

SOAH DOCKET NO. 582-08-2186
TCEQ DOCKET NO. 2006-0612-MSW

APPLICATION OF	§	BEFORE THE STATE OFFICE
WASTE MANAGEMENT OF TEXAS, INC.	§	
FOR A MUNICIPAL SOLID WASTE	§	OF
PERMIT AMENDMENT;	§	
PERMIT NO. MSW-249D	§	ADMINISTRATIVE HEARINGS

APPLICANT WASTE MANAGEMENT OF TEXAS, INC.'S
CLOSING ARGUMENT

TO THE HONORABLE ADMINISTRATIVE LAW JUDGE:

COMES NOW Applicant Waste Management of Texas, Inc. ("*Applicant*" or "*WMTX*") and files this, its Closing Argument, in the above-captioned contested case. Based on the record in this proceeding, and as set forth below, Applicant has demonstrated, by proof exceeding a preponderance of the evidence, that its application to expand the Austin Community Recycling and Disposal Facility ("*ACRD Facility*") complies with all applicable statutory and regulatory requirements. Therefore, Applicant respectfully requests that the Administrative Law Judge ("*ALJ*") recommend issuance of Permit No. MSW-249D to WMTX.

I.
INTRODUCTION

The record evidence – the prefiled testimony and exhibits, the testimony of witnesses before the ALJ at the hearing on the merits of this matter, and the additional exhibits entered at the hearing – demonstrates that WMTX's application complies with all applicable statutory and regulatory requirements. Protestants in this case challenged only certain aspects of WMTX's demonstration of compliance with the applicable requirements. That is, whereas WMTX's witnesses testified that the application, in its entirety, satisfies all applicable statutory and regulatory requirements, Protestants challenged that testimony – through their own witnesses and

through cross-examination of WMTX's witness – only with respect to certain portions of the application.

Accordingly, to avoid repeating and arguing uncontroverted evidence, this Closing Argument addresses only portions of the application that were the subject of cross-examination during the hearing or that were otherwise discussed in the testimony of Protestants' witnesses. As requested by the ALJ, this Closing Argument follows the outline set forth in the ALJ's Order No. 12.

II. PARTIES

The parties to this case are Applicant WMTX, the Executive Director of the Texas Commission on Environmental Quality ("*TCEQ*" or "*the Commission*"), the Commission's Office of Public Interest Counsel, Giles Holdings, L.P., and Protestants Travis County, City of Austin, TJFA, L.P., and Protestants 1. Per the ALJ's Order No. 1, Protestants 1 was formed as an aligned group of individuals, the Northeast Neighbors Coalition, the Harris Branch Residential Property Owners Association, and Williams, Ltd. Giles Holdings – an owner of property adjacent to the ACRD Facility – has not taken a position either in opposition or in support of WMTX's proposed expansion and did not participate in the hearing on the merits of this case.

At the preliminary hearing in this matter, Protestant TJFA presented itself as a real estate investment partnership that invests in properties located in close proximity to landfills.¹ TJFA contends that real estate in proximity to a properly operated landfill will increase in value over

¹ Prelim. Hr'g Tr. at 20:8-10, 26:11-14, 29:5-12, 39:3 to 40:7.

time.² TJFA has purchased properties in proximity to at least four Central Texas landfills that have recently sought to expand, including the ACRD Facility, and has been a protesting party in contested case hearings concerning each of those four landfill expansions.³ Additionally, although it was touched upon at the preliminary hearing, TJFA's ties to Texas Disposal Systems became evident during the course of the hearing on the merits.⁴ Texas Disposal Systems owns and operates a MSW landfill in southeastern Travis County that competes with the ACRD Facility.⁵

III. JURISDICTION

The jurisdiction of the Commission was established, as required, at the preliminary hearing in this matter.⁶ With respect to “the jurisdiction of the [C]ommission over the proceeding,”⁷ TCEQ has broad jurisdiction over “all aspects of the management of municipal solid waste”⁸ (“MSW”) in Texas and has specific jurisdiction over applications for MSW

² See *id.* at 39:8-18.

³ See Trial Tr. at 1312:8 to 1313:4, 1517:11 to 1518:6; Ex. TJFA 500 at 7:1-5.

⁴ See *id.* at 1277:7-17, 1517:11 to 1518:6; see also Prelim. Hr'g Tr. at 35:24 to 36:23.

⁵ See Trial Tr. at 1277:18-24, 1284:1-14, 1287:17-21; see also Prelim. Hr'g Tr. at 36:2-23.

⁶ See 30 TEX. ADMIN. CODE § 80.105(a) (“After the required notice has been issued, the judge shall convene a preliminary hearing to consider the jurisdiction of the commission over the proceeding.”); Order No. 1 (noting that a preliminary hearing was held “and jurisdiction was proven”); Prelim. Hr'g Tr. at 7:20 to 11:13 (establishing jurisdiction).

⁷ 30 TEX. ADMIN. CODE § 80.105(a).

⁸ TEX. HEALTH & SAFETY CODE § 361.011.

permits.⁹ Additionally, the jurisdiction of the State Office of Administrative Hearings (“*SOAH*”) to conduct hearings in contested cases referred by TCEQ is established by statute.¹⁰

IV. PROCEDURAL HISTORY

WMTX’s application was first submitted to TCEQ on August 26, 2005, for review under the agency’s MSW rules in effect at that time.¹¹ On September 15, 2005, the TCEQ Executive Director determined the application to be administratively complete.¹² Thereafter, while the administratively complete application was pending before TCEQ and under technical review by the Executive Director, TCEQ revised the entirety of its MSW rules.¹³ Those revisions went into effect on March 27, 2006.¹⁴ Although not required to do so, WMTX elected to revise its pending application to comply with the new rules and submitted the revised application to TCEQ on October 10, 2006.¹⁵ The revised application was declared technically complete on January 4, 2008.¹⁶

⁹ *Id.* § 361.061 (“[T]he commission may require and issue permits authorizing and governing the construction, operation, and maintenance of the solid waste facilities used to store, process, or dispose of solid waste under this chapter.”).

¹⁰ *See* TEX. GOV’T CODE § 2003.47(a)-(b); *see also* 1 TEX. ADMIN. CODE § 155.51(a) (providing that SOAH acquires jurisdiction over a case when a referring agency completes and files a request to docket a case with SOAH).

¹¹ *See* Ex. APP-200 at 14:22-23.

¹² *See id.* at 14:25-28.

¹³ *See id.* at 16:5-8, 25:9-13; 31 TEX. REG. 2502 (Mar. 24, 2006).

¹⁴ *See* 31 TEX. REG. at 2690; Ex. APP-200 at 16:8.

¹⁵ *See* 30 TEX. ADMIN. CODE § 330.1(a)(2) (“Applications for new permits and major amendments to existing permits that are administratively complete . . . as of the effective date of the 2006 Revisions, shall be considered under the former rules of this chapter unless the applicant elects otherwise.”); Ex. APP-200 at 16:8-10, 25:15-18; Ex. APP-100 at 7:8 to 8:8.

¹⁶ *See* Ex. APP-200 at 16:25-30.

On February 15, 2008, WMTX requested direct referral of its application to SOAH for a contested case hearing.¹⁷ On April 14, 2008, a public meeting was held to discuss the application.¹⁸ SOAH convened a preliminary hearing in this matter on April 16, 2008, at which time the foregoing parties to the case were named.¹⁹

In February and April 2008, WMTX requested certain specific revisions to its technically complete application.²⁰ TCEQ reviewed WMTX's requested revisions and, in May 2008, asked for additional information from WMTX regarding the application.²¹ That same month, WMTX responded to TCEQ's comments and request for additional information, to the satisfaction of the Executive Director.²²

The hearing on the merits of this case commenced March 30, 2009, and concluded April 13, 2009. The application under consideration by the ALJ and the parties (Exhibit APP-202) incorporated and included all revisions to the application that WMTX requested after the application was determined to be technically complete and all revisions accepted by TCEQ.²³

V. BACKGROUND FACTS

A. THE EXISTING FACILITY

The application for Permit No. MSW-249D at issue seeks an expansion of the ACRD Facility, an existing Type I MSW landfill facility.²⁴ The existing, permitted facility is owned and

¹⁷ See Ex. APP-100 at 8:10-28.

¹⁸ See Ex. APP-200 at 19:23-25.

¹⁹ See Order No. 1.

²⁰ See Ex. APP-200 at 21:8 to 22:13.

²¹ See *id.* at 22:15 to 23:6.

²² See *id.* at 23:8 to 24:9.

²³ See *id.* at 24:11 to 25:5.

²⁴ See *id.* at 10:12-30; Ex. APP-202 at 7.

operated by WMTX.²⁵ The ACRD Facility currently comprises 288.6 acres and is located in northeast Travis County, just over five miles east of the I-35 exit for Highway 290 East, and approximately four miles west of Manor, Texas.²⁶

Authorized waste disposal operations began on a portion of the property now occupied by the ACRD Facility in 1970, just over a decade prior to WMTX's affiliation with the site.²⁷ However, the initial version of the facility's existing permit, Permit No. MSW-249, was first issued by the Texas Department of Health ("*TDH*") in 1977.²⁸ That permit was subsequently amended in 1981 to authorize an expansion of the facility under Permit No. MSW-249A.²⁹ WMTX, through its corporate predecessors, acquired the ACRD Facility shortly after the issuance of Permit No. MSW-249A.³⁰ Thereafter, the facility's permit was amended to authorize the installation of a gas recovery system, resulting in the issuance of Permit No. MSW-249B in 1988.³¹ In 1991, Permit No. MSW-249C was issued, authorizing a westward expansion of the facility by 74 acres.³² WMTX currently operates the facility under the terms of Permit No. MSW-249C.³³

²⁵ See Ex. APP-200 at 10:12-30; Ex. APP-202 at 7.

²⁶ See Ex. APP-200 at 10:12-30; Ex. APP-202 at 7, 108, 109.

²⁷ See Ex. APP-200 at 10:12-30; Ex. APP-202 at 7; Ex. TJFA 204 at 20; Ex. TJFA 2 at 1.

²⁸ See Ex. APP-200 at 10:12-30; Ex. APP-202 at 7; Ex. TJFA 200 at 51:13-21; Ex. TJFA 204 at 20; Ex. TJFA 2 at 1. Similarly, the closed Travis County Landfill, adjacent to the southern boundary of the ACRD Facility, began landfilling operations in 1968 but also did not receive its first permit from the state until 1977. See Ex. APP-11 at WM-055350.

²⁹ See Ex. APP-200 at 10:12-30; Ex. APP-202 at 7; Ex. TJFA 200 at 52:1-10; Ex. TJFA 204 at 20.

³⁰ See Ex. APP-200 at 10:12-30; Ex. APP-202 at 7; Ex. TJFA 200 at 52:1-10; Ex. TJFA 203 at 65; Ex. TJFA 204 at 20.

³¹ See Ex. APP-200 at 10:12-30; Ex. APP-202 at 7; Ex. TJFA 200 at 52:1-10; Ex. TJFA 204 at 20.

³² See Ex. APP-200 at 10:12-30; Ex. APP-202 at 7; Ex. TJFA 200 at 52:1-10; Ex. TJFA 204 at 20; Ex. TJFA 2 at 1.

³³ See Ex. APP-200 at 10:12-30; Ex. APP-202 at 7.

The existing ACRD Facility is bisected by a drainage way that flows across the site from the facility's northern permit boundary to its southern permit boundary, dividing the facility into two principal disposal areas, the "East Hill" and the "West Hill."³⁴ The East Hill has been completely filled to final grades and final cover has been installed.³⁵ Current disposal operations are ongoing on the western side of the West Hill, in the area permitted for expansion under Permit No. MSW-249C.³⁶

East of the central north-south drainage way that bisects the facility, and between the East Hill and West Hill, are the two oldest disposal areas within the permit boundary of the ACRD Facility: the Industrial Waste Unit ("*IWU*") and the Phase I Unit.³⁷ These two historic disposal areas are discussed in more detail below.

B. THE APPLICATION

Based on current waste acceptance rates, the existing ACRD Facility is nearing full capacity.³⁸ Both TCEQ and the Capital Area Council of Governments ("*CAPCOG*") have indicated that the Central Texas area served by the ACRD Facility has a shortage of MSW disposal capacities.³⁹ Therefore, to ensure that the facility continues to meet the waste disposal

³⁴ See Ex. APP-200 at 10:28-30; Ex. APP-202 at 121.

³⁵ See Ex. APP-202 at 13, 14, 121.

³⁶ See Ex. APP-202 at 13, 14, 121.

³⁷ See Ex. APP-202 at 7, 22-23, 121.

³⁸ See Ex. APP-100 at 6:7-18 (Smith) (explaining that the disposal capacity remaining in the existing ACRD Facility will be depleted in less than six years, if current waste acceptance rates increase commensurate with expected increases in the populations served by the facility).

³⁹ See, e.g., Ex. COA 12 at 9 (September 2008 TCEQ report noting 7 years of remaining MSW landfill disposal capacity in the CAPCOG region); Ex. TC 5 at 13 (July 2002 CAPCOG plan noting that "[t]he total remaining years of landfill capacity for Type 1 facilities may not be sufficient enough when considering the rapid growth in the region" and that "[p]lanning should begin for future landfills because the total amount disposed of will only increase while the capacity decreases"); cf. Ex. TJFA 104 at 3 (noting, in 1991, "that the United States is in the midst of a municipal solid waste disposal crisis" given

needs of the growing communities in its service area, with the instant application, WMTX is seeking to expand the facility's permit boundary by 71.11 acres.⁴⁰

WMTX's application does not propose to increase the permitted maximum elevation of the final contours of the facility, as currently authorized under the facility's existing permit.⁴¹ The application proposes to expand the facility laterally northward from the western boundary of the West Hill.⁴² The entirety of the proposed expansion area is located to the north-northwest of the existing West Hill portion of the facility and the area of the facility previously authorized for expansion under Permit No. MSW-249C.⁴³ WMTX's application does not propose to expand any portion of the existing ACRD Facility east of the eastern portion of the West Hill.⁴⁴ No expansion or additional waste disposal operations are proposed for the eastern portion of the West Hill, the East Hill, the IWU, or the Phase I Unit.⁴⁵ Other than making improvements to the facility's existing groundwater monitoring system to add wells and make it more protective, no substantive design changes are proposed for these portions of the existing facility.

the projected increase in MSW generation and "a steadily decreasing availability of disposal capacity, and that this "disposal capacity crisis is further compounded by the difficulty in siting new solid waste management facilities").

⁴⁰ See Ex. APP-100 at 6:7-18; Ex. APP-200 at 12:4-17; Ex. APP-202 at 12.

⁴¹ See Ex. APP-200 at 12:19-22; Ex. APP-202 at 12; *see also* 30 TEX. ADMIN. CODE §§ 330.543(b)(2)(B) (defining a "vertical expansion" as "any height increase that exceeds the maximum permitted final contour for any cell or unit for which an increase is requested"), 330.3(72) (defining a "lateral expansion" as "[a] horizontal expansion of the waste boundaries of an existing municipal solid waste landfill unit").

⁴² See Ex. APP-200 at 12:4-8; Ex. APP-202 at 12, 112, 121.

⁴³ See Ex. APP-200 at 12:4-8; Ex. APP-202 at 12, 112, 121.

⁴⁴ See Ex. APP-200 at 12:24-26; Ex. APP-202 at 121, 123, 124, 126, 127, 129-31, 133, 135, 137, 139, 141, 143.

⁴⁵ See Ex. APP-200 at 12:24-26; Ex. APP-202 at 121, 123, 124, 126, 127, 129-31, 133, 135, 137, 139, 141, 143; Trial Tr. at 298:16-18, 299:11-24, 330:12 to 331:5.

C. THE IWU AND PHASE I UNIT

Despite the fact that WMTX's application does not propose to expand or make changes to the design of either the IWU or the Phase I Unit,⁴⁶ discussion of these existing, closed portions of the facility dominated the hearing in this case. Both the IWU and the Phase I Unit were in existence at the time the ACRD Facility received the initial version of its existing permit, Permit No. MSW-249, in 1977, and remained in existence throughout each subsequent permit amendment and expansion of the facility – from MSW-249 to -249A to -249B to -249C, the facility's current permit. Four major permitting actions and more than three decades later, Protestants now claim that the IWU and the Phase I Unit are grounds for denial of WMTX's proposed expansion.

Putting aside the simple truth that denial of WMTX's application would result in no changes to either the IWU or the Phase I Unit – just a return to the status quo under Permit No. MSW-249C – neither the IWU nor the Phase I Unit provides grounds for denial. While Applicant recognizes that these historic disposal areas are within the permit boundary for the ACRD Facility and, therefore, that WMTX is responsible for their proper management in a manner that is protective of human health and the environment,⁴⁷ the legal truth is that these units are closed and not subject to continued regulation as active MSW landfill units. Nevertheless, as noted above and discussed in Section VI.A.2 below, WMTX's application proposes to increase the number of groundwater monitoring wells at the ACRD Facility that will serve to detect a potential release of contaminants from either the IWU or the Phase I Unit.

⁴⁶ See Trial Tr. at 298:16-18, 299:11-24, 330:12 to 331:5.

⁴⁷ See Trial Tr. at 112:18 to 113:4, 134:11-18, 136:1-6, 152:3-13, 224:8-14.

