CAUSE NO. D-1-GN-17-006632

ENVIRONMENTAL PROTECTION IN THE INTEREST OF CALDWELL COUNTY, JAMES ABSHIER, BYRON FRIEDRICH and TJFA, L.P., *Plaintiffs*	§	IN THE DISTRICT COURT OF
vs.	§	
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY, *Defendant*	§	TRAVIS COUNTY, TEXAS
and	§	
130 ENVIRONMENTAL PARK, LLC, *Defendant/Intervenor*.	§	459TH JUDICIAL DISTRICT

PLAINTIFFS' REPLY BRIEF

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NOTE: Throughout this brief, TCEQ rules are cited thusly: "Rule 330.##." This is intended to refer to the rules found in Title 30 of the Texas Administrative Code, which apply to TCEQ.

ARGUMENT

A. Land Use Compatibility

130EP's response brief cherry picks discrete portions of the relevant issues raised by Plaintiffs, recites the phrase "substantial evidence in the record," and dismisses the substantive arguments. Similarly, TCEQ's arguments rely on agency discretion, without addressing the substantive issues raised. This is particularly evident with their responses to the land use compatibility issue. Both TCEQ and 130EP dismiss the fact that the proposed landfill is located immediately upstream from a high hazard dam (which is on the proposed landfill site) and that floodplains surround the proposed landfill. Both fail to grasp how situating a landfill on such a vulnerable site places downstream property owners at serious risk.

1. *TCEQ's decision to issue a landfill permit, without considering the compatibility of siting a landfill immediately upstream of a high hazard dam prejudiced the rights of Plaintiffs.*

130EP maintains that Plaintiffs failed to demonstrate that their rights were prejudiced by TCEQ's decision to issue a landfill permit, despite its incompatibility with surrounding land uses.

The presence of a high hazard dam immediately downstream of the proposed landfill formed the basis for many of the surrounding landowners' opposition to

the landfill permit.[1] The downstream property owners and residents would be among those most impacted if the high hazard dam were breached.

This wasn't just an assumption of the Plaintiffs. Even the ALJs candidly admitted, in their PFD, that they had concerns regarding the compatibility of a landfill sited in close proximity to a high hazard dam and reservoir,[2] and they advised the Commission to determine whether situating a landfill in close proximity to the 100-year floodplain and immediately upstream of a flood control structure needed to protect human life is a compatible land use.[3]

Members of EPICC, who live downstream of the reservoir, are among the human lives that are protected by the flood control structure and who would be placed at risk by a breach of the structure. The Commission's failure to take a hard look at the risks associated with siting a landfill upstream of a high hazard dam, as part of the land use compatibility determination, directly impacts the Plaintiffs and their property rights in this case.

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[1] Patton King, a member of EPICC, for instance, commented about how the Reservoir routinely backs up flood water behind the dam that impacts neighboring properties. And Byron Friedrich, another EPICC member, expressed concern that the landfill would impact the Reservoir and threaten downstream landowners in the event of a breach. AR Vol. 18, Item 54, p. 32.

[2] Throughout this brief, Plaintiffs refer to the reservoir and dam on the site of the proposed landfill as "Site 21" or "Site 21 Reservoir."

[3] AR Vol. 30 Item 248 at 2.

2. *TCEQ's land use compatibility rule requires an analysis that includes factors associated with the public interest to ensure the protection of human health and the environment.*

Next, 130EP argues that because its application contained all information required by Rule 330.61(h) (the land use compatibility rule) and satisfies the requirements regarding surface water drainage and floodplains, the proposed landfill will be protective of human health and the environment. 130EP argues that the Commission concluded that "the information contained in the application was sufficient to demonstrate land use compatibility and [] no additional information was required, and the Application thus satisfied [Rule] 330.61(h)."[4] In other words, 130EP maintains that its only burden in this matter, regarding land use compatibility, was to include in its application the information listed in Rule 330.61(h), and separately, to address the surface water drainage and floodplain rules.[5] But this characterization of 130EP's burden renders the land use compatibility requirement meaningless and devoid of substance.

The applicable rule, 330.61(h), was intended to ensure that the "impact of the site upon a city, community, group of property owners, or individuals [] be considered in terms of compatibility of land uses, . . . and other factors associated with the public interest." It requires the applicant to provide certain information to

[4] 130EP's Response Brief, pp. 55-56.

[5] *Id.*

"assist the executive director in evaluating the impact of the site on the surrounding area." *Id.* This requirement must be read with Rule 80.117(b), which provides that the "applicant shall present evidence [during the contested case hearing] to meet its burden of proof on the application."

In this case, 130EP requested a direct referral. So, it bore the burden of proof on every issue, including the issue of land use compatibility. Its burden cannot be satisfied by merely listing certain empirical data and omitting perhaps the most significant piece of human health information regarding the surrounding land uses—a high hazard dam situated immediately downstream of the proposed landfill, a factor that undoubtedly is associated with the public interest. That the term "high hazard dam" was not included in the specific language of Rule 330.61 does not mean that the presence of the dam, on the proposed landfill site, is irrelevant to the permit application and the compatibility of the proposed landfill.

That more is required of an applicant to satisfy its burden regarding the issue of land use compatibility is made evident when considering the optional bifurcated permitting process. The Legislature created an optional bifurcated landfill permitting process, by which an applicant may request that a hearing be convened to address only Parts I and II of the application—the land use portion of the application—before considering the entire permit application. Tex. Health & Safety Code § 361.069. To be sure, the Legislature did not intend to tie up the

state's resources to conduct a land-use-only hearing solely to determine if the information listed in rule 330.61 was included in the application. Understanding the significance of determining a proposed landfill's compatibility with surrounding land uses, the Legislature intended to provide permit applicants the option of holding a hearing devoted solely to evidence regarding this important issue.

This demonstrates the Legislature's intention of imposing a duty on the permit applicant to present evidence about, and the Commission to take a hard look at, the impacts on a community of the proposed landfill, considering *all* factors associated with the public interest—whether in a bifurcated hearing process or during a single hearing regarding the entire permit application. In a case such as this one, where several affected persons have raised concerns regarding the compatibility of siting a landfill immediately upstream of a high hazard dam, including the party responsible for maintaining the dam and reservoir (Plum Creek Conservation District), and where the dam and reservoir are conspicuous features on the site of the proposed landfill, any substantive and meaningful land use compatibility analysis must address this factor.

Both 130EP and the Commission are simply mistaken in their attempts to minimize what is required by TCEQ rules and by statute regarding a land use compatibility analysis. A meaningful land use compatibility analysis, considering

actual conditions on the ground, is required. This type of analysis, however, was missing in this case.

3. *The Commission's decision regarding land use compatibility was arbitrary and capricious, because the Commission failed to consider a salient factor affecting the surrounding community and the public's interest: a high hazard dam located immediately downstream of the proposed facility.*

130EP and the Commission argue that the record includes substantial evidence to support the findings and conclusions regarding land use compatibility. But they can point to no competent evidence to support their argument that 130EP and the Commission considered the high hazard dam as part of any land use compatibility analysis. Indeed, 130EP's land use expert[6] did not consider the presence of the dam in his land use analysis, and the ED did not present an expert witness regarding land use compatibility (or even an expert regarding dam safety).

Site 21's classification as a "High Hazard Dam" means that should it fail or malfunction, TCEQ expects that it would result in the loss of seven or more lives, three or more habitable structures, or excessive economic loss.[7] Consequently, the dam must be protected against a flood event equaling 75% of the "probable

[6] AR Vol. 66 Tr. 1 at 77, ll. 3-16 (Worrall: "what did you call it? A high hazard dam? Is that what you said?").

[7] Rule 299.14(3).

maximum flood."[8] Any increase in volume of surface water entering the reservoir could adversely impact the ability of the reservoir to perform its intended flood control function—even an "insignificant" increase in volume.

Based on TCEQ's "breach method" analysis, a catastrophic flood breach wave would place at risk 26 downstream houses, 3 Farm-to-Market roads, and 3 county roads used by more than 6,000 vehicles daily.[9] Because the current Site 21 dam does not meet the applicable design standards, the failure potential for the structure is "judged to be high."[10]

TCEQ argues, in its brief, that the ED did consider the presence of the dam in his evaluation of the application, pointing to the testimony of his engineer of record, Mr. Odil, for support. But Odil is not a land use expert. He did not offer testimony regarding a land use compatibility analysis.

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[8] Rule 299.15(a)(1)(A), setting forth criteria for high hazard medium sized dam as PMF. Reservoir 21 has maximum storage in excess of 1,000 acre-feet but less than 2,000 acre-feet, rendering it a medium size dam. AR Vol. 60, PCCD 1.4. TCEQ, in its Response Brief, dismisses this requirement, arguing that it's not applicable in this proceeding, because only the Chapter 330 rules apply. But the rule identifies the standard that applies to this dam, which helps inform whether it is incompatible with a landfill immediately upstream of it.

[9] AR Vol. 62 Item Protestants 5 at 38.

[10] *Id.* at 39, ll. 4-6 & AR Vol. 62 Protestants 5 at 39. 130EP argues, in footnote 60 of its brief, that the high hazard designation of the dam is not related to the condition or structural integrity of the dam. But what 130EP fails to recognize is that the condition and structural integrity of the dam must be improved, because, without modification, the failure potential for the dam is high, and places the downstream developments at risk.

Moreover, Odil did not offer testimony as a surface water hydrologist expert either.[11] He is not a dam safety expert. His testimony was limited, on these issues, to address only what the TCEQ rules require for solid waste disposal permits.[12] In fact, some of the testimony cited by TCEQ in its response brief was testimony that had been stricken by the ALJs.[13]

Nevertheless, TCEQ identifies testimony by Odil wherein he claimed that "MSW staff contacted the Dam Safety Program about the Site 21 Reservoir and Dam."[14] But this testimony is legally insufficient and constitutes no evidence. Odil's testimony was based on double hearsay; that is, Odil relies on information provided to him (or, rather, provided to "MSW staff," which was then made known to him) by unnamed Dam Safety Program staff to support his opinion testimony that impacts to Site 21 will be insignificant, and future rehabilitation of the dam will address any impacts from development upstream. But Odil was not offered as

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[11] AR Vol. 27 Item 208 at 2: "Mr. Odil is not being offered as an expert in any of the above listed [hydrology, drainage, runoff, land use] areas. Mr. Odil is testifying in his role as the Executive Director's leader of the permit review team for this Application." His testimony was limited to describing his review of the Application, and his review was, in turn, "limited to confirming that the required information was submitted in the Application."

[12] *Id.*

[13] AR Vol. 28, 212.

[14] ED's *Closing Argument*, "Surface Water and Drainage" section (citing Ex. ED-SO-1, p. 26).

an expert witness on this issue, and his testimony cannot be considered competent, reliable, or legally sufficient evidence on this issue.[15]

Similarly, 130EP's hydrology expert, Mr. Traw, failed to consider the dam's safety and capacity during his analysis:

> Q: Did you do an evaluation to determine whether the changes resulting from this landfill would compromise the ability of this reservoir to handle the probable maximum flood?
>
> A: No. The probable maximum flood was not incorporated into my analysis.[16]

130EP's engineer-of-record, Kerry Maroney, also made no attempt to evaluate impacts to the dam:

> Q: Have you made any attempt to collect additional information regarding the Site 21 Dam and Reservoir near the proposed landfill footprint?
>
> A: No, ma'am.
>
> Q: Have you conducted any evaluation of Site 21?
>
> A: No, ma'am.[17]

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[15] Odil was not qualified to offer expert opinion testimony, and as the ED conceded, he was not offering expert opinion testimony regarding impacts on the Site 21 dam and reservoir. *See* Tex. R. Evid. 702; *Thomas v. Alford*, 230 S.W.3d 853, 857 & 860 (Tex. App.—Houston [14th Dist.] 2007, no pet.) (holding that to be qualified, expert must have knowledge, skill, experience, training, or education regarding specific issue that would qualify expert to provide opinion on that issue). So, Rule of Evidence 703 does not apply to his testimony on this issue; that is, Odil could not have relied on the opinions of others as a basis for his opinion. *See Collini v. Pustejovsky*, 280 S.W.3d 456, 466 (Tex. App.—Fort Worth 2009, no pet.) (holding that physician may rely on opinions of others who have rendered reports or diagnoses but physician must still demonstrate his/her own qualifications & must demonstrate that others on whom physician relied are also qualified and that their opinions are reliable).

[16] AR Vol. 68 Tr. 3 at 678-679.

That 130EP would fail to consider the integrity of the dam and render it inconsequential to any land use compatibility analysis is remarkable. Having retained a land use expert and having been made aware that the proposed landfill site is located adjacent to a dam that has been designated high hazard, 130EP should have known that any impact on the dam and reservoir is likely to result in adverse impacts on human health and the environment. Indeed, that is the whole point of the high hazard designation. Potential adverse impacts of a proposed landfill on a high hazard dam undeniably qualifies as a "factor associated with the public interest." Yet, the evidence demonstrates that the dam's classification and safety were not considered by 130EP's analysis, and despite the ALJs' entreaty to do so, the Commission also failed to consider the dam as part of the land use compatibility analysis. Failure to consider the impacts of a landfill on a high hazard dam was error, arbitrary and capricious.

B. Floodplains & Local Authorizations

Neither the TCEQ nor 130EP disputes that the issuance of the permit without submission of a floodplain development permit violated the plain language of the TCEQ rules. Rule 330.63(c)(2)(D). Rather, they both claim that Plaintiffs did not suffer substantial prejudice as a result of this violation, and they attempt to

[17] AR Vol. 74 Tr. 9, 2073, ll. 9-14.

justify the Commission's violation of its rules based upon the power of the Commission to include special provisions within a permit. Both of these arguments fail.

1. *TCEQ's decision to issue a landfill permit before 130EP obtained local floodplain authorizations prejudiced Plaintiffs' substantial rights.*

130EP and TCEQ mistakenly attempt to impose a heavy burden on Plaintiffs to demonstrate that TCEQ's blatant violation of its own rules prejudiced their substantial rights. 130EP asserts that it must be presumed that agency action in conformance with its regulations would have produced the same result, and that Plaintiffs must prove otherwise. But both parties are mistaken; this is simply not Plaintiffs' burden.

In the case of *Andrade v. Lauer*, the D.C. Circuit Court of Appeals rejected precisely this argument, in a procedurally similar case, observing that persons challenging government action have a right to expect that the government will act in accord with due process principles. The Court explained that when the government fails to do so, it cannot be assumed that action in accordance with the proper procedures would have produced the same result.[18] That is, a violation of

[18] *Andrade v. Lauer*, 729 F.2d 1475, 1496 (D.C. Cir. 1984).

agency rules cannot be expected to produce the same results as compliance with agency rules.

Furthermore, the requirement that a floodplain development permit be obtained before a permit application is submitted is not a mere procedural aid to the Commission. This requirement confers benefits on the public by: (1) ensuring that the permit under consideration is consistent with the facility to be built; (2) allowing the public to evaluate whether an applicant's representations to the Commission are consistent with representations made to local floodplain authorities; and (3) providing further assurance that the facility will not result in flooding of downstream landowners' properties, taking into consideration local knowledge about drainage and flooding conditions at the site and in the area. An agency's violation of a rule intended to confer benefits on the public "is presumptively prejudicial, placing a heavy burden on the agency to demonstrate the absence of any possible prejudice."[19]

During the hearing process, Caldwell County's engineer testified that in prior submittals to the County for other authorizations, 130EP had relied on unreasonable assumptions that would have led to an underestimation of the

[19] Peter Raven–Hansen, *Regulatory Estoppel: When Agencies Break their Own "Laws,"* 64 Tex.L.Rev. 1, 25-26 (1985).

floodplain.[20] He further testified that many of these unreasonable assumptions, which the County's engineer rejected, had been used by 130EP in its surface water and floodplain analysis included in its permit application and submitted to TCEQ.

The input from a local government is particularly important for floodplain planning. As the House Natural Resources Committee noted in its Interim Report to the 86th Texas Legislature, "Most flood planning occurs at the local scale."[21] The Committee further noted that TCEQ should play only a *secondary* role in floodplain planning, with the local governments playing the *lead role* in flood hazard mitigation.[22] In short, the floodplain development permit is required *before* TCEQ's determination on a permit precisely because it is critically important for TCEQ's decision to be informed by the entity with primary responsibility over the issue. For TCEQ to make a finding that a landfill adequately mitigates for flood hazards displaces the primary role of local governments on floodplain issues.

If TCEQ had enforced its rules and required that 130EP provide a floodplain development permit issued by Caldwell County, then 130EP would have been obligated to develop a floodplain analysis that met the standards of the entity with

[20] AR Vol. 58, Caldwell-1 at 9-10.

[21] Appendix A at 17.

[22] *Id.* at 19.

primary jurisdiction over flooding issues.[23] Considering the testimony of the County's engineer, that analysis would likely have been substantially different than the analysis presented in 130EP's application to the TCEQ.

TCEQ's decision to issue the permit without requiring the submission of a local floodplain development permit prejudiced Plaintiffs' ability to effectively participate in the permitting process, and prejudiced Plaintiffs through the issuance of a permit that was not shown to be sufficiently protective against the flooding of Plaintiffs' properties.

In this case, EPICC includes as members Byron Friedrich and Patton King whom both own land near the proposed landfill.[24] During flooding events, water from the landfill site backs up onto these properties, and into Mr. King's primary water well.[25]

In light of the concerns expressed by Caldwell County's engineer, TCEQ's waiver of the requirement that a permit applicant obtain a local floodplain development permit before TCEQ will issue a landfill permit eliminated an important requirement that would have assured that these downstream property owners would not suffer damage to their property as a result of permit issuance,

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[23] Rule 330.63(c)(2)(D)(ii).

[24] AR Vol. 60, Protestants 1 at 4-5, 9; AR Vol. 60, Protestants 2 at 3-4.

[25] AR Vol. 60, Protestants 1 at 4-5.

including the risk of migration of contaminants into Mr. King's drinking well as a result of flooding.

2. *TCEQ has no authority to waive a substantive requirement by special condition*.

The cases of *Smith*, *City of Jacksboro*, and *Lake Medina Conservation Society* do not support TCEQ's and 130EP's defense of TCEQ's issuance of a landfill permit without the required local floodplain development permit; they are all distinguishable. **In all of these cases, the court found that the substantive requirement of the applicable rule was satisfied at the time of agency decision, and any special provision in the permit was not necessary to cure the failure to comply with a substantive regulatory requirement**. The same cannot be said about this case.

