Commission and that was later adopted by the Commission.¹⁷⁹ Specifically, the attachments state: "As provided on p. 37 of the Regional Solid Waste Management Plan that was approved by the CAPCOG Executive Committee on January 10, 2005, Waste Management of Texas' application for expansion of the Austin Community Landfill does not conform for the following reasons . . ."¹⁸⁰ CAPCOG then lists the reasons and justifications for its determination of nonconformance.

WMTX argues that because CAPCOG's RSWMP contains "goals and objectives" instead of "requirements," "the issue is not one of *compliance* with particular requirements of the RSWMP, but rather whether the purported facility *conforms* to the goals and objectives of the RSWMP."¹⁸¹ It is unclear what WMTX believes is the important distinction between "compliance" and "conformance." In fact, based on the common definitions of both terms, any such distinction is a figment of WMTX's imagination.

WMTX never even addresses the finding of nonconformance made by CAPCOG—findings made by the SWAC and adopted by CAPCOG's Executive Committee based on their own knowledgeable interpretation of a document drafted and adopted by the same entities. Because CAPCOG is recognized by the Commission to be the entity to make the initial determination of compliance and conformity with the RSWMP, CAPCOG's findings are important and cannot simply be ignored as WMTX attempts to do.

See Exh. City of Austin JW-5, "CAPCOG Conformance Determination on the Waste Management of Texas, Inc. MSW Permit Amendment Application," at 5-8.

¹⁸⁰ *Id.* at 5.

WMTX Closing Argument, *supra* note 30, at 68 (emphasis added).

See Exh. APP-218, Executive Committee, Capital Area Council of Governments, Regional Solid Waste Management Plan 2002-2022 (Feb. 9, 2005), at 00008. The RSWMP was approved by TCEQ on May 31, 2007. See Exh. APP-218, TCEQ, Volume I Regional Solid Waste Management Plan, Capital Area Council of Governments (May 31, 2007), at 0001.

The RSWMP identifies one goal and eight objectives as the "Goals and Objectives for Conformance Review of Facility Applications." CAPCOG's SWAC reviewed WMTX's

Use the Plan Conformance/Facility Application Review process and the provisions of §363.066, Health & Safety Code, to address land use compatibility and other local issues in order to avoid, if possible, or minimize if avoidance is not possible, adverse impacts from municipal solid waste (MSW) facilities on human health and the environment.

Exh. APP-218, RSWMP 2002-2022, supra note 179, at 37 (00050). The eight objectives are as follows:

- Ensure that the use of a site for a MSW facility does not adversely impact human health or the environment by evaluating and determining impacts of the site upon counties, cities, communities, groups of property owners, or individuals in terms of compatibility of land use, zoning in the vicinity, community growth patterns, and other factors associated with the public interest.
- Ensure that MSW facilities comply with local zoning requirements, siting ordinances, and other local government land use regulations.
- Ensure that MSW facilities' impacts on roads, drainage ways, and other
 infrastructure are assessed, that both existing and planned future land uses near
 the facility are considered, and that infrastructure problems created by the
 facility and the potential for land use conflicts between MSW facilities and
 existing and planned development are fully and adequately taken into account
 and addressed.
- Ensure that MSW facilities are good neighbors, by assessing and considering every applicant's five year compliance history in Texas to the fullest extent allowed by TCEQ.
- Encourage programs that provide incentives for using landfills instead of illegal dumping including but not limited to conducting and increasing awareness of community cleanup events, efforts to curtail illegal dumping, litter abatement and waste reduction programs, public education programs, lower rates for wastecollection events, etc.
- Avoid if possible, or minimize if avoidance is not possible concerns about visual
 and aesthetic impacts from MSW facilities on adjacent land uses by
 incorporating "context sensitive" design, appropriate buffers and setbacks into
 facility design. Ensure that operators take reasonable and appropriate steps to
 avoid such impacts if possible or minimize them if complete avoidance is not
 possible.
- Address local land use concerns about the long term and cumulative effects of MSW facilities and protect the public interest in a natural landscape, avoid if possible, or minimize if not possible, major disruptions to the landscape and other adverse long term and cumulative effects by ensuring that the permitted and maximum potential (theoretical geometric calculation) height and capacity of a MSW facility are accurately calculated and taken into account.
- Avoid if possible, or minimize if avoidance is not possible, nuisance conditions associated with MSW facilities that generate community concerns by ensuring

Goal #15 states:

application and systematically applied its goal and objectives to WMTX's application. Based on that review, the SWAC made the following determinations, among others:

- Specifically, the applicant's Conformance Checklist states that there are 1163 residences within one mile of the site. In terms of siting facilities to avoid nuisances to neighbors and communities, this site is a poor choice. The existing and future land uses surrounding the site are incompatible with ongoing waste disposal activities. . . . Moreover, the applicant's Conformance Checklist provides no documentation regarding compatibility from appropriate governmental agencies as required by Section 2.12 of the checklist. 184
- The applicant has not provided the documentation required by Section 2.8 of the Checklist confirming that the applicant can obtain site development approval from the City of Austin and Travis County. 185
- These serious violations resulted in nuisance odors that affected neighbors and communities. Given applicant's history of serious violations, there is a risk of future violations, and the applicant must demonstrate that it has taken steps to mitigate this risk. 186
- The applicant's response to Section 2.13 of the Conformance Checklist states only that [sic] will consider or address these issues [i.e., concerns about visual and aesthetic impacts on adjacent land uses] in the future. Section 2.13 clearly requires the application to address these issues at the time of the conformance review. A statement that the applicant will address these issues in the future is inadequate. 187

CAPCOG even went so far as to provide guidance to WMTX regarding how it could address the issues raised through CAPCOG's review pursuant to the RSWMP. But, as identified by WMTX's witnesses, no revisions were made to the application in response to CAPCOG's

that applicants implement reasonable and appropriate measures and best management practices to prevent and control litter, stormwater runoff, vectors, odor, excessive noise, light pollution, and other nuisance conditions.

Id. at 37-38 (00050-00051).

Exh. City of Austin JW-5, *supra* note 179, at 5 of 8.

Id. This finding took on new meaning during the Hearing on the Merits when the accuracy of the Erosion & Restoration Plan that was submitted to the City of Austin on behalf of WMTX to obtain the required development permit was called into question. Witnesses for the City of Austin testified that the ponds detailed in the Erosion & Restoration Plan submitted to the City of Austin differed from the ponds detailed in the application itself. As such, it is not clear that WMTX has obtained the necessary approvals from the City of Austin for construction of the ponds as described in the application.

Exh. City of Austin JW-5, *supra* note 179, at 6 of 8.

¹⁸⁷ *Id*.

review.¹⁸⁸ In fact, WMTX witnesses went so far as to infer, as WMTX does again in its *Closing Argument*, that they were in a better position to determine WMTX's conformance with the RSWMP than CAPCOG.¹⁸⁹

Such is clearly not the case. As described above, WMTX's own land use compatibility witness failed to consider important details regarding the ACL facility itself, rendering his analysis incomplete regarding the compatibility of the ACL facility with neighboring properties. Similarly, WMTX's engineer of record attempted to minimize CAPCOG's determination by pointing out that it was based on an earlier version of the application than the version that was the subject of the Hearing on the Merits. While this is accurate, Mr. Dominguez went on to testify that no changes were made to the application in response to CAPCOG's determination. WMTX never bothered to attempt to respond to the issues raised by CAPCOG; instead, it minimized CAPCOG's determination while processing the application through TCEQ, attempted to replace CAPCOG's determination with its own conclusions during the Hearing on the Merits, and then simply ignored it in its *Closing Argument*.

While WMTX itself can ignore CAPCOG's determination and even the evidence presented regarding land use compatibility that it does not agree with, the Commission in making its final determination regarding conformance with the RSWMP must consider CAPCOG's initial determination and recommendation and the totality of the evidence presented in this proceeding. Based on the entirety of that information, the Commission's final determination should be that WMTX has failed to demonstrate that the application to expand the ACL facility

See Tr. at Vol. 3 at 448 lns.5-14 (Cross Exam (by Sharon Talley) of Charles G. Dominguez, P.E.) (Mar. 31, 2009).

See, e.g., id. at Vol. 4 at 733 lns.10-13 (Cross Exam (by Adam Friedman) of John Worrall) (Apr. 1, 2009).

See id. at Vol. 3 at 447 lns.13-19 (Cross Exam (by Sharon Talley) of Charles G. Dominguez, P.E.) (Mar. 31, 2009).

See id. at Vol. 3 at 448 lns.5-14.

is in conformance with the RSWMP adopted by the Commission, and as such, the application should be denied.

VI. TRANSCRIPT COSTS

WMTX is the party seeking the ability to expand and continue future operations of the ACL facility. It was WMTX's decision to seek authority to expand the ACL facility that made this entire proceeding necessary. Alone, this is enough reason to allocate all transcription costs to WMTX.

But, in addition to that fact, it is important to note that WMTX's handling of the application forced all parties into this proceeding and increased the length of the Hearing on the Merits driving up transcription costs. Among other things, WMTX's purposeful exclusion of the IWU and the Phase 1 unit, as well as WMTX's erroneous designation of the Phase 1 unit as the "Travis County Landfill (Closed),"and thus its failure to provide adequate and appropriate ground water monitoring and landfill gas monitoring, made the entirety of this proceeding necessary. WMTX, as the applicant, chose how to structure its application and chose to attempt to ignore these units and all of the problems that are associated with them.

The protestants raised important issues in this proceeding. The issues raised by protestants were important and were focused on the inability of the design of the ACL facility, as represented in the application, to protect human health and the environment. Also, contrary to WMTX's claims, there was not substantial overlap in questions among the protesting parties. As was noted over and over again during the Hearing on the Merits, other protestants relied heavily on TJFA to carry the load with regard to certain arguments related to historical conditions at the ACL facility and on certain technical provisions of the application, including, for example, geological characterization, ground water monitoring and quality, settlement calculations, and stability analyses. Other protestants noted throughout the proceeding that they were attempting not to re-ask questions already asked by TJFA and other protestants.

The issues raised during this proceeding identified severe flaws in the current operation of the ACL facility and in the application. Such is the role of protestants in these proceedings. To address these issues, the protestants have already gone to extraordinary expense to review ten revisions of the application, gather evidence, and present their cases. The burden on the protesting parties should not be further compounded by requiring any of them, including TJFA, to pay transcription costs on top of the substantial sums expended to meaningfully participate in the contested case hearing process. As such, TJFA respectfully urges the Administrative Law Judge to assign all transcription costs to WMTX.

With regard to the actual court reporting costs for this proceeding, WMTX identifies that it has been assessed reporting and transcription costs in the amount of \$23,506.90 for the prehearing conference and evidentiary hearing. In its Closing Argument, WMTX requests that the protestants be responsible for one-half of that cost. WMTX fails to mention, and what is not addressed on the reporting service's invoice, is that the bill for \$23,506.90 for this proceeding is artificially high because WMTX requested an expedited transcript of the proceeding. Kennedy Reporting Service, Inc. ("Kennedy Reporting") has identified that its regular two-week delivery rate is \$5.25 per page with a \$27.50 administrative fee for a total cost of \$14,328.50. WMTX was Kennedy Reporting's client and was apparently the entity that requested the expedited transcript. Protestants, including TJFA, did not request an expedited copy of the transcript of the entire Hearing on the Merits, and thus, should not be responsible for any of the additional costs associated with the expedited transcript. If the Administrative Law Judge determines that any portion of the transcript costs should be paid by protestants, the

See WMTX Closing Argument, supra note 40, at 69; see also id. at Att. 1.

¹⁹³ See id. at 70-71.

See Letter from Brenda Ruby, Kenney Reporting Service, Inc., to Erich M. Birch, Birch, Becker & Moorman (May 27, 2009), attached hereto and incorporated herein for all purposes as Attachment 3.

additional expenses associated with the expedited transcript should be paid fully by WMTX prior to any allocation of the standard reporting fees.

