

**TEXAS COURT OF APPEALS, THIRD DISTRICT, AT AUSTIN**

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**NO. 03-10-00016-CV**

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**TJFA, L.P. and Concerned Citizens and Landowners, Appellants**

**v.**

**Texas Commission on Environmental Quality and Waste Management of Texas, Inc.,  
Appellees**

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**FROM THE DISTRICT COURT OF TRAVIS COUNTY, 53RD JUDICIAL DISTRICT  
NO. D-1-GN-08-004503, HONORABLE JOHN K. DIETZ, JUDGE PRESIDING**

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**MEMORANDUM OPINION**

TJFA, L.P. and Concerned Citizens and Landowners appeal the district court's order affirming a final order by the Texas Commission on Environmental Quality after a contested case hearing before the State Office of Administrative Hearings (SOAH). In the final order, the Commission granted appellee Waste Management of Texas, Inc.'s permit amendment application to expand and rename its existing municipal solid waste landfill. For the reasons that follow, we affirm the district court's order affirming the Commission's order.

**FACTUAL AND PROCEDURAL BACKGROUND**

In 2005, Waste Management applied to the Commission for a permit to expand its municipal solid waste landfill located near New Braunfels, Texas in Comal County and to rename it "Mesquite Creek Landfill." Waste Management sought to extend the permit boundary across Mesquite Creek and into Guadalupe County, to change the property area from approximately

96 acres to 244 acres, and to increase the waste disposal unit footprint from approximately 79 acres to 164 acres. Under the proposed expansion, Mesquite Creek would flow through the permitted area.

Waste Management's application was declared administratively complete in 2005 and technically complete in 2006. *See* Tex. Health & Safety Code § 361.068 (addressing applications that are administratively and technically complete); 30 Tex. Admin. Code § 330.51 (2006) (Tex. Comm'n on Env'tl. Quality, Permit Application for Municipal Solid Waste Facilities).<sup>1</sup> After its application was declared technically complete, Waste Management requested that the Commission directly refer the application to SOAH for a contested case hearing. *See* 30 Tex. Admin. Code § 55.210 (2011) (Tex. Comm'n on Env'tl. Quality, Direct Referrals); *see also* Tex. Water Code § 5.557(a).

The contested case hearing was held over the course of six days in October 2007. Appellants opposed the application and participated as parties at the contested case hearing. Other parties included the Commission's Executive Director, who did not oppose the application, and the Office of Public Interest Counsel. After the hearing, the administrative law judge issued a proposal for decision recommending that the Commission approve the application with some modifications. The Commission adopted the ALJ's recommendations with additional modifications and issued its final order with findings of fact and conclusions of law.

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<sup>1</sup> The parties agree that the Commission's rules in effect before the rules were revised in 2006 apply to the application. *See* 31 Tex. Reg. 2502 (2006) (discussing applicability of revisions to municipal solid waste rules promulgated in March 2006). Citations to title 30, chapter 330 of the Administrative Code then are to the rules in effect prior to the 2006 revisions.

Appellants filed a motion for rehearing with the Commission. After it was overruled by operation of law, they sought judicial review in Travis County District Court. *See* Tex. Gov't Code § 2001.171; Tex. Health & Safety Code § 361.321. Waste Management intervened in the suit in support of the Commission's order. The district court rendered judgment affirming the Commission's order. This appeal followed.

### **ANALYSIS**

Appellants bring four issues challenging the district court's judgment affirming the Commission's order. They contend that the Commission committed reversible error because Waste Management failed to: (i) comply with rules and precedent regarding floodplains, (ii) adequately demonstrate that increased runoff volume from the landfill would not significantly alter natural drainage patterns or significantly increase flooding, and (iii) adequately test and characterize the geology and hydrogeology of the expansion site. Appellants also contend that the Commission committed reversible error by limiting only the landfill's "waste acceptance hours" rather than all "operating hours" in conflict with a prior settlement agreement between Waste Management and Guadalupe County.

#### ***Scope and Standards of Review***

We review the Commission's order under the substantial evidence standard of review codified in section 2001.174 of the Government Code. *See* Tex. Gov't Code § 2001.174. A court applying this standard shall reverse or remand an administrative order "if substantial rights of the appellant have been prejudiced because the administrative findings, inferences, conclusions, or

decisions are,” among other grounds, “affected by other error of law,” “not reasonably supported by substantial evidence considering the reliable and probative evidence in the record as a whole,” or “arbitrary or capricious or characterized by abuse of discretion or clearly unwarranted exercise of discretion.” *Id.* § 2001.174(2)(D)–(F). A court, however, “may not substitute its judgment for the judgment of the state agency on the weight of the evidence on questions committed to agency discretion.” *Id.* § 2001.174.

