



# State Office of Administrative Hearings

Kristofer S. Monson  
Chief Administrative Law Judge

September 13, 2022

Mary Smith  
General Counsel  
Texas Commission on Environmental Quality  
12100 Park 35 Circle; Bldg. F  
Austin, Texas 78711-3087

VIA E-FILE TEXAS

Re: SOAH Docket No. 582-22-0844.TCEQ; Texas Commission on Environmental Quality No. 2021-1000-MSW; *Application by Diamond Back Recycling and Sanitary Landfill, LP for Municipal Solid Waste Permit No. 2402*

Dear Ms. Smith:

Please find enclosed a Proposal for Decision in this case. It contains my recommendation and underlying rationale.

Exceptions and replies may be filed by any party in accordance with 1 Texas Administrative Code section 155.507(b), a SOAH rule which may be found at [www.soah.texas.gov](http://www.soah.texas.gov).

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Megan Johnson,

Presiding Administrative Law Judge

Enclosure

CC:

All parties of record

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**BEFORE THE  
STATE OFFICE OF ADMINISTRATIVE  
HEARINGS**

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**APPLICATION BY DIAMOND BACK RECYCLING AND  
SANITARY LANDFILL, LP FOR MUNICIPAL SOLID WASTE  
PERMIT NO. 2404**

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**PROPOSAL FOR DECISION**

Diamond Back Recycling and Sanitary Landfill, LP (Applicant) filed an application (Application) with the Texas Commission on Environmental Quality (TCEQ or Commission) for a new Municipal Solid Waste (MSW) permit to authorize construction and operation of a Type I MSW landfill, with both Type I and Type IV disposal cells, in Ector County. TCEQ's Executive Director (ED) has recommended granting the Application and issuing a draft permit he proposed (Draft Permit). Knox Real Property Development, LLC (Knox), Jason Harrington (Harrington), and Diversity Trucking (collectively, Protestants) oppose the Application and Draft Permit. TCEQ referred the matter to the State Office of Administrative Hearings (SOAH) for a contested case hearing on 19 issues. The

parties stipulated to dismissal of four issues. Having considered the evidence relating to the 15 disputed issues in the context of the governing law, the Administrative Law Judge (ALJ) finds that Applicant met its burden of proof on all but one issue— surface water drainage. The adverse alteration of existing drainage patterns is a serious issue with serious potential implications and, as such, the ALJ recommends that the Application be denied at this time.

## **I. BACKGROUND**

Applicant owns a 202-acre tract of land (Property) off FM 866, approximately 2.0 miles northeast of the intersection of FM 866 and IH-20 in Ector County, west of the City of Odessa. The Property is in a rural area, and although not zoned or restricted to any uses, it primarily has oil and gas production scattered throughout. It also contains substantial infrastructure necessary to adequately produce, transport and store the oil, gas, and water from the wells, including but not limited to an oilfield equipment storage facility immediately adjacent to the Property, power lines, poles, and other surface equipment used in the day-to-day operations of the wells on behalf of the mineral and leasehold owners. There are rock quarries and crushing operations in the area, and residential and commercial establishments within one mile of the Property. Harrington owns property adjacent to the south and east of the Property.

Applicant registered and constructed a recycling facility on the Property in early 2018. Applicant proposes to construct the Type I MSW landfill (Facility), which will consist of six cells with a total waste disposal capacity of 11.1 million cubic yards, next to the recycling facility.

Protestants contest the Draft Permit, contending that the Application—which serves as the basis for the Draft Permit—contains numerous deficiencies and presents oversimplified designs, calculations, and analyses for numerous issues.

## **II. NOTICE, JURISDICTION, AND PROCEDURAL HISTORY**

Applicant filed the Application on June 13, 2019. The ED determined the Application was technically and administratively complete and prepared the Draft Permit on September 2, 2020. In an interim order, TCEQ granted requests for hearing filed by Knox and Harrington, along with Moss Dean Ranch, Betty Moss Dean, and C.A. and Betty Moss Dean FLP. Subsequently, several parties withdrew their opposition to the Application, leaving only Knox and Harrington as Protestants.

On February 1, 2022, ALJ Megan Johnson held a preliminary hearing via Zoom videoconferencing, during which Diversity Trucking was added as a party. At the preliminary hearing, the ALJ also admitted Applicant, the Office of Public Interest Counsel (OPIC), Protestants, and the ED as parties. The ALJ further found that notice of the hearing was properly provided and established jurisdiction. No party contested the Commission’s jurisdiction to act on the Application or SOAH’s jurisdiction to convene a hearing and prepare a Proposal for Decision. In addition, no one contested the adequacy of notice regarding the Application or the hearing. On May 23-26, 2022, an evidentiary hearing was held via Zoom videoconference.



Applicant was represented by attorneys Michael Woodward, Barton Hejny, and Trey Wassdorf. Applicant presented the direct testimony and attached exhibits of the following witnesses: Michael Valenzuela, managing partner of Applicant; Todd Stiggins, a professional engineer; John Sheng, a professional engineer; Sonia Samir, a professional engineer; Clay Kilmer, a geoscientist consultant; and Kyle Jackson, a professional engineer.

Knox and Harrington were represented by attorneys Eric Allmon and Marisa Perales, and they presented the direct testimony and attached exhibits of two professional engineers, Jorge Zornberg and Lawrence Dunbar.

The ED was represented by attorneys Anthony Tatu and Mattie Isturiz, and he offered the direct testimony and attached exhibits of two professional engineers, Chandra Yadav and Mamadou Balde.

Attorney Garrett Arthur represented OPIC and did not provide any direct testimony, witnesses, or exhibits. Daven and Mangal represented Diversity Trucking and did not present any witnesses or direct testimony.

### **III. BURDEN OF PROOF AND PRIMA FACIE DEMONSTRATION**

The Application was filed after September 1, 2015, and the Commission referred it under Texas Water Code section 5.557, which governs direct referrals of

environmental permitting cases to SOAH.<sup>1</sup> Consequently, this case is subject to Texas Government Code section 2003.047(i-1)-(i-3), as enacted in 2015,<sup>2</sup> which provides:

- (i-1) In a contested case regarding a permit application referred under Section 5.556 or 5.557, Water Code, the filing with [SOAH] of the application, the draft permit prepared by the [ED], the preliminary decision issued by the [ED], and other sufficient supporting documentation in the administrative record of the permit application establishes a prima facie demonstration that:
  - (1) the draft permit meets all state and federal legal and technical requirements; and
  - (2) a permit, if issued consistent with the draft permit, would protect human health and safety, the environment, and physical property.
- (i-2) A party may rebut a demonstration under Subsection (i-1) by presenting evidence that:
  - (1) relates to a matter referred under Section 5.557, Water Code, . . . ; and
  - (2) demonstrates that one or more provisions in the draft permit violate a specifically applicable state or federal requirement.
- (i-3) If in accordance with Subsection (i-2) a party rebuts a presumption established under Subsection (i-1), the applicant and the [ED] may present additional evidence to support the draft permit.<sup>3</sup>

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<sup>1</sup> Tex. Water Code §§ 5.551(a), .557.

<sup>2</sup> Acts 2015, 84th Leg., R.S., ch. 116 (S.B. 709), §§ 1, 5, eff. Sept. 1, 2015.

<sup>3</sup> *Accord* 30 Tex. Admin. Code § 80.17(c).

In this case, the Application, the Draft Permit, and the other materials listed in Texas Government Code section 2003.047(i-1), which are collectively referred to as the “Prima Facie Demonstration,” were offered and admitted into the record at the preliminary hearing and at the hearing on the merits. Although this law creates a presumption, sets up a method for rebutting that presumption, and shifts the burden of production on that rebuttal, it does not change the underlying burden of proof. Accordingly, the burden of proof remains with Applicant to establish by a preponderance of the evidence that the Application would not violate applicable requirements and that a permit, if issued consistent with the Draft Permit, would protect human health and safety, the environment, and physical property.<sup>4</sup>

#### **IV. ANALYSIS OF REFERRED ISSUES**

##### **A. SUFFICIENT PROPERTY INTEREST**

The first issue referred to SOAH is “whether the Applicant has demonstrated a sufficient property interest as required by TCEQ rules.”

##### **1. Applicable Law**

The applicable rule, found at 30 Texas Administrative Code section (TCEQ Rule) 330.59(d)(2), requires an application to contain a signed property owner affidavit acknowledging that the State of Texas may hold the property owner

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<sup>4</sup> 30 Tex. Admin. Code §§ 80.17(a), (c), .127(h).

jointly or severally liable for the operation and maintenance of the facility. The affidavit must also acknowledge that the State of Texas shall have access to the property during the active life and post closure care period of the facility. Relatedly, TCEQ Rule 330.67(a) states that “[i]t is the responsibility of an owner or operator to possess or acquire a sufficient interest in or right to the use of the surface estate of the property for which a permit is issued, including the access route.”

## 2. Evidence

Applicant witness Mr. Stiggins referenced where the Application contained the metes and bounds description of the Property signed and sealed by a registered professional surveyor and a drawing of the boundary metes and bounds description.<sup>5</sup> Applicant submitted a signed property owner affidavit, which identified all mineral owners, landowners, and easements on the Property.<sup>6</sup> Applicant witness Mr. Valenzuela also testified that Applicant is the sole owner of the Property upon which the Facility is proposed and provided an Assumption Warranty Deed recorded in Ector County.<sup>7</sup> Mr. Yadav, on behalf of the ED, opined that the property owner affidavit sufficiently demonstrated that the Applicant is the surface owner of the property.

Aghorn Operating, Inc. (Aghorn), acting as agent for the mineral and leasehold owners for the Property, submitted a letter stating it had no objection to

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<sup>5</sup> See Application, Part I at I-8.

<sup>6</sup> Application, Part I, Section 4.0 and Appendix I.C; see also Application, Part II, Appendix II.A, FIG.II.A.12 (map of recorded easements).

<sup>7</sup> App. Ex-100 (Prefiled Testimony of Valenzuela) at 3-4; App. Ex-101 (Assumption Warranty Deed dated October 17, 2016).

the use of the surface estate as an MSW landfill, provided that Applicant continued to recognize the mineral estate as the dominant estate and agreed to notify Aghorn in advance of any proposed operations which might impact the ability to produce the minerals without undue hardship.<sup>8</sup>

### **3. Analysis**

It is undisputed that oil and gas production is occurring on the Property. According to Protestants, the Application is based on an assumption that existing surface oil and gas infrastructure will be relocated, but Applicant has done nothing to demonstrate the legal, enforceable property interests to accomplish potential relocation. Protestants likewise argue that is unclear if the existing easements can accommodate that production and future development. TCEQ Rule 330.67(a), however, does not require the owners of the property to obtain exclusive use of the property or even demonstrate a contingent relocation plan to obtain a permit—the Rule only requires a sufficient interest in or right to the use of “the surface estate,” which Applicant has shown through the warranty deed and property owner affidavit. Because Applicant has demonstrated by a preponderance of the evidence that it has the required sufficient interest in the surface of the property to be permitted, it met its burden of proof on this issue.

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<sup>8</sup> App. Ex-102.

## **B. ODOR CONTROL PLAN**

The parties stipulated that this issue be dismissed from the list of issues to be considered in the contested case hearing.<sup>9</sup>

## **C. LANDFILL GAS MANAGEMENT PLAN**

The parties stipulated that this issue be dismissed from the list of issues to be considered in the contested case hearing.<sup>10</sup>

## **D. COMPETENCY**

This referred issue enquires about “whether the Applicant has sufficient demonstrated evidence of competency as required by TCEQ rules.”

### **1. Applicable Law**

Under applicable sections of TCEQ Rule 330.59(f), Applicant must demonstrate the following evidence of competency:

(1) The owner or operator shall submit a list of all Texas solid waste sites that the owner or operator has owned or operated within the last ten years. The site name, site type, permit or registration number, county, and dates of operation shall also be submitted.

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<sup>9</sup> See SOAH Order No. 4.

<sup>10</sup> See SOAH Order No. 4.

(2) The owner or operator shall submit a list of all solid waste sites in all states, territories, or countries in which the owner or operator has a direct financial interest. The type of site shall be identified by location, operating dates, name, and address of the regulatory agency, and the name under which the site was operated.

(3) The executive director shall require that a licensed solid waste facility supervisor, as defined in Chapter 30 of this title (relating to Occupational Licenses and Registrations), be employed before commencing facility operation.

(4) The names of the principals and supervisors of the owner's or operator's organization shall be provided, together with previous affiliations with other organizations engaged in solid waste activities.

(5) For landfill permit applications only, evidence of competency to operate the facility shall also include landfilling and earthmoving experience if applicable, and other pertinent experience, or licenses as described in Chapter 30 of this title possessed by key personnel, and the number and size of each type of equipment to be dedicated to facility operation.<sup>11</sup>

Protestants contend TCEQ Rule 330.59(e), which requires the applicant to list all persons having over a 20% ownership in the proposed facility, is relevant to the competency inquiry. Protestants also reference TCEQ Rule 330.59(c), which addresses requirements regarding verification of legal authority, including information regarding ownership of the proposed facility.