VII. SUMMARY

For all of the above reasons, WMTX has failed to carry its burden on key MSW permitting regulatory requirements. WMTX's strategy was clearly to ignore many of the problems with its site, going as far as misleading the TCEQ into believing that the Phase 1 unit was not part of the ACL facility, but was, according to WMTX, part of the old Travis County Landfill. The proposed POC ground water monitoring system, by design, is incapable of detecting releases from all of the solid waste management units within the permit boundary. Ground water contamination and confirmed leachate seeps would also contaminate surface water exiting the ACL facility. The proposed landfill gas monitoring system cannot detect releases of landfill gas along a section of the facility boundary over one-half mile long. A creek runs over buried MSW, and water is allowed to pond over waste in strict violation of TCEQ rules. The ponding has even created wetlands over the buried waste. Water would drain from the ACL facility at one discharge point at 100-year peak flow rates that are double what such rates would have been for the existing, or permitted, condition, if it had been calculated properly. Clearly erroneous waste settlement calculations lead to an inescapably flawed piggyback liner design. Construction of a drainage pond, a structural component of the proposed lateral expansion of the ACL facility, has already occurred in irrefutable violation of TCEQ rules.

Each one of the above conditions individually is sufficient basis for denial of a MSW permit amendment application. The number of deficiencies in this application—technical deficiencies that are inextricably bound to factors that impact environmental protection and human health and safety—together demand that this application be denied. The identified deficiencies are of the type that require additional investigation, analysis, and redesign, and cannot be remedied under the current application.

WMTX, in this matter, had a choice of how it would handle the above issues in the preparation of its permit application, and it chose a path that led to the deficiencies identified above. For all of the above reasons and those expressed in TJFA's *Closing Argument*, TJFA respectfully requests that the Administrative Law Judge recommend denial of the pending application for Permit No. MSW-249D.

VIII. FINDINGS OF FACT

TJFA presents to the Administrative Law Judge the following proposed Findings of Facts:

A. General Findings/Procedural Issues

- 1. The application was declared technically complete on January 4, 2008. (Exh. APP-200 at 16 lns.16-18; Exh. ED1 at 8 ln.30; Exh. APP-204 at 00001.)
- 2. WMTX requested a direct referral of the January 2008 technically complete application to the State Office of Administrative Hearings ("SOAH") pursuant to 30 Tex. ADMIN. CODE § 55.210(a) via letter dated February 15, 2008. (Exh. APP-102; Exh. ED1 at 9 ln.16.)
- 3. WMTX submitted proposed revisions to the January 2008 technically complete application to the Executive Director of TCEQ on February 21, 2008, and April 14, 2008. (Exh. APP-211A; Exh. APP-211B; Exh. APP-200 at 21 lns.17-20 & 30-24; Exh. ED1 at 10 lns.40-43.)
- 4. WMTX's proposed February 2008 and April 2008 revisions made substantive changes to the January 2008 technically complete application. (APP-211A at 1 (00001); Tr. at Vol. 11 at 2358 ln.17 2360 ln.17.)

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- 5. The revisions to the January 2008 technically complete application revised the buffer zone described in the application because the buffer zone identified in the January 2008 technically complete application did not meet TCEQ MSW rules. (Tr. at Vol. 11 at 2359 lns.2-7.)
- 6. The revisions to the January 2008 technically complete application revised the redefined "contaminated water" under the application and thus would render the permit, if issued based on the application, less protective of human health and the environment than it would have been under the January 2008 technically complete application. (Exh. APP-211A at 00043.)
- 7. The revisions to the January 2008 technically complete application revised the landfill footprint, site life, disposal capacity, drainage plans and calculations, and the level of the water table. (Exh. APP-211A; Exh. APP-211B.)
- 8. TCEQ's rules define a "major amendment" as "an amendment that changes a substantive term, provision, requirement, or a limiting parameter of a permit." (30 TEX. ADMIN. CODE § 305.62(c)(1).
- 9. 30 TEX. ADMIN. CODE § 281.23(a) provides: "No amendments to an application which would constitute a major amendment under the terms of § 305.62 of this title (relating to Amendments) can be made by the applicant after the chief clerk has issued notice of the application and draft permit, unless new notice is issued which includes a description of the proposed amendments to the application." (30 TEX. ADMIN. CODE § 281.23(a).)

- 10. The aggregate of the changes to the January 2008 technically complete application constitute a "major amendment" to the January 2008 technically complete application.

 (30 Tex. Admin. Code § 305.62(c)(1).)
- 11. The Executive Director of TCEQ reviewed the February and April 2008 revisions to the January 2008 technically complete application and requested additional information, including additional revisions, from WMTX via letter dated May 9, 2008. (Exh. APP-212; Exh. APP-200 at 22 lns.22-28.)
- 12. The Executive Director's conclusion regarding the revisions to the January 2008 technically complete application is in contravention of TCEQ rules.
- 13. WMTX responded to the Executive Director's May 9, 2008 letter on May 15, 2008, providing additional revisions to the January 2008 technically complete application. (Exh. APP-213; Exh. APP-200 at 23 lns. 12-14.)
- 14. The version of the application considered at the Hearing on the Merits was a compilation of the January 2008 technically complete application as revised by WMTX's February 21, 2008 requested revisions, its April 14, 2008 requested revisions, and the May 15, 2008 revisions. (Exh. APP-200 at 24 lns.11-28.)
- 15. None of the revisions to the January 2008 technically complete application were part of the application for which a direct referral to SOAH was sought on February 15, 2008. (Exh. APP-200 at 24 lns.11-28.)

- 16. None of the revisions to the January 2008 technically complete application were part of the application for which notice was mailed and published.
- 17. New notice, as required by 30 TEX. ADMIN. CODE § 281.23(a), was not published regarding the amended application.

B. Background Facts

- 18. The site of the Austin Community Recycling and Disposal Facility, also known as the Austin Community Landfill (the "ACL"), has been operated as a municipal solid waste ("MSW") disposal facility since as early as 1970. At that time, the MSW landfill site was operated by Universal Disposal. (Exh. APP-202 at Technically Complete ("TC") 7.)
- 19. Beginning at least as early as 1971, Industrial Waste Materials Management ("IWMM"), a predecessor operator of the ACL facility, disposed of industrial wastes in an approximately 9.5-acre area within the MSW landfill operated by Universal Disposal, pursuant to an authorization issued to IWMM from the Texas Department of Water Resources ("TDWR"). The industrial wastes were disposed on the MSW site "just north of the municipal waste disposal area." (Exh. TJFA 200 at 45 lns.11-18; Exh. TJFA 2 at WM-028304.)
- 20. On February 14, 1972, IWMM applied for a permit to dispose of spent acids, caustics solvents, hydrocarbons, and contaminated process waste. The permit was not issued and the TDWR ordered the IWMM site closed in June 1972 through a cease and desist order due to land use and potential ground water contamination concerns. (Exh. TJFA 203 at 005; TJFA 200 at 48 lns.3-4 & 7-9; Exh. TJFA 21 at 2; Exh. TJFA 203 at 021-022; Exh. TJFA 2 at WM-028304.)

- 21. While in operation, the IWMM industrial waste disposal site received spent acids, caustics, solvents, hydrocarbons, and contaminated process waste in bulk liquid form. Such wastes were disposed in four to six unlined pits, with a total capacity of 1.8 million gallons or more. Industrial wastes were also received in solid, semi-solid, and liquid form in fifty-five gallon drums. A minimum of 21,000, and possibly in excess of 50,000, fifty-five gallon drums were buried in two unlined trenches. The amount of waste taken in bulk form is unknown, but may have amounted to as much as 80,000 tons. (Exh. TJFA 200 at 46 lns.16-24; Exh. TJFA 21 at 1.)
- 22. Much of the wastes received by IWMM would be categorized as hazardous today, and was categorized as hazardous by subsequent owners and operators of the ACL facility, including the Austin Community Disposal Company, Inc. ("ACDC") and Waste Management. (Exh. TJFA 200 at 48 lns.13-17; Exh. TJFA 203 at 062-064; Exh. TJFA 2 at WM-028304; Tr. at Vol. 2 at 107 lns.11-14.)
- 23. The MSW disposal site operated by Universal Disposal continued to operate in the area south of the IWMM industrial solid waste disposal area. (Exh. TJFAQ 2 at WM-028304.)
- 24. Industrial wastes were again received at the ACL facility starting in approximately 1976, at which time, the Texas Department of Health ("TDH") authorized Longhorn Disposal Services to accept, from within the Austin area, certain industrial wastes that would now be classified as hazardous. The industrial wastes disposed during the 1976 timeframe included acetone, styrene, methylene chloride, inks, and lubricants. Permission to accept these wastes was revoked late in 1976 when TDH discovered that Longhorn Disposal

Services was accepting wastes from areas outside of Austin, including areas near the cities of Waco and Houston. (Exh. TJFA 200 at 48 lns.21-23; Exh. TJFA 200 at 49 lns. 7-9 & 19-21; Exh. TJFA 203 at 026 & 027.)

- 25. The site of the ACL facility was permitted Permit No. MSW-249 on September 26, 1977, as a Type I MSW landfill by TDH. The permittee in 1977 was Longhorn Disposal Services, and the permit was issued for the operation of a Type I MSW landfill on approximately eighty-six acres. (Exh. TJFA 200 at 51 lns.15-18; Exh. Travis County JW-5 at 1-3.)
- 26. On July 31, 1981, Permit No. MSW-249 was transferred to a new permittee, ACDC, and the permitted site was expanded to 216.6 acres pursuant to a new Permit No. MSW-249A. (Exh. TJFA 200 at 52 lns.3-5; Exh. Travis County JW-5 at 36-45.)
- 27. In 1981, ACDC submitted a "Notification of Hazardous Waste Site" to the U.S. Environmental Protection Agency ("EPA"), which identified that hazardous solvents and acids had been disposed of at the Longhorn Community Disposal site, a prior name of the ACL facility. (Exh. TJFA 203 at 062-064.)
- 28. EPA included the site of the ACL facility, then identified as the "Austin Community Disposal Landfill" on the Comprehensive Environmental Response, Compensation, and Liability Information System ("CERCLIS") list. EPA uses the CERCLIS list to identify where hazardous wastes have been buried and still remain. (Exh. TJFA 1; Tr. at Vol. 7 at 1498 lns.7-10.)

- 29. In the early 1980s, Waste Management, Inc., became the sole shareholder of ACDC, and the legal name of the company changed to Texas Waste Systems, Inc. At that time, Waste Management had full knowledge of the past disposal activities and the presence of industrial and hazardous waste. Waste Management even contemplated operating the site as a hazardous waste disposal facility. (Exh. TJFA 203 at 065; Exh. TJFA 204 at 001-003.)
- 30. On January 24, 1982, the permit was transferred to Texas Waste Systems, Inc. On July 15, 1988, WMTX was granted a permit amendment for methane gas collected resulting in new Permit No. MSW-249B. On July 22, 1991, an additional seventy-four acres were added to the permitted area of the ACL facility with the issuance of Permit No. MSW-249C. (Exh. TJFA 200 at 52 lns.6-10; Exh. Travis County JW-5 at 4-35.)
- 31. As late as March 2003, WMTX identified the "Austin Community RDF," the ACL facility, as a hazardous waste landfill on its corporate website. (Exh. TJFA 212 at 002.)
- 32. The area where industrial wastes and hazardous wastes were disposed in the early 1970s is known as the Industrial Waste Unit ("IWU"). In addition, acids (*i.e.*., industrial and/or hazardous wastes) were also disposed in an area referred to as Acid Pit #4 across the creek to the west of the IWU. All of this disposal occurred in unlined areas of the ACL facility. (Exh. TJFA 202; Exh. TJFA 205 at 3.)
- 33. MSW was disposed in an area directly to the south of the IWU, historically identified as the Phase 1 unit. This disposal occurred in an unlined area of the ACL facility. (Exh. TJFA 205 at 3; Exh. TJFA 5 at 1; Exh. TJFA 6 at Att. 6 at WM-032544.)

- 34. MSW was disposed above industrial waste buried in the IWU. (Exh. APP-202 at TC 1481.)
- 35. There are two additional official MSW disposal units at the Facility—the East Hill and the West Hill. (Exh. TJFA 202.)
- 36. Disposal of MSW also occurred in a creek bed running between the IWU and the Phase 1 unit. The disposal activities in the creek effectively raised the elevation of the creek bed so that it is now above the interred MSW. This disposal occurred in an unlined area of the ACL facility. (Exh. TJFA 200 at 85 lns.7-14; Exh. TJFA 204 at 053-055.)
- 37. MSW is buried under the current detention pond and as far as the ACL southern permit boundary. (Exh. APP-202 at TC 616, TC 2400, & TC 2433.)
- 38. The application does not identify the area of disposal below the creek or Acid Pit #4, both of which are solid waste management units.

