 14.

¹⁹¹ Compare Tr,. Vol. I., Pg. 214, L. 11 – 16 with Vergo Exh. No. 35, Pg. 1 for Tracking No. 208695. Those sample descriptions are stated by the water well driller as, "topsoil sandy from 0-30 feet, gray clay from 30 to 50 feet, and white sand course from 50 to 102 feet."

¹⁹² See Vergo Exh. No. 35, Pg. 8,

¹⁹³ Tr., Vol. I., Pg. 216, L. 20 - 217, L. 16 – 17.

¹⁹⁴ Tr., Vol. I., Pg. 217, L. 19 – 24.

¹⁹⁵ Tr., Vol. I., Pg. 211.

¹⁹⁶ Id.

¹⁹⁷ Id.

¹⁹⁸ See Vergo Exh. No. 35. Page 1 of each report, Drilling Method.

technology used for the water well; and, Vergo failed to clarify how the monitoring wells' observer was more qualified to perform lithologic descriptions than the water well driller because one of the two equal basis he used to distinguish between them was the use of drilling mud, which they all used.

Second, since mud rotary was utilized to drill those monitoring wells, Mr. Airey's testimony seems illogical because he did not clarify whether or not the person that performed the lithologic descriptions for the monitoring wells, which he primarily relied upon, equated to a geoscientist. He merely stated, "[w]hen a monitor well is installed, it is *generally* observed by a more qualified person. ..." No where in the record evidence did Vergo clarify whether or not the persons listed as the responsible party for drilling the monitoring and water wells differed in their qualifications to reliably perform lithologic descriptions. In other words, Vergo did not distinguish whether or not the person that drilled the monitoring wells is a geoscientist. Instead, Vergo merely attributed a distinction between the monitoring well driller and water well driller in the form of a generality without any further substantial support.

The Examiners find Vergo's evidence conflicting. Had it performed soil sample analyses at the Facility to refute its own evidence that "topsoil sandy" exists within the area surrounding it to demonstrate that lithology is not present at the Facility, the Examiners would likely be persuaded by Vergo's position. Instead, Vergo's expert geologist chose to partly depend upon Vergo's own evidence, all the while dismissing other parts due to his general opinion that water well drillers are not qualified to perform lithologic descriptions. However, Vergo failed to present such evidence in this case to support that contention because the record does not distinguish whether or not the persons that installed the previously mentioned monitoring wells and water well are geoscientists. Due to the conflicting testimony of Vergo's expert geologic witness, the Examiners gave little weight to his conclusion that potential for pollution of surface or near subsubsurface waters at the Facility is unlikely simply because he estimated that "near surface soils don't want to allow anything in" across the entire Facility. Again, the Examiners find no substantial evidence in the record to support that estimation because Vergo did not submit lithologic descriptions taken from the Facility akin to those created for the monitoring wells located roughly three miles north of the Facility. Once more, Vergo's expert geologist later testified that surficial sands are known to exist in the overlying dominant formation. Therefore, the Examiners are convinced by Vergo's own evidence that the potential for pollution of surface and subsurface waters exists at the Facility due to the presence of sandy topsoil existing from the surface to 30 feet bgs near the Facility, and

¹⁹⁹ Id. The Examiners also find that Vergo failed to distinguish whether or not the lithologic descriptions made for the monitor wells (drilled by Mr. Stefan Stamoulis at Prospector Drilling and Tool Co., Inc., and Hydrogeologic/Environmental Testing), and the water well (drilled by Dale R. Jones, Sr. at Jones Water Well Service) utilized the same, or a substantially similar, soil descriptive methodology such as the Unified Soil Classification System, as directed in Staff's February 28, 2012 correspondence (Pg. 3). In other words, Vergo failed to distinguish whether or not the lithologic descriptions made for the monitoring and water wells, which were performed by two different people, were made using a known soil description methodology that would render their descriptions reasonably comparable. Instead, Vergo merely claimed that lithologic descriptions made for monitoring wells are generally more reliable because (1) persons that drill monitoring wells generally utilize hollow-stem augers, not drilling mud, to drill them, (2) persons that drill monitoring wells are generally more qualified to reliably perform lithologic descriptions compared to water well drillers because they are generally geoscientists, and (3) water wells are generally drilled by water well drillers that are generally unqualified to reliably perform lithologic descriptions because they drill them with drilling mud like oil drilling, not hollow-stem auguers, which renders the drill cuttings to a form that is not trustworthy for realiable lithologic description. Despite Vergo's above reasons, the Examiners have no way to objectively determine whether or not the lithologic descriptions made for the monitoring and water wells are reliable, or comparible to the geology that exists beneath the Facility, because (1) Vergo did not show lithologic descriptions from wells at the Facility and (2) soil description methodologies relied upon to describe the lithologies encountered in the monitoring and water wells is unknown.

because Vergo failed to present substantial evidence to refute that sandy topsoil does not similarly exist at the Facility, allowing for migration of pollutants.

