TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



AN ORDER GRANTING THE APPLICATION OF WASTE MANAGEMENT OF TEXAS, INC, FOR TYPE I MSW PERMIT NO. 249D SOAH DOCKET NO. 582-08-2186 TCEQ DOCKET NO. 2006-0612-MSW

On March 10, 2010, the Texas Commission on Environmental Quality (TCEQ of Commission) considered the application (Application) of Waste Management of Texas, Inc. (WMTX) for Type I Municipal Solid Waste Permit No. MSW-249D. A Proposal for Decision (PFD) was presented by Roy G. Scudday, an Administrative Law Judge (ALJ) with the State Office of Administrative Hearings (SOAH), who conducted a hearing in this case from March 30 through April 13, 2009, and a hearing on remand on December 2, 2009, in Austin, Texas.

After considering the ALJ's PFD, the Commission adopts the following Findings of Fact and Conclusions of Law:

I. FINDINGS OF FACT

General Findings

- The applicant is Waste Management of Texas, Inc. (WMTX). Its business address is 9900 Giles Road, Austin, Texas 78754.
- The facility is the Austin Community Recycling and Disposal Facility (ACRD, or the Facility). The street and mailing address for the Facility is 9900 Giles Road, Austin, Texas 78754.

- 3. The Facility is located in Travis County 250 feet north of the intersection of Giles Road and U.S. 290. The facility is bounded by Giles Road to the east, the BFI Sunset Farms Landfill (BFI) and open land to the north, open land and Springdale Rd. to the west, and the closed Travis County Landfill to the south.
- 4. A portion of the permitted boundary is located within the city limits of Austin, Texas, and the remainder of the site is within the extra-territorial jurisdiction (ETJ) of Austin.
- 5. ACRD is an existing Type I Municipal Solid Waste (MSW) Landfill operating under TCEQ Permit No. MSW-294C. The original permit for the Facility was issued by the Texas Department of Health in 1970.
- 6. The Facility is currently authorized to accept municipal solid waste, Class 2 and Class 3 industrial wastes, and approved special wastes.
- 7. The Facility is approximately 360 acres in size, of which approximately 241 acres has been or will be used for landfill operations.
- 8. The current maximum elevation of 740 feet mean sea level (MSL) will be maintained.
- 9. The currently permitted landfill has a total disposal capacity of approximately 26.7 million cubic yards.
- 10. The land on which the Facility is located is owned by WMTX. WMTX operates the Facility and is the sole permittee under the existing permit.
- 11. WMTX initially submitted its application to the TCEQ Executive Director (ED) on August 26, 2005.
- 12. Notice that the Application was deemed administratively complete by the ED was issued on September 15, 2005.

- 13. 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 (TAC) § 39.411 was published on October 14, 2005, in the *Austin American-Statesman*.
- 14. The Austin American-Statesman is the newspaper of largest general circulation that is published in the county in which the facility is located.
- 15. While the Application was under technical review by the ED, TCEQ revised the entirety of its MSW rules. These revisions went into effect on March 27, 2006.
- 16. Although not required to do so, WMTX elected to revise its pending Application to comply with the new rules and submitted a revised Application to TCEQ on October 10, 2006.
- 17. Notice of the ED's determination that the Application was technically complete was issued on January 4, 2008.
- 18. The ED issued a draft permit (proposed Permit No. MSW-294D) on January 4, 2008. An updated revised draft permit was issued on January 17, 2008 (Draft Permit). The Draft Permit was admitted into evidence without objection on March 30, 2009.
- 19. The Notice of Application and Preliminary Decision containing the information required by 30 TAC § 39.411 was published on February 13, 2008, in the *Austin American-Statesman* and on February 14, 2008, in Spanish in the *Ahora Si* newspaper.
- 20. The Ahora Si newspaper is a publication of general circulation in the City of Austin and Travis County, and is published primarily in Spanish.
- 21. On February 15, 2008, Applicant requested that the matter be directly referred to SOAH for a contested case hearing.

- 22. On March 11, 2008, the Commission referred the case to SOAH for a contested case hearing.
- 23. On March 12, 2008, the TCEQ Chief Clerk mailed the Notice of Hearing on the Application to 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 TAC § 39.413.
- 24. The Notice of Hearing on the Application was published on March 14, 2008, in the *Austin American-Statesman* and on March 13, 2008, in Spanish in the *Ahora Si* newspaper.
- 25. The Notice of Public Meeting containing the information required by 30 TAC § 39.411 was published on March 27, April 3, and April 10, 2008, in the *Austin American-Statesman* and in Spanish in the *Ahora Si* newspaper.
- 26. The preliminary hearing on the Application commenced before ALJ Roy G. Scudday at 10:00 a.m. on April 16, 2008, at the SOAH hearing rooms, William P. Clements Building, 300 West 15th Street, Austin, Texas 78701.
- The following persons and entities were named as parties to the proceeding: WMTX; the ED; the Office of Public Interest Counsel (OPIC); Travis County; the City of Austin; TFJA, L.P. (TJFA); Mark and Melanie McAfee; Williams, Ltd. (Williams); Cecil and Evelyn Remmert and Alfred Wendland; Janet L. Smith; Jean Breazeale; John Wilkins; George K. Edwards; John P. Murphy; Alto S. and Rosemary M. Nauert; Northeast Neighbors Coalition (NNC); and Harris Branch Residential Property Owners Association (HBRPO).

- 28. A contested hearing on the Application was conducted before ALJ Scudday on March 30 through April 13, 2009, at the SOAH offices.
- As part of the Application, WMTX is requesting an authorization (Permit No. MSW-249-D) to laterally expand the facility to add 71.11 acres for a total permitted area of 359.71 acres.
- 30. As part of the Application, WMTX is requesting to increase the disposal capacity of the Facility by approximately 39.1 million cubic yards, which would extend the remaining life of the facility to the year 2025.
- 31. WMTX is not requesting an authorization to vertically expand the landfill.

Permit History

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- On December 20, 1970, a permit was issued to Universal Disposal, Inc. by the Texas Department of Health (TDH) to dispose of municipal solid waste at the ACRD Facility Phase I site.
- In May 1971, Industrial Waste Materials Management, Inc. assumed ownership of the facility and began to dispose of industrial solid waste on a portion of the site (IWU) under an emergency order issued by the Texas Water Quality Board.
- 34. Disposal of industrial solid waste at the IWU was discontinued in June 1972, and closure operations including the construction of a 5-feet clay cap over the IWU continued until early 1973.
- 35. In the latter part of 1973 Industrial Waste Materials Management, Inc. sold the ACRD Facility to Longhorn Disposal Service, which continued to dispose of both municipal and industrial wastes in the Phase I Unit of the facility (on which closure operations occurred

- in approximately 1979, including the construction of a 1.5 feet to 12.5 feet clay cap over the Phase I Unit).
- 36. On September 26, 1977, the TDH issued Permit No. MSW-249 to Longhorn Disposal Service to operate the facility as a Type 1 MSW landfill.
- On July 31, 1981, the TDH issued Permit No. MSW-249A to the Austin Community Disposal Company to reflect the new owner and operator of the facility and to expand the facility to 216 acres.
- 38. On January 24, 1983, this permit was transferred to Texas Waste Systems, now WMTX, a wholly-owned subsidiary of Waste Management of North America, Inc.
- 39. On July 15, 1988, the TDH issued Permit No. MSW-249B to authorize the installation of a gas recovery system at the facility.
- 40. On July 22, 1991, the TDH issued Permit No. MSW-249C to authorize a 74-acre expansion to the site for a total permitted area of approximately 290 acres. Sales of separate tracts of land to Travis County for road improvements have reduced the permitted facility to its current acreage.
- 41. The Travis County Landfill, which ceased operating in 1982, is located south of the ACRD Facility at the northwest corner of the intersection of U.S. 290 East and Giles Lane. Waste disposed in the County facility and waste disposed in the Phase I Unit of the ACRD Facility are adjacent to and indistinguishable from one another.
- 42. The permitted area of the existing ACRD Facility includes the IWU, the Phase I Unit, and the East Hill and West Hill disposal areas. The permitted area is in the shape of a rectangle on the east with the proposed expansion on the west boundary of the rectangle.

 The East Hill is on the east side of the rectangle and the West Hill is on the west side of

the rectangle, and the two areas are bisected by a drainage way that flows across the site from its northern permit boundary to its southern permit boundary. Between the two disposal areas is the central area of the rectangle with the north-south drainage way on its western side. The IWU is located in the northern part of the central area and the Phase I Unit is located on the southern side of the central area, and these two areas are bisected by a drainage way that flows from the west side of the East Hill westward until it merges with the north-south drainage way.

- 43. The IWU is a 10.36-acre unit within the Facility permit boundary adjacent to and southwest of the East Hill section of the Facility. The IWU reportedly included four bulk liquid disposal ponds and two drum disposal areas.
- 44. No disposal operations are ongoing in the central area. The East Hill Disposal Area has been completely filled to final grades and final cover has been installed. Current disposal operations are ongoing on the western side of West Hill and in the 74-acre expansion authorized under Permit No. MSW-249C.

Sufficiency of the Permit Application and Draft Permit

- 45. The Application was prepared by Golder Associates, Inc. (GAI). The lead project engineer was Charles G. Dominguez, P.E. The lead project geoscientist was Jay Winters, P.G., of GAI. Other licensed professional engineers and geoscientists assisted in preparation of various portions of the Application.
- 46. The seal of Mr. Dominguez was affixed to all engineering plans and drawings and on the Application cover pages.
- 47. WMTX has coordinated with all appropriate agencies, officials, and authorities that may have a jurisdictional interest in the Application.

- 48. WMTX has provided complete information concerning governmental permits, authorizations, and construction approvals it has received or applied for.
- 49. The Application contains all information required of applicants under Title 30, Chapter 330 of the Texas Administrative Code and other regulations that govern MSW applications in Texas.
- 50. The conditions which exist at and near the Facility are favorable for the lateral expansion of an existing MSW landfill that is designed, constructed, and operated in a manner considered standard by engineers and geoscientists specializing in their respective fields and which is embodied in the MSW rules.
- 51. There are no site-specific conditions that require special design considerations. The site is well suited to the design, construction, operation, and, ultimately, closure and post-closure of an MSW landfill.

Governmental Coordination, Authorizations, and Permits

- 52. WMTX (or consultants on its behalf) coordinated the Application with the following governmental agencies:
 - a. Texas Parks and Wildlife Department;
 - b. Federal Aviation Administration;
 - c. Texas Historical Commission; and
 - d. Texas Department of Transportation.
- 53. Each of these federal and state governmental agencies that responded indicated that the Application was not problematic with respect to that agency's jurisdictional area.

 Agency coordination letters were included in Part I of the Application.

- 54. WMTX also provided written information regarding the proposed expansion to the Capital Area Council of Governments (CAPCOG), which is a 10-county regional planning commission. The CAPCOG issued its non-conformance letter on January 31, 2006, in which it made the determination that the proposed lateral expansion did not conform to the CAPCOG's regional solid waste management plan (RSWMP).
- 55. WMTX obtained approval by the City of Austin of its Erosion and Restoration Plan (ERP) authorizing the construction of two sedimentation and detention/wetland mitigation ponds that are in the same location and have the same configuration as the new sedimentation/water quality pond that is being proposed in the permit application.
- 56. WMTX operates its storm water controls pursuant to the Texas Pollutant Discharge Elimination System (TPDES) General Multi-Sector Permit.
- 57. WMTX has prepared and implemented a Storm Water Pollution Prevention Plan (SWPPP) in connection with TCEQ's approval of its notice of coverage under the TPDES program.