C. Sufficiency of Application and Draft Permit

- 39. WMTX is seeking an amendment to the existing permit seeking to expand the ACL facility by 71.11 acres for a total permitted area of 359.71 acres. A portion of the proposed expansion area would be located over waste disposed in a pre-Subtitle D cell in the West Hill of the existing ACL facility. This portion of the proposed expansion is a vertical expansion over existing waste. (Exh. APP-202 at TC 12 & TC 917.)
- 40. The term "facility" is defined as "all contiguous land and structures, other appurtenances, and improvements on the land used for the storage, processing, or disposal of solid waste." (30 Tex. Admin. Code § 330.3(52).)

- 41. The term "municipal solid waste facility (MSW facility)" is defined as "all continuous land, structures, other appurtenances, and improvements on the land used for processing, storing, or disposing of solid waste. A facility may be publicly or privately owned and may consist of several processing, storage, or disposal operational units, e.g., one or more landfills, surface impoundments, or combinations of them." (30 Tex. ADMIN. CODE § 330.3(89).)
- 42. The ACL facility is a "facility" and is a "municipal solid waste facility," as those terms are defined by TCEQ. (30 TEX. ADMIN. CODE § 330.3(52)&(89).)
- 43. The term "solid waste management unit" is defined as "a landfill, surface impoundment, waste pile, furnace, incinerator, kiln, injection well, container, drum, salt dome waste containment cavern, land treatment unit, tank, container, storage area, or any other structure, vessel, appurtenance, or other improvement on land used to manage solid waste." (30 Tex. ADMIN. CODE § 330.3(146).)
- 44. The term "municipal solid waste landfill unit" is defined as "a discrete area of land or an excavation that receives household waste and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 Code of Federal Regulations § 257.2. A municipal solid waste (MSW) landfill unit also may receive other types of Resource Conservation and Recover Act Subtitle D wastes, such as commercial solid waste, nonhazardous sludge, conditionally exempt small-quantity generator waste, and industrial solid waste. Such a landfill may be publicly or privately owned. An MSW landfill unit may be a new MSW landfill unit, an existing MSW

landfill unit, a vertical expansion, or a lateral expansion." (30 TEX. ADMIN. CODE § 330.3(90).)

- 45. A facility can be made up of multiple units. (Exh. TJFA 400 at 33 lns.6-8.)
- 46. The application claims that the IWU is a unit not regulated by the current permit or the permit to be issued. (Exh. APP-202 at TC 23.)
- 47. WMTX's own documents identify the IWU as part of the ACL facility. (Exh. APP-202 at TC 1481.)
- 48. The IWU is located within the permit boundary of the ACL facility. (Exh. APP-202 at TC 1481.)
- 49. MSW was disposed over industrial waste in the IWU. (Exh. APP-202 at TC 1481.)
- 50. The application claims that the Phase 1 unit is a unit not regulated by the current permit or the permit to be issued. (Exh. APP-202 at TC 23.)
- 51. WMTX's own documents identify the Phase 1 unit as part of the ACL facility. (Exh. TJFA 2 at WM-028304; Exh. TJFA 5 at WM-064091 & WM-064102; Exh. TJFA 6 at WM-032544.)
- 52. The Phase 1 unit is located within the permit boundary of the ACL facility. (Exh. APP-202 at TC 1481.)

- WMTX's own documents identify that MSW was disposed in the Phase 1 unit by WMTX or WMTX's predecessor owners and/or operators of the ACL facility. A 1997 Waste Management memorandum identified that disposal of MSW had occurred in the Phase 1 unit in the early 1970s. Also, a report prepared for WMTX in 1995 identified that the original area of MSW disposal at the ACL facility was in the south central portion of the site in an area designated as "Phase I." (Exh. TJFA 2 at WM-028304; Exh. TJFA 5 at WM-064091 & 064102; Exh. TJFA 6 at WM-032544.)
- 54. The application does not address Acid Pit #4, nor does it specifically address the MSW disposed in the creek between the IWU and the Phase 1 unit.
- 55. The application identifies that MSW has been disposed in the creek between the IWU and the Phase 1 unit. (Exh. TJFA 204 at Figs. 3-2, 3-3, & 3-4 (053-055).)
- 56. The IWU and the Phase 1 unit are both "solid waste management units" and "municipal solid waste landfill units," as those terms are defined by TCEQ, as are the areas of Acid Pit #4 and where MSW is disposed in the creek between the IWU and the Phase 1 unit. (30 Tex. ADMIN. CODE § 330.3(90)&(146).)
- 57. The ACL facility is made up of the following units: the East Hill, the West Hill, the IWU, the Phase 1 unit, the area of Acid Pit #4, and the creek bed in which MSW has been disposed.
- 58. Neither the IWU nor the Phase 1 unit has ever been "closed," as that term is used in TCEQ's MSW rules, 30 TEX. ADMIN. CODE ch. 330, and the federal Subtitle D regulations, 40 C.F.R. pts. 257 & 258.

- 59. The application refers to the Phase 1 unit of the ACL facility as the "Travis County Landfill (Closed)." (Exh. APP-202 at TC 3021.)
- 60. Characterization of the Phase 1 unit as "Travis County Landfill (Closed)" is a mischaracterization of the ACL facility and of the waste disposal history in that area of the ACL facility. (Exh. TJFA 5 at 1 (WM-064091); Exh. TJFA 5 at Fig. 2 (WM-064102); Exh. TJFA 6 at Att. 6 (WM-032544); Exh. TJFA 2 at 1 (WM-028304).)
- 61. In the application, WMTX represents that it received all necessary approvals from the City of Austin for construction of a pond identified in the application. (Exh. APP-202 at TC 192.)
- 62. The Erosion & Restoration Control Plan submitted by WMTX to the City of Austin to obtain the development permit differs from the description of the ponds contained in the application.
- 63. Because the plans submitted to the City of Austin to obtain the development permit differ from those plans set out in the application, WMTX cannot accurately represent that it has received all necessary approvals from the City of Austin.

D. Geology and Hydrogeology Investigations

64. The recognized ground water bearing unit at the ACL facility is the weathered Taylor clay. The Taylor clay underlies the entire Facility. (Exh. APP-202 at TC 2401 & 2419.)

- 65. The application identifies four geologic strata in the proposed expansion area of the ACL facility: Stratum IA, Stratum IB, Stratum II, and Stratum III. (Exh. APP-202 at TC 1391.)
- 66. The application identifies Stratum II as the lower confining stratum at the ACL facility. (Exh. APP-202 at TC 1399.)
- 67. The application does not consistently define the Stratum I/Stratum II interface. (Exh. APP-202 at TC 1392 & TC 1395.)
- 68. Because the Stratum II interface is not defined consistently, it is not possible to determine that the ground water monitoring well placement has been defined accurately and reliably.
- 69. The IWU is located hydraulically downgradient of the East Hill and the West Hill. (Exh. APP-202 at TC 23.)
- 70. The Phase 1 unit is located hydraulically downgradient of the East Hill and the West Hill. (Exh. APP-202 at TC 23.)
- 71. MSW has been disposed over and near the IWU. (Tr. at Vol. 7 at 1397 ln.22 1398 ln.8; Exh. APP-202 at TC 1481.)
- 72. The MSW disposed over the IWU, the MSW disposed in the Phase 1 unit, and the MSW disposed in the creek bed between the IWU and the Phase 1 unit are linked forming a continuous layer of waste. (Tr. at Vol. 7 at 1398 lns.6-13; Exh. APP-202 at TC 1481.)

- 73. The linkage between the IWU, the Phase 1 unit, and the MSW disposed in the creek is a potential source of migration of contamination from hazardous waste buried at the ACL facility. The MSW is a preferential flow path for contaminants released from the IWU, the Phase 1 unit, and the waste disposed in the creek bed. Contaminants tend to move through the MSW. (Tr. at Vol. 7 at 1397 ln.4 1399 ln.5.)
- 74. The IWU is in direct contact with permeable MSW disposal areas and the weathered Taylor, which is the ground water-bearing stratum at the ACL facility. (Exh. APP-202 at TC 2401 & TC 2419.)
- 75. There are wet, liquid, chemical wastes in the IWU. (Exh. APP-202 at TC 2403, TC 2404, TC 2418, TC 2419, TC 2420, TC 2426, TC 2427, and TC 2434.)

E. Ground Water Monitoring

- 76. 30 Tex. ADMIN. Code § 330.403(a)(2) requires that an applicant propose a ground water monitoring system comprised of a sufficient number of monitoring wells, installed at appropriate locations and depths, to yield representative ground water samples from the uppermost aquifer. The point of compliance monitoring system must include monitoring wells installed to allow determination of the quality of ground water passing the point of compliance as defined in 30 Tex. ADMIN. Code § 330.3 to ensure the detection of ground water contamination in the uppermost aquifer. (30 Tex. ADMIN. Code § 330.403(a)(2).)
- 77. 30 Tex. Admin. Code § 330.3(106) defines the "point of compliance" as "a vertical surface located no more than 500 feet from the hydraulically downgradient limit of the waste management unit boundary, extending down through the uppermost aquifer

underlying the regulated units, and located on land owned by the owner of the facility." (30 Tex. ADMIN. CODE § 330.3(106).)

- 78. The ground water monitoring requirements under TCEQ's MSW rules are intended to detect whether any release has occurred at a MSW landfill. If a release is detected, the operator is required to notify regulatory officials and take specific actions to confirm whether a release has actually occurred, and if so, take corrective actions. These are known as the "detection monitoring rules." (30 Tex. ADMIN. CODE §§ 330.407 330.415; Tr. at Vol. 11 at 2447 ln.2 2449 ln.13.)
- 79. The application claims that the IWU is managed separately from the ACL facility pursuant to a voluntary agreement between WMTX and the City of Austin. (Exh. APP-202 at TC 22.)
- 80. TCEQ is not a party to the ground water monitoring agreement between WMTX and the City of Austin. (Exh. City of Austin 6 at COA 1761; Tr. at Vol. 5 at 1000 lns.18-20.)
- 81. The ground water monitoring agreement between WMTX and the City of Austin is not enforceable by TCEQ. (Exh. City of Austin 6 (COA 1761); Tr. at Vol. 10 at 2134 at lns.10-14.)
- 82. The ground water monitoring that occurs pursuant to the voluntary agreement between applicant and the City of Austin is not part of the POC ground water monitoring system.

 (Exh. APP-202 at TC 22, TC 2993, & TC 3023; Exh. City of Austin 6 (COA 1761).)

- 83. The wells monitored pursuant to the agreement between WMTX and the City of Austin will not be monitored as part of the POC ground water monitoring system. (Exh. APP-202 at TC 2993 & TC 3023.)
- 84. The detection monitoring rules are not applicable to the ground water monitoring agreement between WMTX and the City of Austin. (Tr. at Vol. 11 at 2450 lns.9-15.)
- WMTX is monitoring to determine whether contaminants have been detected in ground water at levels that exceed certain remediation cleanup levels established in the Texas Risk Reduction Rules ("TRRP"). (Exh. City of Austin 6 at COA 1778 COA 1779; Tr. at Vol. 7 at 1347 lns.7-10.)
- 86. No regulatory justification is provided by WMTX for the separate management of the IWU pursuant to the agreement between WMTX and the City of Austin.
- 87. The POC ground water monitoring system must be designed in such a way as to allow determination of ground water quality passing the point of compliance from all units at the ACL facility. (30 Tex. ADMIN. CODE §§ 330.401(d) & 330.403(a)(2).)
- 88. The IWU, the Phase 1 unit, the area where Acid Pit #4 is located, and the MSW disposed in the creek between the IWU and the Phase 1 unitare units at the ACL facility. (Tr. at Vol. 11 at 2471 lns.1-8 & 2471 ln.13 2472 ln.1; 30 Tex. ADMIN. CODE §§ 330.3(52), (89), (90), & (146).)

