

SOAH DOCKET NO. 582-08-1804  
TCEQ DOCKET NO. 2007-1302-MSW

2009 SEP 24 PM 4:46

APPLICATION OF IESI TX LANDFILL  
L.P. FOR A NEW TYPE 1 MSW PERMIT  
PROPOSED PERMIT NO. 2332

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BEFORE THE STATE OFFICE  
CHIEF CLERK'S OFFICE  
OF  
ADMINISTRATIVE HEARINGS

EXCEPTIONS TO AMENDED PROPOSAL FOR DECISION

OF

THE CITY OF JACKSBORO

SEPTEMBER 24, 2009



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TEXAS  
COMMISSION  
ON ENVIRONMENTAL  
QUALITY

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CHIEF CLERKS OFFICE  
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ADMINISTRATIVE HEARINGS

**THE CITY OF JACKSBORO'S EXCEPTIONS TO THE AMENDED  
PROPOSAL FOR DECISION**

TO THE HONORABLE COMMISSIONERS:

COMES NOW THE CITY OF JACKSBORO, TEXAS ("City" or "Jacksboro"), and presents to the Texas Commission on Environmental Quality ("TCEQ" or "Commission") this its Exceptions to the Amended Proposal for Decision ("Amended PFD"), and proposed Findings of Fact ("FOF"), Conclusions of Law ("COL"), and Ordering Paragraphs issued on September 4, 2009, by the Administrative Law Judge ("ALJ") in the above-captioned proceeding.

**I. INTRODUCTION**

The City supports the conclusions of the ALJ in recommending issuance of the draft permit to the Applicant. While the evidentiary findings in the Amended PFD support issuance of the permit and the ALJ ultimately recommends approval of the permit, the ALJ still asserts that there are requirements the Applicant must meet that are beyond the regulatory standards for MSW landfills in the state. As the City understands from the Amended PFD, the ALJ believes that the Applicant: (1) did not adequately identify and evaluate all groundwater wells within one



mile of the proposed facility's boundaries;<sup>1</sup> (2) failed to identify areas of groundwater recharge;<sup>2</sup> and (3) did not identify aquifers for the wells within one mile of the site, based on published sources.<sup>3</sup> The City notes that none of these alleged deficiencies relate to the actual design or operation of the landfill, but only question the preparation of the Application. The City also notes that there are no specific regulatory requirements to support these alleged deficiencies and that fact is clear from the Executive Director's support of the Application. The Commission adopted its municipal solid waste ("MSW") rules to ensure that landfills are designed and constructed to protect the environment and public health. Because the Amended PFD ultimately concludes that the Applicant has taken the necessary design precautions to protect the environment and public health, the ALJ's proposed new standards for application preparation, as described in her Amended PFD, should be rejected.

The City is also concerned that the alleged deficiencies in the Application are supported in the Amended PFD only by the testimony of TBCAG witnesses, not by evidence in the record. The record is clear that Dr. Lauren Ross' opinions are questionable because she is not a qualified groundwater scientist<sup>4</sup>, has essentially no experience in landfill design<sup>5</sup>, and has no practical experience with the geology and hydrogeology of this area of Jack County. In contrast, the Applicant's expert, Mr. Mike Snyder, who prepared the geology and hydrogeology sections of the Application that are challenged in the Amended PFD, has extensive landfill design experience and practical experience with the geology and hydrogeology of Jack County and surrounding counties. Further, an Applicant supporting expert, Dr. Charles Kreidler, a registered geoscientist, agrees with the conclusions drawn by Mr. Snyder. The City is at a loss to

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<sup>1</sup> Amended Proposal for Decision, *Application of IESI TX Landfill L.P. for a New Type I MSW Permit Proposed Permit No. 2332*, SOAH Docket No. 582-08-1804, TCEQ Docket No. 2007-1302-MSW (September 4, 2009) [hereinafter PFD] at 1 and 15.

<sup>2</sup> PFD at 1 and 18, *supra* note 1.

<sup>3</sup> *Id.* at 1 and 16.

<sup>4</sup> Tr., Vol. 6, at 93, l. 20-22.

