SOAH DOCKET NO. 582-22-0844
TCEQ DOCKET NO: 2021-1000-MSW

IN THE MATTER OF THE APPLICATION BY DIAMOND BACK RECYCLING AND SANITARY LANDFILL, LP FOR NEW MSW PERMIT NO. 2404	**§**	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

KNOX REAL PROPERTY DEVELOPMENT, LLC AND JASON HARRINGTON'S REPLY TO EXCEPTIONS TO THE PROPOSAL FOR DECISION

TO THE HONORABLE COMMISSIONERS OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY:

Protestants Knox Real Property Development, LLC ("Knox") and Jason Harrington ("Harrington") (collectively, "Protestants") submit this Reply to Exceptions to the Administrative Law Judge's ("ALJ") Proposal for Decision ("PFD") relating to the application by Diamond Back Recycling and Sanitary Landfill, LP ("Diamond Back" or "Applicant") for new MSW Permit No. 2404. Protestants support the ALJ's recommendation of denial of Diamond Back's permit application and agree that the surface water drainage report supplied by Diamond Back does not comply with TCEQ's regulatory requirements. Protestants urge the Commission to reject the exceptions submitted by the Applicant and the Executive Director ("ED") and adopt the ALJ's recommendation of denial. For support, Protestants offer the following.

I. SURFACE WATER DRAINAGE REPORT

Reply to Exceptions by the Applicant

Much like its Closing Arguments and Response to Closing Arguments, Diamond Back's exceptions are fraught with inappropriate attempts to tarnish the expertise, opinions, and motivations of Lawrence Dunbar, P.E.—Protestants' expert witness. Diamond Back struggles to find some flaw with the testimony and opinions offered by Mr. Dunbar, while ignoring the fact

that its own expert witness, Mr. Stiggins, admitted that he failed to comply with TCEQ's regulations.[1] This reflects Diamond Back's misunderstanding of its burden in this proceeding.

Diamond Back bore the burden of proof in this matter, not Protestants. Mr. Dunbar's testimony rebutted the prima facie presumption on the issue of surface water drainage, and thus, Diamond Back was tasked with presenting evidence sufficient to satisfy its burden of proving compliance with TCEQ's regulations. This Diamond Back failed to do. Thus, the ALJ recommended denial, based on Diamond Back's failure to comply with TCEQ rules addressing the surface water drainage report. Protestants urge the Commission to adopt the ALJ's recommendation.

A. TCEQ regulations require an applicant to demonstrate that the proposed facility will not adversely alter existing drainage patterns.

As summarized in the PFD, Protestants raised two fundamental flaws with Diamond Back's surface water drainage analysis. First, Diamond Back failed to prove that existing drainage patterns will not be adversely altered by the proposed landfill development. And second, Diamond Back failed to adequately size its detention ponds to collect and detain the surface water from the site so as to ensure that existing drainage patterns are not adversely altered.[2] Diamond Back failed to comply with both of these essential requirements.

With regard to the analysis demonstrating that existing drainage patterns will not be adversely altered, TCEQ guidance explains that the applicant "must include a point-by-point analysis of the surface water drainage conditions to demonstrate that existing drainage patterns

[1] *See, e.g.,* Tr. Vol. 3, pp. 124-25; Ex. Knox-12 (admitting that Exhibit Applicant-204, depicting hydrographs for Ponds A and B, which were created based on information in the permit application, do not reflect a 24-hour storm duration, because it "does not have to").
[2] 30 Tex. Admin. Code §§ 330.63(c)(1), 330.305.

will not be adversely altered."[3] 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 then compare those existing conditions to the proposed surface water drainage conditions after the landfill is fully developed. 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."[4]

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.[5]

Further, to ensure that the proposed landfill development will not adversely alter existing drainage patterns, an applicant must properly locate, calculate, and design necessary collection, drainage, and/or detention facilities—upstream from the stormwater discharge points.[6] The 25-year, 24-hour storm event must be used to calculate and design these drainage structures.[7]

B. Diamond Back's surface water drainage report did not accurately account for existing conditions at the site.

The ALJ's PFD accurately summarizes the issues raised by Protestants regarding the inadequacies of the surface water drainage report and the evidence presented during the hearing. Protestants provide the following factual background as context for the arguments that follow.

[3] Ex. Knox-15, p. 3.
[4] Ex. Knox-15, p. 4.
[5] Ex. Knox-15, p. 3.
[6] Ex. Knox-15, p. 5.
[7] Ex. Knox-15, p. 9.

