

Bryan W. Shaw, Ph.D., P.E., *Chairman*  
Jon Niermann, *Commissioner*  
Emily Lindley, *Commissioner*  
Toby Baker, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
*Protecting Texas by Reducing and Preventing Pollution*

August 29, 2018

TO: Persons on the attached mailing list.

RE: **Post Oak Clean Green, Inc.**

TCEQ Docket No. 2012-0905-MSW; SOAH Docket No. 582-15-2498  
MSW Permit No. 2378

**Decision of the Commission on Application.**

The Texas Commission on Environmental Quality ("TCEQ" or "Commission") has made a decision to grant the above-referenced application. Enclosed with this letter is a copy of the Commission's order and a draft copy of the permit. Unless a Motion for Rehearing ("MFR" or "motion") is timely filed with the chief clerk, this action of the Commission will become final. A MFR is a request for the Commission to review its decision on the matter. Any motion must explain why the Commission should review the decision.

**Deadline for Filing Motion for Rehearing.**

A MFR must be received by the chief clerk's office no later than the 25<sup>th</sup> day after the date that the Commission's order on this application is signed. The date of signature is indicated on the last page of the enclosed order.

Motions may be filed in accordance with the requirements in Senate Bill 1267 (84th Regular Session, effective September 1, 2015) and Texas Government Code § 2001.146 with the chief clerk electronically at <http://www.tceq.texas.gov/goto/eFilings> or by filing an original and 7 copies with the Chief Clerk at the following address:

Bridget C. Bohac, Chief Clerk  
TCEQ, MC-105  
P.O. Box 13087  
Austin, Texas 78711-3087  
Fax: 512/239-3311

In addition, a copy of the motion must be sent on the same day to each of the individuals on the attached mailing list as indicated by an asterisk (\*). A certificate of service stating that copies of the motion were sent to those on the mailing list must also be sent to the chief clerk. The procedures for filing and serving a MFR and responses are located in 30 TAC § 80.272, Texas Governmental Code § 2001.146 as revised by Senate Bill 1267 (84th Regular Session, effective September 1, 2015), and 30 TAC §§ 1.10 and 1.11. The hardcopy filing requirement is waived by the General Counsel pursuant to 30 TAC § 1.10(h).

P.O. Box 13087 • Austin, Texas 78711-3087 • 512-239-1000 • [tceq.texas.gov](http://tceq.texas.gov)

How is our customer service? [tceq.texas.gov/customersurvey](http://tceq.texas.gov/customersurvey)  
printed on recycled paper

The written motion must contain (1) the name and representative capacity of the person filing the motion; (2) the style and official docket number assigned by SOAH and official docket number assigned by the Commission; (3) the date of the order; (4) the particular findings of fact or conclusions of law that are the subject of the complaint and any evidentiary or legal ruling claimed to be erroneous; and (5) the legal and factual basis for the claimed error.

Unless the time for the Commission to act on the MFR is extended, the MFR is overruled by operation of law at 5:00 p.m. on the 55th day after the date that the Commission's order on this matter is signed.

If you have any questions or need additional information about the procedures described in this letter, please call the Public Education Program, toll free, at 1-800-687-4040.

Sincerely,

A handwritten signature in cursive script that reads "Bridget C. Bohac".

Bridget C. Bohac  
Chief Clerk

BCB/mt

Enclosures

**Post Oak Clean Green, Inc.**  
TCEQ Docket No. 2012-0905-MSW  
SOAH Docket No. 582-15-2498

FOR THE APPLICANT:

\*John A. Riley  
\*Paul C. Sarahan  
HOLLAND & KNIGHT LLP  
111 Congress Avenue, Suite 540  
Austin, Texas 78701

INTERESTED PERSONS:  
See attached list.

FOR THE EXECUTIVE DIRECTOR  
via electronic mail:

Dana Evans, Acting Director  
Texas Commission on Environmental  
Quality  
Environmental Assistance Division  
Public Education Program MC-108  
P.O. Box 13087  
Austin, Texas 78711-3087

\*Steve Shepherd, Staff Attorney  
\*Kathy Humphreys, Staff Attorney  
Texas Commission on Environmental  
Quality  
Environmental Law Division MC-173  
P.O. Box 13087  
Austin, Texas 78711-3087

Steve Odil, P.E., Technical Staff  
Texas Commission on Environmental  
Quality  
Waste Permits Division MC-124  
P.O. Box 13087  
Austin, Texas 78711-3087

FOR PUBLIC INTEREST COUNSEL  
via electronic mail:

\*Garrett Arthur, Attorney  
Texas Commission on Environmental  
Quality  
Public Interest Counsel MC-103  
P.O. Box 13087  
Austin, Texas 78711-3087

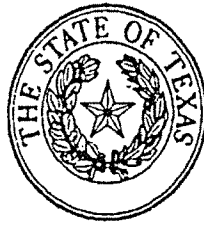
FOR THE CHIEF CLERK  
via electronic mail:

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

FOR THE STATE OFFICE OF  
ADMINISTRATIVE HEARINGS  
via e-Filing:

The Honorable Craig Bennett  
Administrative Law Judge  
State Office of Administrative Hearings  
P.O. Box 13025  
Austin, Texas 78711-3025

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



## **AN ORDER**

GRANTING THE APPLICATION BY POST OAK CLEAN GREEN, INC. FOR A NEW TYPE I MUNICIPAL SOLID WASTE LANDFILL IN GUADALUPE COUNTY, TEXAS; TCEQ Docket No. 2012-0905-MSW; SOAH Docket No. 582-15-2498

On August 8, 2018, the Texas Commission on Environmental Quality (Commission or TCEQ) considered an application by Post Oak Clean Green, Inc. (Post Oak) for a new Type I Municipal Solid Waste Landfill in Guadalupe County, Texas. A proposal for decision (PFD), prepared in two parts (an initial PFD and a remand PFD), was presented by Craig R. Bennett, Administrative Law Judge (ALJ), with the State Office of Administrative Hearings (SOAH), who conducted an evidentiary hearing concerning the application on January 5-14, 2016, and January 17-19 and 22-23, 2018, in Austin, Texas.

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

## **I. FINDINGS OF FACT**

### **Introduction and Procedural History**

1. On December 28, 2011, Post Oak filed an application with the TCEQ seeking a land use compatibility determination on proposed Municipal Solid Waste (MSW) Permit No. 2378 (Parts I and II).
2. The proposed facility (Facility) is located at 7787 Farm to Market (FM) Road 1150, Guadalupe County, Texas 78155 (the Landfill).
3. On January 6, 2012, the Executive Director declared Parts I and II of the application administratively complete.
4. On January 18, 2012, the Notice of Receipt of Application for Land Use Compatibility Determination for a New Municipal Solid Waste Permit was published in the *Seguin Gazette*.
5. On April 4, 2012; April 11, 2012; and April 18, 2012, the Notice of Public Meeting regarding the application was published in the *Seguin Gazette*.



6. On April 24, 2012, the TCEQ conducted a public meeting on the permit application in Seguin, Texas.
7. On June 4, 2013, the Notice of Application and Preliminary Decision on Land Use Compatibility Determination for a Municipal Solid Waste Permit was published in English and Spanish in the *Seguin Gazette*.
8. On October 14, 2013, Post Oak filed Parts III and IV of the application for a permit to authorize a new Type I MSW Landfill that will accept MSW and certain special waste.
9. The Executive Director declared Parts III and IV administratively complete on October 23, 2013.
10. Per Post Oak's request, the TCEQ consolidated Parts I-IV into a single application (the Application).
11. On November 13, 2013, Post Oak filed an updated copy of the consolidated Application.
12. A Notice of Public Meeting was published in English and Spanish in the *Seguin Gazette* on February 12, 2014; February 19, 2014; and February 26, 2014.
13. A second public meeting was held on March 6, 2014, at the Seguin-Guadalupe County Coliseum in Seguin, Texas.
14. The Executive Director declared the Application technically complete and issued a Draft Permit (proposed Permit No. MSW-2378) on January 12, 2015.
15. The TCEQ held public meetings on the Application on April 24, 2012 (Parts I and II) and March 6, 2014 (Parts I-IV).
16. The TCEQ's Chief Clerk received public comments and hearing requests regarding the Application.
17. The Executive Director filed his Response to Comments (RTC) on June 30, 2015. The RTC was admitted into evidence at the contested case hearing held in this matter as ED Ex. SO-4.
18. On January 23, 2015, Post Oak requested that the matter be referred by the TCEQ directly to the State Office of Administrative Hearings (SOAH) for a contested case hearing.
19. On March 25, 2015, SOAH received the administrative record for this matter from the TCEQ.
20. Notice of the preliminary hearing was sent to interested parties, and then published in the *Seguin Gazette* on April 3, 2015. The notice included the time, date and place of the hearing, as well as the matters asserted, in accordance with the applicable statutes and rules.

21. On April 6, 2015, ALJs Craig R. Bennett and Sarah Ramos held a preliminary hearing in this matter in Austin, Texas. The following appeared, were admitted as parties, and participated in the preliminary hearing: (1) Post Oak; (2) the Executive Director; (3) the Office of Public Interest Counsel (OPIC); (4) Guadalupe County, Texas; (5) the City of Schertz, Texas (Schertz); (6) the City of Seguin, Texas (Seguin); (7) the Schertz/Seguin Local Government Corporation (SSLGC); (8) Guadalupe County Groundwater Conservation District (GCGCD); (9) Stop Post Oak Dump (SPOD); and (10) Kathryn Brady, individually (collectively, the Parties).
22. At the preliminary hearing, the ALJs found that notice had been adequately provided and that both the TCEQ and SOAH have proper jurisdiction over this matter.
23. The ALJs convened the initial hearing on the merits on January 5, 2016, at SOAH's offices at 300 W. 15th Street, Austin, Texas. The hearing continued from day to day and concluded on January 14, 2016. The record closed on April 29, 2016, but was reopened for receipt of additional evidence and finally closed on July 26, 2016.
24. The ALJs prepared a PFD which was presented to the Commission for its consideration on April 12, 2017.
25. Following consideration of the PFD, the Parties' Exceptions to the PFD, the Parties' Reply to Exceptions, ALJ Bennett's response to the Parties' Exceptions, and the oral arguments of the Parties, the Commission remanded the matter back to SOAH on four specific issues only: (1) to ensure that written certifications that all wells within the jurisdiction of the Railroad Commission of Texas are properly capped, plugged, and closed in the permit boundary are contained in the evidentiary record within a timeframe to be determined by the ALJ; 2) to allow additional evidence on the issue of bird hazards; 3) to allow additional evidence on the subsurface characterization, including characterization of the groundwater; and 4) to allow additional evidence on the need for 24 hour per day, 7 day per week operating hours.
26. On May 18, 2017, ALJ Bennett held a preliminary hearing in this matter in Austin, Texas. All of the Parties, with the exception of Guadalupe County, Texas, appeared and participated in the preliminary hearing.
27. ALJ Bennett convened the hearing on remand on January 17, 2018, at SOAH's offices at 300 W. 15th Street, Austin, Texas. The hearing continued from day to day, and concluded on January 23, 2018. All of the Parties appeared through counsel or by proxy and participated in the hearing on remand. The record closed on March 16, 2018.
28. The Facility would include a new Type I MSW landfill; a recyclables, used oil and lead battery storage area; a scrap tire storage area; a large items and white goods storage area; a reusable materials staging area; and a citizens' convenience area.
29. The Facility would serve a population equivalent of approximately 156,000 people in Guadalupe and Gonzales Counties, and surrounding areas.

30. The Facility would be located approximately 12 miles east of Seguin and 3.1 miles east-southeast of the intersection of Interstate Highway 10 (IH 10) and FM 1104 in Guadalupe County, Texas.
31. The Facility's proposed site would consist of approximately 1,003 acres, with a landfill footprint of approximately 331 acres.
32. Post Oak engaged in a site selection process.
33. The Facility would accept waste generated from both public and private entities. The primary classification of solid waste to be accepted at the Facility is MSW. Categories of waste will include household waste, vegetative waste, commercial waste, non-hazardous industrial waste, construction-demolition waste, and special wastes.
34. Post Oak estimates that the Facility will receive an estimated 300,000 tons of waste during the first year of operation. This rate is estimated to increase at 5.9% annually for the first 15 years and then remain at that level for the remaining life of the Facility.
35. Post Oak estimates that the operating life of the Facility will be 128 years.
36. The Application contains the information required of applicants under 30 Tex. Admin. Code ch. 330 and other regulations that apply to MSW applications in Texas.
37. There are no site-specific conditions that require special design considerations. With the conditions contained herein, the site is suited to the design, construction, operation, and, ultimately, closure and post-closure of a MSW landfill.
38. It is not unusual for an MSW landfill to be sited on the outcrop area of major or minor aquifers.
39. Post Oak (or consultants on its behalf) coordinated the Application with the Texas Parks and Wildlife Department (TPWD), the Federal Aviation Administration (FAA), the Texas Historical Commission (THC), the Texas Department of Transportation (TXDOT), the US Army Corps of Engineers (USACE), and the United States Air Force (USAF).
40. Post Oak's representations made in the Application are enforceable permit conditions.

#### **Facility Design and Construction**

41. The Application's Site Development Plan includes a General Facility Design Report, a Surface Water Drainage Report, a Landfill Waste Management Unit Design Report, a Geology Report, a Groundwater Sampling and Analysis Plan, a Landfill Gas Management Plan, a Closure Plan, and a Post-Closure Plan, as required by 30 Tex. Admin. Code § 330.63.
42. The General Facility Design Report addresses the following issues under the following sections of 30 Tex. Admin. Code ch. 330: Facility access in accordance with § 330.63(b)(1); waste movement in accordance with § 330.63(b)(2)(A) and (B); ventilation

and odor control in accordance with § 330.63(b)(2)(C); the landfill support area, landfill support area layout, and, citizen convenience area equipment, in accordance with § 330.63(b)(2)(D) and (E); sanitation and water pollution control in accordance with § 330.63(b)(3) and (4); and endangered species management in accordance with § 330.63(b)(5).

43. Attachment 3 of the Site Development Plan (the Landfill Waste Management Unit Design Report) depicts the location and characteristics of the Facility, including: the outline of the units; general locations of main interior Facility roadways and the general locations of main interior Facility roadway access to fill areas; locations of monitoring wells; locations of buildings; representations of the proposed construction sequence of the Facility; fencing; provisions for the maintenance of any natural windbreaks, such as greenbelts or appropriate screening; all site entrance roads from public access roads; sectors with appropriate notations to communicate the types of wastes to be disposed of in individual sectors; the general sequence of filling operations; the sequence of excavations and filling; dimensions of cells or trenches; and maximum waste elevations and final cover.
44. Post Oak's compliance with the requirements of 30 Tex. Admin. Code § 330.63(d)(4) is summarized in Attachment 3 of the Site Development Plan and each of the requirements is addressed in the Landfill Waste Management Unit Design Report.
45. Commission rule 30 Tex. Admin. Code § 330.63(b) requires information regarding generalized design and construction information. While this is addressed in detail in Attachment 3, Landfill Waste Management Unit Design, Attachment 1 provides an overview of the Site Plan.
46. The general operational and construction aspects of the Facility that must be considered in the design of a landfill are detailed in the Landfill Waste Management Unit Design, Part III, Attachment 3.
47. Attachment 3 contains the plans for the design and construction of the Facility, including: (1) general operational and construction aspects of the Facility that must be considered in the design of the Facility; (2) geotechnical analyses to demonstrate that the soils at the site are suitable for the proposed construction of the Facility; (3) plans for the design and construction of the Facility's liner and final cover systems; and (4) plans for the design and construction of the Facility's leachate and contaminated water management systems.
48. The Facility will provide for all-weather operation with either an asphalt or concrete site entrance road.
49. The Facility will utilize area fill methods, and when completed, the filled areas will range between a minimum elevation of 420 feet and maximum elevation of completed landfill 691.8 feet above mean sea level (msl).
50. A Cross-Section Location Map is provided, as are Cross Sections A-A' through D-D', found in Part III, Figures 3-3 through 3-7.

51. These cross sections represent a sufficient number of cross sections to depict the existing and proposed depths of all fill areas and show information from soil boring logs in profile.
52. The construction and design details of the perimeter of the waste disposal areas at the Facility are included on the Landfill Completion Plan and a Landfill Typical Perimeter Cross Section, found in Part III, Figures 3-1 and 3-8.
53. The specification for a liner quality control plan is in the Soils and Geosynthetics Construction Quality Assurance Plan (Quality Assurance Plan), found at Part III, Appendix 3D-1.
54. The Geotechnical Analysis in Part III, Appendix 3B relies upon the Geology Report in Part III, Attachment 4, which discusses the subsurface investigations, subsurface testing and sampling procedures, laboratory testing, and geotechnical test results in order to characterize the subsurface at the Facility in terms of soil water content, unit weight, classification, gradation, moisture/density relationship, permeability, consistency, shear strength, and compressibility.
55. Based on the information provided by the field investigations that were conducted at the Facility, and the laboratory testing of samples taken during those investigations, as reflected in the Geology Report, the Geotechnical Analysis analyzes the suitability of the area subsoils to support the foundation of the landfill and to be utilized in the construction of the compacted soil liner that will underlie the Facility and the infiltration layer component of the final cover system.
56. The engineering tests were conducted pursuant to standards developed and promulgated by the American Society for Testing and Materials (ASTM) and other recognized industry practices and procedures, as appropriate.
57. ASTM standards are internationally recognized and accepted and are the standards required by TCEQ for MSW geotechnical reports.
58. The subsurface soil samples were tested in independent soils laboratories including Burge-Martinez Consulting, Arias & Associates, and TRI Environmental, Inc.
59. The laboratory testing is provided in Boring Logs and Geophysical Logs; BMC-Arias Hydraulic Conductivity Reports; and CJI Geotechnical Laboratory Results, included in Part III, Appendices 4B, 4C and 4D.
60. The laboratory tests of the strata underneath the Facility are described in Section 4.3, Site Stratigraphy of the Geology Report, and laboratory reports are provided in Appendices 4B, 4C and 4D.
61. The strata and soil borings are illustrated in Cross Sections A-A' through G-G', and the soil stratum from which each soil sample was collected is identified, along with a cross-section location map, in Part III, Figures 4-9 through 4-16.

62. At least one sample from each non-sand or non-silt soil that will form the sidewalls and base of the landfill was tested in the laboratory to evaluate its soil characteristics.
63. The laboratory reports of each soil layer that is less than 30 feet below the lowest elevation of the Facility are described in Boring Logs and Geophysical Logs; BMC-Arias Hydraulic Conductivity Reports; and CJI Geotechnical Laboratory Results, found at Part III, Appendices 4B, 4C, and 4D.
64. Cross Sections A-A' through G-G' identify the soil stratum from which each soil sample was collected.
65. The results of testing performed on subsoil samples taken from beneath the area are generally consistent with the strata, soil classifications, and soil properties determined from the subsurface investigations. These findings were sufficient to characterize the geotechnical site conditions and properties of the soils beneath the area.
66. Tests were performed on clay samples obtained by Shelby tubes to characterize the in-situ conditions, and remolded samples were tested to identify suitability of the cohesive soils for use as compacted clay barrier layers in the liner and final cover.
67. Permeability tests were performed in accordance with ASTM D, Method F, where tap water is used as the permeant.
68. The Application contains a geotechnical report that describes and summarizes the geotechnical properties of the subsurface and discussed the suitability of the soils for the uses for which they are intended.
69. The geotechnical conclusions are discussed in Section 5.2 of the Geology Report.
70. Plans for the design and construction of the Facility's liner systems are provided in Landfill Liner System and Final Cover System Design and Construction, found in Part III, Appendix 3D.
71. Landfill cells will be lined with a compacted clay liner (CCL) or a geosynthetic clay liner (GCL) and overlain by a 60-mil high-density polyethylene (HDPE) geomembrane. The compacted soil liner will be a minimum of two-feet thick with a hydraulic conductivity no greater than  $1 \times 10^{-7}$  centimeters per second.
72. As designed, over 99% of the landfill is underlain by the composite drainage layer.
73. The sensitivity analysis conducted on Post Oak's behalf, demonstrated that the dilution factors remained high across the set of parameters.
74. A typical cross-section of the constructed liner is provided in Figures 3-9 through 3-12.
75. The liners are constructed on slopes designed to promote positive leachate drainage to perforated collection pipes, then to the cell sumps for removal.

76. The Application's Quality Assurance Plan, Part III, Exhibit 3d-1, includes soil and liner quality control testing procedures and sampling frequencies.
77. The Application's Quality Assurance Plan, Part III, Exhibit 3d-1, provides guidance on liner evaluation reporting in Section 14.0 Documentation of Liner and Final Cover System.
78. The Application's Quality Assurance Plan, Part III, Exhibit 3d-1, specifies the materials, equipment, and construction methods to be used for the construction of the Facility's compacted soil liner in Section 5.0.
79. The Application's Quality Assurance Plan, Part III, Exhibit 3d-1, specifies the installation methods and quality control testing and reporting for placement of the Facility's geomembrane liner in Section 7.0.
80. Seasonal High Water Levels (SHWL) are discussed in Exhibit 3D-2 to Attachment 3, which was prepared to address the requirements of 30 Tex. Admin. Code § 330.337. Exhibit 3D-2 to Attachment 3 discusses the construction of liners at depths below the SHWL, or in areas otherwise subject to hydrostatic head levels.
81. In the unexpected event that groundwater contact with the liner occurs, the analyses determined that the groundwater can be as much as 6.2 feet above the clay liner excavation and still maintain a factor of safety of 1.2.
82. The purpose, function, and engineering details of the leachate collection system are discussed in Leachate and Contaminated Water Management in Part III, Appendix 3C.
83. The material and construction specifications and construction quality assurance/quality control requirements for the leachate collection system components of the liner are included in Section 3.0 of the Leachate and Contaminated Water Management, and Sections 8.0, 9.0, and 10.0 of the Quality Assurance Plan. Further details are provided in Leachate Collection System Details in Part III, Figures 3-1.

#### **Characterization of Subsurface Geology and Hydrology**

84. The Application's General Geology and Soils Statement addresses the geology of the site of the Facility.
85. The Geology Report required by 30 Tex. Admin. Code § 330.63(e) is included in Part III of the Application as Attachment 4.
86. The regional geology of the area where the Facility is located is discussed in the Geology Report, including the regional physiography and topography of the area, and the stratigraphy and lithology of the subsurface in the vicinity of the Facility.
87. A regional geologic map is included in the Geology Report.

88. The Geology Report discusses regional structure influenced by the two major fault zones located in Guadalupe County, and whether there are any active geologic processes in the vicinity of the Facility, such as faulting, seismic impact zones, or unstable areas.
89. The requirements in 30 Tex. Admin. Code § 330.63(f), concerning the characterization and monitoring of groundwater below the Facility, are specifically addressed in the Groundwater Sampling and Analysis Plan, which is in Part III of the Application, Attachment 5.
90. Post Oak's Groundwater Sampling and Analysis Plan includes information about the following subjects: relevant groundwater monitoring data from onsite wells, the subsurface hydrogeology beneath the site, the groundwater monitoring system, identification of any contamination that has entered the groundwater from the site, the proposed groundwater monitoring program, and detection and identification of hazardous constituents in the groundwater.
91. Post Oak's subsurface investigation followed a soil boring plan consistent with the requirements of 30 Tex. Admin. Code § 330.63(e)(4).
92. Post Oak conducted 90 borings, with 41 of them being at least 30 feet below the elevation of the deepest proposed excavation at the site.
93. Groundwater analytical data from groundwater sampling at the Facility is included in the Application in Appendix G to the Geology Report.
94. Piezometer PZ-45 had a measured seasonal high water level of 434.09 feet msl, which was six inches above the lowest possible excavation of the landfill at that point. However, this low level of intrusion does not present hydrostatic uplift concerns.
95. There is no existing MSW management unit at the site, thus no historic groundwater monitoring data exists for a groundwater monitoring system.
96. Post Oak conducted additional data collection from the monitoring wells at the Post Oak site, first on April 14, 2017; and then again on October 20, 2017, as part of a site visit in which a representative of the protesting parties, William Klemt, participated.
97. Post Oak has updated Table 4-9 from the Application to reflect the data collected in April and October 2017.
98. The groundwater levels at the Post Oak site have not changed significantly from, and are consistent with, those reflected in Table 4-9 from the Application.
99. The groundwater data collected in April and October 2017 do not represent a material change in groundwater measurements from those previously measured at the Post Oak site.
100. No facts were presented in the remand hearing that warrant a reconsideration of the subsurface characterization, including groundwater characterization, included as part of the Application.



101. The location of the landfill is on the outcrop of the Upper Muddy Wilcox geologic structure, which is an aquitard.
102. Underlying the site are varying layers of clay and sandy soils. The clay layers are of low permeability generally and act as a buffer between the sandy layers, which are more permeable and allow groundwater movement.
103. There are three identified layers of relatively high permeability at the site, which have been characterized as the 425 Sand, the 395 Sand, and the 325 Sand. For the eastern part of the landfill site, the 425 Sand is the uppermost aquifer, as it is the highest water-bearing stratum.
104. There is a dry line generally running diagonally across the middle of the landfill site, and to the west side of that dry line, no water was found in the 425 Sand. Thus, on the western side of the site, the uppermost aquifer is the 395 Sand, as that is the highest water-bearing stratum.
105. The Geology Report contains information on the regional groundwater quality of the Carrizo-Wilcox Aquifer.
106. Groundwater samples were analyzed for general water quality parameters, total metals, and volatile organic compounds. The results of those sample events are tabulated in Table 4-11 of the Geology Report in Attachment 4 to Part III of the Application, and corresponding analytical reports are provided in Appendix G of the Geology Report.
107. The Groundwater Sampling and Analysis Plan provides an analysis of the most likely pathway for pollutant migration from the landfill in the event that the primary barrier liner underlying the landfill is penetrated.
108. In conducting site characterization, Post Oak considered all available and relevant information, including geologic and hydrogeologic information, as well as information obtained from geophysical methods, including geophysical logs and bore holes.
109. Under TCEQ's rules, the seasonal high water level is the highest measured water level in an aquifer.
110. An aquifer is defined in TCEQ's rules as a geological formation, group of formations, or portion of a formation capable of yielding significant quantities of groundwater to wells or springs.
111. Based on the site-specific geological, geotechnical, and hydrogeological data obtained from the subsurface investigations conducted at the site, the primary pollutant pathway in the north and northeastern part of the site would be a slow downward migration into the 425 Sand. Once in groundwater of the 425 Sand, the pollutant would move laterally above the 425 Clay, in the direction of groundwater flow of that subunit, generally to the south.