<sup>5</sup> *Id.* at 94, l. 3-10.



understand how Mr. Snyder's, Dr. Kreitler's, and the Executive Director's experts can be called into question solely by Dr. Ross's unsupported and unqualified opinions. Likewise, Mr. Pierce Chandler's testimony was completely discredited by the evidence in the record and his repeated failure to review available literature or properly analyze data in the Application.<sup>6</sup>

The information provided in these Exceptions addresses the ALJ's proposed FOFs that are in conflict with her decision to recommend the issuance of the requested permit and provide a clear basis, supported by the evidentiary record, for a modification of the Amended PFD and issuance of Permit No. MSW-2332. Therefore, the City respectfully requests that the ALJ, after considering the information set out in these Exceptions, modify the Amended PFD and Proposed Order to support issuance of Permit No. MSW-2332 by excluding some FOFs and amending other recommended FOFs. If the Amended PFD and Proposed Order are not so modified, then the City respectfully requests that: (1) the Commission not adopt the ALJ's Proposed Order as it is written; and (2) the Commission adopt a revised Order approving the Application as proposed in these Exceptions.

To be clear, the City does not necessarily agree with all of the ALJ's proposed Findings of Fact and Conclusions of Law but has chosen to only highlight the most salient proposed Findings of Fact and Conclusions of Law to which it excepts. As reflected by the Executive Director's experts' testimony at the Hearing on the Merits ("HOM"), the Application meets all regulatory requirements.<sup>7</sup> The Application clearly conforms to Commission precedent on all contested issues. To approve this Application but include FOFs that are based on different standards than have been required of other landfill permit applications will cause significant

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<sup>6</sup> An example of Mr. Chandler's failure to adequately review the available literature was his testimony that lignite is found only in the Pennsylvanian formations, not the lower Trinity formations. In rebuttal, Dr. Kreitler provided numerous literature citations identifying lignite in the Trinity formations.

<sup>7</sup> See ED Ex. 1 at 3.



harm to the municipal solid waste industry in Texas as well as the approximately 171,000 citizens of Jack County and surrounding areas who will be served by the proposed facility.<sup>8</sup>

In the following sections, the City will focus on those portions of the Application, the regulations, and Commission precedent that justify a modification of the Amended PFD and proposed Order in this proceeding.

## II. EXCEPTIONS TO PFD

### **1. Applicant properly evaluated the stratigraphy and identified the regional aquifers.**

*The City excepts to the deletion of the following Findings of Fact in the Amended PFD:*

Original Finding of Fact No. 67.<sup>9</sup> Stratum II is the uppermost aquifer underlying the site.

Original Findings of Fact No. 68. Stratum III is correlatable across the site and is the lower confining unit.

Original Finding of Fact No. 71. Applicant properly evaluated the stratigraphy.

*The City excepts to new Findings of Fact that did not appear in the original PFD:*

Finding of Fact No. 77. The landfill site overlies both the Cretaceous and Pennsylvanian formations, and the Pennsylvanian formation flows generally to the west.

*The City continues to except to the following Findings of Fact as originally proposed by the ALJ in her original PFD and remain proposed in the Amended PFD:*

Finding of Fact No. 128. The deeper, higher yielding wells are consistent with the depth of the Pennsylvanian formation.

Finding of Fact No. 130. Many of the nearby wells appear to be in the Stratum IA sands.

Finding of Fact No. 131. The Pennsylvanian formation is critically important source of usable groundwater in the vicinity of the landfill; at many locations, there may be no other available water supply resource.

<sup>8</sup> As noted by the ALJ, the proposed facility would serve a population equivalent of 171,000 people in the City, Jack County, and the surrounding areas. See ALJ's Proposed FOF No. 13.

<sup>9</sup> The number listed is the number in the original PFD, issued on May 5, 2009.



Finding of Fact No. 132. The most important water-bearing units in the county are Pennsylvanian age, with minor contributions of groundwater by units of the Trinity Group and alluvium.

Finding of Fact No. 133. Within one mile of the landfill site, there are usable amounts of groundwater in the Pennsylvanian formations.

Finding of Fact No. 134. Applicant did not adequately describe the present use of groundwater withdrawn from aquifers in the vicinity of the facility.

Finding of Fact No. 135. Applicant did not identify the location and list the aquifer of all water wells within one mile of the property boundaries of the facility.

Finding of Fact No. 136. Given that the application does not include the information identified in the two preceding Findings of Fact, a special provision should be added to the permit requiring, that Applicant install 28 monitoring wells around the facility's perimeter that will screen contaminants in Stratum I and Stratum IA.

#### **A. Stratigraphy**

The Applicant properly evaluated the stratigraphy at the site. Therefore, it is unclear why the ALJ has removed accurate Findings from her Amended PFD and inserted new, inaccurate Findings. The Applicant's regulatory burden is to show a "generalized stratigraphic column in the facility area from the base of the lowermost aquifer capable of providing usable groundwater, or from a depth of 1,000 feet, whichever is less, to the land surface."<sup>10</sup> The Applicant provided exactly this information. In her Amended PFD the ALJ relies solely on Mr. Chandler's statements that some of the Applicant's borings were "wash" or "wet rotary" drilled with no soil sample being recovered. The ALJ states "All of Applicant's remarks for the boreholes said the same thing; thus, no distinct information for particular borings can be gleaned from them. This adds credence to Mr. Chandler's Testimony that IESI used wash borings to develop its subsurface stratification."<sup>11</sup> The Applicant's witness, Mr. Gregg Adams, P.E., clearly stated that

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<sup>10</sup> 30 TEX. ADMIN. CODE § 330.56(d)(2)(B).