In this case, there is no dispute that under existing conditions, surface water runs off the site via overland flow—either sheet or shallow concentrated flow.[8] In other words, surface water is exiting the site, at the perimeter, in a diffuse manner, not via a channelized flow or defined discharge route.[9] And the water is, for the most part, exiting the eastern perimeter of the site.[10]

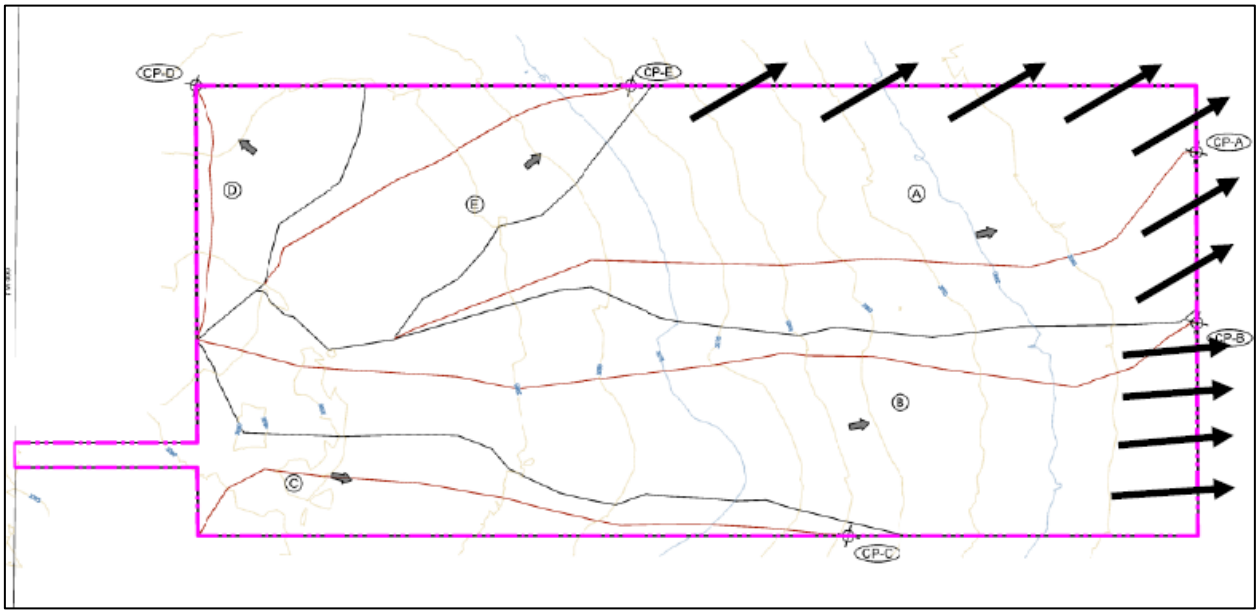

Figure 1 – Application Figure III.C1.1 with Notations[11]

For fully developed landfill conditions, the applicant has proposed two detention ponds (North Pond and South Pond) at the eastern perimeter of the site, and intends to route surface water from two large drainage areas (Drainage Area A and Drainage Area B) to these two detention ponds where it will be discharged over weirs at these two points.[12] This is the infrastructure that

[8] Ex. Knox-200, p. 5; *see also* Tr. Vol. 3, p. 119-20.
[9] Ex. Knox-200, p. 8.
[10] Ex. Knox-202.
[11] *Id*.
[12] Tr. Vol. 3, p. 120.

applicant has proposed to rely on for purposes of verifying that existing surface water drainage patterns will not be adversely altered.

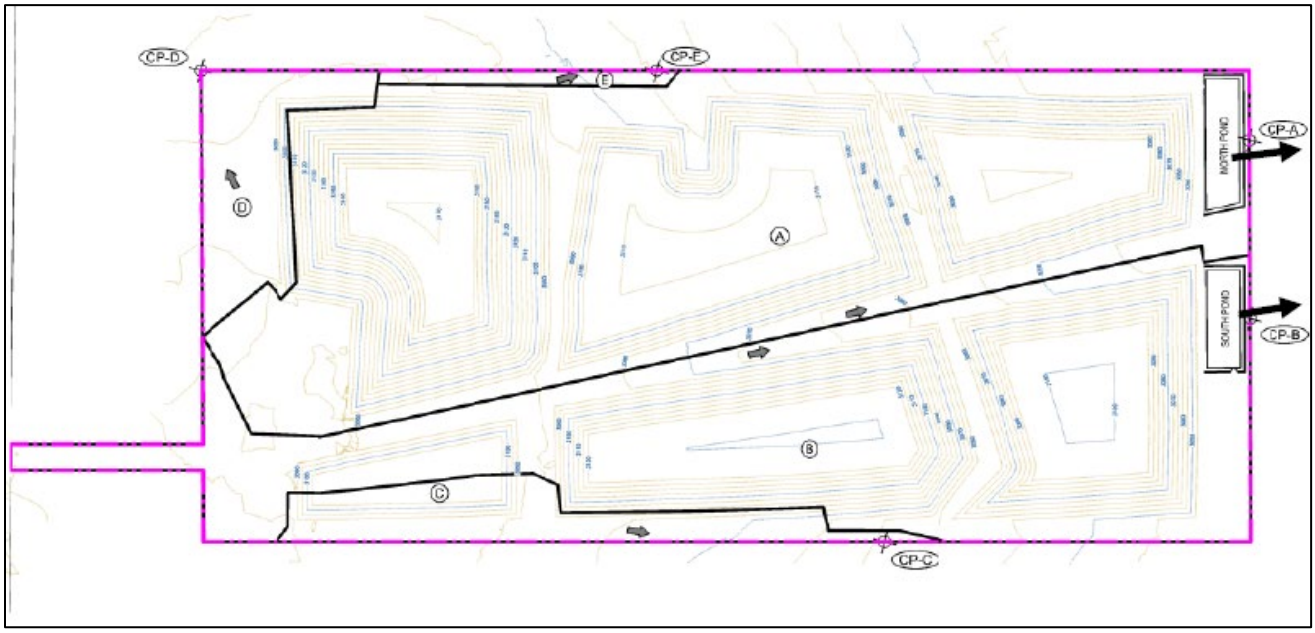

Figure 2 – Application Figure III.C2.1 with Notations[13]