In *Smith*, Houston Chemical applied for an air permit to build a facility near the City of LaPorte.[26] The applicable rules required that an applicant demonstrate that the facility unit would not cause air pollution and that such a demonstration be based on certain information that "shall be submitted as part of the application."[27] Houston Chemical failed to provide separate information in its application in support of its demonstration for one emission point, but the Texas Water

[26] *Smith v. Hous. Chem. Servs., Inc.*, 872 S.W.2d 252, 257 (Tex. App.—Austin 1994, writ denied).

[27] *Id.* at 259.

Commission ultimately found that the emissions from that point would not cause or contribute to a condition of air pollution, based on information developed later in the permitting process.

On appeal, the appellate court noted that the Commission had made a finding that the substantive requirement of the rule had been met based on information available at the time of the Commission's decision. The appellate court, therefore, held that there was no substantial prejudice to the protesting party as a result of the decision, and upheld the Commission's decision.[28]

The *City of Jacksboro*[29] opinion presented a similar situation wherein the appellate court concluded that there was no prejudice to the protesting party because the substantive requirements of the applicable rules had been met at the time of the agency's decision. This case involved a landfill permit; the Commission issued the permit, but included special conditions in the permit, requiring additional groundwater monitoring wells. The special conditions were based on a groundwater monitoring plan submitted by the applicant after the close of the evidentiary hearing. The protesting party challenged the issuance of the permit, arguing that the special conditions were based on information that was

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[28] *Id.*

[29] *City of Jacksboro v. Two Bush Cmty. Action Grp.*, 2012 WL 2509804 (Tex. App.—Austin 2012, pet. denied).

offered after the evidentiary record had closed. The court upheld the Commission's decision, reasoning that TCEQ had found the application satisfied all substantive regulatory requirements, even without the special conditions.[30] Since all substantive requirements had been met at the time of the permitting decision, even without the special conditions, the appellate court held that the protesting party had not been prejudiced by the decision.[31]

Lake Medina[32] stands for the same proposition: that prejudice is absent when a demonstration of compliance with all substantive regulatory requirements has been made at the time of decision. In that case, Bexar-Medina-Atascosa Counties Water Control Improvement District No. 1 ("BMA") applied to the TNRCC to amend its right to withdraw surface water from Lake Medina to allow for municipal and industrial purposes.[33] After a contested case hearing, TNRCC issued the permit amendment in the amount of 65,830 acre-feet for "multiple uses," including irrigation, municipal and industrial uses. But, TNRCC did not specify amounts for each use. Affected persons appealed the decision, alleging that the

[30] *Id.* at *11.

[31] *Id.* at *13.

[32] *Lake Medina Conservation Soc., Inc. v. Tex. Natural Resource Conservation Comm'n*, 980 S.W.2d 511 (Tex. App.—Austin 1998, pet. denied).

[33] *Id.* at 513-514.

order was unlawful because the law required a specific volume of water for each use. The appellants prevailed in this initial appeal, and the matter was remanded.

On remand, BMA withdrew its request for an authorization to withdraw the water for industrial purposes. The Commission did not hold another hearing, but "based on the existing record," authorized BMA to withdraw 19,974 acre-feet of water for municipal use, and the balance for irrigation use. Affected persons challenged the decision arguing that a new hearing should have been held on remand. The appellate court disagreed, holding that the Commission found all substantive requirements to have been met, based on the information available at the time of the decision, and thus there was no prejudice to affected persons.[34]

These cases are wholly distinguishable from the case at hand. 130EP never met the *substantive* requirement to submit a floodplain development permit. Contrary to the agency findings in *Smith, Jacksboro,* and *Lake Medina,* TCEQ found the application to be substantively deficient on this point. Indeed, 130EP had not even commenced the process—had submitted no application—to obtain a local floodplain development authorization, despite multiple requests by TCEQ staff to do so.[35] Neither *Smith, Jacksboro,* nor *Lake Medina* supports the issuance

[34] *Id.* at 517.

[35] AR Vol. 14 Item 27 at 5; AR Vol. 15 Item 31 at 2.

of a permit when the substantive requirements of the TCEQ rules have not been met at the time of decision, as in this case.

Where an application fails to meet the substantive requirements of the TCEQ rules at the time of permit issuance, courts have reversed TCEQ's issuance of such permits. For example, in the case of *BFI v. Martinez Environmental Group,* the TNRCC issued a permit containing a site operating plan that failed to contain the level of detail required by its own rules.[36] The appellate court, therefore, reversed the permitting decision. In reaching its decision, the court explained that valid agency rules have the same force and effect as statutes, and thus, failure to comply with its own rules results in reversal of an agency's decision.[37]

Likewise, in the case of *Flores v. Texas Department of Health*, the appellate court held that the agency's "discretion is bounded by the requirements of its own rules, the enabling statute, and [the Administrative Procedures Act]."[38]

Where the language of the rules is plain, all parties should be able to rely on the words of the regulation in order to determine the regulation's meaning and the standard to be applied during the permitting process. As noted by the Texas

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[36] *BFI Waste Systems v. Martinez Environmental Group*, 93 S.W.3d 570, 581 (Tex. App.—Austin 2002, pet. denied).

[37] *Id.*

[38] *Flores v. Texas Department of Health,* 835 S.W.2d 807, 811 (Tex. App.—Austin 1992, writ denied).

Supreme Court, a state agency is under a duty to adopt general policy through rules: "Allowing an agency to create broad amendments to its rules through administrative adjudication rather than through its rulemaking authority undercuts the Administrative Procedure Act (APA)," and the protections provided under the APA.[39]

In this case, TCEQ's decision is contrary to decisions in similar cases, involving similar facts. This demonstrates the very dangers described by the supreme court, when an agency adopts general policy via administrative adjudications rather than its rulemaking authority.

For instance, in another landfill matter—*Application by Pescadito Environmental Resource Center for Permit No. 2374*—the permit applicant failed to obtain the required floodplain development permit before filing its application, even though portions of the site were in a floodplain. The ED instructed the applicant in that case to obtain the required local floodplain authorization, or the application may be returned.[40]

Similarly, TCEQ addressed a mandatory prerequisite in considering another landfill permit application: *In the Matter of the Application of Post Oak Clean*

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[39] *Rodriguez v. Serv. Lloyds Ins. Co.*, 997 S.W.2d 248, 255 (1999) (reversing agency decision for failing to follow clear and unambiguous language of its rules).

[40] Appendix B, letter to Pescadito by TCEQ's ED.

Green, Inc. for MSW Permit No. 2378. In that case, the Commissioners struggled with an applicant's failure to plug old oil and gas wells on their property as required by TCEQ rules. The ED had resolved this deficiency by adding a special provision to the draft permit, just as he did in this case. But the Commissioners determined that a mandatory prerequisite, set out in the plain language of the rules, could not be resolved via special provision. Indeed, Chair Niermann explained that the ED's attempt to resolve this deficiency via a special provision was "an error."[41]

Because the Commission applied a different standard in this case versus the standard that was applied in the Post Oak and Pescadito matters, the Commission's decision was arbitrary and capricious. Faced with a prerequisite that was clearly set out in the rules, in the Post Oak case, the Commissioners enforced that prerequisite and required the applicant to demonstrate compliance with the rule, before a permit would be issued. A special provision would not suffice. The same standard was applied in the Pescadito matter. Even though a mandatory prerequisite exists regarding local floodplain development approval in the immediate case, the Commission chose not to enforce this requirement and allowed a special provision instead.

[41] Appendix C, Order remanding matter to SOAH.

TCEQ's issuance of the permit in this case, even though 130EP had not met the substantive requirement that an applicant obtain a local floodplain development authorization at the time of the submission of its application to TCEQ, was arbitrary and capricious and characterized by an abuse of discretion, and this decision prejudiced the substantial rights of Plaintiffs.

C. Surface Water Drainage & Flooding

130EP and the Commission both seek to justify TCEQ's drainage conclusions by asserting that TCEQ's drainage rules do not require consideration of the probable maximum flood in this case. Both are mistaken.

TCEQ's regulatory prohibition on adverse drainage impacts is *not* limited to impacts that occur during any particular flood event. Instead, Rule 330.305(a) comprehensively provides that "existing or permitted drainage patterns must not be adversely altered." Other sections of the TCEQ rules regarding drainage and floodplains specify particular events that must be considered,[42] but 330.305(a) notably lacks any specific rainfall event. Adverse drainage impacts occurring in the event of a probable maximum flood are no less real, and thus no less relevant, under Rule 330.305(a), than impacts occurring during other anticipated rainfall

[42] *See, e.g.,* Rule 330.305(b) &(c) (specifying consideration of impacts during 25-year/24-hour storm event).

events. The limits placed on this rule by 130EP and TCEQ are contrary to the plain language of the rule itself.

In this case, a determination of whether the alteration of drainage patterns will have adverse impacts requires consideration of the Site 21 reservoir. An adverse impact upon that dam would endanger lives, livelihoods, and economic development. TCEQ rules provide that the performance of a dam is to be judged under the conditions of a "probable maximum flood,"[43] which was not done in this case.

Failure to evaluate the high hazard dam and turning a blind eye to such a rainfall event avoids reality, and ignores the lessons of Hurricane Harvey. As the Governor's Commission to Rebuild Texas noted, proper disaster planning assumes both that Texas will face future disasters, and that "since we know that future disasters will come, we should not wait for them unprepared."[44] Without evaluating the impact of the landfill upon the downstream reservoir under probable maximum flood conditions, TCEQ has no basis to conclude that the alteration of drainage patterns as a result of the landfill will have no adverse impact on Site 21, and its decision is in error.

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[43] Rule 299.15(a)(1)(A).

[44] Appendix D at 154.

TCEQ further asserts that because waste is not being disposed of within the 100-year floodplain, 130EP was not required to provide information on other events that impact the flood protection of the facility, such as the probable maximum flood or a hurricane event. This argument ignores the plain language of the rule at issue. Rule 330.63(c)(2)(C) requires that "if the *site* is located within the 100-year floodplain," then the permittee shall provide not only information regarding the 100-floodplain, but also information on, "*other* events . . . that impact the flood protection of the facility." TCEQ rules define the term "site" to have the same meaning as the term "facility."[45] 130EP's permit application acknowledged that the "facility" was within the 100-year floodplain.[46] Consequently, the requirements of Rule 330.63(c)(2)(C) apply to 130EP's application.

130EP creates a strawman argument, characterizing Plaintiffs' argument as requiring submission of the design hurricane. This mischaracterizes the issue. Under Rule 330.63(c)(2)(C), information on events *other than the 100-year flood event* is required. This requirement seeks to overcome the tunnel-vision that can result from an exclusive focus on the lines that just happen to form the current 100-year floodplain delineations. Yet, 130EP only addressed the 100-year floodplain

[45] Rule 330.3(139).

[46] AR Vol. 47, 130EP-2, p. 257 & 832.

and failed to address *any* other events (such as the probable maximum flood, a hurricane event) *in any way*. This omission prevented TCEQ and the public from fully evaluating the impact of such events.

Considering the manner in which 130EP has contoured the landfill waste disposal footprint to precisely avoid the delineation of the 100-year floodplain, such an analysis of other events likely would have altered the required design and the size of the waste disposal footprint. Far from harmless, this is another example in this case of TCEQ's casual disregard for the requirements of its own rules intended to address flooding hazards that pose a serious danger to nearby landowners such as the Plaintiffs.

D. Caldwell County's Landfill Siting Ordinance

TCEQ and 130EP argue that because Parts I and II of the application materials were submitted before the County passed its landfill siting ordinance,[47] 130EP was "grandfathered" from that ordinance. Amici City of Waco and SWANA make a similar argument in their brief. 130EP also argues that because it had submitted its application for a registration to operate a solid waste transfer station on the same site as the proposed landfill, this transfer station registration

[47] The "siting ordinance" refers to the Caldwell County Solid Waste Disposal Ordinance, which was enacted by the Caldwell County Commissioners Court via its Order to "Adopt Ordinance Prohibiting Solid Waste Disposal in Caldwell County." AR Vol. 58, Caldwell-3.

application was sufficient to exempt the permit application for the landfill from the ordinance.

None of these parties, however, argues that 130EP submitted a complete application for a landfill permit before the County passed the Ordinance. In fact, 130EP's complete landfill permit application was not filed until after the County enacted its siting ordinance.

As explained in Plaintiffs' initial brief, 130EP initially sought from TCEQ a land-use-compatibility determination and filed only Parts I and II of the Application on September 4, 2013. By filing only Parts I and II of the application, instead of the complete permit as required by statute,130EP could only obtain, from TCEQ, a determination regarding the landfill's land-use compatibility. It could not obtain a permit to construct and operate a landfill.[48]

On December 9, 2013, the Caldwell County Commissioners Court adopted its siting ordinance. *See* Tex. Health & Safety Code §§ 363.112 & 364.012.[49]

On February 18, 2014, almost two months after the County enacted its ordinance, 130EP filed its complete landfill permit application, including Parts III and IV and a significantly revised Parts I and II, proposing a different landfill

[48] *See* Rule 330.57 (describing Parts I and II as a "partial application" and noting that this partial application is intended to determine land use compatibility *alone*).

[49] Texas Health and Safety Code Statutes 363.112 and 364.012 both provide for the prohibition of solid waste disposal through the passage of an ordinance that specifically designates the areas where such disposal is not prohibited.

footprint design. The ED declared those parts administrative complete on February 28, 2014.

In short, the County's siting ordinance was effective December 9, 2013. An administratively complete landfill permit application was submitted to TCEQ almost 2 months later.[50]

Both of the above-cited statutes expressly provide that the Commission may not grant an application for a permit to process or dispose of municipal solid waste in an area in which the processing or disposal of such waste is prohibited by a county ordinance. *See id*. §§ 363.112(d), 364.012(f).

When the siting ordinance was enacted, 130EP did not have a complete landfill permit application filed and pending before the Commission. *See* Rule 330.57 (requiring Parts I-IV of the application to be filed before declared technically complete). Therefore, the ED should have refused to continue reviewing and processing 130EP's landfill permit application, once it became

[50] 130EP quotes from a brief filed with SOAH, wherein, according to 130EP, Plaintiffs admitted that Parts I and II of the application were on file before the County enacted its ordinance. 130EP implies that Plaintiffs conceded in that brief that Parts I and II were sufficient to grandfather 130EP from the siting ordinance. But 130EP has taken the quote out of context. A review of the entire quote reveals that Plaintiffs did not concede that Parts I and II grandfathered the site from the ordinance. At all times, Plaintiffs supported the arguments of the County and maintained that its ordinance prohibited the issuance of a landfill permit at the proposed site. *See, e.g.*, AR Vol. 31, Item 253 at 26 & Vol. 33, Item 266 at 5.

aware of the County's siting ordinance, and the Commission should have returned or denied the application, as required by applicable statutes.

Failing to return the application was inconsistent with past TCEQ decisions, including the Pintail Landfill Permit Application, wherein the ED returned the application after it became apparent that a local siting ordinance prohibited the siting of the landfill at the proposed location. Indeed, in that case, TCEQ also rejected an argument that 130EP attempts to make in this case: that the ED's approval of a registration to operate a transfer station on the proposed landfill site resulted in exempting the site from the County's siting ordinance.[51]

In the Pintail matter, as in this matter, Pintail was issued a registration to operate a transfer station on the same site for which it sought a landfill permit; however, Pintail never constructed the transfer station. Similarly, in this matter, 130EP had no intention of actually constructing and operating the transfer station on such a large site; the registration was sought for the purpose of exempting the site from any siting ordinance.[52] In Pintail, the Commission determined that the

[51] Appendix E, wherein the TCEQ Executive Director explained, in a response to Pintail's Motion to Overturn the decision to return its application for a land-use compatibility determination, that the Pintail transfer station registration did not exempt the proposed landfill from the Waller County siting ordinance. The Commission ultimately overruled Pintail's motion to overturn, thus, agreeing with the ED's determination.

[52] AR Vol. 70 Tr. 5 at 1166.

existence of a transfer station registration was not sufficient to exempt the site for purposes of a subsequent solid waste disposal application permit.[53]

That same logic and precedent should have been followed in this case. The Commission was correct to reject the argument in Pintail, and its reasoning supports a rejection of that argument in this case, as well. Because the Commission failed to apply that same reasoning and reach the same conclusion in this matter as it did in Pintail, its decision was arbitrary and capricious and contrary to law.

Finally, the amici argue that if applicants are required to submit a complete landfill permit application before a County passes a siting ordinance, in order to be considered exempt from the ordinance, then, applicants will never be able to exempt themselves from local siting ordinances. They argue that they should be allowed to, essentially, "game" the system, by submitting only a partial application, as was done in this case, even if they have no intention of actually taking advantage of the bifurcated land-use-compatibility-only determination process. They further argue that it makes sense that Parts I and II would be sufficient for purposes of grandfathering, because nothing in Parts III and IV would impact a proposed landfill's compliance with a siting ordinance. These arguments fail for a variety of reasons.

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[53] Appendix E.

First, the bifurcated permitting process was not created in order to allow permit applicants to circumvent local siting ordinances. It was created to conserve resources for all parties involved. 130EP (and amici), however, are abusing the process in an attempt to avoid a lawful, local siting ordinance, without following through with the bifurcated process. There is no evidence to support their argument that the bifurcated process was intended to allow applicants to circumvent local siting ordinances.[54]

Amici further argue that if they were required to submit a complete landfill permit application in order to be considered exempt from a siting ordinance, this would require the drilling of borings, which would reveal to the public that the site is being evaluated for a landfill. This too is an invalid argument for purposes of claiming an exemption from a siting ordinance.

Applicants should drill borings and obtain all necessary local floodplain authorizations before submitting a land-use-only determination application to TCEQ. The subsurface of a proposed landfill site should be thoroughly investigated to determine whether the site is suitable for a landfill and compatible with surrounding land uses, including groundwater uses, as part of that evaluation and determination.

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[54] The bill analysis cited by amici offers no legal or relevant support for their argument. It merely summarizes some of the concerns presented by industry witnesses.

In any event, in this matter, 130EP drilled their borings before submitting Parts I and II. In fact, they started drilling their borings before even submitting a soil boring plan to TCEQ and completed the borings before receiving approval of that boring plan from TCEQ. This belies the amici's contention that soil borings should not be drilled before the submission of Parts I and II of a permit application.