<sup>11</sup> Amended PFD at 29, *supra* note 1.



core and Shelby tube sampling was performed on an excess of 80 percent of the boreholes.<sup>12</sup> Mr. Adams further stated that for more than 80% of the total drilling he had undisturbed samples to look at.<sup>13</sup> Mr. Adams' testimony was uncontroverted in the evidentiary record.

Wash borings were only utilized for a minor part of the site exploration. The majority of information came from the drilling logs and core samples. Both Mr. Snyder and Mr. Adams testified to the validity of the information in the Application. The Applicants methodology conforms to TCEQ regulatory requirements and Commission precedent.

Mr. Chandler's failure to properly evaluate the data also leads to his erroneous conclusion that Stratum III cannot serve as an aquiclude. The uncontroverted evidence is that Stratum III underlies the entirety of the proposed landfill site. Stratum III is of sufficient thickness and of low enough permeability ( $10^{-8}$  cm/sec) to serve as the aquiclude beneath the uppermost aquifer, Stratum II, at the site. As Mr. Snyder testified, he even confirmed on oilfield logs provided to him by a protestant, Dr. Henderson, that Stratum III extends off the site in both directions.<sup>14</sup>

The Applicant also performed an adequate number of tests to characterize the in-situ materials as part of the landfill design. Mr. Adams testified that the compressive strength data was not the only data that was used to assess the strength parameters.<sup>15</sup> The assumed strength parameters were based on not only compressive strength test results, but also the results of the classification tests, dry unit weight tests, moisture content tests, and split spoon sample blow counts.<sup>16</sup> Once again Mr. Chandler failed to properly analyze the data in the Application.

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<sup>12</sup> Tr., Vol. 1, at 214, l. 9-19.

<sup>13</sup> Tr., Vol. 9, at 55, l. 18-20.

<sup>14</sup> Tr., Vol. 8, at 148, l. 21 through 149, l. 9.

<sup>15</sup> Tr., Vol. 1, at 164.

<sup>16</sup> *Id.* at 161-162.



Because the stratigraphy was properly evaluated, it is unclear why new Finding of Fact No. 77 is included when such information is not necessary to fulfill any of the statutory or regulatory requirements applicable to this proceeding.

### **B. Regional Aquifers**

It is difficult for the City to determine how the evidentiary record might lead the ALJ to conclude that the Applicant allegedly did not identify an important regional aquifer. As properly noted by the ALJ, an aquifer is a “geologic formation...capable of yielding *significant* quantities of groundwater to wells or springs”<sup>17</sup> (emphasis added). The uppermost aquifer is the “geologic formation nearest the natural ground surface that is an aquifer; includes lower aquifers that are hydraulically interconnected with this aquifer within the facility’s property boundary.”<sup>18</sup> The regulations require that landfill permit applicants analyze “usable” groundwater in formations that yield “significant quantities” of groundwater.<sup>19</sup> It is axiomatic that a waterbearing formation must meet these two fundamental criteria to even be considered as a possible regional aquifer. In reaching her conclusion that the Application does not identify the Pennsylvanian Canyon Group as a regional aquifer, the ALJ alleges that the Pennsylvanian formation in this area yields usable and significant amounts of groundwater. The ALJ also alleges that Nordstrom’s Report 308 designates the Pennsylvanian formations as the most important water bearing units in Jack County. Both allegations are in clear error if Nordstrom’s Report 308 is read in its entirety.

The ALJ’s confusion appears to revolve around what is a “regional” aquifer in the regulatory context of a landfill permit application and what type of formation produces

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<sup>17</sup> 30 TEX. ADMIN. CODE § 330.2(6).

<sup>18</sup> *Id.* § 330.2(158).

<sup>19</sup> *See id.* §§ 330.2(6) & 330.56(d)(2)(B).