The first issue with Applicant's surface water drainage report is that Applicant failed to reliably and accurately reflect existing surface water drainage conditions in its analysis. In other words, Applicant's baseline is inaccurate, which renders its comparison to proposed fully developed landfill conditions inaccurate. This, in turn, means that the Applicant cannot demonstrate that existing drainage patterns will not be adversely altered by the proposed landfill.

As explained above, there is no dispute that under existing conditions, surface water exits the site via overland flow, not via defined discharge routes/channels or specific discharge points. This runoff is generally leaving the site all along the permit boundary of the site.

As shown in Figure 1, above, flow from the two largest drainage areas—Drainage Areas A and B—leaves the site generally via overland flow along the eastern and northeastern perimeter

[13] Ex. Knox-203.

of the site. (For purposes of this discussion, Protestants will focus on these two drainage areas only.) This is made evident in the photos that were taken of the eastern boundary of the site by Dr. Zornberg,[14] the topographic information in the application,[15] the narrative description in the application,[16] and even by Mr. Stiggins' testimony.[17]

Yet, this overland flow, along the perimeter of the site, is not accounted for in identifying and locating the peak flows for existing conditions by the Applicant.[18] Instead, baseline, existing surface water flow conditions are reflected as discharging at a single point for each of the 5 drainage areas, in the application, designated as Comparison Points A, B, C, D, and E. This means that the peak flows for existing conditions computed for the 5 drainage areas by the Applicant are being assigned not along the permit boundary as overland flow, but as the peak flow that is occurring at each of the 5 specific discharge points or "comparison points." But in reality, those peak flows are overland flows discharging along the permit boundary, with only a small portion of the computed peak flows leaving the site at the specific comparison points.

To illustrate, Protestants call the Commissioners' attention to Drainage Area B and Comparison Point B, shown in the figures above. Under existing conditions, surface water from Drainage Area B exits the site as overland flow, along the southeastern perimeter of the site. But Diamond Back has assumed that the surface water from Drainage Area B leaves the site only at Comparison Point B. Thus, Diamond Back assigned the calculated peak flow rate for Drainage Area B to this one discharge point location, when, in reality, the peak flow occurs all along the southeastern permit boundary, not at this one discharge location. Had Diamond Back

[14] Ex. Knox-107.
[15] Admin. Record Tab D, Initial Submittal, Vol. 2, Figure III.C.1.1 (PDF p. 62).
[16] Admin. Record Tab D, Initial Submittal, Vol. 2, p. III.C-6 (PDF p. 52).
[17] Tr. Vol. 3, p. 120.
[18] Peak flows, along with velocity and volume, are among the factors that must be analyzed to verify that existing drainage patterns will not be adversely altered. Ex. Knox-15, p. 5.

acknowledged and accurately reflected these conditions, it would have adjusted the peak flow at Comparison Point B so as to reflect what portion of the computed peak flow is discharging at this one location. Because Diamond Back failed to do this—that is, because Diamond Back failed to account for the fact that the calculated peak flow is for surface water that flows and discharges overland along the permit boundary instead of at a single discharge point—its peak flow for Comparison Point B is an overestimation of flow at this particular comparison point.

Mr. Dunbar, Knox's expert witness, recognized that to properly make the comparison between existing conditions and proposed fully-developed landfill conditions at the permit boundary, as required by the TCEQ regulations, the comparison of computed peak flows needs to be made at the same discharge locations.[19] Because Diamond Back is proposing to use two detention ponds (North and South) to collect and discharge most of the runoff from the proposed landfill, these pond discharge locations should be used to make the comparison between existing conditions and fully-developed landfill conditions.

The South Pond (where runoff from Drainage Area B would be routed) uses a 71-foot-wide weir. Thus, to determine the peak flow rate for existing conditions (the baseline condition) for the area where runoff from Drainage Area B is proposed to discharge from the site, Mr. Dunbar focused on the area where the 71-foot-wide weir would be located—because that is where runoff from Drainage Area B is proposed to be discharged, after being routed to the South Pond, under fully developed conditions. Starting with the peak flow rate computed by Diamond Back for Comparison Point B (which erroneously assumes that under existing conditions, all runoff from Drainage Area B discharges at this one discharge point), Mr. Dunbar calculated that portion of the flow that discharges off of the site across the 71-foot-wide area along the permit boundary where

[19] As Mr. Dunbar explained, Applicant's analysis of velocity and volume were also unreliable and inaccurate. For brevity, Protestants focus only on peak flows for discussion of Applicant's erroneous analysis of existing conditions.

the proposed weir would be located, and his calculation resulted in less than 5 cubic feet per second (cfs), for existing conditions.[20] That is, Mr. Dunbar calculated the peak flow rate for existing conditions for that specific area along the permit boundary where runoff from Drainage Area B is proposed to be discharged, after the landfill is fully developed, and the peak flow rate was less than 5 cfs. Applicant had 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.