112. In the south and southwestern part of the proposed landfill area, any leaking contaminants would move through the unsaturated zone into the groundwater in the 395 Sand. Once in the groundwater of the 395 Sand, a pollutant would move laterally above the 395 Lower Clay in the direction of groundwater flow, nominally to the west.
113. In each case, because the Lower Clay stratum is less permeable than the Sand stratum, in the event that contaminants penetrate the liner system, the pathway for pollutant migration would be laterally above the relevant Lower Clay unit.
114. If there is contamination in the groundwater below the Facility, it will be detected by Post Oak's monitoring wells before it would travel vertically to a lower stratum.
115. The groundwater gradient in the 425 Sand is primarily south; the groundwater gradient in the 395 Sand is primarily west; and the groundwater gradient in the 325 Sand is primarily north.
116. The direction of groundwater flow in the 425 Sand, the 395 Sand, and the 325 Sand is different from the regional groundwater flow direction.
117. The geology in the area of the Facility is suitable for the siting and operation of an MSW landfill, based on the physiography and topography of the area, and the stratigraphy and lithology of the subsurface in the vicinity of the Facility.
118. The geology and soil conditions are examined in the Geotechnical Analysis, including Appendix 3B. Drainage is examined in Sections 2.0 and 3.0 of the Surface Water Drainage Plan, included in Attachment 2 of the Site Development Plan.
119. The Application includes the required information regarding soils at and beneath the Facility.
120. The Application adequately describes the regional geology and hydrology in the vicinity of the Facility.
121. [Deleted]

#### **Evaluation of Faults**

122. The Faulting Study included a detailed survey of the area within a 1.25-mile radius of the permit boundary of roads and other geographic features for signs of damage, repairs to damage, visible depressions, surface lineations, and other such signs of active faulting or subsidence.
123. Site visits were made to search for similar signs of faulting or subsidence.
124. No signs of faulting or subsidence were observed.

125. TXDOT reported that based on its maintenance records for the last four years, there was no indication of any structural damage to any TXDOT roads, bridges or facilities due to faulting or creep within a 2 to 3-mile radius of the crossroads of FM 1104 and FM 1150.
126. There are no faults or surface expressions of faults within a mile of the Facility.
127. The lack of faults or surface expressions of faults is supported by published geologic maps and information on the structural and seismic history of the area in the vicinity of the Facility.
128. No evidence of displacement of surficial deposits was found during the field investigations or in the review of boring logs from the subsurface investigations that have been conducted for the Facility.
129. The aerial photographs and topographic maps of the area do not show lineaments or other surface expressions indicating the presence of a potential fault.
130. The Holocene Epoch extends from the end of the Pleistocene Epoch to the present and represents the most recent 10,000 years of the Quaternary Period.
131. No faults occurring during the Holocene Epoch have been found to exist within 200 feet of the Facility.
132. The Facility is not located within a seismic impact zone.

#### **Existing Water and Oil and Gas Wells**

133. Sections 5.0 through 5.3 of the Application provide information pertaining to existing and abandoned water wells and oil wells, which relates to 30 Tex. Admin. Code § 330.61(c)(2), (h)(5), and (l).
134. Subsection 5.1 identifies known water wells within 500 feet of the permit boundary, with the state well numbering system designation for Texas Water Development Board "located wells." It includes a GeoSource report prepared in November 2011, as well as Banks Environmental Data report prepared in September 2013, which is attached as Attachment 4, Appendix 4A to Part III of the Application. It also includes a field investigation by RRW Consulting LLC and Cook-Joyce. Figure 8 displays the location of known water wells.
135. Subsection 5.2 provides the location of plugged, existing or abandoned oil wells within the permit boundary and in the 500-foot perimeter area, according to the Railroad Commission of Texas (RRC) database. Subsection 5.2 further identifies oil and gas wells under the jurisdiction of the RRC, and provides a commitment to plug any open oil and gas wells on site in accordance with RRC rules and guidelines. Figure 8 displays the location of oil wells.
136. Subsection 5.3 identifies the abandoned oil and water wells that are situated within the footprint of the proposed landfill. Figure 8 displays the location of abandoned oil and water wells.

137. The Application describes known water wells and oil and gas wells within the permit boundary, or within the limits of the waste disposal boundary, of the Facility, the locations of which are shown on Part II, Figure 8.
138. Post Oak identified 11 existing and abandoned water wells and 70 oil and gas wells under the RRC's jurisdiction that are within 500 feet of the proposed permit boundary and within the proposed permit boundary itself.
139. Of the 70 oil and gas wells, 42 were identified as being located within the proposed permit boundary and two of the wells were identified as being within the proposed limit of waste.
140. Within the permit boundary, 41 oil and gas-related wells were drilled, and each of these wells has been properly capped, plugged, and closed in accordance with RRC regulations.
141. The RRC had previously misidentified a 42nd well as having been drilled within the permit boundary, but the RRC has since corrected that information to reflect that this well location relates to a well that was permitted by the RRC, but never drilled.
142. All 41 of the known oil and gas-related wells located within the permit boundary have been properly identified, and properly capped, plugged, and closed in accordance with all applicable RRC rules.
143. An abandoned oil pipeline on the Post Oak property was not identified in the Application.

### **Transportation**

144. In 2012, Post Oak gathered data on roadways that Post Oak intends to use to access the Facility.
145. The study analyzed traffic on two two-lane, asphalt-surfaced roads maintained by TXDOT: FM 1104 and FM 1150.
146. Local traffic is expected to increase 3% per year through 2080, and site-generated traffic is expected to increase at the same rate as waste projections, 5.9% per year.
147. By 2029, when Post Oak reaches its ultimate waste acceptance volume of 2,500 tons per day, Post Oak will have approximately 1,528 total trips per day.
148. Vehicles making trips to and from the landfill will include 87 compactor trucks, 26 transfer trucks, 230 small trucks, and 20 other vehicles per day.

---

149. Post Oak provided documentation establishing coordination with TXDOT regarding all designs of proposed public roadway improvements such as turning lanes, storage lanes, traffic and location restrictions, etc., associated with the proposed landfill.
150. Because traffic will increase because of the landfill, TXDOT requires and Post Oak has agreed to make certain improvements to maintain adequacy of the roadways.

151. TXDOT determined that once planned roadway improvements were made, access to the Facility should be adequate for expected traffic volumes for the expected life of the Facility.

### **Airport Safety**

152. Post Oak has included in its Application an analysis of public use airports in the area and has provided airport and FAA coordination letters.
153. The Facility is not located within 10,000 feet of any airport runway end used by turbojet aircraft or within 5,000 feet of any airport runway end used by only piston-type aircraft.
154. One public-use airport is within six miles of the site, the Old Kingsbury Aerodrome Airport.
155. The Federal Aviation Administration (FAA) issued its final revised determinations on June 29, 2016. In those last determinations, the FAA found that the proposed landfill does not exceed obstruction standards and would not be a hazard to air navigation provided certain conditions are met.
156. The conditions in the FAA determinations require that:
- a. obstructions will be marked and lighted;
  - b. the operator will give written notice of actual construction or alteration five days after construction reaches its greatest height; and
  - c. Post Oak contact the commander of the United States' Randolph Air Force Base to address potential issues the landfill may pose to pilots using the Seguin Auxiliary Airfield (the airfield) for military flying training.
157. On December 22, 2016, Post Oak and the USAF, as represented by the 12th Flying Training Wing and 502nd Air Base Wing, located at Joint Base San Antonio (JBSA), entered into a Memorandum of Understanding (MOU) detailing agreed-upon measures Post Oak will employ to mitigate the USAF's concerns regarding the permitting and operation of the Post Oak municipal solid waste landfill.
158. Also on December 22, 2016, Brigadier General Heather L. Pringle sent a letter withdrawing the USAF's objections and comments on this matter.
159. The Post Oak site is outside the five- and six-mile radii referred to in 30 Tex. Admin. Code § 330.545(b), (d).
160. The Post Oak site is outside the bird aircraft safety hazards (BASH) relevancy area set out in the Joint Land Use Study (JLUS) issued in July 2015, while the Post Oak Application was still pending technical review.
161. The JBSA-Seguin Auxiliary Airfield BASH relevancy area described in the JLUS coincides with current and prior FAA guidance.

162. The USAF is a signatory to the “Memorandum of Agreement Between the Federal Aviation Administration, the U.S. Air Force, the U.S. Army, the United States Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture to Address Aircraft-Wildlife Strikes,” (Multi-Agency MOA) wherein the USAF has agreed to “encourage and advise owners and/or operators of non-airport facilities [such as landfills] to follow the siting criteria in Section 1-3 of AC 150/5200-33.” According to AC 150/5200-33 for “Approach or Departure airspace [a] distance of 5 statute miles [between an airport’s aircraft movement areas, loading ramps, or aircraft parking areas and the wildlife attractant] is recommended, if the wildlife attractant may cause hazardous wildlife movement into or across the approach or departure airspace.”
163. The MOU was signed by both the installation commander, General Pringle, and the flying training wing commander who are responsible for the flying mission at Seguin Auxiliary Airfield.
164. The Facility will, absent implementation of the measures outlined in the MOU between Post Oak and the USAF, cause a significant bird hazard to low-flying aircraft.
165. Implementation of the measures outlined in the MOU between Post Oak and the USAF will reduce the bird hazard such that the Facility will not cause a significant bird hazard to low-flying aircraft.

#### **Endangered and Threatened Species**

166. Post Oak investigated whether the Facility was located in the range of threatened or endangered species.
167. TPWD is responsible for providing recommendations about protections for fish and wildlife resources to state agencies that approve permits or licenses. Tex. Parks & Wild. Code § 12.0011.
168. Post Oak submitted, as part of the Application, a species assessment prepared by qualified biologists in accordance with standard procedures of the United States Fish and Wildlife Services (USFWS) and TPWD.
169. The biological assessment was based on three site visits, including one site visit in November 2010 and two site visits in June 2012.
170. As part of the assessment, Post Oak considered both federal and state regulations regarding endangered and threatened species habitat, as applicable, and coordinated with the TPWD.
171. The assessment determined that no suitable habitat for federally-listed threatened or endangered species exists within the project area, or within 300 feet of the project area boundary.
172. No threatened or endangered species were observed during site visits on the 1003-acre area of the Facility.

173. No federally-designated critical habitat occurs at the Facility.
174. The area of the Facility has low potential to provide any suitable habitat for any state- listed species occurring in Guadalupe County.
175. Post Oak has agreed to implement TPWD's recommendations to address endangered and threatened species in relation to the construction and operation of the Facility, including:
  - a. avoid clearing mature, native trees, but where clearing cannot be avoided, replace the trees at a ratio of three to one, and maintain a survival rate of 85%;
  - b. use native plant species for mitigation and for landscaped areas;
  - c. minimize loss of vegetation;
  - d. not clear vegetation, trample, or maintain trees or vegetation between April 1 and July 15 of any year;
  - e. reseed disturbed soils with a mixture of grasses and forbs native to Guadalupe County;
  - f. avoid the use of Bermuda grass to the extent possible in reseeding efforts, except as required to control erosion;
  - g. survey for migratory bird nest sites prior to the construction or future maintenance activities;
  - h. prohibit construction activities from a minimum zone of 100 meters around any raptor nest from February 1 – July 15;
  - i. mitigate for any wetland and stream impacts;
  - j. prepare a wetland mitigation plan in consultation with TPWD;
  - k. coordinate all impacts to aquatic resources with TPWD's Inland Fisheries Program;
  - l. coordinate with TPWD on proposed mitigation activities associated with Post Oak's proposed mitigation plan that has been submitted to the USACE;
  - m. coordinate with TPWD and USFWS, as appropriate, to determine avoidance, minimization, and mitigation strategies;
  - n. train all on-site employees about possible endangered and threatened species that may be found at the site and avoid disturbance of species; and
  - o. consult with TPWD should any Texas listed rare, threatened, or endangered species be encountered at the site.
176. The Facility will not result in the destruction or adverse modification of the critical habitat of endangered or threatened species, or cause or contribute to the taking of any endangered or threatened species.
177. Post Oak adequately evaluated the presence of any potential for adverse effects of the Facility on endangered or threatened species.
- 177A. Post Oak will provide annual training to all on-site employees that covers the possible species that may be found on the site, including not only the Texas Horned Lizard, the Texas Tortoise, and the Timber/Canebrake Rattlesnake, but also Whopping Cranes and other endangered or threatened migratory birds that travel through Guadalupe County.

## **Wetlands and Floodplains**

178. Post Oak provided a wetlands delineation survey.
179. Post Oak was required to include a wetlands determination under applicable federal, state, and local laws and discuss wetlands in accordance with 30 Tex. Admin. Code § 330.553. That demonstration can be made by providing evidence that the facility has a United States Army Corps of Engineers permit for the use of any wetlands area. 30 Tex. Admin. Code § 330.61(m)(2).
180. Post Oak identified wetlands and other jurisdictional waters of the United States located within the Facility boundary per applicable federal, state, and local laws and requirements.
181. Because the survey concluded that some impacts to wetlands/jurisdictional waters would occur, Post Oak applied to the USACE in December 2011 for an individual permit and is awaiting permit approval.
182. Post Oak has certified that the identified impacts to wetlands are to be mitigated with a USACE Individual Permit currently being pursued.
183. The Permit requires that Post Oak obtain the individual permit from USACE before construction of the Facility begins.
184. The Facility will result in impacts to 0.34 acre of wetlands and 11,628 linear feet of stream channel of wetlands/jurisdictional waters in the landfill operations area.
185. Because Post Oak has an application pending with USACE under Clean Water Act, § 404, it was not required to provide any of the demonstrations mentioned in 30 Tex. Admin. Code § 330.553(b) for those wetlands, such as whether wetland degradation could be avoided or whether ecological resources will be adequately protected.
186. A later survey identified additional wetland areas totaling 3.0 acres in the total 1,003 acre tract beyond the landfill operations area.
187. The landfill site is on a topographic ridge, and it slopes from 510 above msl near the northwest corner to approximately 450 above msl on the southeast side.
188. At least five intermittent tributaries connect to one tributary on the southeast side near County Road 215C.
189. That tributary connects with another unnamed tributary on the southeast before connecting with Nash Creek near the intersection of Nash Creek Road and County Road 215B.
190. Three ponded areas are in the northern part of the property, and one of them is located at the beginning of one of the tributaries.
191. These water features are most likely jurisdictional waters of the United States because they connect to Nash Creek, which drains into the Guadalupe River.



192. The Post Oak property contains at least two potential ephemeral drainage areas, indicated by slight topographic draws on the southwestern part of the property.
193. The § 404 permit application includes an “Alternatives Analysis,” explaining why the landfill cannot be constructed without the destruction of wetlands, and asking for approval of alternatives to their destruction.
194. After a USACE permit is issued, Post Oak will be required to implement a mitigation plan.
195. Post Oak has asked USACE to approve its mitigation multiplier of 10, by which Post Oak intends to replace the impacted wetlands with 3.4 acres of wetlands, 12,024 linear feet of constructed ephemeral stream channel, and 5,876 linear feet of stream channel preservation enhancement, resulting in a net increase of 3.0 acres of wetlands and 6,000 linear feet of stream channel at the site.
196. Post Oak did not consider possible impacts to off-site wetlands. Instead, Post Oak chose to design the Facility to prevent the release and migration of any waste, contaminant, or pollutant beyond the point of compliance.
197. The Facility must be designed and operated so that it will not violate Texas Water Code § 26.121, the federal Clean Water Act, or the requirements of the § 404 permit.
198. Each receiving, storage, processing and disposal area must have a containment system to collect spills and thereby prevent the release of any contamination, runoff, spills, or precipitation.
199. Post Oak identified 3.0 acres of wetlands that were not included in its § 404 permit application. However, these acres are in the landfill’s mitigation area, thus indicating that they will not be impacted during the landfill’s construction and operation.
200. Post Oak must have stable disposal units. Each receiving, storage, processing, and disposal area will have a containment system to collect spills and thereby prevent the release of any contamination, runoff, spills, or precipitation. The containment units will prevent the release and migration of any waste, contaminant, or pollutant beyond the point of compliance; therefore, they will adequately protect the wetlands.
201. Post Oak did not present any evidence about the potential effects of catastrophic release of waste to the wetlands; however, there was no evidence that the engineering calculations are incorrect. Furthermore, water that comes in contact with waste will not be discharged into waters in the state or nation, including wetlands, in violation of any requirements of the Texas Water Code, the Clean Water Act or Texas Pollutant Discharge Elimination System (TPDES) requirements. 30 Tex. Admin. Code § 330.553(b)(1).
202. Post Oak will not violate state water quality standards or the Clean Water Act or jeopardize the continued existence of endangered or threatened species in the non-jurisdictional wetlands. 30 Tex. Admin. Code § 330.553(b)(2).

203. The Facility has been designed to avoid disturbing wetlands and jurisdictional waters, to the extent possible.
204. The Application includes adequate provisions to show that the Facility will not cause or contribute to significant degradation of wetlands, in compliance with TCEQ's rules.
205. The Application complies with TCEQ's requirements regarding wetlands, including 30 Tex. Admin. Code §§ 330.61(m) and 330.553.
206. No portion of the Facility will be constructed within the 100-year floodplains delineated in the Federal Emergency Management Agency (FEMA) floodplain map included as Figure 16 of the Application.
207. Construction and operation of the Facility will not cause a restriction of the flow of the 100-year flood, a reduction of the temporary water storage capacity of the floodplain, or a washout of solid waste.
208. The Facility will not require any levees or other improvements to provide protection from a 100-year flood.
209. No part of the waste disposal areas are within the 500-year floodplain delineated on the FEMA Floodplain Map.

#### **Land Use-Zoning, Surrounding Uses, and Growth Trends**

210. Sections 4.0 through 4.3 of Part II of the Application pertain to impact on surrounding area, which relates to 30 Tex. Admin. Code § 330.61(c), (g), and (h).
211. Land surrounding the Post Oak property is used for industrial (oil production) and agricultural purposes.
212. Use of the Post Oak site for a municipal solid waste Facility will not adversely impact human health or the environment.
213. The site is not located within the city limits or extraterritorial jurisdiction of any local government, and there is no zoned area within two miles.
214. Within a one-mile radius of the site, 1.6% of the land is used for residences, and the rest of the land is used for rangeland or oil and gas exploration.
215. A small, unmarked cemetery is 3,600 feet southwest of the landfill boundary.

---

216. The only ponds within one mile of the site are brine ponds, associated with petroleum production, and small stock ponds.
217. The largest stock pond, 3.75 acres, is 1/2 mile east of the site.

218. No known schools; licensed day care facilities; churches; hospitals; lakes; commercial, recreational, or industrial areas; historical structures; significant archeological sites; or sites with exceptional aesthetic quality are within one mile of the permit boundary.
219. Guadalupe County's population grew almost 50% from 2000-2010. The majority of growth in the future is expected to be around the metropolitan areas along the IH 35 corridor, particularly in the City of Schertz.
220. Eighteen residences or other structures are within one mile of the site, two of which are approximately 200 feet south of the permit boundary on Nixon Road (also referred to as County Road 215C). Two additional residences are approximately 1,200 feet farther southwest; and a cluster of five residences is located on Dix Road (also referred to as County Road 215C) beyond ½ mile south of the Facility. The other nine residences or structures are between ½ and one mile to the west, north, and east of the permit boundary.
221. The Facility's perimeter will have a buffer zone of at least 125 feet. The northwestern, southeastern, and southwestern perimeter will have a buffer zone of approximately ¼ mile along Nixon Road, Dix Road, and the northwest perimeter along FM 1150.
222. In the buffer zone, the Facility will use practices to preserve native species of flora, fauna, wooded canopy, and wetlands.
223. The northeastern portion of the site, adjacent to FM 1150, will have a 125-foot buffer.
224. At the waste disposal area, the Facility will have a buffer zone with a minimum six-foot high berm with additional screening provided by an eight-foot fence or vegetation.

#### **Land Use-Water Wells**

225. Eleven water wells are within 500 feet of the permit boundary.

#### **Land Use-Groundwater Conservation District Rules**

226. [Deleted]
227. [Deleted]
228. [Deleted]

#### **Land Use-Operating Hours**

229. The Post Oak landfill will primarily service urban areas that will necessitate nighttime pickups and transportation. Daytime pickups result in lack of access to parking lots, vehicles blocking dumpsters, and traffic congestion, and 24/7 operating hours allow for greater efficiency and safety for collection and transportation.
230. 24/7 operating hours allow for citizen drop-off service on weekends, when residential customers will be better able to utilize these landfill services.

231. Post Oak will be receiving waste from long-haul waste hauling companies, whose drivers require time flexibility to allow the vehicles to drop waste during pre-dawn hours.
  232. Waste collection in populated metropolitan areas during times of heavy traffic presents a safety issue and early morning collection times address this issue and meet the needs of businesses that prefer to have trash collected while they are not operating.
  233. The City of San Antonio is a municipality that requires putrescible waste to be collected from businesses daily in early morning hours.
  234. The Commission's default operating hours could prevent Post Oak from serving customers that require pick-ups at night or in the early morning.
  235. The growing population in the area of Post Oak's facility necessitates flexible waste acceptance hours.
  236. The MOU entered into by the USAF and Post Oak requires Post Oak to pursue 24/7 operating hours.
  237. 24/7 operating hours allow large collection vehicles to be scheduled for deliveries at times separate from when private citizens are disposing of trash at the landfill.
  238. The impact on nearby residents would be minimal because Post Oak will take actions to mitigate noise and lights.
  239. 24/7 operating hours are beneficial because Post Oak can spread out the operations over a greater length of time, providing for fewer people at the landfill at any given time.
  240. The expanded hours allow Post Oak to utilize a smaller working face, which minimizes issues with birds and vectors.
  241. Post Oak can better expand the time for landfill waste disposal operations outside the USAF's peak flight training hours with the flexibility of 24/7 operating hours.
  242. Pyrotechnic devices would not be used at night.
  243. Occupational Safety and Health Administration requirements allow facilities to lower the decibel levels on back-up alarms on vehicles while they are being used at night.
  244. Post Oak has justified its need to operate 24 hours per day, seven days per week.
- 

#### **Land Use-Nuisance Conditions**

245. Construction and operation of the Facility in compliance with the Application and the Permit will not result in pollution of the surrounding land.

246. Construction and operation of the Facility in compliance with the Application and the Permit will not result in contamination of groundwater and surface water.
247. Construction and operation of the Facility in compliance with the Application and the Permit will not result in breeding of insects or rodents.
248. Construction and operation of the Facility in compliance with the Application and the Permit will not result in the creation of odors adverse to human health, safety, or welfare.
249. Noise is not a component of the Commission's definition of nuisance.
250. Noise from the Facility will not rise to a level that would constitute a nuisance.
251. The Application proposes sufficient provisions to avoid causing a nuisance.

### **Competency and Compliance History**

252. Post Oak has provided the information required in 30 Tex. Admin. Code § 330.59(f).
253. The Draft Permit requires Post Oak to employ a licensed solid waste facility supervisor and qualified equipment operators in compliance with TCEQ's rules before commencing operations.
254. Post Oak has an unclassified compliance history rating under TCEQ's rules because the Facility has not yet been constructed and operated.
- 254A. Post Oak had approximately 400 deficiencies in its application, resulting in numerous notices of deficiency from the Executive Director throughout the application review process.

### **Groundwater Protection and Groundwater Monitoring**

255. The Geology Report describes the regional aquifers in the vicinity of the Facility, based upon published and open-file sources.
256. The Geology Report describes the regional aquifers beneath and in the vicinity of the Facility in terms of their associated geologic units, composition, hydrogeologic properties, confined or unconfined conditions, hydraulic connectivity with other units, potentiometric surfaces, groundwater flow rates and water quality, recharge zones, and general water quality.
257. The Geology Report provides information on the uses of groundwater and the locations of water wells in the vicinity of the facility.
258. The regional aquifers in the vicinity of the facility are isolated from each other.
259. A total of 90 borings were installed at the Facility.

260. Eleven of the deepest borings were geophysically logged to evaluate the stratigraphy of the deeper confining units.
261. Thirty-three borings were completed as site monitoring wells or piezometers to evaluate groundwater conditions.
262. Eighty-two borings extend at least five feet below the deepest proposed excavation.
263. Forty-one borings were installed deeper than 30 feet below the deepest proposed excavation.
264. Data obtained from soil borings and piezometers installed during all of these investigations were analyzed to determine the subsurface conditions.
265. A summary of site subsurface investigation activities is provided in Table 4-5 and discussed in Section 4.0 of the Geology Report.
266. Soil samples were collected from the borings for geotechnical testing and to characterize the soils and subsurface strata beneath the site.
267. Groundwater elevation data from the piezometers were used to determine the presence of groundwater and to characterize groundwater flow beneath the site.
268. A complete analysis of the site's stratigraphy is contained in Sections 4.2 and 4.3 of the Geology Report including the referenced tables and figures.
269. The lithology encountered during subsurface investigation of the site is typical of the Wilcox Group.
270. The Upper Muddy portion of the Wilcox Aquifer is approximately 500 feet thick at the location of the Facility.
271. The Upper Wilcox functions hydrogeologically as a low permeability aquitard.
272. Four sand units were encountered, each underlain by a corresponding confining clay unit.
273. Stratigraphic subunits encountered at the site from top to bottom were labeled: Upper Sand and Clay, the 425 Sand, the 425 Lower Clay, the 395 Sand, the 395 Lower Clay, the 325 Sand, and the 325 Lower Clay.
274. Correlations of stratigraphy were made based on lithologic descriptions on boring logs, interpretation of geophysical logs, and geotechnical laboratory data.

---

275. The interpretation of lithology from geophysical logs using natural gamma profiles is presented in Appendix 4H to Part III of the Application.
276. Once subunits were identified, analysis of site-specific groundwater gradient data established that the water-bearing sand units are isolated from each other.