Staff submitted copies of photographs it captured during a site visit it conducted at the Facility on January 29 - 30, 2015, demonstrating that large areas of the Facility utilized for waste disposal were inundated with stormwater (see PFD Attachment No. 7). That stormwater became contact stormwater because it intermingled with the oil and gas waste placed by Vergo in those areas of the Facility. At one point, Vergo indicated that those fields essentially drain into the Facility's network of interior drainage ditches, and ultimately ends into one of the Facility's large ponds (*i.e.* Ponds 1 or 2). PFD Attachment No. 7, however, shows that large areas of the Facility historically utilized for waste disposal by Vergo are not well suited as disposal locations because they render large volumes of contact stormwater unaccounted for. Those large fields of contact stormwater evaporate to a certain extent, based on Staff's evidence of the evaporation rate in the area. What is unknown, however, is how deep that contact stormwater percolates into the subsurface below 36-inches because Vergo never performed subsurface investigations below that depth at the Facility, despite the fact that sandy topsoil was identified as occurring from 0 - 30 feet bgs near the Facility.

Staff also submitted copies of photographs it captured during a site visit it conducted at the Facility on March 27, 2014, demonstrating that oil and gas waste had more or less filled portions of a drainage ditch that is part of Vergo's overall stormwater management network of interior drainage ditches within the Facility (see PFD Attachment No. 6).²⁰¹ Vergo did not refute that material in the ditch is oil and gas waste, nor did it provide any explaination as to why that ditch was filling up with drilling mud. PFD Attachment No. 6 provides another example of Vergo's poor waste management practices at the Facility because contact stormwater near that ditch is prevented from entering Vergo's stormwater management network that ultimately ends at one of its ponds. As a result, the whereabouts of that contact stormwater are also unaccounted for, in part.

Pollution of Soils at the Facility

On February 28, 2012, Staff issued a response to Vergo that, in part, requested soil analyses to be performed at the Facility as part of Vergo's renewal request because Vergo exceeded its permitted disposal capacity by 202,438 barrels of waste.²⁰² Vergo subsequently performed soil sampling and soil analyses on February 18, 2013, and March 26-27, 2013, respectively, in four areas (*i.e.* Areas 1 through 4). The results of that work make-up Ranger's 2013 Report. After reviewing that report, Staff informed Vergo that the Subject Application was denied because of Arsenic and Lead exceedences, in part.²⁰³ Again, Vergo submitted evidence demonstrating that soil samples collected on February 18, 2013, within Area 1 (approximately 60 to 70-acres) of the Facility from 0-12" bgs were found to contain elevated constituents of Arsenic and/or Lead beyond historic standards provided by the Commission. Vergo's expert geologic witness testified, "[i]t

²⁰⁰ Staff Exh. No. 7; Pgs. 95 – 100.

²⁰¹ Compare Staff Exh. No. 4, Pgs. 79 – 80 with Tr., Vol. II., Pg. 34, L. 12 – 16.

²⁰² Compare Vergo Exh. No. 26, Item No. 6 (2,656,085 bbl received) with Vergo Exh. No. 14, Item No. 12 (2,453,647 bbl permitted capacity).

²⁰³ See Vergo Exh. No. 30, Pg. 5 – Soil Analysis.

would have been an abnormal situation not to find hot spots certainly in my experience."²⁰⁴ He also stated that in order to remediate those hot spots, Vergo would simply need to till those areas, and resample them.²⁰⁵ However, the Examiners find Vergo's remedy to be lacking and unpersuasive. Again, those soil samples were collected on February 18, 2013, and tested by a laboratory on March 26-27, 2013. The hearing held to consider the Subject Application took place on October 3-5, 2016. If the remedy to remove those contaminants from Area 1 merely required tilling and resampling, then the Examiners find that Vergo had approximately three and half years between March 26, 2013, and October 3, 2016, to show that those pollutants could be diminished to an acceptable concentration, as Vergo's expert geologic witness previously described. Nonetheless, Vergo did not present such evidence to support that claim. Nor did it address why it had not remediated those hot spots since they were discovered. Instead, Vergo simply claimed it could be done. What's more, Mr. Longron testified that waste is routinely tilled in with the natural land once it is deposited at the Facility. If six hot spots registered exceedences of pollutants beyond the Commission's historic standards, and tilling is routinely performed at the Facility, then Vergo had over three years to remedy that problem. The record suggests that Vergo continued to accept waste at the Facility during that three and half year period. The record, however, does not show why Vergo chose to forego tilling and resampling those six hot spots.