For fully developed landfill conditions, Diamond Back calculated the peak flow rates for the discharges leaving Ponds A and B. For the discharges coming out of the South Pond, or Comparison Point B, Applicant calculated the peak flow rate coming out of the South Pond to be 54 cfs—which is much greater than the 5 cfs computed by Mr. Dunbar for this location under existing conditions. The same is true for the North Pond, or Comparison Point A; Diamond Back calculated the peak flow rates coming out of the North Pond, or Comparison Point A, to be 65 cfs—which, again, is much greater than the 5 cfs (closer to 3.5 cfs) computed by Mr. Dunbar for this location under existing conditions.

Both of these comparisons indicate that had Diamond Back properly reflected and considered flows under actual existing conditions—as overland flows leaving the site along the permit boundary, with only a portion of these flows discharging at specific locations—Diamond Back would have noticed that there will be a significant increase in peak flow rates at Comparison Points A and B under the proposed fully developed landfill conditions.

C. Diamond Back did not adequately size its detention ponds.

The detention ponds are the infrastructure proposed by Diamond Back to ensure that existing drainage patterns will not be adversely altered at the permit boundary. To achieve this

[20] Ex. Knox-200, p. 12.

objective, the ponds are intended to detain the surface water, before the water discharges from the site, so as to reduce the rate at which this water is being discharged. Thus, 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.[21]

TCEQ rules and its guidance documents instruct applicants that they must include calculations for each detention pond to document the relationship between water surface elevation, water inflow, outflow, and storage under peak design conditions.[22] Further, the 25-year, 24-hour storm event must be used for calculations and designs of drainage structures to address runoff control, such as detention ponds.[23] This Diamond Back did not do.

In his prefiled testimony and in his hearing testimony, Mr. Dunbar explained how his analysis of the information provided in the application materials and in response to discovery requests revealed that Applicant had undersized its ponds, and they were inadequate to achieve the overestimated peak flow rates that Applicant had erroneously calculated for existing conditions.[24] Of course, they were undersized by an even greater degree if they were intended to reduce peak flow rates to the actual existing conditions, which is less than 5 cfs.

As Mr. Dunbar explained, the detention ponds were sized to handle about a 25-year, 1-hour duration storm, rather than the 24-hour duration storm, and because the detention ponds were not based on the correct storm event, the detention ponds are inadequately sized.[25] Consequently, the peak flow rates being discharged from the two detention ponds will greatly exceed existing

[21] Ex. Knox-15, p. 4 (Applicant must: "Calculate the size of each detention pond and retention pond, and any other structure that will be used to reduce the peak flow rate and runoff volume at each discharge point.").
[22] 30 Tex. Admin. Code § 330.63(c)(1)(D)(ii); Ex. Knox-15, p. 4.
[23] Ex. Knox-15, p. 9.
[24] Ex. Knox-200, pp. 14-15; Knox-204; Tr. Vol. 2, pp. 21-28, 33-35.
[25] Ex. Knox-204; Tr. Vol. 2, pp. 21-28, 33-35 (describing what Exhibit Knox-204 depicts).

peak flow rates and adversely alter existing drainage patterns.[26] And this increase in peak flow rates exiting the site at the eastern permit boundary will adversely impact downstream property, like Protestants' property, via increased flood levels and duration, and erosion.[27]

But one need not rely on Mr. Dunbar's testimony to understand that Diamond Back failed to apply the required 25-year, 24-hour storm event when calculating and designing the detention ponds. Mr. Stiggins, Diamond Back's engineer of record, readily admitted that he did not use the 25-year, 24-hour storm event when calculating and designing the detention ponds. He did not believe that it was necessary to do so, despite the clear language in TCEQ's rules and guidance documents.[28] It is thus undisputed that Diamond Back did not use the 25-year, 24-hour storm event when calculating and designing the detention ponds and that Applicant, therefore, did not comply with TCEQ's regulations regarding detention pond design.

D. Diamond Back's latest arguments, in its Exceptions, reveals that it continues to misunderstand its burden in this proceeding.

Diamond Back's exceptions, like its closing arguments, fail to acknowledge that Diamond Back bore the burden of proof, and it failed to satisfy that burden. Indeed, as with its closing arguments, Diamond Back scarcely cites to its own witness testimony in support of its exceptions; instead Diamond Back struggles to find some flaw with the testimony and opinions offered by Mr. Dunbar, and it cites to documents that were never introduced or admitted into the evidentiary record.