Moreover, there is no compelling reason that permit applicants should be allowed to surreptitiously enter a community and select a site for purposes of constructing and operating a landfill—a landfill that presumably is intended to serve that very community—without even the possibility of the community's knowledge. When counties adopt siting ordinances for landfills or other solid waste processing and management facilities, they, presumably, are doing so with proper intentions: to protect their natural resources and the health and safety of their constituents, as well as in consideration of the County's solid waste disposal needs.

If the county has information about site-specific conditions that render a site unsuitable for a landfill, then, that information would seem to benefit the solid waste permit applicant—particularly, an out-of-state solid waste management company, such as Pintail and 130EP—and they can then take that information into account before moving forward with any project, and find a suitable site.

In sum, contrary to the amici's implications, the bifurcated land-use-compatibility-only determination application process was not intended to allow solid waste processing and disposal facility permit applicants a free pass to circumvent local siting ordinances. The process should not be abused, as amici propose, and there is no basis for adopting an interpretation of the bifurcated permitting process that allows an applicant to circumvent a local siting ordinance, particularly when that same applicant has no intention of actually pursuing the bifurcated land-use-only determination before submitting and completing Parts III and IV of the full permitting process. Local landfill siting ordinances are presumed to be valid, and an applicant is exempted from such ordinances only if a landfill permit application is pending at TCEQ, when the ordinance is adopted.

In this case, no such valid landfill permit application was pending when the Caldwell County siting ordinance became effective. The statutory prohibition should have been applied here, and therefore, 130EP's application should have been returned by TCEQ, considering the local ordinance prohibited the siting of a landfill at the proposed location. TCEQ's failure to do so rendered its decision to approve the landfill permit arbitrary and capricious and contrary to law.

E. Geology and Hydrogeology

TCEQ mischaracterizes Plaintiffs' complaints regarding this issue, claiming that Plaintiffs challenge the qualifications of 130EP's geology witnesses; TCEQ

fails to recognize or address the witness' lack of a reliable basis supporting his expert opinions. TCEQ also mischaracterizes Plaintiffs' spoliation issue as a complaint about the adequacy of the remedy for a discovery violation that Plaintiffs asked for and received. TCEQ then repeats its familiar refrain: "substantial evidence" supports the Commission's decision. 130EP likewise dismisses Plaintiffs' issue regarding spoliation as a "spurious argument" based on "allegations of spoliation."[55] Plaintiffs will address the spoliation issue first.

1. *Plaintiffs were entitled to a remedy to address 130EP's spoliation of evidence.*

Both TCEQ and 130EP argue that Plaintiffs were entitled to no remedy following 130EP's spoliation of evidence, because Plaintiffs were granted access to the site of the proposed landfill and were allowed to drill borings and conduct their own in situ hydraulic conductivity test. Both, however, are mistaken.

There is no dispute that 130EP spoliated relevant evidence, and that without the field notes, original logs, and soil samples, there was no way to verify the representations in the landfill permit application regarding the subsurface characterization. There is also no dispute that 130EP's consultants have spoliated

[55] 130EP characterizes this issue as Plaintiffs' "allegation of spoliation," but there is no question that 130EP spoliated evidence. The ALJs found that 130EP's experts spoliated evidence that they had a responsibility to preserve. AR Vol. 27 Item 212.

evidence in past landfill permitting proceedings.[56] And there is no dispute that 130EP's consultants knew that the spoliated evidence was relevant and necessary for purposes of the contested case landfill hearing before SOAH.[57]

Based, in part, on the history of 130EP's consultants and their tendency to over-simplify their subsurface characterizations and then spoliate relevant evidence, Plaintiffs sought relief to address 130EP's misconduct. To demonstrate the significance and necessity of the spoliated field notes, original logs, and soil samples, and the need for a remedy, Plaintiffs sought to collect their own subsurface data. Thus, Plaintiffs sought to take advantage of their right, under the discovery rules, to access the property and collect such evidence—not for the purpose of developing their own subsurface characterization, but rather, to demonstrate why the spoliated evidence was necessary.

130EP makes much of Plaintiffs' alternative requests for relief, for either access to the site to drill borings or a spoliation instruction. 130EP argues that Plaintiffs were granted site access, so they were not entitled to a spoliation instruction. But 130EP mischaracterizes Plaintiffs' motion and request for relief.

The alternative requests for relief in Plaintiffs' motion to access the property were intended thusly: (1) either allow Plaintiffs to access the property to collect

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[56] AR Vol. 62, Protestants 5 at 17,18.

[57] AR Vol. 27, Item 208.

data regarding the subsurface, which may then be used in support of a request for relief such as a spoliation instruction, or (2) grant a spoliation instruction immediately, without the need for access to the property to collect subsurface evidence. But Plaintiffs did not abandon their request for a remedy—a true remedy—to address the spoliation of evidence. Plaintiffs' motion was a discovery tool; it sought to compel access to the site to collect samples.[58]

To be sure, Plaintiffs were independently entitled to access the property, drill borings, and collect samples for lab analysis under the rules of civil procedure and TCEQ's own discovery rules (and SOAH rules).[59]

Indeed, just last year, SOAH granted protesting parties access to the property of a proposed hazardous waste facility and allowed them to drill borings to collect subsurface data.[60] That request was not based on any allegation of spoliation of evidence. Instead, the protesting parties simply sought to exercise their right to access the property and analyze soil samples.

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[58] In fact, the motion to which 130EP refers in its Response Brief was Plaintiffs' second amended motion to compel access. AR Vol. 23, Item 119. This motion was filed after 130EP had imposed such unreasonable conditions on Plaintiffs' access to the site that Plaintiffs were effectively denied meaningful access, despite 130EP's prior agreement to allow Plaintiffs access to the site. Thus, Plaintiffs filed this second amended motion to compel and alternative request for sanctions. After the filing of the motion, 130EP agreed to revise the conditions of access to the site, and thus, Plaintiffs no longer sought sanctions against 130EP. But Plaintiffs did not claim to abandon their request for a remedy to address 130EP's spoliation of evidence.

[59] Tex. R. Civ. P. 196.7; Rule 80.151.

[60] *See* Appendix F. In that case, as in this case, the ALJs extended the discovery period to allow access to the site.

Similarly, in this case, Plaintiffs' request to access the site was a discovery request. And the ALJs' order granting Plaintiffs access to the property was not an extraordinary remedy. The discovery rules allow access to property, collection of samples, and analyses of such samples.

The evidence collected by Plaintiffs demonstrated why 130EP's geology report was unreliable and incompetent. 130EP's subsurface geology characterization was overly simplistic, and unsupported by the actual conditions at the site.

This is also why 130EP collected additional subsurface evidence, itself, and sought to supplement its application, even though the application was no longer pending at TCEQ or subject to technical review by the ED's staff: **130EP knew that once Plaintiffs investigated the subsurface, they would discover contradictions between the representations in 130EP's application and the actual conditions at the site.** By supplementing its geology report, 130EP sought to attempt to minimize the contradictions between its 2013 application materials and the findings by Plaintiffs from their subsurface investigation. But its efforts could not remedy its spoliation of evidence.

In sum, the ALJs correctly found that 130EP had a duty to preserve evidence and breached that duty. But they incorrectly concluded that "no remedy is

appropriate."[61] Plaintiffs demonstrated how they were prejudiced by 130EP's spoliation of evidence. The ALJs and the Commission committed error by accepting 130EP's flawed and unsupported subsurface geology characterization, included in 130EP's application, which formed the basis for the draft permit and final permit, and by failing to provide Plaintiffs with a remedy to address 130EP's spoliation of evidence.[62]

2. *130EP's expert witnesses presented conclusory, incompetent, and unsupported opinions.*

TCEQ, in its response brief, mistakenly characterizes Plaintiffs' complaint regarding Snyder's conclusory and incompetent opinions as an attack on Snyder's credentials. 130EP likewise focuses on Snyder's credentials. But both miss the salient point raised by Plaintiffs: the opinions offered by the expert must be based on reliable foundational data regardless of his qualifications. Here, the foundational data did not even exist. So, there is no way that the ALJs or the Commission could have performed the analysis required to determine whether Snyder's opinions were based on reliable foundational data.

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[61] AR Vol. 27 Item 208 at 4.

[62] TCEQ/130EP complain that Plaintiffs have not specified what an appropriate remedy would be. Plaintiffs' complaint is that no remedy was provided at all; not that the remedy was inappropriate. Failure to provide any remedy was error.

TCEQ makes the remarkable and unprecedented argument that Plaintiffs must challenge TCEQ's rules if they seek to complain about the reliability of Snyder's opinions.[63] But this argument is simply a red herring.

The issue raised by Plaintiffs is whether under *Havner* and its progeny, Snyder's unsupported opinions, as reflected in the permit application materials, are based on reliable foundational data. This is unrelated to TCEQ's rules regarding retention of data, and it is unrelated to the question of whether Snyder had sufficient experience to offer expert testimony.

The inquiry into whether expert opinion testimony is sufficiently reliable generally includes three components: "[T]he trial court should undertake a rigorous examination of the facts on which the expert relies, the method by which the expert draws an opinion from those facts, and how the expert applies the facts and

[63] TCEQ also argues that the ALJs determined that Snyder breached his duty to retain soil samples and field notes, based on the Texas Rules of Civil Procedure, not TCEQ's rules. But this argument misses the point. First, the ALJs made no ruling regarding whether TCEQ's rules require preservation of underlying data in support of representations in the application. TCEQ is wrong to suggest otherwise. Second, there is no TCEQ rule stating that applicants are free to discard underlying data. *Cf.* Rules 305.47 (requiring retention of application data); 305.66 (allowing denial, suspension, or revocation of permit based on permittee's failure in the application or hearing process to disclose fully all relevant facts or misrepresentations of relevant facts at any time). This would be an absurd practice. TCEQ's staff have the right to ask for underlying data to verify information in the application during their technical review of the application. Alternatively, TCEQ staff may ask an applicant to review the underlying data and verify the representations in the application, as they did in this case. In both of these scenarios, preservation of foundational data is essential. Finally, an applicant must satisfy evidentiary standards, including those that apply to expert opinions, regardless of the TCEQ rules.

methods to the case at hand."[64] In other words, the trial court should rigorously examine "the three components of the reliability inquiry—namely, the expert's methodology, foundational data, and whether too great an analytical gap exists as the expert connects the foundational data or methodology with the opinion."[65]

Snyder's opinion regarding the subsurface geology at the site of the proposed landfill was that the site consisted of consistent fat clay with no fractures or fissures and only a single slickenside. This is a remarkably simplistic description of the site, and it is inconsistent with published sources and with observations by other consultants who investigated the site on behalf of 130EP. The presence of an aquifer at the site also renders the subsurface geologic description suspect. And Snyder's history of oversimplifying subsurface geology is an additional basis for questioning his representations in this case.

But even if Snyder's opinions had been supported by published resources and observations by others, Snyder and 130EP are not absolved of their

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[64] *Mack Trucks, Inc. v. Tamez*, 206 S.W.3d 572, 579 (Tex. 2006); *see also Enbridge Pipelines (E. Tex.) L.P. v. Avinger Timber, LLC,* 386 S.W.3d 256, 262 (Tex. 2012) ("If an [[expert] utilizes improper methodology or misapplies established rules and principles, the resulting testimony is unreliable and must be excluded.").

[65] *Wilson v. Shanti*, 333 S.W.3d 909, 913 (Tex. App.—Houston [1st Dist.] 2011, pet. denied); *see also Harris Cnty. Appraisal Dist. v. Hous. 8th Wonder Prop., L.P.*, 395 S.W.3d 245, 253-54 (Tex. App.—Houston [1st Dist.] 2012, pet. denied) ("As to reliability, the court must examine the expert's methodology, foundational data, and whether too great an analytical gap exists between the data and methodology, on the one hand, and the expert's opinions, on the other."); *Plunkett v. Conn. Gen. Life Ins. Co.*, 285 S.W.3d 106, 116 (Tex. App.—Dallas 2009, pet. denied) ("[O]pinions drawn either from unreliable foundational data or flawed methodology and reasoning are unreliable and legally no evidence.").

responsibility to demonstrate that his opinions are based on reliable data: "As to reliability, the court must examine . . . whether too great an analytical gap exists between the data and methodology, on the one hand, and the expert's opinions, on the other."[66] When, as here, that foundational data does not exist, the analytical gap is simply too great to overcome; the expert's opinion is not subject to independent evaluation, as required, because the reliability of the data cannot be rigorously examined. And Snyder's professional history and background cannot make up for this fatal flaw.

This is true even if one were to accept TCEQ's and 130EP's argument that granting Plaintiffs access to the landfill site cured any injury caused by 130EP's spoliation of evidence—an argument that Plaintiffs dispute. That is, assuming for the sake of argument that the ALJs were correct in denying Plaintiffs any remedy to address 130EP's spoliation of evidence, because Plaintiffs had been granted access to the site, this "remedy" still does not make up for the absence of reliable foundational data, which were destroyed by 130EP's "expert."

There is no way to determine whether Snyder's description of the subsurface as consistent fat clay is based on reliable foundational data, or whether his opinion regarding the utter absence of secondary features is based on reliable foundational

[66] *Hous. 8th Wonder Prop., L.P.*, 395 S.W.3d at 253-54.

data. There is no way to determine if his opinion regarding where the contact (or transition) between the weathered and unweathered soils is based on reliable foundation data, and there is no way to determine whether his opinion regarding the elevation and direction of groundwater flow is based on reliable foundational data. Neither the ED's staff, the ALJs, the parties, the Commissioners—not even 130EP's own experts—have the ability to conduct a rigorous evaluation of the underlying data to determine whether Snyder's opinions are based on reliable foundational data. His opinions are therefore tantamount to no evidence.

In addition, 130EP's own belated data and testimony, submitted during the SOAH contested case hearing process, as a "supplement" to the geology report, demonstrates that the assumed facts vary from actual facts—to the extent that those facts can be evaluated.[67] The supplemental report reveals that representations in the initial application materials were based on inaccurate water level elevations and inaccurate piezometer locations.

And as TCEQ's staff geologist explained, if the piezometer elevations are wrong, then the recorded groundwater elevations are also wrong.[68] In other words,

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[67] *See Burroughs Wellcome Co. v. Crye*, 907 S.W.2d 497, 499 (Tex. 1995); *Volkswagen of Am., Inc. v. Ramirez*, 159 S.W.3d 897, 902 (Tex. 2004). In *Ramirez*, the Supreme Court held that even when an expert offers some basis for his opinion, if that basis does not support the opinion, the opinion is still conclusory.

[68] AR Vol. 74 Tr. V. 9, p. 2005.

130EP's groundwater conceptual model was based on inaccurate information. This alone renders it unreliable.

Where, as here, an expert's opinions are unsupported by reliable foundational data, they amount to no evidence. Findings based on legally insufficient evidence, as here, are erroneous, because they are not supported by substantial evidence.

F. Permit Boundary

Both TCEQ and 130EP assert that the access road and screening berm need not be included in the permit boundary. But, neither dispute that the access road and screening berm are part of the "facility." In fact, the Commission's final order included a finding of fact that the entire length of the access road was within the scope of the "facilities" authorized by the permit.[69] Texas Health & Safety Code § 361.086 provides that a permit is required, "for each solid waste *facility*." As a part of the "facility," this statute requires that a permit be issued to include the access road and the screening berm. Without including these elements of the facility within the permit, TCEQ has not complied with this statute.

Furthermore, TCEQ's exclusion of the access road and screening berm from the permit boundary place private property rights at risk. There is no guarantee

[69] AR Vol. 33, Item 264 (Finding of Fact 68).

that 130EP will maintain ownership of the property outside the permit boundary upon which these elements of the facility are located. Future owners of property outside the permit boundary will have no legal obligation to comply with regulatory requirements such as the maintenance of all-weather roads or the presence of the screening berm. The only person with an enforceable obligation to implement such measures is the permittee. This is why Rule 330.67(a) requires that the owner or operator possess or acquire control of, "the surface estate of the property for which a permit is issued, *including* the access route." This rule unambiguously anticipates that the access route will be included in the "property for which a permit is issued." Yet, TCEQ has failed to comply with this rule, as the access route was not included within the property for which 130EP's permit was issued.

Furthermore, the Legislature by statute has significantly restricted the Commission's ability to overturn an administrative law judge's underlying finding of facts.[70] TCEQ's decision to exclude the access road and screening berm simply did not have sufficient support to overcome this significant restriction.

CONCLUSION AND PRAYER

[70] Tex. Health & Safety Code § 361.0832.

For the reasons described above, Plaintiffs request that this Court reverse the Commission's decision issuing a permit to 130EP.

CERTIFICATE OF COMPLIANCE WITH TEX. R. APP. P. 9

By my signature below, I, Marisa Perales, certify that the preceding document contains 10,000 words, exclusive of the caption, table of contents, index of authorities, and signature. Concurrent with filing of this Reply Brief, I have filed a motion to exceed the word count limit by a total of 2,500 words, for a total of 10,000 words. This Reply Brief is within that limit.

/s/ Marisa Perales
Marisa Perales

CERTIFICATE OF SERVICE

By my signature below, I certify that on this 26th day of July, 2019, a copy of the foregoing document was served upon the parties identified on the following service list via electronic service.

/s/ Marisa Perales
Marisa Perales

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APPENDIX A

Interim Report
to the 86th Texas Legislature

House Committee on Natural Resources

December 2018

HOUSE COMMITTEE ON NATURAL RESOURCES
TEXAS HOUSE OF REPRESENTATIVES
INTERIM REPORT 2018

A REPORT TO THE
HOUSE OF REPRESENTATIVES
86TH TEXAS LEGISLATURE

LYLE LARSON
CHAIRMAN

COMMITTEE CLERK
SHANNON HOUSTON

Committee On
Natural Resources

December 20, 2018

Lyle Larson
Chairman

P.O. Box 2910
Austin, Texas 78768-2910

The Honorable Joe Straus
Speaker, Texas House of Representatives
Members of the Texas House of Representatives
Texas State Capitol, Rm. 2W.13
Austin, Texas 78701

Dear Mr. Speaker and Fellow Members:

The Committee on Natural Resources of the Eighty-fifth Legislature hereby submits its interim report including recommendations and drafted legislation for consideration by the Eighty-sixth Legislature.