With respect to section 2001.174(2)(E), “‘substantial evidence’ does not mean a large or considerable amount of evidence but such relevant evidence as a reasonable mind might accept as adequate to support a conclusion of fact.” *City of El Paso v. Public Util. Comm’n*, 344 S.W.3d 609, 618 (Tex. App.—Austin 2011, no pet.) (citing *Pierce v. Underwood*, 487 U.S. 552, 564–65 (1988); *Lauderdale v. Texas Dep’t of Agric.*, 923 S.W.2d 834, 836 (Tex. App.—Austin 1996, no writ)). “The test is not whether the agency made the correct conclusion in our view, but whether some reasonable basis exists in the record for the agency’s action.” *Id.* (citing *Railroad Comm’n v. Pend Oreille Oil & Gas Co., Inc.*, 817 S.W.2d 36, 41 (Tex. 1991)). “We must uphold an agency’s finding even if the evidence actually preponderates against it, so long as enough evidence suggests the agency’s determination was within the bounds of reasonableness.” *Id.* (citing *Southwestern Pub. Serv. Co. v. Public Util. Comm’n*, 962 S.W.2d 207, 215 (Tex. App.—Austin 1998, pet. denied)).

To the extent that appellants’ issues address the construction of the Commission’s rules, we review these questions de novo. *Rodriguez v. Service Lloyds Ins. Co.*, 997 S.W.2d 248, 254 (Tex. 1999). In general, “[w]e construe administrative rules, which have the same force as statutes, in the same manner as statutes.” *Id.*; see also *State v. Shumake*, 199 S.W.3d 279, 284 (Tex.

2006) (addressing statutory construction). “Unless the rule is ambiguous, we follow the rule’s clear language.” *Rodriguez*, 997 S.W.2d at 254 (citation omitted). “If there is vagueness, ambiguity, or room for policy determinations in a statute or regulation, . . . we normally defer to an agency’s interpretation unless it is plainly erroneous or inconsistent with the language of the statute, regulation, or rule.” *TGS-NOPEC Geophysical Co. v. Combs*, 340 S.W.3d 432, 438 (Tex. 2011).

The Commission’s rules require the applicant to prove compliance with the applicable requirements by a preponderance of the evidence. *See* 30 Tex. Admin. Code § 80.17(a) (2011); *BFI Waste Sys. of N. Am., Inc. v. Martinez Envtl. Grp.*, 93 S.W.3d 570, 577 (Tex. App.—Austin 2002, pet. denied).

### ***Floodplain***

In their first issue, appellants contend that the Commission committed reversible error by allowing Waste Management to rely on a published map prepared by the Federal Emergency Management Agency (FEMA) to establish that the proposed area for the landfill was not within a 100-year floodplain or that the FEMA map itself was sufficiently reliable.<sup>2</sup>

Appellants challenge the following findings of fact:

- 26.c. There are no topographical features such as floodplains, which, if present, would limit the development of the site as an MSW landfill.

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<sup>2</sup> For purposes of this appeal, a floodplain is defined as “[t]he lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, that are inundated by the 100-year flood.” 30 Tex. Admin. Code § 330.2(48) (Definitions). A 100-year flood is “a flood that has a 1.0% or greater chance of recurring in any given year or a flood of a magnitude equaled or exceeded once in 100 years on the average over a significantly long period.” *Id.* § 330.2(1).

...

- 33.b. The waste disposal limits of the currently permitted landfill and proposed expansion are not located in a 100-year floodplain; therefore, excessive erosion by fluvial processes associated with meandering stream channels should not occur within the waste footprint.

...

- 74. The facility is designed and will be constructed to prevent the discharge of any solid wastes or pollutants adjacent to or into waters of the State of Texas or the United States, non-point source pollution of the waters of the United States, and discharge of dredged or fill material into waters of the State of Texas or the United States in violation of Section 404 of the Clean Water Act.

.....

- 79. The landfill will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment.
  - a. The waste disposal limits of the facility are located outside the 100-year floodplain, as shown on the [FEMA] Flood Insurance Rate Map Community Panel Number 4854630130C (1986).
  - b. The central portion of the site associated with Mesquite Creek is within the flood pool of the downstream Freedom Lake.
  - c. The permitted waste disposal limits and the expansion area's waste disposal areas, perimeter roads/berms, and leachate evaporation pond areas do not extend into the Freedom Lake flood pool.
  - d. Two storm water ponds are partially within the upper elevations of this flood pool, but are designed to allow backflow into the ponds during a flood event through their principal spillway pipes so as not to change the flood storage capacity of Freedom Lake.
  - e. Flood protection levees or other improvement to provide protection from the 100-year flood are not necessary.

Appellants urge that these findings are not supported by substantial evidence and are arbitrary and capricious.