TCEQ Rules 80.17 and 80.117(c)(3) and related statutory authority serve as the regulatory basis for the parties' respective legal burdens, including the burden to present evidence to rebut

[26] Ex. Knox-200, p. 15.
[27] Ex. Knox-200, p. 15.
[28] Tr. Vol. 3, pp. 124-25; Ex. Knox-12 (admitting that Exhibit Applicant-204, depicting hydrographs for Ponds A and B, which were created based on information in the permit application, does not reflect a 24-hour storm duration, because it "does not have to").

the prima facie demonstration regarding one or more provisions of the draft permit and the referred issues. Even under the process established by Senate Bill 709, at no stage and on no issue do Protestants bear a burden of proof. Rather, in order to rebut the prima facie presumption, Protestants need only to present evidence on an issue.

Under the process established by Senate Bill 709 of the 84th Regular Legislative session, the prima facie evidentiary presumption now embodied in TCEQ Rule 80.117(c) shifted the starting point for the contested case hearing process in a manner that spares an applicant from the initial need to submit testimony addressing every requirement applicable to a permit. Under Rule 80.117(c)(1), the filing of the administrative record in a case creates a rebuttable presumption that the draft permit satisfies all legal requirements. But the prima facie presumption found in Rule 80.117(c) may be rebutted, once protestants present some evidence on an issue relevant to the case.

Moreover, although TCEQ staff does not necessarily require an applicant to include all calculations, underlying data, and other information that form the basis of the statements included in the application—relying instead on the presence of a professional seal—more is required in a contested case hearing. A contested case hearing includes an opportunity for the parties to engage in discovery. And the hearing itself is conducted based on the rules of evidence, including the legal standards that apply to expert opinion testimony.[29] Thus, while the TCEQ staff may not require an applicant to present the basis for the statements included in a surface water drainage report, an applicant must do so when questioned about the reliability of those statements in the context of a contested case hearing.

[29] Courts must "rigorously examine the validity of facts and assumptions on which the testimony is based, as well as the principles, research, and methodology underlying the expert's conclusions and the manner in which the principles and methodologies are applied by the expert to reach the conclusions." *Whirlpool Corp. v. Camacho*, 298 S.W.3d 631, 637 (Tex. 2009). The data underlying an expert's opinion should be "independently evaluated in determining if the opinion itself is reliable." *Merrell Dow Pharms., Inc. v. Havner*, 953 S.W.2d 706, 713 (Tex. 1997); *accord Exxon Pipeline Co. v. Zwahr*, 88 S.W.3d 623, 629 (Tex. 2002); *Gammill v. Jack Williams Chevrolet, Inc.,* 972 S.W.2d 717, 728 (Tex. 1998).

As Mr. Yadav explained in his testimony, when reviewing the Applicant's drainage report to ensure it complies with TCEQ rules and the guidance documents, he checks to see whether the required information has been included in the application. And he relies on the fact that the drainage reports are sealed by a professional engineer; he conducts no independent verification of the design and calculations included in the drainage report. And so, in this case, when Mr. Yadav determined that the drainage report, and in particular the drainage structures, complied with TCEQ rules, it was based on his understanding that the detention ponds were designed for the 25-year, 24-hour storm event—because that is what is required by the rules.[30] In other words, because Mr. Yadav determined that the required information had been included in the surface water drainage report and because he declared it technically complete, the report was sufficient for purposes of satisfying the rebuttable presumption standard contemplated by Rule 80.117.

But when Knox presented testimony and evidence rebutting the presumption, Diamond Back was required to do more. Diamond Back was required to satisfy its burden of proving that its surface water drainage report in fact complied with TCEQ's regulatory requirements addressing surface water drainage.

Despite having had the benefit of Mr. Dunbar's prefiled testimony and his deposition testimony, Diamond Back simply failed to present the evidence necessary to satisfy its burden of proof. Even with its exceptions, Diamond Back continues to fail to point to any evidence in the record, demonstrating that it satisfied its burden, focusing instead on disparaging Mr. Dunbar.

[30] Tr. Vol. 4, pp. 146-47.

E. Diamond Back's latest litany of attacks on Mr. Dunbar reflects that Diamond Back's own evidence is inadequate to satisfy its burden of proof.

1. Diamond Back's existing conditions calculations were erroneous.

Diamond Back's latest arguments, in its exceptions, regarding Mr. Dunbar's critique of the existing conditions analysis in the surface water drainage report are confusing and unsubstantiated. This is consistent with Diamond Back's pattern of ignoring the evidence in the record, and instead disparaging Knox and its witnesses. Importantly, however, the record evidence, including evidence presented by Diamond Back, supports Mr. Dunbar's opinions and the ALJ's PFD.

As an initial matter, there is no dispute that the surface water exits the site, under existing conditions, via overland flow. The application and Mr. Stiggins agreed with this characterization of surface water flow at the site. And despite the fact that Mr. Dunbar testified—in his prefiled testimony, in his deposition testimony, and at the hearing on the merits—that Diamond Back's peak flow and velocity calculations were inaccurate because they assumed that the surface water exited the site at discrete discharge points instead of via overland flow, Diamond Back never provided any evidence to dispute Mr. Dunbar's opinion. Even now, Diamond Back does not argue that Mr. Dunbar is incorrect or that the PFD is incorrect in acknowledging that surface water flow exits the site, under existing conditions, as overland flow. And the peak flow rates and velocity calculations in the application do not account for this.