Respectfully submitted,

Lyle Larson, Chairman

Dade Phelan, Vice Chairman

Trent Ashby

DeWayne Burns

James Frank

Kyle J. Kacal

Tracy O. King

Eddie Lucio III

Poncho Nevárez

Four Price

Paul Workman

INTRODUCTION

In late August 2017, Hurricane Harvey devastated the middle and upper Texas coast, unleashing 34 trillion gallons of rainfall, or 94 times the conservation storage of Lake Travis, causing unprecedented flooding and property loss.[1] The hurricane resulted in the deaths of 82 Texans, and caused $125 billion in damages, including Louisiana.[2] Further, damages to critical infrastructure, such as bridges, roads, water treatment plants, critical care facilities, schools, and power plants, led to vital service interruptions, causing ripple effects throughout the economy in the affected areas and nearby regions long after floodwaters receded.

Though Texas has experienced flooding throughout its history and ranks second only to Louisiana in property loss due to flooding, the extent of the loss of life and property the state experienced as a result of Hurricane Harvey, along with six other federally-declared flood declarations since 2015, call attention to the need for a clearer understanding of flooding in Texas, from the events themselves to the data, policies, and resources needed to mitigate them.[3]

In light of the devastation experienced as a result of Hurricane Harvey, the committee was given two interim charges related to flooding. Immediately following the hurricane, the Speaker issued the committee its first charge to evaluate the role of regional entities in developing projects to control flooding, mitigation efforts that would reduce the impact of future flood events, and strategies to fund those efforts, and the response of public entities that own or operate dams, including how such entities make decisions regarding dam and reservoir operations during large-scale rain events, coordinate with state and local emergency management officials, and communicate with the public. Subsequently, the Speaker also asked the committee to study the development of the initial State Flood Assessment by the Texas Water Development Board, science and data needs related to flood risk and to responding to flood events, the best methods of providing state financial assistance for flood infrastructure needs, opportunities for improved collection and storage of flood flows for future supply needs, and the role of voluntary land conservation efforts in preventing and mitigating flooding.

BACKGROUND

Overview of Hurricane Harvey

On Aug. 23, 2017, Harvey—which had been downgraded to a tropical wave—re-formed into a tropical storm. And because of ideal conditions in the Gulf of Mexico, the storm quickly gained power and was already a Category 4 storm before making landfall, near Rockport, on Aug. 25. The hurricane first moved to the northwest before turning back to the east as a tropical storm, circling around Victoria, going through Matagorda Bay, and then back into the Gulf of Mexico on Aug. 28. The tropical storm stayed close to the Texas coast before making landfall again to the east of Beaumont in Louisiana, on Aug. 30. In its report on Harvey, the National Weather Service observes that parts of the state received “more than 40 inches of rain in less than 48 hours,” and that “Cedar Bayou in Houston received a storm total of 51.88 inches of rainfall, which is a new North American record.” That rainfall record—and the record for any United

States storm—was smashed after the weather service reevaluated its data. Nederland, in Jefferson County, recorded 64.6 inches of rain from Aug. 24 to Sept. 1.[4]

Hurricane Harvey encompassed three separate events: the hurricane event near Rockport, Texas in the Coastal Bend region, a wind event as the storm moved toward Greater Houston, and finally another flooding event as the storm made a second landfall in Southeast Texas.[5] The devastation was far-reaching and affected vast swaths of the state. [6]

Flood Risk to the Economy

Commerce exists near water when flows are considered dependable, but flood events can disrupt a local economy, both in the immediate aftermath of an event and over longer time periods. A recent analysis by Standard & Poor's Financial Services (2018) notes that improper planning for weather-related risks can impact a municipality's credit rating, with specific emphasis on hazard impacts to the local population and the associated tax base. This analysis also calls out the importance of realistic financial assumptions and projections that account for the disruptions caused by natural hazards and the benefits from implementing mitigation strategies to increase resiliency. Further, recurrent flooding may discourage long-term investments by the government and private sector alike.[7]

For example, Jefferson County produces approximately 10% of the gasoline in the United States, including about 20% of the diesel fuel, 50% of the commercial aviation fuel, and 50% of the military aviation fuel, and is home to the world's largest military port. About 60% of the water that flows out of the State of Texas and into the Gulf of Mexico comes from the Sabine-Neches waterway, and yet, Calcasieu Parish in Louisiana, Orange County, Jefferson County, Chambers County, and Harris County together are responsible for providing for the bulk of the country's energy needs. While flood projects are expensive, cost-benefit analysis should take this important impact into account. Because of the interruption in refining capacity, it cost the American consumer $2.9 billion due to the refineries being down and the Sabine-Neches Port being shut down due to shuttling, which is the third largest port in the United States.[8]

Types of Flooding[9]

It is important to note the different types of flooding due to the different strategies needed to prepare for and mitigate their impacts. The primary types of flooding that impact the state are summarized below.

Riverine flooding – Abundant rainfall can result in more runoff entering a river channel than can be contained within its banks. When water levels exceed the capacity of a channel, the river overflows onto adjacent lands, called the floodplain. On steep, narrow floodplains, these excess overflows can create flood conditions suddenly (see flash flooding below). Where land is flat and floodplains are more expansive, greater volumes of runoff are required to cause flooding, the impacts of which may take hours or days to reach locations downstream (see slow-rise flooding below).

Flash flooding – A type of riverine flooding, flash flooding is characterized by a short timelag (less than six hours) between the rain event and rapidly rising water levels (NWS, 2018b). Flash flooding can occur anywhere rainfall intensity exceeds the infiltration capacity of the soil, causing rapid surface runoff. Areas with large amounts of impervious cover, exposed bedrock, or other solid surfaces that reduce infiltration and increase runoff, are especially susceptible to flash flooding.

Slow-rise flooding – This second type of riverine flooding occurs when rain events near the top of the watershed, or far upstream, cause flooding that continues unabated downstream, impacting communities where no rain fell. For example, slow-rise flooding occurs along the Guadalupe River. When intense rains in the Hill Country cause the river to swell in New Braunfels, the City of Victoria, located 230 river miles downstream, can expect floodwater to arrive roughly one to two days after it passes underneath IH-35.

Coastal flooding – Low pressure systems may gain strength as they travel across the warm waters of the Gulf of Mexico, sometimes developing into tropical storms or hurricanes. As these systems approach the Texas coast, stronger winds combined with changes in water surface elevation can produce a storm surge that drives ocean water inland across the flat coastal plain. High tide events also may cause frequent, localized flooding of low-lying coastal lands.

Stormwater flooding – This type of localized flooding occurs when rainfall overwhelms the capacity of engineered drainage systems to carry away rapidly accumulating volumes of water. It typically dissipates quickly, except in situations such as when pumping equipment fails due to loss of power, inflows exceed pumping or conveyance capacity, or debris blocks the passage of water. In urban settings, the solid surfaces of buildings and streets (also called impervious cover) prevent rainfall from soaking into the ground. This creates runoff which contributes to stormwater flooding.

Structural failure flooding – Though uncommon in Texas, failure of man-made infrastructure, such as dams or levees, can occur when intense or extensive rainfall results in the uncontrolled release of floodwaters. Failures may arise if a rain event exceeds the design capacity of a structure, such as when Callaway and McGuire dams failed in Robertson County in May 2004.

Development of the State Flood Assessment

To gain a greater understanding of flooding and how it affects our State, the 85th Legislature funded the state's initial State Flood Assessment, to assess risks and role and envision the future of flood planning in Texas.[10] In April of 2018, the Natural Resources Committee Chairman sent a letter to Peter Lake, Chairman of the Texas Water Development Board, requesting that the assessment also include estimated funding costs for mitigation to aid in the Legislature's deliberations during the 86th Legislative Session.[11] A draft flood assessment was released in September of 2018 and a final version was released in December. The information that came out of the assessment relies heavily on surveys and listening sessions with stakeholders, mostly local floodplain administrators.[12]

The report identified three pillars of flood management: mapping, planning, and mitigation.

Stakeholders surveyed and prioritized how they would like to see state resources directed for these activities in the following order:

1.) Financial assistance to implement flood mitigation activities
2.) Improved flood risk mapping and modeling
3.) Financial assistance for flood mitigation and planning.[13]

The following is a summary of the three pillars of flood management identified in the report, along with analysis and recommendations:

Mapping:

Flood hazard maps are a critical tool for managing flood activities, including identifying where the flood prone areas exist, and where to dedicate resources and implement strategies. They also play an important role in conveying flood risk. Currently, the maps that serve this function are the FEMA Flood Insurance Rate Maps, or FIRMS. All participants in the National Flood Insurance Program (NFIP) are required to regulate in accordance with these FIRMs.[14]

However, there are some drawbacks to using these maps. FIRMs are limited in application, as they are regulatory maps designed for insurance purposes. They are static, meaning that changes in development and how that affects how water moves through watersheds is not reflected. They also only look at riverine and coastal flooding, and while those are major problems in the state, stakeholders also indicated challenges with stormwater or urban flooding, which the FIRMs mostly do not represent. Development of the FIRMs is a very time-consuming process, meaning that the pace of development often outpaces the development of these maps. Nevertheless, these are the primary means for conveying flood risk in communities, and guide how communities implement flood strategies.[15]

FIRMs have been updated to varying degrees throughout the state. Some areas have no maps or only paper maps, some areas have maps that are greater than 10 years old, most areas with digital maps have are 5-10 years old, and a few are less than 5 years old. In order to update maps for the entire state, the cost would be $604 million.[16]

However, some watersheds have begun or have recently completed the mapping update process, for example, all of the Guadalupe and Neches river basins and other individual watersheds, reducing the need to invest in a complete remapping of the state, at this time.[17] A true cost for developing and updating all FIRMs in Texas is yet to be determined, but example costs from recent mapping activities ranged from $1.2 million for the Lower Colorado Cummins basin (most of Bastrop and Fayette counties) to $2.6 million for Upper Brushy Creek (most of Williamson County). [18]These estimates include both state or local in-kind services and existing data and modeling products as well as federal grant funding.[19]

Atlas 14, compiled by the National Weather Service, provides estimates of the maximum rainfall that can be expected for most locations in the United States based on historical rainfall measurements. The recently updated Atlas 14 Volume 11, which includes Texas and incorporates data from Hurricane Harvey, shows increases of more than 5 inches for the 1

percent annual chance, 24-hour rainfall event in areas near Houston as compared to existing historical records. Elsewhere in Texas, new rainfall estimates may differ significantly. Del Rio, San Antonio, Austin, and Corpus Christi are some of the areas where the depths of rainfall associated with many storms are expected to increase.[20]

New analyses will be required to determine and revise the extent of flood inundation that can be expected and the appropriate design standards for infrastructure. In general, in areas where rainfall estimates go down, there will be greater confidence that existing infrastructure will perform as intended. Increased rainfall totals over a short time span means that storms will have more significant impacts than previously predicted translating to larger discharges of water in drainage ditches and under bridges, larger volumes of water in detention ponds and behind flood control structures, and larger floodplains associated with a specific duration and frequency of storm.[21]

Planning:[22]

There is no comprehensive flood planning ongoing currently in the state. However, planning is occurring at various scales. At the state level, the Texas Department of Emergency Management, or TDEM, produces the Texas Hazard Mitigation Plan every five years, and looks at weather-related hazards and strategies to address those hazards. It addresses flooding, but also addresses other hazards such as wildfires and tornadoes, and is not a comprehensive flood plan. As of July 2018, 117 counties have communities with FEMA-approved hazard mitigation plans covering about 81 percent of the state's population. Many communities currently have an expired local plan or no approved plan. Barriers to creation of local hazard mitigation plans are similar to those reflected in our survey of stakeholders: limited financial resources, lack of staff dedicated to this process, and difficulty navigating the process.

Local hazard mitigation planning, given its focus on addressing all types of natural hazards and its voluntary nature, is not sufficiently scoped to provide collaborative, watershed-based strategic flood planning. The process as carried out is important but limited. Further, participating entities vary, leaving no guarantee that participants with flood risks or expertise will be included.

Most flood planning is not occurring on a regional or watershed scale. At the watershed scale, the San Antonio River Authority is an example of watershed-scale planning. They've developed a sophisticated program to develop modeling, mapping, and mitigation efforts for flooding in that basin.

Most flood planning occurs at the local scale. TWDB administers the Flood Protection Grant Program by providing local entities funding for local flood planning efforts.

Stakeholders showed a strong preference for watershed-scale planning for the future of flood planning in Texas, and provided input as to what this process might look like. They indicated it would be important to identify and prioritize projects, much like is done in the State Water Plan, assess upstream and downstream impacts, and develop consistent policies and guidelines to require communities following some and evaluate future changes that could occur in the

watershed, such as development.

Mitigation:

Mitigation encompasses activities that reduce the severity of flooding impacts, which are categorized into structural and non-structural strategies. Structural mitigation generally refers to physical barriers to water, including dams, levees, hard grey infrastructure, and detention ponds. Examples of non-structural strategies include outreach programs, enforcement of ordinances, and early flood warning systems. Communities typically deploy a combination of these strategies.[23]

Relying on responses from stakeholders, the State Flood Assessment estimated that flood mitigation costs over a 10-year period for the entire state will range from $31.5 billion-$36 billion. This figure does include costs for disaster recovery, large-scale projects such as the coastal spine, or high-hazard dam repair. Taking into account estimated available local funds over that period ($7.1-$8.2 billion) and available non-local funds ($2.3-$5.3 billion) for flood mitigation efforts, the statewide funding shortfall is $18-$26.6 billion.[24]

While the State Flood Assessment can and should be used as a tool to help policymakers envision the flood needs of Texas and the state's role in flooding issues moving forward, it should be noted that much of the data points and analysis conveyed in the report is limited to the group of floodplain administrators surveyed. More analysis should continue to ensure state resources are used effectively. Additionally, the state may benefit from a more robust and comprehensive look at flooding issues in light of Hurricane Harvey.[25]

Overview of Roles and Responsibilities Related to Flooding

As the State Flood Assessment points out, the responsibility for flood planning, mitigation, protection, warning, and recovery is diffuse amongst many local governments and special purpose districts, and the federal government, with the State primarily supplying data, administering financing programs, overseeing emergency response, and recovery. Overlapping jurisdictions based on political rather than watershed boundaries and differing missions among the various entities create a multi-layered, complex environment, which sometimes leads to unclear responsibilities and uncoordinated efforts.[26]

The following table developed by the Texas Water Development Board as part of the State Flood Assessment provides a broad overview of select entities and their primary and secondary flood-related roles.[27]

		Stream gaging	Weather forecasting	Flood insurance rate mapping	Flood inundation mapping	National Flood Insurance Program Floodplain regulation adoption and	Hazard mitigation planning	Emergency operations planning (State and Local)	Dam/reservoir management	Levee management	Stormwater and drainage management
Local	City governments	P		S	S	P	P	P	P	P	P
	County governments	P		S	S	P	P	P	P	P	P
	Special purpose districts	P		S	S	P	P	S	P	P	P
	Councils of government			S			P	S			S
State	Texas Commission on Environmental Quality						S	S	S	S	S
	Texas Department of Transportation	S					S	S			P
	Texas Division of Emergency Management				P		P	P			
	Texas General Land Office						S	S			
	Texas State Soil & Water Conservation Board						S	S	S		
	Texas Water Development Board	P		S	P	S	S	S			
Federal	Federal Emergency Management Agency			P	P	S	S	S			
	National Weather Service		P	S	P			S			
	U.S. Army Corps of Engineers	S			P			S	P	P	P
	Natural Resources Conservation Service								S	S	
	U.S. Geological Survey	P		S	P						

Entities that have primary roles (P) are in charge of and/or take the lead on a noted activity. Entities that have secondary roles (S) provide data collection or technical support or have a regulatory responsibility. Dark gray fill indicates all entities in the category take on the responsibility; whereas, light gray fill indicates that some, but not all, entities in the category take on the responsibility. Special purpose districts include river authorities, soil and water conservation districts, water control and improvement districts, flood control and improvement districts, municipal utility districts, and levee improvement districts. Here, the Texas Water Development Board also represents the responsibilities related to the Texas Natural Resources Information System.

DISCUSSION AND CHALLENGES

Science and Data Availability and Needs Related to Flood Risk and Responding to Flood Events

As previously mentioned in this report, much of Texas is either unmapped or uses out-of-date maps, leading to widespread confusion. Mapping is the first step in identifying and communicating flood risk. FEMA's insurance maps show the boundary of inundation for the 1 percent annual chance flood event— commonly referred to as the 100-year flood and often misinterpreted as the line between safe and not safe. However, these maps may not reflect flood conditions based on the most current topographic, land use, or rainfall data. Creating flood risk maps using the most recently collected scientific data and models for all watersheds in the state could cost up to $604 million. Stakeholders prioritized up-to-date flood risk mapping, including collection and distribution of supporting data and addressing local drainage issues.

Sound science and data, identified as core elements of effective planning, are needed to inform flood-related decision making. As such, the TWDB has requested an additional $4.45 million in appropriations from the 86th Texas Legislature to support the agency's current efforts to gather data and monitor conditions across the state and to develop new initiatives that will further our understanding of flooding in Texas and our capacity to share that information.

Specifically, the funding requested would allow the TWDB to develop hydraulic river models for priority watersheds; update reservoir flood pool measurements; expand the TexMesonet earth observation network; acquire high-resolution land surface (lidar) data to better predict floodplains and flooding levels; develop coastal circulation and rainfall-runoff models; and create a web-based flood dashboard/water data hub. The information developed through these efforts will assist flood forecasters, emergency responders, local governments, and all Texans in making informed decisions when preparing for, responding to, and recovering from floods. With better data and better science, Texas can continue working toward the common goal of protecting lives and property from the next flood event.[28]

Further details on many of these activities currently funded through the Floodplain Management Account are below:

APPENDIX B

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 6, 2017

Mr. Carlos Y. Benavides, III
Manager
Rancho Viejo Waste Management, LLC
1116 Calle del Norte
Laredo, Texas 78041

Re: Pescadito Environmental Resource Center - Webb County
Municipal Solid Waste (MSW) - Permit Application No. 2374
Notice of Deficiency Response Extension
Tracking No. 21309054; CN603835489/RN106119639

Dear Mr. Benavides:

The Texas Commission on Environmental Quality (TCEQ) MSW Permits Section has reviewed your application revisions that were received January 12, 2017. As of the date of this letter, the remaining items to be addressed are the proposed landfill's location relative to the 100-year floodplain and to existing pipelines and easements, in addition to disputed property ownership issues. It is requested that these items be resolved within 30 days of the date of this letter. A one-time 14-day extension may be approved upon written request. Failure to submit the required information within this timeframe will result in return of the application.