Protection of Groundwater

- 58. The Facility site is in central Travis County within the general outcrop area of the Taylor Group of the Cretaceous System.
- The Taylor Group is composed of massive beds of shale and marl with clayey chalk, clay, sand, and some modular and phosphatic (containing phosphates) zones. The upper portion of the Taylor is comprised of a weathered montmorillonitic (hydrous aluminum silicate) clay with high shrink/swell potential.
- 60. Underlying the weathered material is the unweathered Taylor Group consisting of calcareous claystone, the top of which is most often encountered between 20 and 50 feet

- below ground surface (BGS). Below the claystone is an unweathered marl layer. The base of the Taylor Group is at a depth of approximately 700 feet BGS.
- 61. There are four strata existing beneath the ACRD Facility. Stratum IA is a stiff to hard, light brown to orange with occasional gray mottling, high plasticity clay. Small shells and calcareous nodules are frequent and crystallized gypsum seams of up to ½ inch thick are occasionally found. The stratum thickness ranges from 6 ft. to 58 ft.
- 62. Stratum IB is a hard, dark gray, high plasticity clay with traces of shells and occasional cracks infilled with gypsum and exhibiting mineralization as indicated by the brown colorization along cracks. The stratum thickness ranges between 0 and 60 ft.
- 63. Stratum II is fresh to slightly weathered, dark gray, calcareous claystone. Fossilized shells and pyrite nodules were identified in some samples. The top of the stratum is found between approximately 525 ft. and 607 ft. MSL with a thickness ranging between 39 and 116 ft. The average top of the layer is approximately at elevation 545 ft. MSL.
- 64. Stratum III is fresh to slightly weathered, light gray to white, marl. The top of the stratum is found between approximately elevation 453 ft. and 497 ft. MSL. The average top of the stratum is approximately 485 ft. MSL.
- 65. In the area of the ACRD Facility, groundwater occurs primarily within the weathered portions of the clay unit, sometimes perched on top of the unweathered claystone. There is a preferential flow pathway for groundwater at the interface of Stratum I and Stratum II at an average elevation of 545 ft. MSL.
- 66. The interface of Stratum I and Stratum II is the uppermost aquifer beneath the site.

 Groundwater flows vertically through dessication/stress-relaxation cracks within the Stratum IB clay until it reaches the interface with Stratum II where the cracks are absent.

The groundwater in these cracks, where present, flows in various directions depending on the part of the site under consideration, but normally flows in subdued conformity to topography following the weathered/unweathered interface.

- 67. The first significant aquifer underlying the ACRD Facility is the Edwards and associated limestones. This confined aquifer lies approximately 1,300 feet below the site and the groundwater within the aquifer is not considered potable because of high concentrations of dissolved solids. The thickness and permeability characteristics of the aquifer's overlying strata indicate that there is no reasonable concern for groundwater infiltrating through the site and into any aquifers underlying the site that may be used for human consumption.
- 68. The Application adequately describes the regional geology in the vicinity of the Facility.
- 69. No active faults are located at or near the ACRD site.
- 70. The regional geology should not require any limits to be placed on the design, construction, or operation of the Facility.
- 71. The Facility is located in the Blackland Prairie, which consists of rolling hills.
- 72. On the western portion of the site, the portion on which the expansion is proposed, the groundwater flow is generally to the west, towards a tributary of Walnut Creek.
- On the central portion of the site between the East and West Hills, where the IWU and Phase I Unit are located, groundwater flow is generally to the south and southeast from West Hill, and to the southwest from East Hill. Both flow systems have groundwater movement towards a low point at the southern permit boundary.
- 74. On the eastern portion of the site, groundwater flow is generally toward the northeast.

- 75. The hydraulic conductivity of the clays in the IWU and Phase I areas is such that water moves through those clays at a rate of only 4.24 feet per year.
- 76. Both the IWU and the Phase I Unit are hydraulically downgradient of the East Hill and West Hill areas. The Phase I Unit is hydraulically downgradient from the closed Travis County Landfill site.
- In 2002, WMTX constructed an additional five-feet thick clay soil layer over the north and south disposal areas of the IWU and additional soil was placed over the remaining cap area to provide a minimum two percent slope for drainage. A six-inch topsoil layer was placed over the clay soil layer and the area seeded. Existing drainage ditches were cleaned and widened around the north and south sides of the IWU area to improve storm water drainage.
- 78. In July 2002 semi-volatile organic compounds (SVOC) were discovered in some of the ground water samples taken from the monitoring wells at the Applied Materials facility east across Giles Road from the ACRD Facility and the BFI Sunset Farms Landfill.
- 79. The Applied Materials Site was the location for prior industrial uses such as a former gasoline station with underground storage tanks and a former automobile body repair shop.
- 80. The easternmost corner of the IWU is approximately 1,875 feet from the due east boundary of the ACRD Facility. With the hydraulic conductivity of the subsurface soils, it would take over 468 years for contaminants to reach the easternmost boundary of the Facility from the IWU and then cross to the Applied Materials properties.
- 81. There is insufficient evidence to show that any contamination in the Applied Materials wells could have come from the ACRD Facility.

- 82. The Application includes four soil borings that were made in 1990 and 1994 along the southern boundary of the Facility where the central drainage way exits the site (PZ-18, PZ-1, PZ-19, and PZ-2). The boring logs indicate that each of the piezometer borings were advanced through the weathered clay and into the unweathered claystone, and none of the logs for the borings indicate that waste was found.
- A cross-section from the 2000 ThermoRetec Consulting Corporation (TRCC) Report included in the Application is a south-to-north cross-section of the east-west drainage way between the IWU and the Phase I Unit, drawn perpendicular to the drainage way depicting a single point in the drainage way. The cross-section shows an approximately three-feet thick level of MSW between the cap/fill and the weathered clay at that point of the drainage way.
- 84. The TRCC Report included boring logs from two monitoring wells on the IWU side of the drainage way, but none on the Phase I Unit side of the drainage way. In addition, there is no boring log information for any point in the drainage way itself along that cross-section nor is there boring log information downstream from that cross-section to indicate the presence of MSW anywhere in the drainage way.

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- The leachate from the Phase I Unit flows from the highest elevations in the eastern and central portions to the northwest "toe of the cell," which is the lowest elevation of the Unit, where it is retained by the wall or dam created by the drainage tributary.
- 86. There is insufficient evidence to show that the drainage tributary between Phase I and the IWU has been partially filled with MSW.

87. There is insufficient evidence to show that there is migration of leachate from the IWU to the drainage tributary or to the Phase I Unit, or to show that there is migration of leachate from the Phase I Unit to the perimeter of the ACDR Facility.

Proposed Liner and Leachate Collection System

- 88. The liner systems for the existing Subtitle D cells and the proposed Subtitle D cells in the expansion consist of two feet of compacted low-hydraulic conductivity soil, a 60-mil HDPE geomembrane liner, a leachate collection system of granular and/or geosynthetic drainage layers, two feet of protective cover soil, and perforated collection pipes encased in gravel and leachate collection sumps.
- 89. The drainage layers will consist of either (i) a geonet overlain by geotextile or single-sided geocomposite on the landfill bottom and a double-sided geocomposite on the side slopes, or (ii) granular drainage layer consisting of 1 foot of sand and protective geotextile on both the landfill bottom and the side slopes of the landfill.
- 90. The liners are constructed on slopes designed to promote positive drainage to perforated collection pipes, then to the cell sumps for removal.
- 91. A portion of the proposed expansion will be located over a pre-Subtitle D area of the West Hill. It will be necessary to install a liner and a leachate collection system over the existing waste and under the new waste. The associated design for the vertical expansion over the unlined area is referred to as the "piggyback."
- 92. The proposed liner and leachate collection system for the piggyback area consists of a two foot protective cover soil, double-sided geocomposite drainage layer, 60-mil LLDPE geomembrane liner, textured on both sides, and a two-foot compacted clay liner. In addition, a grading layer may be placed on top of the existing intermediate cover over the

existing waste prior to construction of the two-foot compacted clay liner to provide a smooth subgrade for construction of the compacted clay. The leachate collection system consists of perforated collection pipes placed in gravel-filled trenches located at the cell perimeters. In these areas, the cell base grades are sloped to drain toward a sump where two vertical manholes provide access for leachate removal.

93. WMTX evaluated the settlement of the existing waste beneath the piggyback liner to determine the post-settlement liner slope and induced strains in the liner system. The existing waste in the piggyback expansion area is over 10 years old. Currently, there are soil stockpiles averaging approximately 10-feet thick overlying the old waste in most of the piggyback area, which will be removed to prepare for a uniform base grade for the new liner system. The existing waste settlement consists of two parts: (i) secondary compression and (ii) the primary settlement caused by new waste and final cover. The settlement analyses indicate that the maximum settlement of the piggyback liner is estimated to be 5.3 feet at a location with approximately 80 feet of waste in-place and approximately 40 feet of new waste. Differential settlement is expected to occur in the piggyback liner area; however, the post-settlement liner grade is 6.9% at minimum and greater than 15% in most of the area.

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94. WMTX analyzed the proposed piggyback liner system to determine induced tensile strain due to differential settlement of existing waste and the formation of a localized depression beneath the liner. Results, utilizing the settlement analysis results, show that the proposed liner system will be mainly under "compression" and a very limited length of the upper portion will experience a maximum tensile strain of 0.58%.

- 95. WMTX analyzed the proposed piggyback liner system to determine the impact of localized depression on the liner integrity. Topographic maps from 1998 to 2006 indicate that there were no significant depressions that occurred in the existing waste in the piggyback area and, due to the age of the waste, the formation of significant localized depressions in the future is not expected. However, to account for this possibility, an analysis was performed considering a depression occurring over a 60-foot radius and approximately five-feet deep, resulting in a calculated tensile strain on the liner of 0.46%. The calculated strain is less than the minimum allowable strain of the liner system components.
- 96. While waste settlement will occur beneath the piggyback liner, the estimated maximum settlement of the liner will not compromise the integrity of the piggyback liner.
- 97. Leachate collected from the piggyback liner area will be diverted to cell WD-11 via sheet flow. Inside cell WD-11, all leachate, including that from the piggyback liner, will be collected by the leachate collection pipe and conveyed to the cell WD-11 sump, where it will be further transmitted to storage or disposal areas. The final liner grade is 6.9% at minimum and greater than 15% in most areas, which ensures positive leachate drainage.
- 98. The leachate collection and removal system (LCRS) is designed to limit the maximum leachate depth over the liner to less than 30 centimeters, in accordance with 30 TAC § 330.331(a)(2). The LCRS was designed considering the leachate flow from the piggyback liner area.
- 99. Minimization of leachate and contaminated water will be achieved primarily by best management practices (BMP) to minimize rainfall runoff contacting waste at the working face and by minimizing the amount of water passing through or otherwise emitted from

- waste. Practices utilized to minimize leachate and contaminated water include landfill construction methods, surface water management practices, and cover practices.
- 100. The LCRS on the cell floor area is designed to limit the maximum depth on the bottom liner to less than 30 centimeters by allowing monitoring of head levels and timely recovery of leachate.
- 101. To limit leachate ponding on the protective cover, the gravel surrounding the leachate collection system pipes will extend through the protective cover forming chimney drains along the centerline.
- 102. Perforated six-inch HDPE leachate collection pipes will be installed in gravel-filled chimney drains along the centerline of each cell at a grade of 1% for removal of leachate from the drainage layer. The leachate collection pipes discharge into sumps located near the base grade low points of each cell. No portion of the leachate piping system is designed to penetrate the composite liner.
- 103. Leachate entering the drainage layer and collection pipes will be subsequently discharged into collection sumps located near the base grade low points of each cell, at the toe of the slideslope, where it will be pumped to temporary holding tanks or to the leachate evaporation pond. Sump inverts will be approximately three feet below the leachate collection pipe invert to allow accumulation of leachate. The sumps will be constructed of compacted low hydraulic conductivity soil, a geosynthetic clay liner, 60-mil HDPE liner and washed gravel with no more than 10% of the gravel smaller than the perforations in the pipes. The gravel will be encased in a geotextile wrap and covered by a 24-inch protective layer.