- 89. The impacts on ground water quality from the IWU, the Phase 1 unit, Acid Pit #4, and the wastes disposed in the creek were not considered during design of the POC ground water monitoring system. (Tr. at Vol. 5 at 935 lns.13-14.)
- 90. Ground water flow from under portions of the East Hill exits the ACL facility to the north at the north property boundary. The nearest ground water monitoring well is monitoring well MW-13. Ground water monitoring well MW-13 is the last POC ground water monitoring well on the northeast side of the ACL facility. (Exh. TJFA 11 at Fig. ATT4-19A; Exh. APP-202 at TC 3023.)
- 91. Ground water monitoring well MW-13 cannot detect contamination in ground water flow to the north of the ACL facility, *i.e.*, to the west of ground water monitoring well MW-13. (Tr. at Vol. 5 at 988 lns.10-11.)
- 92. The area west of ground water monitoring well MW-13 is downgradient of the ACL facility. (Exh. APP-202 at TC 2335.)
- 93. The POC ground water monitoring system for the ACL facility was designed to only allow determination of ground water quality passing the point of compliance from the East Hill and the West Hill, excluding that portion of northward flow to the west of ground water monitoring well MW-13. (Exh. TJFA 11 at Fig. ATT4-19A; Exh. APP-202 at TC 3023.)
- 94. The POC ground water monitoring system for the ACL facility is not designed to allow determination of ground water quality passing the point of compliance from the Phase 1 unit or the IWU. (Exh. APP-202 at TC 3023.)

- 95. The POC ground water monitoring system for the ACL facility is not designed to allow determination of ground water quality passing the point of compliance through the MSW buried in the creek bed that forms a preferential flow path for contaminants released from the IWU and the Phase 1 unit. (Exh. APP-202 at TC 3023.)
- 96. The ground water monitoring wells identified as part of the POC ground water monitoring system are not located properly to detect releases from the entirety of the ACL facility.
- 97. There is no TCEQ-enforceable monitoring system designed to detect contamination migrating from the IWU.
- 98. WMTX only monitors ground water at the ACL facility for the "detection monitoring constituents," i.e., the Appendix I list. (See Exh. City of Austin 7.)
- 99. Monitoring the ACL facility for the "detection monitoring constituents" is not comprehensive enough based on the history of disposal of industrial and hazardous wastes at the ACL facility. (Tr. at Vol. 7 at 1364 ln.13 1365 ln.5.)
- 100. To ensure that WMTX can adequately detect releases of contaminants from the ACL facility it must monitor for additional constituents.
- 101. Evidence was presented that any ground water monitoring protocol should include, at a minimum, those constituents identified in TCEQ's rules for assessment monitoring, i.e., 40 C.F.R. Part 258, Appendix II, the top ten to twenty tentatively identified compounds

("TICs"), as identified in previous monitoring at the ACL facility and at the Applied Materials facility, and any additional constituents currently monitored pursuant to the WMTX/City of Austin IWU monitoring program. (Tr. at Vol. 7 at 1364 ln.13 – 1365 ln.5.)

102. The flaws in the POC ground water monitoring system and list of monitoring constituents cannot be remedied through revisions to this application.

F. Ground Water and Surface Water Protection

- 103. TCEQ's MSW rules requires an applicant to demonstrate, among other things, that an application contains sufficient information to demonstrate compliance with drinking water protection and to not cause a discharge of solid waste or pollutants to or into water in the State.
- 104. There is evidence that the ground water beneath the ACL facility has been adversely impacted and that ground water contamination has migrated from the ACL facility to other adjacent properties. (Exh. TJFA 200 at 56 lns.6-17; Exh. TJFA 203 at 049; Exh. TJFA 205 at 1 (049); Tr. at Vol. 7 at 1344 lns.4-5; Exh. TJFA 209; Exh. TJFA 24.)
- 105. Solvents, spent acids, and high salinity industrial wash waters, such as those disposed in the IWU, have been shown, individually, to alter the structure of clays in a manner that would increase hydraulic conductivity. (Exh. TJFA 200 at 54 lns.21-24; Exh. TJFA 203 at 032-033; Tr. at Vol. 5 at 992 ln.11 993 ln.21.)

- 106. As early as 1980, volatile organic compounds (VOCs) were detected in ground water wells monitored at the site of the ACL facility. (Exh. TJFA 200 at 56 lns.6-12; Exh. TJFA 203 at 049.)
- 107. Sample analyses from the six ground water monitoring wells that were the very first ground water monitoring system approved for the site of the ACL facility, which was installed in 1982, indicated ground water contamination in all six of the wells. (Exh. TJFA 200 at 56 lns.13-17; Exh. TJFA 205 at 049.)
- 108. Analytical data obtained from WMTX's ground water monitoring of the IWU pursuant to the agreement between WMTX and the City of Austin indicates that the ground water near the IWU has been contaminated. VOCs, including 1,4-dioxane, methylene chloride, and 1,2,4-trichloro-benzene, have repeatedly been detected in the wells monitored in the vicinity of the IWU. (Exh. TJFA 24.)
- 109. Ground water contamination has been detected in ground water monitoring wells on the property of Applied Materials, Inc., a facility downgradient from the ACL facility. Ground water monitoring wells that are upgradient of the Applied Materials facility are contaminated and indicate an off-site source. Semi-volatile organic compounds (SVOCs) have been detected in ground water samples taken from the ground water monitoring wells at the Applied Materials facility. There is evidence that the IWU is the only known source of such compounds. (Tr. at Vol. 7 at 1344 lns.4-5; Exh. TJFA 200 at 59 lns.18-20; Exh. TJFA 200 at 60 ln.5 61 ln.8; Exh. TJFA 209.)

- 110. High total organic carbon (TOC) concentrations in ground water samples taken near the IWU at the ACL facility indicate releases of organic compounds from the area of the IWU. (Exh. 300 at 39 ln.12 40 ln.9.)
- 111. The iron concentrations and trends in calcium and sulfate (Ca/SO₄) ratios indicate a reducing environment due to the influence of sulfate-reducing bacteria and the presence of organic compounds in the ground water near the IWU, indicating that the anaerobic conditions present at the ACL facility are adversely affecting ground water quality. (Exh. 300 at 39 ln.12 40 ln.9.)
- 112. High total organic halogens (TOX) concentrations near the IWU indicate the presence of chlorinated solvents in the soil and ground water at the ACL facility. (Exh. 300 at 39 ln.12 40 ln.9.)
- 113. Trends in chloride and sodium (Cl/Na) ratios near the IWU, and throughout the ACL facility, indicate the influence of chlorinated solvents on the ground water chemistry. (Exh. 300 at 39 ln.12 40 ln.9.)
- 114. MSW buried in and over the IWU, in the Phase 1 unit, and beneath the creek running between the two units forms a continuous conduit through which leachate may pass from the IWU, under the creek, through the Phase 1 unit, and onto the adjoining old Travis County Landfill site. (Exh. APP-11 at WM-055377.)
- 115. Leachate seeps from the area of the IWU would result in discharges to the creek, allowing contaminants to leave the ACL facility in surface waters. (Exh. TJFA 200 at 96 $\ln .21 97 \ln .15$.)

- 116. Leachate seeps have been observed emanating at both the eastern and western ends of the Phase 1 unit. (Tr. at Vol. 7 at 1480 ln.14 1483 ln.8.)
- 117. Seeps from the Phase 1 unit would enter the creek in the area of the Phase 1 unit, which in turn empties into the tributary to Walnut Creek, which later discharges into the Colorado River. (Tr. at Vol. 10 at 2146 ln.4 2147 ln.1.)
- 118. The ACL facility has a history of poor erosion and sedimentation control, including poor vegetation of intermediate cover and problems with other source control methodologies such as silt fencing, mulching, and limiting area coverage of disturbed soil. (Exh. City of Austin CL-1 at 4 lns.67-70 & lns.74-80.)

G. Drainage and Floodplain Analyses

- 119. Commission rule requires that the existing or permitted drainage patterns not be adversely altered as a result of the development of a proposed landfill. (30 Tex. ADMIN. CODE § 330.305.)
- 120. Pursuant to TCEQ MSW rules, the existing conditions to be used for drainage analyses are the currently permitted condition. (Exh. TJFA 502 at 005.)
- 121. For the application, the existing condition should reflect the current Permit No. MSW-249C, as modified since its original issuance in 1991. (30 Tex. ADMIN. CODE § 330.305; Exh. TJFA 502 at 005.)

- 122. The 100-year peak flow rate leaving the ACL facility to the south was determined to be 977 cubic feet per second (cfs) in 1981 (Permit No. MSW-249A). (Exh. TJFA 503; Exh. TJFA 500 at tbl.1 at 33.)
- 123. The 100-year peak flow rate leaving the ACL facility to the south was determined to be 977 cfs in 1988 (Permit No. MSW-249B). (Exh. TJFA 500 at tbl.1 at 33.)
- 124. The 100-year peak flow rate leaving the ACL facility to the south was determined to be 977 cfs in 1991 (Permit No. MSW-249C). (Exh. TJFA 500 at tbl.1 at 33.)
- 125. The 100-year peak flow rate leaving the ACL facility to the south was determined to be 977 cfs in the 1996 modification to Permit No. MSW-249C. (Exh. TJFA 500 at tbl.1 at 33; Exh. TJFA 504.)
- 126. The 100-year peak flow rate leaving the ACL facility to the south was determined to be 977 cfs in the 2002 modification to Permit No. MSW-249C. (Exh. TJFA 500 at tbl.1 at 33; Exh. TJFA 505.)
- 127. The 100-year peak flow rate leaving the ACL facility to the south was determined to be 977 cfs in the 2003 modification to Permit No. MSW-249C. (Exh. TJFA 500 at tbl.1 at 33; Exh. TJFA 506.)
- 128. The 100-year peak flow rate leaving the ACL facility to the south, as shown to be the existing drainage conditions in the Application, was identified as 1,931 cfs. (Exh. TJFA 500 at tbl.1 at 33.)

- 129. The "existing drainage condition" for the 100-year peak flow rate leaving the ACL facility to the south as identified in the Application (1,931 cfs) is substantially greater than the 100-year peak flow rate for the same location in the 2003 modification to Permit No. MSW-249C (977 cfs). (Exh. TJFA 500 at tbl.1 at 33.)
- 130. The calculations included in the 1996 modification did not accurately reflect the substantial increases in runoff rates leaving the ACL facility to the south that resulted from that modification. (Exh. TJFA 500 at 13 lns.2-5.)
- 131. The incorrect calculation from the 1996 modification was carried through the 2002 modification and the 2003 modification. (Exh. TJFA 500 at tbl.1 at 33; Exh. TJFA 505; Exh. TJFA 506.)
- 132. While the methodology for conducting the drainage analyses in the application is different from the methodology used for the 1996, 2002, and 2003 modifications to Permit No. MSW-249C, only forty to fifty percent of the difference can be attributed to the change in methodology. (Tr. at Vol. 7 at 1555 ln.15 1556 ln.12.)
- 133. Allowing for the change in methodology, there was still an increase of over 500 cfs at the southern property boundary due to the 1996 modification to Permit No. MSW-249C. (Tr. at Vol. 7 at 1558 lns.4-14.)
- 134. An increase of 500 cfs is a significant increase in contravention of TCEQ MSW rules.
- 135. Drainage conditions have been adversely altered by the increase in peak flow rate leaving the ACL facility to the south, in violation of TCEQ MSW rules.

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136. The surface water drainage calculations in the application are based on inaccurate assumptions, thus resulting in the adverse alteration of drainage patterns.