Initially, in its closing arguments, Diamond Back complained that Mr. Dunbar's testimony "was based on a review of the topographical survey provided in the Application, but that he had not visited the site to independently evaluate existing conditions."[31] The topographical survey that Mr. Dunbar used, however, was provided by Diamond Back, in its application, which was sealed by Mr. Stiggins; this was the same information that was provided to the Executive Director.

[31] Diamond Back's Closing Arguments, p. 21.

Moreover, there is no indication that Mr. Stiggins relied on anything other than a topographical survey, himself. More importantly, Mr. Stiggins did not dispute that under existing conditions, surface water runs off the site via overland flow—either sheet or shallow concentrated flow.[32]

Next, Diamond Back falsely claimed, in its response to closing arguments, that Mr. Dunbar "provided no support for his 'calculated' peak flow,"[33] under existing conditions, and that "at no point during discovery, in deposition, or in cross-examination was he able to substantiate his 'calculation.'"[34] But Mr. Dunbar produced his calculations to Diamond Back during the discovery phase of hearing. During a deposition of Mr. Dunbar, Diamond Back's counsel asked Mr. Dunbar to reproduce his calculations, and Mr. Dunbar obliged and provided those calculations to Diamond Back.[35] Moreover, Mr. Dunbar explained to Diamond Back's counsel, during the deposition, how he calculated peak flows and velocities for existing conditions.[36] Diamond Back intentionally misrepresented the facts to the ALJ and the other parties, in its desperate attempt to disparage Mr. Dunbar.

Now, having failed with its previous arguments, Diamond Back presents a new, confusing argument in its exceptions. Diamond Back appears to argue that Mr. Dunbar misapplied the Rational Method when calculating existing flows for existing conditions. For "support," Diamond Back cites to documents that were not offered into the evidentiary record.[37] In addition, Diamond Back cites to testimony by its engineer, Mr. Stiggins, but that testimony involves a discussion of the detention pond design, not the existing conditions analysis.[38] In short, Diamond Back's attempt

[32] Ex. Knox-200, p. 5; *see also* Tr. Vol. 3, pp. 119-20.
[33] Diamond Back's Response to Closing Arguments, p. 18.
[34] Diamond Back's Response to Closing Arguments, p. 19.
[35] Knox's Objections to Diamond Back's Response to Closing Arguments, p. 3.
[36] *Id*.
[37] *See, e.g., Diamond Back's Exceptions to the PFD,* p. 6, n. 7 & 8.
[38] *Diamond Back's Exceptions to the PFD,* p. 6, n. 9. *But see* Tr. Vol. 3, pp. 124-25 & Ex. Knox-12 (admitting that Exhibit Applicant-204, depicting *hydrographs for Ponds A and B*, which were created based on information in the permit application, does not reflect a 24-hour storm duration, because it "does not have to").

to, again, mischaracterize Mr. Dunbar's testimony is specious, and, more importantly, Diamond Back fails to cite the Commission to any evidence in the record disputing Mr. Dunbar's testimony.

Diamond Back bore the burden of proof, not Mr. Dunbar. Diamond Back bore the burden of proving that its proposed landfill will not adversely alter existing surface water flow conditions. To do this, Diamond Back was required to compare surface water flow under existing conditions to surface water flow under fully developed conditions. Stiggins, however, overestimated surface water flow for existing conditions, because he assumed that the peak flows that he computed for existing conditions occur at specific discharge points, instead of along the permit boundary as overland flow.

To demonstrate how Stiggins had overestimated peak flow rates for existing conditions—by assigning them to single discharge points—Dunbar roughly calculated what the peak flow rate would be, under existing conditions, for surface water runoff exiting the site at the specific area along the permit boundary where runoff from each of the drainage areas[39] is proposed to be discharged after the landfill is fully developed. And based on his analysis, he calculated about less than 5 cfs for Drainage Areas A and B.

Contrary to Diamond Back's latest arguments, Mr. Dunbar did not criticize Mr. Stiggins' use of the Rational Method.[40] Mr. Dunbar did not attempt to create or inject new terminology into the TCEQ rules, guidance documents, or the Rational Method. Mr. Dunbar did not include the proposed weirs in his analysis of the existing conditions; he noted the location of the proposed weirs, because that is where the surface water is proposed to be discharged off the site, under fully developed conditions. So, he looked at the flows, under existing conditions, at those same locations—for purposes of comparing existing conditions to fully developed conditions.

[39] Dunbar actually only analyzed the two large drainage areas: Drainage Areas A and B.
[40] Tr. Vol. 2, p. 21, ll. 5-8.

The purpose of Mr. Dunbar's testimony was to demonstrate that Stiggins' drainage calculations, which were based on erroneous assumptions regarding how and where surface water exits the site under existing conditions, resulted in an overestimation of flows and volume under existing conditions. In other words, Dunbar's analysis was intended to account for existing conditions, based on the manner in which surface water currently flows off the site—overland flow. This was necessary, because Stiggins' calculations did not account for the fact that surface water flows overland and exits all along the perimeter of the site; his calculations assumed that surface water exits the site at discrete discharge locations. And this resulted in an overestimation of surface water flow rates and volumes for existing, baseline conditions. Diamond Back offered no testimony or other evidence demonstrating that Mr. Stiggins, in fact, accounted for the existing overland flows at the site, when calculating peak flow rates and velocity for existing conditions.