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<sup>11</sup> Since Applicant has not owned or operated a solid waste site in Texas nor had a financial interest in a solid waste site in any state, territory, or country, TCEQ Rule 330.59(f)(1) and (2) are not applicable. TCEQ Rule 330.59(f)(6) only applies to mobile liquid waste processing units.

## 2. Evidence

For the ED, Mr. Yadav opined that Applicant provided adequate information regarding the ability to operate the proposed landfill and met all TCEQ requirements to prove competency.<sup>12</sup> Specifically, Mr. Yadav concluded the Application identified a licensed solid waste supervisor, as required in the Draft Permit, and identified the names of the principals and supervisors, along with the experience of key personnel and the number and size of each type of equipment dedicated to facility operations based on anticipated solid waste volume and field conditions.<sup>13</sup>

Applicant asserted that it will employ Mr. Valenzuela to serve as the principal owner and operator of the recycling facility and the principal owner and operator of the Facility.<sup>14</sup> The Application lists Mr. Valenzuela's previous affiliations with other organizations engaged in solid waste activities. According to Mr. Valenzuela, he has successfully operated the waste collection company Basin Disposal, Inc. in Ector County for approximately 18 years, with 17 waste hauling trucks and 19 full-time employees.<sup>15</sup> Mr. Valenzuela further testified that he has previously worked for Ector County Road and Bridge and the Texas Department of Transportation (TxDOT). He further testified that he has approximately 40 years of experience in operating heavy equipment, including road work and earth moving machines.<sup>16</sup>

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<sup>12</sup> ED Ex-1 at 6:27-41.

<sup>13</sup> Application, Part I, Section 6.0; *see also* App. Ex-200 at 11:31-32; Application, Part IV.

<sup>14</sup> Application, Part I, Page I-11.

<sup>15</sup> *See* App. Ex-100 at 5:19-30.

<sup>16</sup> *See* App. Ex-100 at 5:8-17.



Mr. Valenzuela owns 51% of Applicant, and the other 49% is owned by 2UB Land Investments.<sup>17</sup> Applicant also has a general partner: Mesquite Recycling and Sanitary Landfill, LLC (Mesquite, LLC). Mesquite, LLC has two members: Managing Member Mr. Valenzuela and Member 2UB Land Investments, LLC. Mr. Valenzuela also noted that he has a leadership role with Mesquite, LLC and is a 50% owner of that company.

### **3. Analysis**

Only subsections (f)(3)-(5) of TCEQ Rule 330.59 apply to this matter. Protestants do not dispute that subsections (3) and (4) have been satisfied. Regarding subsection (5), which requires information about the experience of key personnel, the experience of Mr. Valenzuela—the only person to have management control of the Facility— was properly included in the Application.

In questioning whether Applicant met its burden with regard to competency, Protestants contend that the Application does not contain sufficient information regarding Applicant’s organizational structure, specifically regarding the name of principals involved in 2UB Land Investments and Mesquite, LLC and the individuals associated with either company. TCEQ Rule 330.59(f), however, does not require an applicant to disclose or explain its entire corporate structure. Nor did Protestants explain how the corporate structure relates to competency.

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<sup>17</sup> Tr. Vol. 2 at 188.

Protestants did not show that a detailed corporate structure is necessary to show competency, nor did they present evidence to rebut Mr. Valenzuela’s experience. Protestants have not rebutted the presumption on this issue.

## **E. COMPATIBLE LAND USE**

The next referred issue is “whether the proposed facility is a compatible land use.”

### **1. Applicable Law**

TCEQ Rule 330.61(h) requires an applicant’s owner to provide information regarding the likely impacts of the facility on cities, communities, groups of property owners, or individuals by analyzing the compatibility of the land use by providing the following:

- zoning maps, if available;
- character of the surrounding land uses within one mile of the proposed facility;
- information on growth trends within five miles of the facility; and
- proximity to residences, schools, churches, cemeteries, historic structures and sites, archeologically significant sites, and sites having exceptional aesthetic quality within one mile of the facility.

The Rule further requires that an application contain information regarding the number of residences and commercial establishments within one mile, including

distances and directions to the nearest residences and commercial establishments, and the number of wells within 500 feet of the proposed facility.

## 2. Evidence

Mr. Yadav testified that, based on his review, the Applicant met TCEQ requirements on this issue.<sup>18</sup> The Facility is located in an area of Ector County that is not zoned or restricted to any uses.<sup>19</sup> The area is rural and is used for agricultural, industrial, residential, and commercial uses. Nearby is a vacant lot, drill site, and an electrical company. An operating oil and gas waste landfill is located approximately one-half mile south of the proposed landfill, and an operating MSW landfill is located approximately two miles southeast.<sup>20</sup>

The Application includes information about the character of surrounding land uses within one mile of the Facility. Specifically, there are 114 single-family residences, 118 mobile homes, and five commercial establishments within one mile of the Facility.<sup>21</sup> There are no cemeteries, churches, community centers, hospitals, schools, or daycares licensed by the Texas Department of Family and Protective Services located within one mile of the Facility.<sup>22</sup> There are three water wells located

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<sup>18</sup> ED Ex-1 (Prefiled Testimony of Chandra Yadav) at 6:44-48; 7:1-30; and ED Ex -3, lines 133-39 of the Checklist.

<sup>19</sup> App. Ex-202; Application, Part II, Section 9 and Appendices 2A and 2B.

<sup>20</sup> ED Ex-1 at 7; *see also* App. Ex-200 at 5:36-39; *see also* App. Ex-103 for photographs of the surrounding properties, including the oil and gas waste landfill, and Knox Ex-107 showing photos of the perimeter of the Property.

<sup>21</sup> App. Ex-200 at 11.

<sup>22</sup> App. Ex-200 at 11.

within 500 feet of the Facility, two of which are located within the permit boundaries.<sup>23</sup>

### **3. Analysis**

Protestants identify existing oil and gas operations on the Property as evidence of incompatibility. TCEQ Rule 330.61(h) does not prohibit an MSW landfill from being located on the same property as oil and gas production facilities. In fact, despite the Rule's reference to "impact on surrounding area," it does not require an applicant to submit any information pertaining to oil and gas operations.<sup>24</sup> Protestants did not show that the existence of the oil and gas operations, or any other impact of the Facility on cities, communities, groups or property owners, or individuals, is incompatible with the Facility. Protestants have not rebutted the presumption on this issue.

#### **F. AVAILABLE AND ADEQUATE ROAD ACCESS**

The Commission also referred the issue of "whether the roads used to access the facility site are available and adequate."

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<sup>23</sup> App. Ex-200 at 11-12.

<sup>24</sup> Protestants' reliance on the TCEQ order denying the application for the Altair Disposal Services, LLC facility in Colorado County is also unpersuasive. *See* Application of Altair Disposal Services, LLC, for a New Noncommercial Hazardous Waste Landfill in Colorado County, Texas, Commission Final Order, Sept. 27, 2019, Docket No. 2018-0013-IHW, pp. 11 (Finding of Fact 137), 16 (Ordering Provision 1). As Applicant notes, the Altair application was for a permit to construct and operate a hazardous waste landfill subject to an entirely different regulatory scheme than the permitting requirements for an MSW landfill.

## 1. Applicable Law

TCEQ Rule 330.61(i) pertinently requires an application to include data on access roads for the proposed facility, including: availability and adequacy of roads that the owner or operator will use to access the site; volume of vehicular traffic on access roads within one mile of the proposed facility, both existing and expected, during the expected life of the facility; and projections on the volume of traffic expected to be generated by the facility on the access roads within one mile of the proposed facility.

## 2. Evidence

Applicant provided a Traffic Study for the Facility and information on whether the roads used to access the Facility are available and adequate. This study included information about the roadways used to access the Facility, the volume of traffic within one mile, and the volume of traffic generated by the Facility. Further, the Facility is expected to contribute about 102 vehicles per day in the first year of operation, increasing to over 256 vehicles per day towards the end of the Facility's life, which will include solid waste haul trucks, pickup trucks, and roll-off trucks.<sup>25</sup> The preferred route to access the Facility will be FM 866, a two-lane undivided highway maintained by TxDOT.<sup>26</sup> The Traffic Study concluded that traffic generated by the Facility will not create any adverse impacts to the level of service of

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<sup>25</sup> Application, Appendix II.C; *see also* App. Ex-600 at 4:35-37; 5:1-9; Application, Part II, Section 10; App. Ex-600 at 4:19-20.

<sup>26</sup> App. Ex-202.

roadways providing access to the Facility and recommended no roadway improvements.<sup>27</sup>

Applicant also submitted evidence of coordination with TxDOT.<sup>28</sup> Applicant proposed to submit a driveway permit for reconstruction of the existing access to the site, which would include widening the driveway at FM 866 for 250 feet on either side of the existing driveway at the site after the solid waste permit issued.<sup>29</sup> FM 866 is a two-lane asphalt roadway with a 22-foot total width consisting of two 11-foot lanes.<sup>30</sup> Applicant further proposed to provide TxDOT an updated traffic analysis upon formal request from TxDOT after the Facility is fully operational.<sup>31</sup> TxDOT provided a letter dated July 17, 2020, accepting Applicant's proposals in the Traffic Study.<sup>32</sup> ED witness Mr. Yadav testified that information provided in the Application indicates that the access road can sufficiently handle the current and anticipated future traffic volumes associated with the Facility.

### 3. Analysis

Although TxDOT has approved Applicant's traffic and design measures, Protestants refer to a letter from TxDOT dated February 22, 2019, which contains a bullet point stating that "[t]he existing width of FM 866 is not compatible with

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<sup>27</sup> Appendix II.C at II.C-6.

<sup>28</sup> Appendix II.C; *see also* App. Ex-600 at 5:17-39.

<sup>29</sup> App. Ex-600 at 4.

<sup>30</sup> Admin. Record Tab D, Initial Submittal, Vol. 1, at II.C-4.

<sup>31</sup> App. Ex-600 at 4.

<sup>32</sup> App. Ex-600 at 5; *see also* Ex. ED-1 at 7 (TxDOT Odessa District's review and concurrence of Traffic Study).

over-width loads.”<sup>33</sup> However, there is no evidence in the record that FM 866 needs to accommodate over-width loads, and the most recent communication from TxDOT indicated that Applicant’s Traffic Study and proposals were acceptable. One of the proposals was to submit a driveway permit for reconstruction of the existing access to include driveway widening for the area immediately adjacent to the Facility driveway. TxDOT did not request or require that Applicant widen the entire highway. Applicant has met its burden of proof on this issue by demonstrating that roads are available and adequate to access the Facility.

## **G. DESIGN AND OPERATION OF LANDFILL LINER**

The next referred issue asks “whether the proposed design and operation of the landfill liner meets all applicable requirements.” Protestants argue that they do not. More specifically, Protestants maintain that Applicant has not demonstrated: (1) that the strength of the underlying formation is sufficient to ensure stability of the landfill liner, (2) that the constructed liner is sufficiently designed to accommodate the anticipated occurrence of heave, and (3) the absence of an unacceptable risk of slope failure due to site-specific seismic hazards.

### **1. Applicable Law**

Subchapter H of Chapter 330 of the TCEQ Rules sets out liner system design requirements for the protection of groundwater. TCEQ Rule 330.63 requires an application to include a liner quality control plan prepared in accordance with

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<sup>33</sup> Ex. Knox-16.

Subchapter H.<sup>34</sup> This Rule also requires an application to include a geology report that specifies “geotechnical data that describes the geotechnical properties of the subsurface soil materials and a discussion with conclusions about the suitability of the soils and strata for the uses for which they are intended.”<sup>35</sup> These tests “shall be performed in accordance with industry practice and recognized procedures . . . .”<sup>36</sup>

TCEQ Rule 330.339(a), found in Subchapter H, mandates that “a landfill must have an approved liner quality control plan prepared under the direction of a licensed professional engineer, and it shall be the basis for the type and rate of quality control testing performance and reported in the soil liner evaluation report . . . .” The Rule goes on to state that “[u]nless alternative construction procedures are approved in writing by the executive director, all constructed liners shall be keyed into an underlying formation of sufficient strength to ensure stability of the constructed lining.”

TCEQ Rule 330.559 states that “[o]wners or operators of new municipal landfill units . . . located in an unstable area shall demonstrate that engineering measures have been incorporated into the landfill unit’s design to ensure that the integrity of the structural components of the landfill unit will not be disrupted.” This Rule specifies the following factors to consider when determining whether an area is unstable: on-site soil conditions that may result in significant differential settling;

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<sup>34</sup> 30 Tex. Admin. Code § 330.63(d)(4)(G).

<sup>35</sup> 30 Tex. Admin. Code § 330.63(e)(5).

<sup>36</sup> 30 Tex. Admin. Code § 330.63(e)(5).



on-site geologic or geomorphologic features; and on-site human-made features or events (both surface and subsurface).<sup>37</sup>

## **2. Evidence and Arguments**

Applicant provided a Liner Quality Control Plan (LQCP) in the Application.<sup>38</sup> The design is for an alternative liner system, consisting of a geosynthetic clay liner (GCL) overlain by a high-density polyethylene geomembrane. It also includes a high-density polyethylene barrier between the subsurface and the GCL. The design also includes a leachate collection system and a protective cover. Additionally, the LQCP contains a detailed testing regimen for components of the lining system; the licensed professional engineer prepares a Liner Evaluation Report and submits it to TCEQ for formal approval.