H. TPDES Storm Water Issues

- 137. The ACL facility is required to obtain Texas Pollutant Discharge Elimination System ("TPDES") storm water permit coverage. (30 Tex. ADMIN. CODE § 330.61(k)(3).)
- 138. The storm water permit applicable to the ACL facility is TPDES General Permit No. TXR050000, also known as the Multi-Sector General Permit ("MSGP"). (Exh. City of Austin TF-5.)
- 139. The MSGP requires WMTX to develop a Storm Water Pollution Prevention Plan ("SWPPP"). (Exh. City of Austin TF-5.)
- 140. The Facility Surface Water Drainage Report contained in the application relies on enforceable requirements of the MSWP and the SWPPP to meet requirements of the MSW permit. (Exh. APP-202 at TC 610; 30 Tex. ADMIN. CODE § 330.165(h); Exh. City of Austin TF-5 at 74.)
- 141. Evidence was presented that the application fails to identify that erosion control structures sufficient to deal with the high concentrations of total suspended solids (TSS) in the runoff from the ACL facility. (Exh. City of Austin CL-1 at 7 lns.143-51.)
- 142. The MSGP contains a benchmark value concentrations of TSS in discharges from the ACL facility. The benchmark value is not an enforceable permit limitation, but the

MSGP requires any failure to meet the benchmark value be addressed and rectified. (Exh. City of Austin TF 5 at 48.)

- 143. A design of the ACL facility which is known to result in a violation of the benchmark value would be a violation of the MSGP and of the TPDES certification contained in the application. (Tr. at Vol. 10 at 2158 lns.11-20.)
- 144. An action that results in noncompliance with the MSGP would render also result in noncompliance with the MSW permit.

I. Unstable Area Location Restriction

145. With regard to unstable areas, TCEQ's MSW rules provide: "For the purposes of this section, an unstable area is defined to be a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of a landfill's structural components responsible for preventing releases from the landfill; unstable areas can include poor foundation conditions, areas susceptible to mass movement, and karst terrains. Owners or operators of new municipal solid waste landfills, existing landfill units, and lateral expansions located in an unstable area shall demonstrate that engineering measures have been incorporated into the landfill unit's design to ensure that the integrity of the structural components of the landfill unit will not be disrupted. The owner or operator shall submit the demonstration with a permit application or a permit amendment application. The demonstration must become part of the operating record once approved. The owner or operator shall consider the following factors, at a minimum, when determining whether an area is unstable: (1) on-site or local soil conditions that may result in significant differential settling; (2) on-site or local

geologic or geomorphologic features; and (3) on-site or local human-made features or events (both surface and subsurface)." (30 TEX. ADMIN. CODE § 330.559.)

- 146. To meet the requirements of 30 TEX. ADMIN. CODE § 330.559, the application relies on an "Unstable Area Assessment Report" from 1993. (Exh. APP-202 at TC 536.)
- 147. The "Unstable Area Assessment Report" contained in the application does not address the expansion area of the ACL facility and does not address that a new MSW unit will be constructed over an existing pre-Subtitle D waste disposal cell. (Exh. APP-202 at TC 536.)
- 148. The "Unstable Area Assessment Report" contained in the application does not consider the effect of the poor foundation condition (i.e., the old waste), on the structural components of the expansion landfill. (Exh. APP-202 at TC 536.)
- 149. The unstable area location restriction demonstration contained in the application is deficient and fails to meet the requirements of 30 Tex. ADMIN. CODE § 330.559.

J. "Piggyback" Liner Settlement Calculations.

- 150. The application proposes to construct an engineered composite liner over pre-Subtitle D waste disposed at the ACL facility.
- 151. The approach used in the application to predict waste settlement under the piggyback liner was to measure landfill elevation changes over a nine-year period at specific locations by the use of aerial topographical surveys.

- 152. The accuracy of the topographical surveys is unknown. (Tr. at Vol. 3 at 390 lns.3-6.)
- 153. The accuracy of the topographical surveys has a significant impact on the validity of the approach used to calculate waste settlement.
- 154. There were inconsistencies in how the data collected from the topographical surveys was utilized by WMTX. "Good" data points were used in the waste settlement study, but "bad" data points were excluded. "Good" data points were those tending to show that the ACL facility was decreasing in elevation, whereas "bad" data points were those showing that the ACL facility was increasing in height instead of settling. (Exh. APP-202 at TC 1213.)
- 155. WMTX's engineer of record, Charles G. Dominguez, P.E., did not have documentation to account for the increases in height.
- 156. The definition of "bad" versus "good" data was applied inconsistently throughout the waste settlement study. (Exh. APP-202 at TC 1213.)
- 157. Forty-three of the 112 data points (over thirty-eight percent) of the data points were excluded by WMTX. (Tr. at Vol. 3 at 410 lns.7-14.)
- 158. The time frame used in determining compression index (*i.e.*, slope of best-fit linear regression of time versus strain data) is problematic.

- 159. The application utilized short-time analyses using year 1998 as a beginning time point to analyze the empirical settlement data. (Exh. APP-202 at TC 1214; Tr. at Vol. 3 at 385 lns.6-7.)
- 160. The resulting short-time compression index was used to calculate long-time settlement.
- 161. If the larger compression index had been appropriately used, significantly more settlement would have been predicted.
- 162. Based on WMTX's waste settlement study, the eighty-foot column of waste which is intended to serve as the foundation for the piggyback liner is predicted to settle 5.3 feet. This is a total settlement amount of approximately 6.6% of the landfill waste column height that is predicted to occur over a forty-seven year period. (Exh. APP-202 at 1240; Tr. at Vol. 1 at 48 ln.7 49 ln.10; Tr. at Vol. 3 at 402 lns.8-20.)
- 163. Published authorities indicate that the settlement at a closed landfill facility is expected to be much greater than the results of the settlement calculations in the application. (Exh. TJFA 438.)
- 164. Many factors affect the magnitude of waste settlement, including the initial density or void ratio of the solid waste, amount of daily cover used, the waste compaction, the decomposable waste content, leachate levels and fluctuations, and other environmental factors, including moisture content, temperature within the landfill, whether landfill gases are present or generated, *et cetera*. (Exh. TJFA 438 at 442 (023).)

- 165. Settlement of MSW landfills can approach thirty percent of the initial fill height. (Exh. TJFA 438 at 204 (020) & 440 (021).)
- 166. The conclusions of the waste settlement study of the application are contrary to what is predicted by published authorities.

K. Slope Stability

- 167. The application contains information reflecting slope stability analyses.
- 168. Slope stability analyses are dependent on the accuracy of the inputs including the shear strengths of the materials analyzed.
- 169. To ensure that valid "factors of safety" are derived from slope stability analyses, the strengths of the materials involved in the landfill design need to be critically evaluated using conservative assumptions.
- 170. The ACL facility is sited in Taylor marl clays.
- 171. Two well-known slope failures in Texas (at Waste Management's Skyline Landfill near Dallas and at the City of Irving Landfill) took place in the same geologic materials present at the ACL facility. (Exh. TJFA 400 at 79 ln.13 82 ln.4.)
- 172. Slope failures have occurred at the ACL facility. (Exh. TJFA 400 at 92 ln.1 97 ln.17; Exh. TJFA 433; Exh. TJFA 434; Exh. TJFA 435; Exh. TJFA 436; Exh. TJFA 437.)

- 173. Slope failures have occurred at the adjacent BFI Sunset Farms Landfill. (Exh. TJFA 400 at 107 lns.22-25.)
- 174. The application relies on "peak" soil strengths for design purposes, instead of "residual" strength for many of the slope stability calculations. (Exh. TJFA 400 at 53 lns.13-17.)
- 175. Recognized authorities identify concern with the use of "stiff-fissured clay" soils and discuss slope failures involving these types of soils. (Exh. TJFA 411 at 49 (021).)
- 176. Boring logs contained in the application indicate that stiff-fissured clays are present at the ACL facility. (Exh. APP-202 at TC 1546, TC 1548, TC 1550, TC 1553, TC 1555, TC 1558-59; TC 1561, TC 1563, TC 1566, TC 1570, TC 1578, TC 1587, TC 1618, TC 1676, & TC 1677.)
- 177. WMTX's engineer of record, Charles G. Dominguez, P.E., testified that if stiff-fissured clays are present at the ACL facility, it would change his opinion regarding the residual strength of the clays in the area and that he would have concern about potential stability. (Tr. at Vol. 12 at 1270 lns.11-19.)
- 178. The application fails to demonstrate that slopes will be stable during all phases of landfill construction, waste disposal, and closure.
- 179. There is only one soil strength sample required pursuant to the application for an entire landfill cell. (Exh. APP-202 at TC 1101.)

- 180. WMTX's slope stability analyses utilized unconservative assumptions resulting in unrealistic results for the conditions analyzed.
- 181. 30 TEX. ADMIN. CODE § 330.559 requires landfill permit applicants to demonstrate that natural and human-induced events will not impair the integrity of some or all of the landfill's structural components. (30 TEX. ADMIN. CODE § 330.559.)

L. Landfill Gas Monitoring

- 182. Commission rules require that owners or operators of a landfill facility 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 defined by the legal description in the permit." (30 Tex. ADMIN. CODE § 330.371(a)(2).
- 183. The landfill gas monitoring system proposed in the application has an approximately 3,000-foot long gap in perimeter coverage along the southern boundary of the ACL facility. (Exh. APP-202 at TC 3169 & TC 3172.)
- 184. WMTX attempted to justify the absence of permanent landfill monitoring probes along the "gap" at the facility boundary based on the "presence in this area of the closed Travis County Landfill (MSW-684) and the absence of off-site receptors." (Exh. TJFA 8 at 19.)
- 185. There are no exceptions recognized to the perimeter monitoring requirement of 30 Tex. ADMIN. CODE § 330.371(a)(2). (30 Tex. ADMIN. CODE § 330.371(a)(2).)
- 186. There are off-site receptors on the site of the old closed Travis County Landfill across from the "gap" portion of the facility boundary. (Exh. APP-202 at TC 3172.)

- 187. The presence of waste is no reason not to monitor for landfill gas. Waste is another "matrix" recognized by 30 Tex. ADMIN. CODE § 330.371(a)(2). (30 Tex. ADMIN. CODE § 330.371(a)(2); Tr. at Vol. 11 at 2470 lns.8-13.)
- 188. Landfill gas monitoring is required along the southern boundary of the ACL facility. (30 Tex. Admin. Code § 330.371(a)(2).)
- 189. The landfill gas monitoring system designed for and included in the application fails to comply with 30 Tex. ADMIN. CODE § 330.371(a)(2).

M. Ponding of Water over Waste

- 190. TCEQ's MSW rules provide that the ponding of water over waste on a landfill, regardless of its origin, must be prevented. (30 Tex. ADMIN. CODE 330.167.)
- 191. There is a detention pond constructed in the creek exiting the ACL facility near surface water drainage point CP7.
- 192. Logs of borings of the ACL facility indicate that there is waste buried under the detention pond at depths up to twenty-two feet. (Exh. APP-202 at TC 2400, TC 2433, & TC 2438; Tr. at Vol. 5 at 963 lns.2-24; Tr. at 970 ln.15 971 ln.8.)
- 193. The detention pond is constructed over approximately eighteen to nineteen feet of waste. Exh. APP-202 at TC 616, TC 2400, & TC 2433.)

194. The detention pond is water ponded over waste buried at the ACL facility in contravention of 30 Tex. ADMIN. CODE § 330.167.

N. Closure and Post-Closure Requirements

- 195. The Commission's post-closure care requirements are found at 30 TEX. ADMIN. CODE § 330.463(b).
- 196. The ACL facility fails to satisfy the structural integrity requirements for the piggyback liner area and for sideslope stability and thus is in violation of 30 Tex. ADMIN. CODE § 330.463(b)(1)(A).
- 197. Ponding of water occurs over waste in the filled-in creek between the IWU and the Phase 1 unit, and the final cover and erosion requirements will not be met due to inaccurate surface water flow calculations and improper final cover soils and thus the application does not comply with applicable post-closure requirements in violation of 30 Tex. ADMIN. CODE § 330.463(b)(1)(A).
- 198. The point of compliance ground water monitoring system is incapable of monitoring releases from the IWU, the Phase 1 unit, the creek between those two units, and from the area to the west of ground water monitoring well MW-13 on the north property boundary in violation of 30 Tex. ADMIN. CODE § 330.463(b)(1)(C).
- 199. The facility does not monitor landfill gas at the southern property boundary south of the Phase 1 unit or along portions of the north property boundary in violation of 30 Tex. ADMIN. CODE § 330.463(b)(1)(D).

O. Wetlands

- 200. TCEQ rules require the wetland survey to consider the entirety of the ACL facility.