- 104. Sump riser pipes will be located along the disposal area perimeter to provide a means of monitoring leachate levels and for lowering hoses and submersible pumps into the collection sumps. A geotextile and/or granular bedding will be placed between the pipe and the HDPE geomembrane liner to prevent damage to the liner.
- 105. The leachate collection system is designed to maintain a head of less than 30 centimeters on the liner system. The current pumps are set such that leachate is typically conveyed via pipes directly into the leachate evaporation pond.
- 106. Leachate recovered from pre-subtitle D and subtitle D sumps will be transferred from the leachate evaporation pond by (i) piping to a recirculation network in the landfill, (ii) via tanker to a recirculation area or transported off site, and (iii) by piping to an evaporation pond and then to a sanitary sewer system. Leachate pumped into tanker trucks will be disposed of off-site at a TCEQ-approved treatment facility.
- 107. Collected leachate will be stored in a permitted geomembrane-lined evaporation pond that will be located between the East Hill and the West Hill. A minimum of five consecutive days of storage capacity is desirable and will be maintained to the extent practicable. One foot of freeboard for the 25-year, 24-hour rainfall event shall be maintained in the leachate evaporation pond.
- In disposal cells containing a standard Subtitle D liner system and leachate collection system, leachate and gas condensate may be recirculated back into the waste. Leachate recirculation may consist of spray application during dry conditions using portable tanks at the active face, injecting leachate through a perforated pipe or well buried in the refuse, or discharging leachate in an area excavated into waste and backfilled with highly permeable material.

- 109. The Liner Quality Control Plan (LQCP) specifies materials, equipment, and construction methods for the construction of the disposal units. The LQCP details installation methods and quality control testing and reporting for flexible membrane liners, provides guidance necessary for testing and reporting evaluation procedures for the person preparing the Soil Liner Evaluation Report (SLER) and/or the Geomembrane Liner Evaluation Report (GLER), and describes implementation procedures. It specifies materials and locations for sidewall dewatering and ballasting and guidance for preparation and submission of the Ballast Evaluation Report (BER).
- 110. The LQCP includes measures that will be taken to protect the liner and leachate collection systems during construction below the seasonal high groundwater table. Control of groundwater during excavation and liner system construction is not anticipated to be a problem. The wells are dry in much of the future construction area, and since soil will be excavated gradually for use as a daily/intermediate cover and as a borrow source for clay liner construction, the groundwater zone will be partially dewatered, lowering the potentiometric surface. In addition, much of the recharge area for the shallow unit has been removed as a result of landfill development upgradient of the future cells. The soils in Strata I are poorly permeable and the rock was generally free from joints and discontinuities; therefore, it is anticipated that no groundwater will be visible and hydrostatic pressures will take a long period of time to build below the liner system.

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111. The liner design system and LQCP in the Application meet the requirements of 30 TAC § 330, Subchapter H by describing the liner design and construction details, by providing details showing that the proposed liner system incorporates short-term and long-term hydrostatic uplift pressure relief systems, by providing for leachate and contaminated

- water management systems, and by explaining the groundwater flow path, including the most likely pathways for pollutant migration.
- 112. The evidence sufficiently demonstrates that there are adequate provisions to protect ground water in compliance with the Commission's rules.

Groundwater Monitoring

- 113. Data compiled from numerous site 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.
- 114. The existing groundwater monitoring system is comprised of 15 groundwater monitoring wells screened within the StratumI/II interface to monitor the shallow groundwater beneath the site.
- 115. The proposed groundwater monitoring system will be expanded from 15 to 31 wells.

 Twelve of the existing wells and 19 additional wells will comprise the proposed system.
- 116. On the west portion of the Facility, a total of 13 wells, consisting of four existing wells and nine new wells are proposed to monitor groundwater at the Stratum I/II interface.

 Additionally, a total of 10 wells, four existing piezometers and six new monitoring wells, will be screened within Stratum II.
- 117. On the central portion of the Facility, a total of 10 monitoring wells will be located along the point of compliance in this area. These wells include six proposed wells and four existing wells. One upgradient well is also located on this portion of the site.
- 118. On the eastern portion of the Facility, a total of seven monitoring wells will be located along the point of compliance in this area. These wells include four proposed wells and three existing wells.

- 119. MW-11, a part of the current certified groundwater monitoring network under Permit No. 249C, is located on the west side of the drainage tributary along the Facility's southern permit boundary adjacent to the Travis County landfill to the south and to the west of the Phase I Unit's westernmost extent. MW-12, also a part of the current groundwater monitoring network, is located along the Facility's southern permit boundary adjacent to the Travis County landfill to the south and to the east of the Phase I Unit's easternmost extent.
- 120. The point of compliance (POC) under the current permit does not extend between MW-11 and MW-12.
- The Application proposes to extend the Facility's POC north and east from MW-11 along the eastern boundary of the West Hill, over the northern limits of the IWU, and south along the western boundary of the East Hill to MW-12. Six new monitoring wells are proposed to be added along this new segment of the POC. Two of those new wells, MW-44 and MW-30, will monitor the IWU and a third new well, MW-51, will monitor the Phase I Unit. MW-51 will be located upgradient from MW-12, MW-30 will be located between the northwest corner of the IWU and MW 29A, and MW-44 will be located west and downgradient from PZ-26.
- 122. The area between MW-11 and MW-51 is the upgradient portion of the Phase I Unit, and, as a result, cannot be a part of the POC.
- 123. It is highly unlikely that potential contaminants from the IWU would not reach MW-11 because there is very slow groundwater movement at the Facility site, meaning that any plumes that would emanate from the IWU would tend to be quite wide rather than narrow, thereby facilitating the detection of those plumes.

- In 2002, WMTX entered into a voluntary agreement with the City of Austin in which WMTX agreed to monitor two existing wells (MW-29A and PZ-26) as downgradient groundwater sampling points. MW-29A is between the IWU and the drainage tributary to the west of the IWU, and PZ-26 is between the southwest corner of the IWU and the drainage tributary to the south of the IWU. WMTX also agreed to install a monitoring well (MW-32) along the trace of the drainage tributary downgradient from PZ-26 and to place a piezometer between the south boundary of the IWU and the south drainage tributary (PZ-31) to monitor water levels.
- 125. The Groundwater Sampling and Analysis Plan (GWSAP) contained in the Application provides procedures for collecting representative samples from groundwater monitoring wells and quality assurance/quality control procedures required to ensure valid analytical results. The GWSAP also includes methodology for establishing background water quality in each well and for comparison of the subsequent results to background values in the same well in order that any statistically significant increase may be detected.
- 126. The Draft Permit will include adequate provisions for groundwater monitoring.

Groundwater Monitoring of Additional Constituents

127. There is insufficient evidence to support the addition of a sampling requirement to the groundwater monitoring system for additional constituents.

TPDES Storm Water Permitting Requirements

- 128. The Facility operates under the TPDES Storm Water Multi-Sector General Permit.
- 129. WMTX has prepared a SWPPP as required by the TPDES General Permit.
- 130. The Facility has submitted a Notice of Intent (NOI) as required by the TPDES General Permit.

131. The Application complies with the MSW rule requirements for demonstrating that it has complied with TPDES storm water permitting requirements.

No Significant Alteration of Natural Drainage Patterns

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- 132. The Application includes a surface water protection plan and drainage plan which includes the locations, details, and typical sections of the facilities that relate to the protection of surface water, and it shows the adequacy of provisions for safe passage of all internal and externally adjacent floodwaters.
- 133. Design and operational procedures will minimize the contact between waste and rainfall runoff. The primary method of contaminated water control is to manage rainfall runoff to prevent uncontaminated water from becoming contaminated through contact with waste or daily cover soil at the active working face. During cell construction and site development, BMPs, including, berms, culverts, pumps, pipes, and hoses, grading of areas outside the excavation areas, sumps, detention ponds, and staged development will be used to control and minimize any contact between surface waters and solid waste. Rainfall runoff that does become contaminated will be managed and disposed of in accordance with applicable regulations. Uncontaminated water may be used for site operations, evaporate naturally, or be discharged offsite as authorized under TCEQ permits and the SWPPP.
- 134. The Facility Surface Water Drainage Report contained in the Application shows the locations, details, and typical sections of the surface drainage controls at the Facility.

 Drainage from the developed landfill is designed to maintain the existing drainage patterns and to prevent significant drainage impacts.

- 135. Proposed storm water drainage patterns for the Facility have been revised from the predevelopment conditions; however, the surrounding existing drainage patterns will not be
 adversely altered as a result of landfill construction. The 25-year, 24-hour storm event
 was used to compute the peak flow rates, discharge volumes, velocities, and water
 surface elevations. In addition, in accordance with City of Austin requirements, the 100year, three-hour storm event was used to size the perimeter channels and the
 sedimentation and detention pond, resulting in a conservative design for these drainage
 features.
- 136. WMTX used the Hydrologic Engineering Center Hydrologic Modeling System (HEC-HMS) to calculate the existing peak flows and volumes resulting from the 25-year recurrence interval storm to calculate storm water discharges for existing conditions and post-development conditions. Post-development flow rates are less than or equal to existing flow rates at all control points except for one, which increases slightly. Peak flow rates have been reduced due to the redirection of flow, increased flow path, and attenuation from the proposed sedimentation and detention pond. Therefore, increases in discharge volumes from existing to post-development will be released at rates that will not adversely alter existing drainage patterns.
- 137. The 100-year peak flow runoff was incorrectly calculated in the 1996 amendment application to be 977 cfs. when, in fact, it should have been calculated to be 1,931 cfs.
- 138. Using the correct method of calculation, the Application shows that the current peak flow at the southern boundary (CP-7) is actually 1,931 cfs and the projected peak flow after the expansion will be 1,971 cfs.

- 139. The Application includes structural designs for all proposed collection, drainage, and detention facilities, and depictions of typical cross-sections and ditch grades, flow rates, water surface elevations, velocities, and flowline elevations along the entire length of the drainage structures.
- 140. The Application accurately reflects the current drainage conditions and does not propose adverse alterations to the existing drainage patterns in violation of 30 TAC § 330.305(a).