1. Applicability of RCRA Subtitle D Requirements

Per § 330.5(c) of TCEQ's current MSW rules – indeed, per the MSW rules that have been in place in Texas since the state's adoption in 1993 of regulations implementing the federal criteria for MSW landfills under Subtitle D of the Resource Conservation and Recovery Act (“*RCRA Subtitle D*” or “*Subtitle D*”) – the only regulatory requirements that apply to MSW landfill units that stopped receiving waste before October 9, 1991, are the limited closure and post-closure care provisions of 30 Tex. Admin. Code §§ 330.453 and 330.463(a).⁴⁸ To demonstrate compliance with these closure provisions, owners and operators of MSW landfills “shall submit a closure report that documents that MSW landfill units . . . , or portions thereof, have received final cover,” if such a closure report was not previously submitted prior to the state's promulgation of regulations in 1993 implementing the federal Subtitle D criteria.⁴⁹ The requisite final cover consists of no less than two feet of soil graded at no more than a 4:1 slope.⁵⁰ The cover must be inspected and maintained for a five-year post-closure period.⁵¹

Notably, failure to submit the § 330.5(c) closure report or complete closure activities does not subject a MSW landfill unit to the entirety of TCEQ's regulations, if that unit ceased receiving waste prior to October 9, 1991. While failure to submit the required closure report or

⁴⁸ See 30 TEX. ADMIN. CODE § 330.5(c). Current § 330.5(c) requires compliance with § 330.453, which in turn requires compliance with § 330.463(a). See *id.* § 330.453(f). Current § 330.5(c) is substantively identical to former § 330.3(b), which was promulgated by TCEQ's predecessor agency, the Texas Water Commission, in 1993 to implement the federal Subtitle D criteria. See 18 TEX. REG. 4023, 4037 (June 18, 1993). Additionally, with the exception of current § 330.453(d), which provides for approval of alternative final cover designs, current § 330.453 is substantively identical to § 330.251, as promulgated in 1993. See 18 TEX. REG. at 4074-75. Likewise, current § 330.463(a) is substantively identical to former § 330.254(a), with the exception of current § 330.463(a)(3), which authorizes TCEQ to require an investigation of closed MSW units if there is evidence of a release from any such unit. See 18 TEX. REG. at 4076.

⁴⁹ 30 TEX. ADMIN. CODE § 330.5(c).

⁵⁰ See *id.* § 330.453(a), (c).

⁵¹ See *id.* § 330.463(a).

complete the requisite closure activities may constitute a violation of TCEQ's regulations, it does not render the entirety of TCEQ's regulations applicable to MSW landfill units that stopped receiving waste before October 9, 1991. Regardless of whether the closure requirements of § 330.5(c) are timely satisfied, MSW landfill units that stopped receiving waste before October 9, 1991 are not subject to regulation beyond the provisions of 30 Tex. Admin. Code §§ 330.453 and 330.463(a). By contrast, under § 330.5(d), TCEQ's rules expressly provide that MSW landfill units that receive waste after October 9, 1991, but stop receiving waste before October 9, 1993, are subject to all the requirements of TCEQ's MSW regulations if they fail to complete cover installation and certify cover by the time limits specified in TCEQ's rules.⁵² Similarly, under § 330.5(e), "[a]ll MSW landfill units that receive waste on or after October 9, 1993, must comply with all requirements of [TCEQ's MSW] regulations, unless otherwise specified."⁵³

The October 9, 1991, cutoff date in § 330.5(c) for waste receipts is not an arbitrary deadline. The date corresponds to the date that the United States Environmental Protection Agency ("*EPA*") promulgated its regulations implementing the federal Subtitle D criteria for MSW landfills.⁵⁴ In that rulemaking, EPA specifically provided that the Subtitle D criteria "do not apply to municipal solid waste landfill units that do not receive waste after October 9,

⁵² See *id.* § 330.5(d).

⁵³ *Id.* § 330.5(e); see also 18 Tex. Reg. 1485, 1487 (Mar. 9, 1993) ("The implications of the Subtitle D requirements proposed for adoption are as follows: facilities which did not receive waste after October 9, 1991, are not subject to these rules proposed to be adopted to comply with federal Subtitle D requirements . . .").

⁵⁴ See 56 FED. REG. 50,978 (Oct. 9, 1991). This Federal Register promulgation of EPA's Subtitle D final rule is included in Exhibit TJFA 104. Accordingly, for ease of reference, all references to this Federal Register promulgation in this Closing Argument will be cited to Exhibit TJFA 104, followed by the Federal Register citation in parentheses.

1991.”⁵⁵ When TCEQ’s predecessor agency, the Texas Water Commission (“*TWC*”), adopted rules in 1993 to implement the Subtitle D standards, the state agency agreed with its federal counterpart regarding the applicability of the Subtitle D criteria: “Subtitle D closure and post-closure care maintenance requirements apply to [MSW landfill] units that receive waste after October 9, 1991.”⁵⁶ However, the TWC also noted that MSW landfill units that cease waste receipts prior to October 9, 1991, may have to comply with pre-Subtitle D closure requirements, because the MSW regulations in existence in Texas prior to the implementation of the federal Subtitle D criteria in 1993 contained requirements for the closure and post-closure care maintenance of existing MSW sites.⁵⁷

Accordingly, at both the federal and state level, the question of Subtitle D applicability arises only with respect to MSW landfill units that received waste after October 9, 1991. Although MSW landfill units in Texas that ceased waste receipts prior to that date may be subject to closure and post-closure care requirements that existed prior to the 1993 adoption of Subtitle D criteria in Texas, such units are only obligated to comply with those pre-Subtitle D requirements. Non-compliance with such pre-Subtitle D requirements may render these facilities

⁵⁵ 40 C.F.R. § 258.1(c); Ex. TJFA 104 at 23, 24, 30, 62, 63 (56 FED. REG. at 51,000, 51,001, 51,007, 51,039, 51,040) (“EPA never intended to include within the scope of the revised [c]riteria inactive [MSW landfills] that stopped receiving waste prior to the date of promulgation of today’s rule . . .”).

⁵⁶ 18 TEX. REG. at 4029; *see also* 18 TEX. REG. 1485, 1487 (Mar. 9, 1993) (“The implications of the Subtitle D requirements proposed for adoption are as follows: facilities which did not receive waste after October 9, 1991, are not subject to these rules proposed to be adopted to comply with federal Subtitle D requirements . . .”).

In the preamble to its 1993 final rule, the TWC noted that it had committed “to establishing municipal solid waste regulations that were no more stringent than Subtitle D, unless such measures were necessary to protect key resources such as the Edwards Aquifer.” 18 TEX. REG. at 4024. Following that policy, the TWC refused to include various requested provisions in the state’s rules implementing Subtitle D, among them a request to “require ground-water monitoring of all MSW sites.” *Id.*; *see also* 31 TEX. REG. at 2538 (stating the Commission’s position that the March 2006 revisions to TCEQ’s MSW rules “are consistent with, and do not exceed, the standards set by federal law”).

⁵⁷ *See* 18 TEX. REG. at 4029.

subject to enforcement, but it does not render them subject to the Subtitle D criteria that went into effect after the units ceased receiving wastes.

Furthermore, in the 1991 Subtitle D rulemaking, EPA also made clear that, even if it remains open and continues to receive waste post-October 9, 1991, an existing MSW landfill unit is not required to remove wastes and install Subtitle D-compliant liners, or otherwise comply with Subtitle D facility design requirements.⁵⁸ When the TWC adopted the state's MSW rules implementing the Subtitle D standards in 1993, the state agency again agreed with its federal counterpart and exempted all existing units from compliance with the new design standards: “[E]xisting landfills do not have to retrofit those existing portions or re-permit existing units.”⁵⁹

Although demonstrating the last date of waste disposal in the IWU and the Phase I unit is not a requirement applicable to WMTX's pending application, as set forth below, a preponderance of the record evidence in this proceeding demonstrates not only that these units ceased receiving waste prior to October 9, 1991, but also that the applicable closure requirements have been satisfied.

2. History of the IWU

Much has been made in this case of the fact that the IWU at the ACRD Facility received industrial wastes and potentially hazardous wastes for disposal. Receipt and disposal of such wastes does not render the IWU or the ACRD Facility particularly unique. As EPA explained in the preamble to its Subtitle D regulations in 1991, prior to promulgation of federal standards for

⁵⁸ See Ex. TJFA 104 at 1, 30, 38 (56 FED. REG. at 50,978, 51,007, 51,015) (“Today’s final design requirements do not apply to existing units.”).

⁵⁹ 18 TEX. REG. at 4025; *see also id.* (“Existing permitted units are excluded from changed requirements . . . , which specifically allows existing landfills to continue to operate under previously approved permits, unless a change is mandated by the Federal Subtitle D portion of these rules.”).

hazardous waste facilities under RCRA Subtitle C in 1980, “hazardous wastes were routinely disposed of in municipal solid waste landfills.”⁶⁰ Indeed, as EPA recognized, even under today’s Subtitle D regulations, MSW landfills can receive industrial waste and hazardous waste from multiple small quantity generators and multiple sources of household hazardous waste.⁶¹

As one would reasonably expect, the day-to-day history of the IWU is not as well documented or detailed as compared to a MSW landfill unit in active operation post-Subtitle D. However, the following information from the record evidence in this proceeding demonstrates, by a preponderance of the evidence, that the IWU ceased receiving waste prior to October 9, 1991, and was closed. Moreover, the following demonstrates unequivocally that TCEQ and its predecessor agencies have been actively involved in the closure, investigation, management, and monitoring of the IWU for more than three decades.

⁶⁰ Ex. TJFA at 103 (56 FED. REG. at 51,080); *see also id.* at 5 (56 FED. REG. at 50,982) (noting that MSW landfills “that began operation prior to 1980 could contain industrial hazardous waste that, starting in 1980, could only be sent to a subtitle C facility”).

⁶¹ *See* Ex. TJFA 104 at 103 (56 FED. REG. at 51,080); *see also, e.g.*, 30 TEX. ADMIN. CODE §§ 330.171(c)(6) (authorizing “[m]unicipal hazardous waste from a conditionally exempt small quantity generator” to be accepted at a Type I MSW landfill without further approval from TCEQ provided the amount of such waste does not exceed 220 pounds per month per generator, but not limiting the number of generators from which the landfill may receive such hazardous waste on a monthly basis), 330.173 (specifying the conditions under which industrial wastes may be disposed of at MSW landfills), 330.3(148) (listing special wastes that may be disposed of in MSW landfills under the terms of § 330.171).

DATE	DESCRIPTION OF IWU-RELATED EVENT	RECORD CITATION
Feb. 1972	Report noting that both MSW and industrial waste have been disposed of on portions of the existing ACRD Facility	Ex. TJFA 203 at 8
June 1972	Texas Water Quality Board (“ <i>TWQB</i> ”) “orders closure of the IWU”	Ex. TJFA 204 at 20, 21; <i>see also</i> Ex. TJFA 203 at 51
Feb. 1973	<p>TWQB inter-office memo:</p> <ul style="list-style-type: none"> • discusses closure requirements for the IWU, including covering the IWU “with at least 15 feet of clay” • notes that “the disposal of municipal solid waste and industrial solid waste has occurred on the same land and in effect, is a double decked operation” 	Ex. TJFA 203 at 23
Feb. 1973	<p>“Implementation of TWQB closure requirements for the IWU”:</p> <ul style="list-style-type: none"> • “excavation of stained soil” • “construction of clay cutoff wall” • “construction of clay cap” over IWU 	Ex. TJFA 204 at 20, 21; <i>see also</i> Ex. TJFA 203 at 51, 68; Ex. APP-1 at 1; Ex. TJFA 2
July 1974	Site Plan indicating limits of IWU and locations of buried wastes, including MSW	Ex. TJFA 203 at 24
1977	TWQB investigation of IWU	Ex. TJFA 204 at 21; Ex. TJFA 203 at 51, 68
June 1980	Texas Department of Water Resources (“ <i>TDWR</i> ”) and TDH joint investigation of IWU	Ex. TJFA 204 at 22; Ex. TJFA 203 at 51
July 1980	<p>WMTX internal memo noting that:</p> <ul style="list-style-type: none"> • hazardous waste disposal is no longer occurring at site • the areas in which industrial waste “disposal took place are marked on plans and in the field” 	Ex. TJFA 204 at 1, 3

DATE	DESCRIPTION OF IWU-RELATED EVENT	RECORD CITATION
	<ul style="list-style-type: none"> • TDH conducted a study of leachate generation and found “no effective leachate generation” for the site 	
Dec. 1980	Austin Community Disposal (prior owner/operator of ACRD Facility) meets with TDWR and TDH to present IWU site improvement plan	Ex. TJFA 203 at 51
1981	<p>Longhorn Community Disposal (prior owner/operator of ACRD Facility) performs the following “additional closure activities . . . to improve the containment of industrial wastes” in the IWU:</p> <ul style="list-style-type: none"> • “site grading and soil placement to promote drainage and prevent ponding” • “placement of additional clay on the existing cap” over the IWU • “installation of a clay cut-off trench” • “vegetation reseeding of portions of the existing [IWU] cap” 	Ex. TJFA 204 at 20, 21
Mar. 1981	<p>Pittman Engineering Report: <i>Maintenance Improvements on Old Industrial Waste Area, Austin Community Disposal Co., Inc.:</i></p> <ul style="list-style-type: none"> • in June 1972, TWQB “set forth procedures for closing the industrial portion of the site” and that “[t]he closing of the industrial site was supervised and inspected by the Texas Water Quality Board staff during the remainder of 1972 and the early part of 1973” • “[i]n February of 1973 a clay key was installed to preclude lateral seepage from Drum Disposal Site #1” • inspection memos in June 1973 “indicated that site closure was substantially completed,” with exception of revegetation and deed recordation requirements • “an old brush and/or municipal solid waste disposal area [is] located immediately 	Ex. TJFA 203 at 50-56

DATE	DESCRIPTION OF IWU-RELATED EVENT	RECORD CITATION
	<p>southwest of the old industrial site”</p> <ul style="list-style-type: none"> • MSW was placed over portions of the IWU prior to Feb. 1973 • MSW disposal areas adjoin and surround the IWU • in-house evaluation of IWU conducted to avoid “future problems with the old Industrial Site and the surrounding municipal waste” • discussion of IWU maintenance improvements following in-house evaluation, including installation of additional compacted clay cover and topsoil, grading to drain and eliminate ponding, and revegetation • discussion of quarterly surface water quality monitoring program in drainage channels upstream and downstream of IWU 	
Apr. 1981	TDWR letter referring to the IWU as “[t]he closed industrial portion of the site, inactive since 1972.”	Ex. TJFA 205 at 20
Aug. 1981	<p>WMTX internal memo noting that:</p> <ul style="list-style-type: none"> • “a dense clay cap has been constructed” over the IWU, “which will promote surface water runoff” • remedial work is ongoing to install liners around the IWU • the IWU area “has had recent work to eliminate ponding on top of the site” • “[a]t least 4 feet and as much as 8 feet of soil has been compacted over the top” of the IWU and the IWU “[s]ide slopes have similar amounts of compacted clay cover material • “[t]he top area [of the IWU] has been extremely well graded” • “[l]iners extending 8 feet below grade have been installed around a portion of the perimeter” of the IWU and “should completely 	Ex. TJFA 204 at 4, 5, 6

DATE	DESCRIPTION OF IWU-RELATED EVENT	RECORD CITATION
	surround this area”	
Jun. 1982	EPA internal memo noting that: <ul style="list-style-type: none"> • “TDWR has improved the containment capabilities of the [IWU] and put in monitoring wells” • waste disposal operations are not occurring on the IWU site • “TDH and TDWR have not found any evidence of leakage, migration, or anything else from the [IWU]” 	Ex. TJFA 203 at 71
Nov. 1984	Underground Resource Management Report: <i>Landfills in the Vicinity of Austin, Texas</i> : <ul style="list-style-type: none"> • prepared for the City of Austin • notes “key-way” cut around part of IWU and refilled with compacted clay • notes investigation by TWQB in 1997 that “concluded that no subsurface migration of waste is expected” from the IWU • recommends that the City of Austin take “no action” regarding the IWU 	Ex. TJFA 203 at 66, 68
July 1986	Geotechnical evaluation of IWU area by McBride-Ratcliff & Assocs.	Ex. TJFA 204 at 22
Dec. 1997	Texas Natural Resource Conservation Commission (“ <i>TNRCC</i> ”) approves WMTX study to characterize IWU wastes for potential excavation, treatment, and re-disposal	Ex. TJFA 204 at 20
1998	IWU waste characterization by OHM Corp.	Ex. TJFA 204 at 22
Sept. 1998	IWU geophysical investigation by RUST Environmental & Infrastructure	Ex. TJFA 204 at 22
Aug./Nov. 1999	Preparation of work plan to investigate the IWU is conducted with the involvement of TNRCC	Ex. APP-1 at 1; Ex. TJFA 204 at 18