Relatedly, appellants also challenge the following conclusions of law:

4. Applicant submitted a complete permit amendment application, as required by Tex. Health & Safety Code Ann. §§ 361.066 and 361.068, which demonstrated that Applicant will comply with all relevant aspects of the application and design requirements as provided in 30 TAC §§ 330.4(m) and 330.51(b)(1).  
...
6. The evidence in the record is sufficient to meet the requirements of applicable law for issuance of the Draft Permit, as modified by this Order, including all requirements of the Solid Waste Disposal Act, Tex. Health & Safety Code Ann. Chapter 361, and 30 TAC Chapter 330.
7. The expansion of the proposed Mesquite Creek Landfill, if constructed and operated in accordance with the Solid Waste Disposal Act, 30 TAC Chapter 330, and the Draft Permit as modified by this Order, will not adversely affect public health and welfare, physical property of the people of Texas, or the environment.  
...
15. Pursuant to the authority of, and in accordance with, applicable laws and regulations, the requested permit should be granted.

Appellants urge that these conclusions of law are legally erroneous, unsupported by substantial evidence, and arbitrary and capricious.

Section 330.56 of Title 30 of the Administrative Code lists the required attachments to the site development plan, and subsection (f)(4)(B) of section 330.56 addresses flood control and analysis. 30 Tex. Admin. Code § 330.56 (Attachments to the Site Development Plan). Subsection (f)(4)(B) provides that the applicant must:

- (i) Identify whether the site is located within a 100-year floodplain. Indicate the source of all data for such determination and include a copy of the relevant Federal Emergency Management Agency (FEMA) flood map, if used, or the calculations and maps used where a FEMA map is not available. Information shall also be provided identifying the 100-year flood level and any other special flooding factors (e.g., wave action) that must be considered in designing, constructing, operating, or maintaining the proposed facility to withstand washout from a 100-year flood. The boundaries of the proposed landfill facility should be shown on the floodplain map.
- (ii) If the site is located within the 100-year floodplain, the applicant shall provide information detailing the specific flooding levels and other events (e.g., design hurricane projected by Corps of Engineers) that impact the flood protection of the facility. . . .

*Id.* § 330.56(f)(4)(B)(i)–(ii). This subsection expressly requires an applicant to demonstrate that the proposed landfill site does not lie within a 100-year floodplain or that it will not pose certain risks if it does lie within a 100-year floodplain. *See id.*; *see also id.* § 330.301.<sup>3</sup>

Appellants contend that the evidence was undisputed that the proposed landfill development was within a floodplain and that there was no reliable evidence that the FEMA map was accurate or that FEMA had actually analyzed the specific floodplain at issue. To support these

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<sup>3</sup> Section 330.301 states:

Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions located in 100-year floodplains shall demonstrate that the unit will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment. The owner or operator shall submit the demonstration with a permit application, a permit amendment application, or a permit transfer request. The demonstration shall become part of the operating record once approved.

*See* 30 Tex. Admin. Code § 330.301 (Floodplains).



contentions, appellants assert that Waste Management and Commission engineers testified that the landfill lies within a floodplain and that the FEMA map at issue omitted a flood pool that exists near the landfill site. However, Scott Graves, the engineer of record for Waste Management's application, and a Commission engineer provided conflicting testimony as to whether the landfill was within a floodplain and concerning the methodology FEMA employed to prepare the FEMA map at issue.

Our role is not to second-guess the Commission's weighing of the floodplain evidence. As long as "some reasonable basis exists" in the record for the action taken by the agency, we must uphold it. *See Public Util. Comm'n*, 344 S.W.3d at 618. Section 330.56(f)(4)(B) expressly references and contemplates the use of FEMA maps, and, consistent with this subsection, Graves testified that the Commission "typically" accepts FEMA maps as reliable sources of information and that he relied on FEMA maps to establish that the proposed area for the landfill was not within a 100-year floodplain.<sup>4</sup> *See* 30 Tex. Admin. Code § 330.56(f)(4)(B). The relevant FEMA map itself also supports this conclusion. The FEMA map divides the area around the landfill into "zones" according to their susceptibility to flooding. Among others, "Zone A" consists of areas within a 100-year floodplain, Zone C consists of "areas of minimal flooding," and Zone D consists of "undetermined" areas. The map places Waste Management's landfill site, including the proposed expansion area, in Zone C.

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<sup>4</sup> Graves also testified that he studied "what would happen during a 100-year storm of the flood going through Mesquite Creek" and whether the proposed "landfill features [would] restrict that flow." He concluded that the landfill features would not "significantly restrict that flow." Graves also testified that Mesquite Creek was a "wet-weather stream. It flows when it rains, and then it dries up at some point after that."