 (30 Tex. ADMIN. Code § 330.61(m)(3).)
- 201. Evidence was presented that there are wetlands plants located in the area between the IWU and the Phase 1 unit. (Exh. City of Austin 10; Exh. City of Austin 11; Tr. at Vol. 6 at 1118 lns.5-14.)
- 202. The wetland survey in the application focused on the expansion area of the ACL facility and only looked generally at the rest of the ACL facility. (Tr. at Vol. 6 at 1114 lns.8-10.)
- 203. The area where the wetlands vegetation occurs is a drainageway between the Phase 1 unit and the IWU. (Tr. at Vol. 8 at 1748 lns.14-16.)
- 204. Historical topographic maps show that this area is part of a natural creek/drainage way that runs through the ACL facility. (Exh. TJFA 211 at 001 & 002.)
- 205. The location where the wetlands vegetation occurred meets the common criteria for jurisdictional wetlands—wetlands vegetation, frequent flooding (ponding), and on-channel of a natural drainageway.
- 206. The wetlands survey in the application is deficient because it did not fully delineate wetlands within the entirety of the permit boundary of the ACL facility.

P. Land Use Compatibility

- 207. The Land Use Analysis contained in the application was prepared based on the assumption that the ACL facility is operated in compliance with TCEQ rules. (Tr. at Vol. 4 at 567 lns.23-25.)
- 208. The Land Use Analysis failed to account for the fact that the ACL facility has previously been used for the disposal of industrial and hazardous waste. (Tr. at Vol. 4 at 664 lns.5-18.)
- 209. The Land Use Analysis failed to account for the affects of migrating contaminated ground water onto adjacent properties from the ACL facility.
- 210. WMTX's land use compatibility expert testified that contaminants migrating off of the ACL facility could affect his analysis and that contaminated ground water migrating offsite from the ACL facility could affect his land use analysis. (Tr. at Vol. 4 at 788 ln. 3 790 ln.25.)
- 211. WMTX's land use compatibility expert testified that if there was a leaking hazardous waste unit on site at a MSW facility and that unit was causing ground water contamination, "he would have difficulty determining that we've got land use compatibility." He continued: "Had I discovered it after the fact, I might have to revisit my findings." (Tr. at Vol. 4 at 793 at lns.19-20.)
- 212. The Land Use Analysis included in the application is based on false assumptions and ignores the operational and compliance history of the ACL facility.

213. The Land Use Analysis included in the application is flawed and does not comply with TCEQ's regulatory requirements.

Q. Conformance with Regional Solid Waste Management Plan

- 214. WMTX failed to prove that the landfill conforms to the Capital Area Council of Government's ("CAPCOG") Regional Solid Waste Management Plan.
- 215. The CAPCOG Executive Committee found determined that the proposed expansion of the ACL facility will not conform with current and future land use in the area. (City of Austin Exh. JW-5 at 2.)
- 216. In reaching its land use determination, CAPCOG considered land use compatibility, conformance with CAPCOG's Regional Solid Waste Management Plan ("RSWMP"), and local facility siting concerns. (Exh. City of Austin JW-5.)
- 217. CAPCOG reviewed the application pursuant to the RSWMP that had been adopted by the CAPCOG Executive Committee and that was later approved by the Commission. (Exh. City of Austin JW-5 at 5-8.)

R. Unauthorized Construction of the Expansion of the ACL Facility

- 218. Physical construction of a new lateral expansion of a MSW management facility is prohibited until a permit for such activities has been issued. (30 Tex. ADMIN. CODE § 330.7(a).)
- 219. WMTX has constructed a sedimentation and detention pond in the expansion area of the ACL facility. (Exh. TJFA 400 at 186 lns.3-4 & 193 lns.3-5; Exh. TJFA 451.)

- 220. The sedimentation and detention pond constructed in the expansion area is the pond described in the application to be built in the expansion area of the ACL facility. (Exh. APP-202 at TC 599 & TC 600.)
- 221. The sedimentation and detention pond is a "structural component," as that term is defined in 30 Tex. ADMIN. CODE § 330.3(152). (30 Tex. ADMIN. CODE § 330.3(152).)
- 222. Construction of the pond is in violation of 30 Tex. ADMIN. CODE § 330.7(a).

S. Reporting and Transcription Costs

- 223. Applicant will be the primary beneficiary of the approval of the application.
- 224. All parties participated in the hearing. Other protestants relied on TJFA to argue large portions of the case against the application.
- 225. As statutory parties to the proceedings who cannot appeal the Commission's decision, the Executive Director and the Office of Public Interest Counsel, by rule, cannot be assessed reporting or transcription costs. Tex. WATER CODE §§ 5.228, 5.273(a), 5.275, and 5.356; 30 Tex. ADMIN. CODE § 80.23(d)(2).
- 226. The Executive Director's participation was to be limited to providing information to complete the administrative record.
- 227. Applicant was billed \$23,506.90 in reporting transcription costs for the preliminary hearing and hearing on the merits. \$9,178.40 of the total cost of \$23,506.90 was due to WMTX's requested expedited delivery of the transcript.

PROTESTANT TJFA, L.P.'S REPLY BRIEF

228. All transcript costs should be assessed to WMTX.

IX. CONCLUSIONS OF LAW

TJFA presents to the Administrative Law Judge the following proposed Conclusions of Law:

- 1. The Commission has jurisdiction over the disposal of municipal solid waste and the authority to issue or deny Permit No. MSW-249D under Tex. HEALTH & SAFETY CODE § 361.061.
- 2. The State Office of Administrative Hearings has jurisdiction to conduct a hearing and to prepare a Proposal for Decision. Tex. Gov't Code § 2003.47.
- 3. The IWU, Phase 1 unit, and the area where waste is buried beneath the creek bed are all "solid waste management units" within the ACL facility.
- 4. By failing to properly identify drainage patterns or to analyze substantively the impact that the proposed landfill will have WMTX has failed to comply with 30 Tex. ADMIN. Code § 330.305, which requires a demonstration that existing drainage patterns will not be adversely altered by proposed landfill development.
- 5. Evidence contained in the application and adduced in the Hearing on the Merits demonstrates that the ACL facility is not protective of ground water, in violation of 30 Tex. ADMIN. CODE § 330.15(h)

- 6. The point of compliance ground water monitoring plan described in the application fails to comply with 30 Tex. ADMIN. CODE § 330.403.
- 7. The application violates TEX. WATER CODE § 26.121(2) and 30 TEX. ADMIN. CODE § 330.15(h) because, as designated, contaminated ground water may be discharged from the landfill into waters in the state.
- 8. The slope stability analyses provided in the application failed to demonstrate that the proposed expansion would be sufficiently stable, in violation of 30 Tex. ADMIN. CODE §§ 330.559.
- 9. The ground water monitoring system proposed in the application failed to meet the requirements of 30 Tex. ADMIN. CODE §§ 330.401 330.421.
- 10. Evidence contained in the application demonstrates that the ACL facility is not protective of surface water, in violation of 30 Tex. ADMIN. CODE §§ 330.15(h), 330.63, & 330.301 330.307.
- 11. WMTX has not shown that the ACL facility will not cause a discharge of solid waste or pollutants adjacent to or into the water of the state in violation of TEX. WATER CODE § 26.121, as is required by 30 TEX. ADMIN. CODE § 330.15(h).
- 12. The landfill gas monitoring system described in the application fails to comply with 30 Tex. ADMIN. CODE § 330.371(a)(2).

- 13. WMTX allows water to pond over waste at the ACL facility in violation of 30 Tex. ADMIN. CODE § 330.167.
- 14. The expansion and operation of the ACL facility is a land use that is incompatible with land uses in the area of the site.
- 15. The application failed to prove that the expanded ACL facility will pose no reasonable probability of adverse effects on the health, welfare, environment, or physical property of nearby residents or property owners.
- 16. Pursuant to Tex. Health & Safety Code § 363.066(a), a permit application must conform to the goals and objectives of the Regional Solid Waste Management Plan unless a variance is granted by TCEQ.
- 17. The Application fails to conform to the CAPCOG Regional Solid Waste Management Plan, and therefore, is in violation of Tex. Health & Safety Code § 363.066(a).
- 18. Applicant failed to demonstrate compliance with the Regional Solid Waste Management Plan.
- 19. The application failed to demonstrate that it 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, engineering design, ground water protection, ground water monitoring, surface water protection, erosion control, slope stability, odor control, and other technical considerations.

- 20. WMTX failed to demonstrate that the expansion and operation of the ACL facility will comply with the requirements of the Texas Solid Waste Disposal Act, HEALTH & SAFETY CODE § 361.011 *et seq*.
- 21. The ACL facility is an "open dump," as that term is defined at 30 TEX. ADMIN. CODE § 330.15(b).
- 22. The application does not meet the requirements of TCEQ for issuance of a permit to vertically expand the ACL facility.
- 23. The evidence in the record concerning the application is insufficient to meet the requirements of TCEQ for issuance of a permit to expand the ACL facility.
- 24. The proposed expansion of the ACL facility will not meet all of the applicable requirements of TCEQ's rules found at 30 Tex. ADMIN. CODE Chapter 330 applicable to the application.
- 25. Based on the foregoing findings of fact and conclusions of law, Applicant failed to demonstrate that construction and operation of the proposed landfill will not result in adverse effects on the health, welfare, environment, or physical property of the public and failed to demonstrate that the Application complies with all statutory and regulatory requirements.
- 26. Pursuant to the authority of and in accordance with applicable laws and rules, TCEQ should deny the issuance of Permit No. MSW-249D.

X. ORDERING PROVISIONS

TJFA presents to the Administrative Law Judge the following proposed Ordering Provisions:

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

- 1. The application by Waste Management of Texas, Inc., for Permit No. MSW-249D authorizing the expansion of and operation of a Type I municipal solid waste facility in Travis County, Texas is denied and all exceptions inconsistent therewith be overruled.
- 2. Waste Management of Texas, Inc. shall pay the total transcript costs of the contested case hearing.
- 3. The effective date of this Order is the date the Order is final, as provided by 30 Tex. ADMIN. CODE § 80.273 and the Texas Administrative Procedure Act, Texas Government Code § 2001.144.
- 4. The Chief Clerk of the Texas Commission on Environmental Quality shall forward a coy of this Order to all parties.
- 5. If any provision, sentence, clause, or phrase of this Order is for any reason held to be invalid, the invalidity of any portion shall not affect the validity of the remaining portions of the Order.
- 6. All other motions, requests for entry of specific Findings of Fact or Conclusions of Law, and other requests for specific or general relief, if not expressly granted herein, are hereby denied for want of merit.

PROTESTANT TJFA, L.P.'S REPLY BRIEF

XI. CONCLUSION AND PRAYER

For the reasons citied in this Reply Brief and its previous *Closing Argument*, and based on the evidence presented at the Hearing on the Merits, TJFA, L.P. respectfully requests that the Administrative Law Judge include a recommendation in the Proposal for Decision for denial of Waste Management of Texas, Inc.'s application to expand the Austin Community Recycling and Disposal Facility. TJFA urges the Administrative Law Judge to find that WMTX's application is insufficient under Texas law and the applicable TCEQ regulations, and in turn recommend that Permit No. MSW-249D be denied and that all transcription costs be assessed against WMTX.

Respectfully submitted,

BIRCH, BECKER & MOORMAN, LLP

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By:

ERICH M. BIRCH

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ATTORNEYS FOR TJFA, L.P.