DATE	DESCRIPTION OF IWU-RELATED EVENT	RECORD CITATION
July 2000	<p>JD Consulting Report: <i>Human Health Risk Evaluation Report, Closed Industrial Waste Unit, Austin Community Landfill</i> (“JDC IWU Report”):</p> <ul style="list-style-type: none"> • report was submitted to TNRCC “for review and comment” • report “concludes that the IWU does not pose a potential threat to human health and that corrective action is not required” • report finds that “excavation and removal of wastes from the IWU would create additional potential exposure pathways and risks to onsite workers and the community” • report finds that IWU “cap is an effective physical control and is preventing off-site migration of waste contaminants from the IWU” <p>JDC IWU Report included ThermoRetec Consulting Report: <i>Site Investigation Report, Closed Industrial Waste Unit, Austin Community Landfill</i>:</p> <ul style="list-style-type: none"> • report notes clay cap over IWU areas extending from two to 11 feet deep 	Ex. APP-1 at iii, iv; Ex. APP-2; Ex. TJFA 204 at 36-37
Oct. 2000	<p>TNRCC letter providing comments on JDC IWU Report:</p> <ul style="list-style-type: none"> • refers to the IWU as “the closed industrial waste unit” • refers to the IWU evaluation performed by JDC/ThermoRetec as “voluntary” • concludes that there are no “exposure pathways to soil and groundwater beneath the industrial waste unit” 	Ex. APP-2
Jan. 2001	WMTX responds to TNRCC comments on JDC IWU Report	Ex. TJFA 204 at 8
Apr. 2002	Agreement between the City of Austin and WMTX regarding the IWU:	Ex. COA 6 at COA 1758, 1777, 1779, 1787

DATE	DESCRIPTION OF IWU-RELATED EVENT	RECORD CITATION
	<ul style="list-style-type: none"> • requires WMTX to implement an IWU groundwater monitoring plan and IWU cap enhancement plan • expressly recognizes that agreed-upon “cover enhancement and monitoring measures . . . go beyond what is required by state and federal law” • provides that the agreed-upon plans are “to help enhance the drainage and minimize or prevent infiltration and inflow of rainfall runoff into the IWU” • requires WMTX to submit IWU groundwater monitoring results to TCEQ and the City of Austin • requires WMTX to conduct IWU groundwater monitoring program for “the operating life of the currently permitted landfill facility plus 30 years of post-closure monitoring commencing from the date of the first sampling event, unless otherwise approved by” TCEQ and the City of Austin • requires quarterly monitoring of the IWU cap “for signs of erosion, subsidence, desiccation, and inadequate growth of vegetation” and repair of the IWU cap “as necessary to ensure its integrity” 	
Nov. 2002	<p>RJR Engineering Report: <i>Austin Community Landfill Industrial Waste Area Cover Enhancement Evaluation Report</i>:</p> <ul style="list-style-type: none"> • documents construction of IWU area clay cover enhancement project conducted per WMTX’s agreement with the City of Austin • documents that the following construction activities were performed: <ul style="list-style-type: none"> • “A minimum five-foot thick clay soil layer was placed over the north and south disposal areas with additional soil 	Ex. APP-3 at WM-019308, -019312

DATE	DESCRIPTION OF IWU-RELATED EVENT	RECORD CITATION
	<p>placed over the remaining cap area to provide a minimum 2 percent slope for drainage. A six-inch topsoil layer was placed over the clay soil layer and the area seeded. Existing drainage ditches cleaned and widened around the north and south sides of the IWU area to improve stormwater drainage.”</p> <ul style="list-style-type: none"> • clayey material was spread over IWU and compacted in lifts of approximately six inches 	

In addition to the above record evidence, Dr. Kier, in his prefiled testimony, analyzed a series of aerial photographs of the ACRD Facility taken almost yearly from 1969 to 1996.⁶² Based on Dr. Kier’s own analyses of these photographs, waste disposal operations at the IWU ceased well before 1991 and the area was shown to be “graded smooth and vegetated” by 1984.⁶³ Dr. Kier’s reading of aerial photos is supported by the on-the-ground sequencing of waste disposal operations at the ACRD Facility, as depicted in a map introduced by Mr. Chandler in his prefiled testimony. Back in 2002, in collaboration with Dr. Kier, Mr. Chandler developed a map that, among other things, depicts individual disposal cell designations at the ACRD Facility and the date of regulatory approval to place waste in each cell.⁶⁴ As Mr. Chandler’s own map demonstrates, from the mid 1980s through 2001, waste disposal was occurring on permitted

⁶² See Ex. TJFA 200 at 37:18 to 40:10; Ex. TJFA 205 at 40-48.

⁶³ Ex. TJFA 200 at 86:23-24; Ex. TJFA 205 at 44. Dr. Kier claims that a 1995 aerial photograph in WMTX’s application “indicates activity” in the IWU area, but he does not, and cannot, identify any such activity as waste disposal operations or otherwise distinguish it from soil stockpiling, site regrading, maintenance, and other non-disposal operations. See Ex. TJFA 200 at 87:12-16. Indeed, on the same page of his prefiled testimony, Dr. Kier acknowledges that soil was placed on the IWU area in 1995. See *id.* at 87:3.

⁶⁴ See Ex. TJFA 400 at 196:1-8, 200:6 to 201:16; Ex. TJFA 456.

portions of the East Hill and West Hill, not the IWU (which, notably, Mr. Chandler labeled “closed” on his map).⁶⁵

3. History of the Phase I Unit

Records regarding the history of the Phase I Unit are even fewer than those concerning the IWU, but those in the record of this proceeding identify the Phase I Unit as the area where MSW disposal operations first began at the ACRD Facility in the early 1970s.⁶⁶ Although the exact date that the Phase I Unit was filled to completion and closed to waste disposal is unknown, the record evidence indicates that waste disposal operations at the Phase I Unit did not extend into the 1980s.⁶⁷ In his analysis of yearly aerial photographs of the ACRD Facility, Dr. Kier does not note any waste disposal operations in the Phase I area after 1979.⁶⁸

⁶⁵ See Ex. TJFA 456. The IWU area is also depicted as “closed” on various historic figures and drawings in the record that are dated prior to 1991, providing further support for the conclusion that waste disposal in the area of the IWU ceased prior to October 9, 1991. See, e.g., Ex. TJFA 503 at 1 (figure dates back to at least 1981, per Ex. TJFA 500 at 15:12-15); Ex. TJFA 6 at WM-032544 (figure dated 9/7/82).

⁶⁶ See, e.g., Ex. TJFA 5 at WM-064091 (“The original area of municipal solid waste disposal at the site was in the south central portion of the site in an area currently designated as ‘Phase I.’”); Ex. TJFA 2 at WM-028304, -028305 (noting that, before issuance of Permit No. MSW-249 in 1977, TDH authorized disposal of MSW on property that is now located in the southern half of the eastern portion of the ACRD Facility just south of the IWU and that MSW disposal operations in this area were ongoing in the early 1970s).

⁶⁷ See, e.g., Ex. TC 3 at WM-004853 (reporting to TNRCC that the Phase I Unit “received waste from about 1971 through 1979”). Other evidence in the record indicates that waste disposal operations at the Phase I Unit and the Travis County Landfill bordering the ACRD Facility to the south were ongoing around the same time. See, e.g., Ex. TJFA 2 at WM-028305 (noting that when MSW disposal was occurring in the Phase I Unit during the 1970s, “waste was commingled across the southern boundary with County landfill waste”); Ex. TJFA 5 at WM-064096 (noting that, when considering both the Travis County Landfill and the Phase I Unit, “over 85% of the area landfilled during the 1970’s is located on the Travis County property”). The Travis County Landfill began receiving waste in 1968 and closed in 1982. See APP-11 at WM-055350, -055353; Trial Tr. at 1921:9-12 (White) (testifying that the Travis County Landfill stopped receiving waste in 1981 or 1982).

⁶⁸ See Ex. TJFA 205 at 44-48. In his prefiled testimony, Dr. Kier claims that waste disposal in the Phase I Unit occurred “through at least 1981 and possibly into 1984,” but he does not attempt to square that testimony with his own analysis of the ACRD Facility aerial photographs. Ex. TJFA 200 at 91:1-4. Additionally, as he claims with respect to the IWU, Dr. Kier claims that two post-1991 aerial photographs

Accordingly, there is no evidence in the record to support a finding that the Phase I Unit was receiving wastes on or after October 9, 1991.⁶⁹ Additionally, the record indicates that the Phase I Unit has received a clay cap final cover; that the Phase I Unit has been investigated post-closure; and that the results of the investigation were provided to TNRCC.⁷⁰

VI. ISSUES

Applicant has the burden of proof with respect to whether its application “complies with all applicable statutory and regulatory requirements.”⁷¹ WMTX’s evidentiary burden is not to present proof “beyond a reasonable doubt” or by “clear and convincing evidence,” but rather by “a preponderance of the evidence.”⁷² Proof by a preponderance of the evidence “does not require the quality of absolute certainty nor does it require that [Applicant] preclude every other possibility. . . . All that is required is that the circumstances point to the ultimate fact sought to be established with that degree of certainty as to make the conclusion reasonably probable.”⁷³

in WMTX’s application indicate “activity” in the Phase I area, but he does not, and cannot, identify any such activity as waste disposal operations or otherwise distinguish it from soil stockpiling, site regrading, maintenance, and other non-disposal operations. *See* Ex. TJFA 200 at 93:20-22, 94:15-22.

⁶⁹ Here again, Mr. Chandler’s map indicates that, from at least the mid 1980s through 2001, waste disposal operations at the ACRD Facility were occurring in areas of the East Hill and West Hill well away from the Phase I area. Additionally, as with the IWU, the Phase I Unit is also depicted as “complete” or “completed” on various figures and drawings that are dated prior to October 9, 1991. *See, e.g.*, Ex. TJFA 503 at 1 (figure dates back to at least 1981, per Ex. TJFA 500 at 15:12-15); Ex. TJFA 6 at WM-032544 (figure dated 9/7/82).

⁷⁰ *See, e.g.*, Ex. APP-202 at 1481 (showing cap over Phase I area); Ex. TC 3 at WM-004853 (reporting to TNRCC that the Phase I Unit “has final cover in place and is not planned for further landfill use”); Ex. TJFA 12 at WM-064037, -064039-40 (submitting results of Phase I investigation to TNRCC and documenting compacted clay cap cover over Phase I Unit); Ex. TJFA 5 (TNRCC approval of work plan for Phase I investigation).

⁷¹ 30 TEX. ADMIN. CODE § 55.210(b).

⁷² *Id.* § 80.17(a).

⁷³ *State Farm Mut. Ins. Co. v. Davis*, 576 S.W.2d 920, 921 (Tex. Civ. App.—Amarillo 1979, writ ref’d n.r.e.) (internal citations omitted); *see also Bufkin v. Tex. Farm Bureau Mut. Ins. Co.*, 658 S.W.2d 317, 230 (Tex. App.—Tyler 1983, no writ); *First State Bank v. Md. Cas. Co.*, 918 F.2d 38 (5th Cir. 1990).

The preponderance of the evidence standard does not necessarily require that the party with the burden “explain or disprove the allegations of its opponent.”⁷⁴

Accordingly, with respect to the issues set forth below, to the extent that such issues concern whether WMTX’s application complies with one or more applicable statutory or regulatory requirements, WMTX’s evidentiary burden is a preponderance of the evidence standard, as set forth above.

A. WHETHER THE APPLICATION INCLUDES ADEQUATE PROVISIONS FOR THE PROTECTION OF HUMAN HEALTH AND WELFARE, AND THE ENVIRONMENT IN GENERAL

TCEQ’s MSW rules applicable to WMTX’s application were promulgated pursuant to the agency’s rulemaking authority under the Texas Solid Waste Disposal Act (“*SWDA*”).⁷⁵ The stated legislative policy and purpose of the SWDA is “to safeguard the health, welfare, and physical property of the people and to protect the environment by controlling the management of solid waste”⁷⁶ To further this policy and purpose, TCEQ promulgated a comprehensive regulatory framework governing all aspects of the management and disposal of MSW, including rules governing the content of MSW permit applications, and the siting, design, construction, and operation of MSW landfills.⁷⁷ The clear premise of the Commission’s MSW rules – indeed, a fundamental axiom of environmental permitting in Texas and throughout the nation – is that when a permit application meets or exceeds the applicable regulatory criteria, then the applicant

⁷⁴ *Gooch v. Davidson*, 245 S.W.2d 989, 991 (Tex. Civ. App.—Amarillo 1952, no writ).

⁷⁵ See TEX. HEALTH & SAFETY CODE §§ 361.001, 361.024; 30 TEX. ADMIN. CODE § 330.1(a); 31 TEX. REG. at 2538-39.

⁷⁶ TEX. HEALTH & SAFETY CODE § 361.002.

⁷⁷ See 30 TEX. ADMIN. CODE § 330.1(a) (specifying that TCEQ’s MSW rules “apply to any person . . . involved in any aspect of the management and control of MSW and MSW facilities”); 31 TEX. REG. at 2538-39 (The SWDA “authorizes the commission to control all aspects of the management of MSW.”); TEX. HEALTH & SAFETY CODE §§ 361.011, 361.061.

has proposed a facility that, by definition and consistent with the policy and purpose of the SWDA, will “safeguard the health, welfare, and physical property of the people and the environment.”⁷⁸

In accordance with this fundamental axiom, Applicant’s burden of proof in this matter, as set forth above, is to demonstrate that its application “complies with all applicable statutory and regulatory requirements.”⁷⁹ In satisfying this burden of proof – by demonstrating that its application complies in all respects with the statutory and regulatory requirements promulgated for the stated purpose of protecting human health, welfare, and the environment – Applicant has necessarily shown that its application and proposed facility will “safeguard the health, welfare, and physical property of the people and the environment.” The record evidence – the prefiled testimony and exhibits, the testimony of witnesses before the ALJ at the hearing on the merits of this matter, and the additional exhibits entered at the hearing – demonstrates that WMTX’s application complies with all applicable statutory and regulatory requirements. Accordingly, and as set forth below, Applicant has demonstrated, by proof exceeding a preponderance of the evidence, that expansion of the ACRD Facility, as proposed in WMTX’s application, will be protective of human health, welfare, and the environment.

⁷⁸ See 30 TEX. ADMIN. CODE § 330.57(d) (standard by which TCEQ reviews a MSW permit application is whether the application contains “data of sufficient completeness, accuracy, and clarity to provide assurance that operation of the site will pose no reasonable probability of adverse effects on the health, welfare, environment, or physical property of nearby residents or property owners”); see also *id.* § 330.63(a) (providing that the Site Development Plan in Part III of a MSW permit application “must include criteria that in the selection and design of a facility will provide for the safeguarding of the health, welfare, and physical property of the people and the environment through consideration of geology, soil conditions, drainage, land use, zoning, adequacy of access roads and highways, and other considerations as the specific facility dictates”).

⁷⁹ *Id.* § 55.210(b).

1. Whether the Application Includes Adequate Protection of Groundwater and Surface Water, in Compliance with Agency Rules, Particularly in Relation to the Effects of the IWU and Phase I on the Groundwater and Surface Water

The TCEQ rules most relevant to the protection of groundwater and surface water quality⁸⁰ include those that concern the design and installation of the landfill's liner and leachate collection systems, application and installation of the landfill's cover (daily, intermediate, and final), contaminated water management, and certain landfill location restrictions (e.g., restrictions on locating landfills in floodplains, fault areas, and unstable areas).⁸¹ In their prefiled testimony, Mr. Dominguez and Mr. Winters explained that WMTX's application was prepared to comply, and does comply, with each of these rules.⁸² The application's compliance with landfill cover requirements is discussed in detail in Sections VI.A.9 and VI.A.12 below. Additionally, no one has challenged the adequacy of the leachate management system, contaminated water management practices, and demonstrations regarding landfill location restrictions in the application (with the exception of Mr. Chandler's interpretation of the unstable area restriction, which is addressed in Section VI.A.6 below). Therefore, the focus of the discussion in this

⁸⁰ This section discusses protection of surface water quality, whereas Section VI.A.5 below discusses managing stormwater drainage so as to control erosion and not adversely alter existing drainage patterns.

⁸¹ See 30 TEX. ADMIN. CODE §§ 330.165, 330.207, 330.305(g), 330.331-.341, 330.457, 330.547, 330.555-.559; see also Ex. APP-202 at 902 (discussing how the expanded ACRD Facility "has been designed to provide for the safeguarding of the health, welfare, and physical property of the people and the environment through various design considerations"); Ex. APP-200 at 40:6-25 (same); Trial Tr. at 260:24 to 261:20 (Dominguez) (explaining the systems that he designed in the application to ensure that groundwater is protected); Ex. TJFA 104 at 11 (56 FED. REG. at 50,988) (explaining that the Subtitle D location restrictions "prevent or restrict the siting of landfills in areas that are especially vulnerable to contamination" and that final cover minimizes leachate generation and migration).