277. The hydrogeologic isolation of the sands is discussed in detail in Section 4.3 of the Geology Report: including the referenced tables and figures, and Appendix 4I to Part III of the Application.
278. Waste disposed of in the landfill will be separated from groundwater at each location within the excavated footprint by a CCL, or a GCL, overlain by a 60-mil HDPE geomembrane.
279. The Application and Draft Permit include contingency plans in the event that the excavation encounters groundwater at any point in the excavated footprint.
280. The evidence sufficiently demonstrates that there are adequate provisions in the Application and the Draft Permit to protect groundwater in compliance with TCEQ's rules.
281. Section 2.0 of the Groundwater Sampling and Analysis Plan describes the groundwater monitoring system for the Facility.
282. The groundwater monitoring system has been designed for the Facility in accordance with the requirements of 30 Tex. Admin. Code § 330.403 based on site-specific technical information including identification of the uppermost aquifer and lower confining unit, and characterization of aquifer thickness and groundwater flow rate and direction. The design also considered thickness, stratigraphy, lithology, and hydraulic characteristics of the geologic units above the groundwater, the materials of the uppermost aquifer, and the materials and characteristics of the lower confining unit beneath the uppermost aquifer.
283. The groundwater monitoring system will consist of 96 monitoring wells in 38 well clusters that have been designed along a point of compliance on the site perimeter.
284. Monitoring wells are spaced every 600 feet around the perimeter of the landfill to monitor the up-gradient 425 Sand zone and both up-gradient and down-gradient 395 Sand and 325 Sand zones.
285. Down-gradient 425 Sand zone monitoring wells are spaced every 300 feet because of the higher groundwater velocity in that zone. At those nine locations, one well will be installed into the lower portion of the 425 Sand.
286. At all other proposed monitoring locations, three nested wells will be installed; one in the lower portion of the 425 Sand, one in the lower portion of the 395 Sand, and one in the lower portion of the 325 Sand.
287. Although the 395 Sand is the uppermost continuous water-bearing zone, Post Oak will monitor the 325 Sand as a conservative, extra, protective measure.
288. The wells associated with each cell will be installed prior to waste placement in those cells or prior to the placement of leachate in a leachate evaporation pond constructed in that cell's future location.
289. The Application includes adequate provisions for groundwater monitoring.

### **Waste Management Design-Leachate Recirculation**

290. The Executive Director no longer supports Post Oak's use of leachate recirculation and Post Oak is no longer requesting approval of the use of leachate and methane gas condensate recirculation system as part of the Application.

### **Waste Management Design-Alternate Liner Demonstration**

291. Post Oak's Alternate Liner Demonstration demonstrates the projected concentration levels of contaminants at the point of compliance and demonstrates that the maximum contaminant levels will not be exceeded at the point of compliance.

292. [Deleted]

### **Waste Management Design-Stability Evaluations**

293. Analyses were performed to assess the performance of the proposed landfill design with respect to global slope stability, sidewall liner stability, final cover stability, anchor trench design, and consolidation/heave of the landfill floor. These analyses evaluated the stability of the proposed interim and final landfill slopes and cover system.

294. Stability analyses conducted on behalf of Post Oak were credible, reliable, and thorough.

295. The Application includes adequate analysis to ensure slope stability.

296. Post Oak's stability evaluations, specifically as related to shear strength needs, have been adequately translated into design specifications that can be used by the contractors building the landfill.

### **Waste Management Design-Differential Settlement**

297. Post Oak's preliminary foundation evaluation of the site concluded that, under the operation of the landfill, there could be differential settlement of up to 37 inches between the center point of the landfill and the edge of the landfill.

298. Even with a differential settlement of 37 inches, the leachate collection pipes in the landfill will still flow toward the sump.

299. A differential settlement of 37 inches will not compromise the integrity of the leachate collection system.

---

### **Waste Acceptance Plan**

300. Section 2 of Part II of the Application pertains to the Waste Acceptance Plan required by 30 Tex. Admin. Code § 330.61(b).



301. Section 2 identifies the sources and characteristics of waste to be accepted, including a description of the general sources and generation areas contributing wastes, with respect to the Facility.
302. The Application provides that sufficient equipment will be available at the Facility to effectively manage and conduct operations in accordance with permit conditions and includes a table describing its minimum equipment requirements, equipment types, number of respective equipment units required per waste acceptance rate, typical sizes, and functions.
303. Post Oak's Waste Acceptance Plan satisfies all requirements of the Commission's rules.
304. Post Oak's Site Operating Plan (SOP) addresses the detection of radioactive waste and provides adequate measures for inspecting for radioactive waste.
305. [Deleted]

#### **Site Operating Plan-General**

306. Post Oak submitted Part IV of the Application, which constitutes the proposed SOP for the Facility.
307. The Application provides that the initial opening, preconstruction conference, preopening inspection and information submittal activities will be conducted in accordance with 30 Tex. Admin. Code § 330.73(c)-(f).
308. The Application provides how an Operating Record will be maintained at the Facility, including a table describing the records to be maintained, the frequency of record maintenance, along with a reference to the specific rule that governs the maintenance of the particular record at issue.
309. The Application provides that the Facility will be staffed with qualified and experienced personnel and includes a table describing the key personnel, their respective qualifications, and their respective roles.
310. The Application addresses routine operational inspections and documentation, including a table describing routine site inspections to be conducted at the Facility, instructions for such inspections, and the frequency of them.
311. The Application describes the personnel training programs for the Facility, including a description of all minimum training requirements based on subject matter.
312. The Application describes which wastes will be prohibited and which wastes are not acceptable for disposal, but are acceptable for temporary storage at the Facility. It also provides the procedures for the detection and prevention of prohibited wastes.

313. The SOP includes provisions related to training employees, including training for record keeping, license requirements, detection and prevention of disposal of prohibited wastes, fire protection and response, site inspection, site safety, site access, and maintenance.
314. The landfill personnel would receive training through a combination of classroom instruction and on-the-job training in procedures relevant to the position for which they are employed.
315. The Application identifies the sources and characteristics of waste to be accepted, including a description of the general sources and generation areas contributing wastes, with respect to the Facility.
316. The landfill would have a program for the detection and prevention of the disposal of prohibited wastes, including regulated hazardous and PCB wastes.
317. Site personnel would receive site-specific safety training.
318. In order to enhance site safety, access to the active areas would be limited to authorized personnel and equipment would be kept well-maintained.
319. The SOP adequately provides for training of employees and guides the Facility's day-to-day operations.
320. The SOP outlined in the Application includes a screening program for the detection and prevention of the disposal of prohibited wastes.
321. All incoming loads would be visually monitored at the gatehouse and working face.
322. Site personnel would be properly trained to identify any prohibited wastes, perform random inspections, and know what to do in the event prohibited wastes are identified.
323. Detection of a prohibited waste would trigger an investigation and appropriate measures.
324. The SOP requires the maintenance of records of load inspection reports and regulated hazardous or PCB waste notifications.
325. Prohibited wastes would be properly segregated, protected against the elements, secured against unauthorized removal, isolated from other waste and activities, and returned to the hauler for proper disposition.
326. The SOP provides adequate controls for screening of prohibited wastes, except in regard to radioactive waste.
327. The Application describes the steps to be taken to prevent fires at the Facility, the procedures in the event of a fire, and the firefighting methods and procedures. It provides a description of earthen fire control, fire equipment, fire protection training and TCEQ notification. The Application describes how access will be controlled in terms of site security and traffic control procedures at the Facility.

328. The SOP would provide adequate controls for site access.
329. The only access point through the perimeter fence would be through a gated entrance to the main property, with a gate attendant, at the permit boundary.
330. Entry to the active portion of the site would be restricted to designated personnel, approved waste haulers, and properly identified persons whose entry is authorized by site management.
331. The Application describes procedures for unloading of wastes including information on specific collection areas at the Facility, and the related procedures.
332. The Application describes signage for the Facility.
333. The Application describes any existing or abandoned drainage or pipeline easements within or adjacent to the Facility and any associated buffer zones.
334. The Application describes the landfill markers and the permanent benchmark to be established at the Facility.
335. Post Oak plans to confine the unloading areas to a minimum size.
336. The SOP has measures to control odors such as prompt landfilling of waste, daily covering of freshly landfilled waste, controlling ponded water, and properly managing leachate and contaminated water.
337. The Application describes procedures to minimize waste materials along the route to the Facility.
338. The Application describes procedures for the disposal of large items at the Facility.
339. The Application describes procedures for compliance with the federal Clean Air Act and 30 Tex. Admin. Code § 330.15(d) to comply with prohibitions against burning waste. It also identifies potential sources of odor and describes methods to be employed at the Facility to control odor.
340. The Application describes disease vector control procedures designed to effectively control animals capable of mechanically or biologically transferring a pathogen from one organism to another, including daily cover, ponded water avoidance, and pest extermination alternatives, as appropriate.
341. The Application describes the nature of the access roads and internal roadways and explains the means by which tracking of materials and dust control will be managed at the Facility.
342. The Application describes how salvaging activities, if any, will be managed and how scavenging will be prohibited at the Facility.

343. The SOP provides adequate controls for vectors, salvaging, and scavenging.
344. The SOP adequately addresses the response to salvaging and scavenging.
345. The Application describes the mechanisms to be employed at the Facility to monitor and control methane gas emissions, including a detailed description of monitoring procedures in Attachment 6, the Landfill Gas Management Plan.
346. The Application describes means and methods of waste compaction at the Facility.
347. The Application addresses the daily cover that will be used at the Facility.
348. The SOP provides adequate controls for ponded water.
349. The Application describes how intermediate cover of soils, vegetative growth, or other suitable erosion control mechanisms will be used at the Facility for all areas that will receive additional waste but may be inactive for more than 180 days.
350. The Application explains that no alternative cover will be used absent temporary authorization and permit amendment or modification.
351. The Application describes the final cover for the landfill, including an explanation of the components of the final cover, slope range, and drainage control, with reference to Part III of the Application, Attachment 3, Figures 3-12; Part III of the Application, Attachment 2; and Part III of the Application, Attachment 3, Exhibit 3D-1.
352. The Application addresses erosion of the cover and explains the plan for repairs in the event of cover erosion.
353. The cover application record, with the required elements, will be maintained on site and available for appropriate inspection.
354. The Application includes adequate provisions for cover, in compliance with TCEQ's rules.
355. The Application describes surface water management procedures at the Facility designed to minimize water contact with waste through grading, containment berms, diversion and water pumping, if necessary, as well as other appropriate methods.
356. The Application describes how certain acceptable special wastes will be handled at the Facility and that no other special wastes will be accepted without written approval of the TCEQ.
357. The Application describes whether and how industrial solid wastes can be accepted at the Facility.
358. The Application describes that yard wastes, and wood and brush not mixed with other waste may be diverted for recycling and mulch.

359. The Application describes collection, storage, and subsequent transport off-site of recyclables, used oil, and lead acid batteries by approved vendors.
360. The Application describes how a limited quantity of scrap tires will be accepted for subsequent transport off-site by approved vendors.
361. The Application describes the management of large items and white goods, which will be staged for off-site transport for recycling. It also describes that, if large/white goods are disposed of at the operating face of the landfill, placement will be protective of the liner protective cover and the chlorofluorocarbons will be managed in accordance with federal regulations.
362. The Application describes how inert materials such as asphalt, brick, and concrete will be utilized by the Facility for site operations such as road base and erosion control.
363. The Application describes how the Facility will manage containers located in the Citizen's Convenience Area (CCA), including a table summarizing waste stream processing in the CCA.
364. The Application describes how any contaminated water, incidental to waste and recyclable handling at the CCA, will be managed at the Facility to avoid water pollution.

#### **Site Operating Plan-Windblown Waste**

365. The Application describes how the Facility will be operated to minimize windblown material.
366. The Application describes the soil cover that will be used at the Facility at least once every 24 hours as a means to control disease vectors, fire, odor, windblown litter, and scavenging.
367. The SOP provides many details and means for how Post Oak will control windblown waste at the site.
368. The SOP does not specify how litter scattered throughout the site will be picked up once a day on days the Facility is in operation.

#### **Closure/Post-Closure Plans**

369. A Closure Plan is included in Part III, Attachment 7, of the Application.
370. The Closure Plan specifies the procedures that the Facility must follow for closure of any disposal unit of the landfill or final closure of the entire landfill.
371. Post Oak's Closure Plan includes a description of the steps that will be undertaken to close the disposal units, a general schedule for final closure, a description of the final cover system, and the methods used to install the final cover.

- 372. Section 2.0 of Attachment 7 sufficiently describes the design of the final cover.
- 373. A Post-Closure Plan concerning the ongoing monitoring and maintenance activities that will be conducted at the site following closure is also included as Attachment 8.
- 374. The Application includes adequate provisions for cover consistent with TCEQ's rules.
- 375. The Application provides adequate closure and post-closure plans consistent with TCEQ's rules.

### **Financial Assurance**

- 376. Closure and post-closure costs are included in the Application's Cost Estimates as required by 30 Tex. Admin. Code § 330.63(j), including in Appendices 7A and 8A.
- 377. Post Oak submitted Appendix 7A as part of the Application to comply with the applicable regulatory requirements in 30 Tex. Admin. Code § 330.63(j) and the applicable landfill closure care cost estimate requirements in 30 Tex. Admin. Code ch. 330, subch. L.
- 378. Post Oak's closure cost estimates are based on the estimated cost of hiring a third party to close the largest waste fill area of the landfill that could potentially be open in the year to follow and those areas that have not received final cover.
- 379. Costs are estimated for performing the post-closure care maintenance requirements in 30 Tex. Admin. Code § 330.463 in accordance with the Facility's Post-Closure Plan in Attachment 8 to the Site Development Plan.
- 380. Post-closure care cost estimates in Attachment 8 of the Application are based on the estimated cost of hiring a third party to conduct post-closure care cost activities for the Facility during the 30-year post-closure care period.
- 381. Post Oak's post-closure cost estimates account for the total costs of conducting post-closure care for the largest area of the Facility that could possibly require post-closure care in the year to follow, including annual and periodic costs over the entire 30-year post-closure care period.
- 382. Post Oak has proposed adequate financial assurance.

### **Additional Findings**

#### ***Unstable Areas***

- 383. The Subsidence and Faulting Study was conducted in part because the Facility is located near the Darst Creek Field, an area of oil and gas extraction, which activities could potentially cause unstable areas.
- 384. There have been no induced seismic events at the Darst Creek Field, even during the years of the highest production there.

385. There are no indications of subsidence, and the literature indicates no reports of land subsidence issues in the footprint of the Carrizo-Wilcox Aquifer.
386. The Facility is not in the vicinity of an active fault.
387. Data from soil borings, field observations, and examination of aerial photographs also show no evidence of subsidence at the Facility.
388. An unstable area is an area susceptible to natural or human-induced events or forces that are capable of impairing the integrity of the landfill.
389. No fill materials or other subsurface conditions that may cause significant differential settling of the base grades of the proposed landfill were identified in the subsurface analysis.
390. The Facility is not located in an unstable area and subsidence is not expected to occur.

#### ***Historic Preservation***

391. Post Oak conducted an historic conservation survey and determined that no historic properties will be affected by the Facility.
392. The THC concurred that no historic properties will be affected by the Facility.

#### ***Council of Government***

393. Post Oak provided Parts I and II of the Application to Alamo Area Council of Government (AACOG) for its review of the Application for compliance with AACOG's regional plan.
394. On January 5, 2011, the Resource Recovery Committee of the AACOG voted to grant Post Oak's request for a letter of approval.
395. Although it later revised its position, AACOG determined that the Facility was consistent with the regional plan, and advised that the AACOG's letter of approval could be submitted to TCEQ with the Application.

#### ***Easements and Buffer Zones***

396. There are no existing drainage or pipeline easements within or adjacent to the Facility.
397. An abandoned and unused pipeline easement crosses the southwestern portion of the site, but the pipeline is disconnected and vacated in accordance with Guadalupe County Records.
398. To the extent any portion of abandoned pipeline is encountered in the construction of the Facility, the pipeline will be removed and disposed of properly.

399. An abandoned electrical easement is depicted on Part II, Figures 7 and 8 of the Application.
400. The Application describes buffer zones around the perimeter of the Facility, which will include berms, native flora and fauna, and a wooded canopy, with wetland preservation practices.
401. The Application addresses the buffer zones and earthen and vegetation screens implemented to screen the view of waste, which is more specifically described in Part III, Attachment 3, Figure 3-1.

***Surface Water Protection/Prevention of Erosion and Soil Loss***

402. Commission rule 30 Tex. Admin. Code § 330.63(c) requires the Site Development Plan to include a surface water drainage report addressing the requirements of Subchapter G of Chapter 330 of the Commission's rules, entitled "Surface Water Drainage."
403. The Site Development Plan summarizes the Application's compliance with the requirements of Subchapter G, and each of the requirements is addressed in detail in the Facility Surface Water Drainage Report, included in Part III, Attachment 2.
404. The Facility Surface Water Drainage Report provides a detailed description of the hydrologic and hydraulic analyses performed for the Facility, including the results of those analyses.
405. The pre-development drainage areas, drainage area acreage, existing flow paths, and analysis points are depicted in Figure 2A-1.
406. Drainage calculations for the pre-development areas are presented in Exhibit 2A-1.
407. The post-development drainage areas, drainage area acreage, existing and developed flow paths, and analysis points are depicted in Figure 2A-2.
408. Drainage calculations for the post-development areas are presented in Exhibit 2A-2.
409. Additional drainage calculations for the proposed Facility drainage system design are presented in Appendix 2B.
410. Structural designs and hydraulic calculations for all proposed collection, drainage, and detention facilities are detailed in Part III, Appendix 2B of the Application.
411. A plan for the inspection, maintenance, repair, and restoration of the proposed stormwater management system is included in of Erosion, Sedimentation, and Drainage Control for Operating Areas of the Landfill, including Appendix 2C.
412. The pre- and post-development peak flow rates and runoff volumes are presented in Appendix 2A, Existing and Post Development Storm Water Runoff Comparison.



413. The hydrologic methods are discussed in Sections 1.0 and 2.0 of Existing and Post Development Storm Water Runoff Comparison. Drainage calculations, with a more detailed description of the hydrologic methods and assumptions employed, are also included in Appendix 2A.
414. The 25-year, 24-hour rainfall event used for design of the Facility is 8.16 inches, as indicated in Figure 6 of the Pre-Development Hydrologic Calculations.
415. The drainage system for the Facility is designed to collect and control runoff from a 24-hour, 25-year storm event.
416. The collection and diversion of stormwater run-on and the use of run-on diversion and containment berms to prevent flow onto the active portion of the landfill is discussed in Exhibit 3C-4, Working Face Containment and Berm Design.
417. An erosion and sedimentation control plan with interim controls for the phased development of the Facility is included in the portion of the Application, entitled Erosion, Sedimentation and Drainage Control for Operating Areas of the Landfill.
418. The top dome surfaces and external embankment slopes have been designed to minimize erosion and soil loss through the use of appropriate side slopes, vegetation, and other structural and nonstructural controls during operations and at closure.
419. The Application includes calculations of estimated peak velocities for top surfaces and external embankment slopes in Sheet Flow Velocities for Final Cover and for Intermediate Cover, found in Part III, Annex 2B-1B and Ex. 2C-2.
420. The proposed slopes and lengths of the top surfaces ensure that the velocity of stormwater flowing over these surfaces will not exceed the permissible non-erodible velocity.
421. For the external embankment slopes, diversion structures will be installed along the slopes to limit stormwater flow to velocities below the permissible non-erodible velocity.
422. The soil loss calculations for the Facility's top surfaces and external embankment slopes were calculated using the United States Department of Agriculture's Revised Universal Soil Loss Equation.
423. The analysis of pre- and post-development conditions is set forth and the resulting peak flow rates, maximum velocities, and volumes are presented in Existing and Post-Development Storm Water Runoff Comparison, Part III, Appendix 2A.
424. For all but one of the Facility's discharge points, post-development peak flow rates and maximum velocities will be maintained at or below the peak flow rates and maximum velocities for the pre-development conditions.
425. In the one instance in which the post-development 25-year storm total runoff volume is higher than the corresponding pre-development conditions, the volume is negligibly higher, at 0.01 inches, and will not significantly or adversely alter existing drainage patterns.

426. Stormwater runoff volumes from the Facility will be detained by the stormwater management system and released at rates that will not significantly or adversely alter existing drainage patterns.
427. The Application complies with TCEQ's rules regarding TPDES stormwater permitting requirements.
428. The Application includes a surface water protection and drainage plan that includes the location, details, and typical sections of the facilities that relate to the protection of surface water, and it shows the provisions for safe passage of all internal and externally adjacent floodwaters are adequate.
429. The Application accurately reflects the current drainage conditions and does not propose adverse alterations to the existing drainage patterns.
430. The erosion control methods identified in the Application are consistent with TCEQ's rules.
431. The Application proposes adequate protection of surface water.

#### ***Landfill Gas Management***

432. Commission rule 30 Tex. Admin. Code § 330.63(g) concerns gas management requirements, and 30 Tex. Admin. Code § 330.371 requires routine methane monitoring. These requirements are addressed in detail in the Landfill Gas Management Plan (LGMP), which is in Part III, Attachment 6.
433. The LGMP describes how landfill gases will be managed and controlled and establishes a gas monitoring system and program to ensure that the methane limits in 30 Tex. Admin. Code § 330.371 (a) are not exceeded.
434. The LGMP also prescribes the actions that the Facility must take if methane levels are detected in excess of the prescribed limits.
435. The Application includes adequate provisions to manage landfill gas, in compliance with TCEQ's rules.

#### ***Miscellaneous***

436. The Facility is not located over a recharge zone of the Edwards Aquifer.
437. The Facility is not in a national forest.

#### ***Transcript Costs***

438. The ALJs ordered Post Oak to arrange for and pay the costs of having a court reporter attend the hearing and prepare a transcript, subject to allocation of such costs at the end of the proceeding.
439. Post Oak provided no evidence as to the amount of transcript costs or what they include.
440. Post Oak is the only party that could benefit financially from having a transcript.
441. All of the Parties participated in the proceedings and benefitted from having a transcript for use in preparing their respective briefs.

## 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 § 361.061.
2. Notice was provided in accordance with Tex. Health & Safety Code § 361.0665, 30 Tex. Admin. Code §§ 39.405 and 39.501, and Tex. Gov't Code §§ 2001.051-.052.
3. SOAH has jurisdiction to conduct a hearing and to prepare a PFD in contested cases referred by TCEQ under Tex. Gov't Code § 2003.047.
4. The ED determined that Post Oak submitted an administratively and technically complete permit application, as required by Tex. Health & Safety Code §§ 361.066 and 361.068, that demonstrated that it will comply with all relevant aspects of the Application and design requirements as provided in 30 Tex. Admin. Code §§ 330.71(a) and 330.57(d).
5. 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 § 80.1 *et seq.*; the State Office of Administrative Hearings, specifically 1 Tex. Admin. Code § 155.1 *et seq.*; and Tex. Health & Safety Code ch. 361, subch. C.
6. The burden of proof was on Post Oak, in accordance with 30 Tex. Admin. Code § 80.17(a). Unless otherwise noted herein, Post Oak met its burden with respect to all issues.
7. The evidence in the record is sufficient to meet the requirements of applicable law for issuance of the Draft Permit, as modified by this Order, including Tex. Health & Safety Code ch. 361 and 30 Tex. Admin. Code ch. 330.
8. The Post Oak Municipal Landfill, if constructed and operated in accordance with Tex. Health & Safety Code § 361.001, *et seq.* (the Solid Waste Disposal Act), 30 Tex. Admin. Code ch. 330, and the Draft Permit required by this Order, will not adversely affect public health or welfare or the environment.
9. The Draft Permit No. MSW-2378, as prepared by the Executive Director and modified by this order, includes all matters required by law.

10. The approval of the Application and issuance of Permit No. MSW-2378, as modified by this order, will not violate the policies of the State of Texas, as set forth in Texas Health & Safety Code § 361.002(a), 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.
11. 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 §§ 361.086(b) and 361.087.
12. Post Oak provided the information required under TCEQ's rules to demonstrate competency under 30 Tex. Admin. Code § 330.59(f).
13. Post Oak's compliance history ranking was properly classified as "unclassified" under 30 Tex. Admin. Code ch. 60.
14. The TCEQ is not prohibited by Tex. Health & Safety Code § 361.122 from issuing Permit No. MSW-2378.
15. The Application adequately demonstrates compliance with the TPDES 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 § 330.61(k)(3), (i)(4), and (i)(5), Post Oak has submitted documentation of coordination with TCEQ for compliance with the Federal Clean Water Act Section 402, the FAA for compliance with airport location restrictions, and TXDOT for traffic and location restrictions.
17. Post Oak has submitted wetland determinations required by applicable federal, state, and local laws as required by 30 Tex. Admin. Code § 330.61(m).
18. The Application conforms to the applicable requirements of the Texas Engineering Practice Act, Tex. Occ. Code ch. 1001, as provided in 30 Tex. Admin. Code § 330.57(f).
19. Part I of the Application meets the technical requirements of 30 Tex. Admin. Code §§ 281.5, 305.45, 330.57(c)(1) and 330.59.
20. Post Oak has plugged, capped, and closed all wells required to be plugged, capped, and closed under the requirements of 30 Tex. Admin. Code § 330.61(1)(2). Post Oak has now obtained and submitted the certification related to such plugging, capping, and closure required under 30 Tex. Admin. Code § 330.61(1)(2).
21. Part II of the Application meets the technical requirements of 30 Tex. Admin. Code §§ 305.45, 330.57(c)(2), and 330.61.
22. The Site Development Plan, which supports Parts I and II of the Application, meets the requirements of 30 Tex. Admin. Code §§ 330.63 and 330.61.

23. Unless otherwise noted in this order, Part III of the Application meets the requirements of 30 Tex. Admin. Code §§ 330.57(c)(3), 330.63, 330.545, 330.547, 330.551 and 330.553.
24. Unless otherwise noted in this order, Part IV of the Application, the SOP, meets the requirements of 30 Tex. Admin. Code §§ 330.57(c)(4), 330.65, and 330.121-330.179.
25. Post Oak has shown that it will comply with the operational prohibitions and requirements in 30 Tex. Admin. Code §§ 330.15 and 330.121-330.179.
26. The Application includes adequate provisions to prevent the ponding of water over waste in the landfill, in compliance with 30 Tex. Admin. Code § 330.167.
27. Post Oak submitted a geology report that complies with 30 Tex. Admin. Code § 330.63(e).
28. The Application contains the required information regarding the effect of Facility construction on groundwater flow required by 30 Tex. Admin. Code § 330.403(e)(1).
29. The Application adequately demonstrates that uplift forces will not compromise the integrity of the landfill and that the landfill can handle groundwater infiltration, in compliance with 30 Tex. Admin. Code § 330.337(b).
30. The Application adequately addresses the minimum requirements for approval of an alternate liner design, in compliance with 30 Tex. Admin. Code § 330.335.
31. The Application meets the requirements of 30 Tex. Admin. Code §§ 330.63(f)(4), 330.401, 330.403, 330.405, and 330.407, concerning groundwater protection.
32. The groundwater sampling and analysis plan meets the requirements set forth in 30 Tex. Admin. Code § 330.63(f) and subchapter J of chapter 330.
33. Post Oak 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 §§ 330.63(c)(1)(D)(iii) and 330.305(a).
34. The landfill gas monitoring system complies with 30 Tex. Admin. Code § 330.159.
35. Post Oak has demonstrated compliance with applicable TPDES stormwater permitting requirements.
36. Post Oak has demonstrated compliance with the location restrictions set forth in 30 Tex. Admin. Code §§ 330.545, 330.547, 330.553, 330.555, 330.557, and 330.559.
37. Post Oak has submitted information regarding closure and post-closure that demonstrates compliance with the requirements of 30 Tex. Admin. Code §§ 330.63(h)-(i), 330.457, 330.461, 330.463, and 330.465.
38. The Soils and Liner Quality Control Plan complies with 30 Tex. Admin. Code §§ 330.63(d)(4)(G) and 330.339.