Sufficiency of Erosion Control Methods

- 141. The Application includes: (1) structural controls for capturing sediment before it leaves the site in both interim and final configurations, (2) erosion control practices to prevent erosion in the interim and final configurations, and (3) calculations to show that erosion in the final configuration will be below permissible levels.
- 142. The proposed structural controls to control erosion and sedimentation include:
 - Storm water falling on the top dome and external embankment side slopes
 of the landfill will be routed to temporary and permanent downchutes
 using soil berms sloped towards these features;
 - The downchutes will discharge into perimeter drainage ditches and channels and then into sedimentation ponds located throughout the facility (except for the currently permitted Ditch 7, which is permitted to discharge directly into the tributary of Walnut Creek that crosses the southwestern portion of the existing facility);
 - The sedimentation ponds will then discharge storm water into the tributary of Walnut Creek or to a natural drainage way that separates the East and West Hills (the "central drainage way");

- Storm water from the East Hill and the western portion of the West Hill will discharge into the central drainage way and into two sedimentation ponds that have been constructed within the central drainage way;
- These sedimentation ponds will allow for sediment to fall out of suspension and minimize sedimentation-laden runoff from this portion of the site;
- The remaining portion of West Hill and the new portion of the West Hill to be created by the proposed expansion will be routed to a sedimentation/detention pond located along the west-central portion of the permit boundary;
- The proposed detention pond will be equipped with an outlet structure that will allow sediment to fall out of suspension prior to leaving the site in this location; and
- The proposed detention pond will be designed with a biofiltration system consisting of 1.5 feet of gravel, overlain by a filter geotextile, overlain by a 0.5 feet of soil capable of supporting vegetation, all completed to satisfy the City's Site Development Permit requirements and to further decrease the amount of sediment-laden runoff exiting the site.
- 143. The erosion and sedimentation controls for the intermediate cover areas will include:
 - The top surfaces are to be sloped either at 3% with a maximum length of 410 feet, or at 5% with a maximum length of 360 feet, while the external embankment side slopes will be four feet horizontal to one foot vertical (4H/1V) slopes with a maximum length of 710 feet;

- The storm water velocity on the top surfaces will not exceed the permissible non-erodible velocity, while the 4H1V slopes will require diversion structures at least every 100 feet apart along the slope to limit the velocity below the permissible non-erodible velocity;
- Results of the soil erosion analyses demonstrate that the top surfaces can achieve effective erosional stability with 60% groundcover and a diversion berm near the crest of the slope to divert runoff to temporary and permanent downchutes;
- The erosion and sediment controls for the external embankment side slopes require both stabilized soil surfaces and storm water diversion structures, and the length between such structures shall not exceed 100 feet as measured along the slope to maintain sheet flow conditions and keep flow velocities below 5 feet per second;
- The expected soil loss for the 60% groundcover is approximately 10.8 tons/acre/year, well below the permissible soil loss of 50 tons per acre per year;
- Types of soil surface stabilization BMP to be used on the intermediate cover will include vegetation, mulch, and geosynthetics; and
- Types of storm water diversion structures will include soil diversion berms, biodegradable logs or organic berms.
- 144. The erosion and sedimentation controls for the final cover areas will include:
 - Storm water diversion berms;

- Lined diversion channels and perimeter channels, downchutes, detention
 and sedimentation ponds, and discharge control structures; and
- Seeding of native vegetation on a 6-inch thick top soil layer to ensure a minimum 90% ground cover.
- 145. The erosion control methods identified in the Application are sufficient to comply with agency rules.

Slope Stability

- 146. The Application contains a geotechnical report that describes and summarizes the geotechnical properties of the subsurface and discusses the suitability of the soils for the uses for which they are intended.
- 147. WMTX performed slope stability analyses using limit equilibrium methods to assess the stability of the proposed landfill. Stability of the proposed excavated landfill sideslopes, stability of the protective cover on landfill sideslopes, stability of the interior waste slopes, overall stability of final filled landfill, and stability of the final cover system were evaluated.
- 148. The critical surface analysis indicates a minimum factor of safety equal to 2.0 for the excavated slopes, which will increase as waste is placed within landfill cells. Results of the stability analysis for the pond excavation slopes indicate a minimum factor of safety equal to 3.2. Analyses of the stability of the cell sideslope liner system indicate that the factor of safety for a 3H/1V slope (worst-case slope) is 1.6, which will also increase as waste is placed within the cell. Analyses of the stability of interior waste slopes, performed using worst case conditions, indicate that, the factor of safety against sliding is

- greater than 1.4 for all conditions analyzed. This factor of safety is adequate for temporary conditions.
- 149. When textured geomembrane and double-sided geocomposite are used on the cell floor, continuous 3H/1V waste slopes without benches have a minimum factor of safety against sliding of 2.12. Stability analyses, performed using worst-case geometry, indicate that the final waste slopes will be stable with a minimum factor of safety of 1.58.
- 150. A stability analysis of the final cover liner system was performed to estimate the potential for sliding to occur following closure of the landfills by analyzing the worst-case section. The analyses indicate that, provided the geocomposite drainage layer is adequate to convey drainage without building up pore water pressures in the geocomposite, the factor of safety against sliding will be approximately 1.6. For all conditions evaluated, the calculated minimum factor of safety is adequate.
- 151. WMTX performed stability and liner system strain analyses to support the piggyback liner design. The analyses of the stability of protective cover on the piggyback liner, using worst case conditions, indicate that the factor of safety is 2.1 without vehicle breaking force and 1.6 under a vehicle breaking force, which will increase as waste is placed within the cell.
- 152. Stability of the interior waste slope associated with the piggyback liner was analyzed for the worst condition when operational sequence VI is completed. The results of these analyses indicate that the factor of safety against sliding is 1.46. As waste placement reaches its final grades, the piggyback liner will be buttressed by waste placed west of the liner, producing a more stable configuration than during waste filling. The minimum factors of safety in the piggyback liner area are 7.04 and 8.21 for sliding and circular

- failure mechanisms respectively. For all conditions evaluated, the calculated factor of safety is adequate.
- 153. The Application contains an Unstable Area Location Restriction Demonstration.
- 154. TCEQ has never interpreted the unstable area restriction in its regulation to require a separate slope stability analysis.
- 155. The Application includes adequate analysis of and provisions to ensure slope stability

Management of Landfill Gas

- 156. The Application contains a Landfill Gas Management Plan which includes a Landfill Gas Collection and Control System (GCCS), which is incorporated into the Site Operating Plan.
- 157. The GCCS serves the dual purpose of controlling surface emissions and gas-related odors.
- 158. The GCCS is comprised of landfill gas collection wells, a landfill gas collection system that includes gas headers, pumps, *etc.* or a landfill gas blower-flare station where methane gas is ignited and destroyed.
- 159. The piggyback liner system to be constructed over an area of the West Hill will interfere with gas wells W-5, W-6, and W-7. Prior to construction of the piggyback liner system, these three existing wells will be abandoned. The wells will be cut and capped below the ground surface and any laterals to these wells will be cut and capped to remove the wells from the vacuum system. Gas wells W-5, W-6, and W-7 will be reinstalled east of their current location and along the eastern side of the piggyback liner system.
- 160. The Application has a gap in coverage of approximately 3,000 feet along the south side of the perimeter boundary between gas monitoring probes P-9 west of the Phase I Unit

and P-10 east of the Phase I Unit. The absence of permanent probes between P-9 and P-10 is due to the following;

- a considerable decrease in topography and geologic conditions on the west
 end of East Hill which provide a preferential flow path which surfaces in
 the topographic low, and
- the presence in this area of the closed Travis County Landfill and the absence of off-site receptors in this area.
- 161. The elevation in the drainage way that runs along the west boundary of the Phase I Unit and then south of the permit boundary along the west side of the closed Travis County Landfill becomes lower than the lowest disposal cell bottoms of the East and West Hills approximately 400 feet south of the permit boundary, providing a natural vent to atmosphere for any gas that may migrate southward from the Facility.
- 162. A probe cannot be put through waste in order to determine if there is methane gas at the location because the waste itself may produce methane gas so that the probe results would be meaningless. Accordingly, it is not feasible or advisable to install wells through the waste interface between the Phase I Unit and the Travis County Landfill.
- 163. The Application includes adequate provisions to manage landfill gas, in compliance with agency rules.

Ponding of Surface Water

- 164. The Site Operating Plan (SOP) contained in the Application includes a Ponded Water Prevention Plan that sets forth the different methods that will be utilized to prevent ponded water over waste-filled areas.
- 165. The Application proposes adequate protection of surface water.

Provisions for Cover

- 166. The SOP contained in the Application addresses the landfill cover systems that will be utilized in the operation of the Facility, in addition to a Final Cover Quality Control Plan as part of the Closure Plan.
- 167. The Application includes adequate provisions for cover, in compliance with agency rules.

Transportation Information

- 168. The Application includes a traffic study of the roads near the facility as well as correspondence from the Texas Department of Transportation indicating that it had no objections to the study.
- 169. The access roadways have a maximum limit level of 80,000 pounds and the determination of WMTX that the access roads were adequate took those weight limits into account.
- 170. The Application includes adequate information related to transportation, in compliance with agency rules.

Provisions for Closure and Post-Closure

- 171. Because the IWU and Phase I Unit are pre-Subtitle D landfill units that stopped receiving waste prior to October 9, 1991, they are only subject to the rule at 30 TAC § 330.453, requiring a final cover of no less than 2 feet of topsoil with the final six inches of which is capable of sustaining native plant growth, and final slopes not exceeding a 25% (4H/1V) grade.
- 172. The Application sets forth the requirements for the closure and post-closure plans in compliance with agency rules.

173. There is an error in the Final Cover Quality Control Plan regarding the specification for the soils to be used in the final cover, and the Plan should be revised to specify SCS Hydrologic Soil Group D for that soil.

Designation of Wetlands

- 174. The Application demonstrated that the wetlands determination met the federal, state, and local requirements and met the technical requirements for wetlands protection.
- 175. The Application includes adequate provisions to show that the MSW facility will not cause or contribute to significant degradation of wetlands, in compliance with agency rules.

Land Use Compatibility

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- 176. No portion of the Facility is located within the city limits of any incorporated city except for an approximately 200-foot-wide strip along Giles Road in the far eastern portion of the permit boundaries, which was annexed by the City of Austin in 1985.
- 177. The remainder of the Facility is located within the extraterritorial jurisdiction (ETJ) of the City of Austin.
- 178. The approximately 200-foot-wide strip along the eastern boundary is zoned "DR"-Development Reserve, and "P-CO"-Public with Conditional Overlay, by the City of Austin. No other zoning ordinance or designation applies to the remainder of the Facility.
- 179. The Facility and adjacent property are located within the City of Austin's Desired Development Zone, an area that the City has designated for future growth and development.

- 180. The predominant land use (67.5%) within one mile of the permit boundary is open, which includes agricultural property, vacant property and rights-of-way. The next largest land use (15.9%) is industrial, which includes two active landfills (Sunset Farms and ACRD), the Applied Materials manufacturing facility, and other industrial uses along U.S. 290 and Johnny Morris Road. The next largest land use (10%) is residential, and the remaining land uses (commercial, recreational, water and institutional) comprise 6.6% of the land area within one mile of the permit boundary.
- 181. Solid waste disposal has been a historically and geographically significant land use within one-mile of the Facility since at least 1968. Of the 4,338 acres within one mile of the ACRD Facility, approximately 795 acres (18%) have been permitted for waste disposal purposes at one time or another.
- The majority of the residential units are single family housing, most of which are concentrated in the Harris Branch Subdivision to the northeast, the Pioneer Crossing Subdivision to the northwest, and the Springdale Road/US 290 area subdivisions to the southwest. As of July 2008, there were approximately 1,477 residential units located within one mile of the permit boundary. The nearest existing residence is approximately 305 feet southwest of the permit boundary in the Colonial Place subdivision. The proposed expansion would place the landfill operations closer to the homes in the Pioneer Crossing Subdivision.
- 183. An estimated 57 business establishments, including the BFI Sunset Farms Landfill, are within one mile of the permit boundary. One school is located 4,850 feet northwest of the permit boundary, one daycare center is located approximately 3,440 feet from the

- permit boundary, and one historic site, the Barr Mansion, is located within a mile of the permit boundary.
- 184. Almost 90% of the residences that are located within one mile of the permit boundary have been built while the ACRD Facility and the other landfills have been operating.
- 185. Both the school and day care center were built while Sunset Farms and the ACRD Facility were operating.
- 186. The City of Austin is the community that is located closest to the Facility.
- 187. The bulk of the City of Austin is located to the west of the Facility. However, the City has annexed properties (including the Harris Branch subdivision) to the northeast of the Facility.
- 188. From 1990 to 2000, the predominant direction of residential growth for the City of Austin was northerly. The ACRD Facility is located within the fastest growing sector of the City from 1990 to 2000.
- 189. The ACRD Facility has not deterred growth in the vicinity of the landfill.