Given that section 330.56(f)(4)(B) expressly references and contemplates the use of FEMA maps as well as the evidence presented at the contested case hearing, we cannot conclude that the Commission erred by allowing Waste Management to rely upon FEMA maps to establish that the proposed landfill area was not within a 100-year floodplain. *See id.* § 330.56(f)(4)(B); *see also* 42 U.S.C. § 4101 (West 2003) (FEMA federal agency statutorily entrusted with producing floodplain maps); *Sierra Club v. Federal Highway Admin.*, 715 F. Supp. 2d 721, 736 (S.D. Tex. 2010) (“[I]t was reasonable for the defendants to rely on the same floodplain maps relied on by . . . FEMA. Although there may have been reason to believe that the maps were not 100 percent accurate, they provided the best available official data at the time, and it cannot be said that defendants acted arbitrarily or capriciously in relying on them.”).

Appellants also argue that the Commission’s decision to allow Waste Management to rely upon FEMA maps runs contrary to the Commission’s own precedent. Appellants cite two earlier Commission orders in which the Commission denied landfill permits to applicants who relied on FEMA maps to establish that their proposed landfills did not lie within 100-year floodplains. *See* Tex. Comm’n on Env’tl. Quality, *An Order Regarding the Application by Tan Terra Environmental Services, Inc., L.L.C., Permit No. MSW-2305*, Docket No. 2004-0743-MSW, at 9 (Apr. 20, 2006); Tex. Comm’n on Env’tl. Quality, *An Order Denying the Application by Juliff Gardens, L.L.C., Permit No. MSW-2282*, Docket No. 2002-0117-MSW, at 5 (Oct. 4, 2004). These proceedings, however, do not support appellants’ position. In *Tan Terra*, the applicant relied upon a FEMA floodplain index that did “not clearly delineate whether the Facility [was] or [was] not located in a floodplain,” and, in the *Juliff Gardens* proceeding, the FEMA map itself showed that FEMA had not

actually studied the area around the proposed landfill site. Here, in contrast, the FEMA map’s “zone” scheme affirmatively addresses the areas around the boundaries of the landfill, and its proposed expansion area, and shows that they are not within the zone of a floodplain but a zone of “areas of minimal flooding.”

We overrule appellants’ first issue.

***Natural Drainage Patterns***

In their second issue, appellants contend that the Commission committed reversible error by failing to require Waste Management to adequately demonstrate that increased runoff volume from the landfill would not significantly alter natural drainage patterns or increase flooding.

*See* 30 Tex. Admin. Code §§ 330.55(b)(5)(D) (Site Development Plan), 330.56(f)(4)(A)(iv).

Specifically, appellants challenge the following findings of fact by the Commission:

- 75. Surface water controls at the proposed expansion will be designed to prevent rainfall run-off from coming in contact with leachate or refuse, maintain natural drainage patterns, and minimize erosion.  
...
- 83.c. The post-development condition will maintain similar drainage patterns to the natural site and pre-development conditions.  
...
- 84. The natural drainage patterns will not be significantly altered as a result of the landfill development; an increase in run-off volume will occur for three discharge points, but the post-development discharge rate will be less than the pre-development discharge rate.

In this connection, appellants again challenge conclusions of law 6, 7, and 15 as they did with their first issue.

A landfill-expansion application must include calculations, discussion, and analyses to demonstrate that natural drainage patterns will not be significantly altered. *See id.* §§ 330.55(b)(5)(D) (“Sample calculations shall be provided to verify that natural drainage will not be significantly altered.”), 330.56(f)(4)(A)(iv). Subsection (f)(4)(A) of section 330.56 addresses “drainage and run-off control analyses,” and subsection (f)(4)(A)(iv) requires the applicant to provide “discussion and analyses to demonstrate that natural drainage patterns will not be significantly altered as a result of the proposed landfill development.” *Id.* § 330.56(f)(4)(A)(iv). The Commission also has issued *Guidelines for Preparing a Surface Water Drainage Plan for a Municipal Solid Waste Facility* (“*Guidelines*”) that include acceptable methods for addressing surface-water drainage issues.<sup>5</sup>

In its application, Waste Management discussed the volume of storm water runoff at specified “discharge points”—points where storm water leaves the landfill site—during a 24-hour, 25-year storm event. The application described the runoff, including the volume of storm water and the peak rate of discharge, at each discharge point under pre-expansion conditions. It then compared that runoff with the projected runoff under post-expansion conditions to show that the proposed landfill will not significantly alter natural drainage patterns. *See id.* §§ 330.55(b)(5)(D), .56(f)(4)(A)(iv).