Vergo referred to its 4th Amended Permit (i.e. the current permit for LF-0032), and mentioned that it does not contain constituent value limitations for Arsenic and Lead. As a result, Vergo argued that, "[s]ince there's no permit values, then they have not exceeded it. ...so, even five or six [hot spots] was not a violation of the permit."²⁰⁶ In other words, despite the findings in Ranger's 2013 Report, Vergo argued that it had not violated its permit because the permit did not specify acceptable limitations of pollutants such as Arsenic or Lead. Based on that argument, and corresponding facts, the Examiners find Vergo's position unpersuasive because that logic concludes that even though Vergo's operation created exceedences of limitations historically provided by the Commission, it is acceptable and should be overlooked because its permit does not expressly prohibit it. This is not a penalty docket. However, the exceedances are a cause for concern. Staff's expectation that this be addressed before Vergo is granted a renewal permit for the Facility is not unreasonable.

When asked by Vergo's counsel, "[s]o did you reach any conclusions as to whether since 1986 any contaminants ever migrated beyond the 12-inch level," Mr. Airey testified, "[t]hat is a correct statement. None have."207 He offered no explanation about how he reached that conclusion. Presumably, it was due to the results found in Ranger's 2013 Report. Staff directed Vergo to perform soil analyses for the entire Facility (i.e. 632-acres), as a condition of its evaluation to renew the Subject Application.²⁰⁸ Ranger's 2013 Report demonstrates that it sampled four areas (i.e. Areas 1 through 4) at its discretion. On cross-examination, Mr. Longron identified the locations that waste is deposited at the Facility. 209 Looking at the map for Area 2 in Ranger's 2013 Report, compared to the locations identified by Mr. Longron in Staff's Cross Exh. No. 2, indicates he was unaware that Area 2 is utilized for disposal at the Facility. Furthermore,

²⁰⁴ Tr., Vol. I., Pg. 204, L. 15 – 16.

²⁰⁵ Tr., Vol. I., Pg. 204, L. 4.

²⁰⁶ Tr., Vol. I., Pg. 206, L. 17 – 5.

²⁰⁷ Tr., Vol. I., Pg. 225, L. 18 – 21.

²⁰⁸ See Vergo Exh. No. 26, Item 6.

²⁰⁹ See Staff Cross Exh. No. 2.

the map for Area 4 in Ranger's 2013 Report demonstrates that soil samples were taken from locations outside existing disposal beds. In other words, Vergo's own evidence suggests that it is unaware of all the locations at the Facility utilized for disposal, and it chose not to sample existing locations utilized for waste disposal. The record shows that Vergo historically pumped contact stormwater from the Facility to areas outside the Facility for 12 years due to flooding. What's more, Mr. Copeland, who partly testified as an expert in permitting on behalf of Vergo, stated, "... I've also seen on the Railroad Commission's website that they actually will not authorize the discharge of contact stormwaters specifically for landfarms." Vergo did not present evidence in this case demonstrating whether or not areas affected by that contact stormwater that was discharged outside the Facility were adversely affected by that waste. For those reasons, the Examiners are not persuaded by Vergo's encompassing conclusion that no contaminants migrated beyond the 0-12" bgs interval since 1986.

The Facility's Boundaries

Staff requested a copy of Vergo's executed lease for the Facility, as part of its review of the Subject Application. Mr. Avitt indicated that information was not received until discovery between the parties.²¹¹ Nonetheless, Vergo contends that it submitted a copy of that lease authorizing it to conduct operations pursuant to LF-0032 at the Facility.

Staff argued that Vergo's lease expired on its own terms in 1995.²¹² Vergo refuted that claim by stating that the law in Texas provides automatic renewal thereafter, for leases such as Vergo's, unless there has been an explicit termination, or the language of the lease expressly prohibits renewal. For clarification, the Examiners requested Vergo's counsel to provide a short brief citing Texas case law it argued that favors Vergo's position.²¹³ However, the record reflects that Vergo failed to submit it in support of its claim.