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- 190. The Application includes adequate information regarding the impact of the site upon the city, community and nearby property owners and individuals in terms of compatibility of land use, zoning, community growth patterns, and other factors associated with the public interest.
- 191. WMTX included sufficient information in the Application pertaining to land use and land use compatibility.
- 192. The existing ACRD Facility is compatible with surrounding land uses.
- 193. The continued use of the land for an MSW site will not adversely impact human health, safety, or welfare.

- 194. The desires of the City, the County, and NNC for the ACRD Facility to cease operations is not a legal basis for denying this Application.
- 195. The proposed expansion is compatible with land use in the surrounding area

Control of Nuisances

a. Odors

- 196. The Odor Management Plan set forth in the SOP contained in the Application includes:
 - effective and proven waste and leachate handling procedures,
 - the placement of cover materials,
 - the elimination of ponded waters,
 - gas control,
 - incorporation of approved sludges and grease trap wastes into the working face with other wastes,
 - immediate covering of dead animals with three feet of waste or two feet of soil, and
 - stabilization of liquid wastes in the stabilization basin in a timely manner to minimize the potential for odor development.
- 197. When offensive odors are identified at the Facility, site personnel will attempt to isolate the source of the odor and if an identifiable odor is detected at an active working face, the leachate collections sumps, the leachate evaporation pond, the leachate/gas condensation recirculation system, or the gas extraction system appropriate corrective actions will be initiated.
- 198. The Application includes adequate provisions to prevent the creation or maintenance of odors.

b. Control of Spilled and Windblown Waste and Cleanup of Spilled Waste

- 199. The SOP provides that windblown solid waste will be controlled by covering the working face daily with six inches of compacted cover soil or approved daily cover, installing portable and stationary litter fences of adequate height and width, and daily picking up of windblown waste and litter scattered throughout the site, along fences and access roads, and at the entrance gate.
- 200. The SOP also requires that signs be posted at the site entrance requiring incoming loads to be enclosed or covered.
- 201. The Application includes adequate provisions to control spilled and windblown waste.

c. Dust Control and Maintenance of Site Access Roads

- 202. The SOP provides that all-weather site access roads will be provided from Giles Road at the entrance of the Facility to the unloading areas designated for wet-weather operations.

 Tracked mud and debris will be removed daily at the access to the Facility and mud will be removed from on-site roads as necessary.
- 203. Truck traffic leaving the site will exit via a 3,200 foot paved road to help clean off excess mud before reaching Giles Road. An on-site wheel wash facility may be used as necessary for trucks exiting the site.
- 204. Dust will be controlled on an as-needed basis by use of an on-site water truck. On-site and access roadways will be maintained on a regular basis by grading and placing additional road materials to continuously provide access to the unloading areas.
- 205. The Application includes adequate provision for dust control and maintenance of site access roads.

d. Noise Control and Operational Hours

- 206. On October 6, 2009, the Commission remanded the contested case to SOAH solely for the purpose of reopening the record to take additional evidence on the appropriateness of the proposed operating hours.
- 207. A preliminary hearing on the remanded issue was conducted on October 20, 2009, and the hearing on remand was conducted in Austin, Texas, on December 2, 2009, by ALJ Roy G. Scudday.
- 208. The Facility is currently authorized to operate from 9:00 p.m. Sunday through 7:00 p.m. Saturday, and if necessary, from 7:00 a.m. to 4:00 p.m. on Sunday.
- 209. The Application does not seek to change the operating hours for the Facility.
- 210. Applicant has the burden of proof to show that the current operating hours for the Facility are appropriate.
- 211. There is sufficient evidence to show that the Facility's current operational hours are appropriate to provide safe, efficient, and cost-effective waste disposal services to the community.

e. Summary

- 212. "Nuisance" is defined in the Commission's rules as "municipal solid waste that is stored, processed, or disposed of in a manner that causes the pollution of the surrounding land, the contamination of groundwater or surface water, the breeding of insects or rodents, or the creation of odors adverse to human health, safety, or welfare." 30 TAC § 330.3(95).
- 213. Operation of the expanded landfill as requested in the Application will not result in pollution of the surrounding land.

- 214. Operation of the expanded landfill as requested in the Application will not result in contamination of groundwater and surface water.
- 215. Operation of the expanded landfill as requested in the Application will not result in breeding of insects or rodents.
- 216. Operation of the expanded landfill as requested in the Application will not result in the creation of odors adverse to human health, safety, or welfare.
- 217. Noise is not a component of the Commission's definition of nuisance.
- 218. Noise from the Facility does not and will not rise to a level that would constitute a nuisance.
- 219. The Application proposes sufficient provisions to avoid causing a nuisance.

Buffer Zones and Landscape Screening

- 220. The Application provides for a 125-foot buffer zone from the newly permitted airspace of the lateral expansion.
- 221. The Application addresses the screening of deposited waste as required by 30 TAC §330.175, particularly regarding the landscaping and vegetation of the east and south slopes of East Hill..
- 222. The provisions proposed for buffer zones and landscape screening comply with agency rules.

Compliance History

- 223. The ED prepared compliance summaries for WMTX and the Facility.
- 224. After reviewing Compliance History reports for WMTX for the compliance period September 1, 2003, through August 31, 2008, the ED rated WMTX' compliance history as average, with a rating of 2.76.

- 225. The compliance history rating for the ACRD Facility is average, with a rating of 6.17.
- 226. The compliance history of the Facility shows the only Facility-related violations to be those set out in the 2004 Agreed Order Docket No. 2002-0935-MLM-E. That Order concerned several allegations including the following:
 - deviating from an operational requirement in the Facility's SOP by allowing the leachate head to rise more than 12 inches above the landfill liner on February 4, 2002;
 - failing to operate the landfill gas collection system such that negative pressure was continuously maintained at each wellhead on February 4, 2002;
 - failing to operate each interior wellhead such that landfill gas contained either a nitrogen level of less than 20 percent or an oxygen level of less than 5 percent on February 4, 2002;
 - failing to monitor Well Nos. 38, 39, 40, 42, 43, and 44 monthly for temperature from January 1, 2001, through December 31, 2001;
 - failing to operate all pollution emission capture equipment and abatement equipment in good working order and operating properly during facility operations, specifically failing to seal a flange on a leachate sump pipe on February 26, 2002;
 - discharging one or more air contaminants in such concentrations and for such duration so as to interfere with the normal use and enjoyment of property on April 4, 2002;

- allowing an unauthorized discharge of waste into or adjacent to any water in the state, specifically allowing accumulations of sediment and landfill debris in drainage channels that flow into unnamed tributaries of Walnut Creek as observed on March 28, 2002;
- failing to submit a semi-annual deviation report for the period from April
 2, 2001, until October 2, 2001, and from April 2, 2002, until October 2,
 2002, and failing to include information concerning all deviations on the
 annual compliance certification;
- failing to include a certification of accuracy and completeness in the deviation report submitted November 22, 2002; and
- failing to submit an annual report containing information on monitored parameters for the gas collection system for the years 2001 and 2002.
- 227. The Agreed Order recognized corrective measures implemented at the Facility in response to the TCEQ's enforcement action, including the following:
 - repaired or replaced three leachate collection sump pumps in February 2002;
 - reduced leachate levels to less than 12 inches above the landfill liner in February 2002;
 - sealed a flange pipe leading from a leachate collection sump in February 2002;
 - installed temperature gauges on, and began recording monthly temperature readings for, landfill gas collection Well Nos. 38, 39, 40, 42, 43, and 44 in April 2002;

- completed the installation of approximately 3,000 feet of additional silt fencing in April 2002;
- implemented a procedure for handling waste streams which have a high odor potential, specifically either redirecting the waste streams to an alternate landfill facility or covering them immediately upon arrival, in April 2002;
- completed the installation of 14 additional and replaced three landfill gas
 collection wells and approximately 2,800 feet of piping in April 2002;
- began the operation of the portable odor-neutralizing system along the southeast corner of the Facility on May 1, 2002;
- completed removal of sediment from on-site channels and ditches along the southwestern side of the Facility in August 2002;
- suspended use of alternate daily cover except in emergency situations in February 2002;
- completed relocation and upgrade of the flare system to increase operating effectiveness in July 2002;
- installed three additional gas wells in July 2002;
- installed and began operation of a permanent odor-neutralizing system covering 2,200 feet on the southeast corner of the Facility in August 2002;
- installed 12 new vertical gas collection wells in November 2002;
- submitted the semi-annual deviation report for the period from April 2, 2002, to October 2, 2003, on November 22, 2002;

- submitted annual reports for 2001 and 2002 containing information on monitored parameters for the gas collection system on May 1, 2003; and
- submitted the semi-annual deviation report for the period from April 2, 2001, to October 2, 2001, on June 23, 2003.
- 228. The Agreed Order assessed an administrative penalty in the amount of \$244,420, of which Applicant paid \$122,210, and the balance was offset by Applicant's completion of a Supplemental Environment Project.
- 229. The Facility's compliance history does not warrant denial of the Application.

Construction of the proposed lateral extension prior to the issuance of the Draft Permit

- 230. Between April 30, 2006, and December 4, 2007, WMTX commenced construction of a detention pond and a sedimentation pond in the northwest corner of the Facility expansion area.
- 231. The two ponds in the northwest corner of the Facility expansion area are substantially the same as the ponds that are described in the Erosion and Restoration Site Plan (ERSP) approved by the City on July 19, 2006.
- 232. The two ponds have not yet been constructed in accordance with the engineering design for the detention and sedimentation ponds as set forth in the Application.
- 233. The two ponds have been, at least partially, constructed prior to the issuance of the Draft Permit.
- 234. In addition to being required by the ECRP, the two ponds are a necessary part of the drainage controls required for the Facility expansion.
- 235. Although the ponds are an integral part of the erosion and drainage control system of the lateral expansion, they have not been completed, their ultimate design as set forth in the

- Application will meet the technical requirements, and the commencement of construction of the ponds does not threaten the overall integrity of the permit process.
- 236. The commencement of the construction of the two ponds prior to the approval of the Application, in apparent violation of 30 TAC § 330.7(a), is not a sufficient basis for denial of the Application

Conformance with the regional solid waste management plan (RSWMP)

- 237. In 1992, TCEQ adopted the RSWMP submitted by the CAPCOG on May 26, 1992.
- 238. The CAPCOG has authority to make conformance determinations pursuant to that adopted plan.
- 239. On April 14, 2005, Applicant submitted the initial amendment application to the Solid Waste Advisory Committee (SWAC) of the CAPCOG.
- 240. The SWAC subsequently determined that the proposed expansion of the Facility would not conform with current and future land use in the area based on the RSWMP approved by the CAPCOG Executive Committee on July 10, 2002. The Executive Committee indicated its agreement with SWAC's determination in a letter to TCEQ dated January 31, 2006.
- 241. The revised RSWMP was not adopted by TCEQ until May 2007, well after the non-conformance determination issued by the CAPGOG.
- 242. The CAPCOG Executive Committee subsequently reaffirmed the determination of nonconformance based on the revised RSWMP in a letter dated April 10, 2008.
- 243. The CAPGOG found that the Application does not conform with Goal # 7 of the revised RSWMP to encourage the proper management and disposal of MSW based

- on the Facility's compliance history,
- its posing of a nuisance to neighbors and communities, and
- its location within the Desired Development Zone of the City.
- 244. The CAPCOG also found that the Application does not conform to Goal # 15 of the revised RSWMP, regarding land use compatibility in order to minimize if not avoid adverse impacts from MSW facilities on human health and the environment. In addition to the same considerations supporting the determination of non-conformance with Goal #7, CAPCOG stated that
 - Applicant had not confirmed that it could obtain site development plan approval from the City;
 - Applicant's coordination with local governments regarding infrastructure
 has been minimal;
 - Applicant failed to describe any real program or plan to systematically address efforts to curtail illegal dumping, litter abatement and waste reduction programs, public education programs, lower rates for waste collection events, *etc.*;
 - Applicant failed to address concerns about visual and aesthetic impacts for MSW facilities on adjacent land uses by incorporating "context sensitive" design, and appropriate buffers and setbacks into facility design; and
 - Applicant failed to address how the natural landscape is impacted by increasing the elevation of the natural ground at the site to an elevation of 740 feet above MSL.
- 245. The CAPCOG's determination is merely advisory.