Appellants argue that Waste Management was required to perform calculations on downstream sites as part of its analysis and failed to do so. Without such calculations, they argue,

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<sup>5</sup> The parties agree that the June 2004 version of the *Guidelines* applies here. We refer to the *Guidelines* then as they existed in June 2004.

the Commission could not reasonably conclude that downstream natural drainage patterns would not be significantly altered by the proposed landfill development. This Court addressed a similar argument in *Heritage on the San Gabriel Homeowners Association v. Texas Commission on Environmental Quality*, 393 S.W.3d 417 (Tex. App.—Austin 2012, pet. denied). In that case, we upheld the Commission’s interpretation that section 330.56(f)(4)(A)(iv) did not require an analysis of downstream sites and that the required analysis was of the “discharge impact only at the permit boundary.” *See id.* at 431.<sup>6</sup> We concluded that the interpretation was reasonable, not in conflict with the plain language of the rule, and concerns a matter within the TCEQ’s administrative expertise. *Id.* at 432. Following our prior analysis and conclusion, we conclude that it was reasonable not to require Waste Management to perform calculations on downstream sites to establish that natural drainage patterns would not be significantly altered. *See id.* at 431–32.

Appellants alternatively cite a provision of the *Guidelines* that states “the expected volume increase could vary from 5 to 60 percent” to support their contention that the Commission’s findings and conclusions as to natural drainage were arbitrary and capricious. They point to the section of Waste Management’s application that showed that the discharge volume at one discharge point, Discharge Point E, would increase by 75 percent after the expansion. Appellants contend that, assuming that the Commission’s “refusal to look downstream for any impacts is upheld,” the

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<sup>6</sup> *See also* Tex. Comm’n on Env’tl. Quality, *An Order approving the Application of North Texas Municipal Water District for Municipal Solid Waste Permit No. MSW-2294*, TCEQ Docket No. 2002-0745-MSW, SOAH Docket No. 582-02-3386, at 18 (Oct. 20, 2003); Tex. Natural Res. Conserv. Comm’n, *An Order Denying the Application of Blue Flats Disposal, L.L.C., for Permit No. MSW-2262*, TNRCC Docket No. 98-0415-MSW, SOAH Docket No. 582-98-1390, at 8 (Jan. 2, 2001).

Commission “has never articulated any such [reasonable] criteria nor explained why a 75 percent increase in runoff volume at the permit boundary is not ‘significant.’”

The *Guidelines*, however, expressly state that “[t]here is no clear-cut number or percentage of change that can be set to indicate a ‘significant’ change.” Rather, “[w]hat is considered ‘significant’ is a subjective term that cannot be defined as a specific, objective criterion.” Thus, “the ‘significantly altered’ issue is best determined on a case-by-case basis and is one of professional judgment.” The *Guidelines* also expressly provide that “[t]ypical methods” for demonstrating “that any volume increase (or decrease) is not ‘significant’” include to “[d]emonstrate that the additional volume will be released at a rate that will not significantly affect the downstream receiving water body.”

Waste Management proposed to manage increased runoff volumes through the use of detention ponds, as well as other engineering features, and its application showed that the detention ponds will accommodate increased runoff volume by detaining and discharging the runoff in a controlled, attenuated manner. According to this proposal, while the volume of discharge at Point E will increase following development, it will be released downstream at rates and velocities lower than in pre-development conditions. Waste Management’s application also contains calculations and analyses of runoff volumes, flow velocities, and the timing of peak runoff conditions in both pre- and post-development conditions. Graves testified that he considered runoff volumes, velocities, and timing, in addition to peak discharge rates and other factors, and he determined that the landfill expansion will not significantly alter natural drainage patterns. The Commission’s engineer testified that he agreed with Graves’s determination. Based upon this

evidence, the Commission could reasonably conclude that by proposing the use of detention ponds, as well as other engineering features, to lessen discharge rates and velocities, Waste Management adequately demonstrated that the expected increase in storm water runoff volume at Discharge Point E will not significantly alter natural drainage patterns or increase flooding.

We overrule appellants' second issue.

***Geology, Hydrogeology, and Groundwater Monitoring***

In their third issue, appellants argue that the Commission erred by granting Waste Management's application without requiring Waste Management to adequately test and characterize the geology and hydrogeology of the expansion site, which resulted, in appellants' view, in an inherently unreliable groundwater monitoring system. Appellants urge that Waste Management improperly relied on data from tests for permeability and horizontal hydraulic conductivity that were conducted on samples from the existing landfill area. As a result, appellants argue, Waste Management failed to show that its proposed groundwater monitoring system will be sufficient for the conditions that exist beneath the proposed expansion area.

Appellants challenge the following findings of fact:

46.c. Because Stratum III is capable of yielding representative samples of groundwater that could identify a potential release from the landfill, it is considered the uppermost aquifer (30 TAC § 330.231(a)).

...