⁸² See Ex. APP-200 at 28:27 to 30:14, 31:15-21, 39:22 to 40:4, 42:4-9, 69:16 to 70:3, 78:1-23, 84:12 to 85:16, 86:16 to 88:14, 92:6-22; Ex. APP-800 at 11:2 to 14:13; see also Ex. APP-202 at 29-30 (fault areas, seismic impact zones, and unstable areas), 32-33 (floodplains), 392-97 (location restrictions), 608-09 (floodplains), 917-18 (liner design), 921-28 (leachate and contaminated water management), 1374-75 (fault areas, seismic impact zones, and unstable areas), 3271-73, 3294-317 (final cover), 3405-07 (landfill cover).

section is on the application's compliance with TCEQ's rules applicable to liner systems, as well as protection of groundwater and surface water resources with respect to the IWU and the Phase I Unit.

a. Adequacy of Proposed Composite Liner Systems

WMTX's application proposes to line the expansion area with a Subtitle D composite liner system that meets the design criteria in TCEQ's rules.⁸³ In the preamble to its rules implementing Subtitle D, EPA explained that composite liners of the type proposed in WMTX's application will provide adequate protection of groundwater, even in areas that are poorly suited for the construction of a landfill.⁸⁴ As Mr. Chandler confirmed during his cross-examination in this matter, the Taylor Formation in which the ACRD Facility is located is recognized throughout Texas as one of the better locations for siting a landfill.⁸⁵ In his prefiled testimony, Mr. Dominguez considered the geotechnical characteristics of the Taylor, as well as the construction design of the composite liner systems in the application, and testified that, if constructed in accordance with the application, the proposed composite liner systems "will effectively contain the wastes placed in the landfill, prevent groundwater contamination, and protect human health and the environment."⁸⁶ Aside from Mr. Chandler questioning the stability of the proposed liner systems (which is addressed below in Section VI.A.6), Mr. Dominguez's

⁸³ See Ex. APP-202 at 917-18; Ex. APP-200 at 78:25 to 79:10; *see also* 30 TEX. ADMIN. CODE § 330.331(a)(2), (b).

⁸⁴ See Ex. TJFA 104 at 32, 83 (56 FED. REG. at 51,009, 51,060) ("The composite liner system is designed to be protective in all locations, including poor locations."); *see also id.* at 11 (56 FED. REG. at 50,988) ("[A] composite liner . . . will prevent unacceptable releases from the landfill."), 79 (56 FED. REG. at 51,056) ("The Agency believes that the composite liner design . . . provides protection necessary to ensure that contaminant migration to the aquifer is controlled.").

⁸⁵ See Trial Tr. at 1646:5-8.

⁸⁶ Ex. APP-202 at 83:15-25.

expert opinion was not challenged by any credible expert testimony, nor was it discredited on cross-examination in any way.

In his prefiled testimony, Mr. Chandler claims that certain information is lacking from the Liner Quality Control Plan (“*LQCP*”) in the application. Notably, TJFA chose not to raise those claims with Mr. Dominguez on cross-examination, but rather elected to cross-examine the Executive Director’s expert, Mr. Udenenwu, regarding the *LQCP*.⁸⁷ The questioning of Mr. Udenenwu, and certain of the prefiled testimony of Mr. Chandler, concerned whether the *LQCP* contained sufficient liner construction requirements regarding the removal of clods and stones larger than one inch in diameter from the compacted soils used to construct a portion of the composite liner.⁸⁸ Mr. Udenenwu located the requisite pre-construction requirements⁸⁹ and, contrary to Mr. Chandler’s claim, the applicable liner construction requirements are found on pages 1094 and 1096-97 of the application.⁹⁰ Similarly, the other information that Mr. Chandler claims is lacking from the *LQCP* is, indeed, contained in the application.⁹¹

⁸⁷ See Trial Tr. at 2376:7 to 2383:2.

⁸⁸ See 30 Tex. Admin. Code §§ 330.339(g) (“The maximum clod size of the compacted liner soils shall be approximately one inch in diameter.”), 330.338(h) (“The liner soil material shall contain no rocks or stones larger than one inch in diameter or that total more than 10% by weight.”).

⁸⁹ See Trial Tr. at 2378:9-22.

⁹⁰ See Ex. APP-202 at 1094 (requiring, under § 2.2 “Soil Liner Construction Specifications and Practices,” mechanical processing of liner soils “to break down the original soil structure and to reduce clod size to the smallest size necessary to achieve the required coefficient of permeability (\leq one inch in diameter)”), 1096-97 (specifying, under § 2.3 “Construction Monitoring and Conformance Testing,” a maximum clod size of “approximately one inch in diameter” and that “[t]he liner soil material shall contain no rocks or stones larger than one inch in diameter or that total 10% by weight”).

⁹¹ Mr. Chandler also claims that the *LQCP* in WMTX’s application lacks “a discussion with conclusions about the suitability of the soils and strata for the uses for which they are intended.” Ex. TJFA 400:1-3; see also *id.* at 140:15-19 (citing 30 TEX. ADMIN. CODE § 330.63(e)(5) for this requirement). The discussion that Mr. Chandler claims is lacking, while required by § 330.63(e)(5), is not required to be included in the *LQCP* and is found on pages 912-13 of WMTX’s application. See Ex. APP-202 at 912-13; see also Ex. APP-200 at 76:29 to 77:12 (discussing suitability of soils and strata at the ACRD Facility for the uses for which they are intended).

b. IWU and Phase I: Protection of Groundwater and Surface Water

As set forth above, because the IWU and the Phase I Unit ceased receiving wastes prior to October 9, 1991, by rule they are not subject to the regulatory requirements applicable to WMTX's pending application.⁹² Additionally, regardless of the last date of waste disposal, these existing units are not required to be retrofitted or redesigned to the specifications applicable to the disposal cells in the proposed expansion area.⁹³ By comparison, the filled, existing pre-Subtitle D cells in the East Hill and West Hill⁹⁴ are not required to be excavated and lined with a Subtitle D composite liner, regardless of whether such cells were receiving waste after October 9, 1991.

Although the IWU and Phase I Unit are not proposed in the application to be retrofitted with Subtitle D structural controls, the record evidence demonstrates that these closed units – as they exist today – are protective of groundwater and surface water resources. As discussed above, WMTX and its predecessors; TCEQ and its predecessor agencies; and third parties and the public have scrutinized, investigated, tested, and monitored these units – particularly the IWU – multiple times over the last 30 years. As detailed above, such efforts have resulted in a number of safeguards being added to these units, the most recent being the IWU clay cover enhancement project conducted per WMTX's agreement with the City of Austin, wherein an additional five-foot thick clay cap was constructed over the IWU, re-graded, sloped for drainage, and vegetated.⁹⁵

⁹² See 30 TEX. ADMIN. CODE § 330.5(c).

⁹³ See 18 TEX. REG. at 4025.

⁹⁴ See Ex. APP-202 at 121.

⁹⁵ This five-foot clay cap was in addition to the cap that ThermoRetec surveyed and reported as being up to 11 feet thick. See Ex. TJFA 204 at 36-37.

However, even prior to these most recent improvements, the IWU was thoroughly investigated by ThermoRetec and evaluated by JD Consulting, who reported to TNRCC that “the IWU does not pose a potential threat to human health” and that there is no “off-site migration of waste contaminants from the IWU.”⁹⁶ TNRCC concurred that contaminant pathways to soil and groundwater beneath the IWU have been eliminated.⁹⁷ As he has with every other study that has ever been conducted of the IWU, Dr. Kier takes issue with various aspects of ThermoRetec’s investigation and JD Consulting’s risk evaluation. Given Dr. Kier’s near decades-long crusade against the ACRD Facility and his demonstrated bias,⁹⁸ his critique of the JDC IWU Report is neither surprising nor credible. Indeed, Dr. Kier would not be satisfied if TCEQ itself performed the investigation and conducted the evaluation.⁹⁹

Moreover, considering the low hydraulic conductivity of the Taylor clays that surrounds the IWU (and the Phase I Unit), it is evident that the *in situ* and constructed structural controls for these units are protective of groundwater and surface water and, therefore, human health and the environment. Although the IWU and Phase I Unit appear to be sited in the weathered Taylor clay, rather than the more impermeable unweathered claystone below,¹⁰⁰ these units are nevertheless sited in a stratum that is nearly impermeable¹⁰¹ and that no expert in this case would

⁹⁶ Ex. APP-1 at iii, iv; *see also* Ex. APP-2.

⁹⁷ *See* Ex. APP-2 at WM-000851.

⁹⁸ *See* Trial Tr. at 1276:6 to 1277:17, 1278:16 to 1282:23, 1310:23 to 1311:9.

⁹⁹ *See id.* at 1301:21 to 1302:6 (Kier) (testifying that he does not consider TCEQ to be a “truly independent third party”).

¹⁰⁰ *See* Ex. APP-202 at 1481; Ex. APP-1 at 1.

¹⁰¹ *See* Trial Tr. at 1024:20-21, 1025:4-5 (Winters) (noting that all of the “native soils” at the ACRD Facility “are quite impermeable”).

consider to be an aquifer.¹⁰² Water moves through the clay in the area of the IWU and Phase I Unit, if at all, at a rate of only 0.5 to 4 feet per year.¹⁰³

ThermoRetec's field calculations of the hydraulic conductivity of the clays in IWU area ranged from 1.1×10^{-6} to 1.0×10^{-5} cm/sec.¹⁰⁴ In laboratory tests, the hydraulic conductivity of the native clay samples that ThermoRetec collected from beneath the IWU ranged from 1.4×10^{-8} to 4.6×10^{-8} cm/sec.¹⁰⁵ By comparison, the compacted clay component of a composite liner meets the current Subtitle D regulatory design criteria if it has a hydraulic conductivity no greater than (i.e., no more permeable than) 1×10^{-7} cm/sec.¹⁰⁶ Although Dr. Kier hypothesizes that the waste in the IWU has desiccated the Taylor clays that entomb the IWU, such desiccation was not reported by ThermoRetec and is not reflected in the low permeabilities of the IWU clays that were tested.

Furthermore, in addition to providing subsurface containment of the IWU, these low permeability clays were used to construct the clay caps covering the IWU and Phase I Unit. Prior to the IWU cap enhancement project in 2002, which used on-site clays to construct the enhanced cap,¹⁰⁷ clay samples from the IWU cap were tested by ThermoRetec and returned hydraulic conductivity values in the range of 1.1×10^{-8} to 7.7×10^{-8} cm/sec.¹⁰⁸ Here again, these laboratory test results exceed the current Subtitle D standard (i.e., are even more impermeable than the clay cover soils required by Subtitle D). Landfill units that remained in operation

¹⁰² See Trial Tr. at 1026:15-16, 1315:25 to 1316:3, 1646:9-10, 1646:24 to 1647:1, 1647:10-12.

¹⁰³ See Ex. TJFA-204 at 42; Ex. COA 6 at COA 1777.

¹⁰⁴ See Ex. TJFA-204 at 42; *see also* Ex. COA 6 at COA 1777.

¹⁰⁵ See Ex. TJFA-204 at 37.

¹⁰⁶ See 30 TEX. ADMIN. CODE § 330.331(b).

¹⁰⁷ See Ex. APP-3 at WM-019312.

¹⁰⁸ See Ex. TJFA 204 at 37.

following the promulgation of Subtitle D standards and that close today may install a final clay cover or clay-equivalent cover with a hydraulic conductivity of 1.0×10^{-5} cm/sec or less.¹⁰⁹

In the rulemaking that promulgated these specifications for Subtitle D final covers, EPA explained that a final cover having such low permeability “will restrict the introduction of liquids into the landfill, thereby limiting the production of leachate” and minimizing leachate migration.¹¹⁰ EPA also recognized the long-term protection that such clay caps provide to closed units, such as the IWU and the Phase I Unit: “The liner/leachate collection system is relied on to minimize releases primarily during the operating life of the [MSW landfill], while the final cover provides the primary long term protection after closure of the landfill.”¹¹¹

2. Whether the Application Includes Adequate Provisions for Groundwater Monitoring, in Compliance with Agency Rules, Particularly the Sufficiency of the Groundwater Monitoring Plan and the Point of Compliance to Assess Effects of the IWU and Phase I on the Groundwater

For MSW landfill units subject to TCEQ’s groundwater monitoring regulations, TCEQ’s rules require the installation of a network of groundwater monitoring wells that will yield representative groundwater samples from the uppermost aquifer and detect groundwater contamination in the uppermost aquifer passing the facility’s point of compliance.¹¹² In his testimony in this case, Mr. Winters confirmed that the groundwater monitoring network proposed in WMTX’s application was designed to comply, and does comply, with these requirements. Mr. Winters’ testimony, and the adequacy of the proposed monitoring network, were not challenged with respect to the monitoring wells designed to monitor the area proposed

¹⁰⁹ See 30 TEX. ADMIN. CODE § 330.457(a)(1)-(2), (d).

¹¹⁰ Ex. TJFA 104 at 63 (56 FED. REG. at 51,040); see also *id.* at 11 (56 FED. REG. at 50,988) (noting that the Subtitle D-prescribed “final cap” is “designed to minimize leachate generation and migration”).

¹¹¹ *Id.* at 80 (56 FED. REG. at 51,057).

¹¹² See 30 TEX. ADMIN. CODE § 330.403(a), (a)(2).

for expansion of the landfill. Rather, the questioning of Mr. Winters was focused on his determination of the facility's point of compliance in the area of the IWU and Phase I Unit, and the locations he proposed for locating new wells along that point of compliance.

Here again, because the IWU and the Phase I Unit did not receive wastes after October 9, 1991, they are not subject to the regulatory requirements applicable to WMTX's pending application.¹¹³ Nevertheless, as Mr. Winters testified, WMTX's application proposes to increase the number of groundwater monitoring wells at the existing ACRD Facility that will serve to detect a potential release of contaminants from either the IWU or the Phase I Unit.¹¹⁴

In the current, certified groundwater monitoring network under the facility's existing permit – Permit No. 249C – monitoring well MW-11 is located along the facility's southern permit boundary adjacent to the closed Travis County Landfill to the south. MW-11 is located to the west of the westernmost extent of the Phase I Unit. MW-12 is also located along the same permit boundary, but to the east of the easternmost extent of the Phase I Unit. In the certified, permitted network that has existed at the facility following the implementation of Subtitle D standards, there are no wells installed between MW-11 and MW-12. The facility's point of compliance under Permit No. MSW-249C is discontinuous between MW-11 and MW-12 – the point of compliance extends from the west to MW-11, and from the east to MW-12, but the point of compliance does not extend between MW-11 and MW-12.¹¹⁵

¹¹³ See 30 TEX. ADMIN. CODE § 330.5(c); *see also id.* at §§ 330.401 (providing that monitoring well spacing requirements promulgated in 2006 are inapplicable to closed units), 330.401(e) (requiring monitoring well certification only for “new solid waste management units”).

¹¹⁴ See, e.g., Trial Tr. at 1016:22 to 1017:15, 1022:22 to 1023:1, 1023:12 to 1024:12, 1043:15-20.

¹¹⁵ See Trial Tr. at 299:5-10, 301:17-19, 926:24 to 927:7.

WMTX's application proposes to extend the facility's point of compliance north and east from MW-11 along the eastern boundary of the West Hill, over the northern limits of the IWU, and south along the western boundary of the East Hill to MW-12. The groundwater monitoring network in the application includes the addition of six wells along this new segment of the facility's point of compliance. As Mr. Winters explained, currently groundwater monitoring well MW-11 is the only well in the permitted monitoring network for the existing ACRD Facility that will detect a release from either the IWU or the Phase I Unit. WMTX's application proposes to retain MW-11 in the network and add two additional wells to the network (MW-44 and MW-30) that will monitor the IWU and another additional well (MW-51) that will monitor the Phase I Unit.¹¹⁶

Rather than welcome the addition of new monitoring wells to the facility's network, Protestants have accused WMTX of attempting to "move" the facility's point of compliance and, somehow, exclude the IWU and the Phase I Unit from the ACRD Facility. Protestants, however, fail to explain how WMTX can propose to "move" a line that does not currently exist, or exclude units from the facility without amending the facility's permit boundary.¹¹⁷ In any event, Protestants appear to contend that WMTX should install one or more wells along the southern permit boundary between MW-11 and MW-12 and/or along the drainage way between the IWU and the Phase I Unit. The problems with Protestants contentions are two-fold (1) the southern permit boundary between MW-11 and MW-12 is the upgradient limit of the Phase I Unit¹¹⁸ and

¹¹⁶ See Trial Tr. at 1017:1-8, 1023:17-23, 1043:15-20.

¹¹⁷ See Trial Tr. at 301:5-10.

¹¹⁸ See Trial Tr. at 924:23 to 926:14, 1017:11-15.

(2) waste is continuous across the property line between the closed Travis County Landfill and the ACRD Facility and northward to the IWU.¹¹⁹

By definition, a facility's "point of compliance" must be located hydraulically downgradient of the MSW landfill unit that is to be monitored at the point of compliance.¹²⁰ There appears to be little disagreement, if any, among the relevant experts in this case that if wells were located along the southern permit boundary between MW-11 and MW-12, those wells would be monitoring potential releases from the closed Travis County Landfill onto the ACRD Facility.¹²¹ Accordingly, this segment of the permit boundary is not a point of compliance for the ACRD Facility.¹²²

Also by definition, a point of compliance monitoring well must yield representative groundwater samples from, and detect groundwater contamination from, the uppermost aquifer.¹²³ The well must be constructed in a manner that provides for "collection of representative groundwater samples from the water-bearing zone(s) of concern" and "that will not introduce contaminants into the borehole or casing" of the well.¹²⁴ Additionally, a facility's groundwater monitoring program must be "designed to ensure monitoring results that provide an accurate representation of groundwater quality at the . . . point of compliance wells."¹²⁵ As

¹¹⁹ See Trial Tr. at 114:18 to 115:7, 231:20 to 233:23, 313:9-19; Ex. APP-202 at 1481; Ex. APP-11 at WM-055366; Ex. TJFA 2 at WM-028305; Ex. TJFA 5 at WM-064093.