By the end of the hearing, Vergo, Staff, and the Examiners were completely uncertain of the boundaries for the Facility. As a result, Mr. Longron testified that he would hire a surveyor to conduct a survey of the Facility, and that he would submit a certified copy of the results to the Commission. On February 22, 2017, the Examiners issued a letter to the parties requesting that Vergo supply a copy of any new survey results of the Facility's boundaries, if one had been performed. No such evidence was provided by Vergo. As a result, the record clearly demonstrates that the Facility's boundaries are not known at this time. Therefore, the Examiners are not persuaded to recommend approval of the Subject Application, in part, because Vergo failed to show where the Facility's permitted boundaries begin and end.

EXAMINERS' RECOMMENDATION

For those reasons previously mentioned, the Examiners find that Vergo failed to meet its burden in proving that its operations at the Facility, as proposed, will prevent pollution of surface and subsurface waters. Furthermore, the Examiners believe that pollution exists within the Facility that has remained uncorrected, and that Vergo has failed to demonstrate where the boundaries of

²¹⁰ Tr., Vol. I., Pg. 242, L. 2 – 5.

²¹¹ Tr., Vol. II., Pg. 153.

²¹² Tr., Vol. I., Pg. 174, L. 19.

²¹³ Tr., Vol. I., Pg. 176, L. 20.

its Facility begin and end. Therefore, the Examiners recommend that the Subject Application be denied, and the Commission adopt the following findings of fact and conclusions of law.

FINDINGS OF FACT

- 1. Vergo Patio Gardens, Inc. ("Vergo") seeks renewal of its landfarm permit ("LF-0032") that provides for commercial disposal of freshwater base drilling mud and fluid to the 632-acres of the A.E. Longron, Jr. property in Newton County, Texas ("Facility") (collectively, "Subject Application").
- 2. Vergo submitted the Subject Application for renewal of LF-0032 on August 4, 1998.
- 3. By letter dated October 3, 2013, the Railroad Commission's Oil & Gas Division ("Staff") ultimately denied Vergo's renewal request for LF-0032.
- 4. The Subject Application was protested by Staff.
- 5. A hearing on the merits to consider the Subject Application occurred on October 3, 4, and 5, 2016.
- 6. On October 27, 1986, the Commission granted Vergo its original authority to operate the Facility in accordance with the provisions provided by LF-0032 ("Original Permit").
- 7. By its own terms, the Original Permit expired November 1, 1996, or at the time the Facility accepted 1,101,200 barrels of Permitted Waste.
- 8. On February 1, 1989, Vergo requested to amend the Original Permit to allow for the disposal of Permitted Waste originating from Louisiana.
- 9. On April 23, 1990, the Commission amended the Original Permit to provide Vergo authority to accept Permitted Wastes originating from Louisiana within 200 miles of the Facility ("1st Amended Permit").
- 10. By its own terms, the 1st Amended Permit's expiration is coterminous with the Original Permit.
- 11. On September 26, 1996, Vergo requested renewal of the 1st Amended Permit.
- 12. On August 12, 1997, the Commission granted Vergo renewal of its 1st Amended Permit, with amendments ("2nd Amended Permit").
- 13. By its own terms, the 2nd Amended Permit expired on August 12, 2002, or at the time the Facility accepted 1,101,200 barrels of Permitted Waste, whichever occurred first.
- 14. On February 5, 1998, Vergo requested to amend the 2nd Amended Permit to provide it authority to spread up to six-inches of waste across the entire Facility, to increase the

distance of waste accepted at the Facility originating in Louisiana from 200 to 350 miles from the Facility, and an emergency 30-day period be granted to Vergo to continue accepting wastes.