Diamond Back simply failed to satisfy its burden of proof on this issue, and its tortured attempts at discrediting Mr. Dunbar are unavailing here.

2. Diamond Back's detention pond design failed to comply with TCEQ rules.

Similarly, Diamond Back's arguments regarding the under sizing of the detention ponds are unavailing here. Here, again, Applicant bore the burden of proof. When Mr. Dunbar presented evidence demonstrating that the detention ponds were undersized because they were not designed based on the required 25-year/24-hour storm event, Diamond Back failed to present any evidence proving otherwise. In fact, Mr. Stiggins agreed that he did not use the 25-year/24-hour storm event for purposes of designing his detention pond.

First, Diamond Back attempts to mischaracterize Mr. Stiggins' testimony, wherein he admitted that he did not rely on the 25-year/24-hour storm event when designing his detention ponds. Diamond Back claims that this testimony referred only to the hydrographs included with

Mr. Stiggins' prefiled testimony, suggesting that the detention pond design, as reflected in the application, were based on the 25-year/24-hour storm event. Diamond Back cites to the application, itself, in support of this argument.

But this is an inaccurate representation of Mr. Stiggins' testimony. Mr. Stiggins prepared hydrographs as exhibits that he offered with his prefiled testimony.[41] He explained during the hearing that the hydrographs—for detention Ponds A and B—were created based on information in the permit application.[42] And according to Mr. Stiggins, his Exhibit 204—the hydrographs, which were created to depict the information in the application—does not reflect a 24-hour storm duration, because it "does not have to."[43] When asked during the hearing if this was still his testimony, Mr. Stiggins confirmed that it was.[44] Though Diamond Back had the opportunity to elicit redirect testimony from Mr. Stiggins and even rebuttal testimony, Mr. Stiggins did not change his testimony. In fact, Diamond Back's counsel vigorously sought to keep this testimony out of the evidentiary record, but because he had no legal basis for doing so, his efforts were unsuccessful.[45]

Diamond Back now cites to its application materials in support of its argument that the detention ponds were indeed designed based on the 25-year/24-hour storm event. But those arguments are unavailing because the evidence in the record contradicts the statements in the application.

As explained by Mr. Dunbar: "There's nothing in the application materials to demonstrate that the detention system can handle a 25-year/24-hour storm event, as required by TCEQ rules.

[41] Ex. Applicant-204.
[42] Tr. Vol. 3, p. 122, ll. 18-22.
[43] Tr. Vol. 3, pp. 124-25; Ex. Knox-12.
[44] Tr. Vol. 3, p. 125, ll. 10-11.
[45] Tr. Vol. 3, pp. 125-128.

There is no analysis or hydrograph in the application materials demonstrating this."[46] He further explained that the detention ponds were sized to handle about a 25-year, 1-hour duration storm, rather than the 24-hour duration storm, and because the detention ponds were not based on the correct storm event, the detention ponds are inadequately sized.[47] Consequently, the peak flow rates being discharged from the two detention ponds will greatly exceed existing peak flow rates and adversely alter existing drainage patterns.[48] And this increase in peak flow rates exiting the site at the eastern permit boundary will adversely impact downstream property, like Protestants' property, via increased flood levels and duration, and erosion.[49] Diamond Back presented no evidence to dispute Mr. Dunbar's opinions.

Diamond Back's latest arguments attempt to provide a new explanation about how the Modified Rational Method was properly employed by Mr. Stiggins, and that there was no need to rely on the 25-year/24-hour storm event for the detention pond design, because doing so would result in no detention being required at all. Here, again, Diamond Back cites to resources that were not offered into the evidentiary record.

Despite Diamond Back's attempts to confuse the issue presented here, the issue is not that complicated. TCEQ's rules and guidance documents require an applicant to use the 25-year/24-hour storm event when designing their detention infrastructure. Mr. Stiggins acknowledged that he did not do so. Although there are statements in the application indicating that he did, he provided no calculations or underlying data in support of these statements. Instead, he explained that he did not think that he was required to rely on the 25-year/24-hour storm event for his detention pond design.

[46] Ex. Knox-200, p. 14.
[47] Ex. Knox-204; Tr. Vol. 2, pp. 21-28, 33-35 (describing what Exhibit Knox-204 depicts).
[48] Ex. Knox-200, p. 15.
[49] Ex. Knox-200, p. 15.

Here, again, Mr. Dunbar did not criticize the Applicant's use of the Modified Rational Method. Mr. Dunbar did not attempt to design the detention ponds, on his own, based on the 25-year/24-hour storm event. His burden was to present evidence demonstrating that Diamond Back failed to comply with TCEQ's regulations, which he did. Diamond Back offered no evidence demonstrating that Mr. Dunbar was wrong, or that Mr. Stiggins' detention pond design was based on the regulatorily required 25-year/24-hour storm event.