39. Post Oak 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 FAA and in compliance with 30 Tex. Admin. Code §§ 330.61(i)(5) and 330.545.
40. As required by Tex. Health & Safety Code § 361.069, the Facility is compatible with surrounding land uses.
41. The MOU entered into by Post Oak and the USAF adequately addresses the concerns raised by the USAF regarding flight safety issues.
42. With implementation of the measures required by the MOU between Post Oak and the USAF, the Facility will not present a significant bird hazard to low flying aircraft, and meets the requirements of 30 Tex. Admin. Code § 330.545(d).
43. GCGCD does not have authority under the Comprehensive Municipal Solid Waste Management, Resource Recovery and Conservation Act, Tex. Health & Safety Code § 363.001, *et seq.*, to prohibit the siting of a MSW landfill in any area of Guadalupe County.
44. [Deleted]
45. TCEQ's jurisdiction under 30 Tex. Admin. Code ch. 361 does not extend to preventing any alleged interference with mineral rights.
46. Solid waste management activities at the Facility conform with the applicable regional solid waste management plan, pursuant to Tex. Health & Safety Code § 363.066.
47. 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 § 330.3(95).
48. The buffer zones established by Post Oak between the edge of fill and the Facility boundary are compliant with the MSW rules, including 30 Tex. Admin. Code §§ 330.141(b) and 330.543(b).
49. Post Oak 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 § 330.165(a).
50. Except in regard to the failure to specify how litter will be picked up daily, the methods specified in the SOP for the control of windblown waste and litter comply with the MSW rules, including 30 Tex. Admin. Code §§ 330.127 and 330.139.
51. Post Oak has provided adequate information related to transportation in compliance with 30 Tex. Admin. Code § 330.61(i).

52. The 24 hour a day, seven day a week waste acceptance hours and facility operating hours proposed in the Application, and supported by the USAF in the MOU, have been shown to be appropriate, necessary and justified.
53. The proposed groundwater monitoring system will adequately monitor the groundwater beneath the Facility and protect human health and the environment in compliance with 30 Tex. Admin. Code §§ 330.63(f)(4), 330.401, 330.403, 330.405, and 330.407.
54. Unless otherwise noted in this Order, Parts I and II of the Application comply with applicable regulatory requirements of 30 Tex. Admin. Code ch. 330.
55. Unless otherwise noted in this Order, Parts I and II of the Application comply with the requirements of 30 Tex. Admin. Code §§ 281.5, 330.59, and 330.61.
56. Unless otherwise noted in this Order, Section 2.0 of Part II of the Application complies with applicable requirements of 30 Tex. Admin. Code § 330.61(b).
57. Post Oak's Waste Acceptance Plan satisfies all requirements of the Commission's rules.
58. [Deleted]
59. Unless otherwise noted in this Order, Sections 3.0 through 3.3 of Part II of the Application comply with applicable regulatory requirements set forth in 30 Tex. Admin. Code § 330.61(c)-(f) and (l)(1).
60. Unless otherwise noted in this Order, Sections 4.0 through 4.3 of Part II of the Application comply with applicable regulatory requirements set forth in 30 Tex. Admin. Code § 330.61(c)-(h) and (l)(1).
61. The location, construction and operation of the Facility, as proposed in the Application and modified by this order, is compatible with the surrounding land uses, which are primarily agricultural and oil and gas exploration and development.
62. Unless otherwise noted in this Order, Sections 5.0 through 5.3 of Part II of the Application comply with applicable regulatory requirements set forth in 30 Tex. Admin. Code § 330.61(c)(2), (h)(5), and (l).
63. Section 6.0 of Part II of the Application complies with applicable regulatory requirements set forth in 30 Tex. Admin. Code § 330.61(i).
64. Sections 7.0 through 7.8 of Part II of the Application comply with applicable regulatory requirements set forth in 30 Tex. Admin. Code § 330.61(j).
65. Sections 8.0 through 8.3 of Part II of the Application comply with applicable regulatory requirements set forth in 30 Tex. Admin. Code § 330.61(k).

66. Section 9.0 and Attachment 8 of Part II of the Application comply with applicable regulatory requirements set forth in 30 Tex. Admin. Code §§ 330.61(m) and 330.547 as they relate to floodplains.
67. Section 9.0 and Attachment 5 of Part II of the Application comply with applicable regulatory requirements set forth in 30 Tex. Admin. Code §§ 330.61(m) and 330.553 as they relate to wetlands.
68. Section 10.0 and Attachments 6 and 8 of Part II of the Application comply with applicable regulatory requirements set forth in 30 Tex. Admin. Code §§ 330.61(n) and 330.551 as they relate to endangered and threatened species.
69. Section 11.0 and Attachment 4 of Part II of the Application comply with applicable regulatory requirements set forth in 30 Tex. Admin. Code § 330.61(o).
70. Section 12.0 of Part II of the Application complies with applicable regulatory requirements set forth in 30 Tex. Admin. Code § 330.61(p).
71. Section 13.0 of Part II of the Application complies with applicable regulatory requirements set forth in 30 Tex. Admin. Code § 330.543.
72. Section 14.0 of Part II of the Application complies with applicable regulatory requirements set forth in 30 Tex. Admin. Code ch. 330.
73. Unless otherwise noted in this Order, Section 14.0 and Attachment 8 of Part II of the Application comply with applicable regulatory requirements set forth in 30 Tex. Admin. Code § 330.545.
74. Commission rules 30 Tex. Admin. Code §§ 330.549 and 330.563 are not applicable to the Facility, based on its location.
75. Attachment 1 of the Site Development Plan complies with 30 Tex. Admin. Code § 330.63(b).
76. The Overview and Attachment 2 to the Site Development Plan comply with applicable regulatory requirements in 30 Tex. Admin. Code § 330.63(c) and subchapter G of chapter 330.
77. Attachment 3 to the Site Development Plan complies with the applicable regulatory requirements in 30 Tex. Admin. Code §§ 330.63(d)(4) and 330.305(g).
78. Appendix 3D-1 complies with all of the applicable liner requirements in 30 Tex. Admin. Code ch. 330, subch. H.
79. Together with the back-up provided in the Geology Report in Attachment 4, Appendix 3B of Attachment 3 to the Site Development Plan complies with applicable geotechnical regulatory requirements in 30 Tex. Admin. Code §§ 330.63(e)(5)(A)-(B) and 330.339(a) and (e).



80. Attachment 5 to the Site Development Plan, regarding the Groundwater Sampling and Analysis Plan, complies with the applicable regulatory requirements in 30 Tex. Admin. Code § 330.63(f).
81. Attachment 6 to the Site Development Plan, regarding Post Oak's LGMP, complies with applicable regulatory requirements in Subchapter I of Chapter 330.
82. Attachment 7 to the Site Development Plan, regarding Post Oak's Closure Plan, complies with the applicable regulatory requirements in 30 Tex. Admin. Code § 330.63(h) and applicable closure requirements in Subchapter K of Chapter 330.
83. The final cover systems proposed in Attachment 7 provide effective, long-term protection against infiltration and erosion.
84. The final cover designs proposed in Attachment 7 are protective of human health and the environment.
85. Appendix 7A to the Site Development Plan complies with applicable regulatory requirements in 30 Tex. Admin. Code § 330.63(j) and applicable landfill closure care cost estimate requirements in 30 Tex. Admin. Code ch. 330, subch. L.
86. Attachment 8 to the Site Development Plan complies with applicable post-closure requirements in 30 Tex. Admin. Code ch. 330, subch. K.
87. Attachment 8 to the Site Development Plan complies with applicable regulatory requirements in 30 Tex. Admin. Code § 330.63(j) and applicable landfill post-closure care cost estimate requirements in 30 Tex. Admin. Code ch. 330, subch. L.
88. Except as otherwise noted in this order, the SOPs included in Part IV of the Application comply with applicable regulatory requirements in 30 Tex. Admin. Code § 330.65, as well as 30 Tex. Admin. Code ch. 330, subch. D.
89. The SOPs included in Part IV of the Application are designed to make the Facility protective of human health, welfare, property and the environment.
90. Section 2.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.123.
91. Sections 3.0 through 3.5 of Part IV of the Application comply with applicable regulatory requirements of 30 Tex. Admin. Code §§ 330.125-.127 and 335.586(a) and (c).
92. Section 4.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.129.
93. Sections 5.0 through 5.2 of Part IV of the Application comply with applicable regulatory requirements of 30 Tex. Admin. Code § 330.131.

94. Section 6.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.133.
95. Section 7.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.135.
96. Section 8.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.137.
97. Section 9.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.139.
98. Section 10.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.141.
99. Section 11.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.143.
100. Section 12.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.145.
101. Section 13.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.147.
102. Section 14.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.149.
103. Section 15.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.151.
104. Section 16.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.153.
105. Section 17.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.155.
106. Section 18.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.157.
107. Section 19.0 of Part IV and Attachment 6 of Part III of the Application comply with applicable regulatory requirements of 30 Tex. Admin. Code § 330.159.
108. Sections 20.0 through 20.3 of Part IV and Figure 8 of Part II of the Application comply with applicable regulatory requirements of 30 Tex. Admin. Code § 330.161.
109. Section 21.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.163.

110. Sections 22.0 through 22.6 of Part IV of the Application comply with applicable regulatory requirements of 30 Tex. Admin. Code § 330.165.
111. Section 23.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.167.
112. Section 24.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.171.
113. Section 25.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.173.
114. Section 26.0 of Part IV of the Application complies with applicable regulatory requirements of 30 Tex. Admin. Code § 330.175.
115. Special Provision 6 (Section IX, 6) regarding leachate recirculation should be removed from the Draft Permit, as the leachate recirculation system is no longer supported by the Executive Director, and Post Oak is no longer pursuing the use of this system at the Facility as part of this matter.
116. Sections 28.0 through 28.7 of Part IV of the Application comply with applicable regulatory requirements of 30 Tex. Admin. Code § 330.63(d)(1)(A)-(C).
117. Post Oak should be required to take its shear strength calculations and incorporate them into specific design specifications to be included in the Soils and Geosynthetics Construction Quality Assurance Plan prior to construction.
118. The engineering, design, and operational plans and drawings in the Application ensure that the Facility is designed and operated in a manner protective of human health, welfare, property, and the environment.
119. The subsurface investigations of the Facility were conducted to ensure that the site is suitable for construction and operation of a landfill that will not adversely impact human health, welfare, property, or the environment.
120. Special Provision 2 (Section IX, 2) regarding the plugging of each of the known oil and gas-related wells should be removed from the Draft Permit, because each of the known oil and gas-related wells within the permit boundary that are within the RRC's jurisdiction has been plugged.
- 120A. Special Provision 3 (Section IX, 3) regarding wetlands should be reworded in the Draft Permit to read "Proof of a final Wetlands Mitigation Plan from the United States Army Corp of Engineers must be provided to the Executive Director before commencement of physical construction."
121. Special Provision 4 (Section IX, 4) regarding airport safety issues should be removed from the Draft Permit, because Post Oak has met the requirements of 30 Tex. Admin. Code § 330.545.

122. Pursuant to the authority of, and in accordance with, applicable laws and regulations, the requested permit should be granted, as modified by this order.
123. No transcript costs may be assessed against the Executive Director or OPIC because the TCEQ's rules prohibit the assessment of any cost to a statutory party who is precluded by law from appealing any ruling, decision, or other act of the Commission. 30 Tex. Admin. Code § 80.23(d)(2).
124. Factors to be considered in assessing transcript costs include: the party who requested the transcript; the financial ability of the party to pay the costs; the extent to which the party participated in the hearing; the relative benefits to the various parties of having a transcript; the budgetary constraints of a state or federal administrative agency participating in the proceeding; and any other factor which is relevant to a just and reasonable assessment of the costs. 30 Tex. Admin. Code § 80.23(d)(2).
125. Post Oak should pay all costs associated with preparation of the transcript.

### III. EXPLANATION OF CHANGES

1. The Commission deleted proposed Finding of Fact No. 121 for the reasons set forth in the Executive Director's original reply to exceptions. As noted in the ED's reply, the proposed finding could have been improperly interpreted to allow the Applicant to completely disregard the geology at the site when designing, constructing, and operating the landfill.
2. The Commission deleted proposed Ordering Provision No. 1.a as duplicative, as the Executive Director's draft permit already requires that the improvements to roadways recommended by the Texas Department of Transportation be implemented prior to waste acceptance in Special Provision No. IX, 5 (now identified as Special Provision No. IX, 3 in the Commission's permit).
3. The Commission amended the ALJ's May 15, 2018 version of the Proposed Order to retain proposed Finding of Fact Nos. 208 and 209 from the ALJs' January 11, 2017 version of the Proposed Order. Those findings relate to endangered and threatened species and are now numbered Finding of Fact Nos. 175 and 177A in this Commission Order. In addition, the Commission added an ordering provision (new Ordering Provision No. 1.f), as recommended by the ALJ in the Original PFD, requiring the Applicant to train all on-site employees about possible endangered or threatened species that may be found at the site. The ALJ did not provide any explanation for deleting the two findings of fact and not ordering the additional training in the May 15, 2018 PFD. Without explanation from the ALJ on the deletions, the Commission believes that retaining the ALJ's original recommendation on endangered and threatened species is appropriate.
4. The Commission added new Conclusion of Law No. 120A to provide that Special Provision IX, 3 regarding wetlands should be reworded in the Executive Director's draft permit to read "Proof of a final Wetlands Mitigation Plan from the United States Army Corp of Engineers must be provided to the Executive Director before commencement of

physical construction.” (This provision is now identified as Special Provision No. IX, 2 in the Commission’s permit.)

5. The Commission determined that the evidence in the record supports Post Oak’s use of the proposed alternative liner. The Commission determined that the Applicant’s computerized design modeling in the Application demonstrated that the required maximum contaminant levels would not be exceeded at the point of compliance, in accordance with 30 Tex. Admin. Code § 330.335. Accordingly, the Commission modified proposed Finding of Fact No. 291, deleted proposed Finding of Fact No. 292, modified Conclusion of Law Nos. 30 and 115, and modified Ordering Provision No. 1.d. in the Proposed Order (including modifying the opening text of Ordering Provision No. 1 and deleting provision Ordering Provision No. 1.d.), to allow the use of the alternative liner. In addition, the Commission retained the authorization to use an alternative liner design in Special Provision No. IX, 7 in the Executive Director’s draft permit (now identified as Special Provision No. IX, 4 in the Commission’s permit).
6. The Commission declined to adopt the ALJ’s recommendation to add more specificity to the requirements prohibiting the disposal of most radioactive wastes. 30 Tex. Admin. Code § 330.127(5) specifies a list of procedures for the detection and prevention of the disposal of prohibited wastes, including radioactive waste with limited exceptions. Post Oak’s Site Operating Plan contains all of the necessary procedures and information required by 30 Tex. Admin. Code § 330.127(5). The ALJ’s recommendation to include additional specificity is not contemplated by TCEQ rules and has specifically been rejected by the Commission in previous rulemakings, as noted in the Executive Director’s exceptions and replies. Consequently, proposed Finding of Fact Nos. 303 and 304 have been modified, proposed Finding of Fact No. 305 has been deleted, proposed Conclusion of Law No. 57 has been modified, proposed Conclusion of Law No. 58 has been deleted, and proposed Ordering Provision No. 1.b has been deleted to eliminate the ALJ’s recommendation to add more specificity to the radioactive waste procedures in the Site Operating Plan.
7. The Commission amended the May 15, 2018 version of the ALJ’s Proposed Order to retain proposed Finding of Fact No. 273 from the ALJ’s January 11, 2017 version of the Proposed Order related to notices of deficiency. As in Explanation of Changes No. 3, above, the ALJ provided no explanation for deleting the Finding of Fact in the May 15, 2018 PFD. Without explanation for its deletion, the Commission believes that retaining the finding (now numbered Finding of Fact No. 254A) is appropriate.
8. As recommended by the Executive Director in his exceptions following the Remand PFD and agreed to by the ALJ by letter dated July 6, 2018, the Commission added a special condition to the draft permit prohibiting the recirculate of leachate (now identified as Special Condition IX, 5 in the Commission’s permit). The addition of the special condition is provided for by Ordering Provision No. 1.g.
9. The Commission deleted proposed Finding of Fact Nos. 226 through 228 and Conclusion of Law No. 44 related to groundwater conservation district rules and authority. As noted by the Protestants’ in their exceptions and replies, the findings and conclusion do not relate to any contested case issue raised by the parties and are irrelevant to the Commission’s

decision on this application. Accordingly, the findings and conclusion has been deleted from this Order.

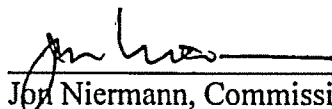
10. The Commission amended Ordering Provision No. 1.e. to replace the phrase "Site Operating Plan" with a more general reference to "the Application." As noted by the Executive Director during the Commission's August 8, 2018 public meeting, although the MOU has the potential to conflict with provisions contained in the Applicant's Site Operating Plan, the MOU might also potentially conflict with provisions contained outside the Site Operating Plan in other parts of the Application. Thus, to provide clarity, a general reference to "the Application" in Ordering Provision No. 1.e. covers all potential conflicts between the MOU and all portions of the Application, rather than just those provisions found in the Site Operating Plan.

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

1. Post Oak's application is granted and the Municipal Solid Waste Landfill Type I permit is hereby issued to Post Oak, as set out in the attached Draft Permit, with the removal of Special Provisions 2, 4, and 6 (Section IX, provisions 2, 4, 6), and the inclusion of the following modifications:
  - a. [Deleted]
  - b. [Deleted]
  - c. The SOP shall be modified to specify the means Post Oak will use to comply with the requirement that litter scattered throughout the site will be picked up once a day on days the Facility is in operation.
  - d. [Deleted]
  - e. The MOU between Post Oak and the USAF is incorporated into, and made an enforceable part, of Permit No. MSW-2378. In the event of a conflict between the MOU and the Application, the MOU provisions shall supplement the Application and control, except as otherwise required by law.
  - f. Post Oak shall train all on-site employees about possible endangered and threatened species that may be found at the site.
  - g. The permit shall specify that the recirculation of leachate is prohibited.
2. Post Oak shall pay all costs related to the preparation of the transcript.
3. The effective date of this Order is the date the Order is final.

4. All other motions, requests for entry of specific findings of fact or conclusions of law, and any other requests for general or specific relief not expressly granted herein, are hereby denied for want of merit.
5. If any provision, sentence, clause, or phrase of this Order is held to be invalid, the invalidity of such shall not affect the validity of the remaining portions of the Order.
6. The Chief Clerk of the Texas Commission on Environmental Quality shall forward a copy of this Order to the parties.

TEXAS COMMISSION ON  
ENVIRONMENTAL QUALITY

  
\_\_\_\_\_  
Jon Niermann, Commissioner

8/27/18  
\_\_\_\_\_  
Dated

# Texas Commission on Environmental Quality



Permit For  
Municipal Solid Waste (MSW) Management Facility  
Issued under provisions of Texas  
Health and Safety Code  
Chapter 361

MSW Permit No.: 2378  
Name of Site Operator/Permittee: Post Oak Clean Green, Inc.  
Property Owner: K4 Ranches  
Facility Name: Post Oak Municipal Solid Waste Landfill  
Facility Address: 7787 Farm to Market Road 1150  
Seguin, Texas 78155  
Classification of Site: Type I Municipal Solid Waste Management Facility

The permittee is authorized to store, process, and dispose of wastes in accordance with the limitations, requirements, and other conditions set forth herein. This 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.

*Approved, Issued and Effective* in accordance with Title 30 Texas Administrative Code, Chapter 330.

Issued Date: \_\_\_\_\_

\_\_\_\_\_  
For the Commission



**Table of Contents**

**I. Size and Location of Facility..... 3**

**II. Facilities and Operations Authorized..... 3**

**III. Facility Design, Construction, and Operation..... 4**

**IV. Financial Assurance..... 8**

**V. Facility Closure ..... 8**

**VI. Facility Post-Closure Care ..... 9**

**VII. Standard Permit Conditions..... 9**

**VIII. Incorporated Regulatory Requirements..... 11**

**IX. Special Provisions .....12**

**Attachment A .....12**

**Attachment B .....12**

**I. Size and Location of Facility**

- A. The Post Oak Municipal Solid Waste Landfill is located in Guadalupe County, Texas 12.1 miles east of Seguin at 7787 Farm to Market Road 1150. The most commonly used route to the proposed facility would be from I-10, south about 1.2 miles on FM 1104 (Dix Road) to FM 1150, then east about 1.0 mile on FM 1150 to the facility entrance. The facility contains approximately 1,003 acres, of which 331 would be used for waste disposal.
- B. The legal description is contained in Part I, Attachment 1 of the application, which is incorporated by reference in Attachment A of this permit.
- C. Coordinates and Elevation of Site Permanent Benchmark:
- |            |                               |
|------------|-------------------------------|
| Latitude:  | N 29.60520°                   |
| Longitude: | W 97.72440°                   |
| Elevation: | 460 feet above mean sea level |

**II. Facilities and Operations Authorized**

A. Days and Hours of Operation

The waste acceptance hours for the receipt and disposal of waste at this facility shall be 24 hours per day, seven days per week. The operating hours at this landfill, which include the use of heavy equipment, shall be 24 hours per day, seven days per week.

The operator shall post the actual operating hours on the site sign.

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, recreational and industrial 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 special waste. The acceptance of the special wastes is contingent upon such waste being handled in accordance with 30 TAC §330.171, and in accordance with the procedures listed and described in Part IV of the application, which is incorporated by reference 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 prohibitions set forth in 30 TAC §330.15(e). The permittee shall not accept Class 1 nonhazardous industrial solid waste, regulated hazardous waste, liquid waste, or any other waste not identified in Section II.B. of this permit.

D. Waste Acceptance Rate

Solid waste may be accepted for disposal at this facility at the initial rate of approximately 300,000 tons per year (approximately 1,150 tons per day based on 260 days per year of operation) and increasing over time to a maximum acceptance rate of approximately 710,000 tons per year (approximately 2,700 tons per day based on 260 days per year of operation). 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 waste disposal capacity of the landfill (including waste and daily cover) is 87 million cubic yards.

F. Facilities Authorized

The permittee is authorized to operate a Type I municipal solid waste landfill with a total permit boundary encompassing approximately 1,003 acres, of which approximately 331 acres are the waste disposal footprint. The permittee is also authorized to operate a recyclables, used oil, and lead battery storage area; a scrap tire storage area; a large items and white goods storage area; a reusable materials staging area; and a citizens convenience area.

All waste disposal activities authorized by this permit are to be confined to the Type I landfill unit. Other units and structures associated with the landfill unit include access roads, scales, gatehouse, dikes, berms and temporary drainage channels, permanent drainage structures, detention ponds, landfill gas management system, contaminated water management system, leachate management system (including leachate evaporation ponds), final cover, groundwater monitoring system, a liner system, and other improvements.

All waste storage and processing activities authorized by this permit are to be confined to the locations depicted in Figure 20 in Part II of the permit application or as described in Part IV of the permit application. Used oil storage must meet the requirements of 30 TAC Chapter 324. Lead battery storage must meet the requirements of 30 TAC Chapter 328, Subchapter C.

G. Changes, Additions, or Expansions

Any proposed facility changes must be authorized in accordance with the rules in 30 TAC Chapters 305 and 330.

**III. Facility Design, Construction, and Operation**

- A. Facility design, construction, and operation and maintenance must comply with the provisions of this permit; Commission Rules, including but not limited to 30 TAC Chapter 330; special provisions contained in this permit; and Parts I through IV of the permit application incorporated by reference in Attachment A of this permit; amendments, corrections, and modifications incorporated by

reference in Attachment B. The facility construction and operation shall be managed in a manner that protects 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 frequency flood; 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 §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. Management of Contaminated Water, Leachate, and Gas Condensate
1. All contaminated water, including leachate, condensate, and water that has contacted waste, shall be handled, stored, treated, disposed of, and managed in accordance with 30 TAC §§ 330.65(c), 330.177, 330.207, 330.305(g), 330.333, as applicable, and the permit application incorporated by reference in Attachment A of this permit.
  2. Contaminated surface water and groundwater shall not be placed in or on disposed waste in the landfill.
- E. Liner System
1. A liner system pursuant to 30 TAC §330.331 must be installed in all cells. Two liner designs are authorized: a system including a composite liner and a system including an alternative liner. The liner system shall be

constructed in accordance with the rules and the specifications in Part III, Attachment 3, Figure 3-9 in the application. The composite liner system must consist of, from top to bottom, 2 feet of protective cover, a geocomposite drainage layer, a 60-mil high-density polyethylene (HDPE) geomembrane, and two feet of compacted clay with a hydraulic conductivity of no more than  $10^{-7}$  centimeters per second (cm/s). The alternative liner system replaces the compacted clay layer in the composite system with a geosynthetic clay liner.

2. The liner system shall be installed over the entire bottom and sidewalls as described in Part III, Attachment 3, Appendix 3D of the application.
3. The elevation of deepest excavation at the landfill disposal area is 415 feet above msl, and is located within a 3-foot-deep leachate collection sump.
4. The elevations of the bottom of the excavations within the waste disposal areas shall be as shown in Figure 18 in Part II of the application.

F. Final Cover System

1. A final cover system pursuant to 30 TAC Chapter 330 Subchapter K must be installed over all waste placed in landfill cells. The final cover system shall be constructed in accordance with the rules and the specifications in Part III, Attachment 3, Appendix 3D of the application, and must consist of, from top to bottom, 2 feet of protective cover (of which the top six inches are suitable to sustain native plants), a geocomposite drainage layer, a 40-mil linear, low-density polyethylene (LLDPE) geomembrane, and 18 inches of compacted clay with a hydraulic conductivity of no more than  $10^{-5}$  cm/s.
2. The maximum elevation of the final cover shall not exceed 691.8 feet above msl.
3. 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 the Post Closure Care Plan.