¹²⁰ See 30 TEX. ADMIN. CODE § 330.3(106); see also Trial Tr. at 920:2-16.

¹²¹ See Trial Tr. at 1017:11-15.

¹²² See Trial Tr. at 924:23 to 926:14, 927:24 to 928:9.

¹²³ See 30 TEX. ADMIN. CODE § 330.403(a), (a)(2).

¹²⁴ *Id.* § 330.421(a), (a)(1)(B).

¹²⁵ *Id.* § 330.405.

Mr. Winters explained, compliance with these regulatory requirements becomes extremely difficult, if not impossible, when the well is installed in or through a mass of waste.¹²⁶

Monitoring leachate in the waste itself, rather than in the groundwater, provides no indication of the quality of groundwater in the uppermost aquifer passing the point of compliance. Providing a conduit for leachate to escape containment by drilling through the waste and into the uppermost aquifer is likewise ill advised. Moreover, such approaches are particularly impractical given that TCEQ's rules expressly allow the installation of wells "at the closest practicable distance to the point of compliance that will ensure detection of groundwater contamination of the uppermost aquifer" when there are "physical obstacles" that preclude the installation of wells along the point of compliance.¹²⁷ Even assuming that wells placed in the drainage way between the IWU and the Phase I Unit would be downgradient of those units (rather than cross-gradient), there is no practicable reason or regulatory requirement to install those wells through waste when installation of the groundwater monitoring network proposed in the application would avoid such complication and, as Mr. Winters testified, will detect releases from the IWU and the Phase I Unit.

3. Whether the Groundwater Monitoring System Proposed in the Application Should Sample and Analyze for Any Constituents in Addition to Those Required to be Tested by Agency Rules

Per the requirements for the detection monitoring program in TCEQ's MSW rules, facilities are required to sample and analyze their groundwater monitoring systems for the constituents listed in Appendix I to the federal Subtitle D regulations in 40 C.F.R. Part 258

¹²⁶ See Trial Tr. at 1047:5-9.

¹²⁷ 30 TEX. ADMIN. CODE § 330.403(a)(2).

(“*Appendix I*”).¹²⁸ If, based upon such sampling and analysis, the facility determines that there has been a “statistically significant increase over background” concentrations for one or more of the Appendix I constituents, then the facility “shall sample and analyze the ground water monitoring system for the full set of constituents listed in Appendix II” to 40 C.F.R. Part 258 (“*Appendix II*”).¹²⁹ These requirements – sampling for Appendix I constituents in detection monitoring and sampling for Appendix II constituents in assessment monitoring – mirror the federal Subtitle D regulations that TCEQ’s groundwater monitoring rules were promulgated to implement.¹³⁰

The Appendix I and Appendix II lists of constituents were established by EPA in its 1991 rulemaking promulgating the federal Subtitle D criteria. As discussed above, EPA undertook that rulemaking with the knowledge that, prior to promulgation of federal standards for hazardous waste facilities under RCRA Subtitle C in 1980, “hazardous wastes were routinely disposed of in municipal solid waste landfills.”¹³¹ EPA also recognized that, even under the Subtitle D regulations it was enacting, MSW landfills would be able to receive hazardous waste from multiple small quantity generators and multiple sources of household hazardous waste.¹³² Accordingly, EPA was well aware that hazardous wastes were and would be disposed of in MSW landfills when the agency developed the Appendix I and Appendix II lists of constituents

¹²⁸ See *id.* § 330.419(a); see also *id.* § 330.407(a).

¹²⁹ *Id.* § 330.409(a), (b).

¹³⁰ See 40 C.F.R. §§ 258.54(a), 258.55(a), (b).

¹³¹ Ex. TJFA 104 at 103 (56 FED. REG. at 51,080); see also *id.* at 5 (56 FED. REG. at 50,982) (noting that MSW landfills “that began operation prior to 1980 could contain industrial hazardous waste that, starting in 1980, could only be sent to a subtitle C facility”).

¹³² See *id.* at 103 (56 FED. REG. at 51,080).

and specified how those lists would be used in groundwater detection and monitoring programs at Subtitle D facilities.

Indeed, in the preamble to the 1991 Subtitle final rule, EPA responded to public comments critical of the agency for not proposing to regulate MSW landfills under the same criteria applied to hazardous waste facilities under Subtitle C.¹³³ In response, EPA acknowledged that the available data “do not provide strong support” for distinguishing the leachate from MSW landfills from that of Subtitle C facilities: “Technical data gathered by the Agency . . . do not reveal significant differences in the number of toxic constituents and their concentrations in the leachates of the two categories of facilities.”¹³⁴ Although EPA noted reasons to expect a reduction in the number and concentrations of toxic constituents in MSW landfill leachate over the long-term,¹³⁵ the agency had in hand these data equating MSW landfill leachate to that of hazardous waste facilities when it specifically declined to extend the scope of the Appendix I list of constituents.¹³⁶

As EPA explained, the Appendix I list was developed as a list of indicator parameters – constituents, that, if detected may indicate a release of the detected constituent, as well as other constituents that may not have been detected or may not be on the Appendix I list (hence the approach to include the entire Appendix II list in assessment monitoring).¹³⁷ As such, EPA

¹³³ See *id.* at 5 (56 FED. REG. at 50,982) (“The Agency received many comments critical of the proposed Criteria base don the fact that the Criteria varied from those applicable to hazardous waste facilities under RCRA subtitle C.”).

¹³⁴ *Id.* (explaining that the study results do not indicate “significant differences between the number of toxic constituents and their concentrations between leachates from post-1980 [MSW landfills] and leachates from pre-1980 [MSW landfills] and hazardous waste landfills”).

¹³⁵ See *id.*

¹³⁶ See *id.* at 99 (56 FED. REG. at 51,076).

¹³⁷ See *id.* at 97-100 (56 FED. REG. at 51,074-77).

determined that facilities that sample and analyze their groundwater monitoring wells for the Appendix I constituents “should be able to detect, with reasonable confidence, nearly every type of release” from a MSW landfill.

Furthermore, while the TCEQ Executive Director can add constituents to a detection monitoring list, he can only do so if the constituents are reasonably expected to be in, derived from, or otherwise indicative of a release from a regulated MSW unit.¹³⁸ For the reasons set forth above in Section V.C, neither the IWU nor the Phase I Unit fit that description.

4. Whether the Application Includes Sufficient Information Demonstrating how the MSW Facility will Comply with Applicable TPDES Stormwater Permitting Requirements

Per TCEQ’s MSW rules, WMTX demonstrated how the expanded ACRD Facility will comply with applicable Texas Pollutant Discharge Elimination System (“*TPDES*”) stormwater permitting requirements by providing in the application a certification statement indicating that WMTX will obtain the appropriate TPDES permit coverage when required.¹³⁹ The City of Austin appears to contend that, despite the clear language of the applicable rule and WMTX’s indisputable compliance with that rule, WMTX should be required to go beyond the regulatory requirement and present a substantive demonstration of TPDES compliance in the context of its MSW permit amendment application. Such an approach was rejected by both EPA and TCEQ in each respective agency’s adoption of rules implementing Subtitle D.¹⁴⁰

¹³⁸ See 30 TEX. ADMIN. CODE § 330.419(c).

¹³⁹ See *id.* § 330.61(k)(3)(A); Ex. APP-202 at 105; see also Ex. APP-200 at 28:18-25; Ex. APP-202 at 31 (discussing TPDES compliance).

¹⁴⁰ See Ex. TJFA 104 at 77 (56 Fed. Reg. at 51,054) (EPA responded to comments seeking the integration of Subtitle D and National Pollutant Discharge Elimination System (“*NPDES*”) requirements as follows: “Under today’s approach, NPDES requirements for landfills will be implemented under the NPDES permitting program”); see also *id.* (“EPA believes that the Clean Water Act is the appropriate mechanism for ensuring that point source discharges are protective of human health and the

5. Whether the Application Includes Adequate Provisions for Erosion Control, in Compliance with Agency Rules

Mr. Dominguez testified that the Facility Surface Water Drainage Report in WMTX's application meets all of the applicable regulatory requirements.¹⁴¹ Among the applicable requirements addressed in the Facility Surface Water Drainage Report is the requirement to demonstrate that expansion of the facility, as proposed in the application, will not adversely alter existing drainage conditions.¹⁴² The Facility Surface Water Drainage Report also includes the Erosion and Sedimentation Control Plan that will be employed by the facility to control erosion during all phases of the landfill's operation, closure, and post-closure care.¹⁴³ Protestant TJFA challenges Mr. Dominguez's testimony with respect to the demonstration of no adverse drainage alterations, and Protestant City of Austin questions the adequacy of the proposed Erosion and Sedimentation Control Plan. For the reasons set forth below, the deficiencies that Protestants allege with respect to the Facility Surface Water Drainage Report lack support in the record and the applicable regulations.

A. Demonstration of No Adverse Drainage Alterations

The crux of Mr. Dunbar's testimony in this case is that the drainage calculations in a 1996 modification of the existing ACRD Facility's stormwater drainage system were incorrect and, if done properly, would have reflected an approximate doubling of the peak flow rate of

environment."); *id.* ("[T]he Agency believes that compliance with surface water regulations is best suited to mechanisms already established under the [Clean Water Act]."); 18 TEX. REG. at 4026 ("The commission concurs in EPA's comment that "collect and control: does not necessarily require sampling or treatment, unless such is required to meet requirements of the Clean Water Act, including but not limited to the NPDES requirements.").

¹⁴¹ See Ex. APP-200 at 44:20 to 45:9; 30 TEX. ADMIN. CODE §§ 330.63(c), 330.301-.307.

¹⁴² See Ex. APP-202 at 594; 30 TEX. ADMIN. CODE §§ 330.63(c)(1)(C), 330.305(a).

¹⁴³ See Ex. APP-202 at 602; 30 TEX. ADMIN. CODE § 330.305(d).

stormwater being discharged from the facility's southern permit boundary. The 1996 modification at issue was submitted to, and reviewed and approved by, the TNRCC.¹⁴⁴ TJFA now claims that this nearly 13 year old authorization is grounds for denial of WMTX's application in 2009. TJFA makes this claim despite the fact that its own witness, Mr. Dunbar, does not have a single criticism of the drainage calculations in WMTX's application and concedes that expansion of the ACRD Facility, as proposed in the application, will not adversely alter existing drainage patterns.¹⁴⁵

The support for Mr. Dunbar's conclusion that the 1996 modification doubled the peak flow leaving the site is thin at best. Mr. Dunbar claims to have calculated the drainage conditions as they existed prior to the 1996 modification, and the alleged increase in drainage resulting from that modification, but even Mr. Dunbar referred to his calculations as "back of the envelope."¹⁴⁶ And apparently that envelope was thrown away, as there is no evidence of any calculations in the record. Indeed, Mr. Dunbar also claims to have recalculated 1981 drainage calculations, and compared those recalculations to his calculations for the 1996 modification, yet there is not a single document in the record showing Mr. Dunbar's math.¹⁴⁷

Moreover, it's not a straightforward apples-to-apples comparison. The method that was used in 1996 to calculate drainage is not the method used by the computer model that Mr. Dominguez ran to conduct the drainage analysis in WMTX's application.¹⁴⁸ In fact, TCEQ's current rules provide that the method that was used in 1996 would not be a permissible

¹⁴⁴ See Ex. TJFA 504; Trial Tr. at 1541:21-24, 1543:7-11.

¹⁴⁵ See Trial Tr. at 1540:5-19, 1541:3-9, 1545:4-14, 1546:9 to 1547:2.

¹⁴⁶ *Id.* at 1544:10-14 (Dunbar); see also *id.* at 1544:1-3 (describing his calculations as rough estimates that he did in his head).

¹⁴⁷ See *id.* at 1555:15 to 1556:12.

¹⁴⁸ See *id.* at 1538:21 to 1539:23; Ex. APP-200 at 48:13-29.

method to use in the pending application.¹⁴⁹ While Mr. Dunbar offers an estimate of the difference in peak flow rates that the two models would render, he cannot speak to this issue with any certainty without having run both models to analyze the effect of the 1996 modifications.

In any event, Mr. Dunbar's testimony does not allege or otherwise concern a deficiency in WMTX's application. Per TCEQ's rules and guidance, the Facility Surface Water Drainage Report in WMTX's application compares the drainage condition as permitted under Permit No. MSW-249C to the drainage condition as proposed for permitting in WMTX's application.¹⁵⁰ Even Mr. Dunbar concedes that this comparison was the proper approach and that it demonstrated that there will be no adverse alterations of existing drainage patterns if the ACRD Facility is permitted and expanded as proposed in the application.¹⁵¹ While Mr. Dunbar and TJFA may contend that the TNRCC should not have authorized the 1996 modification some 13 years ago, that modification application is not the application at issue in this case.

B. Erosion and Sedimentation Control Plan

Mr. Lesniak's concerns regarding the Erosion and Sedimentation Control Plan in the application appear to be two-fold: (1) while the plan is not lacking in providing available erosion controls, Mr. Lesniak would like to see more specificity regarding where, when, and how the

¹⁴⁹ See 30 TEX. ADMIN. CODE § 330.305(f)(1) (providing that the rational method may only be used to calculate drainage from areas of 200 acres or less); Ex. TJFA 502 at 9 (providing that "the 200-acre standard applies to the total area of the watershed(s) above and including the proposed landfill permit boundary"); Ex. APP-200 at 48:22-29 (Dominguez) (testifying that the total area of the watershed(s) above and including the proposed ACRD Facility permit boundary "is well above 200 acres"); *see also* Ex. TJFA 502 at 8 (explaining that the rational method "is recognized as being limited in providing information that is required to show that there is no significant change to natural drainage patterns").

¹⁵⁰ See 30 TEX. ADMIN. CODE § 330.305(a) ("Existing or permitted drainage patterns must not be adversely altered."); Ex. TJFA 502 at 5 ("For expansions or modifications of existing facilities, the appropriate comparison should be between the currently approved (permitted) site closure condition and the proposed post development condition at closure."); Ex. APP-200 at 46:29 to 47:10.

¹⁵¹ See Trial Tr. at 1540:5-19, 1541:3-9, 1545:4-14, 1546:9 to 1547:2.

controls will be employed,¹⁵² and (2) the sedimentation and bio-filtration pond that the City of Austin approved will not be able to handle the sediment load in the runoff from the facility prior to installation of final cover.¹⁵³

With respect to his first concern, Mr. Lesniak asks for more than the applicable rule requires. Indeed, the TCEQ guidance document that Mr. Lesniak used to review the Erosion and Sedimentation Control Plan provides that “[s]pecific configurations or development scenarios showing specific locations of structural controls are not required” for compliance.¹⁵⁴ The rule requires the facility to “provide effective erosional stability to top dome surfaces and external embankment side slopes during all phases of landfill operation, closure, and post-closure,” but leaves it to the facility owner or operator to determine which erosion controls to use, and where, when, and how to utilize those erosion controls, to achieve effective erosional stability in each phase of the landfill’s development.¹⁵⁵ As explained in the Erosion and Sedimentation Control Plan in the application, “[t]he selection of erosion and sediment control structures will be a continual evolution of temporary and permanent control devices.”¹⁵⁶

Mr. Lesniak’s second concern is based on his mistaken belief that the sedimentation and bio-filtration pond that the City of Austin approved will be the primary method for removing sediment during construction and operation of the expansion area.¹⁵⁷ Mr. Lesniak’s testimony regarding the adequacy of the pond for the function of sediment removal did not take into

¹⁵² See Trial Tr. at 2111:20 to 2112:4, 2170:5-10.

¹⁵³ See *id.* at 2112:13 to 2113:17.

¹⁵⁴ Ex. APP-15 at 2.

¹⁵⁵ 30 TEX. ADMIN. CODE § 330.305(d); see also Ex. APP-202 at 603-04.

¹⁵⁶ Ex. APP-200 at 602.

¹⁵⁷ See Trial Tr. at 2126:7-13; 2169:22 to 2170:4.

account any erosion control and sediment removal that will occur upstream of the pond and that will result in far less sediment entering the pond than Mr. Lesniak appears to envision.¹⁵⁸ For instance, the calculations in the Erosion and Sedimentation Control Plan demonstrate that, through proper slope design, establishment of ground cover, and stormwater diversion structures, soil loss from intermediate cover areas at the facility will be well below permissible soil loss.¹⁵⁹ These calculations demonstrate compliance with the applicable regulatory requirement without any consideration whatsoever given to the sediment removal capabilities of the pond permitted by the City.¹⁶⁰

Additionally, the calculations performed by one of the City's other witnesses, Mr. Franke, as supplemented by Mr. Dominguez, demonstrate that use of just one of the many erosion and sedimentation control practices specified in the application will significantly reduce suspended solids in the stormwater that may be routed to the sedimentation and bio-filtration pond.¹⁶¹ WMTX's application proposes to incorporate not just one, but many different best management practices for erosion and sedimentation control. The sediment removal that will be achieved by such measures was simply ignored by the City's witnesses.

¹⁵⁸ See Trial Tr. at 2170:11 to 2171:2.