The Application also includes two geotechnical reports prepared by Applicant's geotechnical engineering firm, Terracon, that outline the geotechnical site-specific testing, analysis, and recommendations.

The ED concluded that the Applicant met the Rules' requirements relating to liner system design, and OPIC argues that Applicant met its burden of proof for this issue.

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<sup>37</sup> 30 Tex. Admin. Code § 330.559.

<sup>38</sup> Application, Part III, Attachment D7; App. Ex-200 at 12.

## a) Protestants' Position

Protestants argue that Applicant failed to provide adequate geotechnical data to demonstrate that the underlying soils and strata are appropriate for use as subgrade for the landfill. Protestants also argue that Applicant failed to demonstrate that the underlying formation has sufficient strength to ensure the stability of the constructed liner at the landfill.

More specifically, Protestants first argue that Applicant's slope stability analysis does not adequately characterize either the cohesion or the friction angle beneath the landfill. Applicant's solid waste engineer, Dr. Samir, used "engineering judgment and published values" to determine subgrade strength properties.<sup>39</sup> The only site-specific data she used in her analysis were the N-values determined by Applicant's geotechnical engineering firm, Terracon.<sup>40</sup> And Protestants maintain that Applicant failed to demonstrate that Dr. Samir's process of correlating N-values to cohesion and friction angle value produced an accurate characterization of these values—she did not set forth the correlation and could not recall the test numbers she used.<sup>41</sup> Moreover, Jon Sheng, senior principal at Terracon, testified that Terracon adjusted the N-values in its report from those actually measured in the field, without any indication of which values were adjusted, why they were adjusted, or whether a particular adjustment resulted in an increase or decrease in the blow count reported.<sup>42</sup>

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<sup>39</sup> Admin. Record Tab D, Initial Submittal, Vol. 2, p. III.D5-4.

<sup>40</sup> Tr. Vol. 3 at 169-170.

<sup>41</sup> Tr. Vol. 3 at 171-72.

<sup>42</sup> Admin. Record Tab D, Vol. 2, p. III.D5C - i - III.D5C-125.

Protestants next argue that Applicant has failed to demonstrate that excessive heave will not occur at the landfill, which would compromise the integrity of the liner. Underlying this argument is the fact that the heave analysis in Applicant's application is wrong.<sup>43</sup> Dr. Samir, at hearing, testified that the method she included in the Application was wrong, but the method she used was too conservative for this site because it assumed the soil layer beneath the excavation would be clay, not the sandstone that, according to Terracon's report, actually lies beneath. Protestants argue that the sandstone was located in the upper proximity, but the material of concern, claystone, is at a depth of more than 70 feet.<sup>44</sup>

Finally, Protestants argue that Applicant has not demonstrated the absence of an unacceptable risk of slope failure. Protestants maintain that Applicant has failed to demonstrate that the landfill is not located in an unstable area and failed to demonstrate that engineering measures have been incorporated into the design to ensure the structural components will not be disrupted. These arguments rest on Protestants' contention that site-specific hazards of both tectonic and non-tectonic seismic events render the location unstable. Protestants contend that the proximity of the Facility to designated seismic hazard areas (according to the U.S. Geological Survey (USGS) seismic hazard map) and its site-specific characteristics warrant careful consideration, which was not given. Protestants also argue that the potential for non-tectonic events, which are not considered by the USGS map contained in the Application, exist at the site. Thus, they argue that the issues of hydrocarbon

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<sup>43</sup> Admin. Record Tab D, Vol. 2, p. III.D.5.A-1.

<sup>44</sup> Admin. Record Tab D, Initial Submittal, Vol. 2, p. III.D5.C-1, Figure III.E.3.6 and Figure III.E.3.7; Knox Ex-7.

exploration, injection wells, and the reach of seismic risk from the epicenter of an earthquake require more stability analysis than the Application included. The Application's stability analysis did not relate to seismic activity.

### **b) Applicant's Position**

Applicant responds that its geotechnical engineering firm, Terracon, drilled 28 borings within the project location, prepared two geotechnical reports, and reported that the project site is located within an area mapped as caliche deposits, which consist of very dense and cemented calcareous silicate materials. Applicant contends that the subsurface profile identified by Terracon is sufficient to ensure the stability of the landfill liner.

Applicant further contends that Terracon's reports meet the standards of TCEQ Rule 330.63(e)(4)(H), which requires "a narrative that describes the investigator's interpretations of the subsurface stratigraphy based upon the field investigation," and TCEQ Rule 330.63(e)(5), which requires "geotechnical data that describes the geotechnical properties of the subsurface soil materials and a discussion with conclusions about the suitability of the soils and strata for the uses for which they are intended . . . ." More specifically, Terracon's reports include soil stratigraphy, site geology, standard penetration test blow counts, and N-values. Recommended soil strengths were used to develop the soil strength parameters for each identified soil material type. Then, Applicant explains, licensed professional engineers' interpretations of the information, engineering judgment, and industry-accepted correlations were used to interpret the soil strength from SPT blow counts for slope stability analysis.

Regarding the heave analysis, Applicant states that the calculation in the Application was inadvertently included, even though it was not required. Applicant explains that the calculation provided in the Application used normal consolidation theory with the most conservative assumption that the soil layer beneath the excavation would be clay. Practically, however, Terracon's reports show that the soil layer beneath the excavation is made up of caliche, a material that does not exhibit shrink-swell behavior with changes in moisture. Moreover, Applicant points out that Terracon reported that the subsurface soils at the site are not expected to experience substantial volumetric changes to moisture content.<sup>45</sup>

Applicant finally argues that the requirement in Rules 330.339(a) and (e) regarding a showing of "sufficient strength to ensure stability" of the lining only applies to *constructed* liners. Applicant proposes an alternate liner system and, therefore, this requirement is not applicable.

### **3. Analysis**

As an initial matter, the ALJ agrees with Applicant that TCEQ Rules 330.339(a) and (e) are not applicable to this Draft Permit because the proposed landfill does not have a constructed liner.

Turning to the remaining issues, the ALJ notes that Protestants did not offer any independent evidence in support of their arguments regarding this issue; rather,

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<sup>45</sup> App. Ex-203 at 6 (Geotechnical Overview).

they questioned the underlying testing and analysis through cross-examination of Applicant's experts. Thus, they did not rebut Applicant's experts regarding, for example, the process of correlating N-values to cohesion and friction angle. Nor did they rebut the determination that slope failure was not a concern. They did not independently present evidence of seismic risk.

Even if Protestants could be viewed as having rebutted the presumption, here, Applicant's geotechnical engineering firm, Terracon, conducted a site-based geotechnical investigation and provided two geotechnical reports that outlined, in detail, the geotechnical properties of the location's subsurface.<sup>46</sup> The reports included laboratory testing performed on soil samples and rock coring and information for subsurface soil, groundwater conditions, and N-values. In addition, the reports contain licensed professional engineers' interpretations of the information, which conclude that the project site is suitable for the planned development.<sup>47</sup> The ALJ finds that the preponderant evidence, specifically the Terracon geotechnical reports, in conjunction with the Geology Report,<sup>48</sup> demonstrate that the landfill location is not an unstable area.

The ALJ concludes that Applicant met its burden regarding whether the proposed design and operation of the landfill liner meets all applicable requirements.

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<sup>46</sup> Admin. Record Tab D, Vol. 2, pp. III.D5C-4-6, III.D5C-117.

<sup>47</sup> Admin. Record Tab D, Vol. 2, p. III.D5C-123.

<sup>48</sup> Admin. Record Tab D, Vol. 2, Part III, Attachment E.

## **H. DESIGN AND OPERATION OF LANDFILL COVER**

The next issue the Commission referred to SOAH for hearing is “whether the proposed design and operation of the landfill cover meets all applicable requirements.”

### **1. Applicable Law**

TCEQ Rule 330.63(h) requires a closure plan be prepared in accordance with Chapter 330, Subchapter K of the Rules, and further specifies that the closure plan shall include a contour map showing the final constructed contour of the entire landfill to include internal drainage and side slopes plus accommodation of surface drainage entering and departing the completed fill area. Subchapter K outlines the specific closure requirements, and TCEQ Rule 330.457 applies to this Facility.

### **2. Evidence**

The Application proposes the prescriptive cover with the details for the design.<sup>49</sup> The Application also contains a Final Cover Quality Control Plan Landfill Final Contour Plan.<sup>50</sup> The final cover system will be provided to cover each cell with a composite final cover over both Type I and Type IV disposal areas consisting of the following components (listed in order from top to bottom): minimum of 6 inches of erosion layer capable of sustaining native plant growth; double-sided geo-composite drainage layer; 40-mil linear low-density polyethylene geomembrane;

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<sup>49</sup> App. Ex-200 at 15:7-20; Application, Part III, Attachment H, Section 2.

<sup>50</sup> Application, Part III, Attachment H.2; *see also* App. Ex-200 at 15:7-9; Application, Part III, Attachment H.3.

and 18 inches of infiltration layer with a coefficient of permeability no greater than  $1 \times 10^{-5}$  cm/sec.<sup>51</sup> The ED's staff found through their review that Applicant met TCEQ requirements on this issue.<sup>52</sup>

### **3. Analysis**

There was no dispute that the Application meets the requirements for landfill cover set out in TCEQ Rules 330.63(h) and Subchapter K. Accordingly, Applicant met its burden of proof on this issue.

#### **I. POTENTIAL SEISMIC IMPACT ZONES**

Next, the Commission inquired about “whether the Applicant has adequately addressed potential seismic impact zones at the proposed facility.” Protestants argue the Applicant failed to make this demonstration.

##### **1. Applicable Law**

TCEQ Rule 330.557 defines a “seismic impact zone” as “an area with a 10% or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull, will exceed 0.10g in 250 years.” This Rule prohibits the construction of new MSW landfill units in seismic impact zones unless the owner or operator can demonstrate that all

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<sup>51</sup> ED Ex-1 at 8-9 (Prefiled Testimony of Chandra Yadav).

<sup>52</sup> ED Ex-1 at 8:34-45; 9:1-2; Ex. ED-3 at 682-737 of the Checklist.



structures and systems are designed to resist the maximum horizontal acceleration in lithified earth material for the site.

## **2. Evidence and Arguments**

Although Protestants contend that Applicant has not demonstrated that the structural elements of the landfill are properly designed in consideration of the potential seismic impacts upon the landfill, they concede that the landfill is not located within a seismic impact zone, and, therefore, is not governed by TCEQ Rule 330.557. They argue, nonetheless, that the proximity of the Facility to the seismic impact zone has not been adequately addressed.

Applicant maintains that it has demonstrated that the proposed Facility is not within a seismic impact zone. The ED concluded that the potential for seismic risk has been addressed in the Geology Report<sup>53</sup> section of the Application and that the site is not located in a high seismic risk zone. OPIC argues that Applicant met its burden of proof with regard to this issue as well.

## **3. Analysis**

The ALJ concludes that Protestants have not rebutted the presumption on this point. Accordingly, the ALJ concludes that Applicant has adequately addressed potential seismic impact zones at the proposed Facility.

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<sup>53</sup> Admin. Record Tab D, Vol. 2, Part III, Attachment E.

## **J. ADEQUATE WETLAND DELINEATION**

The parties stipulated that this issue be dismissed from the list of issues to be considered in the contested case hearing.<sup>54</sup>

## **K. ADEQUATE DELINEATION AND IMPACTS OF RELEVANT FLOODPLAINS AND FLOODWAYS**

The parties stipulated that this issue be dismissed from the list of issues to be considered in the contested case hearing.<sup>55</sup>

## **L. EROSION CONTROL AND PREVENTION**

This issue asks, “whether the Applicant has demonstrated that the design and operation of the facility includes sufficient measures for erosion control and prevention.” Protestants contend that Applicant has failed to demonstrate effective erosional stability for all phases of the landfill operation. More specifically, Protestants argue that the final cover system is too steep, the local soils are highly erodible, and the soil is too poor to support vegetation.

### **1. Applicable Law**

TCEQ Rule 330.305(d) outlines the requirements for effective erosion control and provides, in relevant part, the following:

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<sup>54</sup> See SOAH Order No. 4.

<sup>55</sup> See SOAH Order No. 4.

- (d) The landfill design must provide effective erosional stability to top dome surfaces and external embankment side slopes during all phases of landfill operation, closure, and post-closure care in accordance with the following.
  - (1) Estimated peak velocities for top surfaces and external embankment slopes should be less than the permissible non-erodible velocities under similar conditions.
  - (2) The top surfaces and external embankment slopes of municipal solid waste landfill units must be designed to minimize erosion and soil loss through the use of appropriate side slopes, vegetation, and other structural and nonstructural controls, as necessary. Soil erosion loss (tons/acre) for the top surfaces and external embankment slopes may be calculated using the Soil Conservation Service of the United States Department of Agriculture's Universal Soil Loss Equation, in which case the potential soil loss should not exceed the permissible soil loss for comparable soil-slope lengths and soil-cover conditions.