G. Waste Placement

1. The lowest elevation of waste placement will be approximately 420 feet above mean sea level (msl).
2. The maximum final elevation of waste placement will be 688.3 feet above msl.

H. Landfill Gas Management System

1. A landfill gas management system to monitor and control methane gas, pursuant to 30 TAC Chapter 330, Subchapter I, shall be installed and operated at the landfill. The landfill gas monitoring system shall consist of a perimeter network of landfill gas monitoring probes and landfill gas monitoring equipment for facility structures. The landfill gas monitoring probes and landfill gas control system shall be located as illustrated in Part III, Attachment 6, Figure 6-1 of the application. The landfill gas monitoring and control systems shall be designed, installed, and operated as described in Part III, Attachment 6 of the application and consistent with applicable rules. At a minimum, landfill gas monitoring shall be conducted on a quarterly basis.
2. The landfill gas management system shall ensure that the concentration of methane gas generated by the facility does not exceed 5% by volume in monitoring points, probes, subsurface soils, and does not exceed 1.25% by volume in facility structures (excluding gas control or recovery system components). If methane gas levels exceeding the limits specified herein are detected, the owner or operator shall follow and implement the notification and mitigation provision described under 30 TAC §330.371(c) to ensure continuous protection of human health and the environment.

I. Groundwater Monitoring System

1. The groundwater monitoring system shall be installed and shall consist of a sufficient numbers of monitoring wells to monitor the quality of groundwater in the uppermost aquifer in accordance with 30 TAC §330.403. The system shall be designed, constructed, and operated in accordance with Part III, Attachment 5 of the application and consistent with the applicable rules.
2. Monitoring wells shall be sampled in accordance with 30 TAC §330.407. The frequency of groundwater sampling and reporting of data collected for each sampling event shall be in accordance with 30 TAC §330.405 and Part III, Attachment 5 of the application.

J. Landfill Markers

Landfill markers shall be installed and maintained in accordance with 30 TAC §330.143 and as described within Part IV, Section 11.0 of the application.

- K. Storm water runoff from the active portion(s) of the landfill shall be managed in accordance with 30 TAC §§330.63(c), 330.301 through 330.307, and 330.165(c), and as described in Part III, Attachment 2 of the application.
- L. The permittee shall comply with 30 TAC §330.59(f) (3) regarding employment of a licensed solid waste facility supervisor. The permittee shall ensure that landfill personnel are familiar with safety procedures, contingency plans, requirements of

the Commission's rules and this permit, commensurate with their levels and positions of responsibility as described in Part IV, Section 3.4 of the permit application. All facility employees and other persons involved in facility operations shall obtain the appropriate level of training or certification as required by applicable regulations.

- M. The facility shall be properly supervised to assure that the attraction of birds does not cause a significant hazard to low-flying aircraft 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 this permit and maintenance of financial assurance in accordance with 30 TAC Chapter 330 Subchapter L and 30 TAC Chapter 37.
- B. Within 60 days prior to the initial receipt of waste, the permittee shall provide financial assurance instrument(s) for demonstration of closure in an amount not less than \$3,310,349 (2014 dollars). This cost addresses construction in the first year of operation. The cost estimate and financial assurance instruments will be reviewed annually and updated, as necessary, to address changes during development, including changes to the largest area requiring closure.
- C. Within 60 days prior to the initial receipt of waste, the permittee shall provide financial assurance instrument(s) for demonstration of post-closure care of the landfill in an amount not less than \$8,141,148 (2014 dollars). This cost addresses construction in the first year of operation. The cost estimate and financial assurance instruments will be reviewed annually and updated, as necessary, to address changes during development, including changes to the largest area requiring post-closure care.
- D. The permittee shall annually adjust the 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 and 330.507, as applicable.
- E. If the facility's closure and/or post-closure care plan is modified the permittee shall provide new cost estimates in current dollars in accordance with 30 TAC §§330.503, 330.463(b)(3)(D), and 330.507, as applicable. 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 the landfill being filled to its permitted waste disposal capacity or upon the landfill reaching its permitted maximum waste elevation;
- 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 by the permittee;
- D. Upon direction by the Executive Director of the TCEQ for failure to secure and maintain an adequate bond or other acceptable financial assurance instrument as required; or
- E. Upon the permittee's notification to the TCEQ that the landfill will cease to accept waste and no longer operate.

**VI. Facility Post-Closure Care**

- A. Upon completion and closure of the landfill, post-closure care shall be conducted in accordance with 30 TAC §330.463 and as described in Part III, Attachment 8 of the application for a period of 30 years following written acceptance of the certification of final closure by the Executive Director of the TCEQ.
- B. The vegetation on the final cover must be monitored and maintained throughout the post-closure care period.
- C. Following completion of the post-closure care period, the owner or operator shall submit to the Executive Director for review and approval a documented certification prepared by an independent professional engineer licensed in the State of Texas in accordance with 30 TAC §330.465.
- D. Upon written acceptance of the certification of completion of post closure care by the Executive Director of the TCEQ, the permittee shall submit to the Executive Director a request for voluntary revocation of this permit.

**VII. Standard Permit Conditions**

- A. This permit is based on and the permittee shall follow the permit application submittals dated December, 28, 2011, and revisions dated April 21, 2012; July 24, 2012; October 2, 2012; December 6, 2012; January 31, 2013; March 14, 2013; March 18, 2013; March 27, 2013; October 11, 2013; April 21, 2014; April 23, 2014; August 15, 2014; and December 4, 2014. These application submittals are hereby approved subject to the terms of this permit, the rules and regulations, and any orders of the TCEQ. These application materials are incorporated into this permit by reference in Attachment A as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval



by the Commission. The permittee shall maintain the application and all supporting documentation 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. Attachment B, consisting of 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 beginning physical construction of the facility 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 the facility.
- E. A pre-opening inspection shall be held pursuant to 30 TAC §330.73(e). The facility shall not accept solid waste until the executive director has confirmed in writing that all applicable submissions required by the permit and applicable rules have been received and found to be acceptable and that construction is in compliance with the permit and the approved site development plan.
- F. The permittee shall monitor sediment accumulation 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 design flow. The roads within the facility shall be designed so as to minimize the tracking of mud onto the public access road.
- G. In accordance with 30 TAC §330.19(a), the permittee shall record in the deed records of Guadalupe 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).
- H. Daily cover of the waste fill areas shall be performed with well-compacted clean earthen material that has not been in contact with garbage, rubbish, or other solid 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.
- I. 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.

- J. Erosion stability measures shall be maintained on top dome surfaces and external embankment side slopes during all phases of landfill operation, closure, and post-closure care in accordance with 30 TAC §330.305(d).
- K. In compliance 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 the application or adopted by reference in Attachments A and B of this permit, the permittee shall be required to meet all performance standards required by the permit, the Texas Administrative Code, and local, state, and federal laws or ordinances.
- P. 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.
- Q. 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. 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.

- B. 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.

**IX. Special Provisions**

1. Water wells within the permit boundary must be plugged and abandoned in accordance with applicable state rules before physical construction may commence. A written certification that these wells were properly capped, plugged, and closed in accordance with all applicable rules and regulations of the commission or other state agency must be approved by the Executive Director before physical construction may commence.
2. Proof of a final Wetlands Mitigation Plan from the United States Army Corp of Engineers must be provided to the Executive Director before commencement of physical construction.
3. The facility must implement all roadway improvements specified in Part II, Appendix 4A of the permit application before waste may be accepted.
4. This permit provides authorization for an alternative liner design.
5. Recirculation of leachate is prohibited. Language in the Application describing this activity is hereby nullified.
6. The Site Operating Plan shall be modified to require that the facility must train all on-site employees about possible endangered or threatened species that may be found on the site.
7. The SOP shall be modified to specify the means Post Oak will use to comply with the requirement that litter scattered throughout the site will be picked up once a day on days the Facility is in operation.
8. The attached Memorandum of Understanding (MOU) between Post Oak and the United States Air Force is incorporated into, and made an enforceable part of, this permit. In the event of a conflict between the MOU and the Application, the MOU provisions shall supplement the Application and control, except as otherwise required by law.

**Attachment A**

Parts I through IV of the permit application.

**Attachment B**

Amendments, corrections, and modifications issued for MSW Permit No. 2378.

**Attachment C**

Memorandum of Understanding between Post Oak Clean Green Inc. and the United States Air Force

**MEMORANDUM OF UNDERSTANDING  
REGARDING  
WILDLIFE HAZARDS MANAGEMENT**

This Wildlife Hazards Management Memorandum of Understanding ("MOU") is entered into between the United States Air Force ("USAF") as represented by, the 12th Flying Training Wing ("FTW"), and the 502d Air Base Wing ("ABW"), and Joint Base San Antonio ("JBSA"), Texas and Post Oak Clean Green, Inc. ("Post Oak")

**1. PURPOSE & SCOPE.** This MOU identifies Bird / Wildlife Aircraft Strike Hazard ("BASH") mitigation measures Post Oak will employ to mitigate the USAF's concerns regarding the permitting and operation of the Post Oak municipal solid waste landfill, proposed TCEQ MSW Permit No. 2378, near the City of Seguin in Guadalupe County, Texas.

**2. REFERENCE.** Proposal for Decision dated September 23, 2016 and Draft Order; SOAH Docket No. 582-15-2498; TCEQ Docket No. 2012-0905-MSW; and proposed TCEQ MSW Permit No. 2378; and JBSA – Randolph, Joint Land Use Study, July 2015.

**3. ADMINISTRATION.**

Nothing in this MOU shall obligate the USAF to expend appropriations in violation of Federal Anti-deficiency laws, rules, and regulations.

Any records or documents generated as a result of this MOU shall be available to the parties to this MOU and become part of the Post Oak operating record as defined in 30 Tex. Admin. Code § 330.125 and maintained in accordance with that rule. Any request for release of records associated with the implementation of this MOU to anyone outside the parties must be determine based on applicable laws. The USAF cannot agree to maintain the confidentiality of information received from Post Oak except to the extent permitted under the Freedom of Information Act or the Privacy Act.

**4. RESPONSIBILITIES.** In consideration of the USAF withdrawing the objections and concerns it previously raised to the TCEQ concerning the proposed TCEQ MSW Permit No. 2378 and consistent with Section III.M of said permit, which states: "The facility shall be properly supervised to assure that the attraction of birds does not cause a significant hazard to low-flying aircraft and that appropriate control procedures will be followed." and "[a]ny increase in bird activity that might be hazardous to safe aircraft operations will require prompt mitigation actions." Post Oak acknowledges the sufficiency of the consideration and agrees to:

a. Retain services of a US Department of Agriculture ("USDA") wildlife hazard management biologist with appropriate US Fish and Wildlife Service ("USFW") certifications through contract or employment and at Post Oak's exclusive expense ("Post Oak's biologist") to undertake or direct actions to keep large numbers of birds away from the landfill site, track bird trends, and conduct predictive bird modeling, as deemed needed by the wildlife hazard management biologist.

b. Periodically and at a minimum, semi-annually, Post Oak's biologist will coordinate with the USDA wildlife biologist at the 12 FTW.

c. If, at any time, a large number of birds, (including but not limited to vultures, hawks, gulls, mixed blackbird species, egrels, etc.) are observed on or within of 500 yards of the landfill waste placement footprint, Post Oak will notify the Seguin Runway Supervisory Unit (primary)

or 12 FTW Safety Office (secondary) as to the location of the large number of birds.

d. Post Oak's biologist will identify possible synergistic effects, if any, between the landfill and surrounding land uses that may increase the threat of bird strikes to aviation. For example, nearby roosts (including but not limited to cell towers, power line towers, etc.) that may cause birds to traverse between roost sites and the landfill site. Post Oak will work with such property owners in an attempt to minimize the synergistic effects of the identified land uses.

e. Post Oak will maintain a robust program to minimize the attractiveness of the landfill to birds and predatory wildlife species. As deemed appropriate and necessary by Post Oak's biologist, Post Oak will employ auditory harassment techniques, various pyrotechnics, propane cannon systems, etc. and consider additional methods, such as the use of methyl antbranilate and the Long Range Acoustic Device (LRAD), to disperse/deter identified bird populations. As authorized and needed, Post Oak will employ lethal and non-lethal means.

f. Post Oak will not plant trees or shrubs that attract or accommodate bird nesting or roosting, and will maintain or remove existing trees or shrubs, as needed, to limit nesting or roosting sites as allowed by any applicable state or federal regulatory limitations.

g. Post Oak will plant grasses that deter birds from gathering at the site and maintain grass height between seventeen and fourteen inches (7"-14") in the inactive areas of the landfill, subject to weather and growing conditions at the site. Post Oak will not be expected to irrigate inactive areas to supplement natural conditions or rainfall.

h. Post Oak will minimize the surface area of the active face and employ daily cover as required by TCEQ's rules and proposed TCEQ MSW Permit No. 2378.

i. Post Oak will eliminate standing water in areas of the landfill as required by TCEQ's rules and proposed TCEQ MSW Permit No. 2378.

j. Post Oak will incorporate anti-perching devices and bird harassment measures into all on-site structures (including but not limited to buildings, signs, etc.), where practical.

k. Post Oak will install and maintain a perimeter fence around the site designed to keep medium to large mammals (including but not limited hogs, coyotes, deer, canines, felines, etc.) from entering and disturbing daily cover.

l. Post Oak will continue to pursue twenty four hours a day – seven days a week (24-7) operating hours for the landfill to allow landfill operations the ability to avoid the USAF's peak flight training hours (9 am to 4 pm, Monday - Friday) by expanding the time for landfill waste disposal operations outside the USAF's peak flight training hours.

m. Post Oak agrees to install a bird radar system at the landfill site at a cost not to exceed \$600,000 to facilitate the monitoring of bird movements in real time and further the development of bird activity trends. The bird radar feed will be made available to the 12 FTW to aid in risk identification and mitigation. Post Oak will also spend up to \$25,000 per year for maintenance of the bird radar system. If agreed to by USAF, this requirement may be removed as technology or training equipment improves in the future.

n. Post Oak will be responsible for any and all permits and authorizations required by law to undertake these activities herein.

**5. EDUCATION AND AWARENESS.** In addition to Post Oak's biologist, Post Oak employees will be trained to identify and report bird activities and groups of birds at the site. Post Oak will meet with USAF as requested to discuss these BASH mitigation efforts and otherwise foster open communication and coordinated efforts.

**6. DISPUTE RESOLUTION.**

In the event of a dispute, claim, question or disagreement arising from or relating to this MOU, the parties shall use their best efforts to settle the dispute, claim, question, or disagreement. To this effect, the parties shall consult and negotiate with each other in good faith and, recognizing their mutual interests, attempt to reason a just and equitable solution satisfactory to both parties.

If a dispute, claim, question or disagreement cannot be settled through negotiation, the parties agree to try in good faith to settle the dispute, claim, question or disagreement through mediation administered by the American Arbitration Association or similar professional mediation organization mutually agreed to by the parties. The parties will share the costs of mediation equally. Any party refusing to mediate shall not prevent the other party from pursuing their claims to arbitration. Nothing herein will be construed to prevent any party's use of injunction, and/or other prejudgment or provisional action or remedy. Any such action or remedy will not waive the moving party's right to compel arbitration of any dispute.

If the dispute, claim, question, or disagreement cannot be resolved through mediation, the parties agree that the dispute shall be referred to arbitration in accordance with American Arbitration Associations Rules of Arbitration. The arbitrator's decision shall be final and binding and judgment may be entered thereon. In the event a party fails to proceed with arbitration, unsuccessfully challenges the arbitrator's award, or fails to comply with arbitrator's award, the other party is entitled of costs of suit including a reasonable attorney's fee for having to compel arbitration or defend or enforce the award.

**7. POINTS OF CONTACT.**

**For the USAF**

Chief of Safety  
12th Flying Training Wing  
Joint Base San Antonio – Randolph, TX, 78150  
(210) 652-3308

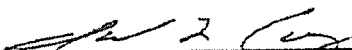
**For Post Oak Clean Green, Inc.**

John A. Riley  
KELLEY DRYE / JACKSON GILMOUR & DOBBS  
1115 San Jacinto Blvd., Suite 275, Austin, Texas 78701

**8. APPROVALS/ SIGNATURES.** By signing below, each party acknowledges he or she is an authorized agent or representative of their respective organizations and have the legal authority to enter into this MOU and to bind their respective organizations, their successors in interest, agents, and assigns. By signing below, each party agrees to be bound by the terms of this MOU. The parties acknowledge that this MOU shall be provided to TCEQ for TCEQ's consideration in granting the proposed TCEQ MSW Permit No. 2378 or any other TCEQ municipal solid waste permit associated with the operations of the landfill at issue.

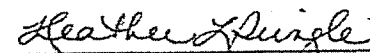
THIS MOU CONTAINS A BINDING ARBITRATION PROVISION WHICH MAY BE ENFORCED BY THE PARTIES.

For the 12th FLYING TRAINING WING

  
\_\_\_\_\_  
JOEL L. CAREY, Colonel, USA  
Commander

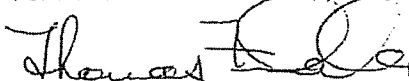
22 Dec 2016  
date

For the 502<sup>nd</sup> AIR BASE WING and Joint Base San Antonio

  
\_\_\_\_\_  
HEATHER L. PRINGLE  
Brigadier General, USAF  
Commander

22 Dec 2016  
date

For Post Oak Clean Green, Inc.

  
\_\_\_\_\_  
Thomas Funderburg  
President

22 Dec 2016  
date

Bryan W. Shaw, Ph.D., P.E., *Chairman*  
Jon Niermann, *Commissioner*  
Emily Lindley, *Commissioner*  
Toby Baker, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

August 29, 2018

TO: Persons on the attached mailing list.

RE: Post Oak Clean Green, Inc.  
TCEQ Docket No. 2012-0905-MSW; SOAH Docket No. 582-15-2498  
MSW Permit No. 2378

Enclosed is a copy of the Executive Director's Response to Comments regarding the above-referenced matter.

Should you have any questions, please contact Melissa Schmidt of the Texas Commission on Environmental Quality's Office of the Chief Clerk (MC 105) at (512) 239-3317.

Sincerely,

A handwritten signature in cursive script that reads "Bridget C. Bohac".

Bridget C. Bohac  
Chief Clerk

BCB/ms

Enclosure



Post Oak Clean Green, Inc.  
TCEQ Docket No. 2012-0905-MSW  
SOAH Docket No. 582-15-2498

FOR THE APPLICANT:

John A. Riley  
Paul C. Sarahan  
Holland & Knight LLP  
111 Congress Avenue, Suite 540  
Austin, Texas 78701

INTERESTED PERSONS:

See attached list.

FOR THE EXECUTIVE DIRECTOR  
via electronic mail:

Dana Evans, Acting Director  
Texas Commission on Environmental  
Quality  
Environmental Assistance Division  
Public Education Program MC-108  
P.O. Box 13087  
Austin, Texas 78711-3087

Steve Shepherd, Staff Attorney  
Kathy Humphreys, Staff Attorney  
Texas Commission on Environmental  
Quality  
Environmental Law Division MC-173  
P.O. Box 13087  
Austin, Texas 78711-3087

Steve Odil, P.E., Technical Staff  
Texas Commission on Environmental  
Quality  
Waste Permits Division MC-124  
P.O. Box 13087  
Austin, Texas 78711-3087

FOR PUBLIC INTEREST COUNSEL  
via electronic mail:

Garrett Arthur, Attorney  
Texas Commission on Environmental  
Quality  
Public Interest Counsel MC-103  
P.O. Box 13087  
Austin, Texas 78711-3087

FOR THE CHIEF CLERK  
via electronic mail:

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

## TCEQ Permit No. 2378

Permit Application by Post Oak	§	Before the
Clean Green, Inc. for Municipal	§	Texas Commission on
Solid Waste Permit No. 2378	§	Environmental Quality
	§	

---

### Executive Director's Response to Public Comments

---

The Executive Director of the Texas Commission on Environmental Quality (the Commission or TCEQ) files this Response to Public Comments (Response) on an application received from Post Oak Clean Green, Inc. (Applicant) for a new Municipal Solid Waste (MSW) landfill under Permit Application Number 2378 (Application) and on the Executive Director's preliminary decision. As required by Title 30 Texas Administrative Code (TAC), Section (§) 55.156, before an application is approved, the Executive Director prepares a response to all timely, relevant and material, or significant comments. The Office of the Chief Clerk received timely written comments, as well as oral comments at public meetings held on April 24, 2012, and March 6, 2014.

**Attachment A** provides a list of approximately 220 individuals who provided timely written and oral comments in support of the proposed facility. Reasons for their support include a need for a disposal facility in the area and the benefit of associated jobs and recycling activities. These comments are acknowledged, and no further response will be provided.

**Attachment B** lists the approximately 215 individuals who provided timely written and oral comments in opposition, or noted concerns over the proposed facility. A petition was provided by Mr. Jim Watts at the April 24, 2012, public meeting on behalf of a protestant group, Stop Post Oak Dump (SPOD). The petition was signed by over 1,300 individuals. The comments provided by the petition are addressed in this Response, but these parties are not listed individually in this Response.

State Senator Judith Zaffirini, State Senator Donna Campbell, State Representative John Kuempel, past Schertz Mayor Pro Tem David Scagliola, and past

Seguin Mayor Betty Ann Matthies expressed opposition to the proposed facility. State Senator Jeff Wentworth expressed concern over the proposed location.

Representatives for various organizations provided comments in opposition to or concern over the proposed facility. The representatives are included within **Attachment B**. The organizations include the Alamo Area Council of Governments, the Alamo Soil and Water Conservation District No. 330, the Association of Texas Soil and Water Conservation Districts, the Bastrop County Soil and Water Conservation District No. 40, Burleson County Soil and Water Conservation District No. 358, Canyon Regional Water Authority, Cibolo Valley Local Government Corporation, Comal-Guadalupe Soil and Water Conservation District #306, DeWitt County Soil and Water Conservation District, Gonzales County Soil and Water Conservation District No. 338, Gonzales County Underground Water Conservation District, Gonzales County Water Supply Corporation, Green Valley Special Utility District, Guadalupe County Commissioners Court, Guadalupe County Groundwater Conservation District, Guadalupe County Farm Bureau, Hays Caldwell Public Utility Agency, Independent Cattlemen's Association of Texas, Luling Foundation, Plum Creek Conservation District, San Antonio Water System, City of Schertz, Schertz/Seguin Local Government Corporation (SSLGC), City of Seguin, Texas Railroad Commission (TRRC), Seguin Area Chamber of Commerce, Water Protection Association, and Wilson County Farm Bureau. A letter from the TRRC Regional Office initially opposed the Application, but this opposition was withdrawn by a subsequent letter from the TRRC Central Office. This subsequent letter maintained concerns, which are addressed in this Response, but withdrew opposition.

This Response addresses all timely public comments received, whether or not withdrawn, regarding the Application. If you need more information about this Application or the municipal solid waste permitting process, please call the TCEQ Public Education Program at 1-800-687-4040. General information about the TCEQ can be found at our website at [www.tceq.texas.gov/](http://www.tceq.texas.gov/).

## I. Background

### ***A. Description of Facility***

Post Oak Clean Green applied to the TCEQ for an MSW permit to construct and operate the Post Oak Municipal Solid Waste Landfill, which would include a new Type I MSW landfill; a recyclables, used oil, and lead battery storage area; a scrap tire storage area; a large items and white goods storage area; a reusable materials staging area; and a citizens convenience area. The facility would be located approximately 12 miles east of Seguin, Texas and 3.1 miles east-southeast of the intersection of Interstate 10 and FM 1104 in Guadalupe County, Texas. The total permitted area would include about 1,003 acres of land, of which approximately 331 acres would be used for a waste disposal unit. The final elevation of the landfill final cover material would be 692 feet above mean sea level (MSL), which is approximately 232 feet above natural grade. Solid waste to be disposed of would primarily consist of municipal solid waste resulting from, or incidental to, municipal, community, commercial, institutional, recreational and industrial activities, including garbage, putrescible wastes, rubbish, ashes, brush, street cleanings, dead animals, abandoned automobiles, construction-demolition waste, vegetative waste, Class 2 nonhazardous industrial solid waste, Class 3 nonhazardous industrial solid waste, and special waste. The proposed landfill would not be authorized to accept waste materials other than those mentioned above for disposal. Furthermore, waste streams that are expressly prohibited by 30 TAC §330.15 could not be accepted.

### ***B. Procedural Background***

Parts I and II of the Application were received by the TCEQ on December 28, 2011, and declared administratively complete on January 6, 2012. The Notice of Receipt of Application for Land Use Compatibility Determination for a New Municipal Solid Waste Permit was published in English and in Spanish in the *Seguin Gazette* on January 18, 2012. The Notice of Public Meeting was published in the *Seguin Gazette* on April 4, 2012; April 11, 2012; and April 18, 2012. A public meeting was held on April 24, 2012, at the Seguin-Guadalupe County Coliseum, located at 950 South Austin Street, Seguin, Texas. The Executive Director completed the technical review of Parts I and II of

the Application on April 4, 2013, and prepared a Draft Order. The Notice of Application and Preliminary Decision on Land Use Compatibility Determination for a Municipal Solid Waste Permit was published in English and in Spanish in the *Seguin Gazette* on June 4, 2013.

On October 14, 2013, the Applicant submitted Parts III and IV of the Application to the TCEQ. In a letter dated October 18, 2013, the Applicant clarified their desire to consolidate the Application into one complete four-part application. Consolidation of the Application (Parts I through IV) was allowed as an amendment of the original application, as allowed with new notice under 30 TAC §281.23(a). Parts III and IV of the Application were declared administratively complete on October 23, 2013. On November 13, 2013, the TCEQ received an updated, consolidated Application, which included changes to Parts I and II. The Notice of Public Meeting was published in the *Seguin Gazette* on February 12, 2014; February 19, 2014; and February 26, 2014. A second public meeting was held on March 6, 2014, at the Seguin-Guadalupe County Coliseum, located at 950 South Austin Street, Seguin, Texas. The Executive Director completed the technical review of the consolidated Application on January 12, 2015, and prepared a Draft Permit.

On January 23, 2015, the Applicant requested that the Application be referred directly to the State Office of Administrative Hearings for a contested case hearing. A Notice of Hearing was issued on February 25, 2015. The Notice of Application and Preliminary Decision was issued March 3, 2015, and published on April 3, 2015. A preliminary SOAH hearing was held April 6, 2015.

The comment period ended on May 4, 2015. This Application was administratively complete on or after September 1, 1999; therefore, this Application is subject to the procedural requirements adopted pursuant to House Bill 801, 76<sup>th</sup> Legislature, 1999.