CERTIFICATE OF SERVICE

I certify that a true and correct copy of the foregoing document has been served upon all counsel of record via facsimile, e-mail transmission, first class mail, Federal Express overnight delivery, or hand-delivery addressed to:

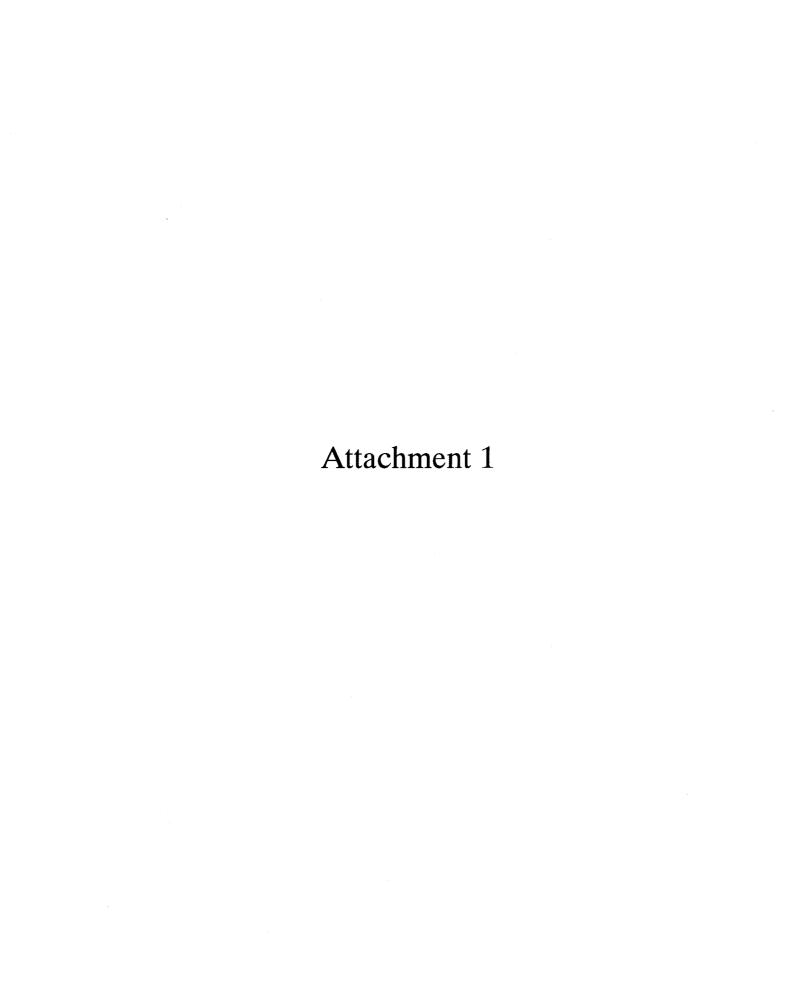
The Honorable Roy Scudday Administrative Law Judge State Office of Administrative Law 300 W. 15th Street, Suite 504 P.O. Box 13025 Austin, Texas 78711 Fax: (512)	
Mr. Bryan J. Moore Mr. John A. Riley Vinson & Elkins, LLP 2801 Via Fortuna, Suite 100 Austin, Texas 78746-7568	Representing Waste Management of Texas, Inc.
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Ms. Amie Richardson Litigation Division (MC-175) Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087 (mail) 12100 Park 35 Circle, Building A Austin, Texas 78753 (delivery)	Representing the Executive Director of the Texas Commission on Environmental Quality
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Mr. Paul M. Terrill The Terrill Firm, P.C. 810 West 10th Street Austin, Texas 78701 Fax: (512) 474-9888 pterrill@terrill-law.com	Representing Giles Holdings
Docket Clerk Office of Chief Clerk (MC-105) Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087 (mail) 12100 Park 35 Circle, Building F Austin, Texas 78753 (delivery) Fax: (512) 239-3311	

On this the 29th day of May, 2009,

ERICH M. BIRCH



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



APPLICATION OF WILLIAMSON COUNTY FOR A PERMIT AMENDMENT TO EXPAND A TYPE I MUNICIPAL SOLID WASTE Landfill Facility; (PERMIT NO. MSW-1405B)



AN ORDER

Granting the Application for Permit No. MSW-1405 to Williamson County; TCEQ Docket No. 2005-0337-MSW; SOAH Docket No. 582-06-3321

On February 11, 2009, the Texas Commission on Environmental Quality (Commission or TCEQ) considered the application of Williamson County (Williamson County or Applicant) for Permit No. MSW-1405B to authorize Williamson County to laterally and vertically expand the existing Williamson County Recycling and Disposal Facility in Williamson County, Texas. Travis Vickery and Henry D. Card, Administrative Law Judges (ALJs) with the State Office of Administrative Hearings (SOAH), presented a Proposal for Decision (PFD), which recommended that the Commission grant Williamson County's Application for Permit No. MSW-1405B. After considering the ALJs' PFD, the Commission adopts the following Findings of Fact and Conclusions of Law:

FINDINGS OF FACT

General Findings/Procedural Issues

- 1. The Applicant is Williamson County, 301 S.E. Inner Loop, Suite 109, Georgetown, Texas 78626.
- 2. The Facility is the Williamson County Recycling and Disposal Facility (Williamson County RDF, Landfill, or Facility), which is located at 600 Landfill Road, Hutto, Texas 78220 and is operated by Waste Management of Texas, Inc. (WMTX).

- 3. The Facility is located northeast of the City of Hutto in Williamson County on the west side of FM 1660 approximately one mile north of the FM 1660 and CR 133 intersection.
- 4. The Facility is an existing Type I Municipal Solid Waste (MSW) Landfill consisting of approximately 202 acres and permitted pursuant to Permit No. MSW-1405A.
- 5. Applicant filed Application No. MSW-1405B (the Application), which requests an amendment of Permit MSW-1405A to laterally expand the existing 202-acre Facility to approximately 575 acres and to vertically expand the Facility from 766 feet above Mean Sea Level (MSL) to approximately 840 feet above MSL. The Application proposes to expand the actual limit of waste from approximately 160 acres to approximately 500 acres.
- 6. Williamson County owns the 575-acre Facility site.
- 7. The Facility is currently authorized to accept municipal solid waste, Class 2 and Class 3 industrial solid waste, and Class 1 industrial waste that is Class 1 only because of asbestos content.
- 8. The Application was compiled by RJR Engineering, Ltd., L.L.P. pursuant to the Notice of Engineer's Appointment prepared by Applicant. The Application was developed under the direction and supervision of Williamson County Judge John Doerfler, the sitting Williamson County Judge at the time the Application was filed with the TCEQ.
- 9. The seal of James R. Murray, a professional engineer registered in Texas, was affixed to all engineering plans and drawings and on the Application cover pages.
- 10. Parts I and II of the Application were initially submitted to the TCEQ on December 10, 2003. On December 22, 2004, Parts III and IV were submitted to the TCEQ and, thereafter, consolidated with Parts I and II.

- 11. Notice that the Application was deemed administratively complete by the Executive Director (ED) of the TCEQ was issued on May 13, 2005. Notice of the technically complete determination was issued on March 24, 2006.
- 12. The Amended Notice of Receipt of Application and Intent to Obtain Municipal Solid Waste Permit Amendment containing the information specified in 30 Tex. ADMIN. CODE § 39.11 was published on June 28, 29, and 30, 2005, in the Round Rock Leader, Williamson County Sun, and Austin American-Statesman.
- 13. The Notice of Application and Preliminary Decision containing the information required by 30 Tex. ADMIN. CODE § 39.11 was published on April 12, 13, and 16, 2006, in the Austin American-Statesman, Round Rock Leader, and Williamson County Sun.
- 14. The Notice of Hearing on the Application was published on September 21, 22, and 24, 2006, in the Round Rock Leader, Williamson County Sun, and Austin American-Statesman.
- On September 19, 2006, the TCEQ Chief Clerk mailed the Notice of Hearing on the Application to the then-identified participants to the proceeding, to other potentially affected persons identified in the Application, to various state and local agencies and officials, to state legislators for the districts in which the Facility is located, and to other persons specified in 30 Tex. Admin. Code § 39.13. Potentially affected persons receiving notice generally included those landowners whose property was within one mile of the Facility. All persons intending to request party status at the hearing were required to attend the hearing and demonstrate how he or she would be adversely affected by the application in a way not common to members of the general public.
- 16. A preliminary hearing commenced at 10:00 a.m. on October 26, 2006 at the SOAH hearing rooms, William P. Clements Building, 300 West 15th Street, Austin, Texas 78701.

- 17. The following persons were named as parties to the proceeding: the Applicant; the ED; the Office of Public Interest Council (OPIC); TJFA, L.P. (TJFA); Mount Hutto Aware Citizens (MHAC); the Jonah Water Special Utility District (Jonah Water); and the Hutto Citizens Group and the Heritage on the San Gabriel Homeowners Association (collectively HCG).
- 18. A contested case hearing on the Application was conducted on August 20-30, 2007, at SOAH, William Clements Building, 300 West 15th Street, Austin, Texas 78701. The record closed on January 11, 2008.

Sufficiency of Permit Application and Draft Permit

- 19. The conditions which exist at and near the Facility are favorable to the development of an MSW landfill designed, constructed, and operated in a manner considered standard by engineers specializing in the field and which are embodied in the MSW rules. There are no site-specific conditions that require special design consideration. The site is well-suited to the design, construction, and operation of an MSW landfill.
- 20. The Application is signed by Williamson County Judge John Doerfler, the sitting Williamson County Judge at the time the Application was filed.
- 21. Applicant coordinated with all appropriate agencies, officials, and authorities that may have a jurisdictional interest in the Application.
- 22. Applicant has provided complete information concerning permits or construction approvals received or applied for.
- 23. The ED has prepared a draft permit for Permit No. MSW-1405B (Draft Permit).

Compliance History

24. The ED prepared compliance summaries of Williamson County, WMTX, and the Facility.

- 25. Williamson County's compliance history is classified as average with a rating of 3.17.
- 26. WMTX's compliance history is classified as average with a rating of 3.17.
- 27. The Facility is rated high.

The Identity of the Owner, Operator, and Applicant

- 28. Williamson County is the owner of the Williamson County RDF.
- 29. Williamson County has been the owner of the Williamson County RDF since the Facility was first authorized to receive municipal solid waste on December 23, 1981, by the Texas Department of Health under Permit No. 1405.
- 30. Williamson County is the sole Applicant for Permit No. MSW-1405B and is the sole permittee under the existing permit for the Williamson County RDF, Permit No. MSW-1405A.
- 31. WMTX operates the Landfill pursuant to a contract with Williamson County and has operated the Williamson County RDF for approximately 14 years.
- 32. WMTX submitted the Application to the Commission on behalf of Williamson County.

Land Use

- 33. The Facility is not located within the city limits or extraterritorial jurisdiction of any incorporated city. No zoning ordinances apply to the Landfill. No approval as a non-conforming use or special permit from a local government is required.
- 34. Within one mile of the Facility, the land is used primarily as undeveloped range and farmland. Out of a total of 4574 acres: 4103 acres are agricultural; 339 acres are residential

rural large-lot or homestead with agricultural activities; and 123 acres are commercial/industrial.

- 35. Fewer than 150 residences are located within one mile of the Facility. No schools, licensed child care facilities, churches, hospitals, lakes, or recreational areas are located within one mile of the site. A small cemetery is located approximately 2,500 feet southeast of the site. There are four commercial/industrial establishments within one mile of the Facility. The Texas Historical Commission (THC) was contacted regarding the presence of cultural resources that might be impacted by the Landfill. THC determined that an archeological survey is not necessary and it has no archeological concerns related to the expansion. There is one house on-site that is eligible for listing in the National Register of Historic Places, but the house is located within a buffer zone of the proposed expansion and will not be destroyed as a result of Landfill operations.
- 36. Williamson County's population is growing at an estimated rate of 3.4% per year.
- The Williamson County RDF is located 1.6 miles north of the City of Hutto, Texas (Hutto). Hutto has grown over 500% in population since the year 2000 when its population was 1,250 persons as compared to its 2006 population of 7,977 persons. Hutto's growth is omnidirectional, including to the north. Hutto can adjust to, and incorporate the Facility into its growth plans.
- 38. The City of Hutto's 2006 Growth Guidance Plan classifies the area comprising the Landfill as "institutional," which includes uses by government, school, church, and other tax-exempt entities. The Landfill is an "institutional" use. The areas immediately to the east and west of the Landfill are classified as "business park" and "commercial."
- 39. In August of 2007, the Hutto Independent School District (HISD) purchased a 100 acre tract within one mile of the Landfill. At that time, HISD was aware of the Landfill and classified the Landfill as it currently exists as a compatible land use. The proposed expansion of the

Landfill under the Application does not present nuisance, scavenger, or student traffic-safety issues beyond those already considered acceptable by HISD.