- 15. On February 5, 1998, Vergo asserted that soil testing revealed at least 28 feet of impervious clay beneath the Facility, and that additional soil tests were ordered by Vergo to evaluate every ten acres within approximately 325 to 375-acres that was utilized for all deposition of waste at the Facility.
 - a. Vergo did not submit evidence of soil sample analytical results demonstrating 28 feet of impervious clay beneath the Facility, in conjunction with its assertion on February 5, 1998;
 - b. Vergo did not provide soil sample analytical results for every ten acres within 325 to 375-acres that was utilized for waste disposal at the Facility, in conjunction with its assertion on February 5, 1998.
- 16. On May 11, 1998, the Commission renewed and amended the 2nd Amended Permit ("3rd Amended Permit").
 - a. The 3rd Amended Permit increased the cumulative disposal capacity at the Facility from 1,101,200 to 2,453,647 barrels, it allowed a total six-inch waste application thickness, and it removed the distance restriction from the Facility for waste that originates in Louisiana;
 - b. The 3rd Amended Permit expired on July 10, 1998.
- 17. On June 9 and July 13, 1998, Vergo requested to amend the 3rd Amended Permit to provide for an expiration date of August 24, 1998.
 - a. On July 15, 1998, the Commission amended the 3rd Amended Permit to provide for an expiration date of August 24, 1998 ("4th Amended Permit");
 - b. On July 22, 1999, Vergo requested that Staff issue a letter to Vergo stating that the 4th Amended Permit did not expire on its own terms, and that land farming was legal at the Facility until Staff advised Vergo to no longer accept drilling mud or drilling fluids, on or about January 28, 1998;
 - c. On January 30, 1998, a Staff letter showed that Vergo had exceeded its permitted disposal capacity. That letter instructed Vergo to stop receiving wastes at the Facility, and to begin closure of the Facility.
 - d. On July 30, 1999, Staff issued a response to Vergo that stated its records showed that Vergo exceeded the permitted capacity of waste allowed by its permit for the Facility by 14,184 barrels of waste on or about January 30, 1998, and that Vergo's

- permit for the Facility expired under its own terms when the permitted capacity of 1,101,200 barrels of waste was reached;
- e. On August 27, 1999, Staff issued a letter to Vergo in response to a telephone conversation between those two parties that states Vergo's permit to operate the Facility remained in effect because Vergo timely requested renewal of its 4th Amended Permit, and the Commission had not yet taken final action on Vergo's request to renew the 4th Amended Permit.
- 18. On March 16, 2004, Vergo requested to amend the 4th Amended Permit to remove any permit condition requiring Vergo to sample each load of water base drilling mud delivered to the Facility for disposal.
- 19. On April 23, 2004, Staff issued a letter to Vergo that administratively denied its request to amend and renew the 4th Amended Permit, and provide Vergo the opportunity to request an administrative hearing within 30 days of April 23, 2004.
- 20. Vergo did not request a hearing within 30 days of April 23, 2004.
- 21. On September 1, 2004, Staff issued a letter to Vergo that states the 4th Amended Permit remains in effect because Vergo applied for renewal before that permit's expiration date of August 4, 1998, and the Commission has not yet taken final action on the application for renewal.
- 22. On February 28, 2012, Staff issued a letter to Vergo that states its renewal application for the 4th Amended Permit had been reviewed, that additional information was necessary, and that Vergo's records indicated that the Facility had accepted roughly 2,656,085 million barrels of waste since April 1987.
- 23. On December 30, 2012, Vergo submitted correspondence to Staff in response to Staff's February 28, 2012 letter that sought additional information for consideration of renewal for the 4th Amended Permit.
- 24. On January 28, 2013, Staff issued a letter to Vergo that sought clarification from Vergo regarding Vergo's December 30, 2012, correspondence.
- 25. On May 3, 2013, Vergo submitted correspondence dated March 12, 2013, in response to Staff's January 28, 2013 letter regarding renewal of its 4th Amended Permit request.
- 26. On October 2, 2013, Staff issued a letter to Vergo that administratively denied Vergo's request to amend and renew the 4th Amended Permit due potential pollution of subsurface water, potential pollution of surface waters, mismanagement of waste, and violations of Statewide Rule 8.
- 27. At the hearing held on October 3, 4, and 5, 2016, to consider the Subject Application, Vergo proposed amending the Subject Application to provide for a permitted boundary

area for the Facility composed of 300-acres with a cumulative waste capacity of 3.5 million barrels of Permitted Waste.