If you have questions regarding this letter, please contact Mr. Dwight C. Russell, P.E. at (512) 239-5282. When addressing written correspondence, please use mail code MC 124 on the first line of the address.

Sincerely,

Earl Lott for

Chance Goodin, Manager
Municipal Solid Waste Permits Section
Waste Permits Division

CG/DR/cgm

cc: Mr. Mike Oden, P.E., CB&I, Dallas

APPENDIX C

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AN INTERIM ORDER concerning the Administrative Law Judges' Proposal for Decision and Order regarding the Application of Post Oak Clean Green, Inc. for New Type I Municipal Solid Waste Landfill Permit No. 2378; TCEQ Docket No. 2012-0905-MSW; SOAH Docket No. 582-15-2498.

On April 12, 2017, the Texas Commission on Environmental Quality (TCEQ or Commission) considered the application of Post Oak Clean Green, Inc. for Type I Municipal Solid Waste Landfill Permit No. 2378 in Guadalupe County. A Proposal for Decision (PFD) was presented by Craig Bennett, an Administrative Law Judge (ALJ) with the State Office of Administrative Hearings (SOAH), who conducted a hearing in this case in January 2016 in Austin, Texas.

After considering the ALJs' Proposal for Decision, the oral argument of the parties, and the filings in this matter, the Commission determined to remand the matter to SOAH on four specific issues only: 1) to ensure that written certifications that all wells within the jurisdiction of the Railroad Commission of Texas are properly capped, plugged, and closed in the permit boundary are contained in the evidentiary record within a timeframe to be determined by the ALJ; 2) to allow additional evidence on the issue of bird hazards; 3) to allow additional evidence on the subsurface characterization, including characterization of the groundwater; and 4) to allow additional evidence on the need for 24 hour per day, 7 day per week operating hours.

NOW, THEREFORE, BE IT ORDERED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY that:

This matter is hereby **remanded** to SOAH on four specific issues only: 1) to ensure that written certifications that all wells within the jurisdiction of the Railroad Commission of Texas are properly capped, plugged, and closed in the permit boundary are contained in the evidentiary record within a timeframe to be determined by the ALJ; 2) to allow additional evidence on the issue of bird hazards; 3) to allow additional evidence on the subsurface characterization, including characterization of the groundwater; and 4) to allow additional evidence on the need for 24 hour per day, 7 day per week operating hours.

Issue Date: 4-19-17

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

Bryan W. Shaw

Bryan W. Shaw, Ph.D., P.E., Chairman

APPENDIX D

EYE OF THE STORM

Report of the Governor's Commission to Rebuild Texas

REBUILD TEXAS
The Governor's Commission to Rebuild Texas

John Sharp, *Commissioner*

THE TEXAS A&M UNIVERSITY SYSTEM

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John Sharp, Chancellor

NOVEMBER 2018

FOREWORD

On September 1 of last year, as Hurricane Harvey began to break up, I traveled from College Station to Austin at the request of Governor Greg Abbott. The Governor asked me to become Commissioner of something he called the Governor's Commission to Rebuild Texas. The Governor was direct about what he wanted from me and the new commission: "I want you to advocate for our communities, and make sure things get done without delay," he said.

I agreed to undertake this important assignment and set to work immediately. On September 7, the Governor issued a proclamation formally creating the commission, and soon after, the Governor and I began traveling throughout the affected areas seeing for ourselves the incredible destruction the storm inflicted on a swath of Texas larger than New Jersey.

Since then, my staff and I have worked alongside other state agencies, federal agencies and local communities across the counties affected by Hurricane Harvey to carry out the difficult process of recovery and rebuilding.

More than a year has now passed. We know now what we only suspected on September 1, 2017: Harvey was one of the worst disasters in U.S. history. It caused at least $125 billion in damage in Texas, more than any other natural disaster except Hurricane Katrina. Thousands of Texans were left to salvage what they could. Ultimately, it produced the largest disaster response in Texas history, and I am proud to have been part of the response.

In the past year, much has been accomplished, but much remains to be done before Texas can declare itself fully recovered from the devastation of a few days at the end of last summer. But Texans are resilient, and eventually all will be set right.

Before the difficulties our communities faced because of Harvey fade from memory, it is critical that we examine what happened and how our preparation for and response to future disasters can be improved.

In this report, we try to create as clear a picture of Hurricane Harvey as possible. We document how the storm developed and how it affected our state. We also offer a frank assessment of the federal, state and local response and recommendations for how Texas can be better prepared to withstand future disasters. The report is both a record of a milestone event in the state's history and a guide to "future-proofing" our state to mitigate the impact of future Harveys.

Hurricane Harvey was an inestimable tragedy for many Texans, but the lessons it taught us should not be forgotten or ignored.

John Sharp
Commissioner
The Governor's Commission to Rebuild Texas

EYE OF THE STORM

Report of the Governor's Commission to Rebuild Texas

EXECUTIVE SUMMARY

Hurricane Harvey slammed into the Texas Gulf Coast just before 10 pm on August 25, 2017. The storm came ashore just northeast of Corpus Christi and quickly devastated Texas coastal communities with 130 mile-per-hour winds and a six-foot storm surge. From there, the storm moved eastward, leaving a path of destruction that covered an area of Texas the size of New Jersey. By the time the storm left the state, dozens of Texas counties and millions of Texans had been affected.

As part of his effort to respond quickly and effectively in the storm's aftermath, Governor Greg Abbott created the Governor's Commission to Rebuild Texas headed by Texas A&M University System Chancellor John Sharp. The commission's role was to "oversee the response and relief effort between the state and local governments to ensure victims of the storm get everything they need as quickly as possible" and to be "involved in the rebuilding process, focusing on restoring roads, bridges, schools and government buildings in impacted communities."

This report of the commission describes how our state responded to the disaster, and how Texans began the long road to recovery. The report is the product of months of effort by the commission and its many partners, based on hundreds of hours of interviews and after-action reports. It provides a detailed account of the storm and offers recommendations for improving our response to future disasters.

The clearest and most important message we took from the commission's work is that Hurricane Harvey was a warning we should heed. The magnitude of the devastation caused by the storm is almost unimaginable to those who didn't live through it or visit the disaster area repeatedly, as Governor Abbott and Commissioner Sharp did in the weeks following the storm. The enormous toll on individuals, businesses and public infrastructure should provide a wakeup call underlining the *urgent* need to "future-proof" the Gulf Coast — and

indeed all of Texas — against future disasters. This report includes the commission's recommendations about how we can begin this process.

We found that Texas is a national leader in responding to disasters, whether a hurricane along the Gulf Coast or a Panhandle wildfire. Emergency management in Texas is highly organized and well run by professionals who know their jobs and move quickly and decisively. However, we have identified ways the state can improve the current system by unifying the state's response and recovery responsibilities, and by providing better information, training and more effective application of emerging technologies. Texas must be an innovator in the field of emergency management as well as a leader.

We particularly need to do a better job during the long and difficult process of recovery — what is done in the weeks and months after a disaster to restore Texans, their communities and economies to a point where they are as good as or better than before disaster struck.

In this regard, the task ahead matches the Federal Emergency Management Agency's (FEMA) national strategic priorities: To build a culture of preparedness, to be ready for future disasters, and to reduce complexity.

Texas also needs to be better prepared for future disasters. Harvey was a tragedy for many Texans, but it also taught us valuable lessons about how to build a state that is ready for future challenges. We should not allow the opportunity for improvement to pass without action. We need to ensure that state capabilities for emergency response are organized, trained and equipped for whatever challenges lie ahead. We need to have better trained local officials and emergency managers.

Accomplishing these goals requires better communication with the communities affected by a disaster, better and timelier assistance to survivors, better coordination of recovery efforts, stronger partnerships with the federal agencies that provide funding and assistance during major disasters, and improved strategies for bringing state and federal resources to bear in time of need.

For example, during Hurricane Harvey, Texas A&M AgriLife Extension Service agents in a new role aided state-local communications by serving as a "force multiplier" for professionals already in the field and working with city and county officials on a daily basis. We believe this strategy should be developed and extended further. We should work more closely with our federal partners like FEMA to streamline assistance programs and simplify the inevitable mountains of paperwork.

We also need to help individual Texans be better prepared by providing them with better and more accessible information about future risks. We need to stop making the old mistakes in local development that expose homes and businesses to risks that only become apparent when disaster strikes. To paraphrase the old saying, an ounce of preparation is worth a pound of cure.

We must make the Texas Gulf Coast — and indeed the entire state — more resilient and better able to withstand future disasters, whether the threat comes from hurricanes, tornadoes, wildfires, flooding or other disasters, a process Governor Abbott has called "future-proofing" our state.

The effects of an event like Harvey can't be eliminated but they *can* be reduced. With billions of federal, state and local dollars being spent in Texas to repair and replace what Harvey destroyed, it is essential that we don't simply replace what was destroyed but that we also increase the state's resilience. As Commissioner Sharp said last year: "Future-proofing the state's coastal areas requires a long-term commitment and investment to improve the resiliency of our communities and institutions. To succeed, the task needs both the continued partnership and financial support of the federal government."

To accomplish this, we must do a better job of setting priorities and identifying the key improvements that can contribute to a more resilient Texas. That means maintaining an inventory of what needs to be done when funding is available. It means creating an effective state-local planning process for improvement of our infrastructure and our communities, both along the coast and, again, in all of Texas.

Future-proofing Texas means recognizing that the future is uncertain and that investing in strategic improvements now in recognition of future uncertainties is not only a good idea, but also good policy.

In 1900, the most devastating hurricane in U.S. history swept Galveston, killing between 6,000 and 12,000 people. While many storms have lashed the island since then, many fewer people have suffered and much less damage has been done. The reason for this can be attributed to two lessons learned in that tragic year. First, the people of Galveston were better prepared and took approaching storms more seriously. And second, they elevated an entire island and built a seawall. We should recognize that those lessons remain vital and relevant to Texas today — and tomorrow.

FLOODPLAIN RISKS

In the hydrologic sense, a river flood is simply the point at which a river or stream has reached its capacity to convey water within its channel. To most, though, a flood involves damage to property and assets and hazards to life. In the words of the late Gilbert White, "Floods are 'acts of God,' but flood losses are largely acts of man."[17] Factors such as intense rainfall, altered natural landscapes and development in areas that are flood-prone — or that may become that way in time — are increasing river flood hazards.

DEVELOPMENT IN RIVER FLOODPLAINS

Floodplain "encroachment," or development within the floodplain, is one of the major underlying causes of coastal Texas' vulnerability to flooding. It puts property at risk while reducing the benefits associated with intact ecosystems.

Ironically, increased development within the floodplain often is due to actions designed to *reduce* flood hazards. Such measures include channelization, embankments and other physical alterations of the floodplain, intended to reduce flood risk but sometimes giving developers and buyers a false sense of security. This is known as the "safe development paradox" — development can be encouraged by the belief that the flood risk has been removed.[18]

Another cause of floodplain encroachment may be the National Flood Insurance Program itself. Some argue that insuring against loss encourages risky behavior. That is, by offering insurance against flood risk — and at subsidized rates — the NFIP creates indirect incentives for development within floodplains.[19] Furthermore, current NFIP standards allow development within the floodplain to cause up to a one-foot rise in flood levels during a 100-year flood event, implicitly permitting encroachment if it doesn't increase the base flood elevation by an entire foot.

This standard is particularly problematic because it doesn't consider the influence of development *outside* the floodplain, the increasing intensity of rainfall events, future development scenarios, and residual storm water depths and velocities. The net result is that developments are likely to experience flooding exceeding NFIP standards regardless of their present design or situation.[20]

It's important to realize, moreover, that regulatory floodplain maps often are outdated.[21] In Harris County, about 38 percent of flood insurance claims made between 1976 and 2014 were for properties outside the floodplain.[22] Homeowners living outside designated floodplains aren't required to buy flood insurance and may not know about their risks. A lack of such knowledge was particularly evident in the areas around Addicks and Barker reservoirs during Hurricane Harvey; many residents simply were unaware their homes were within the flood pool of the reservoirs (see inset, next page).

COMMUNICATING RISK

Risk communication has a strong influence on whether homeowners conduct mitigation activities. Most such communications are part of larger governmental and community initiatives. For example, flood insurance is required if a homeowner is located within the 100-year floodplain and has a federally backed mortgage, but some communities urge *all* their citizens to purchase flood insurance through various media avenues.

Yet understanding flood risk can be difficult. Statistically, a 100-year flood has about a 26 percent chance of occurring during a 30-year mortgage period. Few homeowners, however, truly understand this risk. Local governments can help with outreach activities that increase awareness of flood risk, including the dissemination of risk information, required hazard information disclosure during real-estate transactions, technical assistance and community flood risk-reduction workshops.

DEFINING TERMS

In a reservoir designed for flood control, the **flood pool** is any elevation of water above the reservoir's normal maximum operating level, or more broadly, the land area that would be flooded by such an elevation. A **100-year flood pool** is the elevation of water within the reservoir (and the resulting area flooding) produced during a 100-year flood event.

URBAN FLOODING

Urban flooding is the flooding in a built environment, particularly in more densely populated areas, by rain falling on impervious surfaces that overwhelms the capacity of drainage systems. It occurs when storm water enters buildings through windows and doors, backs up through pipes and drains or seeps through walls and floors.

Population growth and urban development, coupled with aging storm water infrastructure and changing weather patterns, have given rise to the urban flood problem. These risks and impacts aren't tied to FEMA-defined floodplains or specific river or coastal areas; instead, significant flood losses can occur miles away from a floodplain, in a highly developed landscape.

PRIMARY CAUSES OF URBAN FLOODING

Aging and poorly maintained drainage systems. Many older communities still rely on water and wastewater systems designed and built decades ago. In many cases, these systems have deteriorated significantly. In addition, storm water collection systems require continuous maintenance. Drain blockage, collapsed pipes and any restriction of channel or storage capacity can substantially reduce their effectiveness.

FOCUS ON THE ADDICKS AND BARKER RESERVOIRS

The Addicks and Barker dams were built in the 1940s to create reservoirs that could capture and hold excess rainwater during extreme rainfall, reducing flooding in downtown Houston. After Harvey made landfall on August 25, the reservoirs eventually reached record heights of 109.1 feet above mean sea level in Addicks Reservoir and 101.5 feet in Barker Reservoir. Water began flowing around the spillway on the north end of Addicks Reservoir.

To prevent further uncontrolled releases and dam failure, the U.S. Corps of Engineers (USACE) opened the floodgates on both dams on August 28, allowing water to flow at more than 15,000 cubic feet per second into Buffalo Bayou. Harris and Fort Bend counties issued evacuation orders for upstream residents on August 30, and ordered downstream evacuations on September 2. Ultimately, more than 150,000 people fled.

More than 9,000 homes and businesses built within the reservoirs' pools were flooded — about 5,000 upstream of Addicks and at least 4,000 upstream of Barker. When the reservoirs were originally constructed, USACE purchased land only within the 100-year flood pool, leaving 8,000 acres with a high potential of flooding as private land. In the 1980s, USACE acknowledged that residential subdivisions could be built within the flood pools and that it could be sued if they flooded.

Significant residential growth behind the dams began in the 1990s and 2000s. Three large, planned communities, Cinco Ranch, Kelliwood and Grand Lakes, were built along with several smaller communities. Since 2000, nearly 30,000 structures have been built within the reservoirs' flood pools. Because these privately owned areas aren't considered to be within the 100-year floodplain, many residents were unaware of their risk prior to Harvey and did not have flood insurance.

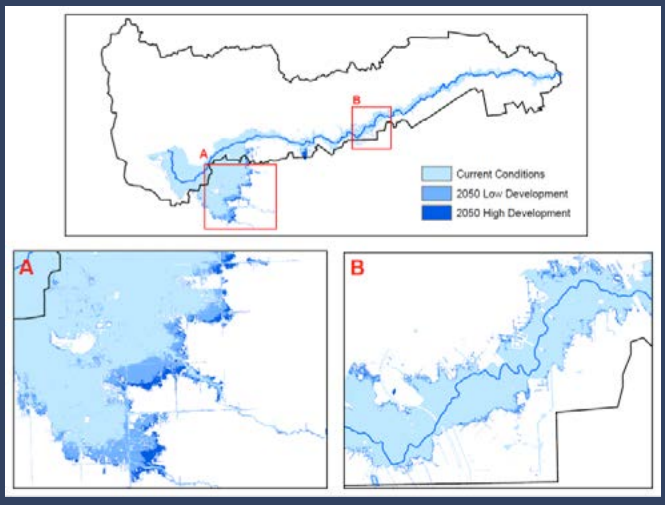
The only official disclosure that these neighborhoods were located within a flood pool is found on subdivision maps of proposed developments within Fort Bend County; Houston and Harris County never required such disclosure. Because any action that could cause private property values to fall could be considered a governmental "taking" without compensation, the legality of even these small warnings has been questioned, as illustrated in recent lawsuits against the USACE.

Because homes located in the flood pools of Addicks and Barker reservoirs are within the city of Houston's jurisdiction, the Houston Planning Commission is responsible for approving new development in the area. Multiple members of the commission during this time of residential growth also were involved in the development of these massive communities. Even after USACE rated the dams as "extremely high risk" in 2009, the planning commission never publicly discussed the risk posed within the flood pools.

THE CYPRESS CREEK FLOODPLAIN

The Cypress Creek watershed in northwest Harris County encompasses a drainage area of more than 267 square miles. In the past few years, Cypress Creek has experienced several major flooding events that damaged thousands of homes and resulted in substantial economic losses. During Hurricane Harvey, thousands of residents in the watershed experienced severe flooding for several days, leaving hundreds stranded in their homes.

Yet the area is being developed rapidly. From 2000 to 2010, the population living in the watershed rose by an average of 70 percent by ZIP code; one ZIP code in the watershed's western portion saw its population increase by *390 percent*. Thus, new development is occurring in areas already vulnerable to flooding, while the accompanying increase in impervious surface is increasing the flood risk.



While new development in Cypress Creek features detention requirements, these are not sufficient to completely offset the impacts of new construction. By 2050, the amount of developed land in the watershed could rise by 54 percent, while natural land acreage could fall by 60 percent. Even with existing detention requirements, new development will increase the extent of the 100-year floodplain by up to 23 percent in some portions of the watershed. By 2050, development could bring an additional 550 residential properties into the 100-year floodplain.