¹⁵⁹ See Ex. APP-202 at 603-04.

¹⁶⁰ See 30 TEX. ADMIN. CODE § 330.305(d)(1)-(2); Ex. APP-15 at 2-3 ("The applicant should demonstrate that the controls proposed will achieve soil loss that does not exceed the maximum erosion soil loss . . .").

¹⁶¹ See COA Ex. TF-1 at 8:170 to 9:203; COA Ex. TF-4; Ex. APP-16 at 88:22 to 94:10; Trial Tr. at 491:7 to 496:19; Ex. APP-223.

6. Whether the Application Includes Adequate Provisions for Proper Slope Stability, in Compliance with Agency Rules, Particularly in Relation to the Proposed “Piggyback” Liner System

A. Slope Stability

TJFA would have the ALJ believe that, despite the fact that solid waste disposal operations at the site are nearing their fortieth year, the ACRD Facility presents a grave and unknown danger for a catastrophic slope failure. Indeed, TJFA attempts to paint a rather troubling history of such failures throughout the state. TJFA’s hyperbole is most evident when one considers the fact that there are no rules requiring slope stability analyses in MSW permit applications.¹⁶² There isn’t even so much as an agency guidance document on the topic.

No doubt realizing the difficulty of arguing that WMTX’s application fails to comply with a nonexistent regulatory requirement, TJFA attempts to fashion a slope stability requirement out of the unstable area location restriction. But even Mr. Chandler acknowledges that such an approach is a novel idea at best, and one that hasn’t caught on with TCEQ or found its way into any permit proceeding to date.¹⁶³ In any event, as Mr. Dominguez explained, his slope stability analyses in the application would not change regardless of whether he conducted them under the guise of the unstable area location restriction, or under no guise at all.

Mr. Chandler takes issue with Mr. Dominguez’s stability analyses, largely because Mr. Chandler contends that lower shear strength values should have been used in the calculations. Mr. Chandler relies solely on published data and empirical correlations in support of his claims.¹⁶⁴ The data that Mr. Chandler cites are dated and likely fail to account for the

¹⁶² See Trial Tr. at 1656:25 to 1657:4, 1690:4-7; Ex. APP-200 at 72:22-29.

¹⁶³ See Trial Tr. at 1656:3-24.

¹⁶⁴ See Trial Tr. at 1707:22 to 1708:21, 1723:18-22.

advances in material shear strengths over time.¹⁶⁵ Certain of the data are unrepresentative of the liner materials proposed for use in the application, and many others are of questionable relevance, given a lack of information regarding test conditions, test methods, soil types tested.¹⁶⁶ The data are also generally reflective of unrealistically low residual strength values, whereas Mr. Dominguez used peak strength values in his analyses.¹⁶⁷ Furthermore, when questioned on cross-examination, Mr. Chandler testified that, when designing MSW landfills in Texas, he has never relied, and would never rely, solely on the data that he relies upon in this case to critique Mr. Dominguez's stability analyses.¹⁶⁸

Mr. Dominguez, too, can find support in the published literature for the shear strength values that he selected.¹⁶⁹ But published data are ultimately of limited use in the final design of a landfill, which, in turn, further limits the relevance of Mr. Chandler's testimony.¹⁷⁰ Whereas Mr. Chandler's support begins and ends with published data and empirical correlations, Mr. Dominguez's stability analyses are backed not only by ample published data, but by site-

¹⁶⁵ See Trial Tr. at 1686:9-23, 1687:3-12, 1715:12-23 (citing 1994 source).

¹⁶⁶ See Trial Tr. at 1692:23 to 1693:5, 1694:21 to 1695:3, 1709:4-22, 1711:10-21, 1712:17 to 1713:3, 1717:3-22, 1720:4-18, 2519:6 to 2520:3, 2527:8-23.

¹⁶⁷ See Trial Tr. at 1697:1 to 1698:19 (Chandler) (describing the assumption of residual strengths in the entire design as "some unusual combination of worst-case conditions"); *id.* at 1721:1 to 1722:4; *id.* at 2518:21 to 2519:2 (Dominguez) (testifying that he has not observed clays at the ACRD Facility exhibiting residual strengths).

On this issue – use of residual strengths versus peak strengths – the published literature may be mixed, but if residual strengths are used, the target factor of safety can be lower than that used in a peak strength analysis. See Ex. APP-6 at 455 ("The designer's dilemma of using peak or residual shear strength (or something between) is an actively disputed topic.") (citation omitted); Trial Tr. at 2532:10 to 2533:7; Ex. APP-26; Trial Tr. at 1699:2-14. In essence, it's a trade-off.

¹⁶⁸ See Trial Tr. at 1723:23 to 1724:5.

¹⁶⁹ See Trial Tr. at 2530-31; Ex. APP-25.

¹⁷⁰ See Trial Tr. at 1726:2-20; Ex. APP-6 at 454-55 (advising that when determining the interface shear strength of geomembranes placed on clay soils "site-specific and material-specific tests should always be performed" and that "[i]n such cases, literature values should never be used for final design purposes") (emphasis in original).

specific testing of the soils at the ACRD Facility that will be used in the construction of the expanded facility's liner.¹⁷¹ Mr. Dominguez did not use empirical correlations to estimate the soil strengths in the application.¹⁷² Because the shear strengths of the clays at the ACRD Facility are dependent upon site-specific conditions,¹⁷³ the strengths of the clays were determined through site-specific testing, not empirical correlations.¹⁷⁴

Moreover, Mr. Dominguez has been at the ACRD Facility, in the field observing the construction of new cells and the excavation and construction of landfill slopes.¹⁷⁵ The design of the slopes that Mr. Dominguez proposes in the application have a proven track record of stability in the field at the ACRD Facility.¹⁷⁶ Indeed, the proposed designs are the industry standard for landfills throughout Texas.¹⁷⁷

The foregoing facts alone provide ample support for a finding that the application includes adequate provisions for proper slope stability, in compliance with TCEQ's rules. However, the requirements proposed in the application for liner construction go even further and require conformance testing of the actual materials that will be used in the construction of the facility's liners, prior – and as a prerequisite to – installation of those liners in the field.¹⁷⁸ Should the materials not pass the test, then they will not be used to construct the liner. Cell

¹⁷¹ See Trial Tr. at 1690:25 to 1691:5.

¹⁷² See Trial Tr. at 1691:13-20, 2514:18-24; *see also* Ex. TJFA 407 at 57 (noting that use of empirical relationships is “rare” and only an alternative where “the shear strength of a material cannot be ascertained through laboratory testing”).

¹⁷³ See Trial Tr. at 1691:21-25.

¹⁷⁴ See Trial Tr. at 2510:17 to 2511:3.

¹⁷⁵ See Trial Tr. at 2505:3-20.

¹⁷⁶ See Trial Tr. at 1674:10-19, 2504:21 to 2506:3.

¹⁷⁷ See Trial Tr. at 1673:4-8, 1674:6-9, 1676:5-17.

¹⁷⁸ See Trial Tr. at 1682:4-25, 2347:18.

construction will not proceed until materials meeting the design specifications are obtained. As Mr. Chandler acknowledged, such site-specific and project-specific materials testing is the “Cadillac” standard and far superior to mere reliance on published data.¹⁷⁹

B. “Piggyback” Liner Settlement

Mr. Chandler also critiqued Mr. Dominguez’s calculations of the amount of long-term settlement to be expected of the waste beneath the proposed “piggyback” liner.¹⁸⁰ Here again, Mr. Chandler relies solely on published data, whereas Mr. Dominguez’s data are specific to the ACRD Facility.¹⁸¹ Moreover, Mr. Dominguez’s calculated rate of settlement is in line with data published in the very same treatise that Mr. Chandler cites as authoritative.¹⁸² Whereas Mr. Chandler claims that the settlement calculations in the application are unrealistically low, the published literature shows them to be well within the range of expected *post-construction* waste settlement (i.e., settlement following the date of fill completion, rather than settlement calculated from the date of first waste placement).¹⁸³

These published post-construction settlement rates are particularly relevant given that Mr. Dominguez first started monitoring settlement at the proposed piggyback area of the West Hill in 1998, two years after the area had been filled, and a decade after this area was first opened for waste disposal.¹⁸⁴ The waste in this area has a median disposal date of 1992.¹⁸⁵

¹⁷⁹ See Trial Tr. at 1678:21-25, 1679:21 to 1681:8; 1682:4-25, 1683:12 to 1684:22.

¹⁸⁰ See Ex. APP-202 at 917-20 (discussing piggyback liner).

¹⁸¹ See *id.* at 919 (“The secondary compression of existing waste was analyzed using the site-specific settlement data.”).

¹⁸² See Ex. APP-225 at 445-46.

¹⁸³ See *id.* (reporting post-construction settlement ranges between 4.5% and 6% of total fill depth); see also Trial Tr. at 2555:2 to 2556:9 (Dominguez) (explaining settlement calculations in APP-225).

¹⁸⁴ See Ex. APP-202 at 919, 1212-13; Ex. TJFA 456; Trial Tr. at 2342:20 to 2343:21, 2345:8-13, 2544:11-13, 2549:25 to 2550:12.

Accordingly, the waste had already undergone years of settlement before Mr. Dominguez began his analysis.¹⁸⁶ As Mr. Udenenwu explained, by 1998, most if not all of the primary settlement would have been completed and the waste would be in the secondary settlement period – a “much more gradual, much more predictable” rate of settlement.¹⁸⁷ Indeed, by 2010 – the estimated piggyback liner construction date¹⁸⁸ and 18 years out from the median waste placement date of 1992 – Mr. Dominguez calculates that “most of the waste settlement would have occurred.”¹⁸⁹

Mr. Dominguez was accused of skewing his settlement analysis by not including in his calculations some of the data that he obtained from locations on the West Hill that he monitored yearly for settlement. As Mr. Dominguez explained, the data at issue were excluded because the monitoring points from which the data were obtained were impacted by soil stockpiled on that area of the West Hill and, as a result, the data were not representative.¹⁹⁰ Due to the stockpiling of soil in these locations, the data points indicated that the landfill grew from one year to the

¹⁸⁵ See Trial Tr. at 2549:25 to 2550:12.

¹⁸⁶ See Ex. APP-202 at 918 (“The existing waste in the piggyback expansion area is well over 10 years old.”); Trial Tr. at 2548:15-16 (Dominguez) (noting that the waste in the area of the piggyback is “quite old”).

¹⁸⁷ Trial Tr. at 2342:20 to 2343:21, 2345:8-13; *see also id.* at 2548:25 to 2549:4-11, 2553:18-24 (Dominguez) (confirming that the waste in place beneath where the piggyback liner will be installed is currently in the extended period of secondary compression); Ex. APP-202 at 17-18 (discussing primary and secondary compression/settlement); Ex. TJFA 438 at 23 (providing that most of landfill settlement occurs within the first year or two following fill completion).

¹⁸⁸ See Ex. APP-202 at 919 (noting that December 2010 was used in the piggyback settlement calculations in the application as the estimated piggyback liner construction date, and that if construction of the piggyback liner is delayed, “the amount of settlement affecting the liner will be less”).

¹⁸⁹ Trial Tr. at 2552:14-17.

¹⁹⁰ See Trial Tr. at 2543:8-24, 2544:7-20; *see also* Ex. APP-202 at 918 (noting soil stockpiles “averaging approximately 10-feet thick overlying the old waste in most the piggyback area”).

next, rather than settled as expected.¹⁹¹ As Mr. Chandler testified, “once waste is in place, it typically doesn’t increase in height.”¹⁹² Accordingly, Mr. Dominguez’s exclusion of these unrepresentative data resulted in more conservative settlement calculations. Had he included, rather than excluded, these data in his calculations, his calculations would have indicated less settlement beneath the piggyback liner.¹⁹³

7. Whether the Application Includes Adequate Provisions to Manage Landfill Gas, in Compliance with Agency Rules

All of the questions in this proceeding regarding the adequacy of the landfill gas management provisions in WMTX’s application were limited to the area of the existing, permitted facility between monitoring wells MW-11 and MW-12 along the southern boundary of the ACRD Facility where waste is continuous across the shared property line with the closed Travis County Landfill.¹⁹⁴ Defining the same portion of the permit boundary in terms of existing, permitted gas monitoring probes, rather than groundwater monitoring wells, the segment is between existing gas probes P-9 and P-10.¹⁹⁵ Here again, WMTX is not proposing to expand any portion of this area of the existing facility or otherwise amend any provision of Permit No. MSW-249C that applies to this area, with the exception of the addition of groundwater monitoring wells, as discussed above. No changes are proposed in the application for the permitted gas monitoring network that currently exists in this area of the facility.¹⁹⁶

¹⁹¹ See Trial Tr. at 2544:7-20.

¹⁹² Trial Tr. at 1733:7-10; *see also id.* at 2545:3-7.

¹⁹³ Trial Tr. at 2544:21 to 2545:7.

¹⁹⁴ See Trial Tr. at 114:18 to 115:7, 231:20 to 233:23, 293:1-22, 313:9-19; 528:23 to 529:7; Ex. APP-202 at 1481; Ex. APP-11 at WM-055366; Ex. TJFA 2 at WM-028305; Ex. TJFA 5 at WM-064093.

¹⁹⁵ See Ex. APP-202 at 3149, 3169.

¹⁹⁶ See Trial Tr. at 432:13-15.

The regulation at issue provides that “landfill units shall ensure that . . . the concentration of methane gas does not exceed 5% by volume in monitoring points, probes, subsurface soils, or other matrices at the facility boundary.”¹⁹⁷ Protestants’ apparent contention is that “other matrices” include the waste that is continuous across the ACRD Facility’s southern boundary with the county landfill. Construing “other matrices” to include waste is an unreasonable construction of a regulation that, on its face, was intended to require subsurface monitoring of methane released from waste, not methane migrating from waste on one side of a permit boundary to waste on the other side.¹⁹⁸

In any event, installation of additional gas monitoring probes along this portion of the permit boundary is neither required nor technically feasible. The regulation at issue is specific to landfill units, not the facility within which those units are located. As set forth in Section V.C above, the Phase I Unit, having ceased waste receipts prior to October 9, 1991, is subject only to the limited closure and post-closure care provisions of 30 Tex. Admin. Code §§ 330.453 and 330.463(a).¹⁹⁹

Additionally, with respect to the technical merits, WMTX’s application provides a discussion of why gas monitoring probes in this area are not necessary and are neither feasible nor advisable to install.²⁰⁰ Regarding this latter point, Mr. Dominguez explained numerous times that no purpose would be served by installing gas monitoring probes in waste: “[I]t’s not possible

¹⁹⁷ 30 TEX. ADMIN. CODE § 330.371(a)(2).

¹⁹⁸ See Trial Tr. at 280:11-12 (Dominguez) (noting that gas monitoring probes are subsurface probes); 293:10-12 (“[I]t’s not possible to put a probe through waste and for it to serve its intended purpose.”); see also Ex. APP-202 at 3150 (discussing gas monitoring probe construction).

¹⁹⁹ See *id.* § 330.5(c).

²⁰⁰ See Ex. APP-202 at 3149-50; see also Ex. APP-224.

to put a probe through waste and for it to serve its intended purpose.”²⁰¹ Even if a probe installed along this segment of the permit boundary were able to function and detect gas migration, there would be no way to tell whether such gas is migrating from the ACRD Facility into the Travis County Landfill or vice versa.

Moreover, there is no concern here for off-site receptors – if there is subsurface migration of gas in this area, the gas is migrating from one landfill to another.²⁰² Protestants are quick to point out that there is a flea market on the closed Travis County Landfill. While true, the presence of the flea market on the old county landfill does not appear to be of any concern to Travis County, since the county itself has no methane monitoring or gas collection program for the closed Travis County Landfill²⁰³ – which is not surprising given that the county landfill ceased receiving waste prior to October 9, 1991.²⁰⁴

²⁰¹ Trial Tr. at 293:10-12 (Dominguez); *see also id.* at 293:18-22 (“[I]f we were to put probes there, they would be within waste and would likely measure landfill gas or be impacted by landfill gas.”), 296:8-9 (“I can’t put a probe in the waste to determine if there’s landfill gas at that location.”); 313:9-19 (recalling discussion with TCEQ regarding the impracticality of installing probes through the waste across the southern ACRD Facility permit boundary); 432:16 to 433:8 (“I’m not familiar with any equipment that you can [use to] monitor for landfill gas through waste.”).

²⁰² *See* Ex. APP-202 at 3149 (noting absence of off-site receptors).

²⁰³ *See* Ex. APP-11 at WM-055374, WM-055380-81 (“The existing flea market is constructed of relatively open structures which are not conducive to the accumulation of explosive or other toxic mixtures. Horizontal migration of gas off site is limited by the low-permeability soils in the area. Therefore, it is not currently considered to be a threat to human safety.”); Ex. APP-12 at WM-037476-77, WM-037379, WM-037484.

²⁰⁴ *See* Ex. APP-11 at WM-055350, -055353; Trial Tr. at 1921:9-12 (White) (testifying that the Travis County Landfill stopped receiving waste in 1981 or 1982); *see also id.* at 1952:8-10 (testifying that the county does not have a permitted groundwater monitoring network at the closed Travis County Landfill).