- 246. None of the specific bases for the CAPCOG's non-conformance determination are a sufficient basis to support a denial of the Application.
- 247. The CAPCOG required that Applicant must agree that no landfill may be operated at the current site beyond November 2015.
- 248. The 1992 RSWMP anticipated that the ACRD Facility would continue operations until 2025, even without the proposed expansion.
- 249. There is no evidentiary or legal basis to support the inclusion of an arbitrary November 2015 closing date in the Permit.

Health of Protestants NCC and Their Families

- 250. The Application meets the requirements of the Commission's rules and goes beyond those requirements in many respects.
- 251. No evidence was presented that any individual has suffered any adverse health effects due to the Facility.
- 252. No evidence was presented that any individual will suffer adverse health effects as a result of expansion of the landfill.
- 253. The Application proposes sufficient provisions to protect groundwater and surface waters.
- 254. The Application proposes sufficient provisions regarding air emissions, landfill gas management, odor controls, dust controls, vector controls, and other measures that will be protective of human health and the environment.
- 255. The lateral expansion will not increase the likelihood that any individual's health will be adversely affected.

Major Amendment

- 256. The revisions made by the Applicant to the application after it was declared technically complete in January 2008 were provided to the parties well before the hearing on the merits and were the subject of extensive testimony at the hearing
- 257. No additional public notice is necessary pursuant to 30 TAC § 281.23(a).

Reporting and Transcription Costs

- 258. Reporting and transcription costs of \$23,506.90 were incurred for the prehearing conference and evidentiary hearing.
- 259. The costs included \$9,178.40 for an expedited transcript as requested by WTMX.
- 260. TJFA is a Texas limited partnership.
- 261. Garra de Aguila, Inc., a Texas corporation, serves as the managing general partner of TJFA.
- 262. Bob Gregory is an owner of TJFA and is part owner of Texas Disposal Systems Landfill, Inc. (TDSL) and Texas Disposal Systems, Inc. (TDS), a business competitor of WMTX.
- 263. TDSL owns a municipal solid waste landfill near Creedmoor in southeast Travis County.
- 264. TJFA purchased a property near the ACRD Facility in December 2004. TJFA has purchased properties next to four Central Texas landfills (Sunset Farms and three facilities operated by WMTX) and participated as a party-protestant in four separate MSW permitting proceedings in the past four years.
- 265. The other Protestants heavily relied on TJFA's experts due to their lack of resources relative to its own.
- 266. There was no evidence regarding the finances of any party.

267. The reporting and transcription costs for the remanded hearing, \$3,517.70, were incurred due to the necessity to receive evidence of the appropriateness of Applicant's current operating hours.

Other Remaining Issues

268. With respect to all other contested issues and all unrefuted issues, the Application and the remainder of the evidentiary record contain sufficient factual information regarding the Landfill's design and operation to satisfy all applicable statutory and regulatory requirements.

II. CONCLUSIONS OF LAW

- 1. The Commission has jurisdiction over the disposal of municipal solid waste and the authority to issue this permit under TEX. HEALTH & SAFETY CODE ANN. § 361.061.
- 2. Notice was provided in accordance with TEX. HEALTH & SAFETY CODE ANN. § 361.0665, 30 TEX. ADMIN. CODE ANN. §§ 39.405 and 39.501, and TEX. GOV. CODE ANN. §§ 2001.051 and 2001.052.
- 3. SOAH has jurisdiction to conduct a hearing and to prepare a Proposal for Decision in contested cases referred by TCEQ under Tex. Gov. Code Ann. § 2003.47.
- 4. The provisions of 30 TEX. ADMIN. CODE. ANN. Ch. 330 in effect as of March 27, 2006 apply to the Application.
- 5. WMTX submitted an administratively and technically complete permit amendment application, as required by Tex. Health & Safety Code Ann. §§ 361.066 and 361.068, that demonstrates that it will comply with all relevant aspects of the Application and design requirements as provided in 30 Tex. ADMIN. Code. Ann. §§ 330.71(a) and 330.57(d).

- 6. The Application was processed and the proceedings described in this Order were conducted in accordance with applicable law and rules of the TCEQ, specifically 30 TEX. ADMIN. CODE. ANN. § 80.1 et seq., and the State Office of Administrative Hearings, specifically 1 TEX. ADMIN. CODE. ANN. § 155.1 et seq., and Subchapter C of TEX. HEALTH & SAFETY CODE ANN. Chapter 361.
- 7. The burden of proof was on the Applicant, in accordance with 30 TEX. ADMIN. CODE.

 ANN. § 80.17(a). WMTX met its burden with respect to all referred issues.
- 8. The evidence in the record is sufficient to meet the requirements of applicable law for issuance of the Draft Permit, including TEX. HEALTH & SAFETY CODE ANN. Chapter 361 and 30 TEX. ADMIN. CODE. ANN. Chapter 330.
- 9. The expansion of the proposed Austin Community Recycling and Disposal Facility, if constructed and operated in accordance with the Solid Waste Disposal Act, 30 Tex.

 ADMIN. CODE ANN. Chapter 330, and the attached Draft Permit, will not adversely affect public health or welfare or the environment.
- 10. The Draft Permit No. MSW-249D, as prepared by the TCEQ staff, includes all matters required by law.
- 11. The approval of the Application and issuance of Permit No. MSW-249D, will not violate the policies of the State of Texas, as set forth in § 361.002(a) of the Solid Waste Disposal Act, to safeguard the health, welfare, and physical property of the people of Texas, and to protect the environment by controlling the management of solid waste.
- The contents of the permit to be issued to the Facility meet the requirements of the Texas Solid Waste Disposal Act, Tex. Health & Safety Code Ann. §§ 361.086(b) and 361.087.

- WMTX's compliance history ranking was properly classified as "average" under 30 Tex.
 ADMIN. CODE ANN. Chapter 60.
- 14. The TCEQ is not prohibited by Tex. Health & Safety Code Ann. § 361.122 from issuing Permit No. MSW-249D.
- 15. Applicant has submitted documentation of compliance with the NPDES program under the federal Clean Water Act Section 402, as amended, as required by 30 Tex. ADMIN. Code § 330.61(k)(3).
- 16. As required by 30 Tex. Admin. Code Ann. §§ 330.61(k)(3), 330.61(i)(4), and 330.61(i)(5) Applicant has submitted documentation of coordination with TCEQ for compliance with the federal Clean Water Act Section 402, the Federal Aviation Administration for compliance with airport location restricts, and the Texas Department of Transportation for traffic and location restrictions.
- 17. Applicant has submitted wetland determinations required by applicable federal, state, and local laws as required by 30 Tex. ADMIN. CODE ANN. §§ 330.61(m).
- 18. The Application conforms to the applicable requirements of the Engineering Practice Act,
 TEX. REV. CIV. STAT. ANN. art. 3271a, as provided in 30 TEX. ADMIN. CODE ANN.
 § 330.57(f).
- 19. Part I of the Application meets the technical requirements of 30 Tex. ADMIN. CODE ANN. §§ 305.45, 330.57(c)(1), and 330.59.
- 20. Part II of the Application meets the technical requirements of 30 Tex. ADMIN. CODE ANN. §§ 305.45, 330.57(c)(2), and 330.61.
- 21. The Site Development Plan, which supports Parts I and II of the Application, meets the requirements of 30 Tex. ADMIN. CODE ANN. §§ 330.63 and 330.61.

- Part III of the Application meets the requirements of 30 Tex. ADMIN. CODE ANN. §§ 330.57(c)(3) and 330.63.
- 23. Part IV of the Application, the SOP, meets the requirements of 30 Tex. ADMIN. CODE ANN. §§ 330.57(c)(4), 330.65, and 330.127.
- 24. Applicant has shown that it will comply with the operational prohibitions and requirements in 30 Tex. ADMIN. CODE ANN. §§ 330.15 and 330.121 330.179.
- 25. The Application includes adequate provisions to prevent the ponding of water over waste in the landfill, in compliance with 30 Tex. ADMIN. CODE ANN. § 330.167.
- 26. Applicant submitted a geology report that complies with 30 Tex. ADMIN. CODE ANN. §.330.63(e).
- 27. The Application contains the required information regarding the effect of Facility construction on groundwater flow required by 30 Tex. Admin. Code Ann. § 330.403(e)(1).
- 28. The Application meets the requirements of 30 Tex. ADMIN. CODE ANN. §§ 330.63(f)(4), 330.401, 330.403, 330.405, and 330.407, concerning groundwater protection.
- 29. The groundwater sampling and analysis plan meets the requirements set forth in 30 Tex.

 ADMIN. CODE ANN. § 330.63(f), and Subchapter J of Chapter 330.
- 30. Applicant has demonstrated that existing drainage patterns will not be adversely altered as a result of the proposed landfill development, as required by 30 Tex. ADMIN. CODE ANN. §§ 330.63(c)(1)(D)(iii) and 330.305(a).
- 31. The landfill gas monitoring system complies with 30 Tex. ADMIN. CODE ANN. § 330.159.
- 32. Applicant has demonstrated compliance with applicable TPDES storm water permitting requirements.

- 33. Applicant has demonstrated compliance with the location restrictions set forth in 30 Tex.

 ADMIN. CODE ANN. §§ 330.545, 330.547, 330.553, 330.555, 330.557, and 330.559.
- 34. Applicant has submitted information regarding closure and post-closure that demonstrates compliance with the requirements of 30 Tex. ADMIN. CODE ANN. §§ 330.63(h) and (i), 330.457, 330.461, 330.463, and 330.465.
- 35. The SLQCP complies with 30 Tex. ADMIN. CODE ANN. §§ 330.63(d)(4)(G) and 330.339.
- 36. Applicant is not proposing to site a new MSW landfill or lateral expansion within five miles of an airport serving turbojet or piston-type aircraft, as confirmed in correspondence with the Federal Aviation Administration and in compliance with 30 Tex. ADMIN. Code Ann. §§ 330.61(i)(5) and 330.545.
- 37. As required by Tex. Health & Safety Code Ann. § 361.069, the Facility is compatible with surrounding land uses.
- 38. Section 363.066 of the Tex. Health & Safety Code Ann. does not affect The Solid Waste Disposal Act, under which the Commission may supersede any authority granted to or exercised by the council of governments.
- 39. Solid waste management activities at the Facility conform with the applicable regional solid waste management plan, pursuant to Tex. Health & Safety Code Ann. § 363.066.
- 40. The methods specified in the SOP comply with the MSW rules to prevent the creation of any nuisance, as defined by 30 Tex. ADMIN. CODE ANN. § 330.3(95).
- 41. The buffer zones established by Applicant between the edge of fill and the Facility boundary are compliant with the MSW rules, including 30 Tex. ADMIN. CODE ANN. §§ 330.141(b) and 330.543(b).