## **2. Evidence and Arguments**

The ED determined that the Applicant demonstrated that the Facility complies with TCEQ Rule 330.305(d), and OPIC provided no argument on this issue but asserted that Applicant met its burden with regard to this Rule.

Protestants presented expert testimony on this issue. Protestants' expert witness, Dr. Zornberg, testified that the "final cover system is too steep, the local soils are highly erodible, and the presence of caliche makes the agronomic qualities

of the soil too poor to support vegetation.”<sup>56</sup> Dr. Zornberg opined that Applicant’s calculations assumed an unrealistic vegetation cover of 60%, which incorrectly demonstrated that the soil loss would not exceed the maximum allowable value of three tons per acre per year.<sup>57</sup> He also testified that the caliche formation is characterized by a significant salt content, which will be even higher once the material is excavated. The salt, he stated, will prevent vegetation from establishing.<sup>58</sup>

Applicant’s expert Mr. Stiggins testified that erosional stability for the landfill is achieved through the design, construction, and operation provisions in the Application.<sup>59</sup> Specifically, Part III, Attachment C, Section 5.0, addresses erosion control for interim and final conditions. Appendix III.C.3 includes a demonstration of thickness of both interim and final cover, using the Revised Universal Soil Loss Equation. It shows how the Facility has been designed to comply with TCEQ Rule 330.305(d), and states that compliance will be monitored following construction and during operation through routine inspections. Moreover, the Erosion and Sedimentation Control Plan states that side slope vegetation, drainage ditch erosion protection, and design considerations intended to limit the potential for erosion conditions will be used to control erosion.<sup>60</sup> Finally, although Mr. Stiggins did not substantively address Dr. Zornberg’s assertions regarding the difficulty in growing vegetation, he testified that, as stated in Part III, Attachment I, if any problems occur

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<sup>56</sup> Knox Ex-100 at 29.

<sup>57</sup> Knox Ex-100 at 29.

<sup>58</sup> Knox Ex-100 at 29-30.

<sup>59</sup> App. Ex-200 at 19:5-37; Application, Part III, Attachment C, Section 5.0; Attachment III.C.3; and Part III, Attachment H.

<sup>60</sup> ED Ex-1 at 10.

with the lack of vegetative cover, Applicant is responsible for corrective efforts until the ED determines all issues are resolved.

### **3. Analysis**

The ALJ finds that Applicant met its burden in demonstrating that the design and operation of the Facility includes sufficient measures for erosion control and prevention. Although Protestants raised issues with the Facility's erosional control measures, the evidence presented was insufficient to outweigh the Application's demonstration of controls through the design, construction, operation, and monitoring/inspection efforts. More specifically, even if the vegetative cover may be an issue here because of angle, erosion or salt content, Applicant is required to maintain the 60% vegetative cover pursuant to the requirements of the permit. Protestants failed to demonstrate that any of these concerns are more than speculative issues. Moreover, Applicant is responsible for corrective efforts if any issues arise, which mitigates concern relating to erosional stability.

#### **M. SUFFICIENT WATER DRAINAGE REPORT**

The next referred issue asks: "whether the Applicant has provided a sufficient surface water drainage report." TCEQ Rules relating to drainage analysis require an Applicant to (1) verify that existing draining patterns will not be adversely altered by the proposed landfill and (2) include hydraulic calculations and designs for the necessary collection, drainage, and detention facilities (that is, the infrastructure proposed to ensure the existing drainage patterns will not be adversely altered). Protestants argue that Applicant failed to comply with both requirements.

## 1. Applicable Law

TCEQ Rules 330.63(c), 330.303, 330.305, and 330.307 require Applicant to provide a Surface Water Drainage Report that demonstrates that the owner or operator will design, construct, maintain, and operate the landfill to manage run-on and runoff during the peak discharge from at least a 25-year storm and prevent the off-site discharge of waste and contaminated stormwater; provide structures to collect and control at least the water volume resulting from a 24-hour/25-year storm; protect the landfill from washouts; and demonstrate that the existing drainage pattern is not adversely altered.

The predominant requirement for surface water drainage is that existing drainage patterns must not be adversely altered.<sup>61</sup> This requirement means that existing drainage patterns must be accurately characterized so that pre- and post-development drainage patterns can be compared. To conduct this comparative analysis, an applicant must determine what the surface water drainage patterns are for existing conditions at the site, so that it can compare those existing conditions to the proposed surface water drainage conditions after the landfill is fully developed. According to the TCEQ regulatory guidance, the existing drainage patterns of the site are intended to provide: “(1) a baseline for comparison with the post-development drainage patterns of the facility and (2) a basis for the demonstration that the existing drainage patterns will not be adversely altered.”<sup>62</sup>

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<sup>61</sup> See 30 Tex. Admin. Code §§ 330.63(c)(1)(C), (D)(iii), and .305(a).

<sup>62</sup> Knox Ex-15 at 4.

To determine existing surface water drainage conditions, TCEQ has prescribed a five-step exercise:

1. Determine the specific discharge points for the runoff with respect to existing conditions at the permit boundary. Discharge points include the locations where storm water runoff leaves the permit boundary by open channel flow, overland flow, flow through hydraulic structures, etc.
2. Determine drainage subareas and calculate the peak flow rates for existing conditions for each of the discharge points.
3. Calculate the volume of the runoff for the design storm event for each of the discharge points for existing conditions.
4. Determine the velocity of the peak runoff at each of the discharge points for existing conditions.
5. Determine the areas offsite that contribute flows onto the permit boundary (run-on), and calculate the peak flow rate, velocity, and volume of run-on from each offsite area onto the site for existing conditions.<sup>63</sup>

Then, these five steps must be repeated for the proposed fully developed landfill conditions.<sup>64</sup> The applicant must compare the peak flow rate, velocity, and volume under existing conditions with peak flow rate, velocity, and volume under fully developed landfill conditions, to ensure that drainage patterns will not be adversely altered.<sup>65</sup>

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<sup>63</sup> Knox Ex-15 at 3.

<sup>64</sup> Knox Ex-15 at 3.

<sup>65</sup> Knox Ex-15 at 3.

Next, to ensure that the proposed landfill development will not adversely alter existing drainage patterns, an applicant must locate, calculate, and design necessary collection, drainage, and detention facilities.<sup>66</sup> The 25-year/24-hour storm event must be used to calculate and design these drainage structures.<sup>67</sup>

## **2. Evidence and Arguments**

### **a) The Application**

Attachment C, Part III of the Application addresses the requirements for assessment of drainage patterns. Applicant used a “modified rational method” to calculate the volume of storage needed to mitigate surface water drainage from pre-development to post-development conditions.<sup>68</sup> The water exits the site, for the most part, along its eastern perimeter. The parties agree that under existing conditions, surface water runs off the site via overland flow, exiting the site in a diffuse manner rather than a channelized flow or defined discharge route.<sup>69</sup>

The Application proposed two detention ponds (North Pond and South Pond) at the eastern perimeter of the site, and Applicant proposes to route surface water from two large drainage areas (Drainage Area A and Drainage Area B) to these two

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<sup>66</sup> Knox Ex-15 at 5.

<sup>67</sup> Knox Ex-15 at 9; 30 Tex. Admin. Code §§ 330.63(c)(1)(D)(i) and .305(b), (c), (d)(1).

<sup>68</sup> App. Ex-200 at 17:30-34.

<sup>69</sup> Knox Ex-200 at 5; *see also* Tr. Vol. 3 at 119-20.



detention ponds, where it will be discharged at the permit boundary over weirs (barriers across the width of the pond to help control the flow of water).<sup>70</sup>

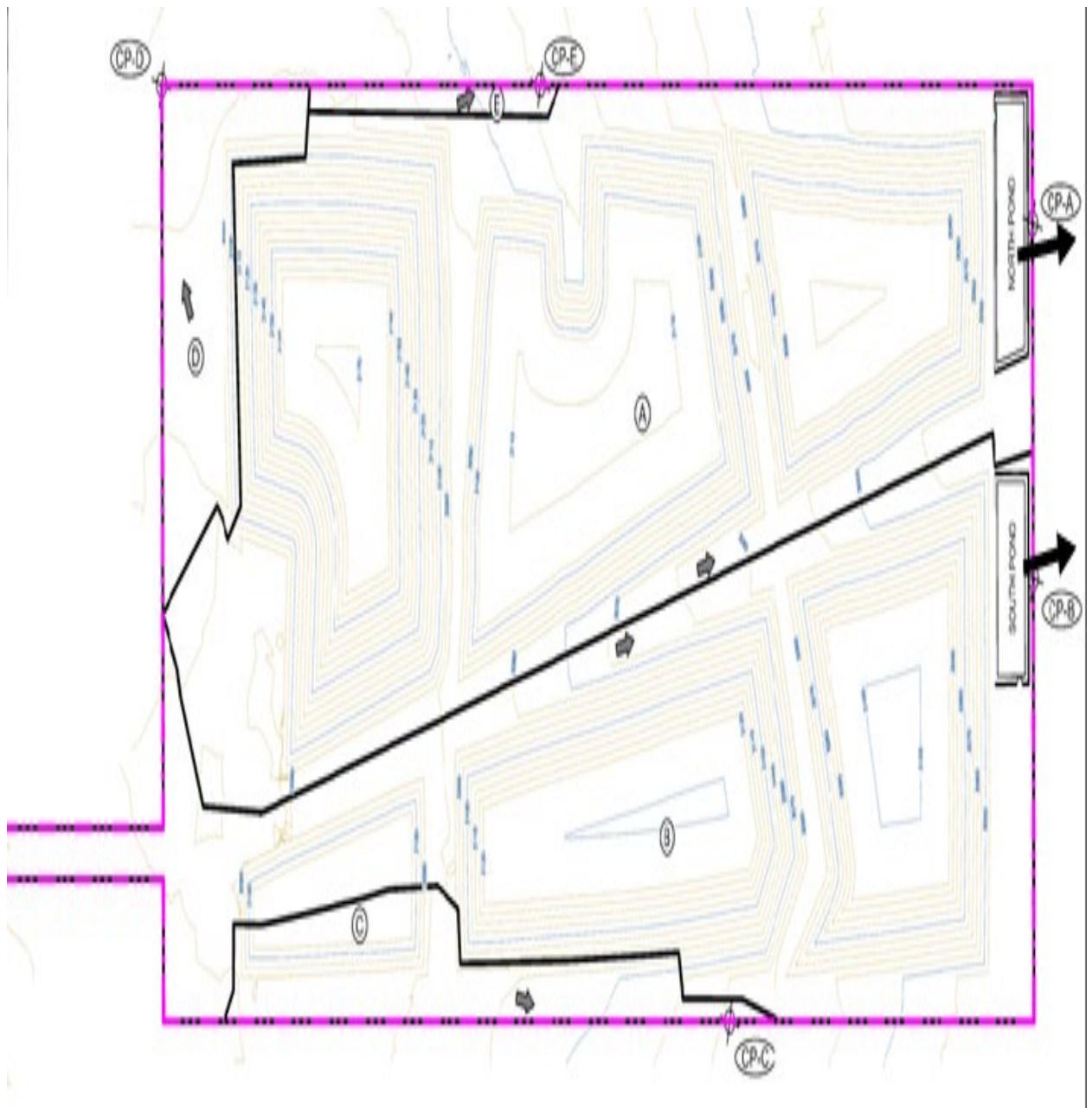


Figure 1 – Application Figure III.C2.1 showing the drainage areas, Comparison Points, and North and South Ponds

<sup>70</sup> Tr. Vol. 3 at 120.

The ED found the Application, including the drainage report, provided discussions and detailed designs, calculation, and operational considerations for the collection, control, and discharge of storm water as required by the applicable Rules.

**b) Protestants' and OPIC's Positions**

**(i) Pre- and Post-Development Peak Flow Rates**

Protestants' first concern relates to the reliability and accuracy of Applicant's comparison of the existing drainage conditions to the fully developed drainage conditions. This concern rests on Applicant's calculation of the baseline conditions, which reflect a single-point discharge for each of the five drainage areas designated in the Application as Comparison Points A, B, C, D, and E.<sup>71</sup> Protestants, on the other hand, contend that Applicant should have analyzed overland flow along the perimeter of the site. This means, Protestants contend, that the peak flows for existing conditions computed for the five drainage areas are not calculated as overland flow along the perimeter of the site, but as the peak flow that is occurring at each of the five specific discharge (comparison) points. This methodology, in turn, overestimates the peak flow rate at the permit boundary for existing conditions.