8. Whether the Application Includes Adequate Provisions to Prevent the Ponding of Water over Waste on the Landfill, in Compliance with Agency Rules

WMTX's application includes a ponded water prevention plan that complies with all applicable regulatory requirements.²⁰⁵ The plan (1) identifies techniques to be used at the ACRD Facility to prevent water from ponding over waste-filled areas of the landfill; (2) includes a weekly inspection schedule to identify depressions and other potential ponding sites on the landfill; (3) specifies corrective actions to remove ponded water; and (4) provides instructions to manage water that has been in contact with waste as contaminated water.²⁰⁶ Additionally, the plan provides that areas in which ponding occurs will be filled in and re-graded within seven days.²⁰⁷

9. Whether the Application Includes Adequate Provisions for Cover, in Compliance with Agency Rules

The provisions in WMTX's application for daily and intermediate cover comply with all applicable regulatory requirements.²⁰⁸ The provisions in the application for final cover are specified in Appendix A to the Closure Plan in the Application and, therefore, are addressed in Section V.I.A.12 below.²⁰⁹

The Site Operating Plan ("**SOP**") in WMTX's application includes the requisite provisions for daily cover and alternative daily cover, intermediate cover, and cover inspection and repair.²¹⁰ The only testimony that even remotely concerns the provisions for daily and

²⁰⁵ See Ex. APP-202 at 3407; 30 TEX. ADMIN. CODE § 330.167.

²⁰⁶ See Ex. APP-202 at 3407; 30 TEX. ADMIN. CODE § 330.167.

²⁰⁷ See Ex. APP-202 at 3407; 30 TEX. ADMIN. CODE § 330.167.

²⁰⁸ See Ex. APP-202 at 3405-07; 30 TEX. ADMIN. CODE § 330.165.

²⁰⁹ See Ex. APP-202 at 3271; 30 TEX. ADMIN. CODE § 330.165(f).

²¹⁰ See Ex. APP-202 at 3405-07; 30 TEX. ADMIN. CODE § 330.165.

intermediate cover in the application is the testimony of Mr. Lesniak, who testifies in his prefiled testimony that he could not find in the application a requirement that soils used for intermediate cover must be capable of sustaining native plant growth. That requirement is on page 3406 of Ex. APP-202.

10. Whether the Application Includes Adequate Provisions to Protect Endangered or Threatened Species, in Compliance with Agency Rules

Mr. Sherrod testified regarding the application's compliance with all applicable requirements relating to threatened and endangered species.²¹¹ Mr. Sherrod's testimony was not challenged by the testimony of any other witness, nor was it discredited on cross-examination in any way. Indeed, Mr. Sherrod was not asked a single question on cross-examination regarding the application's compliance with requirements relating to threatened and endangered species.

11. Whether the Application Provides Adequate Information Related to Transportation, in Compliance with Agency Rules

Mr. McInturff testified regarding the application's compliance with all applicable requirements relating to transportation.²¹² Mr. McInturff's testimony was not challenged by the testimony of any other witness, nor was it discredited on cross-examination in any way.

12. Whether the Application Includes Adequate Provisions for Closure and Post-Closure, in Compliance with Agency rules

WMTX's application includes the closure and post-closure plans required by TCEQ's rules.²¹³ Additionally, Mr. Dominguez testified that these plans meet all of the applicable

²¹¹ See Ex. APP-600.

²¹² See Ex. APP-500.

²¹³ See Ex. APP-202 at 3267 (Closure Plan), 3324 (Post-Closure Plan); 30 TEX. ADMIN. CODE §§ 330.63(h), (i), 330.457, 330.463.

regulatory requirements.²¹⁴ Mr. Dominguez's testimony was challenged only with respect to the application's Closure Plan and only with respect to an incorrect soil specification in Appendix A to that plan, the Final Cover Quality Control Plan.²¹⁵ Instead of specifying SCS Hydrologic Soil Groups A, B, or C on page 3316 of Ex. APP-202, the Final Cover Quality Control Plan should specify SCS Hydrologic Soil Group D for the soil to be used in the final cover. Mr. Dominguez acknowledged the incorrect specification, testified as to the correct specification, explained the scope of the requisite correction, and explained that correcting the specification would not affect any other portions of WMTX's application.²¹⁶ Should the ALJ recommend issuance of Permit No. MSW-249D, then WMTX respectfully requests that the ALJ recommend an ordering provision to accomplish this soil specification correction.

13. Whether the Application Includes Adequate Provisions to Show that the MSW Facility Shall not Cause or Contribute to Significant Degradation of Wetlands, in Compliance with Agency Rules

Mr. Sherrod and Ms. Castille testified regarding the application's compliance with all applicable requirements relating to wetlands.²¹⁷ Their testimony was not challenged by the testimony of any other witness, nor was it discredited on cross-examination in any way. Indeed, Ms. Castille was not asked a single question on cross-examination.

²¹⁴ See Ex. APP-200 at 86:14 to 89:22.

²¹⁵ See Ex. APP-202 at 3293.

²¹⁶ See Trial Tr. at 369:12-21, 534:16 to 536:10.

²¹⁷ See Ex. APP-600, Ex. APP-700.

B. WHETHER THE APPLICATION PROVIDES ASSURANCE THAT OPERATION OF THE SITE WILL POSE NO REASONABLE PROBABILITY OF ADVERSE EFFECTS ON THE HEALTH, WELFARE, ENVIRONMENT, OR PHYSICAL PROPERTY OF NEARBY RESIDENTS OR PROPERTY OWNERS

The credible and reliable evidence in the record supports a finding that the proposed expansion is in the public interest and not incompatible with surrounding land uses. Such evidence includes, without limitation: (1) the testimony of Mr. Worrall, which is discussed below, and (2) the uncontroverted evidence contained in the application itself,²¹⁸ which provides the information required by TCEQ's rules²¹⁹ and proves (i) the site has been authorized to operate as a MSW landfill since 1970;²²⁰ (ii) the proposed expansion area is buffered to the south-southwest by the currently permitted ACRD Facility and to the west-northwest by property owned by WMTX;²²¹ (iii) two adjoining tracts (the closed Travis County Landfill and the active Sunset Farms Landfill) border the facility and further buffer the proposed expansion from existing and future residential and commercial development to the east-northeast and south-southeast well beyond the buffer zones required by rule;²²² (iv) the proposed expansion does not represent a significant change in area land use relationships;²²³ and (v) residential and commercial development within one mile of the landfill has been and continues to be robust.²²⁴

²¹⁸ See Ex. APP-202 at 18-23,170-230.

²¹⁹ See 30 TEX. ADMIN. CODE § 330.61(g), (h).

²²⁰ See Ex. APP-202 at 1.

²²¹ See Ex. APP-202 at 114, 392.

²²² 30 TEX. ADMIN. CODE § 330.543.

²²³ See *id.* at 179.

²²⁴ See *id.* at 20, 179.

1. Whether the Application Includes Adequate Information Regarding the Compatibility of Land Use to Show that the MSW Facility will not Adversely Impact Human Health or the Environment

TCEQ's rules detail the information that an applicant must provide in a MSW application to assist the Commission "in evaluating the impact of the site on the surrounding area."²²⁵ Mr. Worrall prepared a land use analysis report that contains all of the information required by the applicable regulatory provisions.²²⁶ Mr. Worrall's initial report was completed in January 2005, and the requisite information was subsequently updated in September 2006 and December 2008.²²⁷ The September 2006 updated report was among the revisions to the application that WMTX made to comply with TCEQ's current MSW regulations, as revised in March 2006.²²⁸

Generally, to satisfy the applicable TCEQ requirements, the application must include information regarding zoning at the site and in the surrounding areas; the character and proximity of land uses within one mile of the proposed facility; community growth patterns and growth trends within five miles of the proposed facility; and the location of wells within 500 feet of the proposed facility.²²⁹ While there is likely still some dispute regarding Mr. Worrall's analysis of the required information, there is no evidence in the record disputing that the information was provided as required by TCEQ's rules or that the information provided was correct. Thus, the application satisfies the core land use informational requirements.²³⁰

Furthermore, Mr. Worrall, alone, evaluated the information required by the Commission in the context of land use compatibility. Mr. Worrall explained his findings with respect to each

²²⁵ 30 TEX. ADMIN. CODE § 330.61(g), (h).

²²⁶ See Ex. APP-300 at 6,10.

²²⁷ See Ex. APP-302.

²²⁸ See Ex. APP-300 at 7, 10.

²²⁹ See *id.* at 10.

²³⁰ See 30 TEX. ADMIN. CODE § 330.61(g), (h)(1)-(6)

feature of the TCEQ rules and the bases for his ultimate conclusion.²³¹ In Mr. Worrall’s expert opinion, the use of the expansion area for continuing landfill operations at the ACRD Facility is compatible with the surrounding land uses.²³²

City of Austin and Travis County witnesses, namely Mr. Guernsey, Mr. Word, and Mr. White, discuss land use issues²³³ and, to varying degrees, allege or imply that issuance of the permit to expand the ACRD Facility will adversely impact human health or the environment.²³⁴ However, there is no evidence in the record that supports these witnesses’ conclusory statements or implications that continued landfill operations in the area will adversely impact human health or the environment. In fact, after more than 30 years of landfill operations in the area, no such evidence exists and each of these witnesses’ own testimony belies any such conclusion. Mr. Word testifies that “[t]he area has become more urban in character, and the City anticipates that nearby land that is still undeveloped may be developed in the near future.”²³⁵ Mr. Guernsey swears “[i]t is anticipated that additional residential uses will be built within the Pioneer Crossing PUD and the Harris Branch PUD located to the north, northwest and northeast over the next five to ten years.”²³⁶ And Mr. White emphasizes that “[g]rowth in the area has exploded, probably because of its proximity to downtown Austin.”²³⁷ It simply defies common sense, logic, and reality to conclude, absent any evidence of past or present harm, that human health and the environment will be endangered by landfill operations conducted under more stringent

²³¹ See Ex. APP-300 at 19.

²³² See *id.*

²³³ See, e.g., TC Ex. JW-1 at 10-18; COA Ex. GG-1 at 3-6; COA Ex. JW-1 at 5-10.

²³⁴ See TC Ex. JW-1 at 16-18; COA Ex. GG-1 at 6; COA Ex. JW-1 at 13-14.

²³⁵ COA Ex. JW-1 at 5.

²³⁶ COA Ex. GG-1 at 6.

²³⁷ TC Ex. JW-1 at 14.

regulatory standards than have ever been imposed on landfills in Texas historically. This realization is further bolstered and particularly obvious when one considers that the waste fill area in the proposed expansion will not cause waste disposal operations to be any closer than the most proximate existing distance to a residence, school, daycare center, historic site, or business establishment within one mile of the existing ACRD Facility.²³⁸

The only other testimony offered by Protestants' – specifically the testimony of Mr. McAfee, Mr. Nauert, Mr. Williams, Mr. Wilkins, and Mr. Rogers – pertain to land use issues, albeit loosely. In essence, their testimony is little more than a litany of concerns or complaints that have long since been addressed by prior changes to landfill operations. As Mr. Smith testified, “the last alleged violation at the ACRD Facility occurred in 2002.”²³⁹

It cannot be disputed by any of the Protestants that there is an existing MSW landfill with an uncertain and indeterminable amount of active life remaining.²⁴⁰ This simple reality should be considered in any objective evaluation of the compatibility of land uses in the surrounding area. However, it is consistently ignored by Protestants both inside and outside of the hearing room. For example, Mr. Word and Mr. White each explain that the respective agreements between BFI and the City of Austin and Travis County regarding the closure date for the adjacent Sunset Farms landfill are driven by the unfounded expectation that the ACRD Facility, under its current permit, would cease accepting waste some time around or prior to November

²³⁸ See Ex. APP-300 at 6, 10.

²³⁹ APP-100 at 14.

²⁴⁰ See Trial Tr. at 237:17 to 238:10.

2015.²⁴¹ As Mr. Smith made abundantly clear, under its current permit, the ACRD Facility could continue to accept waste for “a long, long time.”²⁴²

In sum, the testimony of Protestants’ expert and lay witnesses regarding land use is nothing more than an expression of preference that WMTX take its landfill elsewhere. However, the City of Austin and Travis County cannot, under the guise of unsubstantiated claims of incompatible land use, legally circumvent the means and mechanisms prescribed by the Texas Legislature for these governmental bodies to prohibit the processing or disposal of municipal solid waste in certain areas of the City or County.²⁴³ Throughout the testimony of the City and County witnesses,²⁴⁴ who are acting as representatives of these entities in this proceeding, there are clear and unabashed expressions of the local governments’ desire to prohibit landfill operations in the area of the proposed expansion without fulfilling the other part of their responsibility – specifically designating areas where municipal solid waste disposal will not be prohibited.²⁴⁵ In any event, Protestants cannot legitimately claim land use incompatibility based on the evidence in the record.

2. Whether the Application Includes Adequate Provisions to Prevent the Creation or Maintenance of a Nuisance, Including Odors, Control of Spilled and Windblown Waste, Dust Control, and Maintenance of Site Access Roads, in Compliance with Agency Rules

The plans for preventing nuisances, including odors, spilled or windblown waste, dust control, and maintenance of site access roads are described in the SOP in WMTX’s application,

²⁴¹ See COA Ex. JW-1 at 13; TC Ex. JW-1 at 17.

²⁴² Trial Tr. at 238:5.

²⁴³ See TEX. HEALTH & SAFETY CODE § 363.112.

²⁴⁴ See, e.g., TC Ex. JW-1 at 17; COA Ex. GG-1 at 3; COA Ex. JW-1 at 13-14.

²⁴⁵ See TEX. HEALTH & SAFETY CODE § 363.112 (a).

as required by TCEQ's rules.²⁴⁶ Travis County's expert witness, Mr. White, testified that "many of the procedures described in the application are commendable" but he expressed concerns that the procedures are "discretionary" and questioned whether the procedures should be made "mandatory, based on performance criteria, and subject to documentation."²⁴⁷ To the contrary, the City of Austin's main witness on the subject, Mr. Word, complained that "[t]here is nothing in the applicant's proposed site operating plan that is significantly different from their existing plan" and "[t]here is no indication of a willingness or intent to exceed minimum operating standards" Despite their apparent disagreement as to the merits of the proposed SOP, both witnesses expressed concerns about WMTX's ability to adhere to provisions of the SOP because of the facility's compliance record.

However, neither witness's concern regarding the facility's compliance record is supported by evidence or otherwise warranted. In fact, the lack of any citation since 2002 for any violation of an environmental rule or requirement pertaining to nuisance is clear and convincing evidence of the ACRD Facility's commitment to compliance and the efficacy of the SOP – existing and proposed.²⁴⁸

3. Whether the Application Includes Adequate Provisions to Control Noise, In Compliance with Agency Rules

The only stated concerns in this case regarding noise from the ACRD Facility were unqualified and unquantified concerns unsupported by any facts or reasoned testimony. There was no evidence offered or adduced through cross-examination that supports a finding that these conclusory concerns are warranted. Furthermore, in its application, WMTX commits to

²⁴⁶ See Ex. APP-202 at 3369-480; 30 TEX. ADMIN. CODE, Ch. 330, Subch. D.

²⁴⁷ TC Ex. JW-1 at 26.

²⁴⁸ See APP-100 at 14.

providing a minimum 125-foot buffer zone around solid waste processing and disposal activities in the expansion area, as required by TCEQ's current MSW rules.²⁴⁹ Considering both the proposed expansion area and the existing facility, buffer zones around the perimeter of the entire site will range from 50 feet to 955 feet.²⁵⁰ Unloading, processing, storage, or disposal activities that may create noise will not occur within these buffer zones.²⁵¹ No party challenged the adequacy of these buffer zones to "buffer" noises that may be associated with facility operations.

Additionally, given the framing of this issue ("in compliance with agency rules") and the standard in this case (compliance with "all applicable statutory and regulatory requirements"), it should be noted that TCEQ has no rules that specifically regulate or otherwise specifically address noise from MSW landfill operations. By contrast, in the same 2006 rulemaking wherein TCEQ revised the entirety of its MSW rules, including those pertaining to landfills, TCEQ promulgated § 330.239 that expressly regulates only MSW transfer stations – not landfills – and that requires such facilities to "provide screening or other measures to minimize noise pollution."²⁵² This rule is notable for two reasons: (1) there is no counterpart to this transfer station rule that similarly regulates MSW landfill facilities and (2) the rule provides that noises may be minimized through screening, such as buffer zones. Given the regulatory history, and given that transfer stations and other MSW storage and processing facilities are only required to

²⁴⁹ See Ex. APP-202 at 392, 3395-96; 30 TEX. ADMIN. CODE § 330.543(b)(2)(C); see also *id.* at § 330.543(b)(2)(D) (providing that the 125-foot buffer zone requirement in TCEQ's revised MSW rules "shall apply only to newly permitted airspace and shall not apply to any previously permitted airspace").

²⁵⁰ See Ex. APP-202 at 392, 3395-96.

²⁵¹ See *id.* at 392, 3395; 30 TEX. ADMIN. CODE §§ 330.141(a), 330.543(a).

²⁵² 30 TEX. ADMIN. CODE § 330.239; see also *id.* § 330.63(b)(2) (requiring "transfer stations" to "provide designs for noise pollution control").

maintain a 50-foot buffer,²⁵³ it is reasonable to conclude that TCEQ did not find it necessary to specifically regulate noise from MSW landfills due to the 125-foot buffer requirement that new and expanded landfills must meet.