- 42. Applicant has provided sufficiently detailed information regarding the operational methods to be utilized at the Facility when using daily cover and its preventative effect on vectors, fires, odors, windblown waste and litter, and scavenging, as required by 30 Tex. Admin. Code Ann. § 330.165(a) and (b).
- 43. The methods specified in the SOP for the control of windblown waste and litter comply with the MSW rules, including 30 Tex. ADMIN. CODE ANN. §§ 330.127 and 330.139.
- 44. Applicant has provided adequate information related to transportation in compliance with 30 Tex. ADMIN. CODE ANN. § 330.61(i).
- 45. The operating hours proposed in the Application have been shown to be appropriate.
- The IWU stopped accepting waste prior to October 9, 1991; therefore, the only regulatory requirements that apply to the IWU are the limited closure and post-closure care provisions of 30 Tex. ADMIN. CODE ANN. §§ 330.5, 330.453, and 330.463.
- 47. The proposed groundwater monitoring system will adequately monitor the IWU and protect human health and the environment in compliance with 30 Tex. ADMIN. CODE ANN. §§ 330.63(f)(4), 330.401, 330.403, 330.405, and 330.407.
- 48. The Phase I Unit area stopped accepting waste prior to October 9, 1991; therefore, the only regulatory requirements that apply to the Phase I Unit area are the limited closure and post-closure care provisions of 30 Tex. ADMIN. CODE ANN. §§ 330.5, 330.453, and 330.463.
- 49. The proposed groundwater monitoring system will adequately monitor the Phase I Unit area of the Facility and protect human health and the environment in compliance with 30 Tex. Admin. Code Ann. §§ 330.63(f)(4), 330.401, 330.403, 330.405, and 330.407.

- 50. Pursuant to the authority of, and in accordance with, applicable laws and regulations, the requested permit should be granted with the modifications described in this Order.
- 51. Pursuant to 30 Tex. ADMIN. CODE ANN. § 80.23(d)(2), the Executive Director and Office of Public Interest Counsel may not be assessed any portion of the transcript and reporting costs.
- 52. For the reasons set out in the Findings of Fact, the court reporting and transcript costs for the original hearing should be apportioned 75% to Applicant and 25% to Protestant TJFA. The court reporting and transcription costs for the remanded hearing should be borne by Applicant.

III. EXPLANATION OF CHANGES

1. Upon remand, the Commission directed the ALJ to modify his September 8, 2009 Proposed Order to eliminate a recommendation that would have incorporated four wells (MW-29A, MW-32, PZ-26, and PZ-31) currently included in a private voluntary agreement between the City of Austin and WMTX into the TCEQ permit's groundwater monitoring system and reconfigured the Point of Compliance to include those four wells. The original PFD and September 8, 2009 Proposed Order indicate that the proposed incorporation was not intended to monitor the proposed expansion, but rather was "intended to mitigate the potential threat to human health and the environment should contaminants from the IWU and/or the Phase I Unit migrate towards the boundaries of the Facility." See September 8, 2009 Proposed Order at Finding of Fact No. 125 and Conclusion of Law No. 48, now deleted from the Commission's Final Order; and July 21, 2009 PFD at pp. 29-30. The Commission's decision to delete the ALJ's recommended incorporation is based on the evidence in the record which clearly shows that the IWU and Phase I Unit stopped receiving waste many years prior to October 9, 1991 (see current Finding of Fact No. 171). Thus, pursuant to 30 TAC § 330.5(c), the groundwater monitoring requirements in Subchapter J of the Commission's rules are inapplicable to the IWU and Phase I Unit and there is no regulatory requirement that those units be monitored. See also, 30

- TAC § 330.453. The ALJ orally acknowledged that there was no regulatory basis for incorporation of the four wells into the facility's permit and Point of Compliance during the Commission's March 10, 2010 Agenda.
- 2. The Commission adopted proposed corrections to citation or wording errors in Conclusion of Law Nos. 2, 4, 15, 22-24, 28, 30, 33, 35, 39, 47, and 49 recommended by the Applicant in it's exceptions following the Supplemental PFD. By letter dated February 5, 2010, the ALJ determined that the Applicant's proposed corrections to the listed Conclusions were appropriate and necessary to correctly reflect the applicable regulations.
- 3. The Commission directed the ALJ to add the following new Ordering Provision to his Proposed Order: "The Commission adopts the Executive Director's Response to Public Comment in accordance with 30 Tex. ADMIN. CODE §§ 50.117 and 80.126. Also in accordance with Section 50.117, the Commission issues this Order and the attached permit as its single decision on the permit amendment application. Information in the agency record of this matter, which includes evidence admitted at the hearing and part of the evidentiary record, documents the Executive Director's review of the permit amendment application, including that part not subject to a contested case hearing, and establishes that the terms of the attached permit are appropriate and satisfy all applicable federal and state requirements." This standard language is routinely included in all matters subject to HB 801, 76th Legislative Session, 2001. Commission rules 30 Texas Administrative Code §§ 50.117(f) and (g) and 80.126 require that the Commission issue a single decision on a permit application and require the Commission to adopt a Response to Public Comments. This standard provision was inadvertently left out of an earlier version of the ALJ's Proposed Order and is now included as Ordering Provision No. 2.

NOW, THEREFORE, BE IT ORDERED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY, IN ACCORDANCE WITH THESE FINDINGS OF FACT AND CONCLUSIONS OF LAW THAT:

The attached Type I Municipal Solid Waste Permit No. MSW-249D is granted to Waste
 Management of Texas, Inc. with the following change:

Final Cover Quality Control Plan

The specification for the soils to be used in the final cover should be revised to specify SCS Hydrologic Soil Group D for that soil.

- 2. The Commission adopts the Executive Director's Response to Public Comment in accordance with 30 Tex. Admin. Code Ann. §§ 50.117 and 80.126. Also in accordance with Section 50.117, the Commission issues this Order and the attached permit as its single decision on the permit amendment application. Information in the agency record of this matter, which includes evidence admitted at the hearings and the evidentiary record of this matter, documents the Executive Director's review of the permit amendment application, including that part not subject to a contested case hearing, and establishes that the terms of the attached permit are appropriate and satisfy all applicable federal and state requirements.
- 3. The Applicant shall pay 75% of the court reporting and transcript costs for the initial proceedings of this case and TFJA, L.P. shall pay the remaining 25%. The Applicant shall pay 100% of the court reporting and transcript costs for the remanded proceedings.
- 4. The Chief Clerk of the Commission shall forward a copy of this Order to all parties and issue the attached permit as changed to conform to this Order.
- 5. All other motions, requests for specific Findings of Fact or Conclusions of Law, and other requests for general and specific relief, if not expressly granted, are denied for want of merit.

- 6. 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 this Order.
- 7. The effective date of this Order is the date the Order is final, as provided by 30 Tex.

 ADMIN. CODE ANN. § 80.273 and Tex. Gov. CODE ANN. § 2001.144.

ISSUED: MAR 1 5 2010

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Bryan W. Shaw, Ph.D., Chairman

For the Commission



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PERMIT FOR MUNICIPAL
SOLID WASTE (MSW) MANAGEMENT FACILITY
Issued under provisions of Texas
Health & Safety Code
Chapter 361

MSW Permit No.:

249D

TCEQ Docket No.: 2006-0612-MSW

Name of Permittee:

Waste Management of Texas, Inc.

9900 Giles Road

Austin, Texas 78754

Property Owner:

Waste Management of Texas. Inc.

Facility Name:

Austin Community Recycling and Disposal Facility

Classification of Site:

Type I Municipal Solid Waste Management Facility

The permittee is authorized to accept, store, process, and dispose of wastes in accordance with the limitations, requirements, and other conditions set forth herein. This amended permit is granted subject to the rules and orders of the Commission and laws of the State of Texas and it replaces any previously issued permit. Nothing in this permit exempts the permittee from compliance with other applicable rules and regulations of the Texas Commission on Environmental Quality. This permit will be valid until canceled, amended, or revoked by the Commission, or until the site is completely filled or rendered unusable, whichever occurs first.

APPROVED, ISSUED AND EFFECTIVE in accordance with Title 30 Texas Administrative Code Chapter 330.

ISSUED DATE:

or the	Commission

Austin Community Recycling and Disposal Facility MSW Permit No. 249D Page 2

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Austin Community Recycling and Disposal Facility MSW Permit No. 249D Page 3

PART NO. 1

I. Size and Location of Facility

- A. The Austin Community Recycling and Disposal Facility is located at 9900 Giles Road, approximately 250 feet north of the intersection of Giles Road and US Highway 290 in Austin, Travis County, Texas.
- B. The legal description is contained in the Documentation section in Parts I/II of the application found in Attachment A of this permit.
- C. Coordinates and Elevation of Site Permanent Benchmark:

Latitude:

N 30° 20' 02.59"

Longitude:

W 97° 37' 22.85"

Elevation:

636.049 feet above mean sea level (ft-msl)

II. Facilities and Operations Authorized

A. Days and Hours of Operation

The operating hours for receipt of waste and for all landfill related operations at this municipal solid waste facility shall be from 9 p.m. Sunday through 7 p.m. Saturday and, if necessary, from 7 a.m. to 4 p.m. on Sunday.

B. Wastes Authorized at This Facility

The permittee is authorized to dispose of municipal solid waste resulting from, or incidental to, municipal, community, commercial, institutional, and recreational activities, including garbage, putrescible wastes, rubbish, ashes, brush, street cleanings, dead animals, abandoned automobiles, construction-demolition waste, yard waste, Class 2 non-hazardous industrial solid waste, Class 3 non-hazardous industrial solid waste, and certain special wastes that are identified in Part IV found in Attachment A of this permit. The acceptance of the special wastes indicated in Part IV of Attachment A of this permit is contingent upon such wastes being handled in accordance with Title 30 Texas Administrative Code (30 TAC) Section (§) 330.171 and §330.173, and in accordance with the listed and described procedures in Part IV found in Attachment A of this permit, subject to the limitations and special provisions provided herein.

C. Wastes Prohibited at This Facility

The permittee shall comply with the waste disposal restrictions set forth in 30 TAC §330.15. Class 1 nonhazardous industrial solid waste (with the exception of waste that is Class 1 only because of asbestos content), hazardous waste from any source (other than municipal hazardous waste from conditionally exempt small quantity generators), and any other waste not identified in Section II.B. of this permit shall not be accepted at this facility.

D. Waste Acceptance Rate

Authorized solid waste may be accepted for disposal at this site at the initial rate of approximately 447,658 tons-per-year and increasing over time to a maximum acceptance rate of approximately 673,183 tons-per-year. These estimated waste acceptance rates are not a limiting parameter to this permit. The actual yearly waste acceptance rate is a rolling quantity based on the sum of the previous four quarters of waste acceptance.

E. Waste Volume Available for Disposal

The total area within the permit boundary is approximately 359.71 acres, of which only approximately 241 acres will be used for waste disposal. The total waste disposal capacity of the landfill is approximately 39,137,000 cubic yards based upon the information contained in Section 2.1 of Parts I/II found in Attachment A of this permit.

F. Facilities Authorized

The permittee is authorized to operate a Type I municipal solid waste landfill that utilizes a combination of area excavation fill and aerial fill of the municipal solid waste subject to the limitations contained herein. All waste disposal activities subject to permitting are to be confined to the following facilities, which shall include disposal units, structures, appurtenances, or improvements: access roads, dikes, berms and temporary drainage channels, permanent drainage structures, detention ponds, landfill gas management system, contaminated water management system, final cover system, groundwater monitoring system, landfill liner and leachate collection systems, and other improvements.