### ***C. Access to Rules, Laws, and Records***

Please consult the following websites to access the rules and regulations applicable to this permit.

- to access the Secretary of State website: [www.sos.state.tx.us](http://www.sos.state.tx.us)

- for TCEQ rules in Title 30 of the Texas Administrative Code:  
[www.sos.state.tx.us/tac/](http://www.sos.state.tx.us/tac/) (select “View the current Texas Administrative Code” on the right, then “Title 30 Environmental Quality”)
- for Texas statutes: [www.statutes.legis.state.tx.us/](http://www.statutes.legis.state.tx.us/)
- to access the TCEQ website: [www.tceq.texas.gov](http://www.tceq.texas.gov) (to download rules in Adobe PDF format, select “Rules” on the left side of the page, then “Current TCEQ Rules” then “Download TCEQ Rules”)
- for Federal rules in Title 40 of the Code of Federal Regulations (CFR):  
[www.epa.gov/lawsregs/regulations/](http://www.epa.gov/lawsregs/regulations/)
- for Federal environmental laws: [www.epa.gov/lawsregs/index.html](http://www.epa.gov/lawsregs/index.html)

TCEQ records for the facility are available for viewing and copying at the TCEQ Central Office in Austin, 12100 Park 35 Circle, Building E, Room 103 (Central File Room), and at the TCEQ Region 13 Office in San Antonio at 14250 Judson Road, San Antonio, TX 78233-4480. The technically complete Application is also available for review and copying at the Guadalupe County Courthouse, 211 West Court Street, Seguin, Guadalupe County, Texas, and online at [www.postoakcleangreen.net/Documents.html](http://www.postoakcleangreen.net/Documents.html).

## **II. Comments and Responses**

### **Comment 1: Location in Aquifer Recharge Zone and Groundwater Quality**

Most commenters opposed to the Application indicated concern over the proposed location within the recharge zone of the Carrizo-Wilcox aquifer and the possibly detrimental effects that leaks from the proposed landfill could cause to the aquifer. Several individuals indicated that the Carrizo-Wilcox aquifer deserves to be protected the same way that the Edwards Aquifer is protected. Some people noted that the Application is in conflict with a resolution from the Texas State Soil and Water Conservation Board. Two people indicated that if the landfill contaminated the underlying aquifer, it could never be remediated.

**Response 1:**

While MSW rule 30 TAC §330.549(a) prohibits landfills in the recharge zone of the Edwards Aquifer Recharge zone, no prohibition is provided for other aquifer recharge zones in Texas. An MSW Type I landfill unit must include numerous features protective of groundwater, such as composite liners, leachate collection systems, and groundwater monitoring systems. These features are addressed in Part III of the Application and are discussed in greater detail elsewhere in this Response. MSW rules do not require compliance with resolutions by organizations such as the Texas State Soil and Water Conservation Board during review of a permit application.

The Executive Director expects that the landfill will be constructed according to the specified design to protect groundwater. If groundwater quality is impacted by the landfill, MSW rules provide mechanisms and processes for addressing the cause and correcting affected groundwater. These requirements are provided in 30 TAC Chapter 330, Subchapter J and are addressed in Part III, Attachment 5, Groundwater Sampling and Analysis Plan of the Application.

**Comment 2: Watershed Protection and Surface Water Quality**

Most people opposed to the Application indicated concern over the effects that the proposed facility could have on the watershed and on surface water quality in the vicinity of the proposed facility.

**Response 2:**

In accordance with 30 TAC §§ 330.63(c), 330.303, 330.305, and 330.307, an applicant must provide a Surface Water Drainage Report that demonstrates that the owner or operator will design, construct, maintain and operate the landfill to manage run-on and runoff during the peak discharge from at least a 25-year storm and prevent the off-site discharge of waste and contaminated storm water; ensure erosional stability of the landfill during all phases of landfill operation, closure, and post-closure care; provide structures to collect and control at least the water volume resulting from a 24-hour, 25-year storm; protect the landfill from washouts; and ensure that the existing drainage pattern is not adversely altered. Part III, Attachment 2 of the Application,

Surface Water Drainage, provides discussions and detailed designs, calculations, and operational considerations for the collection, control, and discharge of storm water from the landfill as required by the cited rules.

The drainage system described in the Application consists of drainage swales, downchutes, perimeter channels, detention ponds and outlet structures. The landfill is designed to prevent discharge of pollutants into waters in the state or waters of the United States, as defined by the Texas Water Code and the Federal Clean Water Act, respectively. The Application contains a certification statement in Part II, Attachment 7 indicating that the Applicant will obtain the appropriate Texas Pollutant Discharge Elimination System (TPDES) coverage, as required by Section 402 of the Federal Clean Water Act, for the proposed facility to assure that storm water discharges are in compliance with applicable regulations.

According to Section 5.0 of Part III, Attachment 2, the proposed post-development surface water management design will include final cover and a system of intercept berms, drainage terraces, rundown channels, perimeter ditches, and ponds. Surface water runoff from the final cover will sheet flow and be intercepted in drainage terraces constructed at 40 foot intervals down the sideslopes. Terraces discharge to lined, flat-bottom rundown channels that discharge to a perimeter ditch. This ditch discharges to ponds. Ponds discharge to existing natural drainage channels that join together and exit the permit boundary. The system is designed to convey the 25-year peak flow rate from the developed landfill consistent with TCEQ regulations. In addition, the perimeter channels are designed to convey the runoff from a 100-year rainfall event, as noted in Section 5.2. Detention ponds are designed in accordance with MSW rules to provide the necessary storage and outlet control to mitigate impacts to the receiving channels downstream of the Landfill. A demonstration that existing permitted drainage patterns will not be adversely altered is provided under Part III, Appendix 2A, as required. The details of this demonstration are provided in the Exhibits of Appendix 2A.

MSW rules are protective of surface water features, even when those features are proximate to the waste disposal unit. Only uncontaminated storm water will be allowed to discharge at the various discharge points at the landfill boundary. Contaminated water management is discussed in greater detail in responses below.



The Application complies with all applicable requirements regarding storm water and contaminated water management.

**Comment 3: Adequacy of Access Roads, Traffic Impacts, and Traffic Safety**

Many of the individuals opposed to the Application expressed concern that the facility would create traffic congestion or traffic hazards and could damage the roads in the vicinity of the proposed landfill. Some asked how costs would be paid to address damages caused by vehicles serving the facility.

**Response 3:**

In accordance with 30 TAC §330.61(i), an application for an MSW landfill permit must include data on access roads for the proposed facility, including: availability and adequacy of roads that the owner or operator will use to access the site; volume of vehicular traffic on access roads within one mile of the proposed facility, both existing and expected, during the expected life of the facility; and projections on the volume of traffic expected to be generated by the facility on the access roads within one mile of the proposed facility. The required traffic data is provided in the Application in Part II, Section 2.6 and summarized in Part II, Figure 9.

When reviewing permit applications, the Executive Director defers to the Texas Department of Transportation (TxDOT) for recommendations on roadway improvements needed to handle expected traffic. Coordination documents with TxDOT, required under 30 TAC §330.61(i)(4), are provided in Part II, Appendix 4A. TxDOT required improvements at the intersections of IH-10 and FM 1104, FM 1104 and FM 1150, and FM 1150 and State Highway 80, and on FM 1150 at the proposed facility entrance. In an email dated December 4, 2012, TxDOT indicates that once the roadway improvements are completed, “the roads used to access the facility should be adequate for the expected traffic volumes for the expected life of the facility.”

Concerning the comment on compensation for damages to public roads resulting from proposed landfill activities, MSW rules do not provide for consideration of how

costs would be paid to address roadway damages caused by vehicles serving a proposed facility.

The Application complies with all applicable requirements regarding availability and adequacy of roads and traffic impact and safety.

**Comment 4: Review Process**

Attorneys on behalf of SPOD indicated that a bifurcated process (initial submittal of Parts I and II and subsequent submittal of Parts III and IV) should not have been allowed. One argued that a determination is required by the Executive Director as to the appropriateness of a bifurcated process, that no determination has been made, and that the bifurcated process should not be allowed because “much of what is contained in Part II of the application depends on the contents of Parts III and IV of the application.”

Comments were submitted regarding the process followed during technical review of the Application. Specifically, it was suggested that the Commission violated its rules by failing to limit review to 75 days and for issuing more than two Notice of Deficiency letters. Some commented that the review violated statements made at the Sunset Commission hearings for the TCEQ. Others noted that the Executive Director issued new deficiency comments after the declaration that Parts I and II of the Application were technically complete.

**Response 4:**

A complete MSW permit application contains Parts I through IV. Parts I and II contain information related to the applicant, existing site conditions, and the general characteristics of the facility and surrounding area. Parts III and IV contain more detailed information related to the site, such as design information, subsurface investigation reports, and operating plans. In accordance with 30 TAC § 330.57(a), applicants for MSW permits have the option to submit what is referred to as a bifurcated application, as was done in this case. The Executive Director determined that it was appropriate to process this bifurcated Application. To receive a permit, the Applicant must also provide Parts III and IV of the Application for review. As noted above in Section I.B, the Applicant delivered Parts III and IV of the Application to the TCEQ on October 14, 2013, and requested to consolidate (into one complete, four-part

application) the Application in a letter dated October 18, 2013. The Executive Director then agreed to process the consolidated Application.

Regarding the suggestion that the Commission did not comply with the 75-day limit under 30 TAC §281.19(a) for technical review. When additional information is needed to resolve outstanding application deficiencies, the review period is routinely extended beyond the 75-day limit, as allowed by 30 TAC §§ 281.19 and 281.20, to allow the applicant additional time to provide the information in accordance with Commission rules, as was done in this case.

Regarding the comment that the Executive Director should not have allowed more than two opportunities to respond to deficiencies, Commission rules do not limit the number of notice of deficiencies that may be used in reviewing a landfill application. Commission policy is to try to resolve deficiencies within two attempts, but the Executive Director decided that it would be appropriate to require additional information in this case.

While the issuance of no more than two NOD letters continues to be a goal of the MSW Permits Section, neither the number of NOD letters nor the number of deficiencies identified during review is limited by statute or rule. The Executive Director strives to determine whether all applicable Commission rules are met in each application during technical review. Notices of deficiency are an expected outcome of this process as we question information that is being provided to determine whether it meets the required standards.

The Executive Director agrees that technical deficiencies were issued on Parts I and II after those parts were declared technically complete. This resulted from changes that the Applicant made to Parts I and II in their November 13, 2013 submittal. The Executive Director reviewed these changes and issued new deficiencies.

#### **Comment 5: Faulting, Oil and Gas Activity, Subsidence**

Numerous individuals and the TRRC indicated that natural and man-made subsurface conditions, such as faulting, oil and gas activity, and subsidence, in the vicinity of the proposed facility increase the risk of contamination to the underlying groundwater aquifer and that these conditions indicate that the proposed location is

inappropriate. One comment noted that proper plugging and abandonment of known oil and gas wells, as required under 30 TAC §330.61(l)(2), has not been performed.

**Response 5:**

In accordance with 30 TAC §330.61(j)(2), applicants for MSW permits must provide data on fault areas in accordance with 30 TAC §330.555. In Part II, Section 2.7.4 of the Application, the Applicant provided information demonstrating that there are no active faults within 200 feet of the proposed facility. The closest known fault is located approximately one half mile north of the proposed facility. According to published literature cited in the Application, the fault (Darst Creek Fault) has not had displacement in Holocene time; therefore, the information provided in the Application, specifically regarding the Darst Creek Fault, satisfies the requirements for 30 TAC §330.555(a).

In accordance with 30 TAC §330.61(l)(2), any and all existing or abandoned on-site wells under the jurisdiction of the TRRC must be identified in an application. This rule also states that a permittee must provide the Executive Director with written certification that these wells have been properly capped, plugged, and closed in accordance with applicable rules at the time of application. The Applicant has identified all known onsite wells in the Application, but has not provided the certification of proper capping, plugging and closure, and so this requirement has been addressed through Special Provision 2 in the Draft Permit. If the Permit is issued, the provision will require that the certification be provided before physical construction of the facility may commence.

In accordance with 30 TAC §330.555(b), applications submitted for the operation of sites located in areas experiencing withdrawal of crude oil, natural gas, sulfur, etc., must be investigated for the possibility of differential subsidence or faulting that could adversely affect the integrity of landfill liners. Part II, Section 7.4 of the Application provides information pertaining to differential subsidence and geologic faulting in the vicinity of the proposed facility. The information provided by the Applicant indicates that no structural damage to roadways or scarps in natural ground exist on or near the proposed facility. The Application further indicates that a site reconnaissance identified the presence of ponded water, linear features, and structural control of natural streams;

however, all identified features are associated with natural drainage structures at the proposed facility and are not considered to be associated with geologic faulting. Changes in vegetation at the proposed facility were also observed during the site reconnaissance; however, these changes appear to be the result of clearing of pasture lands, growth of excess vegetation along existing fence lines, and the presence of additional water that supports dense vegetation along creeks and streams, and do not appear to be related to geologic faulting at the proposed facility.

The Application indicates that based on field observations and available data, crude oil and natural gas accumulation has occurred south of the Darst Creek Fault. Since development of the Darst Creek oil field, seismic activities have not been recorded along the Darst Creek Fault. In Part II, Figure 11, the Applicant provides a geologic cross-section of the subsurface near the proposed facility. This figure was generated using electrical spontaneous potential and resistivity logs to create stratigraphic representation of the subsurface strata and possible anomalies (faults). The Darst Creek Fault is identified in this figure. No other faults near the proposed facility are identified.

The Application further indicates that changes in elevation of established benchmarks at the proposed facility were not observed.

A comprehensive geologic investigation is provided in Part III, Attachment 4, Geology Report, of the Application.

#### **Comment 6: Property Values**

Many people noted concern that the proposed facility, if constructed, would negatively affect their property value. Some indicated that the facility has already negatively affected their property value.

#### **Response 6:**

TCEQ jurisdiction is established by the Legislature, and is limited to the issues set forth in statute and rules. TCEQ has not been given authority to consider effects on property values when determining whether to approve or deny a permit application.

**Comment 7: Livestock and Wildlife**

Many comments noted concern over the negative effect that the proposed facility would have on livestock and wildlife.

**Response 7:**

Under 30 TAC § 330.63(b)(1), the Applicant must describe how access will be controlled for the facility, such as the type and location of fences or other suitable means of access control to prevent the entry of livestock. Also, 30 TAC §330.61(n) requires the Applicant to consider the impact of the proposed MSW facility on endangered and threatened species, and prohibits the destruction or adverse modification of critical habitat of endangered or threatened species, or to cause or contribute to the taking of any endangered or threatened species. MSW rules do not address other wildlife or livestock; however, the Executive Director believes that if the facility is constructed and operated in accordance with the Application and Chapter 330, local wildlife and livestock will be adequately protected.

**Comment 8: Better Location**

Many people indicated that there must be a better location for this facility. One comment indicated that common sense would indicate that the proposed location is inappropriate.

**Response 8:**

As noted previously, TCEQ jurisdiction is established by the Legislature, and is limited to the issues set forth in statute and rules. TCEQ has not been given authority to identify more appropriate locations or to suggest alternative locations to those proposed by the Applicant. The Executive Director must review the Application as proposed for compliance with all applicable rules.

**Comment 9: Enjoyment of Life**

Some comments indicated that the proposed facility, if constructed, would decrease their enjoyment of life.

**Response 9:**

As noted previously, TCEQ jurisdiction is established by the Legislature, and is limited to the issues set forth in statute and rules. There is no specific rule protecting the enjoyment of life, but the rule requirements are intended to implement the state's policy to safeguard the health, welfare and physical property of the people.

**Comment 10: Inadequate Land Use and Growth Information**

A few people indicated that the land use and growth assessment information provided in the Application is inadequate.

**Response 10:**

In order to assist the Commission in evaluating the impact of a proposed MSW facility on the surrounding area, applicants must provide information regarding the likely impacts of the facility on cities, communities, groups of property owners, or individuals by analyzing the compatibility of land use, zoning in the vicinity, community growth patterns, and other factors associated with the public interest. Specifically, an applicant must provide certain information, including an available published zoning map for the facility and within two miles of the facility for the county or counties in which the facility will be located; information about the character of the surrounding land uses within one mile of the proposed facility; information about growth trends within five miles of the facility with directions of major development; information on the proximity of the facility to residences, business establishments, and other uses within one mile, such as schools, churches, cemeteries, historic structures and sites, archaeologically significant sites, and sites having exceptional aesthetic quality; information regarding all known wells within 500 feet of the site; and any other information requested by the Executive Director.

The required information is provided primarily in Part II, Section 4.1, and illustrated on Figure 7, Land Use Map. The Application indicates that surrounding land use within one mile of the proposed permit boundary is 74.5% agricultural rangeland, 23.9% oil and gas production, and 1.6% residential. There is one cemetery. There are no schools, licensed day-care facilities, churches, hospitals, lakes, commercial or recreational areas, archaeological sites, historical sites, or sites with exceptional

aesthetic qualities. Part II, Section 4.1 indicates that there is no zoning within 2 miles of the proposed facility.

Growth trends are discussed in Part II, Section 2.4.3. Conclusions were based primarily on U.S. Census data from 2000 and 2010, population projections from the Alamo Area Council of Governments for Guadalupe County, and a breakdown of census data from the Golden Crescent Regional Planning Commission for Gonzales County. The analysis concludes that for areas within five miles of the proposed facility there are no major development trends and the area of greatest growth is anticipated to be four to five miles southwest of the proposed facility.

The Application includes adequate information on land use and growth trends.

**Comment 11: Inadequate Endangered Species Assessment**

Many comments indicated that an inadequate endangered species assessment was provided by the Applicant.

**Response 11:**

In accordance with 30 TAC §330.61(n)(2), an application for a landfill located in the range of endangered or threatened species must include a biological assessment prepared by a qualified biologist. An “Assessment of Potential for Occurrence of State and Federally Listed Threatened and Endangered Species for the Proposed Post Oak Clean Green Project” (Assessment) was performed by SWCA Environmental Consultants and is provided in Part II, Appendix 6 and discussed in Part II, Section 2.11. The report concludes that no potential habitat for federally listed threatened or endangered species occurs on the property and no federally listed threatened or endangered species have been observed on the property. The report further concludes that no state listed threatened or endangered species have been observed on the property and the property contains only marginally suitable habitat for two species, Texas horned lizard and Texas tortoise, neither of which have been observed on the property on any of the associated site surveys.

The Applicant accessed United States Fish and Wildlife Service (USFWS) online information on Federal threatened and endangered species. A printout of this search is provided in the Assessment. The Assessment was provided to the Texas Parks and



Wildlife Department (TPWD) for locations and specific data related to any state listed endangered and threatened species in the area. Their response is provided in Part II, Appendix 6, pages 6-77 through -80 and provides developmental and operational recommendations for the proposed facility. The Applicant's responses to these recommendations are provided in Part II, Appendix 6, pages 6-74 through -76.

The Application complies with all applicable requirements regarding endangered or threatened species.

### **Comment 12: Applicant Experience**

Nine comments stated that the Applicant has inadequate experience to operate a landfill.

### **Response 12:**

In accordance with 30 TAC §330.59(f), the Applicant must list all Texas solid waste sites that the Applicant has owned or operated within the last ten years; list all solid waste sites in all states, territories, or countries in which the Applicant has a direct financial interest; state that a licensed solid waste facility supervisor shall be employed before commencing facility operation; list the names of the principals and supervisors of the owner's or operator's organizations together with previous affiliations with other organizations engaged in solid waste activities; show landfilling and earthmoving experience, and other pertinent experience or licenses possessed by key personnel as well as list the number and size of each type of equipment to be dedicated to facility operation. Part I, Section F of the Application provides discussions on the evidence of competency. The Applicant does not own or operate any other solid waste facilities in Texas or elsewhere. The Applicant states that a properly licensed solid waste facility supervisor will be hired prior to commencing the operation of the facility.

The evidence of competency information provided in the Application meets the requirements of the rule cited above.

### **Comment 13: Wetlands**

Some commenters were concerned that the proposed facility would negatively affect wetlands, or that the Application provides inadequate information regarding the

effects that the proposed facility would have on wetlands. One person indicated that the proposed facility would violate 30 TAC §279.11, which disallows discharges where a practicable alternative would have less adverse impact on the aquatic ecosystem.

**Response 13:**

TCEQ rules require applicants for MSW landfills to provide a wetlands determination in Part II of the application to meet the requirements of 30 TAC §330.61(m). As noted in Part II, Section 2.10 of the Application, wetlands and waters of the United States were assessed within the proposed permit boundary by Medina Consulting Company and by SWCA Environmental Consultants. Reports documenting these assessments are provided in Part II, Appendix 5. The assessments identified approximately 4.7 acres of wetland areas.

The Applicant submitted its findings to the U.S. Army Corp of Engineers (USACE) and provided information regarding the requirements of 30 TAC §330.553(b)(1)-(5). Final determination from the USACE has not been provided. Special Provision 3 in the Draft Permit ensures that the facility may not commence construction prior to the USACE Section 404 permit approval.

A commenter noted that 30 TAC §279.11 prohibits certification of a 404 Permit activity if there is a practicable alternative to the proposed discharge that would have less adverse impact on the aquatic ecosystem. The Application includes an Alternatives Analysis in Part II, Appendix 5D-1. This analysis was provided in the 404 Permit application to the USACE. The Executive Director will defer to the USACE with respect to the 404 Permit, which would include the review of the Alternatives Analysis.

The Application, along with the Draft Permit (which specifies final approval of the 404 Permit must be provided by the USACE before commencement of physical construction), contains sufficient information regarding wetlands delineation.

**Comment 14: Waste Acceptance**

Some comments shared concern that the proposed facility could receive hazardous waste. One indicated that the facility would accept out of state nuclear waste. Others suggested that the proposed facility should be limited to waste that is generated in Guadalupe County.

**Response 14:**

An applicant for an MSW permit must submit a waste acceptance plan (WAP) with Part II of the application in accordance with 30 TAC §330.61(b). The WAP must identify the sources and characteristics of waste, provide a brief description of the general sources and generation areas contributing wastes to the facility, and estimate the maximum annual waste acceptance rate for the facility for five years. Part II, Section 2.1 of the Application provides the proposed WAP and adequately addresses the sources and characteristics of wastes in accordance with 30 TAC §330.61(b). This section of the Application characterizes wastes to be accepted at the facility as household waste, vegetative waste, commercial waste, construction and demolition waste, Class 2 industrial waste, Class 3 industrial waste, and special wastes. Special wastes that could be accepted include, but are not limited to, municipal hazardous waste from conditionally exempt small-quantity generator (CESQG), wastes from out of state that are industrial or would be otherwise special, grease and grit trap wastes, and liquid wastes. This section also indicates that the facility proposes to serve “any county in Texas and occasionally, wastes generated outside of Texas.” Based on the Application, the proposed facility would be able to accept municipal hazardous wastes from CESQGs. MSW Type I landfills are allowed to accept CESQG municipal hazardous waste in accordance with 30 TAC §330.171(c)(6). The facility would be prohibited from disposing of regulated hazardous waste, as defined by 30 TAC §330.3(126), and prohibited by 30 TAC §330.15(e)(7).

While out of state waste could be accepted with special handling requirements dependent on the waste (this information is discussed in Part IV of the Application), radioactive waste, as defined in 30 TAC Chapter 336, is specifically prohibited in the WAP and by 30 TAC §330.15(e)(9).

The TCEQ does not have authority to restrict the area a landfill serves or to consider the service area in deciding whether to issue a permit.

**Comment 15: Contradictions from Early Notice of Deficiency Comments**

Four individuals indicated that the Application contains contradictions from information provided to address early notice of deficiency comments.

**Response 15:**

The Executive Director is unable to address perceived contradictions without specific examples; however, possible examples may have occurred when the Applicant's final engineer of record removed information provided by the first engineer of record in response to deficiencies identified by staff. The Executive Director's technical staff reviews an application for compliance with 30 TAC Chapter 330 and other rules. Where the final engineer of record removed or replaced information provided by the first engineer of record, the changes were reviewed to ensure that applicable rules were still met.

The final Application contains sufficient information to comply with all requirements.

**Comment 16: Inadequate Geological and Hydrogeological Information**

Several comments suggested that the Application contains inadequate information on geology and hydrogeology.

**Response 16:**

In accordance with 30 TAC §330.61(j) and (k), the Applicant provided a general geology and soils statement and information related to groundwater and surface water in Part II of the Application. More detailed information on site-specific geology and hydrogeology is provided in Part III of the Application.

As required in Part III of an application, and in accordance with 30 TAC §330.63(e), an applicant must provide a geology report, including the results of investigations of subsurface conditions at a site, with information derived from a sufficient number of borings that are deep enough to allow identification of the uppermost aquifer and underlying hydraulically interconnected aquifers, and to establish subsurface stratigraphy and geotechnical properties of the soils and rocks beneath the facility. Rules 30 TAC §§ 330.63(e)(5)(C) through (F) require that an application include information about aquifers and groundwater beneath the facility.

To characterize the geology and hydrogeology at the site, the Applicant conducted a subsurface investigation following a soil boring plan that met the requirements of 30 TAC § 330.63(e)(4). The methods and results of the subsurface investigation are

described in Part III, Section 4 of Attachment 4, which includes a detailed discussion of the site stratigraphy. Boring logs are provided in Appendix 4B of Attachment 4, and geologic cross sections are provided in Figures 4-10 through 4-16. Section 5 of Attachment 4 provides information about the geotechnical properties of the subsurface materials, and documents three distinct clay units and three distinct sand units. Laboratory geotechnical test results are documented in Appendices 4C and 4D. The clay units are described as fat clay to lean clay with hydraulic conductivity ranging from  $9.00 \times 10^{-9}$  to  $1.35 \times 10^{-7}$  cm/sec. Boring logs and geologic cross sections all indicate that the soils and strata are consistent beneath the proposed landfill footprint.

Section 1.1 of Part III, Attachment 5 (Groundwater Sampling and Analysis Plan) describes the site hydrogeology. Section 2.2 (Design Criteria) to Part III, Attachment 5 and Section 5 (Geotechnical Data) Attachment 4 (Geology Report) summarize the geotechnical properties of the soils, including a detailed discussion of aquifers and groundwater beneath the site. Tests related to groundwater are documented in detail in Appendices 4C and 4F of Attachment 4.

The Geology Report and proposed Groundwater Sampling and Analysis Plan meet the requirements of 30 TAC §330.63(e) and (f).

#### **Comment 17: Effect of an Earthquake on the Proposed Landfill**

Some comments asked what effect an earthquake would have on the proposed landfill.