4. Whether the Landfill's Operational Hours are Appropriate

The operating hours proposed in the SOP in WMTX's application are exactly the same as the facility's currently permitted operating hours under Permit No. MSW-249C. That is, these are the same hours that the facility has historically been operating within under its existing permit. TCEQ's current rule regulating operating hours specifies default operating hours that a facility must operate within unless operating hours outside of those default hours are "otherwise approved in the authorization for the facility."²⁵⁴ The language of the current rule was first promulgated in 2004.²⁵⁵ In the preamble to that rulemaking, TCEQ explained the intent of the rule and its application to existing facilities:

The intent of the rules is to require that a facility's site operating plan accurately reflects the hours when the facility will accept waste, allow materials to be transported on or off site, and the hours when heavy equipment may operate. *The rules do not change the operating hours authorized in a facility's current permit.*²⁵⁶

Only those existing facilities that seek to operate "outside the hours currently authorized in the facility permit" are required to modify their permitted operating hours to comply with the rule requirement (i.e., existing facilities may continue to operate within the hours "approved in the authorization for the facility").²⁵⁷

²⁵³ See *id.* § 330.543(b)(1).

²⁵⁴ 30 TEX. ADMIN. CODE § 330.135(a).

²⁵⁵ See 29 Tex. Reg. 11,054 (Nov. 26, 2004).

²⁵⁶ *Id.* at 11,060.

²⁵⁷ *Id.*; 30 TEX. ADMIN. CODE § 330.135(a).

Furthermore, the SOP provides adequate provisions to prevent nuisance conditions during these operating hours: “Any lighting used for night operations will be oriented so that it does not face residences along the boundary of the site. Trucks will not queue onto public roads during night operations.” No party challenged the adequacy of these provisions to prevent potential nuisance impacts if facility operations are conducted after dark.

Additionally, as set forth above, no party challenged the adequacy of the facility’s proposed buffer zones to buffer noises that may be associated with facility operations within the existing and proposed operating hours. The same is true regarding the adequacy of the buffer zones to buffer lighting used for night operations. Moreover, as discussed above with respect to noise, the only stated concerns in this case regarding WMTX’s operating hours are conclusory allegations unsupported by any evidence in the record. Here again, there was no evidence offered or adduced through cross-examination at the hearing that supports a finding that these conclusory concerns are warranted, or that a limitation on WMTX’s proposed hours is warranted.

5. Whether the Application Includes Adequate Provisions for Buffer Zones and Landscape Screening, in Compliance with Agency Rules

The adequacy of the facility’s proposed buffer zones is demonstrated above. One of the stated goals that TCEQ sought to accomplish when it promulgated its rules requiring a 125-foot buffer zone for lateral expansions of existing facilities was to provide “visual screening of solid waste processing and disposal activities.”²⁵⁸ Accordingly, achieving the agency’s visual screening goal is accomplished by providing a minimum 125-foot buffer, which, as noted above, WMTX commits to do around solid waste processing and disposal activities in the expansion

²⁵⁸ 30 TEX. ADMIN. CODE § 330.543(b)(3)(B)(i).

area. The SOP in WMTX's application also provides that vegetation in the buffer zones around the facility will be maintained to promote the visual screening that the buffer zones are intended to provide.²⁵⁹ Additionally, the east and south slopes of the East Hill portion of the existing facility have been landscaped to provide additional visual screening beyond the facility's existing buffer zone.²⁶⁰ This area of the facility is in closest proximity to public roadways and is most frequently in public view.

C. WHETHER THE APPLICATION SHOULD BE DENIED BASED ON THE APPLICANT'S COMPLIANCE HISTORY, IN ACCORDANCE WITH STATE LAWS AND AGENCY RULES

An evaluation of compliance history under TCEQ's rules begins with an accounting and scoring of various compliance events relative to environmental laws and regulations or "components" for the five years prior to the date a permit application is filed with the Commission.²⁶¹ The regulations then employ a formula to calculate a numerical value that is sometimes referred to as a site's or entity's compliance history score. Based on that score, each site and entity regulated by TCEQ is classified as either a "high," "average," or "poor" performer. An "average" performer is one with a compliance history score in the range of 0.1 to 45 points. A score of less than 0.1 is "high" and a score of greater than 45 is "poor."²⁶²

Relative to the application and pursuant to rule, TCEQ calculated compliance histories, and prepared a compliance history report, for WMTX and the ACRD Facility in January 2008, once the agency determined that the application was technically complete.²⁶³ WMTX's

²⁵⁹ See Ex. APP-202 at 3415.

²⁶⁰ See *id.* at 3272-73, 3321-22, 3415.

²⁶¹ 30 TEX. ADMIN. CODE § 60.1(b), (c).

²⁶² *Id.* at § 60.2.

²⁶³ See Ex. APP-100 at 11:7-12.

compliance history score at that point was 3.74 and the ACRD Facility's was 38.14.²⁶⁴ Accordingly, both WMTX and the ACRD Facility were classified as "average" performers in January 2008.²⁶⁵ However, a more recent compliance history report for WMTX and the ACRD Facility was issued on December 10, 2008.²⁶⁶ Per that report, WMTX's compliance history is rated at 2.76 and the ACRD Facility's is 6.17. Still, both WMTX and the ACRD Facility were classified as "average" performers at that time.²⁶⁷

The compliance history reports in Exhibits APP-103 and APP-104 and, consequently, the scores and classifications described above, all take into account the administrative order referenced repeatedly by Protestants in this matter, specifically TCEQ Docket No. 2002-0935-MLM-E.²⁶⁸ In fact, that Agreed Order embodies the last environmental regulatory violations, dating back to 2002, that are alleged to have occurred at the ACRD Facility.²⁶⁹ Thus, Protestants' have greatly exaggerated their claims regarding the compliance history of WMTX and the ACRD Facility. Under the law, they are each regarded as average performers with respect to environmental compliance and there is simply no statutory or regulatory basis for denial of the application based on an average compliance history classification.²⁷⁰

²⁶⁴ See Ex. APP-103.

²⁶⁵ *Id.*

²⁶⁶ See Ex. APP-104.

²⁶⁷ *Id.*

²⁶⁸ See, e.g., COA Ex. JW-4

²⁶⁹ See Ex. APP-100 at 14:23-28.

²⁷⁰ See 30 TEX. ADMIN. CODE § 60.3.

D. WHETHER THE APPLICATION SHOULD BE DENIED BECAUSE APPLICANT ALLEGEDLY BEGAN CONSTRUCTION OF THE PROPOSED LATERAL EXPANSION PRIOR TO THE ISSUANCE OF THE DRAFT PERMIT, IN VIOLATION OF AGENCY RULES

The sedimentation and bio-filtration pond that currently exists in the northwest portion of the area proposed for expansion of the ACRD Facility was constructed pursuant to a site development permit issued to WMTX by the City of Austin.²⁷¹ WMTX did not need to obtain a MSW permit amendment from TCEQ to construct the pond. The local authorization from the City is independent of any authorization that the state may issue for expansion of the ACRD Facility. Indeed, the pond is a City-required mitigation project – the pond is required mitigation for the loss of a stock tank that the City defined to be a critical environmental feature under its local ordinances.²⁷²

In any event, even assuming that construction of the pond constitutes the commencement of construction of the lateral expansion without a permit – which WMTX in no way concedes – the alleged violation does not concern a statutory or regulatory requirement applicable to WMTX’s pending application. Therefore, it is not grounds for denial of WMTX’s application.

E. WHETHER THE APPLICATION PROVIDES ADEQUATE INFORMATION THAT THE WASTE MANAGEMENT ACTIVITIES OF THE MSW FACILITY WILL CONFORM TO THE REGIONAL SOLID WASTE MANAGEMENT PLAN, IN ACCORDANCE WITH STATE LAWS

CAPCOG is an association of governments located in the 10-county State Planning Region 12, which includes Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, Travis, and Williamson counties.²⁷³ TCEQ’s rules required Applicant to provide Parts I and II of its application to CAPCOG, so that the COG could review the application for compliance with the

²⁷¹ See COA Ex. TF-1 at 5:99-102; COA Ex. TF-3; Ex. APP-16 at 62:13 to 65:6, depo. Ex. 10.

²⁷² See COA Ex. TF-3 at 15 (Restoration & Wetland Mitigation Plan); Ex. APP-16 at depo. Ex. 6.

²⁷³ See Ex. APP-200 at 35:1-3.

approved Regional Solid Waste Management Plan (“**RSWMP**”).²⁷⁴ Consistent with the TCEQ’s rules, WMTX was required to provide, and did provide, TCEQ with documentation that Parts I and II of the application were submitted to CAPCOG after the application was revised to comply with TCEQ’s 2006-revised MSW rules.²⁷⁵ In addition, subsequent revisions to Parts I and II of the application were submitted to CAPCOG, including the versions of Parts I and II of the application as contained in Volume I of Exhibit APP-202.²⁷⁶

The current CAPCOG RSWMP was adopted by the CAPCOG Executive Committee in 2005, but it was not approved by TCEQ until May 2007.²⁷⁷ The CAPCOG RSWMP does not set forth any particular requirements for MSW permit applicants or facilities.²⁷⁸ Instead, the CAPCOG RSWMP sets out goals and objectives, specifically Goal #15, as it pertains to the review of “Facility Applications.”²⁷⁹ The issue is not one of compliance with particular requirements of the RSWMP, but rather whether the proposed facility conforms to the goals and objectives of the RSWMP.²⁸⁰

The objectives listed under Goal 15 of the CAPCOG RSWMP concern land use compatibility, roadway and drainage impacts, the applicant’s compliance history as determined by the TCEQ, buffer zones and visual screening, and practices to prevent and control windblown litter, stormwater runoff, vectors, odors, and nuisance conditions.²⁸¹ Each of these topics is

²⁷⁴ See 30 TEX. ADMIN. CODE § 330.61(p).

²⁷⁵ See *id.*; Ex. APP-202 at 168.

²⁷⁶ See *id.* at 36:7-11.

²⁷⁷ See Ex. APP-218.

²⁷⁸ See Ex. APP-200 at 36:29 to 37:1.

²⁷⁹ See Ex. APP-218 at 50-51.

²⁸⁰ See *id.* at 37:3-8.

²⁸¹ See Ex. APP-218 at 50-51.

addressed directly in the application and, in the case of compliance history, by TCEQ in the application review process, pursuant to TCEQ's rules in 30 Tex. Admin. Code Chapter 60, as discussed above.²⁸² Thus, it is clear that the application provides sufficient information demonstrating that the waste management activities associated with the proposed expansion of the ACRD Facility will conform to the CAPCOG RSWMP, in accordance with state law.

VII. TRANSCRIPT COSTS

WMTX has been assessed reporting and transcription costs in the amount of \$23,506.90 for the pre-hearing conference and evidentiary hearing in this matter. A copy of the reporting service's invoice for these costs is attached as *Attachment 1*. Applicant respectfully requests that, in the ALJ's Proposal for Decision, the ALJ recommend assessment of these costs among the parties in a fair and reasonable manner, consistent with 30 Tex. Admin. Code § 80.23(d), and reimbursement to WMTX of a portion of the costs upon such assessment.²⁸³ Specifically, WMTX requests that half of these reporting and transcription costs be apportioned to WMTX and half to Protestants, for the reasons set forth below.

Per the ALJ's Order No. 1, WMTX was required to arrange for court reporting services at the evidentiary hearing, and pay the costs of those services, subject to allocation of those costs at the close of the case. These services were essential to the trial of the proceeding, and each party to the proceeding, to some degree, benefited from the services provided.²⁸⁴

²⁸² See generally, APP-202 Parts I/II and Part IV, APP-103, and APP-104.

²⁸³ 30 TEX. ADMIN. CODE § 80.23(b)(5) (authorizing the ALJ to "require the applicant to pay for the transcript in advance subject to reimbursement from other parties upon assessment of costs").

²⁸⁴ See *id.* § 80.23(d)(1)(D).

As a statutory party to the proceeding, the Office of Public Interest Counsel, by rule, cannot be assessed reporting or transcription costs.²⁸⁵ Additionally, the Executive Director's participation in this matter, although not mandated by statute, was limited to providing information to complete the administrative record.²⁸⁶ Accordingly, WMTX does not propose to assess any portion of the reporting and transcription costs to the Executive Director. That leaves WMTX and Protestants as potential parties to share in the allocation of such costs.

As reflected by the hearing transcripts, Protestants' collective participation in the hearing exceeded that of WMTX.²⁸⁷ Protestants frequently asked duplicative questions of adverse witnesses and engaged in lengthy friendly cross-examinations of each Protestant's witnesses. Such duplicative questioning and friendly cross-examination greatly lengthened the hearing and increased the reporting and transcription costs. Conversely, Applicant sought to shorten the hearing, where possible, by introducing deposition testimony and foregoing extended cross-examinations of a number of Protestants' witnesses. Additionally, given that WMTX was the first questioner in the order of cross-examination, Applicant often had no or limited opportunity to question witnesses regarding the witnesses' testimony in response to Protestants' friendly cross-examinations.

With respect to the financial ability of Protestants to pay one-half the costs, while the financial capabilities may vary from one Protestant to another, collectively they cannot reasonably dispute that they have the financial wherewithal to cover \$11,753.45 in assessed

²⁸⁵ See *id.* § 80.23(d)(2); TEX. WATER CODE § 5.273(a).

²⁸⁶ See 30 TEX. ADMIN. CODE § 80.108(d); TEX. WATER CODE § 5.228(c).

²⁸⁷ See 30 TEX. ADMIN. CODE § 80.23(d)(1)(C).

costs.²⁸⁸ Protestant TJFA, in particular, has no valid claim of financial inability to pay. As set forth above, this is the fourth contested case in which TJFA has participated as a party protesting a landfill expansion in Central Texas. Surely, by now, TJFA has factored the costs of such cases into its overall “investment” strategy. Indeed, Mr. Dunbar testified that in the two prior matters in which he represented TJFA in opposition to a landfill expansion, he and his co-counsel billed TJFA up to \$500,000 in attorneys’ fees and costs for the two matters.²⁸⁹ And that’s exclusive of expert witnesses’ fees. In this matter, where Mr. Dunbar was retained by TJFA as its expert witness, rather than as its attorney as in the prior two matters, Mr. Dunbar has billed TJFA approximately \$30,000, and Mr. Dunbar is but one of five TJFA experts in this proceeding.²⁹⁰

The finances of the remaining Protestants – the City of Austin, Travis County, and Protestants 1 – may be more limited than that of TJFA (e.g., due to budgetary constraints of the governmental entities); however, while Protestants 1 is comprised, in part, of individual landowners, at least one of those individuals testified that he is a successful businessman who made approximately \$500,000 in profits last year.²⁹¹ In any event, such limitations, should they exist, should be accounted for in the allocation of costs among the Protestants (e.g., by allocating a greater percentage of the \$11,753.45 to TJFA). Given the other factors that are to be considered in the assessment of reporting and transcription costs under 30 Tex. Admin. Code § 80.23(d) – particularly the extent to which Protestants participated in the hearing – limited financial ability to pay should not excuse any one Protestant from shouldering some share of the costs in this matter. Moreover,

²⁸⁸ See 30 TEX. ADMIN. CODE § 80.23(d)(1)(B).

²⁸⁹ See Trial Tr. at 1517:11 to 1518:6, 1519:6 to 1523:11; *see also* Ex. TJFA 500 at 7:1-5.

²⁹⁰ See Trial Tr. at 1515:23 to 1516:1.

²⁹¹ See *id.* at 2214:6-8, 2229:16-22.

Accordingly, WMTX respectfully requests that the reporting and transcription costs that WMTX has incurred in this proceeding be apportioned equally to WMTX and Protestant TJFA.

**VIII.
SUMMARY**

For the foregoing reasons, and based on the evidentiary record in this proceeding, Applicant respectfully requests that the ALJ recommend issuance of Permit No. MSW-249D.

**IX.
FINDINGS OF FACT**

Per the ALJ's Order No. 12, Applicant WMTX will file its proposed Findings of Fact with its reply brief.

**X.
CONCLUSIONS OF LAW.**

Per the ALJ's Order No. 12, Applicant WMTX will file its proposed Conclusions of Law with its reply brief.

**XI.
ORDERING PROVISIONS**

Per the ALJ's Order No. 12, Applicant WMTX will file its proposed Ordering Provisions with its reply brief.

Respectfully submitted,

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A large, stylized handwritten signature in black ink, appearing to read 'BJM', is written over a horizontal line. Below the line, the names and SBN numbers of three individuals are listed.

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CERTIFICATE OF SERVICE

I certify that a true and correct copy of the foregoing Closing Argument has been served on the following on this the 8th day of May, 2009:

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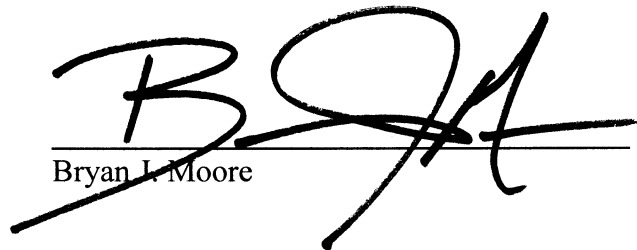
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