G. Changes, Additions, or Expansions

Any proposed facility changes must be authorized in accordance with the Texas Commission on Environmental Quality (TCEQ) permit amendment or modification rules, 30 TAC Chapters 305 and 330.

III. Facility Design, Construction, and Operation

- A. Facility design, construction, and operation and/or maintenance must comply with the provisions of this permit; Commission Rules, including 30 TAC §§330.55 through 330.73, 330.121 through 330.179, 330.207, 330.261 through 330.289, 330.301 through 330.307, 330.331 through 330.341, 330.371, 330.401 through 330.415, 330.419, 330.421, 330.451 through 330.465, 330.501, 330.503, 330.507, 330.509, and 330.541 through 330.563; special provisions contained in this permit; and Parts I through IV of the application found in Attachment A of this permit, and shall be managed in a manner to protect human health and the environment.
- B. The entire waste management facility shall be designed, constructed, operated, and maintained to prevent the release and migration of any waste, contaminant, or pollutant beyond the point of compliance as defined in 30 TAC §330.3 and to prevent inundation or discharge from the areas surrounding the facility components. Each receiving, storage, processing, and disposal area shall have a containment system that will collect spills and incidental precipitation in such a manner as to:
 - 1. Preclude the release of any contaminated runoff, spills, or precipitation;
 - 2. Prevent washout of any waste by a 100-year storm; and
 - 3. Prevent run-on into the disposal areas from off-site areas.
 - C. The site shall be designed and operated so as not to cause a violation of:
 - 1. The requirements of §26.121 of the Texas Water Code:
 - 2. Any requirements of the Federal Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements of §402, as amended, and/or the Texas Pollutant Discharge Elimination System (TPDES), as amended:
 - 3. The requirements under Section 404 of the Federal Clean Water Act, as amended; and

- 4. Any requirement of an area wide or statewide water quality management plan that has been approved under §208 or §319 of the Federal Clean Water Act, as amended.
- D. Contaminated water shall be handled, stored, treated, disposed of, and managed in accordance with 30 TAC §§330.55(b), 330.65(c), 330.177, 330.207, 330.305(g) and 330.333, and Part III, Attachment 3, Section 6 found in Attachment A of this permit. Other methods may be considered for approval as a modification to this permit.
- E. Best management practices for temporary erosion and sedimentation control shall remain in place until sufficient vegetative cover has been established to control and mitigate erosion on areas having final cover. Vegetative cover will be monitored and maintained throughout the post-closure care period in accordance with Part III, Attachment 8 found in Attachment A of this permit.
- F. Storm water runoff from the active portion of the landfill shall be managed in accordance with 30 TAC §§330.63(c) and 330.301 through 330.307, and as described in Part III, Attachment 2 found in Attachment A of this permit.
- G. All facility employees and other persons involved in facility operations shall be qualified, trained, educated, and experienced to perform their duties so as to achieve compliance with this permit. The permittee shall comply with 30 TAC §330.59(f) and as described in Section 1.6 of Parts I/II found in Attachment A of this permit. The permittee shall further ensure that personnel are familiar with safety procedures, contingency plans, the requirements of the Commission's rules and this permit, commensurate with their levels and positions of responsibility, in accordance with Part III and Part IV found in Attachment A of this permit. All facility employees and other persons involved in facility operations shall obtain the appropriate level of operator certification as required by recent changes in the statute and applicable regulations.
- H. The facility shall be properly supervised to assure that bird populations will not increase and that appropriate control procedures will be followed. Any increase in bird activity that might be hazardous to safe aircraft operations will require prompt mitigation actions.

IV. Financial Assurance

A. Authorization to operate the facility is contingent upon compliance with provisions contained within the permit and maintenance of financial assurance in

accordance with 30 TAC §330.63(j), 30 TAC Chapter 330, Subchapter L, and 30 TAC Chapter 37.

- B. Within 60 days after the date of issuance of this permit, the permittee shall provide financial assurance instrument(s) for demonstration of closure of the landfill in accordance with 30 TAC §330.503. The closure cost estimate of \$7,186,799 (2006 dollars)] is based on estimates as described in Part III Attachment 9 found in Attachment A of this permit. The financial assurance instrument shall be in an amount that includes the inflation factors for each calendar year following 2006 until the year the permit is issued.
- C. Within 60 days after the date of issuance of this permit, the permittee shall provide financial assurance instrument(s) for demonstration of post-closure care of the landfill in an amount for the entire landfill facility. The post-closure care cost estimate of \$4,654,923 (2006 dollars) is based on estimates as described in Part III Attachments 9 found in Attachment A of this permit. The financial assurance instrument shall be in an amount that includes the inflation factors for each calendar year following 2006 until the year the permit is issued.
- D. The owner and/or operator shall annually adjust closure and/or post-closure care cost estimates for inflation within 60 days prior to the anniversary date of the establishment of the financial assurance instrument pursuant to 30 TAC §§330.503(b) and 330.507(b), as applicable.
 - E. If the facility's closure and/or post-closure care plan is modified in accordance with 30 TAC §305.70, the permittee shall provide new cost estimates in current dollars in accordance with 30 TAC §§330.503 and 330.507. The amount of the financial assurance mechanism shall be adjusted within 45 days after the modification is approved. Adjustments to the cost estimates and/or the financial assurance instrument to comply with any financial assurance regulation that is adopted by the TCEQ subsequent to the issuance of this permit shall be initiated as a modification within 30 days after the effective date of the new regulation.

V. Facility Closure

Closure of the facility shall commence:

- A. Upon completion of the disposal operations and the site is completely filled or rendered unusable in accordance with Part III Attachment 7 found in Attachment A of this permit;
- B. Upon direction by the Executive Director of the TCEQ for failure to comply with the terms and conditions of this permit or violation of State or Federal regulations.

The Executive Director is authorized to issue emergency orders to the permittee in accordance with §§5.501 and 5.512 of the Water Code regarding this matter after considering whether an emergency requiring immediate action to protect the public health and safety exists:

- C. Upon abandonment of the site;
- D. For failure to secure and maintain an adequate bond or other financial assurance as required; or
- E. Upon the permittee's notification to the TCEQ that the landfill will cease to accept waste and no longer operate at any time prior to the site being completely filled to capacity.

VI. Site Completion and Closure

The landfill shall be completed and closed in accordance with 30 TAC Chapter 330, Subchapter K and as described in Part III, Attachment 7 found in Attachment A of this permit. Upon closure, the permittee shall submit to the Executive Director documentation of closure as set out in 30 TAC §330.461. Post-closure care and maintenance shall be conducted in accordance with Part III Attachment 8 found in Attachment A of this permit, for a period of 30 years or as otherwise determined by the Executive Director pursuant to 30 TAC §330.463(b)(2).

VII. Standard Permit Conditions

- A. Parts I through IV, as described in 30 TAC §330.57(a) and (c), which comprise the Permit Application for MSW Permit No. 249D are hereby made a part of this permit as Part No. 2: Attachment A. The permittee shall maintain Parts I through IV, as described in 30 TAC §330.57(c), at the facility and make them available for inspection by TCEQ personnel. The contents of Part III of Attachment A of this permit shall be known as the "Approved Site Development Plan," in accordance with 30 TAC §330.63. The contents of Part IV of Attachment A of this permit shall be known as the "Approved Site Operating Plan," in accordance with 30 TAC §330.65 and 30 TAC Chapter 330, Subchapters D and E.
- B. Part No. 3: Attachment B, consisting of minor amendments, modifications, and corrections to this permit, is hereby made a part of this permit.
- C. The permittee shall comply with all conditions of this permit. Failure to comply with any permit condition may constitute a violation of the permit, the rules of the Commission, and the Texas Solid Waste Disposal Act, and is grounds for an enforcement action, revocation, or suspension.

- D. A pre-construction conference shall be held pursuant to 30 TAC §330.73(c), prior to commencement of any construction within the expansion permit boundary to ensure that all aspects of this permit, construction activities, and inspections are met. Additional pre-construction conferences may be held prior to the opening of any new MSW landfill unit at the facility.
- E. A pre-opening inspection shall be held pursuant to 30 TAC §330.73(e).
- F. The permittee shall monitor sediment accumulations in ditches and culverts on a quarterly basis, and remove sedimentation to re-establish the design flow grades on an annual basis or more frequently if necessary to maintain the design flow.
- G. The tracking of mud off-site onto any public right-of-way shall be minimized.
- H. In accordance with 30 TAC §330.19(a), the permittee shall record in the deed records of Travis County, a metes and bounds description of all portions within the permit boundary on which disposal of solid waste has and/or will take place. A certified copy of the recorded document(s) shall be provided to the Executive Director in accordance with 30 TAC §330.19(b).
- I. Daily cover of the waste fill areas shall be performed with clean soil that has not been in contact with waste or with an alternate daily cover which has been approved in accordance with 30 TAC §§330.165(d) and 305.70(k). Intermediate cover, run-on, and run-off controls shall not be constructed from soil that has been scraped up from prior daily cover or which contains waste.
- J. During construction and operation of the facility, measures shall be taken to control runoff, erosion, and sedimentation from disturbed areas. Erosion and sedimentation control measures shall be inspected and maintained at least monthly and after each storm event that meets or exceeds the design storm event. Erosion and sedimentation controls shall remain functional until disturbed areas are stabilized with established permanent revegetation. The permittee shall maintain the on-site access road and speed bumps/mud control devices in such a manner as to minimize the buildup of mud on the access road and to maintain a safe road surface.
- K. In complying with the requirements of 30 TAC §330.145, the permittee shall consult with the local District Office of the Texas Department of Transportation or other authority responsible for road maintenance, as applicable, to determine standards and frequencies for litter and mud cleanup on state, county, or city maintained roads serving the site. Documentation of this consultation shall be submitted within 30 days after the permit has been issued.

- L. The permittee shall retain the right of entry onto the site until the end of the post-closure care period as required by 30 TAC §330.67(b).
- M. Inspection and entry onto the site by authorized personnel shall be allowed during the site operating life and until the end of the post-closure care period as required by §361 032 of the Texas Health and Safety Code.
- N. The provisions of this permit are severable. If any permit provision or the application of any permit provision to any circumstance is held invalid, the remainder of this permit shall not be affected.
- O. Regardless of the specific design contained in Attachments A and B of this permit, the permittee shall be required to meet all performance standards required by this permit, the regulations, and as required by local, state, and federal laws or ordinances.
- P. If differences arise between these permit provisions (including the incorporated Parts I through IV of Attachment A of this permit) and the rules under 30 TAC Chapter 330, the rule provisions shall hold precedence.
- Q. The permittee shall comply with the requirements of the air permit exemption in 30 TAC §106.534, if applicable, and the applicable requirements of 30 TAC Chapters 106 and 116, and 30 TAC Chapter 330, Subchapter U.
- R. All discharge of storm water will be in accordance with the U.S. Environmental Protection Agency NPDES requirements and/or the State of Texas TPDES requirements, as applicable.

VIII. Incorporated Regulatory Requirements

- A. To the extent applicable, the requirements of 30 TAC Chapters 37, 281, 305, and 330 are adopted by reference and are hereby made provisions and conditions of this permit.
- B. The permittee shall comply with all applicable federal, state, and local regulations and shall obtain any and all other required permits prior to the beginning of any on-site improvements or construction approved by this permit.

IX. Special Provisions

None.

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PART NO. 2

Attachment A

Parts I through IV of the permit application effective with the date on the permit.

PART NO. 3

Attachment B

Minor amendments, corrections, and modifications may be issued for MSW Permit No. 249D

The minor amendment, modification, or correction document prepared and executed with an approval date shall be attached to this attachment. There is no limitation on the number of these documents that may be included in Attachment B of this permit.