#### **Response 17:**

In accordance with 30 TAC §330.557, an applicant must determine whether a proposed facility is located in a seismic impact zone, which is defined as an area with 10% or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull, will exceed 0.10g in 250 years. If the proposed facility is located in a seismic impact zone, the applicant must demonstrate that all containment structures, including liners, leachate collection systems, and surface water control system, are designed to resist the maximum horizontal acceleration in lithified earth material for the site. The Application indicates that according to the United States Geologic Society (USGS) website for Earthquakes

Hazards Program, the calculated probability of exceedance for a maximum horizontal acceleration of 0.1 g in 250 years is 3.4% for the proposed location, which is less than the 10% level at which the rule defines a seismic impact zone. The Application provides this information in Part II, Section 7.5. Based on the information provided, the proposed facility would not be located in a seismic impact zone.

**Comment 18: Factual Errors at the Public Meeting and in the Application**

Some comments suggested that there were factual errors in the Application and in information presented at the public meeting.

**Response 18:**

It is unclear what factual errors the commenters believe may have been presented at the public meeting. The Executive Director is unable to address perceived factual errors in the Application without specific examples. Any information in the Application that is used to meet a rule requirement would be subject to consideration during a contested case hearing.

**Comment 19: Adverse Effect on Growth**

Some comments stated concern for the effect that the proposed facility would have on growth of the surrounding community.

**Response 19:**

In performing the technical review of an application, the Executive Director makes certain that all land use information is provided in accordance with 30 TAC §330.61. This includes information about growth trends within five miles of the facility in accordance with 30 TAC §330.61(h)(3) which has been reviewed. The Application contains sufficient information for a land use compatibility determination. The land use information submitted, including the growth trend information, does not support a determination that the landfill would be an incompatible land use.

**Comment 20: Complete and Accurate Landowner Information**

One person indicated that the Application does not include complete and accurate landowner information.

**Response 20:**

It is unclear what specific incorrect or missing information is suggested by the comment. The information on land ownership within one-quarter mile of the proposed facility boundary, provided in Figure 5, meets the requirements of 30 TAC §330.59(c)(3). The property owner information submitted for the facility property complies with 30 TAC §330.59(d).

**Comment 21: Mineral Interests**

Some commenters indicated that the information provided in the Application on mineral interests is incorrect.

**Response 21:**

In accordance with 30 TAC §330.59(c)(3), the Application must identify mineral interest ownership under the facility. The information provided in Figure 5 of the Application meets this requirement. The Applicant represented that this information was obtained from the Guadalupe County Appraisal District 2012 tax records in accordance with this rule.

**Comment 22: Insufficient Information on Pipeline Easements**

Some comments indicated that the information provided in the Application on a pipeline easement on the proposed facility is inadequate.

**Response 22:**

The Application discusses easements in Part II, Section 2.14. In Part II, Appendix 1B the Applicant has provided a copy of a Right of Way Grant, on which Item 2 indicates that the right of way reverts to the grantor upon one year of non-transmittal of product. The Applicant, who is also the land owner for the proposed facility, has attested, with three other individuals, that the pipeline has not been in service for at least one year.

Non-transmittal for one year results in the right of way reverting to the grantor, the land owner. The information provided in the Application indicating that this easement terminated adequately addresses the requirements of 30 TAC §330.543.

**Comment 23: Retention Ponds are an Environmental Hazard**

One comment indicated that retention ponds to be used by the proposed facility are an environmental hazard.

**Response 23:**

The Executive Director is challenged to address this comment when no specific hazard concern was provided. Retention ponds are storm water drainage features. They are an important feature for landfills, as they control storm water release rates. Retention ponds at MSW landfills are not designed to receive contaminated water. In accordance with 30 TAC §330.63(c) and 30 TAC Chapter 330, Subchapter G, the Applicant must provide a surface water drainage report that demonstrates that the owner or operator will design, construct, maintain and operate the facility to manage storm water run-on and runoff during the peak discharge from a 25-year/24-hr storm and to prevent the off-site discharge of waste and contaminated storm water. Prevention of discharge of contaminated storm water includes berms or other controls around areas where waste is exposed to prevent run-on into this active area and to contain the contaminated water that is generated. All water that has come into contact with waste must be treated as contaminated water.

A detailed surface water management plan (discussions, designs, calculations, and operational considerations for the collection, control, and discharge of storm water from the facility as required by the above-referenced rules) is included in Part III of the Application.

**Comment 24: Possible Permit Transfer**

One commenter expressed a concern that the facility permit, if issued, would be transferred to another owner.



**Response 24:**

In accordance with 30 TAC § 305.64(a), a permit may only be transferred with the approval of the Commission; however, the Commission cannot prohibit a permittee from applying for and transferring their permit.

**Comment 25: Inadequate Archaeological Survey**

Some comments indicated that the archaeological survey provided in the Application is inadequate.

**Response 25:**

In accordance with 30 TAC §330.61(o), an applicant must submit a review letter from the Texas Historical Commission (THC) to document compliance with the Natural Resources Code, Chapter 191, Texas Antiquities Code. This is discussed in the Application in Part II, Section 2.12 and documented in Part II, Appendix 4C. In response to an initial coordination, the THC requested additional investigation. This investigation was performed by SWCA Environmental Consultants in July 2011 and November 2012. In a letter dated January 9, 2013, the THC acknowledged the investigation report and indicated that the project “may proceed without further consultation with” the THC. While the Executive Director confirms that coordination with the THC has occurred and documentation of compliance has been provided, the Executive Director defers to the THC’s determination, after submittal of the *Intensive Cultural Resources Survey of the Post Oak Clean Green Project in Guadalupe County, Texas*, that “no further work is required” and that “this project may proceed without further consultation with [THC], provided that no significant archeological deposits are encountered during construction and development of the property.”

The information provided in the Application adequately addresses the requirements of 30 TAC §330.61(o).

**Comment 26: Violation of Guadalupe County Groundwater Conservation District Rule 8.1**

Some comments indicated that the proposed landfill would be a violation of Rule 8.1 from the Guadalupe County Groundwater Conservation District (GCGCD).

**Response 26:**

The Application is subject to, and reviewed for compliance with, applicable statutes and Commission rules. The referenced GCGCD rule has not been incorporated into Commission rules. The Commission is not authorized to determine whether the landfill would violate the GCGCD rule.

**Comment 27: Claims of Environmental Conscience**

One commenter indicated that the name “Post Oak Clean Green” is not justified by the proposed facility and that public discussions of a wildlife preserve and an environmental center are not proposed at the facility.

**Response 27:**

The Commission has no authority over the naming of facilities or applicant organizations. A wildlife preserve and environmental center may have been mentioned by the Applicant in public discussions, but these are not requirements of 30 TAC Chapter 330 and are not part of the Application.

**Comment 28: Commission Responsibility to Protect Texas**

One comment asked whether the Commission is tasked with protecting the environment in Texas and whether issuance of a permit for this Application would constitute protection.

**Response 28:**

The Commission is authorized to safeguard the health, welfare, and physical property of the people and to protect the environment. The Commission’s permitting rules are intended to protect the environment consistent with the underlying authority provided by state statutes. All applicable rules are adequately addressed by the Application, and so human health and the environment are expected to be protected if the landfill is constructed and operated in compliance with the Draft Permit.

**Comment 29: Consistency with Regional Waste Management Plan**

One person raised the concern that the Application does not conform to the provisions of the Regional Waste Management Plan (RWMP) of the Alamo Area Council of Governments (AACOG).

**Response 29:**

In accordance with 30 TAC § 330.61(p), the Applicant must provide documentation showing that the Application was submitted for review to the applicable council of government for compliance with the RWMP. Part II, Section 2.13 of the Application indicates that Parts I and II were submitted to AACOG. A response letter from AACOG, dated January 27, 2011, indicates that AACOG had concluded that the Application is in conformance with the RWMP. This response letter is provided in Appendix 4B of the Application.

It should be noted that during the public comment period the Executive Director received a second letter from the AACOG, dated July 6, 2012. The July 6, 2012 letter requests withdrawal of the AACOG letter dated January 27, 2011, and supports the resolution of the Guadalupe County Commissioner's Court, which is considered in this Response. The July 6, 2012 letter concludes that "local support is more important than consistency with its plan." This statement implies that the conclusion of consistency has not changed, as no general statement implies contradiction and no specific example of contradiction is provided. It is clear from the letter that AACOG now opposes the proposed facility. This opposition has been noted in this Response.

The information provided in the Application demonstrates that the landfill is compatible with AACOG's regional solid waste plan.

**Comment 30: Floodplain/Washout**

A few people stated concern that the landfill is located in the floodplain and that flood waters could lead to washout of waste.

**Response 30:**

In accordance with 30 TAC §330.63(c)(2), an application must identify whether a site is located within a 100-year floodplain. A Flood Insurance Rate Map of the facility is

provided as Part II, Appendix 8B, Figure 8-1. This figure indicates that the 100-year floodplain does not extend into the facility.

Section 30 TAC § 330.547(b) requires that an application include a demonstration that a waste disposal unit will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste if the unit is located within the 100-year floodplain. Figure 8-1 illustrates that the facility is not located within the 100-year flood, and so no further demonstration is required to demonstrate compliance with these rules.

**Comment 31: Public Notice**

One comment questioned whether proper notices of the Application and hearing were provided, including signs at the site and newspaper publication.

**Response 31:**

Notice is required for MSW permit applications in accordance with 30 TAC Chapter 39, Subchapters H, I and Chapter 330. These rules specify that notices of the receipt of an application and of a preliminary decision are made to, among others listed in 30 TAC §39.413, landowners named on the application map. Rule 30 TAC §330.59(c)(3)(A) limits this map to include land ownership within one quarter-mile of the proposed facility. Rule 30 TAC §330.57(i) requires applicants to post notice signs at the proposed site.

The Applicant provided the notice required by the rules.

**Comment 32: Texas Railroad Commission (TRRC)**

Two people noted that the Railroad Commission opposed the Application.

**Response 32:**

A letter from the TRRC Regional Office initially opposed the Application, but this opposition was withdrawn by a subsequent letter from the TRRC Central Office. This subsequent letter maintained concerns, which are addressed in this Response, but withdrew opposition.

**Comment 33: Guadalupe County Underground Water District (GCUWD)**

One comment shared dismay that the Commission did not include the GCUWD on the list of contacts for input on the Application.

**Response 33:**

The comment appears to intend to reference the Guadalupe County Groundwater Conservation District (GCGCD), as no record could be found for a GCUWD. Regardless, the list of organizations for which an application must demonstrate coordination are provided in 30 TAC Chapter 330, primarily in 30 TAC §330.61, and addressed in Part II of the Application. MSW rules require some coordination with specified agencies, including, for example, TxDOT, THC, TPWD, and USACE; however, there is no requirement in Chapter 330 to coordinate with GCGCD. The Executive Director did, however, provide notice and receive comment from the GCGCD. Their opposition to the Application is noted in the opening section of this Response and their specific concerns are addressed within this Response.

**Comment 34: Public Education and Price Reduction**

One comment expressed a concern that the Application “fails to describe any real program to systematically address efforts to curtail illegal dumping, litter abatement and waste reduction programs, public education programs, or how this proposed landfill will lower consumer pricing and commercial hauler tipping fees for waste collection.”

**Response 34:**

Public education programs and waste service price reductions for communities where landfills are located are not requirements to obtain a landfill permit under Chapter 330. The Executive Director is not authorized to require them of the Applicant.

**Comment 35: Significant Change to Drainage Patterns**

One comment indicated that the proposed facility would create a significant alteration of natural drainage patterns. The comment further stated that runoff volume would significantly increase and that the design of the proposed facility diverts storm water from its natural pathway.

**Response 35:**

In accordance with 30 TAC § 330.63(c) and 30 TAC Chapter 330, Subchapter G, an applicant must provide a Surface Water Drainage Report to demonstrate that the existing drainage pattern is not adversely altered. The drainage pattern evaluation is performed at points where storm water is discharged from the permit boundary. Please note that the comment claimed a *significant* change, while the rule prohibits an *adverse* change.

Part III, Attachment 2 of the Application, Surface Water Drainage, provides the required demonstration. Appendix 2A, Existing and Post-development Storm Water Runoff Comparison, discusses the demonstration. As can be seen in Figures 2A-1 and 2A-2, discharge points from the property, A, B, and C, are not proposed to change from pre- to post-development. As the Table in Appendix 2A, Section 3 indicates, discharge points A and C are unchanged, while B would experience about a 3% decrease in peak flow rate and a 0.3% increase in discharge volume. These changes do not represent an adverse change.

**Comment 36: Liner and Leachate Collection System**

Many individuals shared concerns over the liner system and leachate collection system. Several asserted that the United States Environmental Protection Agency (EPA) has indicated that all landfill liners will fail. Others were concerned that waste would puncture the liner, that clay liner tie-ins present a preferential pathway for leachate, and that there is inadequate quality assurance/quality control (QA/QC) for liner installation.

**Response 36:**

The MSW rules specify liner system design requirements in 30 TAC Chapter 330, Subchapter H, for the protection of groundwater. For waste disposal units that will receive household waste like this one, these rules require a composite liner or an alternative liner. A composite liner is, from bottom to top, at least two feet of re-compacted soil with a hydraulic conductivity of no more than  $10^{-7}$  cm/sec, a minimum 30-mil geomembrane (if the geomembrane is high-density polyethylene, it must be at least 60 mils thick). Composite liners must then be overlain by protective cover soil and a leachate collection system that is adequate to control leachate over the liner. Liner

details are provided on Figures 3-9 and 3-10 in Part III, Attachment 3 in the Application. Leachate collection system details are provided on Figure 3-11 in Part III, Attachment 3 in the Application. The proposed composite liner and leachate collection system meet applicable requirements.

The Application also proposes an alternative liner which replaces the clay component of the composite liner with a geosynthetic clay liner (GCL) with a hydraulic conductivity of no more than  $5 \times 10^{-9}$  cm/sec. A GCL is a layer of bentonite held between two geotextiles. Alternative liners are allowed under 30 TAC §330.331(a)(1), but require a demonstration to show that constituent concentrations in 30 TAC §330.331(a)(1), Table 1, are not exceeded in the uppermost aquifer at the point of compliance. This demonstration is provided in Part III, Appendix 3D, Exhibit 3D-3. This demonstration is adequate to authorize the proposed alternative liner, should the permit be issued.

The EPA stated, in the preamble to proposed rules (see the *Federal Register*, Volume 53, Number 166, August 30, 1988), that “even the best liner and leachate collection systems will ultimately fail due to natural deterioration, and recent improvements in [Municipal Solid Waste Landfill] containment technologies suggest that releases may be delayed by many decades at some landfills.” This proposed rule would have required a “second, less intensive phase of [post-closure] care,” but this proposed requirement was never adopted. The MSW rules meet the requirements of the adopted federal program.

As illustrated in the liner detail figures, both the composite and alternative liners will include a two-foot-thick layer of protective cover soil. This layer protects the geomembrane and underlying liner components from being punctured by the initial overlying waste.

QA/QC for liner installation is established by MSW regulations in 30 TAC §§330.337 and 339, and by the Commission’s *Liner Construction and Testing Handbook* (Liner Handbook) published in 1994. Other resources may be used, such as publications from the Geosynthetic Institute. For constructed soil liner tie-ins, the Liner Handbook recommends either a sloped transition or a stair-step transition. Part III, Attachment 3, Appendix 3D, Figure 3D1-3 of the Application proposes tie-in details for constructed soil liners that mimic the recommendations of the Liner Handbook. The proposed Soils and Geosynthetics Construction Quality Control Plan in Part III,

Attachment 3, Appendix 3D, Exhibit 3D-1 complies with the MSW rules and is consistent with appropriate guidance.

**Comment 37: Landfill Gas Control**

Some comments indicated a concern that the proposed facility would have inadequate landfill gas control.

**Response 37:**

MSW rule 30 TAC §330.63(g) requires the owner or operator of a landfill unit to monitor landfill gases in accordance 30 TAC §330.371. This rule requires the owner or operator to monitor and control landfill gas because it contains methane, which can cause odors and create an explosive hazard if it were to migrate into buildings, subsurface vaults, utilities, or any other areas where potential gas buildup would be of concern.

Part III, Attachment 6 of the Application contains the proposed Landfill Gas Management Plan (LGMP) for the facility. Section 3 of the LGMP indicates that monitoring will be accomplished by a system of 17 gas monitoring probes around the perimeter of the landfill, to be installed in phases as construction of the landfill progresses. Each proposed probe is designed to monitor the soil strata above the lowest planned future elevation of waste, or the lowest seasonal groundwater level, within 1,000 feet of the probe. The spacing between probes will be a maximum of 1,000 feet. Probe locations in relation to the waste footprint and facility appurtenances are shown on Drawing 6-1 of Attachment 6.

Section 6 of the LGMP indicates that as the site develops, gas extraction wells will be installed as needed to collect landfill gas and control landfill gas emissions. Blowers, flares, and piping will be installed as needed to provide the vacuum and capacity to manage the landfill gas.

The proposed LGMP meets the requirements of 30 TAC § 330.371.



### **Comment 38: Groundwater Monitoring System**

Some people were concerned that the proposed facility would have an inadequate groundwater monitoring system. Others were concerned that the system might miss a contaminant plume.

### **Response 38:**

In accordance with 30 TAC § 330.403(e), the Application must provide a groundwater monitoring system, including the number, spacing, and depths of monitoring wells or other sampling points, that is designed and certified by a qualified groundwater scientist. Well spacing may not exceed 600 feet without an applicable site-specific technical demonstration, as required by 30 TAC § 330.403(a)(2). The Groundwater Sampling and Analysis Plan is signed and sealed by Mr. Edward E. Hughes, P.G., Texas Licensed Professional Geoscientist No. 10021, as the qualified groundwater scientist.

The proposed groundwater monitoring system consists of 96 groundwater monitoring wells. Thirty-eight wells will be installed in the upper sand unit (425 Sand), 29 in the middle sand unit (395 Sand), and 29 in the lower sand unit (325 Sand). The spacing of downgradient wells in the 395 Sand and 425 Sand is 600 feet between wells. The spacing of downgradient wells in the 425 Sand is 300 feet between wells.

Section 4.3 of Attachment 4 and Section 1.1 of Attachment 5 indicate that groundwater occurs in three distinct sand layers (425 Sand, 395 Sand, and 325 Sand) underlying the facility. All three sand layers are demonstrated to be separated by clay layers and not interconnected. The Applicant has chosen to monitor all three sand layers beneath the facility.

The proposed groundwater monitoring system complies with the requirements for groundwater monitoring.

### **Comment 39: Landfill Would be 20 Feet from the Underlying Aquifer**

Some comments noted that the waste disposal unit is only 20 feet above groundwater in the aquifer.

**Response 39:**

Groundwater levels were updated in the October 22, 2014 submittal. On July 22, 2014, the groundwater elevation in piezometer PZ-45 was measured to be at 434.09 feet above mean sea level (ft msl). The proposed excavation depth at this point is 433.6 ft msl. The proposed excavation depth at PZ-45 is approximately 6 inches below the seasonal high groundwater table (SHGT).

MSW rule 30 TAC §330.337 establishes requirements for waste disposal units that extend below the SHGT. This rule requires a demonstration that the liner system will not undergo uplift from hydrostatic forces during its construction by one of the methods itemized in 30 TAC §330.337(b)(1) through (4). The Application discusses this requirement in Part III, Attachment 3, Appendix 3D, Exhibit 3D-1, Soils and Geosynthetics Construction Quality Control Plan, Section 11.1. The Application provides a ballasting evaluation, an option under 30 TAC §330.337(b)(1), in Exhibit 3D-2. The demonstration complies with the requirement for a demonstration that the liner will not undergo uplift from hydrostatic forces during its construction and operation.

**Comment 40: Provisions for Closure and Post-Closure Care**

One comment suggested that provisions for closure and post-closure care are inadequate.

**Response 40:**

Closure and post-closure care requirements are established in 30 TAC Chapter 330, Subchapter K. These requirements have been adequately addressed by the Application in Part III, Attachments 7 and 8.

**Comment 41: Financial Assurance**

Comments asserted that Applicant has failed to show the capability of paying projected costs of closing the landfill, providing post-closure care, and addressing potential corrective action.

**Response 41:**

In accordance with 30 TAC §330.503(b), the owner or operator of any MSW unit must establish financial assurance for closure of the unit in accordance with 30 TAC Chapter 37, Subchapter R. In accordance with 30 TAC §330.507(b), financial assurance must also address post-closure care costs. Part IV of the Draft Permit states that authorization to operate the facility is contingent upon maintenance of financial assurance. Within 60 days prior to the initial receipt of waste, a permittee must provide financial assurance instrument(s) for demonstration of closure and post-closure care. For this Application, closure costs were estimated to be \$3,310,349 (2014 dollars) and post-closure care costs were estimated to be \$8,141,148 (2014 dollars). A facility may not begin accepting waste without providing adequate financial assurance. Please note that financial assurance for any corrective action costs is not required at the time of application for a new facility. Should the need for remediation be identified in the future, a corrective action cost estimate and associated financial assurance would be required in accordance with 30 TAC §330.509.

**Comment 42: Buffer Zones**

A comment indicated that the facility would have inadequate buffer zones.

**Response 42:**

Buffer zones for Type I landfill units are established at 125 feet by 30 TAC §330.543(b)(2)(A). No solid waste unloading, storage, disposal, or processing may occur within any buffer zone. This requirement is addressed in Part IV, Section 10.0 and illustrated on Part III, Attachment 1, Figure 1-1. The Application provides for buffer zones as required under this rule.

**Comment 43: Final Cover System**

A comment asserted that the Application has not met requirements for the final cover system.

**Response 43:**

A final cover system on a new landfill must meet the design requirements of 30 TAC §330.457(a). The Application proposes, from top to bottom, a two-foot soil erosion layer (top 6 inches capable of sustaining native plants), a geocomposite drainage layer, a 40-mil linear low density polyethylene (LLDPE) geomembrane, and an 18-inch compacted clay layer (hydraulic conductivity  $\leq 10^{-5}$  cm/s). This design is illustrated in Part III, Attachment 3, Appendix 3D, Figure 3D1-2. Final cover installation QA/QC is addressed in Part III, Attachment 3, Appendix 3D-1, Soils and Geosynthetics Construction Quality Control Plan in the Application. The proposed design meets applicable rules for design of the final cover system.

**Comment 44: Slope Stability**

A comment stated that information in the Application regarding slope stability was insufficient because the minimum factor of safety is inadequate.

**Response 44:**

Information regarding the stability of waste disposal units is required under 30 TAC § 330.337(e). Information to address this requirement is provided in Part III, Attachment 3, Appendix 3B, Geotechnical Calculation Package (GCP). Sources for minimum factors of safety were requested by the Executive Director in his notice of deficiency letter dated February 26, 2014. The Applicant addressed the deficiency by adding Section 1.1, Methods for Calculating Factors of Safety in Stability Analyses, to the GCP. This information indicates that target safety factors were based on TCEQ Technical Guideline No. 3 and on USACE recommendations for levees as outlined in EM 1110-2-1913, "Design and Construction of Levees." The information in the Application regarding slope stability is adequate to meet rule requirements.

**Comment 45: Erosion Control**

A comment indicated that the Application provides inadequate erosion control, improper structural controls for capturing sediment before it leaves the proposed facility, and inadequate requirements for re-vegetation of disturbed areas.

**Response 45:**

Cover erosion control requirements are required under 30 TAC §330.305(d), and addressed in TCEQ document, “Guidance for Addressing Erosional Stability During All Phases of Landfill Operation,” dated February 14, 2007. This document explains that the Soil Conservation Service Universal Soil Loss Equation (USL) or other equivalent or better method must be used to demonstrate that soil losses from final cover slopes will not exceed 3 tons per acre per year (tons/acre-yr) and soil losses from intermediate cover surfaces will not exceed 50 tons/acre-yr. Typically, maximum allowable flow distances are calculated for top dome and side slope surfaces that take into account the design slopes and vegetative cover, among other parameters. Designs are provided for benches, terraces, berms, swales or other features that will prevent these surfaces from exceeding the appropriate limit.

In addition, an application must demonstrate that peak flow velocities do not exceed permissible, non-erodible velocities under similar conditions. “Similar conditions” indicates similar soil, vegetation, topography, and slope as the evaluated surface. These velocity limits are determined through published sources that must be documented in an application.

Erosion control for final cover surfaces is addressed in Part III, Attachment 2, Appendix 2B, Exhibit 2B-1. A final cover plan is provided on Figure 2B1-0, while details for final cover features, such as berms, swales, and channels, are provided on Figures 2B1-1 and 2B1-2. Soil loss estimates for the final cover are provided in Annex 2B-1A. Sheet flow velocity estimates for the final cover are provided in Annex 2B-1B. Annex 2B-1A utilizes the USL and indicates final cover erosion losses of 0.67 tons/acre-yr on top dome surfaces and 2.7 tons/acre-yr on side slopes. The Applicant has assumed 90% vegetative cover. Annex 2B-1B uses the Rational Method to estimate the 25-year peak flow rate, determines flow depth with Manning’s equation, and concludes peak velocities on final cover surfaces of 1.5 feet per second (ft/s) on top domes and 1.78 ft/s on side slopes. These velocities are below the values (5 ft/s on top domes and 4 ft/s on side slopes) chosen by the Applicant for easily eroded soil from the National Engineering Handbook, Table 8-6. The Application provides required information regarding erosion control from final cover surfaces.

Erosion control for intermediate cover surfaces is addressed in Part III, Attachment 2, Appendix 2C. A conceptual plan illustrating the partially filled landfill, including intermediate cover surfaces, is provided on Figure 2C-1, while details for final cover features, such as berms, swales, and channels, are provided on Figures 2C-2 and 2C-3. Soil loss estimates for the final cover are provided in Exhibit 2C-1, while sheet flow velocity estimates for the final cover are provided in Exhibit 2C-2. Exhibit 2C-1 utilizes the USL and indicates final cover erosion losses of 6.3 tons/acre-yr on top dome surfaces and 46.9 tons/acre-yr on side slopes. The Applicant has assumed 60% vegetative cover. Exhibit 2C-2 uses the Rational Method to estimate the 25-year peak flow rate, determines flow depth with Manning's equation, and concludes peak velocities on final cover surfaces of 1.99 ft/s on top domes and 2.36 ft/s on side slopes. These velocities are below the values (4 ft/s on top domes and 3 ft/s on side slopes) chosen by the Applicant for easily eroded soil from the National Engineering Handbook, Table 8-6. The Application provides required information regarding erosion control from intermediate cover surfaces.