Increasing local runoff. Our storm water infrastructure generally has not been improved to cope with changes in hydrology due to population growth, development and increasingly intense precipitation. As new development occurs, and redevelopment replaces smaller with larger structures, natural drainage patterns are reduced and urban flooding increases.

Changes in local physical conditions. In some cases, transportation projects and other development block historic paths for drainage. Some communities' drainage plans call for use of roadways as temporary water storage areas. During excessive rainfall, however, this strategy sometimes fails, creating unforeseen pathways for drainage with unexpected consequences.

While evidence suggests that urban flooding is an increasing problem nationwide, it can be difficult to measure. Storm surge heights and river gauges are easily measured, but such indicators aren't necessarily present during an urban flood. One useful measure, however, comes from the examination of insured flood claims occurring *outside* the floodplain. For example, an evaluation of repetitive flood losses in Harris County from 1978 to 2008 found that more than 47 percent of such losses occurred outside the 100-year floodplain.[23]

In a subsequent analysis of insured flood claims in the Clear Creek watershed south of Houston, 55 percent of losses between 1999 and 2009 were located outside the 100-year floodplain. Furthermore, residents located a quarter of a mile from the floodplain boundary — the average flood claim distance — still could expect almost $13,000 in flood damage. Significantly, *none* of the storms causing property losses during the study period were 100-year events.[24]

OUTLOOK

Recent estimates place more than $400 billion in Texas assets in the current 100-year floodplain, with a 50 to 75 percent increase in their value expected by 2050.[25]

River flooding is likely to increase since it's tied directly to precipitation intensity. Increased precipitation can be expected to contribute to higher peak flows during extreme events. More intense storms will decrease the time needed to reach peak flow, causing rivers (especially bayous and smaller tributaries) to flood more readily. The impacts will be further compounded by urban development, sea-level rise and the loss of natural buffers separating developed areas from flood hazard areas.

Increased river flows have been observed across Texas, with nearly 20 percent of stream flow gauges in the state displaying upward trends. The greatest rate of

change has been seen in the greater Houston-Galveston region, followed by Dallas-Fort Worth.[26] Although greater peak flows won't necessarily lead to damaging floods, they can certainly cause them.

As already noted, more urban development is expected in the majority of Texas coastal watersheds. Loss of natural storage areas such as wetlands, open space and even agricultural land increases the volume and speed of runoff, particularly in coastal areas. Where floodplains are wide and shallow, small changes in peak flow can have large impacts on the extent of flooding.

Recent studies in the Houston-Galveston area have shown that urban development will increase the extent of floodplains in the future, despite investments in onsite water detention. For example, in the Cypress Creek watershed in Northeast Houston, urban development is expected to increase the size of the floodplain by 8.4 to 12.5 percent by 2050, placing an additional 361 to 550 existing structures in the Special Flood Hazard Area, where flood insurance is mandatory (see inset, previous page).

Such trends highlight the need for comprehensive flood mitigation and an increased focus on detention requirements to offset the impacts of new development, as well as policies to ensure that such development has no adverse impact on existing floodplains and nearby communities.

Periodic updates to regulatory floodplains, moreover, are likely to increase the amount of land within them. The federal regulatory process identifies areas vulnerable to floods to define levels of risk and determine actuarial rates. The result of this analysis is the Flood Insurance Rate Map (FIRM), which draws the boundaries of the 100-year and 500-year flood plains.

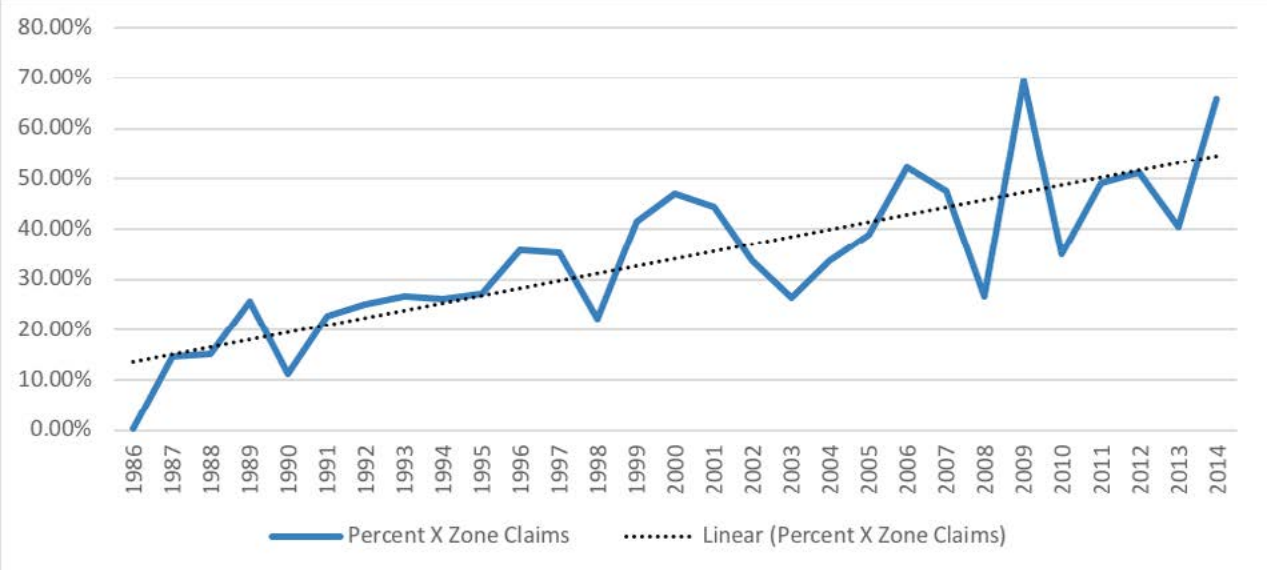
One key measure used in defining regulatory floodplains is precipitation, specifically the amount falling in a 24-hour rainfall event with a 1 percent chance of occurring in any one year. This value is provided by a rainfall frequency analysis, which for Texas is derived from a 1961 technical paper released by the National Weather Service.[27] NOAA updated these values for Texas, for 2018.[28]

Early indications suggest that for the upper and middle Texas coast, along with areas throughout the Texas Hill Country, 1 percent/24 hour rainfall amounts will increase by 2 to 7 inches, which in some areas, such as southeast Harris County, represents an increase of 30 percent or more.[29] As these data are used to redefine flood-risk areas, identified floodplains will expand more rapidly into previously developed areas, with serious implications for insurance requirements as well as the need to communicate flood risks.

Urban flooding also appears to be increasing. Insured flood losses outside Texas floodplains rose steadily from 1986 through 2014 (**Exhibit 5**). Note that these figures include only individuals who *chose* to purchase flood insurance, because lenders and mortgage services don't require it outside the regulatory floodplain.

Exhibit 5. Share of Total Insured Flood Losses Outside Texas Floodplains, 1986–2014

Source: Created from NFIP data by Texas A&M University. X Zone claims are those that occur outside of the regulatory floodplain.



CHARACTERISTICS OF THE NATURAL ENVIRONMENT

In Texas, the primary causes of excessive rainfall are tropical cyclones and slow-moving thunderstorms.

Due to its location in the subtropics and long coastline on the Gulf of Mexico, Texas has always had a high risk of hurricane damage. The historical record shows that about one has made landfall somewhere on the Texas coast annually since 1875.[30] According to NOAA, eight of the 30 most significant hurricanes in U.S. history hit Texas.[31]

While almost any tropical cyclone carries the risk of 10 inches or more of rain, extreme amounts (more than 20 inches) generally are associated with tropical cyclones that stall or move very slowly. The most extreme tropical cyclone events in Texas history — Beulah in 1967, Amelia in 1978, Claudette in 1979, Allison in 2001 and Harvey in 2017 — show no correlation between total rainfall amounts and storm intensity.[32]

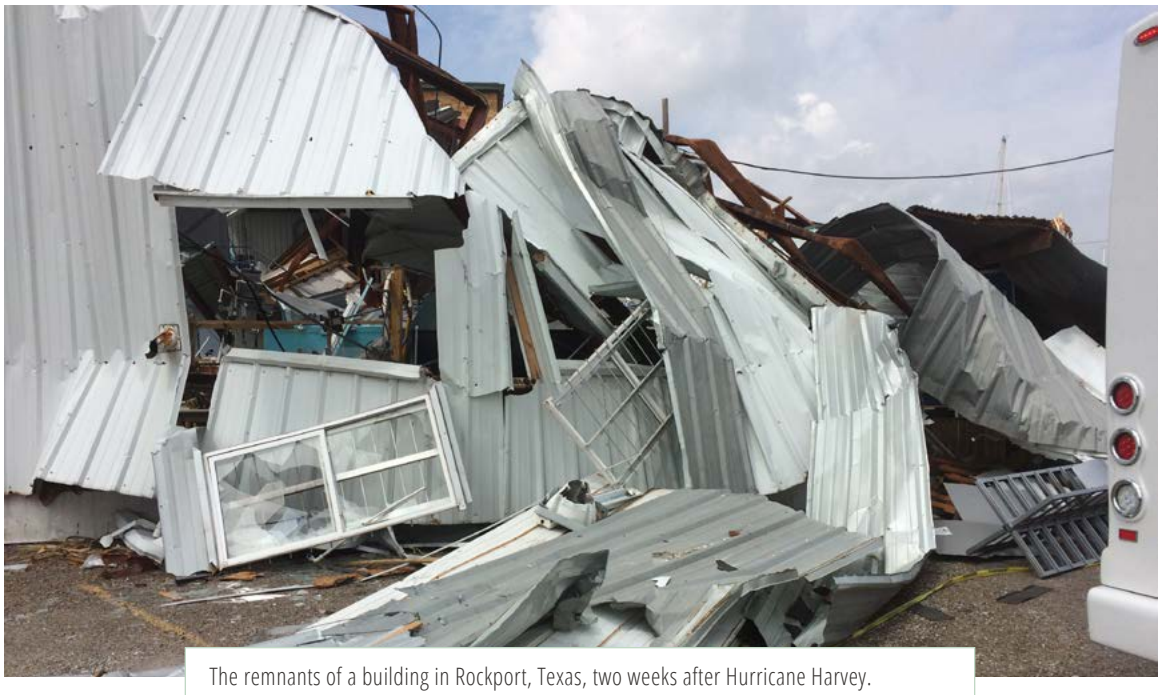
In addition to tropical cyclones, regular annual rainfall has risen across the U.S. since 1900. Research indicates that rainfall over the central U.S. has increased in intensity as well as frequency. Texas State Climatologist Dr. John Neilson-Gammon has stated that the frequency of non-tropical extreme rain events has been increasing in recent decades and that, while droughts are becoming more common across Texas, so too are heavy downpours.[33]

Since 1950, for example, parts of southern Texas have experienced a 700 percent increase in heavy rain events. Houston has seen a 167 percent rise in heavy rainfall.[34] Recent events across the state further highlight this trend. 2015 was Texas' wettest since record-keeping began, and May 2015 was the wettest month in the state's history, with an average of 8.81 inches of rain statewide.[35] In 2016, South and East Texas experienced rainfall exceeding 19 inches in 24 hours at some locations, causing devastating flooding.

STORM SURGE AND WIND

While Harvey's unprecedented flooding directed much attention to extreme rain, storm surge and wind also pose severe risks. For the vast majority of hurricanes, storm surge and wind are the largest contributors to damage; storm surge alone is responsible for 49 percent of deaths from hurricanes in the Atlantic basin from 1963 to 2012.[36]

While wind poses a lesser threat to life than storm surge and flooding, it still can cause great damage to structures along the coast. Wind damage mainly occurs from storms approaching hurricane strength. Damage and threats to human lives increase dramatically with wind speed.



The remnants of a building in Rockport, Texas, two weeks after Hurricane Harvey. (Texas A&M AgriLife Extension Service)

Meteorologists and wind engineers designed the Saffir-Simpson Hurricane Wind Scale to convey these exponential increases in risk with higher wind speeds. Its hurricane categories, however, are based on *maximum* wind speed, not the size of the wind field or the length of time high winds occur over a given location.[37] Such factors are important in determining the extent of impacts.

Harvey, for instance, had an average to slightly smaller than average-sized wind field when it made landfall. Humberto (2007), by contrast, was an extremely small hurricane with hurricane-force winds extending outward only about 20 miles from its center; its wind field was less than half of Harvey's size. Hurricane Ike (2008) was perhaps the largest storm in the historical record affecting Texas, with Carla (1961) a close second; Ike's wind field was about three times larger than Harvey's.

The American Society of Civil Engineers (ASCE) has published information for the chances of extreme winds at return intervals of 300 years (i.e. a 0.33 percent annual chance) and 700 years (a 0.14 percent annual chance) (**Exhibit 6**). The contour lines show the expected maximum wind speeds in such events. These data form the baseline for wind specifications in building code design. While such large intervals may seem to imply very low-probability events, it should be remembered that the landfall impacts of Harvey, Irma and Maria all were in the 1,000-year or greater realm.

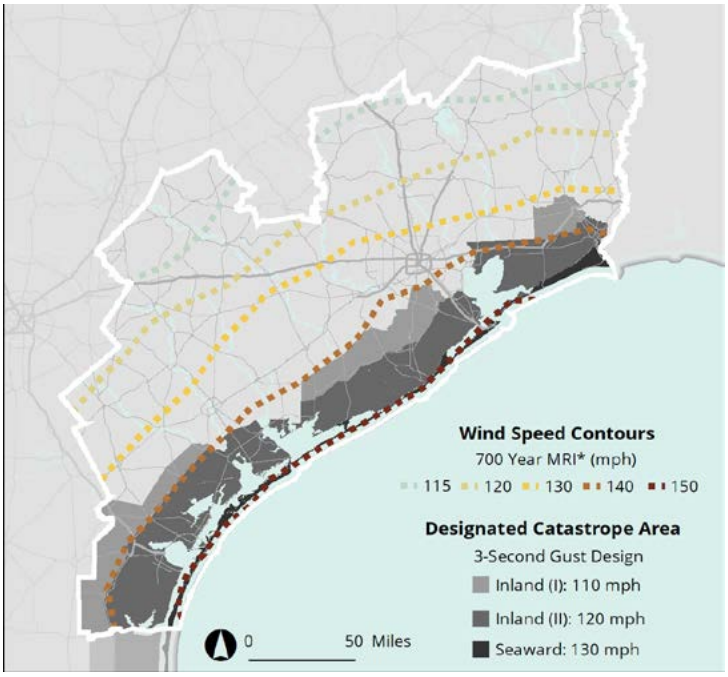
In Texas, city and county jurisdictions set and enforce building codes for wind. TWIA and the Texas Department of Insurance (TDI) have adopted guidelines for local jurisdictions to use in developing residential building codes. As with floodplain regulations, TDI's guidelines appear to closely match a 100-year return period, or 1 percent annual chance, for extreme winds. And as with flood insurance, many commercial insurance companies deem the wind risk exposure in Texas coastal counties to be too great to be actuarially acceptable, which led to creation of TWIA as an insurer of last resort.

OUTLOOK

Most of the flood-producing rains in Texas not associated with tropical storms or hurricanes are a result of intense storm systems (such as the 2015 Memorial Day weekend floods in the Hill Country and the 2016 Tax Day flood in Houston). Texas State Climatologist John Neilson-Gammon has demonstrated that the frequency of extreme rain events has increased

Exhibit 6. Wind Contours for Counties in the Harvey-Affected Area

Source: Texas A&M University analysis of Texas Windstorm Insurance and American Society of Engineering data



in recent decades.[38] Observations of the Gulf Coast region since 1880 show an increase of 12 to 22 percent in the intensity of extreme precipitation events lasting three days.[39]

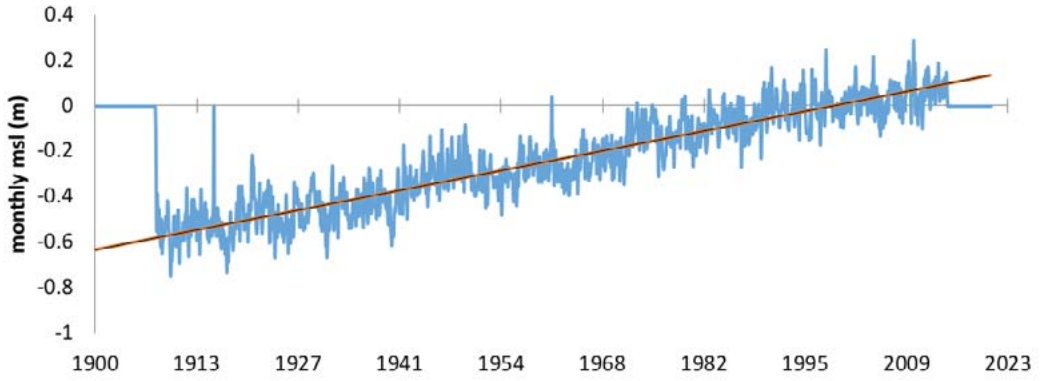
On other hand, the forecasting of tropical cyclones and accompanying surge and wind impacts is still evolving. There is some indication of an increased likelihood of very intense (category 4 and 5) storms, but confidence in this prediction is currently low.[40]

Given the very gradual change of elevation inland from the Texas coast, sea level rise would greatly increase the area at risk from storm surge and flooding. The largest sea level rise in the U.S. is anticipated in the western Gulf of Mexico, where Texas has 367 miles of coastline. Some of the highest rates of sea level rise along the Texas coast have been observed near the Bolivar Roads Inlet at the east end of Galveston Island.

Since 1904, the sea level at Galveston's Pier 21 has risen by an average 0.25 inches per year, equivalent to a 2.13 foot rise per 100 years (**Exhibit 7, next page**).[12] At Corpus Christi, sea level has risen by an average 0.18 inches per year since 1983, equivalent to a 1.5-foot rise per 100 years.

Sea level rise increases the potential for *tidal*

Exhibit 7. Observed Trend in Monthly Mean Sea Levels at Galveston Pier 21, 1904-2014
Source: Texas A&M University analysis of NOAA tides and currents data



flooding, also called recurrent or nuisance flooding. For example, Port Isabel, Texas, experienced 15 days of coastal flooding between 1955 and 1964, but *121* days between 2005 and 2014.[13] Sea level rise also can be expected to heighten the impacts of storm surge, both by adding more land area to potential flood zones and by increasing the depth of flooding of coastal properties already at risk.