Mr. Dunbar, Protestants' water resource engineer, opined that the comparison of pre- and post-development peak flows needs to be made at the same discharge locations. Because Applicant is proposing to use two detention ponds to collect and discharge most of the runoff, Mr. Dunbar maintains that these pond

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<sup>71</sup> Application, Part III, Attachment C.

discharge locations should be used to make the comparison between the existing and developed conditions, rather than the Comparison Points.<sup>72</sup> The North Pond is where runoff from Drainage Area A would be routed, and it uses an 86-foot-wide weir at its discharge structure.<sup>73</sup> The South Pond is where runoff from Drainage Area B would be routed, and it uses a 71-foot-wide weir.<sup>74</sup> Applicant calculated the portion of the peak flow rate for existing conditions for Drainage Area A, assigned to Comparison Point A, as 65 cubic feet per second (cfs).<sup>75</sup> Applicant calculated the peak flow rate for existing conditions for Drainage Area B to be 54 cfs, and assigned all of it to Comparison Point B.<sup>76</sup> Mr. Dunbar focused his analysis on the South Pond, or Drainage Area B. He calculated the portion of the overland flow that discharges off the site across the 71-foot-wide area along the South Pond's weir, which is at the permit boundary. His calculation resulted in less than 5 cfs for existing conditions.<sup>77</sup>

For developed landfill conditions, Applicant calculated the peak flow rates for runoff flowing *into* the North and South Ponds to be 177 cfs and 130 cfs, respectively.<sup>78</sup> For the discharges *leaving* the North Pond weir (or Comparison Point A), Applicant calculated the peak flow rate as 65 cfs and as 54 cfs for the South Pond weir (or Comparison Point B).<sup>79</sup> Protestants point out that these numbers are much higher than the 5 cfs Mr. Dunbar calculated for existing conditions (rather than

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<sup>72</sup> Knox Ex-200 at 5, 8-9.

<sup>73</sup> Knox Ex-200 at 12.

<sup>74</sup> Knox Ex-200 at 11.

<sup>75</sup> Application, Part III, Attachment C, Table III.C.I.

<sup>76</sup> Application, Part III, Attachment C, Table III.C.I.

<sup>77</sup> Knox Ex-200 at 11-12.

<sup>78</sup> Application, Part III, Attachment C, Table III.C.I.

<sup>79</sup> Application, Part III, Attachment C, Table III.C.H.

identical cfs for pre- and post-development peak flow rates, as Applicant has calculated).

Based upon Mr. Dunbar's testimony, OPIC states that it is persuaded that Applicant overestimated existing runoff velocity and peak flow by making assumptions that do not accurately reflect on-site conditions.<sup>80</sup> OPIC also concludes that Applicant's proposed detention ponds are too small and that the peak flow rates of water discharged from the ponds will exceed existing peak flow rates, thereby adversely altering existing drainage patterns.

### **(i) Pond Sizing**

Protestants next argue that Applicant has not and cannot demonstrate that its proposed landfill will not alter existing drainage patterns because its detention ponds are not properly sized. Protestants explain that the ponds must be able to reduce the peak flow and runoff volume, such that when compared to existing conditions, there is no adverse alteration of the peak flow rates and runoff volume discharging from the ponds and exiting the permit boundary.<sup>81</sup>

Mr. Dunbar testified that the North Pond is designed for 5.7 acre-feet of water to be stored, but a 25-year/24-hour storm at the landfill site would yield about 30 acre-feet of stormwater runoff from the 103.9 acres for Drainage Area A, which would enter the North Pond.<sup>82</sup> He goes on to state that there is no outlet constantly

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<sup>80</sup> OPIC Closing Brief at 9.

<sup>81</sup> Knox Ex-15 at 4.

<sup>82</sup> Knox Ex-200 at 14.

discharging significant amounts of water during the filling-up of the pond; instead, gabion boxes are proposed. And, although there is no outflow information provided in the Application, gabion boxes are low-flow outlet structures to drain the pond.<sup>83</sup> Therefore, the pond will fill up and start overflowing the weir before the peak inflow of 177 cfs enters the pond, and there is not enough storage in the pond to reduce this peak inflow to Applicant's wrongly calculated existing peak flow rate of 65 cfs.<sup>84</sup> Mr. Dunbar testified that the same issue applies to the South Pond as well.<sup>85</sup>

Additionally, Mr. Stiggins testified that he did not use the 25-year/24-hour storm when designing Applicant's detention ponds because he believed it was unnecessary to do so.<sup>86</sup> In explaining his series of hydrographs for the North and South Ponds, he testified that the hydrographs do not reflect a 24-hour duration storm because a storm with a 24-hour duration has a much lower intensity and lower peak flow rates than storms with shorter durations.<sup>87</sup> Consequently, Protestants argue that, based on Mr. Stiggins's erroneous assumption, the peak flow rates of the water being discharged from the ponds will greatly exceed existing peak flow rates and adversely alter existing drainage patterns and will adversely impact downstream property via increased flood levels and duration and erosion.<sup>88</sup>

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<sup>83</sup> Knox Ex-200 at 14.

<sup>84</sup> Knox Ex-200 at 14.

<sup>85</sup> Knox Ex-200 at 14.

<sup>86</sup> Tr. Vol. 3 at 124-25; Knox Ex-12.

<sup>87</sup> Tr. Vol. 3 at 122-25; App. Ex-204.

<sup>88</sup> Knox Ex-200 at 15.

### **c) Applicant's Position**

Applicant argues that Protestants' positions are built upon unsupported and faulty conclusions by Mr. Dunbar. Applicant first takes issue with the fact that unlike Mr. Stiggins, Mr. Dunbar never visited the site but instead relied upon photographs taken by Dr. Zornberg and Applicant's topographical map. This, Applicant argues, prevented him for considering an existing road that blocks overland flow and increased vegetation.<sup>89</sup> Applicant next criticizes Mr. Dunbar's calculation methodology because he failed to substantiate his peak flow at existing conditions. Third, Applicant argues that Mr. Dunbar's hydrograph is unrealistic and inaccurate because it fails to identify the method used to create it and purports to show 85% of the total amount of rainfall of a 25-year/24-hour storm arriving at the pond within the first five hours of the storm event. Applicant contends that 85% runoff is not supported by site-specific data and, according to the TxDOT Hydraulic Manual used by Mr. Stiggins, is more representative of clayey soils and urban areas than rural areas like the landfill site.<sup>90</sup> Moreover, Applicant argues that Mr. Dunbar's hydrograph assumes that all storm water runoff enters the pond within a five-hour time frame, compressing the entire 24-hour storm into five hours. Applicant next contends that Mr. Dunbar's hydrograph fails to account for water leaving the ponds through the gabion box / weir structure and water being released from the weir before the pond is completely full.

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<sup>89</sup> Mr. Dunbar testified that going to the site will not tell him as much as the topographic map does; the topographic map, he maintains, is what one looks at to determine direction of flow. Tr. Vol. 2 at 19.

<sup>90</sup> Tr. Vol. 2 at 29-30. Mr. Dunbar counters that the runoff coefficients in the manual are associated with the rational method to determine peak flow, while he was referring to the runoff associated with calculating volume of runoff to create a hydrograph. He opines that these are different numbers.

### 3. Analysis

The preponderant evidence demonstrates that Applicant failed to provide a sufficient surface water drainage report. Given the ED's preliminary decision to issue a Draft Permit, the ALJ must conclude that the ED approved Applicant's use of a modified rational method for the calculation of drainage characteristics. Nonetheless, the ALJ is persuaded by Mr. Dunbar's testimony that Applicant overestimated existing runoff velocity and peak flow by making assumptions that do not accurately reflect on-site conditions. Therefore, the ALJ concludes that the peak flow for existing conditions has been overestimated by Applicant.

The overarching regulatory requirement for surface water drainage is that existing drainage patterns must not be adversely altered. Practically speaking, this requirement has two components: (1) the pre- and post-development drainage pattern analysis; and (2) the related infrastructure to ensure the pre-development drainage pattern will not be adversely altered post-development. Protestants assert that Applicant cannot meet its burden of proof on either of these components because Applicant miscalculated existing drainage patterns and the proposed detention ponds are undersized. OPIC agrees.

Applicant used a "modified rational method" to calculate the volume of storage needed to mitigate any change in surface water drainage once the landfill is developed. Applicant asserts that the pre- and post-development drainage patterns were accurately analyzed, reflecting on-site details. It also maintains that the

drainage infrastructure was accurately designed to alleviate any adverse alteration of drainage patterns.

The ALJ also concludes that Applicant's detention/retention pond sizing is underestimated. Importantly, Applicant's expert, Mr. Stiggins, admitted during the hearing that he did not use a 25-year/24-hour storm for his analysis required by the TCEQ Rules. This inaccurate analysis could result in water drainage at a peak flow higher than Applicant predicts, adversely altering drainage patterns. Further, while the ED found the Application administratively and technically complete, Mr. Yadav testified that he did not independently verify Applicant's design or calculations; he relied on the fact that the drainage report is sealed by a professional engineer.

**a) Pre- and Post-Development Peak Flow Rates**

The ALJ agrees with Protestants that Applicant's calculation of velocity and peak flow under existing conditions is inaccurate. Presently, surface water runs off the landfill site via overland flow—in a diffuse manner along the eastern perimeter of the site. Therefore, to calculate the relevant pre-development drainage at the permit boundary, the analysis must capture the existing drainage along the future perimeter of the proposed detention ponds' weirs. Applicant's analysis, however, reflects five single-point discharges for two drainage areas and routes runoff drainage to these five points. Applicant then measures velocity and peak flow at these points (rather than along the perimeter of the future weirs).

The preponderant evidence demonstrates that Applicant's analysis overestimates existing runoff velocity and peak flow. Because Applicant measured



the flow at five points to which water is routed, rather than measuring flow along the perimeter of the proposed pond weirs, the velocity and peak flow are higher than they should be. As it stands today, the water runoff at the Property drains by overland flow. Therefore, to measure existing conditions, the runoff should be measured by overland flow. Mr. Dunbar persuasively opined that the runoff by overland flow (as it exists today) should be measured at the Property along the perimeter of the future North Pond and South Pond weirs. He calculated this peak flow to be about 5 cfs (rather than the 65 cfs calculated by Applicant). This measurement would provide the existing velocity and peak flow measurements for an “apples to apples” comparison of cfs with the post-development calculation. Mr. Dunbar takes no issue with Applicant’s post-development calculation of cfs. If velocity and peak flow is at 5 cfs for existing conditions but at 65 (or 54) cfs for post-development conditions, then Applicant would need to account for this significant delta in its mitigation efforts for drainage at the permit boundary (which it did not do).

The ALJ concludes that the greater weight of the credible evidence demonstrates that there will be a significant increase in velocity and peak flow rates at Comparison Points A and B post-development as compared to the pre-development velocity and peak flow rates.

### **b) Pond Sizing**

The ALJ is also persuaded that Applicant’s proposed ponds are undersized. Because Applicant did not use a 25-year/24-hour storm for its calculation of pond size, and, instead, used a storm shorter in duration, the ponds are too small. The ALJ concludes that a 25-year/24-hour storm is required by the Rules, regardless of the

purported intensity of the hypothetical storm. Here, the ponds will fill with water and begin overflowing the weir, draining water at the permit boundary, before the peak inflow enters the pond. There is not enough storage in the pond to reduce the peak inflow of 177 cfs to Applicant's predicted peak flow rates exiting the weir. This will result in water discharge from the weir at the permit boundary that significantly exceeds existing peak flow rates at the permit boundary, adversely altering existing drainage patterns.

## **N. ENDANGERED AND THREATENED SPECIES**

The parties stipulated that this issue be dismissed from the list of issues to be considered in the contested case hearing.<sup>91</sup>

## **O. EASEMENTS**

This referred issue asks “whether the application adequately delineates and addresses easements.”

### **1. Applicable Law**

TCEQ Rule 330.61(c)(10) requires an application to include a general location map that illustrates all drainage, pipeline, and utility easements within or adjacent to the facility. TCEQ Rules 330.141(a) and 330.543(a) also provide that no solid waste unloading, storage, disposal, or processing operations may occur within any

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<sup>91</sup> See SOAH Order No. 4.

easement, and no solid waste disposal may occur within 25 feet of the center line of any utility line or pipeline easement. Finally, TCEQ Rule 330.543(a) requires that no solid waste unloading, storage, disposal, or processing operations shall occur within any easement, buffer zone, or right-of-way that crosses the facility, and all pipeline and utility easements shall be clearly marked with posts that extend at least six feet above ground level, spaced at intervals no greater than 300 feet.

## **2. Evidence**

The Application includes a map identifying all recorded easements on the Property in a Buffers and Easements Map, which shows that all solid waste unloading, storage, disposal, and processing operations are located outside all easements, buffer zones and rights-of-way that cross the Facility.<sup>92</sup> The Application states that no solid waste disposal shall occur within 25 feet of the centerline of any utility line or pipeline easements and further indicates that equipment serving the oil and gas operations on the Property, such as speed lines and electric utility lines, will be relocated in cooperation with the mineral operator.<sup>93</sup>

## **3. Analysis**

Protestants do not argue that the Application fails to delineate existing easements. Instead, they contend that Applicant's proposal to relocate some of the flowlines or speed lines and electrical lines is deficient because the proposal does not depict where those relocated flowlines and electrical lines will be located when

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<sup>92</sup> Application, Part II, Attachment II.A, FIG.II.A.12; Application, Part II, Appendix J, Page II.J-1.