- 40. A TXU Lone Star Gas Co. gas pipeline easement exists along the northern property boundary and two Jonah Water waterline easements are located along the western property boundary.
- 41. No oil or gas wells were identified within 500 feet of the permit boundary. TCEQ water well records indicate there are three water wells within one mile of the proposed permit boundary. The United States Geological Survey map indicates an additional four wells within one mile of the Facility. Eighteen unrecorded wells were located by means of a field survey. Of these, five were drilled and 13 were hand-dug; one well is used at a commercial establishment and the others are used for irrigation, livestock, or are inactive. None of the unrecorded wells are used for domestic purposes.
- 42. The development and operation of the proposed expansion of the existing Williamson County RDF will not result in the destruction or adverse modification of critical habitat or cause or contribute to the taking or harming of any endangered species. The United States Department of the Interior Fish and Wildlife Service does not anticipate the Landfill expansion to adversely affect any endangered species or their critical habitat. The Texas Parks and Wildlife Department (TPWD) does not anticipate adverse impacts to any rare, threatened, or endangered species from the proposed project activities. A biological assessment of the Williamson County RDF and proposed expansion area was conducted and revealed the presence of no endangered or threatened species or their critical habitat within the subject property or any potential critical or essential habitat.

Transportation

43. Access to the Williamson County RDF is provided via FM 1660, which runs north/south along the east side of the site. FM 1660 consists of two 12-foot lanes with three-foot

improved shoulders on each side. FM 1660 is designed with a vehicular weight limit of 80,000 pounds, which is greater than the weight of the heaviest vehicle anticipated to use the Facility.

- 44. The existing Landfill is served by an abandoned portion of CR 128 from FM 1660. By resolution, Williamson County changed the name of this road from CR 128 to Landfill Road.
- The Texas Department of Transportation (TxDOT) provided daily traffic volumes in the vicinity of the Landfill for FM 1660 north of CR 100 and south of SH 29 for 2003. The data represent the two-way, 24-hour daily traffic volumes. The data indicates that 1,750 vehicles per day south of the Facility and 1,400 vehicles per day north of the Facility from SH 29 use FM 1660. Given that there are no significant roadways or other significant traffic sources between these two traffic study locations, the majority of the Landfill traffic will enter the Facility from the south. TxDOT estimates that the traffic volumes in the vicinity of the Landfill will increase at a rate of 3.0% per year. Landfill traffic is anticipated to increase at approximately the same rate as Williamson County's population, which is approximately 3.4% per year based on the Capital Area Council of Governments (CAPCOG) data. The maximum percent of traffic attributed to the Landfill in 2050 will be approximately 18%.
- 46. TxDOT has determined that the adequacy and design capacities of the roadways adjacent to and surrounding the site are sufficient to safely accommodate any additional traffic generated by the proposed Facility.
- 47. No public use airport is located within five miles of the proposed Landfill boundary. A small private airstrip is located approximately 1.5 miles northwest of the Facility. No bird hazards to aircraft associated with the existing Facility have been reported and none are expected with the proposed amended design.
- 48. The nearest public airport is the Taylor Municipal Airport, located approximately six miles to the southeast of the Facility. The permit boundary is not located within 10,000 feet of the

end of an airport runway servicing turbojet aircraft or within 5,000 feet of the end of a runway serving piston-type aircraft. Applicant received a letter from the U.S. Department of Transportation Federal Aviation Administration stating that there is "no objection to the proposal from the standpoint of potential bird hazards to aircraft operating at the Taylor Municipal Airport."

Geology and Groundwater Protection

- 49. The Landfill site is in south-central Williamson County, in the Grand Prairie Physiographic Province (a.k.a. rolling prairie).
 - 50. The rolling prairie is an elongated area of grassland country underlain by thin, stony, and gently sloping to sloping soils. Those soils were formed in limestone or limestone and marl of upper Cretaceous rocks, which outcrop in the region.
 - 51. The only river in the county is the San Gabriel, which is part of the Brazos River drainage basin.
- 52. More specifically, the topography of the area surrounding the site is gently sloping valleys trending from a topographical high on the western permit boundary near the northwest corner of the original 122-acre Landfill.
- 53. The surface water features closest to the site are Mustang Creek, an intermittent tributary of Brushy Creek that flows from northwest to southeast along the southern portion of the permitted Landfill, and an unnamed tributary of the San Gabriel River, located in the northern portion of the permitted Landfill.
- 54. Approximately three-fourths of the site drains southwest toward Mustang Creek; the remainder drains to the north, toward the unnamed tributary.

- 55. There is no unfavorable topography in the area that would limit the Landfill's design, construction, or operation.
- 56. The lowermost aquifer capable of providing usable groundwater is the Edwards aquifer.
- 57. The approximate depth of the top of the Edwards aquifer is 600 to 700 feet below the ground surface (bgs), or 550 feet below the lowest excavation proposed for the Landfill.
- 58. The regional geology should not require any limits to be placed on the design, construction, or operation of the proposed Landfill.
- 59. There are no active faults at or near the Williamson County Landfill site.
- 60. There are no possible seismic impact zones, subsidence, unstable areas, erosion, or wetlands that should cause any limitations to be placed on the design, construction, or operation of the proposed Facility.
- A subsurface stratigraphy investigation was conducted to determine the geological feasibility and soundness of constructing the Facility in the area in question.
- 62. A groundwater investigation was conducted to determine reliable aquifer characteristics and performance data.
- 63. Data compiled from both investigations were used to design the groundwater monitoring network, the purpose of which is to detect any release of contaminants into the groundwater beneath the Facility.
- 64. Geologist Katherine Gallup and others under her direction performed field activities for the subsurface investigations of the proposed Williamson County Landfill expansion from April 13 through July 27, 2004.

- 65. Ms. Gallup and her colleagues also reviewed previous subsurface investigations conducted from 1989 through 1991. Data from soil borings and piezometers installed during those investigations were analyzed to determine the subsurface conditions.
- 66. Previous investigations provided an adequate characterization of the subsurface conditions beneath the existing Landfill.
- 67. To investigate the subsurface conditions for the proposed expansion area, Ms. Gallup and her colleagues reviewed the earlier data for the existing Landfill, then examined aerial photographs and topographic maps covering five decades. They saw no features to indicate subsurface discontinuities. They then developed a drilling program, consisting of 44 borings at 35 different locations within the expansion area.
- 68. Three major stratigraphic units underlie the expansion site down to approximately 592 feet above MSL.
- 69. In general, those stratigraphic units consist of (1) surficial clay, which generally occurs between 717 and 630 feet above MSL, with thickness ranging from 8.6 to 60 feet, (2) claystone, typically between 705 to 630 feet above MSL, with thickness ranging from 5 to 49 feet, and (3) limestone, encountered between 668 to 607 feet above MSL.
- 70. A total of 44 borings have been drilled at the Facility. Williamson County drilled 17 soil borings within the expansion area to a depth of at least 5 feet below the deepest planned excavation and 18 borings to a depth of at least 30 feet below the deepest planned excavation. Nine shallow borings were advanced and completed as piezometers adjacent to deeper, completed piezometers, to determine water-level elevations in the uppermost aquifer and in a potentially hydraulically, interconnected, underlying aquifer, and to perform a series of hydraulic conductivity tests as part of the groundwater investigation.

- 71. After the borings were completed and samples collected, 22 of the borings were sealed. The remaining 22 were converted to piezometers, 13 of which monitor water elevations in the surficial clay and nine of which monitor the lower claystone/upper limestone unit.
- 72. The borings conducted at the expansion site were sufficiently deep to identify the uppermost aquifer, including its lowest level.
- 73. The first zone of the uppermost aquifer occurs in the surficial clay unit and extends into the upper zone of the claystone unit. A lower zone, hydraulically connected to the upper one and therefore considered part of the uppermost aquifer, occurs at the base of the claystone unit into the upper portion of the limestone.
- 74. The surficial clay and claystone are the only units that will be in contact with the proposed Landfill excavation.
- 75. The majority of the base grades of the proposed Facility will terminate in the claystone, approximately 10 to 15 feet above the limestone unit. However, some of the side slopes of the excavation will be in contact with coarser materials in the surficial clay.
- 76. Although the claystone/limestone unit is not even moderately transmissive, it forms the lower boundary of the uppermost aquifer and is the only strata available to monitor subsurface water for the entire site.
- 77. The surficial clay and the lower claystone/upper limestone units should be considered one hydrostatic unit, constituting the uppermost aquifer, which collectively act as an aquitard to the Edwards aquifer.
- 78. An "aquitard" is a zone beneath the earth that restricts the flow of groundwater from one aquifer to another.

- 79. There are "confining beds," or completely impermeable aquitards, between the Williamson County expansion area and the Edwards aquifer.
- 80. The proposed groundwater monitoring system would consist of 35 monitoring wells located along the perimeter of the combined footprints of the existing and proposed Landfill.
- 81. The wells would be spaced between 489 to 655 feet apart, with an average spacing of 595 feet. That spacing is similar to the 563-foot average spacing of the present monitoring wells.
- 82. No monitoring wells were included along the western boundary of the original Landfill site.
- 83. Of the 35 wells, 25 would be screened in the lower claystone/upper limestone unit and 10 would be screened in the shallow, coarse-grained material of the surficial clay unit, along the eastern boundary of the expansion area.
- 84. The screens for the wells would generally be 10.0 feet in length for the shallower wells in the surficial clay unit and 15.0 feet in length for the deeper wells at the claystone/limestone interface.
- 85. Under the proposed monitoring system, two wells, MW-11 and MW 12, which are located at corners of the western boundary of the existing Landfill, where its boundary turns towards the east, are intended as upgradient wells, meant to serve as background monitoring wells.
- 86. Because groundwater passes through upgradient wells before reaching the Facility, that water will not have been affected by any release from the Facility.
- 87. The current groundwater monitoring system, approved in 1995 to obtain Williamson County's current Permit No. MSW-1405A, consists of eight wells, all screened in the lower claystone/upper limestone unit.

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- 88. The upgradient wells under the current system are MW-11, MW-12, and MW-9A. However, MW-9A, which is along the eastern boundary of the current Landfill, would be decommissioned if the expansion is approved, because it would be in the middle of the expanded Landfill. Two other downgradient wells would be decommissioned also, for the same reason.
- 89. Originally at this Landfill site, three monitoring wells (MW-01 through MW-03) were installed. In November 1991, four new monitoring wells (MW-04 through MW-07) were installed. In January 1996, in connection with Permit No. 1405A, piezometer P-J was converted to MW-9 (later replaced by MW-9A due to damage) and monitoring wells MW-08 and MW-10 through MW-13 were installed. Three of the earlier monitoring wells, MW-01 through MW-03, were plugged and abandoned at that time. Two others, MW-4 and MW-5, remain at the site, but were removed from the monitoring detection system.
- 90. Piezometers have been maintained at the MW-4 and MW-5 locations.
- 91. For this Facility, Ms. Gallup located the point of compliance around the entire northern, eastern, and southern boundaries of the Facility, excluding the western boundary of the existing Landfill which she determined to be upgradient.
- 92. The Geology Report included and summarized geological data, including boring logs, from previous investigations.
- 93. The Geology Report summarized and discussed historical groundwater monitoring data.

 Historical data that were not actually included in the filing were analyzed by Ms. Gallup and clearly referenced in the Application.
- 94. It is common practice to reference historical materials rather than include them in an application.

- 95. Williamson County analyzed and presented adequate information regarding the existing Landfill site.
- 96. The Application adequately discussed the effect of construction on groundwater movement.
- 97. There is no active faulting in the area of the site.
- 98. The evidence is inconclusive as to whether there is an inactive fault or faults beneath the Landfill.
- 99. Although inactive faults theoretically can provide a pathway for the movement of groundwater, there was no evidence of such movement at this site.
- 100. Even if there is an inactive fault in the area of the site, it does not affect the movement of groundwater.
- 101. The groundwater monitoring system does not need to be revised to account for the possible presence of an inactive fault.
- 102. The boring data showed the bottom of the uppermost aquifer to be five to ten feet below the claystone/limestone interface, which is where those monitoring wells will be screened.
- 103. Although some boring samples showed additional, deeper fractures, those fractures were "at depth," with an unfractured zone consistently reported between the shallower fractures and the deeper fractures.
- 104. Most of the boring samples summarized in the Application show the limestone as unfractured below the 5-10 foot level below the top of the limestone. If there are fractures a few feet lower, they are almost all totally healed.