Detailed studies have been conducted to investigate the dual impact of increased development and rising sea level on the Houston-Galveston area between 2015 and 2080. The findings show that 2.4 feet of sea level rise more than doubles the chances of residential flooding in the event of a major hurricane.[41]

A secondary but important impact of increasing coastal water levels is the potential additive effect of storm tide to river flooding, or *compound* flooding. Recent research suggests an upward trend in compound flood events along the U.S. Gulf and East coasts. For this reason, experts expect average storm-related losses to rise by up to $222 million annually by 2030 and up to $650 million per year by 2050. This would increase expected annual losses to $3.9 billion by mid-century.[42]

CONCLUSION

Texas has been prone to flooding for millions of years. The characteristics that help shape flood impacts, however, are changing in ways that make the state more vulnerable. Flooding risks for coastal Texas, and much of the rest of the state, will continue to rise. The current scientific consensus points to increasing amounts of intense rainfall coupled with the likelihood of more intense hurricanes.

Precipitation and surge-based flood risks have always been with us, but as development creeps into flood-prone areas and floodplains expand into already developed areas, Texans are likely to become increasingly vulnerable. Urban floods will continue to pose a threat to more densely populated areas. Population growth and increasing development, if unguided, will further exacerbate the state's flood risks and vulnerabilities.

A large share of the future flood threats we face are the result of a convergence of many factors. Some of these factors can be mitigated through available techniques and proactive planning — but only if community leaders are willing to work within and across jurisdictional boundaries.

9 FUTURE-PROOFING TEXAS

During a news conference announcing the formation of the Governor's Commission to Rebuild Texas, Commissioner Sharp said: "One of the guiding principles will be to 'future-proof' what is being rebuilt so as to mitigate future risks as much as possible."[1] Since its creation, Governor Abbott and Chancellor Sharp have returned to that idea again and again, driving home an important point to Texans.

The concept of future-proofing may seem unfamiliar, but its core meaning in emergency management isn't: It means to plan ahead and prepare for the inevitable emergencies of the future. In this sense, future-proofing is the process of anticipating future storm events and developing ways to minimize their effects on lives and property — strategies that can mitigate the impact of future disasters and make the state more resilient.

As such, the concept rests on two assumptions: First, that Texas will face future disasters, and second, that since we know that future disasters will come, we should not wait for them unprepared. The report of an earlier commission, the Governor's Commission for Disaster Recovery and Renewal, put it this way in 2009: "Where possible, the state of Texas should take measures to protect against catastrophic damage. But catastrophes will still happen, so the state of Texas needs to pursue processes that will help prevent one major loss from triggering additional losses."[2]

As we applied the concept of future proofing in the course of the Commission's work and in detail in Chapter 8 of this report, it means putting a premium on strategies that can help avoid, resist and accommodate the worst nature can throw at our state. It also means we do our best to prepare our citizens and our institutions to deal with emergencies by communicating information that will allow them to make good decisions about mitigating risks.

No one working on the state's recovery from Hurricane Harvey has ever been under the illusion that future-proofing Texas in the most comprehensive sense of the word would be easy or inexpensive. If it was easy and inexpensive, it would have been accomplished long ago. It would have been accomplished in 2008 after Texas suffered through three hurricanes — Dolly, Gustav, and Ike. It would have been accomplished in 2005 after Katrina devastated Southern Louisiana and Mississippi and Rita tore through South East Texas on its way to creating more destruction in Louisiana. It would have been accomplished after the deadly and destructive 2011 fire season. Periodic disasters are not a new story in Texas. Because of its sheer size, environmental diversity and location on the Gulf of Mexico, the state must deal with these threats on a regular basis. Texas, after all, has had more declared disasters than any other state in the nation.[3]

"NOTHING GOOD COMES OUT OF A SLOWING STORM"

That unwanted distinction is unlikely to change in the future. Recent scientific studies have found that tropical cyclones, which includes hurricanes, are moving more slowly than they did in past decades, intensifying their potential effects when they reach land.[4] "Nothing good comes out of a slowing storm," said James Kossin, with the National Oceanic and Atmospheric Administration's Center for Weather and Climate in Madison, Wisconsin, and author of one recent analysis published in *Nature*. "It can increase storm surge. It can increase the amount of time that structures are subjected to strong wind. And it increases rainfall."[5] The recent destruction in the Carolinas caused by Hurricane Florence offers yet another demonstration of the trend.

Ethan Gutmann of the National Center for Atmospheric Research who led another study of recent hurricane trends brought the issue closer to home: "Our research suggests that future hurricanes could drop significantly more rain. Hurricane Harvey demonstrated last year just how dangerous that can be."[6] In the same vein, a study released last year found that rainfall events along the Texas coast as intense as that produced by Hurricane Harvey, had about a 1 percent annual

likelihood in the 1990s. That likelihood increased to about 6 percent annually in 2017, and by 2090, it could be about 18 percent.[7]

The commission's work focused on hurricanes and coastal Texas, but the state's challenges with disasters, natural and otherwise, goes beyond hurricanes. The 351 declared disasters in Texas since 1953 that FEMA tracks include hurricanes, tornadoes, severe storms and floods, fires and more than one explosion, including the West fertilizer explosion in April 2013. Texans remember the Bastrop fires of 2011 that burned more than 34,000 acres and destroyed 1,660 homes in Central Texas, one of the most damaging wildfires the state has ever seen. Some will remember April 10, 1979, when a series of about 30 deadly tornadoes tore through communities on the Texas-Oklahoma border and the Red River Valley, killing 58 people, 54 of them Texans, on a day that became known as "Terrible Tuesday." The list, in fact, includes more fires and floods than hurricanes and the effects of these other disasters, though smaller than Harvey, are no less devastating to the communities and individuals affected.

So, we should recognize that Texas, along with its many benefits, will face a future that contains more challenges, and the question we have tried to answer in this report is: What should we do to prepare? The answers we found after months of work on hurricane recovery and days of discussion with state and local officials, business, nonprofit and individuals encompasses many recommendations for improvements in our current emergency management process contained in this report. As we look to the future, six conclusions stand out as vital in determining whether Hurricane Harvey has really taught us our lesson or if we will simply wait for the next hurricane or tornado or wildfire to arrive without taking the steps needed to better protect our citizens, their homes and businesses and the public infrastructure that is critical to the state's economic success.

First, we found that Texas is the best in the nation in its ability respond to disasters, whether natural or man-made, but we also identified ways that we can improve the current system through more efficient organization, more effective coordination, better information and the application of emerging technologies. Texas must not only remain a leader in emergency response. It must also be an innovator.

Second, we need to apply the lessons of Hurricane Harvey to the strategies we use to begin the recovery in the critical days and weeks following a future disaster. That means better organizing assistance for survivors of the disaster, better coordination of recovery efforts at the state and local level, stronger partnerships with the federal agencies who provide funding and assistance for major disasters, and more quickly and effectively bringing state and federal resources to bear on the problem.

Third, we need to greatly streamline and improve our longer-term approach to recovery, providing more effective and organized assistance to communities affected by disaster, working with our federal partners to streamline and speed up assistance programs for local governments, individuals and businesses, and build on what we have learned from Harvey as we prepare for the next inevitable challenge. The recovery has not worked well for all Texans. There have been delays, particularly in federal housing programs, and many Texans have spent the year battling through the thicket of federal and state bureaucracy in order to get back on their feet. Some of this is inevitable given the magnitude of the problem, but we should make a commitment to making real improvements in the process before the next large storm.

Fourth, we need to be better prepared. Harvey was a tragedy for many Texans, but it also exposed areas where the state can better equip itself for the future. We should not allow the opportunity for improvement to pass by without action. We need to have better trained local officials and emergency managers. We need to ensure that state capabilities for emergency response are organized, trained and equipped for future Harveys. We need to stop making the old mistakes in local development that expose homes and businesses to flood events like Harvey.

Fifth, we need to provide local governments, Texas businesses and individual Texans with better and more accessible information about future risks in their area, and we need to develop our communities in ways that don't expose homeowners and businesses to risks that only become apparent when disaster strikes. In a 2016 study of public perceptions of hurricane-related risks along the Gulf Coast and how they influence public support for flood management policies, researchers found that residents had low motivation to take voluntary steps to reduce their risks before a storm unless they have timely, up-to-date information from trusted sources about how serious those risks are. Their perceptions were also affected by past experience with storms.[8] "In the case of Harvey, we believe that many victims did not correctly perceive

the risks they faced, and failed to anticipate or prepare adequately for this unprecedented catastrophe," the study's author said.[9] We need to make sure that doesn't happen again. Only when people have good information can they make good decisions.

Finally, we need to begin the vital work of future-proofing Texas, and we need to develop a more organized method of approaching this imposing task. As part of the work of the commission, we have worked with the Texas Division of Emergency Management to compile a comprehensive list of hazard mitigation projects in the counties affected by Hurricane Harvey. The list totals more than 4,000 potential projects costing billions of dollars. Many of these projects are important to protecting the state as a whole from future hurricane and flooding disasters; all are critical to the local communities where they are needed — and needed now, not in the future.

This list, which continues to grow, is only a start. Ultimately, the state needs to compile a comprehensive list of mitigation strategies for the entire state, an effort that will require much more time and cooperation at the local level. Then we need to prioritize the projects based on the best available scientific and economic analyses and begin work on attacking the problem. There is no need to wait for a perfect list. It will be ever-changing. The time to begin work is now while resources are available from the federal government and the state to address as much as is feasible.

PREPARING ON AN EXTENDED TIME SCALE

Texas already has a model for this sort of approach — the Texas Water Plan. Born in the 1950s during the state's drought of record, it was designed to forecast the state's future water needs over decades, rather than a few years and prioritize water projects, working from the local level up to the overall plan, an approach that ensures that local concerns are addressed along with statewide concerns. As one article put it: "Texas officials, with the pain of '50s drought fresh in their minds, funded the first water plan in 1961 in a way that hasn't been done since."[10]

Texas needs water, but it also needs to protect its citizens and public infrastructure from future disasters like Harvey. Is it not appropriate that with the hurricane fresh on our minds that we make the changes we need to make now and not in some theoretical future? Chapter 8 of this report lays out a path to improvement.

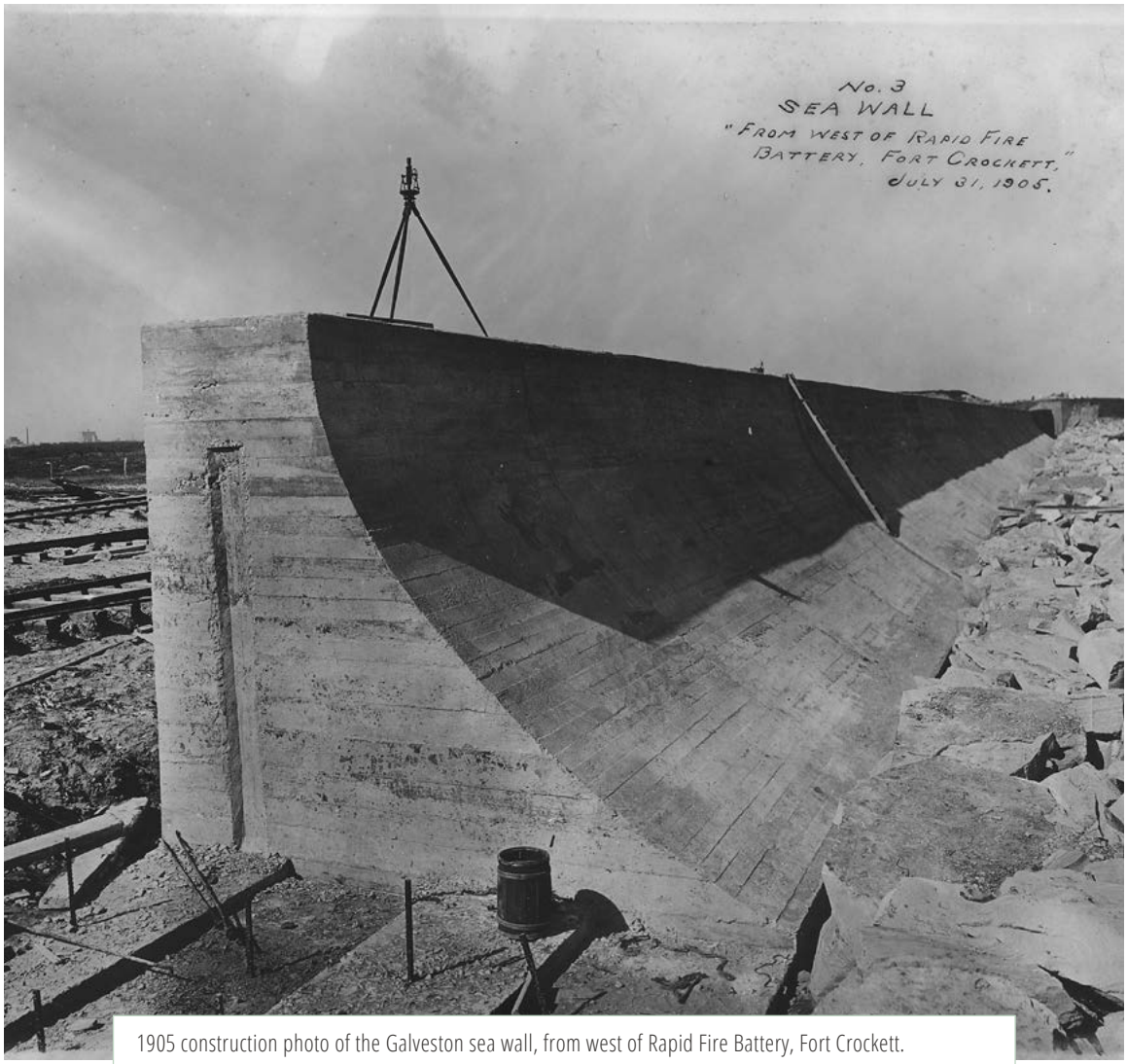
Commissioner Sharp, who oversaw the state's finances for eight years as Texas Comptroller of Public Accounts, recognizes as well as anyone that this process cannot be completed immediately. He recognizes as we all should that we are talking about thinking in generational terms, to making a commitment that we will start now to build an infrastructure that will last for decades and survive the worst that is thrown at it. This requires a vision for what needs to be done and a willingness to think long term. As MIT Professor Kerry Emanuel, who authored the paper on hurricanes along the Gulf Coast, put it: "It would be nice to see cities in general plan on a 50-year time scale, at least, versus a one- or two- or 10-year time scale."

The list TDEM and the commission have compiled is the beginning of such a plan. It contains projects totaling an estimated 108 billion, including the $61 billion in priority projects that Governor Abbott submitted to Congress in October of last year. The total funding requirement, assuming it is accurate, is far larger than the funding provided by Congress in the wake of Hurricane Harvey. It is far more than the Legislature can possibly provide in any legislative session or succession of legislative sessions. It is, in fact, about the same as the entire annual budget of the state of Texas in fiscal 2019. That is why we need a plan, a set of priorities, and a commitment to addressing the plan over time as funding becomes available.

In short, we need to know what we will do when we are able to do it — and to be effective, we need the participation both of local governments and the federal government, which has a compelling national interest in protecting the vital infrastructure of the Texas Gulf Coast along with its millions of inhabitants. As Commissioner Sharp put it last year: "Future-proofing the state's coastal areas requires a long-term commitment and investment to improve the resiliency of our communities and institutions. To succeed, the task needs both the continued partnership and financial support of the federal government."[11] And that is before we even before we consider the very real needs of the rest of the state.

The future risks to the Texas Gulf Coast are real and will only grow as the coastal counties continue to develop. The reality is that there will never be a better time to begin working on a future-proof Texas than right now.

Isaac Cline, the chief of the U.S. Weather Bureau in Galveston at the time of the 1900 hurricane — and the Isaac in Erik Larson's book about the 1900 hurricane, *Isaac's Storm* — once dismissed the probability of a hurricane striking the island: "Galveston should take



1905 construction photo of the Galveston sea wall, from west of Rapid Fire Battery, Fort Crockett. (U.S. National Archives and Records Administration)

heart as the chances are that not once in a thousand years would she be so terribly stricken," he wrote. His comments helped persuade local officials to save money and postpone improvements, including building a seawall, which would have given the island some measure of protection. Eventually Cline saw the error of his ways. As the 1900 storm bore down on Galveston, he violated Weather Bureau policy and unilaterally warned the island's residents. Tragically, the warning came too late to allow residents to evacuate and thousands died.

It wouldn't be the last hurricane to threaten the Texas Gulf Coast and Galveston. Another large hurricane struck the island in 1915. There were many others in succeeding years as Larson wrote: "Other hurricanes struck or came very near in 1919, 1932, 1941, 1943, 1949, 1957, 1961, and 1983," Larson wrote in *Isaac's Storm*. That list has expanded over the last 20 years and now includes not only Hurricane Harvey but also the devastating Hurricane Ike in 2008. But while many storms have lashed the island since 1900, many fewer people have suffered and much less damage has been done. The reason for this can be attributed to two lessons learned in that tragic year. First, the people of Galveston were better prepared and took approaching storms more seriously. And second, they elevated an entire island and built a seawall.

ENDNOTES

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APPENDIX E

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 13, 2017

Bridget Bohac, Chief Clerk
Texas Commission on Environmental Quality
Office of the Chief Clerk (MC-105)
P.O. Box 13087
Austin, Texas 78711-3087

RE: PINTAIL LANDFILL, LLC
TCEQ DOCKET NO. 2016-2112-MSW

Dear Ms. Bohac:

Please find attached The Executive Director's Response to Pintail's Motion to Overturn in the above referenced matter.

Sincerely,

Anthony Tatu, Staff Attorney
Environmental Law Division

cc: Mailing list

Enclosure

TCEQ DOCKET NO. 2016-2112-MSW

APPLICATION BY	**§**	**BEFORE THE TEXAS**
PINTAIL LANDFILL, LLC FOR	**§**	**TEXAS COMMISSION ON**
NEW MUNICIPAL SOLID WASTE	**§**	
PERMIT NO. 2391	**§**	**ENVIRONMENTAL QUALITY**

Executive Director's Response to Pintail's Motion to Overturn

On December 01, 2016, the Executive Director of the Texas Commission on Environmental Quality ("TCEQ") returned Pintail Landfill LLC's ("Pintail") application, No. 2391 for a municipal solid waste ("MSW") landfill permit. The Executive Director returned the application in accordance with Tex. Health & Safety Code ("THSC") Sections 364.012 and 363.112 which prohibit the TCEQ from granting an application when local ordinances prohibit the processing or disposal of waste at that location. In this instance, local ordinances have been passed by the City of Hempstead and Waller County which prevent the TCEQ from granting Pintail's application by prohibiting the processing or disposal of waste at Pintail's proposed location. Pintail filed a motion to overturn that decision on December 22, 2016. For the reasons stated below, the Executive Director respectfully recommends that Pintail's Motion be denied by the Commissioners, or not set for Commission agenda and be overruled by operation of law.