Diamond Back simply failed to satisfy its burden of proving compliance with TCEQ's rules.

Reply to the Executive Director's Exceptions

It is noteworthy that the ED's exceptions do not provide any argument, or dispute the testimony presented during the hearing, about the Applicant's failure to correctly describe and establish the existing drainage patterns in its surface water drainage analysis. Instead, the ED simply notes that the ALJ found that the Application's existing drainage patterns do not conform with actual conditions at the site. The ED appears not to take exception to the ALJ's finding and conclusion on this issue.

With regard to the detention pond design, the ED argues that Diamond Back's application should be remanded to allow for additional evidence because there may be some confusion regarding the use of the appropriate storm event for its detention pond design. But in making this argument, the ED all but concedes that the Applicant did not satisfy its burden of proof. Applicant had every opportunity to offer evidence rebutting Mr. Dunbar's opinions. Applicant deposed Mr. Dunbar, had access to his opinions via his prefiled testimony, and cross-examined him. Moreover, Applicant had the opportunity to present redirect testimony from Mr. Stiggins and rebuttal testimony. And yet, the record contains no evidence in support of the statements in the application

regarding the detention pond design and no evidence indicating that Mr. Dunbar was wrong. To the contrary, Mr. Stiggins' own testimony supports Mr. Dunbar's testimony.

Admittedly, the Executive Director declared the application technically complete and issued a draft permit, even though the detention ponds were not designed in accordance with TCEQ rules. This can perhaps be attributed to the fact that the application states that these structures were designed to handle the 25-year, 24-hour storm event, even though no such analysis was included in the application. Thus, it was not clear, perhaps, to the Executive Director's staff that Applicant had failed to heed TCEQ's regulations and guidance documents when calculating and designing its detention ponds.

As Mr. Yadav explained in his testimony, when reviewing the Applicant's drainage report to ensure it complies with TCEQ rules and the guidance documents, he checks to see whether the required information has been included in the application. And he relies on the fact that the drainage reports are sealed by a professional engineer; he conducts no independent verification of the design and calculations included in the drainage report. And so, in this case, when Mr. Yadav determined that the drainage report, and in particular the drainage structures, complied with TCEQ rules, it was based on his understanding that the detention ponds were designed for the 25-year, 24-hour storm event—because that is what is required by the rules. And the Application states that these structures were designed to handle the 25-year, 24-hour storm event, even though no such analysis was included in the application. As Mr. Yadav confirmed, the duration of the design storm event is an essential requirement when designing the drainage structures, such as detention ponds.[50] Mr. Yadav was simply unaware that Mr. Stiggins' pond design failed to comply with TCEQ regulations.

[50] Tr. Vol. 4, pp. 146-47.

In short, the PFD is supported by the evidence in the record on this issue. The Applicant failed to meet its burden. A remand is not necessary. Nor is there any legal basis for allowing the Applicant another bite at the apple, when they have already had several and simply failed to produce the requisite evidence. The ALJ clearly understood the evidence. The PFD reflects no confusion on this issue.

II. CONCLUSION

Knox and Harrington support the ALJ's recommendation that Diamond Back's permit be denied, and respectfully request the Commission deny the application and permit requested by Diamond Back.

Respectfully submitted,

/s/ Eric Allmon
Eric Allmon
Texas Bar No. 24031819
eallmon@txenvirolaw.com
Marisa Perales
Texas Bar No. 24002750
marisa@txenvirolaw.com

PERALES, ALLMON & ICE, P.C.
1206 San Antonio St.
Austin, Texas 78701
512-469-6000 (t)
512-482-9346 (f)

Counsel for Knox Real Property Development, LLC and Jason Harrington

CERTIFICATE OF SERVICE

By my signature, below, I certify that on October 13, 2022, a true and correct copy of the foregoing document was served upon the following parties via electronic service.

/s/ Eric Allmon
Eric Allmon

For the Applicant
Michael L. Woodward
Barton Hejny
Hance Scarborough, LLP
400 West 15th, Suite 950
Austin, Texas 78701
MWoodward@hslawmail.com
BHejny@hslawmail.com

For the Executive Director
Anthony Tatu, Staff Attorney
Mattie Isturiz, Staff Attorney
Texas Commission on Environmental Quality
Environmental Law Division, MC-173
P.O. Box 13087
Austin, Texas 78711-3087
Tel: (512) 239- 2999
Fax: (512) 239-0606
Anthony.Tatu@tceq.texas.gov
Mattie.Isturiz@tceq.texas.gov

For the Office of Public Interest Counsel, TCEQ
Vic McWherter, Attorney
Garrett Arthur, Senior Attorney
Texas Commission on Environmental Quality
Public Interest Counsel, MC-103
P.O. Box 13087
Austin, Texas 78711-3087
Tel: (512) 239-3144
Fax: (512) 239-6377
Vic.Mcwherter@tceq.texas.gov
Garrett.Arthur@tceq.texas.gov

For Diversity Trucking
Davenand Mangal
3700 NA Street, Apt. 1308
Midland, Texas 79705
Tel: (678) 521-9711
diversitytrucking@yahoo.com