48.a. Monitoring wells and piezometers in Stratum IV were dry or contained insufficient quantities of groundwater for sampling purposes, and the unit has relatively low permeability.

...

- 48.c. Stratum IV and the underlying clays are, collectively, the lower aquitard or confining unit for Stratum III.
49. The most likely pathways for pollutant migration from the landfill are within the saturated base of Stratum III and along the Strata III/IV contact.
- a. Stratum III is the main stratum intersected by the linear system side slopes and base.
  - b. Neither the inactive fault in the existing site nor Mesquite Creek appear to be potential pathways for pollutant migration.
  - c. Any contaminant released from the landfill would move at the same rate and direction as the groundwater beneath the facility.
  - d. Because the horizontal and vertical hydraulic conductivities decrease with depth, there is no potential for landfill constituent migration from the facility to the Edwards Aquifer during the active life, closure, and post-closure care periods.
- ...
59. The proposed monitoring wells will be:
- activated after the permit amendment is approved to collect intra-well background data;
  - properly screened to monitor the groundwater encountered at the monitored location;
  - able to detect a release from the facility.
- ...
61. The proposed expansion of the facility is designed to be protective of groundwater.
- a. Quality control procedures will be used during the construction and installation of the liner system.
  - b. A Soil and Liner Evaluation Report (SLER) and/or a Geomembrane Liner Evaluation Report (GLER) will be



submitted to the [Commission] detailing the final construction and lining of a new disposal cell prior to the placement of any waste in that cell.

Appellants similarly urge that conclusions of law 6, 7, and 15, to the extent founded as they are on the forgoing fact findings, are legally erroneous, unsupported by substantial evidence, and arbitrary and capricious.

Section 330.231(a) addresses the requirements for the groundwater monitoring system and provides that it must consist of “a sufficient number of monitoring wells, installed at appropriate locations and depths, to yield representative groundwater samples from the uppermost aquifer as defined in [section] 330.2 of this title.” 30 Tex. Admin. Code § 330.231(a) (Groundwater Monitoring Systems); *see also id.* § 330.56(e) (Attachment 5 - groundwater characterization report). Section 330.2(6) defines an aquifer as “a geological formation, group of formations, or portion of a formation capable of yielding significant quantities of groundwater to wells or springs.” *Id.* § 330.2(6); *see also id.* § 330.2(158) (“uppermost aquifer” defined as “the geologic formation nearest the natural ground surface that is an aquifer; includes lower aquifers that are hydraulically interconnected within this aquifer within the facility’s property boundary”).

Section 330.56(d)(5) addresses the requirements for the subsurface and geotechnical investigations and provides in relevant part:

- (5) The owner or operator shall provide the results of investigations of subsurface conditions at a particular waste management unit in the following reports.
  - (A) Subsurface investigation report. This report must describe all borings drilled on-site to test soils and characterize groundwater. . . .

- (i) A sufficient number of borings shall be performed to establish subsurface stratigraphy and to determine geotechnical properties of the soils and rocks beneath the facility. . . . The number of borings necessary can only be determined after the general characteristics of the site are analyzed and will vary depending on the heterogeneity of subsurface materials. . . .
  - (ii) Borings shall be sufficiently deep to allow identification of the uppermost aquifer and underlying hydraulically interconnected aquifers. . . .
- (B) Geotechnical report. This report shall include engineering data that describes the geotechnical properties of the subsurface soil materials and a discussion with conclusions about the suitability of the soils and strata for the uses for which they are intended. . . .
- (i) A laboratory report of soil characteristics shall be determined from at least one sample from each soil layer or stratum that will form the bottom and side of the proposed excavation and from those that are less than 30 feet below the lowest elevation of the proposed excavation. . . .
  - (ii) Permeability tests shall be performed according to one of the following standards on undisturbed soil samples. . . . Those undisturbed samples that represent the sidewall of any proposed trench, pit, or excavation shall be tested for the coefficient of permeability on the sample’s in-situ horizontal axis; all others shall be tested on the in-situ vertical axis. . . .

*See id.* § 330.56(d)(5)(A)(i)–(ii), (B)(i)–(ii) (Attachment 4 - geology report). Among the requirements for a permit to expand a landfill, the applicant must (1) identify the “uppermost aquifer” at the proposed site; (2) perform horizontal permeability testing of soil layers or strata that “represent the sidewall” of any proposed excavations; and (3) propose an adequate groundwater monitoring system. *See id.* §§ 330.56(d), .56(e), .231.

According to Waste Management’s application, the proposed landfill expansion area will be excavated into four geological strata (I through IV, I being the uppermost and IV being the lowermost). The two strata relevant here, Strata III and IV, are found throughout the site. Among other testing, Waste Management performed soil borings on all four strata underneath the proposed expansion area and determined that Stratum III was the uppermost aquifer or water-bearing zone and that Stratum IV was dry and a “confining bed.”<sup>7</sup> Although Waste Management proposed to excavate and place waste into Stratum IV on the expansion site, its proposed groundwater monitoring system would not extend below Stratum III.