<sup>93</sup> Application, Part II, Attachment II.A, FIG.II.A.12; Application, Part II, Appendix J, Page II.J-1.

landfill operations commence. However, Applicant met the requirements of TCEQ Rules 330.141(a) and 330.543(a) because it has committed that it will not allow solid waste disposal within 25 feet of the centerline of any easements and will otherwise relocate any lines in cooperation with the mineral operator on the Property. TCEQ's rules do not require Applicant to provide a relocation plan prior to the granting of a permit. Accordingly, Applicant has met its burden of proof by demonstrating that the Application adequately delineates and addresses easements at the proposed site.

## **P. WASTE SCREENING MEASURES**

The next referred issue is “whether the Applicant has proposed adequate waste screening measures.”

### **1. Applicable Law**

TCEQ Rule 330.127(5) requires a Site Operating Plan (SOP) to contain procedures for the detection and prevention of the disposal of prohibited wastes, including regulated hazardous waste. Specifically, the detection and prevention program must include the following: (A) procedures to be used by the owner or operator to control the receipt of prohibited waste, including random inspections of incoming loads and inspection of compactor vehicles; (B) records of all inspections; (C) training for appropriate facility personnel responsible for inspecting or observing loads to recognize prohibited waste; (D) notification to the ED, and any local pollution agency with jurisdiction that has requested to be notified, of any incident involving the receipt or disposal of regulated hazardous waste or polychlorinated biphenyls waste at the landfill; and (E) provisions for the remediation of the incident.

## 2. Evidence

The ED argues the Application's SOP contained measures for controlling prohibited waste in accordance with TCEQ's applicable rules.<sup>94</sup> Mr. Yadav stated that as part of the SOP, Part IV, Section 8.0 of the Application establishes procedures for the detection and prevention of the disposal of prohibited wastes including sign posting, providing customers with lists of prohibited waste, prohibited waste training, and random inspections of vehicles.<sup>95</sup> Likewise, the Application calls for the unloading of waste to be conducted in as small a space as possible, with trained personnel monitoring the unloading of waste.<sup>96</sup> The Application provides that if prohibited waste is discovered after unloading, it will be placed back on the offending vehicle; and if prohibited waste is discovered after the transport vehicle has left the Facility, the prohibited waste will be segregated and controlled as necessary and efforts will be made to identify the offender and return the prohibited waste.<sup>97</sup>

## 3. Analysis

Protestants contend that although the SOP lists measures for controlling prohibited wastes, there are no details regarding the contents of the training for facility personnel to recognize regulated wastes. TCEQ's Rules, however, do not require that TCEQ-approved training programs be detailed in the SOP. Similarly, Protestants also took issue that Mr. Stiggins, on behalf of Applicant, did not identify

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<sup>94</sup> See ED Ex-1 (Prefiled Testimony of Chandra Yadav, P.E.) at 12:2-3; ED Ex-3 lines 794-800 and 810-24 of the Checklist.

<sup>95</sup> See App. Ex-200 at 20:33-38; 21:1-2.

<sup>96</sup> See App. Ex-200 at 21:4-12.

<sup>97</sup> Application, Part IV, Section 11.0, Page IV18.

any specific plans to address radioactive waste which might arise from oil and gas activity on the Property. Radioactive waste, however, falls within the definition of prohibited waste, generally, and TCEQ's regulations do not specifically require a separate plan to address potential radioactive waste. The preponderant evidence shows that Applicant's SOP covers each of the detection and prevention requirements and specifies procedures for controlling prohibited waste outlined in TCEQ Rule 330.127(5). Accordingly, Applicant has met its burden of proof by demonstrating that the Application proposes adequate waste screening measures.

## **Q. GROUNDWATER PROTECTION**

Protestants next argue that Applicant has not demonstrated that the landfill is protective of groundwater. Protestants offer two bases for this: (1) Applicant has failed to adequately characterize the groundwater to develop a groundwater monitoring system, and (2) Applicant has not proposed adequate background monitoring wells.

### **1. Applicable Law**

TCEQ Rule 330.63(f) outlines the requirements for the groundwater sampling and analysis plan required in the application. It directs an applicant to prepare the plan in accordance with Chapter 330, Subchapter J of the Rules.

TCEQ Rule 330.403 is found in Subchapter J and pertains to groundwater monitoring systems. Subsection (a) requires a sufficient number of monitoring wells, installed at appropriate locations and depth, to yield representative groundwater

samples from the uppermost aquifer. In addition, Subsection (a)(1) mandates that background monitoring wells be installed to allow determination of background groundwater that has not been affected by leakage from a unit. Subsection (e)(1) also requires that the design of the system is based on site-specific technical information that must include, among other things, a thorough characterization of groundwater flow direction, including seasonal and temporal fluctuations in flow, and thickness, stratigraphy, lithology, and hydraulic characteristics of saturated and unsaturated geologic units.

Also in Subchapter J, TCEQ Rule 330.405 outlines the groundwater sampling and analysis requirements for the groundwater monitoring program. And TCEQ Rule 330.421 contains the monitor well construction specifications.

## **2. Evidence and Arguments**

Applicant included a Geology Report in the Application, which was prepared by a licensed professional geoscientist and contained site stratigraphy, groundwater occurrence, and groundwater flow direction and rate.<sup>98</sup> The Application also included a groundwater monitoring system consisting of 11 wells, one of which is upgradient.<sup>99</sup> Both the ED and OPIC concluded that Applicant met its burden of proof with regard to this issue.

Protestants first argue that Applicant has not adequately characterized groundwater to develop its monitoring system. They maintain that, for example,

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<sup>98</sup> Application, Part III, Attachment E; App. Ex-500.

<sup>99</sup> Application, Part III, Attachment F; App. Ex-200 at 21:30-40; 22:1-4.

Applicant has failed to thoroughly characterize seasonal variation in aquifer thickness and groundwater flow. Protestants point to testimony of both Applicant's and the ED's witnesses confirming that water elevations in this area are subject to seasonal variation,<sup>100</sup> but the groundwater samples at the site were taken only during the months of April and May 2019.<sup>101</sup> They argue that no witness testified that this limited testing is sufficient to thoroughly characterize aquifer thickness and groundwater flow including seasonal and temporal fluctuations in flow.

Protestants next contend that Applicant has failed to propose adequate background monitoring wells. For at least a portion of the year, the groundwater gradient at the site flows generally to the southeast, although the precise direction varies in different areas of the site.<sup>102</sup> Protestants argue that the one background monitoring well proposed, in the northwest corner of the site, is contrary to the plain language of the rules which anticipate multiple wells. Moreover, Protestants claim that because some of the groundwater flow along the northern boundary of the landfill is more due south than southeast, some groundwater will originate in areas significantly different than the vicinity of the single well. This, they argue, may allow a leak to go undetected. This is complicated by the fact that drilling activity and transport activities have occurred on site, which could lead to the failure of the single well to detect a localized spill from this activity.

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<sup>100</sup> Tr. Vol. 4 at 22, 164.

<sup>101</sup> Tr. Vol. 4 at 30-31.

<sup>102</sup> Admin. Record Tab D, Initial Submittal, Vol. 4, p. III.F-2, Figure III.F.1.



In response, Applicants point to the definition of “seasonal high water,” found in TCEQ Rule 330.3(143), which is: “[t]he highest measured or calculated water level in an aquifer during investigations for a permit application and/or any groundwater characterization studies at a facility.” This definition, Applicant argues, demonstrates that there is no specific requirement for a minimum number of samples or a minimum period over which the samples must be taken. Moreover, Applicant clarifies that the testimony actually showed the water levels were measured over four months—April, May, June, and July of 2019.<sup>103</sup> It counters that the testimony of Clay Kilmer, a licensed geoscientist, coupled with the Subsurface Investigation and Report in the Application, adequately characterized the subsurface.<sup>104</sup> This report included an analysis of the uppermost aquifer and its thickness, results of slug tests, a groundwater contour map, and the lower limit of the aquifer.<sup>105</sup>

Regarding the backwater monitoring well system, Applicant begins by maintaining that TCEQ Rule 303.403(a) simply requires a “sufficient number of monitoring wells” to “allow determination of the quality of background groundwater;” the Rule says nothing about the minimum number of wells. Moreover, Applicant points out that Protestants offer no data to support their assertion that a single upgradient groundwater monitoring well is inadequate, and that this, in the face of the ED’s conclusion, fails to rebut the prima facie demonstration that the Draft Permit meets this requirement.

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<sup>103</sup> Tr. Vol. 4 at 62:7-65:10.

<sup>104</sup> App. Ex-500 at 6; 7:7-37; Application, Part III, Attachment E.

<sup>105</sup> Application, Part III, Attachment E.

### 3. Analysis

The ALJ finds that the Applicant has met its burden to demonstrate that the landfill is protective of groundwater.

Protestants first essentially question the thoroughness of Applicant's groundwater characterization. Although the groundwater sampling that occurred over the span of four months in the spring may not meet the common meaning of "seasonal variation," the statutory definition found in TCEQ Rule 330.3 only requires the highest measured level in an aquifer during permit application investigations. Also, Mr. Kilmer's Subsurface Investigation and Report outlines the uppermost aquifer and its thickness and groundwater flow. Finally, Mr. Balde with TCEQ testified that the system is based on site-specific technical information in accordance with TCEQ Rules 330.403 and 330.405.<sup>106</sup>

Protestants next question the adequacy of background monitoring wells proposed by Applicant. First, the ALJ disagrees with Protestants that the plain language of the Rules anticipates multiple wells. As indicated in the Code Construction Act, "[t]he singular includes the plural and the plural includes the singular,"<sup>107</sup> and no specific requirements can be inferred. Additionally, the text of TCEQ Rule 330.403(a) only states that the system must consist of a "sufficient number" of wells. Mr. Balde testified that Applicant submitted a system consisting of 11 properly spaced wells, one of which is upgradient, and that the Application's

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<sup>106</sup> ED Ex-4 at 4.

<sup>107</sup> Tex. Gov't Code § 311.012(b).

monitoring well details indicated that the specifications comply with TCEQ Rule 330.421.<sup>108</sup> The ALJ finds that the Applicant met its burden in demonstrating the landfill is protective of groundwater and satisfying TCEQ’s requirements.

## **R. SITE OPERATING PLAN**

The next issue enquires as to “whether the Applicant has provided an adequate Site Operating Plan.”

### **1. Applicable Law**

TCEQ Rule 330.65 requires the Application to contain an SOP that outlines the day-to-day operations at the Facility. The SOP must also describe Operational Standards for Municipal Solid Waste Landfill Facilities and Operational Standards for Municipal Solid Waste Storage and Processing Units as provided in Subchapters D and E of Chapter 330 of TCEQ’s Rules.

### **2. Evidence**

The SOP is contained in Part IV of the Application. The SOP addresses the requirements of TCEQ Rules 330.121 through 330.177 in Sections 1.0 through 32.0 in the SOP of the Application.<sup>109</sup>

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<sup>108</sup> ED Ex-4 at 4.

<sup>109</sup> App. Ex-200 at 23:1-18.

### 3. Analysis

Protestants contend the Application's SOP does not contain "meaningful" details. For example, Protestants argue the Fire Protection Plan includes a list of steps that will be taken to prevent fire, including that soil cover will be used daily, but the Type IV facility proposes only weekly cover, not daily cover. Protestants argue that Applicant should be required to apply daily soil cover to the Type IV facility working face, in addition to the Type I working face, and that Applicant should have to identify where sufficient amounts of adequate soils will come from.<sup>110</sup> As discussed previously, Protestants also contend the SOP does not adequately address easements, buffer zones, site access road details, dust control, ponding of water, and oil and gas activity on the site.

The ALJ finds that Applicant's SOP is not deficient. The Fire Protection Plan specifies that landfill fires will normally be extinguished by smothering with cover material spread by dozer, and that a minimum of 111 cubic yards or enough soil to cover a working face with at least 6 inches of compacted soil be stockpiled within 2,000 feet of the working faces of both the Type I and Type IV landfills.<sup>111</sup> Section 15.0 of the SOP specifically states that no solid waste unloading, storage, disposal or processing operations will occur within any easement, buffer zone or right of way that crosses the site. It further states that all pipeline and utility easements will be clearly marked with posts that extend at least 6 feet above ground level, spaced

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<sup>110</sup> Knox Closing Brief at 49.

<sup>111</sup> See Admin. Record Tab D, Vol. 1, pages IV-13 – IV-16.

at intervals no greater than 300 feet, as required by TCEQ rules.<sup>112</sup> Section 21.0 of the SOP identifies that access roads will be constructed and maintained, including requirements to keep records to demonstrate compliance. Plainly stated, the preponderant evidence demonstrates that the Application contains an SOP providing guidance to site management and operating personnel to meet the general and site-specific requirements of the TCEQ regulations. Accordingly, Applicant has met its burden of proof by demonstrating that it has provided an adequate SOP.

## **S. OIL AND GAS AND WATER WELL PROVISIONS**

The final referred issue is “whether the application and draft permit have adequately addressed the oil and gas and water well provisions in 30 TAC § 330.61(l).”