- 28. Vergo did not provide evidence demonstrating the true and accurate boundary lines for the Facility's permitted area.
- 29. Vergo argued the Subject Application should be approved because Vergo satisfied all necessary requirements for renewal of a landfarm permit listed in a Commission publication entitled, "Surface Waste Management Manual" ("SWMM").
- 30. The Commission's SWMM is a guidance document.
- 31. The Commission's SWMM is not a statewide rule in 16 Tex. Admin. Code, Chapter 3 ("Commission's Oil and Gas Statewide Rules").
- 32. The Commission's governing statewide rule that applies to the Subject Application is Statewide Rule 8 Water Protection.
- 33. Vergo failed to meet its burden in proving that the Subject Application would not harm surface water or groundwater at or near the Facility:
 - a. Despite Staff's request that Vergo drill monitoring wells on the Facility, Vergo never did so. Instead Vergo relied on monitoring wells drilled at a separate facility three miles away from the Facility;
 - b. Vergo has not provided conclusive evidence of the soil type at the Facility and has not determined whether or not the Chicot Aquifer is present;
 - c. Vergo's expert witness stated the Chicot Aquifer was not present, but added that he had not drilled a well in Newton County;
 - d. Vergo provided evidence that a soil-type described as "topsoil sandy" exists near the Facility from 0 to 30 feet below ground surface ("bgs"), contrary to its claim that the Facility rests on approximately 20 feet of clay;
 - e. Vergo did not perform geologic analyses beneath the Facility to a depth that would have reasonably demonstrated that "topsoil sandy" is not present within the Facility's boundaries;
 - f. The soil-type described as "topsoil sandy" provides a potential conduit for oil and gas wastes to migrate into the subsurface;
 - g. The migration of oil and gas wastes into the subsurface is an increased risk of pollution to subsurface water.

- 34. Vergo provided evidence that demonstrated 24 soil sample locations from 1 to 2 feet bgs exceeded the Commission's historic soil pollution standards for Arsenic and/or Lead ("Hot Spots"):
 - a. Vergo provided evidence showing at least four soil sample locations exceeded the Commission's historic soil pollution standards for Arsenic by over 16 times and 3 times the limit, and for Lead by over 2 times the limit;
 - b. Vergo had over three years to remediate the Hot Spots at the Facility prior to the hearing held for the Subject Application;
 - c. Vergo failed to submit evidence demonstrating that the Hot Spots were remediated to below the Commission's historic standards for soil pollutants.
- 35. Rainwater that enters the Facility, and contacts oil and gas waste at the Facility, becomes contact stormwater. Photographs taken by Staff on March 27, 2014, and February 30, 2015, demonstrate the extent of rainwater contacting waste in the Facility (see PFD Attachment No. 7).
- 36. Statewide Rule 8 does not provide for unauthorized discharge of oil and gas wastes to unpermitted areas.
- 37. Vergo routinely discharged contact stormwater from the Facility between 1986 and 1998, through two pipes ("Discharge Pipes") that traversed the Facility's outer-most berm, to unpermitted areas outside the Facility.
- 38. Vergo provided evidence demonstrating that one of the Discharge Pipes is three feet in diameter ("Main Discharge Pipe").
- 39. The Main Discharge Pipe was historically connected to a V-8, diesel engine intended to pull stormwater that entered the Facility during rain events, including contact stormwater, and discharge it to unpermitted areas outside the Facility.
- 40. Vergo provided evidence demonstrating that if it could not operate the Facility through use of the Discharge Pipes, or through different means in a similar manner, then it could not continue with its operations at the Facility.
- 41. Vergo provided evidence demonstrating that the Main Discharge Pipe is currently bolted shut, but could still be used if needed.
- 42. Vergo failed to substantially demonstrate that it has not utilized the Discharge Pipes at the Facility to discharge contact stormwater from the Facility to areas outside the Facility that are unauthorized to accept oil and gas waste.
- 43. Vergo's estimated closing costs for the Facility are inadequate.

44. Vergo failed to prove that the Subject Application would adequately protect surface and subsurface water resources, and therefore failed to meet the requirements of Statewide Rule 8.

CONCLUSIONS OF LAW

- 1. Proper notice was issued in accordance with all applicable statutes and regulatory codes. See Tex. Water Code § 27.034; 16 Tex. Admin. Code § 3.8
- 2. All things have occurred and been accomplished to give the Commission jurisdiction in this matter pursuant to Tex. Nat. Res. Code Ch. 81 and Tex. Water Code Ch. 27. See, e.g., Tex. Nat. Res. Code § 81.051; Tex. Water Code §§ 27.031 and 27.034.
- 3. Vergo Patio Gardens, Inc. failed to prove that renewal of Permit LF-0032 would prevent the pollution of groundwater and surface water resources, as required by 16 Tex. Admin. Code § 3.8

EXAMINERS' RECOMMENDATION

Based on the record evidence, the Examiners recommend that the Commission deny Vergo Patio Gardens, Inc.'s application to renew LF-0032.

Respectfully,

Brian Fancher, P.G.

Technical Examiner

Marshall F. Enquist

Administrative Law Judge