I. Timeline and History of Applications and Local Ordinances

The proposed Pintail landfill would be located at 24644 Highway 6, within the extra territorial jurisdiction ("ETJ") of the City of Hempstead, in Waller County, Texas. Since July 2011, three applications and three ordinances have affected the proposed site for the landfill. The three applications include two MSW landfill applications and one Transfer Station Registration application. The three ordinances include two Waller County ordinances and a City of Hempstead ordinance.

On July 22, 2011, Pintail filed a permit application for an MSW landfill – MSW No. 2377 ("original application"). On August 2, 2011, Pintail filed Transfer Station Registration Application No. 40259 ("Transfer Station Application").

After Pintail submitted both applications, Waller County passed Ordinance 2011-001 ("2011 Ordinance") on August 26, 2011, prohibiting the disposal of municipal or solid waste in Waller County unless the disposal (1) occurs within a two mile radius of any *privately*-owned solid waste disposal site holding a current or previously valid permit as of the date of adoption of the ordinance or (2) occurs at a publicly owned or operated facility within Waller County.

On February 13, 2013, Waller County passed a second ordinance, Ordinance 2013-001 ("2013 Ordinance") which amended the 2011 Ordinance and allowed disposal of solid waste at the proposed Pintail site. This ordinance was later voided as result of litigation between the City of Hempstead and Waller County.

On September 8, 2015, the City of Hempstead passed Ordinance 15-109 which allows the disposal and processing of waste within the city limits and the city's ETJ only if those activities are located at least 5280 feet away from residences, rights-of-

way of highways, and public or private water wells where the water is being used as a source for potable water.

Approximately one month later, on October 5, 2015, the TCEQ returned Pintail's Original Application after Pintail disclosed in formal filings that their landfill application, which was pending at the State Office of Administrative Hearings ("SOAH") did not meet TCEQ rule requirements.

On July 05, 2016, Pintail filed a second permit application for an MSW landfill – MSW No. 2391 ("Current Application")—the subject of this MTO. An applicant for an MSW landfill facility must indicate on the application form if a local ordinance exists prohibiting the processing or disposal of solid waste at the proposed site. In this case, Pintail stated that no local ordinances prohibited their proposed MSW facility and attached a memo from their attorneys explaining their reasoning.

On July 19, 2016, the Executive Director's MSW Staff declared the current application administratively complete and stated that the review of whether local ordinances applied would be conducted during the technical review period. MSW staff did conduct a thorough technical review of the Application while legal staff reviewed the ordinances and a public meeting was held at the request of a legislator.

On December 1, 2016, the Executive Director returned the current application because local ordinances passed by Waller County and the City of Hempstead prevent the TCEQ from granting Pintail's application in accordance with THSC Sections 363.112 and 364.012.

On December 22, 2016, Pintail filed a Motion to Overturn the Executive Director's decision.

II. Statutory Authority and TCEQ's Review

The relevant statutory authority governing the ordinances and Executive Director's return can be found at THSC Sections 363.112 and 364.012. Section 363.112 authorizes Cities and Counties to adopt ordinances prohibiting the processing or disposal of municipal solid waste in certain areas. Section 364.012 applies only to Counties and authorizes ordinances prohibiting disposal of municipal waste if that disposal is a threat to the public health, safety, and welfare. Both statutes, however, contain similar provisions preventing a city or county from prohibiting waste in areas for which an application is filed and pending or a current authorization exists. *See* Attached Exhibit A (THSC § 363.112) and Exhibit B (THSC § 364.012).

III. Executive Director's Responses to Pintail's Arguments

A. State law and the Hempstead and Waller County ordinances prohibit the siting of the Pintail landfill

Pintail argues that Sections 363.112 and 364.012 charge the TCEQ with the responsibility to review ordinances passed under each section and determine their effect and validity. When determining the effect or validity of an ordinance, Pintail argues that the TCEQ should determine the effect of each ordinance or the reach of the prohibition at the time it is passed. This is the "snapshot in time" argument. Furthermore, Pintail argues that the reach of the prohibition should apply so that if an application is filed before an ordinance is enacted, even if the application is later returned or denied, a city or county could not prohibit the processing or disposal of

solid waste *in that area* without passing a new ordinance before a new application for that area is filed.

The Executive Director makes two arguments in response. First, the type of review requested by Pintail is beyond the scope of the TCEQ's authority and the proper jurisdiction for such a review would be a trial court. Pintail argues that the TCEQ should determine the validity and reach of the Ordinance's prohibition. Pintail's position would require the Executive Director to determine the intent of the local governing body passing the ordinance, the validity of the ordinance, the effect of the ordinance, and establish a precedent that the effect of an ordinance can only be determined at the time it is passed. Decisions on where solid waste activities can be prohibited in a City or County should be left to the City or County governing bodies and reviewing the effect or validity of an ordinance should be left to a state court. The Executive Director has never performed such a review because doing so would exceed the agency's statutory authority. It would therefore be inappropriate to make such determinations.

Second, under the THSC provisions the TCEQ's analysis is limited to two steps. Initially, the agency must determine whether there is a local ordinance which prohibits the processing or disposal of municipal solid waste in the area for which the application was filed. In this case, the Executive Director determined that there is a city ordinance and a county ordinance which prohibit processing and disposal in the area where Pintail proposes to locate a landfill.

Subsequently, the TCEQ must determine whether the ordinance in question violates THSC Section 363.112(c) or 364.012(e). Therefore, the Executive Director must determine whether there was a pending application before the TCEQ or whether there

was a permit or other authorization already issued for the same type of facility at the time the ordinances were passed.

In this case, the City Ordinance and the County Ordinance were both passed prior to the submittal of the current application, so the ordinances apply to this application. In addition, there is no issued landfill permit which would grandfather or exclude the Pintail application from the prohibition in the ordinances. Pintail's argument that the existence of a transfer station registration should grandfather their landfill application is addressed below in this response.

B. The Texas Health and Safety Code does not require local ordinances to designate areas using metes and bounds.

Pintail argues that both the City of Hempstead and the Waller County ordinances fail to comply with the Texas Health and Safety Code statutes because they do not properly designate where a landfill may and may not be located. Pintail argues THSC Section 363.112 (a) and Section 364.012 (b) require a city or county to specifically designate geographic areas using metes and bounds and cannot rely on siting criteria such as specifying distances from certain receptors like residences, roads, or water wells.

In support of their argument, Pintail offers a transcript from a Travis County Commissioners Court meeting over a decade ago in which a TCEQ staff attorney answered questions from the Commissioners Court with regard to a proposed ordinance.

The Executive Director does not agree a city or county ordinance must designate areas by metes and bounds. The Statutes require that a city or county "specifically

designate the area of the municipality or county, as appropriate, in which the disposal of municipal or industrial solid waste will not be prohibited." The Statues do not require that "metes and bounds" be used to designate areas for disposal in a city or county. The Executive Director does not have the authority to make a determination with regard to the validity of the City or the County Ordinances based on the method used for describing the location.

The TCEQ staff attorney was simply providing information on the crafting of an ordinance in response to questions. In practice however, the Executive Director does not declare local ordinances to be invalid and does not process applications for MSW landfills when there is an existing ordinance which prohibits disposal of MSW in a city or county. In this case, the City of Hempstead, by correspondence dated July 18, 2016, has indicated to the Executive Director that their ordinance is valid and prohibits the proposed Pintail landfill.

C. Public Policy and Constitutional Issues

Pintail argues that both the County and City ordinances are invalid due to public policy and constitutional concerns. Pintail asserts that the Waller County ordinance is invalid because it is not supported by public policy. Pintail objects to the fact that the county ordinance allows public landfills anywhere in the county but does not allow private landfills in certain areas, which they assert is unsupported by any facts. Pintail also claims that the County ordinance failed to satisfy its burden of demonstrating that disposal would be a threat to public health, safety, and welfare as required by THSC Section 364.012 (a).

Pintail also maintains that the City of Hempstead's ordinance is invalid because it prohibits the disposal of waste throughout the entire city and its extraterritorial jurisdiction. According to Pintail this would circumvent legislative intent.

When a local ordinance has been passed prohibiting waste disposal in a city or county, the Executive Director's review of the ordinance only extends to determining whether THSC Sections 363.112(c) or 364.012(e) were violated. The Executive Director does not make a determination regarding the validity of the ordinance, public policy or constitutional issues. The validity of a local ordinance should be reviewed in district court and not by an administrative agency.

D. The Transfer Station registration does not grandfather the landfill application

Pintail asserts that because they applied for and received a registration for a transfer station at approximately the same location where the landfill is proposed, the ordinances do not apply to the landfill permit application. Pintail believes that once they filed an application for the transfer station, neither the City nor the County had the authority to prohibit their landfill by ordinance under THSC Sections 363.112 (c) or 364.012 (e).

The Executive Director does not believe this is a reasonable interpretation of the statutory language. THSC Section 363.112 (c) prohibits a city or county from adopting an ordinance in an area where a permit or other authorization under Chapter 361 has been filed or has been issued by the commission.

Pintail is correct that both the transfer station application and a previous landfill application were filed with the TCEQ prior to any ordinances being adopted. It

is also correct that a transfer station registration was issued prior to the City adopting an ordinance.

However, the filing of a transfer station application, or even the issuance of a transfer registration, should not be the basis for declaring a local ordinance not applicable. Transfer stations operate to process municipal solid waste, whereas landfills are designed to dispose of the waste. Transfer stations are authorized by registration and as such, they are not subject to the same level of public participation that a landfill is subject to. Most notably, they are not subject to a contested case hearing. There are many levels of authorization under THSC Chapter 361, from notices to registrations to permits. Accepting Pintail's argument could lead to a scenario in which a compost registration is issued and later, after a local ordinance is adopted, a landfill application is filed for the same general area and is a grandfathered from the ordinance by the compost registration. Such a result is unreasonable and could not have been intended by the legislature. A reasonable reading of the statute would be that the existence of a transfer station registration at a specified location in a county or city serves to grandfather that area for future transfer stations, but not for landfills.

IV. Conclusion

For the reasons explained in this Response, the Executive Director respectfully recommends that Pintail's Motion to Overturn be denied by the Commissioners, or not be set for Commission agenda and be overruled by operation of law.

ATTACHMENT A

Tex. Health & Safety Code § 363.112

§ 363.112. Prohibition of Processing or Disposal of Solid Waste in Certain Areas

(a) To prohibit the processing or disposal of municipal or industrial solid waste in certain areas of a municipality or county, the governing body of the municipality or county must by ordinance or order specifically designate the area of the municipality or county, as appropriate, in which the disposal of municipal or industrial solid waste will not be prohibited.

(b) The ordinance or order must be published for two consecutive weeks in a newspaper of general circulation in the area of the municipality or county, as appropriate, before the date the proposed ordinance or order is adopted by the governing body.

(c) The governing body of a municipality or county may not prohibit the processing or disposal of municipal or industrial solid waste in an area of that municipality or county for which:

(1) an application for a permit or other authorization under Chapter 361 has been filed with and is pending before the commission; or

(2) a permit or other authorization under Chapter 361 has been issued by the commission.

(d) The commission may not grant an application for a permit to process or dispose of municipal or industrial solid waste in an area in which the processing or disposal of municipal or industrial solid waste is prohibited by an ordinance or order authorized by Subsection (a), unless the governing body of the municipality or county violated Subsection (c) in passing the ordinance or order. The commission by rule may establish procedures for determining whether an application is for the processing or disposal of municipal or industrial solid waste in an area for which that processing or disposal is prohibited by an ordinance or order.

(e) The powers specified by this section may not be exercised by the governing body of a municipality or county with respect to areas to which Section 361.090 applies.

Credits

Acts 1989, 71st Leg., ch. 678, § 1, eff. Sept. 1, 1989. Amended by Acts 1995, 74th Leg., ch. 76, § 11.110, eff. Sept. 1, 1995; Acts 1999, 76th Leg., ch. 570, § 4, eff. Sept. 1, 1999.

ATTACHMENT B

Tex. Health & Safety Code § 364.012

Texas Health & Safety Code § 364.012

§ 364.012. Prohibiting Solid Waste Disposal in County

(a) The county may prohibit the disposal of municipal or industrial solid waste in the county if the disposal of the municipal or industrial solid waste is a threat to the public health, safety, and welfare.

(b) To prohibit the disposal of municipal or industrial solid waste in a county, the commissioners court must adopt an ordinance in the general form prescribed for municipal ordinances specifically designating the area of the county in which municipal or industrial solid waste disposal is not prohibited.

(c) An ordinance required by Subsection (b) may be passed on first reading, but the proposed ordinance must be published in a newspaper of general circulation in the county for two consecutive weeks before the commissioners court considers the proposed ordinance. The publication must contain:

(1) a statement of the time, place, and date that the commissioners court will consider the proposed ordinance; and

(2) notice that an interested citizen of the county may testify at the hearing.

(d) A public hearing must be held on a proposed ordinance before it is considered by the commissioners court, and any interested citizen of the county shall be allowed to testify.

(e) The commissioners court of a county may not prohibit the processing or disposal of municipal or industrial solid waste in an area of that county for which:

(1) an application for a permit or other authorization under Chapter 361 has been filed with and is pending before the commission; or

(2) a permit or other authorization under Chapter 361 has been issued by the commission.

(f) The commission may not grant an application for a permit to process or dispose of municipal or industrial solid waste in an area in which the processing or disposal of municipal or industrial solid waste is prohibited by an ordinance, unless the county violated Subsection (e) in passing the ordinance. The commission by rule may specify the procedures for determining whether an application is for the processing or disposal of municipal or industrial solid waste in an area for which that processing or disposal is prohibited by an ordinance.

(g) The powers specified by this section may not be exercised by a county with respect to areas to which Section 361.090 applies.

Credits

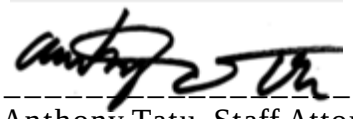
Acts 1989, 71st Leg., ch. 678, § 1, eff. Sept. 1, 1989. Amended by Acts 1991, 72nd Leg., 1st C.S., ch. 3, § 1.035, eff. Aug. 12, 1991; Acts 1999, 76th Leg., ch. 570, § 5, eff. Sept. 1, 1999.

V. T. C. A., Health & Safety Code § 364.012, TX HEALTH & S § 364.012

Current through the end of the 2015 Regular Session of the 84th Legislature

CERTIFICATE OF SERVICE

I hereby certify that on this 13th day of January, 2017, a true and correct copy of the foregoing document has been sent via facsimile and first class mail to the persons on the attached Mailing List.



_____
Anthony Tatu, Staff Attorney
Environmental Law Division

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TCEQ Docket No. 2016-2112-MW

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APPENDIX F

State Office of Administrative Hearings

Kristofer Monson
Chief Administrative Law Judge

May 7, 2019

Mary Smith, General Counsel
Texas Commission on Environmental Quality
12100 Park 35 Circle, Bldg. F, Room 4225
Austin Texas 78753

Re: ***SOAH Docket No. 582-18-1960; TCEQ Docket No. 2018-0013-IHW; In the Matter of the Application of Altair Disposal Services, LLC for New Hazardous Waste Permit No. 50407***

Dear Madam:

The above-referenced matter will be considered by the Texas Commission on Environmental Quality on a date and time to be determined by the Chief Clerk's Office in Room 201S of Building E, 12118 N. Interstate 35, Austin, Texas.

Enclosed are copies of the Proposal for Decision and Order that have been recommended to the Commission for approval. Any party may file exceptions or briefs by filing the documents with the Chief Clerk of the Texas Commission on Environmental Quality no later than May 27, 2019. Any replies to exceptions or briefs must be filed in the same manner no later than June 6, 2019.

This matter has been designated **TCEQ Docket No. 2018-0013-IHW; SOAH Docket No. 582-18-1960**. All documents to be filed must clearly reference these assigned docket numbers. All exceptions, briefs and replies along with certification of service to the above parties shall be filed

with the Chief Clerk of the TCEQ electronically at http://www14.tceq.texas.gov/epic/eFiling/ or by filing an original and seven copies with the Chief Clerk of the TCEQ. Failure to provide copies may be grounds for withholding consideration of the pleadings.

Sincerely,

Meitra Farhadi
Administrative Law Judge

Pratibha J. Shenoy
Administrative Law Judge

Enclosures
cc: Mailing List

On March 28, 2018, ALJ Meitra Farhadi held a preliminary hearing at the Colorado County Courthouse in Columbus, Texas.[7] The ED, OPIC, LCRA, and Darmor were admitted as parties. The County, the District, ACE, and RCISD were also admitted as parties and aligned (collectively, Aligned Protestants). The United Methodist Women's Organization was admitted as a party but did not participate in the contested case hearing. Tom Etheridge also sought to be admitted as a party at the preliminary hearing, but his request was denied by the ALJ.[8]

The parties conducted discovery in 2018 and, as a result, Aligned Protestants sought leave to enter the Site to conduct surface and subsurface inspection of the soils at the Site to develop evidence concerning whether the location for the proposed landfill is compliant with applicable TCEQ location standards. Specifically, Aligned Protestants sought to: observe the existing borrow pit on the east side of the proposed landfill footprint to visually inspect the exposure of soils; perform assessment borings at up to 20 locations across the footprint; drill 6-8 borings utilizing a larger diameter hollow-stem auger drilled approximately 18-25 feet below grade; and analyze and test the samples. ALJs Farhadi and Pratibha J. Shenoy allowed the Aligned Protestants to conduct discovery on the Site, which they did along with Altair, during October and November 2018.[9]

On December 6-18, 2018, the ALJs convened the evidentiary hearing at SOAH in Austin, Texas. The parties filed closing arguments on February 8, 2019, responses to those closing arguments on March 8, 2019, and the evidentiary record closed on that date.

III. BACKGROUND FACTS

On October 22, 2013, Altair filed the Application seeking authorization for a new noncommercial hazardous waste permit to authorize the disposal of hazardous wastes by

[7] SOAH Order No. 1; ED Ex. 1 at 58.

[8] SOAH Order No. 1.

[9] Aligned Protestants' Supp. Ex. 1.