### **1. Applicable Law**

TCEQ Rule 330.61(l) provides that the owner or operator shall identify the location of any and all existing or abandoned water wells, crude oil and natural gas wells, or other wells associated with mineral recovery situated within the facility. The Rule also requires written certification to the ED regarding capping, plugging, and closing of the wells.

### **2. Evidence**

The Application identifies and provides the location of the following wells:

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<sup>112</sup> See Admin. Record Tab D, Vol. 1 at IV-23.

- there are three existing and one abandoned water wells within 500 feet of the Facility; no known active water wells and one plugged abandoned water well within the Facility boundary;<sup>113</sup>
- all water well reports, drill reports, and plug reports for all known wells within 500 feet of the Facility;<sup>114</sup>
- the location of 29 oil wells located within 500 feet of the Facility; of those 29, 12 are active oil wells and 17 are abandoned;<sup>115</sup>
- Fourteen oil wells located within the Property, five oil wells are active and nine are plugged. None of the active wells are located within the footprint of the proposed waste disposal units;<sup>116</sup>
- well reports from the RRC for the nine plugged wells located within the permit boundaries of the Facility.<sup>117</sup>

According to Mr. Balde, documentation of plugging of inactive wells from the Texas Railroad Commission (RRC) was provided for all plugged wells within the proposed waste footprint.<sup>118</sup> The Application further specifies that 30 days prior to construction, Applicant will provide written certification to the ED that any abandoned oil wells not identified in the Application have been capped, plugged, and closed in accordance with all applicable rules of the RRC.<sup>119</sup>

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<sup>113</sup> Application, Part II, Section 13.1, Page II-19; Appendix II.A, Figure II.A.5.

<sup>114</sup> Application, Part III, Attachment III.E6.

<sup>115</sup> Application, Part II, Section 13.1, Page II-19.

<sup>116</sup> Application, Part II, Section 13.1, Page II-19.

<sup>117</sup> Application, Part III, Attachment III.E7.

<sup>118</sup> See Application, Part III, Attachment E, Appendix E6; Part II, Section 13.1, Page II-19; Appendix II.A, Figure II.A.5.

<sup>119</sup> Application, Part IV, Section 25, Page IV34.

### **3. Analysis**

Protestants did not provide argument on this issue. Given the sufficient identification of the well information required in the Application, the preponderant evidence demonstrates compliance with the requirements of TCEQ Rule 330.61(l). Accordingly, Applicant has met its burden of proof on this issue.

## **V. TRANSCRIPT COSTS**

TCEQ Rule 80.23(d) provides for the allocation of transcript costs among the parties, excluding the ED and OPIC. In allocating those costs, the Commission is to consider the following applicable factors in allocating reporting and transcription costs among the other parties:

- The party who requested the transcript;
- The financial ability of the party to pay the costs;
- The extent to which the party participated in the hearing;
- The relative benefits to the various parties of having a transcript; and
- Any other factor which is relevant to a just and reasonable assessment of costs.

The ALJ ordered Applicant to arrange for and pay the costs of having a court reporter attend the hearing and prepare a transcript, subject to allocation of such costs at the end of the proceeding. Both Applicant and Knox/Henderson argue that the other should be responsible for 100% of the transcript costs.

The Applicant and Knox/Henderson participated roughly equally in the hearing, although Applicant had more witnesses and spent one of four days of hearing cross-examining one of Knox/Henderson's witnesses. Both sides cited to the transcript in their closing arguments; therefore, both sides benefitted from having a transcript. There is no direct evidence concerning the respective financial abilities of the parties to pay the transcript cost. Additionally, however, of the 15 issues submitted to the ALJ for final analysis, Protestants only prevailed on one. Based on the above, the ALJ recommends that the Commission assess Applicant 30% of the transcript costs, and Knox/Henderson 70% of the transcript costs.

## **VI. CONCLUSION**

In conclusion, the ALJ determined that the evidentiary record does not support issuance of the Draft Permit, and therefore, recommends that the Application be denied. The ALJ further recommends that the Commission adopt all Findings of Fact and Conclusions of Law in the Proposed Order on these issues. The ALJ recommends that the Commission not adopt the parties' proposed Findings of Fact and Conclusions of Law that the ALJ did not include in the Proposed Order, based on the reasoning set out in the Proposal for Decision.<sup>120</sup>

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<sup>120</sup> 30 Tex. Admin. Code § 80.252(d).



**SIGNED SEPTEMBER 13, 2022.**



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Megan Johnson,

Presiding Administrative Law Judge



**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

**AN ORDER  
DENYING THE APPLICATION BY  
DIAMOND BACK RECYCLING AND SANITARY LANDFILL, LP  
FOR NEW MSW PERMIT NO. 2404  
IN ECTOR COUNTY, TEXAS;  
SOAH DOCKET NO. 582-22-0844;  
TCEQ DOCKET NO. 2021-1000-MSW**

On \_\_\_\_\_, the Texas Commission on Environmental Quality (TCEQ or Commission) considered the application of Diamond Back Recycling and Sanitary Landfill, LP (Applicant) for a new Municipal Solid Waste (MSW) Permit No. 2404 in Ector County, Texas. A Proposal for Decision (PFD) was presented by Megan Johnson, Administrative Law Judge (ALJ) with the State Office of Administrative Hearings (SOAH), who conducted an evidentiary hearing concerning the application on May 23-26, 2022, in Austin, Texas via Zoom videoconferencing. After considering the PFD, the Commission makes the following findings of fact and conclusions of law.

## I. FINDINGS OF FACT

### Application

1. Diamond Back Recycling and Sanitary Landfill, LP (Applicant) filed an application for new MSW Permit No. 2404 with the Texas Commission on Environmental Quality (TCEQ or Commission) on August 5, 2019.
2. The application requests authorization to construct and operate a new Type I landfill facility, with both Type I and Type IV disposal cells, in Ector County, Texas.
3. The proposed landfill facility (Facility) is located in Ector County, on FM 866 approximately 2.0 miles northwest of the intersection of FM 866 and U.S. Highway 20.
4. The proposed permit boundary area consists of a 202-acre tract of land.
5. The Facility is owned and will be operated by the Applicant.
6. TCEQ's Executive Director (ED) declared the application administratively complete on October 1, 2019.
7. The ED determined the application to be technically complete on September 11, 2020, and issued a draft permit.

### Notice and Jurisdiction

8. On November 9, 2019, the Notice of Receipt of Application and Intent to Obtain a Municipal Solid Waste Permit was published in the *Odessa American*.
9. After the ED completed the initial technical review of the application, on September 29, 2020, the Notice of Application and Preliminary Decision was published in in the *Odessa American*.
10. On December 22 and 29, 2020 and January 5, 2021, the Notice of Public Meeting for Municipal Solid Waste Permit was published in the *Odessa American*.

11. On January 14, 2021, TCEQ's Chief Clerk's office conducted a virtual Public Meeting to receive comments from the public.
12. On June 21, 2021, the ED filed the Response to Comments.
13. On October 6, 2021, the Commission entered an Interim Order granting the hearing requests of Knox Real Property, Jason Harrington, Moss Dean Ranch, Betty Moss Dean, and C.A. and Betty Moss Dean FLP.
14. The Commission identified 19 issues for referral to the State Office of Administrative Hearings (SOAH) in the Interim Order.
15. On January 3, 2022, SOAH received the administrative record from TCEQ.
16. Notice of the preliminary hearing was sent to interested parties on December 28, 2021, and published in the *Odessa American* on December 29, 2021. The notice included the time, date, and place of the hearing, as well as the matters asserted, in accordance with the applicable statutes.

### **Proceedings at SOAH**

17. The SOAH preliminary hearing was held via Zoom videoconference before Administrative Law Judge (ALJ) Megan Johnson on February 2, 2022.
18. No jurisdictional objections were raised at the preliminary hearing, and, following the preliminary hearing, the ED provided the required jurisdictional exhibits as requested by the ALJ.
19. The ALJ found that notice had been adequately provided and that both TCEQ and SOAH have proper jurisdiction over this matter.
20. At the preliminary hearing, the ALJ admitted the following as parties to this proceeding: (1) the Applicant; (2) the ED; (3) the Office of Public Interest Counsel; (4) Knox Real Property (Knox); (5) Jason Harrington (Harrington); and (6) Diversity Trucking.
21. On May 17, 2022, Knox and Harrington conceded referred issue K in response to Applicant's Motion for Partial Summary Disposition.

22. On May 20, 2022, the ALJ issued Order No. 4, in which the ALJ granted the Applicant's Agreed Motion to Dismiss Stipulated Issues dismissing 4 of the 19 issues referred to SOAH by TCEQ. Pursuant to the parties' agreement, Order No. 4 dismissed referred issues B, C, J, and N.
23. The hearing on the merits was held via Zoom videoconference starting on May 23, 2022, in Austin, Texas. The Applicant, ED, OPIC, Harrington, Knox, and Diversity Trucking participated in the hearing. The hearing concluded on May 26, 2022. The record closed on July 13, 2022, after the parties submitted written closing arguments and responses.

### **Sufficient Property Interest**

24. The Applicant owns the 202-acre tract upon which the Facility is proposed to be located.
25. The application provided the legal description of the property, a metes and bounds survey of the property, and a property owner affidavit.
26. The Applicant has obtained acknowledgement from the current mineral operator to accommodate the use of the property as an MSW landfill.

### **Competency**

27. The application indicates that the Facility supervisor shall possess a Class A license before commencing Facility operations.
28. The application indicates that Michael G. Valenzuela will act as the principal/owner and operator of the Facility.
29. The application lists the previous affiliations of Michael G. Valenzuela with other organizations engaged in solid waste activities.
30. The application lists the number and size of each type of equipment to be dedicated to Facility operation.

## **Compatible Land Use**

31. The Facility is located in an area of Ector County that is not zoned or restricted to any uses.
32. The application includes information about the character of surrounding land uses within one mile of the Facility.
33. The application includes the proximity of the Facility to residences and other uses within one mile.
34. There are 114 single-family residences, 118 mobile homes, and five commercial establishments within one mile of the Facility.
35. There are no cemeteries, churches, community centers, hospitals, schools, or daycares licensed by the Texas Department of Family and Protective Services located within one mile of the Facility.
36. In addition to the residential and commercial uses listed in Finding No. 33, the area within five miles of the Facility consists of vacant land, oil and gas drill sites, an oil and gas waste landfill, a municipal solid waste landfill, an oil and gas equipment storage facility, rock quarry/crushing operations and a planned natural gas to gasoline conversion plant.
37. The application includes a description and discussion of all known wells within 500 feet of the Facility.
38. There are three water wells located within 500 feet of the Facility, two of which are located within the permit boundaries.
39. The application includes information about the growth trends within five miles of the Facility.

## **Availability and Adequacy of Roads**

40. The preferred route to access the Facility will be FM 866, a two-lane undivided highway maintained by the Texas Department of Transportation (TxDOT).

41. The Applicant proposed to TxDOT to submit a driveway permit for reconstruction of the existing access to include driveway widening on the driveway side of FM 866 for 250 feet on either side of the driveway after the solid waste permit is issued.
42. The Applicant proposed to provide TxDOT an updated traffic analysis upon formal request from TxDOT after the Facility is fully operational.
43. TxDOT provided a letter dated July 17, 2020, concurring with the Applicant's proposals.
44. Based on the Applicant's commitment to submit a driveway permit and updated traffic analysis, the roads used to access the Facility are available and adequate.

### **Design and Operation of Landfill Liner**

45. The Applicant proposes to construct an alternate liner system that is comprised of a reinforced geosynthetic clay liner (GCL) overlain by a 60-mil geomembrane.
46. The alternate liner system will be installed on top of a 30-mil geomembrane that will serve as a barrier between the liner system and the subgrade.
47. The application contains a liner quality control plan (LQCP).
48. The LCQP contains detailed information on the installation of the liner, including preparation of the subgrade.
49. The LCQP includes a detailed testing regimen during installation of the liner.
50. The Applicant will be required to have a Liner Evaluation Report prepared by a licensed professional engineer and submitted to TCEQ for formal approval before receiving approval for waste disposal.
51. GCL's typically have a hydraulic conductivity between two and four orders of magnitude lower than compacted soil liners.

## **Design and Operation of Landfill Cover**

52. The application contains both a prescriptive and alternative cover design.
53. The Applicant proposes and the draft permit requires the installation of the prescriptive cover detailed in TCEQ regulations.
54. The prescriptive cover is comprised of an 18-inch infiltration layer overlain by a 40-mil geomembrane overlain by a geocomposite overlain by a 6-inch erosion layer.
55. The application contains a Final Cover Quality Control Plan and a Final Contour Plan.

## **Potential Seismic Impact Zones**

56. The application identifies and provides data on seismic impact zones.
57. The United States Geologic Survey has created a map to assess and document seismic risk across the United States called *USGS Scientific Investigations Map, 3325, Sheet 2 of 6*.
58. According to the *USGS Scientific Investigations Map, 3325, Sheet 2 of 6*, the Facility is not located in a seismic impact zone as defined by TCEQ.