Appellants contend that Waste Management did not comply with the applicable rules because it failed to demonstrate that the upper portion of Stratum IV was not part of the uppermost aquifer or water-bearing zone and chose to excavate into that stratum for waste disposal without having any monitoring wells at that level. They argue that “[s]imply looking at the soil borings is inadequate to determine that no portion of Stratum IV is capable of conducting groundwater such that it should not be considered part of the uppermost aquifer.” Appellants’ argument focuses on Waste Management’s failure to test the borings for “horizontal hydraulic conductivity,” to install piezometers, or to include groundwater monitoring in Stratum IV beneath the proposed expansion area.<sup>8</sup>

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<sup>7</sup> Waste Management’s geologist Janet Meaux defined the phrase “confining bed” as “a body of material of low hydraulic conductivity.”

<sup>8</sup> According to testimony at the hearing, “horizontal hydraulic conductivity” is the ability to transmit water horizontally, and a piezometer detects the presence and elevation of groundwater.

We first address appellants' arguments that Waste Management could not rely on data showing the permeability and horizontal hydraulic conductivity of samples taken from beneath the existing landfill area and that it failed to perform similar tests of samples from Stratum IV beneath the proposed expansion area. Their argument turns on the phrase "in situ" in section 330.56(d)(5)(B)(ii). *See id.* § 330.56(d)(5)(B)(ii) (samples must be tested on their "in-situ horizontal axis"). The text of section 330.56(d)(5)(B)(i), however, requires only "one sample from *each soil layer or stratum* that will form the bottom and side of the proposed excavation." *Id.* § 330.56(d)(5)(B)(i) (emphasis added). And, specifically, with regard to testing permeability, the sample must only "*represent* the sidewall" of the excavation. *Id.* § 330.56(d)(5)(B)(ii) (emphasis added). Data included in Waste Management's application and evidence adduced at the hearing showed that the characteristics of Stratum IV were consistent across the existing and proposed areas. Thus, the Commission could reasonably conclude that samples from the existing area provided a sufficient basis to evaluate the permeability and horizontal hydraulic conductivity of Stratum IV beneath the proposed expansion area. *See also id.* § 330.56(d) (approving submission of "previously prepared documents").

Appellants also argue that, even if it was permissible for Waste Management to rely on prior testing and samples from the existing landfill area, it could not reasonably rely on those tests here because Waste Management's own geologist testified that they were unreliable. Waste Management's geologist Janet Meaux characterized the piezometers from which the Stratum IV data were derived as being of "questionable construction," and she also questioned data from those devices. Based upon this evidence, appellants contend that there was "insufficient data to conclude

that the upper portion of Stratum IV—which will be excavated and have waste placed in it—is not a water-bearing zone that needs to be monitored for the movement of contaminants.” They also contend that the evidence showed that the upper portions of Stratum IV had signs of “weathering” and “fracturing” similar to Stratum III, which could provide a pathway for groundwater to travel.<sup>9</sup>

Meaux, however, testified that Waste Management’s application did not rely on data that she considered unreliable.<sup>10</sup> After explaining her methodology at length, she testified that, in her professional opinion, the proposed groundwater monitoring system was adequate.<sup>11</sup> Further, the

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<sup>9</sup> Meaux defined a “fracture” as referring to a “very small crack” and “weathering” as referring to a part of the core that was softer than other parts or that “just looked more weathered.” Meaux testified that ten out of twenty-four boring samples taken in the proposed expansion area showed fractures in Stratum IV. Meaux also testified that “a very small amount” of water was found in some piezometers from Stratum IV in the existing landfill area when the piezometers were first installed but that she was unsure of the source of the water.

<sup>10</sup> Meaux testified that the tests were reliable to show the horizontal hydraulic conductivity for Stratum IV. She testified at the hearing as to this testing:

Q. . . . So all of the horizontal hydraulic conductivity numbers in this application that are assigned to Stratum IV, we should consider as unreliable. Correct?

A. Well, again, they do represent the sediments – the transmissivity of the sediments. We just don’t know where the water came from that was used in the tests.