While the facility has proposed a storm water detention pond which will reduce sediment from storm water runoff, limits for erosion rates are for the eroding surfaces, not for storm water effluent. Practices that control erosion rates on eroding surfaces will also limit suspended solids concentrations in storm water and reduce the amount sediment leaving the facility. Any specific limitations on storm water effluent would be addressed through storm water discharge permitting, which is handled through the TPDES program. The Applicant certifies that the facility will obtain the proper TPDES permit coverage in Part II, Attachment 7.

As noted above, vegetation is a requirement for intermediate and final cover surfaces. In accordance with 30 TAC §330.457(a)(3), final cover must be seeded or sodded immediately following the application of the final cover. Intermediate cover must be seeded or sodded following its application, as required by 30 TAC §330.165(c). Repairs to final and intermediate cover, including re-vegetation, must follow these same requirements. These rules have been adequately addressed in Part III, Attachment 7 for final cover and in Part III, Attachment 2, Appendix 2C, Section 3.2 and Part IV, Section 22.2 for intermediate cover.

**Comment 46: Odors**

Many comments indicated a concern that the facility will produce nuisance odors or that the Odor Management Plan is inadequate.

**Response 46:**

MSW rules under 30 TAC § 330.149 require that an application include an Odor Management Plan that must identify wastes and activities that are more likely to cause odors and how odors will be mitigated. This information is provided in Part IV, Section 14.0. This information meets the cited rule.

Nuisances, which are defined by 30 TAC § 330.3(95) to include odors, are prohibited under 30 TAC § 330.15(a)(2). If activities from the facility create odors or other nuisances, please report the problem to the TCEQ Region 13 office in writing or in person at 14250 Judson Road, San Antonio, Texas 78233-4480, or by telephone at (210) 490-3096 or toll-free at 1-888-777-3186. Citizen complaints may also be filed online at [www.tceq.texas.gov/complaints](http://www.tceq.texas.gov/complaints).

**Comment 47: Windblown Waste and Roadside Trash**

Many of the comments expressed a concern over windblown waste and trash along roads in the vicinity of the proposed facility.

**Response 47:**

Part IV, Sections 9.0 and 12.0 provide procedures for control of windblown solid waste and litter, and for control and cleanup of materials along the route to the site, as required by 30 TAC §§ 330.139 and 145, respectively. The Applicant would be responsible for picking up litter scattered throughout the site, along fences and access roads, at the gate, and along and within the right-of-way of public access roads serving the landfill for a distance of two miles from the entrance (including any waste illegally dumped within the right-of-way). Cleanup must occur at least once a day on days that the landfill is in operation.

The Application complies with the requirements of 30 TAC §§ 330.139 and 145. If the Landfill is operated in accordance with the SOP, the Executive Director expects that

windblown trash and materials along the route to the Landfill will be adequately controlled.

**Comment 48: Noise**

Numerous comments noted that the proposed facility would be a noise nuisance.

**Response 48:**

The TCEQ's rules do not include any specific limits on noise caused by landfill operations. The basis for a nuisance prohibited by 30 TAC §330.15(a)(2) does not include noise. The Executive Director is not aware of information to justify restricting the proposed operations or operating hours to reduce noise.

**Comment 49: Air Emissions and Effects on Health**

Numerous comments shared a concern over air emissions, including dust, from the proposed landfill and the effect that these emissions would have on the health of people in the vicinity.

**Response 49:**

As waste degrades in a waste disposal unit, landfill gas is produced. Landfill gas is mostly methane and carbon dioxide, with some moisture and trace constituents, including volatile organic compounds and hydrogen sulfide. Rules in 30 TAC §§ 330.63(g) and 330.371 require control of landfill gas to prevent possible explosive hazards due to migration and accumulation of methane. These rules are addressed in Part III, Attachment 6.

Emissions from stationary sources and particulate matter from roads and excavations at a landfill facility must be controlled in accordance with a standard air permit under 30 TAC, Chapter 330, Subchapter U. In accordance with 30 TAC § 330.55(a), the construction and operation of waste management facilities must comply with Subchapter U or other approved air authorizations. Emissions of air pollutants from the landfill itself are regulated under federal rules in 40 C.F.R., Part 60, Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills), adopted by reference by the state, which require an active gas collection and control system (GCCS),



monitoring of conditions in the GCCS and of emissions at the surface of the landfill, and corrective action as needed to ensure compliance.

Under 30 TAC §330.153(b), Part IV of the Application must address concerns regarding dust from on-site and other access roadways. Part IV, Section 16.0 of the Application addresses this rule and indicates that a water truck will be provided to water the on-site roads as needed to control dust.

If activities from a permitted facility create odors or other nuisances, please report the problem to the TCEQ Region 13 office in writing or in person at 14250 Judson Road, San Antonio, Texas 78233, or by telephone at (512) 339-2929 or toll-free at 1-888-777-3186. Citizen complaints may also be filed online at [www.tceq.texas.gov/complaints](http://www.tceq.texas.gov/complaints) or by phone at 1-888-777-3186.

**Comment 50: Vectors**

Numerous comments expressed the concern that the proposed landfill would attract disease vectors.

**Response 50:**

MSW rules under 30 TAC § 330.151 require control of on-site populations of disease vectors using proper compaction and daily cover procedures, and the use of other approved methods when needed. This information is provided in Part IV, Section 15.0. This section concludes that if the methods described in daily operations do not control vectors, a licensed professional will apply pesticides to ensure that proper chemicals are used and that they are properly applied. The Application meets requirements for vector control.

**Comment 51: Fire Protection**

Some comments noted the risk of fires associated with landfills or indicated that the fire protection controls in the Application are inadequate.

**Response 51:**

In accordance with 30 TAC § 330.129, an application must include calculations demonstrating that the operator can cover any waste received for disposal that has not

been covered with six inches of earthen material within one hour of detecting a fire. This requires sufficient on-site equipment and an adequate supply of soil located near the active waste disposal area. Part IV of the Application must contain a Fire Protection Plan that identifies the fire protection standards to be used at the facility and how personnel are trained.

This Fire Protection Plan, including the required demonstration that the active face may be covered within one hour, is included in Part IV, Section 4.0. The Application satisfies the rule requirements regarding fire protection.

**Comment 52: Leachate and Contaminated Water Management**

A comment stated that the Application contains inadequate information on water that has contacted waste, does not address treatment of contaminated water, and provides inadequate information on leachate storage.

**Response 52:**

Contaminated water is defined by 30 TAC § 330.3(36) as leachate, gas condensate, or water that has come into contact with waste. Leachate is produced as water percolates through waste to the liner system. Some contaminated water is generated at the active waste disposal area where rain falls directly on or runoff travels to exposed waste. Condensate is a result of landfill gas reaching the surface through collection systems, cooling, and dropping out the moisture it contains. As noted in the comments, contaminated water may contain any contaminant that is found in the landfill, or any biodegradation byproduct of these contaminants. For this reason, MSW rules include provisions concerning contaminated water management. These include prohibition of unauthorized discharges of contaminated water under 30 TAC § 330.15(h)(1) and (2) and requirements to divert runoff from active portions of the landfill and containment of contaminated water from active portions of the landfill in accordance with 30 TAC § 330.305(b) and (c).

Requirements for contaminated water management also include limiting the depths of leachate on the liner system, minimizing generation of water contacting waste, containing water that has contacted waste, requirements for covering waste each

operating day, and a liner system with a leachate collection system designed in accordance with 30 TAC § 330.333.

As noted in Part III, Attachment 3, Appendix 3C, Leachate and Contaminated Water Management, Section 1.0, contaminated water may not be discharged. Section 2.0 indicates that contaminated water will be collected and placed in leachate evaporation ponds (discussed in greater detail below) or transported to an off-site wastewater treatment facility. Part IV, Section 28.7 clarifies that these management procedures for contaminated water also apply to wastewater from the Citizen Convenience area. The Leachate and Contaminated Water Management plan for the facility addresses generation, collection, containment, storage, and disposal of contaminated water, including leachate and condensate. The information provided in this plan and elsewhere in the Application adequately addresses requirements for contaminated water management.

Leachate storage will be in leachate evaporation ponds, as described in Part III, Attachment 3, Appendix 3C, Exhibit 3C-5, Evaporation Pond Design. Ponds will provide 4.25 or 8.5 acre-feet of storage. Design drawings for each pond option are provided on Figure 3C5-1. The ponds will be lined with two feet of compacted clay (hydraulic conductivity of  $10^{-7}$  cm/sec or less) overlain by a 60-mil high-density polyethylene (HDPE) liner that is installed with the same QA/QC requirements as the waste disposal unit liner.

### **Comment 53: Access Control of Scavenging**

One comment indicated that the proposed facility would have inadequate access control to prevent scavenging.

### **Response 53:**

Scavenging is prohibited by 30 TAC §330.155, and requirements for access control are provided by 30 TAC § 330.131. Public access to all MSW facilities must be controlled by means of artificial barriers, natural barriers, or a combination. Uncontrolled access must be prevented. Provisions for access control must be provided in the SOP, which must also include an inspection and maintenance schedule and notification requirements as specified in the rule. The rule indicates that fences and

gates are the preferred method of landfill access and control, but does not provide specifications for these features.

Part IV, Section 5.1 indicates that access will be controlled by a 4-foot barbed wire fence at the permit boundary. Access from FM 1150 is limited to the entrance road through the gatehouse area where a gate attendant controls access and monitors all vehicles entering and exiting the site. Part IV, Section 17.0 notes that scavenging is prohibited. The information provided meets the requirements for site access control and scavenging.

**Comment 54: On-site Roads**

A comment stated that the Application fails to provide adequate information for the use of all-weather roads and the removal of mud tracked onto public roads.

**Response 54:**

Part III, Attachment 3, Figure 3-15 provides an illustration of the entrance area of the proposed landfill. Figure 3-14 provides details of the entrance road (from the gate on FM 1150, past the scales to the second gate) and the landfill access road (past the second gate). The entrance road will be hot mix asphalt or reinforced concrete pavement, while the landfill access road will be surfaced with crushed stone, gravel, concrete or asphalt rubble, or wood chips). These proposed roads adequately address all-weather access roads required under 30 TAC §330.63(d)(4)(A).

In accordance with 30 TAC § 330.153(a), tracked mud and associated debris at the access to the facility on the public roadway must be removed at least once per day on days when mud and associated debris are being tracked onto the public roadway. This has been adequately addressed in Part IV, Section 16.0 of the Application.

**Comment 55: Ponded Water**

A comment suggested that measures in the Application to address ponded water are inadequate.

**Response 55:**

Rule 30 TAC § 330.167 notes that the ponding of water over waste on a landfill must be prevented. Pondered water must be eliminated and the area in which the ponding occurred must be filled in and regraded within seven days of the occurrence. A ponding prevention plan must be provided in the SOP that identifies: techniques to be used at a landfill to prevent the ponding of water over waste, an inspection schedule to identify potential ponding sites, corrective actions to remove ponded water, and general instructions to manage water that has come into contact with waste.

Part IV, Section 23.0 addresses ponded water. This section indicates that ponded water will be prevented by proper grading, and that ponded water over waste will be removed and the depression filled in and graded within seven days of the occurrence. Inspection frequencies for daily, intermediate, and final cover are provided in Part IV, Section 3.3. Daily cover will be inspected daily while intermediate and final cover will be inspected after placement, weekly, and within 72 hours of a 0.5-inch or greater rainfall event. Inspections specifically for ponded water will occur within 72 hours of a 0.5-inch or greater rainfall event.

The information provided to address prevention of ponded water meets rule requirements.

**Comment 56: Visual Screening**

A comment indicated that the Application fails to provide adequate visual screening required under 30 TAC §330.175.

**Response 56:**

Section 30 TAC § 330.175 requires that an applicant provide visual screening of deposited waste materials where the Executive Director determines that screening is necessary or as required by the permit. Part IV, Section 26.0 indicates that the waste unit is located about one-quarter mile or more from public roads except on the northeastern side of the waste unit. In this area a 125-foot buffer is maintained adjacent to FM 1150. In this area along FM 1150 the facility will maintain an earthen berm and/or vegetation as a visual screen. This is illustrated in Part III, Attachment 3, Figure 3-1. The Executive Director has not determined that any additional screening should be required

under the above-cited rules and has concluded that the Application complies with requirements for visual screening of waste.

The Application and Draft Permit comply with all applicable regulatory and statutory permitting requirements. No changes were made to the Draft Permit in response to comments received.

Respectfully submitted,

Texas Commission on Environmental Quality

Richard A. Hyde  
Executive Director

Robert Martinez, Director  
Environmental Law Division

A handwritten signature in black ink, appearing to read "Steven Shepherd", is written over a horizontal line.

Steven Shepherd, Staff Attorney  
Environmental Law Division  
State Bar No. 18224200  
P.O. Box 13087, MC 173  
Austin, Texas 78711-3087  
Phone (512) 239-0464, Fax: (512) 239-0606

REPRESENTING THE EXECUTIVE  
DIRECTOR OF THE TEXAS COMMISSION  
ON ENVIRONMENTAL QUALITY

Post Oak Clean Green, Inc.  
Proposed Permit No. 2378  
Attachment A  
Support

Aguilar, Mercy  
Arp, Dustin  
Avila, Mari  
Bagby, Todd  
Banda, Maricela  
Barrientos, Santos  
Barton, Caleb  
Bell, Randy  
Bloch, Lydia  
Bodkin, Jack  
Bohmeler, Steve  
Bonds, Anthony  
Boone, Aaron  
Bronder, Bryan  
Brookhart, Ann  
Campos, Joey V.  
Canell, Robert  
Chavez, Saul  
Clark, David  
Coleman, Rodney  
Colung, Richard  
Cortinas, Andre  
Costa, Nate  
Cottingham, Colin  
Crawford, Debbie  
Danforth, Michael  
Davis, Will P.  
Degn, Amanda  
Driggers, Angelica  
Driggers, David  
Driggers, Scott  
Duke, J. D.  
Eastwood, Jordan  
Eastwood, Kenneth  
Eicher, Brent  
Espinosa, Antonio  
Evans, Leonard  
Fennell, Callie  
Flores, Hilario  
Ford, Max  
Franklin, Ray  
French, Mare  
Funderburg, Dorothy

G, Laura  
Galvan, Ramiro  
Garcia, Marco  
Garcia, Pilar  
Gerhurst, Chris  
Gibbs, Sand  
Gonzales, Mari  
Gonzalez, Jose  
Green, Mack  
Green, Mozell  
Green, Torrey  
Guerra, Richardo –  
*(Pres, League of United  
Latin American Citizens  
Council 682)*  
Guerrero, Irma  
Guillen, Jesse  
Guillen, Theresa  
Gutierrez, Debra  
H, Arler D.  
H, Julie  
Harboth, Stanley  
Harrell, Candace  
Harrell, Jerry  
Harrell, Scott  
Harrell, Tina  
Harrison, Justin  
Hathaway, Eliana  
Hathaway, Matthew  
Haugen, Calvin  
Heidemeyer, Deonna  
Herman, Daniel J.  
Hernandez, A.J.  
Hernandez, Adrian  
Hernandez, Ashley  
Hernandez, Cuca  
Hernandez, Isable  
Herrera, Javier  
Hill, Daniel  
Hill, William  
Hill, Yvonne  
Hinds, Ben  
Horacefield, Hope

Hull, Kristi  
Jackson, Kimberly  
Jahs, Dustin  
Jahs, Jamie  
Jaroszewski, Joan  
Jarvi, Rick  
Jeffrey, Felicia  
Johnson, Martha A.  
Jones, Larry –  
*(Guadalupe County  
Judge)*  
Karm, Basil G.  
Karm, Marie  
Karm, Ronald  
Kline, Syble  
Koebig, Alfred  
Koehler, Kelyn  
Lara, Jack  
Lara, Jacob  
Lara, Jon  
Lara, Kwin  
Laster, Angela  
Laster, Stephen  
Lawrence, Cristian  
Laymon, John F.  
Lockwood, Bill  
Long, James R.  
Longoria, Janie C.  
Longoria, Josephine C.  
Longoria, Mary  
Longoria, Pantaleon  
Longoria, Paula N.  
Lopez, Tony  
Lovelace, Tracy-Lou  
Lozano, Alfred  
Ludewig, Shaun  
Luera, Anthony  
Luna, Many  
Machado, Joe  
Maleika, Volkmar W.  
Mancha, Rudy  
Manning, Tom  
Marty, Emilio

Post Oak Clean Green, Inc.  
Proposed Permit No. 2378  
Attachment A  
Support

13 Concerned Citizens

Mata, Joseph  
Matthews, Clarence  
McCann, Paul  
McKinney, Michael  
McLaughlin, Patty  
Medina, Rudy  
Mendoza, Edgar  
Mendoza, Ernesto  
Mewboarn, Jason  
Miller, Greg  
Molina, Kim  
Montoya, Jessie  
Moreno, Jesse  
Morgan, James  
Mueller, Jake  
Mueller, Misty  
Nall, Greg  
Nall, Trisha  
Ochoa, A.D.  
Pape, Leroy  
Parra, Crystal  
Parra, Krystal  
Patterson, Joe L.  
Pena, Kristen A.  
Pereira, Adam  
Pereira, Wesley  
Perez, Alicia  
Perrera, Adam  
Perrera, Suzanne  
Phillips, Bill  
Phillips, Doris  
Phillips, Rebecca  
Phillips, William  
Pontoya, Joey  
Reid, Kirk  
Reyes, Jose  
Reynolds, Daniel  
Ridgeway, Austin  
Ridgeway, Kaci  
Rigney, Phia  
Rodriguez, Juan  
Rodriguez, Mia  
Rodriguez, Vanessa  
Schneider, Eileen  
Schneider, Wayne

Scott, P.J.  
Seibert, Richard L.  
Slaton, Robert  
Smith, Gus  
Smith, Jason  
Sosa, Jaime  
Spears, Aaron  
Stephenson, Patricia  
Stephenson, Ron  
Stidham, James  
Stiles, Jerry F.  
Strain, J.W.  
Strain, Joey W.  
Sutton, Bart  
Sutton, Niesha  
Taft, Clint  
Thornton, Darla  
Thornton, Sarah  
Toms, Larry  
Torres, Chris  
Tovar, Victor  
Trueblood, Eloise  
Trueblood, Scott  
Urdiales, Erminia  
Vecera, Kristen  
Vecera, Trent  
Vincent, Vardy  
Waldrop, Diann  
Washburn, Charlie  
Washburn, Isable  
Wehmeyer, Dusty  
Welty, Greg  
Whitaker, Richard  
White, Alyssa  
Wickersham, Matt  
Williams, Barry N.  
Williams, Melvin  
Wilson, Darrell  
Woods, Jonathan  
Wright, Tom  
Yglacias, Rene  
Young, Laci  
Young, Lori  
Zwicke, Aaron  
Zwicke, Angela



Post Oak Clean Green, Inc.  
Proposed Permit No. 2378  
Attachment B  
Opposed

Abat, Paul H.  
Ahrens, Charles E. - (V.  
*Pres., Water Resource and  
Conserv., San Antonio  
Water System*)  
Alex, Jamie  
Allen, Janet V.  
Allen, Pat -  
*(Gen Mgr., Green Valley  
Special Utility Dist.)*  
Armstrong, Kelly Evans  
Ayotte, Brenda  
Ayotte, Kyle  
Ayotte, Nancy  
Bading, Russell -  
*(Chairman, Comal-  
Guadalupe Soil and Water  
Conservation  
District #306)*  
Baker, Emmet, Jr.-  
*(Pres., Gonzales County  
Underground Water  
Conserv. District)*  
Baker, Becky  
Baker, Dennis G.  
Baker, Randall W.  
Baker, Robin  
Baker, Ronald W.  
Baker, Shad  
Baker, Staci  
Bettis, Sharon J.  
Blackburn, Sheri  
Bode, Ken  
Boehnke, Annie L.  
Bond, Mike  
Brady, Donald R.  
Braune, Gary -  
*(Pres Guadalupe County  
Farm Bureau)*  
Breitschopf, Phil - (CoB,  
*Gonzales County Soil &  
Water Conserv. District  
#338)*  
Broadway, Robert Royce  
Cabello, Tina Louise  
Caffey, Gerry D.  
Campbell, Donna -  
*(State Senator,  
District 25)*

Cheatham, Jimmie M. &  
Irving R.  
Cheshire, Amanda A.  
Cheshire, Billy & Frances  
Cheshire, Kent A.  
Chott, Merle & John  
Clark, William D.  
Cockerell, Rex Alan -  
*(Gen Mgr., Schertz-Seguin  
Local Gov. Corp)*  
Cordova, Eduardo  
Cowan, Joel A. -  
*(Chairman, Burleson  
County Soil & Water Cons  
District 358)*  
Crawford, Doug L.  
Dahl, Brian  
Danos, Dean J. -  
*(Exec Dir., Alamo Area  
Council Of Govt)*  
Dansfiell, William B.  
Davenport, David J. -  
*(Gen Mgr., Canyon  
Regional Water  
Authority)*  
Davis, Ralph E. &  
Judy A.  
Dennison, Kathy  
Dickman, Stephen C. -  
*(Atty. for SPOD)*  
Dietz, Tuddy  
Durkin, Debora  
Dwyer, Robin V.  
Edwards, Kirsten  
English, Molly E.  
Evans, Alan  
Evans, Alan R.  
Evans, Colby  
Evans, Derrick  
Evans, James  
Evans, Jamie  
Evans, John Adna  
Evans, Kelly D.  
Evans, Pattie A.  
Evans, Shantea  
Evans, Stephanie  
Evans, Winnie  
Flowers, Wayne T.  
Floyd, Jean

Foerg, Steven  
Folmar, Sharie  
Fralick, Phyllis S. -  
*(On behalf of Fran & Bill  
Cheshire, 621 Nixon Road)*  
Galvan, Frank  
Garza, Joannie K.  
Gay, Michelle Ann  
Geoffray, Rachel  
Goebel, Arlen -  
*(Chairman, DeWitt  
County Soil & Water  
Conserv. District)*  
Gonzalez, Paul -  
*Atty. for Schertz-Seguin  
Local Gov. Corp*  
Greenwald, Ken -  
*(Pres. Schertz-Seguin  
Local Gov. Corp)*  
Hale, Megan  
Halliburton, Johnie -  
*(Exec Mgr., Plum Creek  
Conservation District)*  
Ham, Zina  
Hartman, Nancy J.  
Hoegenauer, Lavonne &  
Glenn  
Hollub, Nancy & Bobby  
Holmes, Ken  
Hyman, William V. -  
*(Exec Dir., Indep.  
Cattlemen's Assoc. of TX,  
Inc.)*  
Jackson, Darell  
Jackson, Elbert Wayne  
Jackson, June  
Jackson, Reba  
Jackson, Wayne  
Johnson, Stephen E.  
Jones, Vernelle F.  
Jones, William E. -  
*(Dir, Guadalupe County  
Groundwater Conserv.  
District #4)*  
Kalil, Pamela  
Klemt, William B. -  
*(Guadalupe County  
Groundwater Conserv.  
District)*

Post Oak Clean Green, Inc.  
Proposed Permit No. 2378  
Attachment B  
Opposed

Kollaus, Wanda  
Kuck, Michael -  
(Gen Mgr., Luling  
Foundation)  
Kuempel, John -  
(State Representative,  
District # 44)  
Larsen, Donald  
Lindner, Patrick W. -  
(Atty. Schertz-Seguin  
Local Gov. Corp)  
Lowerre, Richard -  
(Atty. SPOD)  
Lunsford, Billy Joe  
Matthies, Betty Ann -  
(Mayor, City of Seguin)  
Maxwell, Boyd & Ardis  
May, John  
May, Lavern  
McMurren, Sandra  
Medina, Rojelio S.  
Mercer, David S.  
Mergele, Clint Blaine  
Mergele, Logan  
Mergele, Richard & Carla  
Miller, Barry -  
(Gonzales County Water  
Supply Corp.)  
Mizanin, Richard  
Mondor, Rebecca M.  
Mooney, Terry  
Moore, Graham -  
(Mgr., Hays Caldwell  
Pub. Utility Agency)  
Moses, Christin  
Najvar, Michael  
Nash, Claudia Cheshire  
Watts, Wayne  
Wentworth, Jeff -  
(State Senator, District  
25)  
Westbrook, John  
White, Alice Reneau  
Whittle, Melissa  
Winkelmann, Zachary K.  
Wood, Carl G.  
Wood, Rebecca L.  
Wood, Sarah C.  
Wosnig, Donna

Naumann, Ronald -  
(Pres. Guadalupe County  
Groundwater Conserv.  
District)  
Nesbit, David  
Ortmann, Tom -  
(Pres. Wilson County  
Farm Bureau)  
Parker, Doug  
Perales, Marisa -  
(Atty. SPOD and  
Guadalupe Groundwater  
Conserv. District)  
Ploeger, Mark -  
(Pres., Water Protection  
Association)  
Powers, Scott Allen  
Puente, Robert R. -  
(Pres/CEO San Antonio  
Water System)  
Quinn, Justin  
Ramos, Humberto  
Rice, Kristen Elizabeth  
Richmond, Jule -  
(Pres., Assoc. Texas Soil &  
Water Conserv. Districts)  
Rodriguez, Arturo D. -  
(Atty. for Cibolo Valley  
Local Gov. Corp)  
Roecker, Annette  
Roecker, Cleburn  
Roecker, Randy  
Ruppert, Charles  
Ryan, Robert L.  
Sachnik, Betty  
Sachnik, Gregory J.  
Sachnik, Margaret  
Wundt, James  
Young, Edward  
Zaffirini, Judith -  
(State Senator,  
District #21)  
Zetka, Norman -  
(Chairman, Bastrop  
County Soil & Water  
Conserv. District # 40)  
Zunker, Mary Ann

Sagebiel, Craig  
Saliger, Fran  
Scagliola, David -  
(Mayor Pro Tem, City of  
Schertz)  
Schiemenz, Terri  
Schott, Gary -  
(Chairman, Alamo Soil &  
Water Conserv. District #  
330)  
Schraub, Donald  
Sengelmann, Greg -  
(for Gonzales County  
Underground Water  
Conserv. District)  
Sowell, Anne  
Sowell, Dennis  
Sparks, Charles G. Sparks,  
Patricia Renee  
Spence, Gary W.  
Stolz, Doug  
Tamayo, Monica Eileen  
Thorson, Cory  
Thorson, John A.  
Tieken, Greg - (Pres.,  
Gonzales County Water  
Supply Corp.)  
Walker, Robin  
Wallace, Trudy N.  
Walther, Mary Claire  
Watts, Clifford  
Watts, D'Lacy  
Watts, James - (Stop Post  
Oak Dump)  
Watts, Louise