## **Erosion Control and Prevention**

59. The application addresses design and operation of the Facility to provide effective erosional stability to top dome surfaces and external embankment side slopes during all phases of landfill operation, closure, and post-closure care.
60. The application provides that erosional stability is achieved through design and construction of appropriate side slopes, swales, letdown chutes, and



channels to capture and convey stormwater in a controlled manner along with appropriate operating provisions.

61. The application proposes and the draft permit requires that the Applicant maintain a 60% vegetative cover on the final landfill cover to assist in prevention of erosion.
62. The application requires regular inspections of the Facility to determine if erosion has occurred, and, if erosion is discovered that is deep enough to jeopardize the final or intermediate cover, the Applicant must repair the erosion within five days.

### **Surface Water Drainage Report**

63. The application contains a Surface Water Drainage Report, which fails to demonstrate that the Facility will be constructed, maintained and operated to manage run-on and runoff during the peak discharge of a 25-year, 24-hour rainfall event without adversely affecting existing drainage patterns and preventing the discharge of waste.
64. Applicant utilized the Rational Method and the Modified Rational Method to determine the peak flow and volume of runoff from both pre- and post-construction conditions.
65. The facilities to control runoff are inadequately sized. Consequently, the peak flow rates being discharged from the two proposed detention ponds will greatly exceed existing peak flow rates and adversely alter existing drainage patterns.

### **Easements**

66. The application includes a map identifying all recorded easements on the Facility.
67. The application shows that all solid waste unloading, storage, disposal, and processing operations are located outside all easements, buffer zones, and rights-of-way that cross the Facility.

68. The application states that no solid waste disposal shall occur within 25 feet of the centerline of any utility line or pipeline easements.
69. The application indicates that equipment serving the oil and gas operations on the Facility property, such as speed lines and electric utility lines, will be relocated in cooperation with the mineral operator.

### **Waste Screening Measures**

70. The application contains procedures for the detection and prevention of the disposal of prohibited wastes.
71. The procedures for detection and prevention of disposal of prohibited waste include notices by signage, training personnel to detect prohibited waste, inspections of waste loads, maintaining records of inspections, and notification to the ED and remediation, if necessary.
72. The application calls for the unloading of waste to be conducted in as small a space as possible, with trained personnel monitoring the unloading of waste.
73. The application provides that if prohibited waste is discovered after unloading, it will be placed back on the offending vehicle.
74. The application provides that if prohibited waste is discovered after the transport vehicle has left the Facility, the prohibited waste will be segregated and controlled as necessary, and efforts will be made to identify the offender and return the prohibited waste.

### **Groundwater Protection**

75. The application includes a Geology Report with sufficient information about regional aquifers, the subsurface investigation conducted at the Facility, site specific groundwater observations, permeability of site soils, site hydrogeology, water levels, and groundwater flow direction and rate.
76. The application identifies and locates all water wells within one mile of the property boundaries of the Facility. A total of 185 possible water wells were

identified within the one-mile radius, with most wells occurring over 4,000 feet to the southeast of the Facility.

77. The application includes a TCEQ-approved Soil Boring Plan, the associated field activities, the location and depth of the borings, the boring logs, and the hydrogeologic site characterization.
78. The application contains a description of the site stratigraphy, which includes a narrative of the professional geoscientist's interpretations of the subsurface stratigraphy based upon the field investigation.
79. The groundwater gradient map in the application shows groundwater flow in the Antlers Sand to be generally from the northwest to the southeast.
80. Hydraulic tests of samples of the silty and clayey horizons in the zone above the Antlers Sand, indicate highly impermeable conditions exist in the order of 10<sup>-6</sup> to 10<sup>-7</sup> centimeters per second.
81. The application provides a map that includes the delineation of the waste management areas, the property boundary, the proposed point of compliance, the groundwater gradient, and the proposed location of the groundwater monitoring wells.
82. The application describes a groundwater monitoring program, which includes consistent sampling analysis procedures that are designed to ensure monitoring results that will provide an accurate representation of groundwater quality at the background and point of compliance wells.
83. The application provides for seven monitoring wells downgradient of the landfill at the point of compliance and one background monitoring well upgradient of the landfill.

### **Site Operating Plan**

84. The application contains a site operating plan (SOP) providing guidance to site management and operating personnel to meet the general and site-specific requirements of TCEQ regulations.

85. The application indicates that the SOP will be retained during the active life of the Facility and during the post-closure care period.
86. The SOP describes the record keeping that must be maintained and become part of the Site Operating Record.
87. The SOP describes the types, responsibilities, and qualifications required for site personnel.
88. The SOP describes the equipment to be kept and maintained at the Facility.
89. The SOP provides a site inspection and maintenance list including the frequency each item must be inspected.
90. The SOP details the training that site personnel will be required to receive according to their position.
91. The SOP contains a chapter on the detection and prevention of prohibited waste.
92. The SOP provides details on fire prevention and procedures to take in case of fire.
93. The SOP describes site security and access control.
94. The SOP mandates that waste unloading shall occur in as small of space as practicable.
95. The SOP identifies when the Facility will be open to receive waste from the public and the operating hours, and that the Facility will keep a record of the site operations.
96. The SOP mandates that a sign be erected and maintained at the site entrance and specifies what will be included on the sign.
97. The SOP specifies that windblown waste and litter will be controlled through proper unloading, compaction, and cover procedures.

98. The SOP specifies that no solid waste operations will occur in any easement, buffer zone, or right of way that crosses the Facility.
99. The SOP specifies that markers will be erected and maintained to clearly identify features such as facility boundaries, easements, and buffer zones.
100. The SOP specifies that the Applicant will encourage waste haulers to secure their loads to prevent escape by blowing or spilling and will post signs and report offenders to law enforcement. The SOP also states that the Applicant will clean up spilled waste along access roadways for two miles in either direction from the site entrance daily.
101. The SOP describes the procedures for landfill cover.
102. The SOP specifies that ponded water over waste in a landfill, regardless of origin, will be prevented, and states that ponded water that occurs in an active portion of a landfill will be eliminated and the area where the ponding occurred will be filled and regraded within seven days of the occurrence.
103. The SOP contains a sufficient Fire Protection plan, which specifies that landfill fires will normally be extinguished by smothering with cover material spread by dozer, and that a minimum of 111 cubic yards or enough soil to cover a working face with at least 6 inches of compacted soil be stockpiled within 2,000 feet of the working faces of both the Type I and Type IV landfills.

### **Oil and Gas and Water Wells**

104. The application identifies and provides the location of water wells situated within the Facility. There are three existing and one abandoned water wells within 500 feet of the Facility.
105. The application identifies and provides the location of 29 oil wells located within 500 feet of the Facility. Of those 29 oil wells, 12 are active and 17 are abandoned.
106. The application identifies 14 oil wells located within the Facility. Of those 14 oil wells, five are active and nine are plugged.

107. The application specifies that the Applicant will provide the ED written certification that all abandoned oil wells identified in the application have been capped, plugged, and closed in accordance with all applicable rules of the Railroad Commission of Texas.

### **Transcript Fees**

108. Reporting and transcription of the hearing on the merits was warranted because the hearing lasted for four days.

109. Applicant, Knox/Harrington, and the ED fully participated in the hearing by presenting witnesses and cross-examining witnesses. Diversity Trucking did not present any direct witness testimony.

110. Both the Applicant and Knox/Harrington participated roughly equally in the hearing, although Applicant had more witnesses and spent one of four days of hearing cross-examining one of Knox/Harrington's witnesses.

111. Both Applicant and Knox/Harrington cited to the transcript in their closing arguments; therefore, both sides benefitted from having a transcript.

112. There was no evidence that any party subject to allocation of costs is financially unable to pay a share of the costs.

113. Of the 15 issues submitted to the ALJ for final analysis, Protestants only prevailed on one.

114. Applicant should pay 30% of the transcript costs; Knox/Harrington should pay 70% of the transcript costs.

## **II. CONCLUSIONS OF LAW**

1. The Commission has jurisdiction over the disposal of municipal solid waste and the authority to issue a permit. Tex. Health & Safety Code § 361.061.
2. SOAH has jurisdiction to conduct a hearing and to prepare a Proposal for Decision in contested cases referred by the Commission. Tex. Gov't Code § 2003.047.

3. Notice was provided in accordance with Texas Health and Safety Code §§ 361.0665 and 361.081, Texas Government Code §§ 2001.051 and 2001.052, and 30 Texas Administrative Code §§ 39.405 and 39.501.
4. The application is subject to the requirements in Senate Bill 709, effective September 1, 2015. Tex. Gov't Code § 2003.047(i-1)-(i-3).
5. The filing of the administrative record established a prima facie case that: (i) the draft permit meets all state and federal legal and technical requirements; and (ii) a permit, if issued consistent with the draft permit, would protect human health and safety, the environment, and physical property. Tex. Gov't Code § 2003.047(i-1).
6. The Applicant retains the burden of proof on the issues regarding the sufficiency of the application and compliance with the necessary statutory and regulatory requirements. 30 Tex. Admin. Code § 80.17(a).
7. The Applicant demonstrated a sufficient property interest as required by Commission rules. 30 Tex. Admin. Code § 330.59(d).
8. The application adequately demonstrates evidence of competency as required by TCEQ rules. 30 Tex. Admin. Code § 330.59(f).
9. The Facility is a compatible land use. 30 Tex. Admin. Code § 330.59(f).
10. The roads used to access the Facility are available and adequate. 30 Tex. Admin. Code § 330.61(i).
11. The proposed design and operation of the landfill liner meets all applicable requirements of the TCEQ rules. 30 Tex. Admin. Code §§ 330.63(d)(4)(G) and 330.331-.341.
12. The proposed design and operation of the landfill cover meets all applicable requirements of the TCEQ rules. 30 Tex. Admin. Code §§ 330.63(h), .451, .457, and .461-.465.
13. The application adequately addresses potential seismic impact zones at the Facility. 30 Tex. Admin. Code §§ 330.61(j)(3), .63(e)(2), and .557.
14. The design and operation of the Facility includes sufficient measures for erosion control and prevention. 30 Tex. Admin. Code §§ 330.305 and .457.

15. An owner or operator of an MSW facility must design a runoff management system from the active portion of the landfill to collect and control at least the water volume resulting from a 24-hour, 25-year storm. 30 Tex. Admin. Code § 330.305(c).
16. The application fails to contain an adequate surface water drainage report. 30 Tex. Admin. Code §§ 330.63(c) and 330.303-.307.
17. The application adequately delineated and addressed easements at the Facility. 30 Tex. Admin. Code §§ 330.61(c)(10), .141, and .543.
18. The Applicant has adequately proposed waste screening measures. 30 Tex. Admin. Code §§ 330.127(5) and .133.
19. The landfill will be protective of groundwater. 30 Tex. Admin. Code §§ 330.403, .405(a), (b)(3)(B), (d), and .417(a), (b)(1)-(4).
20. The application provided an adequate SOP. 30 Tex. Admin. Code § 330.127.
21. The application and the draft permit have adequately addressed the oil and gas and water well provisions in the TCEQ rules. 30 Tex. Admin. Code § 330.61(l).
22. Because the application does not contain an adequate surface water drainage report, the requested permit should not be issued.
23. No transcript costs may be assessed against the ED or OPIC because TCEQ's rules prohibit the assessment of any cost to a statutory party who is precluded by law from appealing any ruling, decision, or other act of the Commission. 30 Tex. Admin. Code § 80.23(d)(2).
24. Factors to be considered in assessing transcript costs include: the party who requested the transcript; the financial ability of the party to pay the costs; the extent to which the party participated in the hearing; the relative benefits to the various parties of having a transcript; the budgetary constraints of a state or federal administrative agency participating in the proceeding; and any other factor which is relevant to a just and reasonable assessment of the costs. 30 Tex. Admin. Code § 80.23(d)(1).



25. Considering the factors in 30 Texas Administrative Code § 80.23(d)(1), a reasonable assessment of hearing transcript costs against parties to the contested case proceeding is: 30% by the Applicant and 70% by Knox/Harrington.

**NOW, THEREFORE, BE IT ORDERED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY, IN ACCORDANCE WITH THESE FINDINGS OF FACT AND CONCLUSIONS OF LAW, THAT:**

1. Applicant's application for Municipal Solid Waste Permit No. 2404 is denied.
2. Applicant must pay 30% of the transcription costs and Knox/Harrington must pay 70% of the transcription costs.
3. The Commission adopts the ED's Response to Public Comment in accordance with 30 Texas Administrative Code section 50.117.
4. All other motions, requests for entry of specific Findings of Fact or Conclusions of Law, and any other requests for general or specific relief, if not expressly granted herein, are hereby denied.
5. The effective date of this Order is the date the Order is final, as provided by Texas Government Code section 2001.144 and 30 Texas Administrative Code section 80.273.
6. TCEQ's Chief Clerk shall forward a copy of this Order to all parties.
7. If any provision, sentence, clause, or phrase of this Order is for any reason held to be invalid, the invalidity of any provision shall not affect the validity of the remaining portions of this Order.

**ISSUED:**

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

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**Jon Niermann, Chairman, For the Commission**