<sup>11</sup> She opined, “The proposed monitoring system was conservatively designed to be protective of human health and the environment and to provide early detection of any release of contaminants from the facility.” She also testified concerning the basis of her opinion:

To summarize, the locations, numbers, and depths of the monitoring wells proposed for the Mesquite Creek Landfill groundwater monitoring system were selected after detailed and thorough considerations of the stratigraphy and hydrogeology underlying the site. The proposed wells will be strategically positioned so as to monitor the groundwater passing beneath the facility in the uppermost water-bearing zone. This zone, Stratum III, would provide the most timely indication of a release of

Commission’s regulations do not require groundwater monitoring in every stratum that will be excavated; they require monitoring “to yield representative groundwater samples from the uppermost aquifer.” *See* 30 Tex. Admin. Code § 330.231(a), (a)(2). Meaux testified: “In our investigation we found no water bearing fractures in Stratum IV.” She also testified: “There was no evidence of water movement in Stratum IV. All our cores showed it was dry.” Other experts similarly testified that Stratum IV was not an aquifer or an uppermost aquifer. *See id.* § 330.2(6) (“aquifer” defined), (158) (the “uppermost aquifer” defined).

We overrule appellants’ third issue.

### ***Operating Hours***

In their final issue, appellants argue that the Commission erred by refusing to limit the landfill’s operating hours to those named in the settlement agreement between Waste Management and Guadalupe County. Specifically, appellants challenge the Commission’s finding of fact 99 and its conclusion of law 14, which state:

#### Finding of Fact

99. Applicant’s waste acceptance hours should be limited to those stated in its agreement with Guadalupe County.

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constituents from the landfill. Any liquid released from the landfill would be expected to percolate vertically through the vadose zone until the water-bearing zone of Stratum III is encountered, since there is no horizontal gradient driving flow laterally through the unsaturated soil. If a release from the landfill occurred in the few locations where the base grades are in Stratum IV, there would be little potential for migration, due to the low hydraulic conductivity of Stratum IV, which is a confining bed.

## Conclusion of Law

14. The facility's waste acceptance hours should be Monday through Friday from 4:00 a.m. to 8:00 p.m. and Saturday from 4:00 a.m. to 3:00 p.m., unless an emergency requires extended waste acceptance hours. Transportation of materials on- and off-site and operation of heavy equipment should be allowed Monday through Saturday, from 4:00 a.m. to 9:00 p.m., and on Sunday 5:00 a.m. to 9:00 p.m. Other activities should not be limited to specified hours and may be conducted by the facility, as necessary, at any time.

Appellants contend that the challenged finding of fact and conclusion of law are arbitrary and capricious and unsupported by substantial evidence.

Guadalupe County was initially a party to the administrative proceeding, but it reached a settlement with Waste Management. The settlement agreement provided that the landfill "operation hours" were to be from "4:00 a.m. to 8:00 p.m., Monday through Friday and 4:00 a.m. through 3:00 p.m. on Saturday." As part of the settlement agreement, Guadalupe County withdrew its protest and request for party status. In its order, the Commission approved "waste acceptance hours" that match the agreed hours in the settlement agreement but approved longer hours for other operations at the landfill. *See* 30 Tex. Admin. Code § 330.118(a) (Facility Operating Hours) (requiring site operating plan to "specify the waste acceptance hours and the operating hours when materials will be transported on or off site, and the hours when heavy equipment may operate").

Appellants do not claim that the operating hours ultimately imposed by the Commission were impermissible for any reason other than their contention that the hours authorized by the Commission diverged from the settlement agreement. In their brief, appellants also state that they are unaware of authority to support their position that the Commission was bound to the

settlement agreement, but they contend that allowing state agencies to depart from settlement agreements like the one at issue here “would act as a powerful disincentive to settlements.”

Even if we assume without deciding that the operating terms in the order diverge from the settlement agreement, however, the Commission was not required to include the terms of the settlement agreement in its order approving the application. *See Citizens Against Landfill Location v. Texas Comm’n on Env’tl. Quality*, 169 S.W.3d 258, 273 (Tex. App.—Austin 2005, pet. denied) (concluding that Commission did not possess authority or duty to enforce higher standard set forth in settlement agreement); *see, e.g., BML Stage Lighting, Inc. v. Mayflower Transit, Inc.*, 14 S.W.3d 395, 400 (Tex. App.—Houston [14th Dist.] 2000, pet. denied) (contracting parties generally cannot bind non-parties without their consent). Neither the Commission nor appellants were parties to the settlement agreement, and Waste Management and Guadalupe County did not seek to have the terms of the settlement agreement incorporated into the permit amendment for the landfill. Waste Management also supported its requested hours for different types of operations with evidence that supported longer hours for operations other than waste acceptance.

We therefore conclude that the challenged finding of fact and conclusion of law as to operating hours were not arbitrary or capricious and were supported by substantial evidence. We overrule appellants’ fourth issue.

### **CONCLUSION**

For the reasons stated above, we affirm the district court’s order affirming the Commission’s order.



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Melissa Goodwin, Justice

Before Justices Pemberton, Goodwin, and Field

Affirmed

Filed: July 16, 2014