“significant” amounts of usable groundwater. Because the Amended PFD appears to rely heavily on Nordstrom’s Report 308, the City highlights the fact that Nordstrom does not identify the Pennsylvanian Canyon Group as a regional aquifer. Nordstrom explicitly states that Jack County is underlain by Pennsylvanian rocks, but the formations therein yield limited amounts of fresh to saline groundwater.<sup>20</sup>

Based on the study performed by Nordstrom, the Pennsylvanian Canyon Group groundwater demonstrated that the “overall quality of groundwater for domestic use is fairly poor.”<sup>21</sup> Nordstrom went further and analyzed the use of Pennsylvanian Canyon Group groundwater for irrigation wells and concluded that “groundwater from the Canyon Group is not suitable for extensive irrigation practices.”<sup>22</sup> Nordstrom notes that Bill Dennis, a Jack County historian, mentioned that because of the poor quality of the groundwater in the Canyon Group, Jack County was settled late or not at all.<sup>23</sup> **Nordstrom concluded that Pennsylvanian formation water should not be used for domestic purposes or for irrigation purposes.**<sup>24</sup> Nordstrom’s Report 308 clearly refutes the ALJ’s allegation that the Pennsylvanian Canyon Group yields significant amounts of useable groundwater and, therefore, is an important regional aquifer.

When asked if the Pennsylvanian Canyon Group is an aquifer (much less a regional aquifer), Dr. Ross explicitly did **not** testify that the formation is an aquifer. She merely opined that it is an “important source of usable groundwater in the vicinity of the landfill” and that there

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<sup>20</sup> TBCAG Ex. 8B at iii.

<sup>21</sup> *Id.* at 63.

<sup>22</sup> *Id.* at 63-64.

<sup>23</sup> *Id.* at 54.

<sup>24</sup> *Id.* at 71-72.



may be “no other available water supply resource.”<sup>25</sup> Dr. Ross’ opinion, even if true, definitely does not make the Pennsylvanian Canyon Group a “regional” aquifer for regulatory purposes. In contrast, Nordstrom states that the Pennsylvanian is so discontinuous and occurs so erratically that potentiometric maps and water quality maps cannot be constructed and would be misleading.

In addition to Nordstrom’s Report 308, the primary aquifer identification publication issued by the State of Texas, *Aquifers of Texas*, does not list the Pennsylvanian formation as either a major or minor aquifer. Dr. Ross agreed that *Aquifers of Texas* is a reliable source for identifying a regional aquifer.<sup>26</sup> With the published authorities agreeing that the Pennsylvanian formations in the area of the proposed landfill do not produce sufficient groundwater for use over a large area by a significant population, the Applicant did not list the Pennsylvanian Canyon Group as a regional aquifer. There is nothing in the literature, or the evidentiary record, that groundwater withdrawn from the Pennsylvanian formation in this area is anything other than of limited quantity and potability. At best, it can only serve a few people on an unreliable basis. The Pennsylvanian Canyon Group is simply not a regional aquifer, either in fact or under TCEQ regulations.

Nordstrom and the Applicant agree that the Twin Mountains formations of the Trinity Aquifer, not the Pennsylvanian formations, are the most important sources of groundwater in the region.<sup>27</sup> All regional aquifers have been identified in the Application by utilizing standard industry practice and in accordance with Commission regulations.

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<sup>25</sup> TBCAG Ex. 8 at 8.

<sup>26</sup> See Tr., Vol. 6 at 100, l. 13-23.

<sup>27</sup> See TBCAG Ex. 8B at 79; see also App. Ex. 100, Vol. 2, Attachment 4 at 4-3.



### C. Site Aquifers

In identifying the stratigraphic column, the Application listed the only possible “aquifers” for any possible water wells within one mile of the landfill site. The now deleted Finding of Fact No. 67 properly concludes that Stratum II is the uppermost aquifer. Much of the ALJ’s discussion in her Amended PFD tries to imply that Stratum IA must also be identified as an aquifer since some undocumented nearby wells may draw limited amounts of perched groundwater from Stratum IA. The evidence in the record clearly establishes that Stratum IA is not an aquifer in the TCEQ regulatory context. Even if it were, it has been identified in the Application. The City is at a loss to understand what else the Application could possibly include since it contains all of the information required by applicable TCEQ regulations. The ALJ is obviously trying to apply some higher standard beyond the regulatory requirements. Such is beyond the scope of a contested case proceeding and was not requested by the Commissioners in this case referral to SOAH.

The City reiterates that the Applicant properly conducted a physical on-site subsurface investigation and characterization of the underlying geology and hydrology. The ALJ ultimately agreed with the Applicant and TCEQ staff that it was properly conducted. Because the Applicant identified the possible groundwater resources at the site, and designed the proposed facility to be protective of such resources, the intent of the rules, to protect the environment and public health, has been met.

Because the evidence does not support the ALJ’s removal from the Original PFD of the Findings of Fact described above, the City hereby recommends re-insertion of the following Findings of Fact, renumbering the Proposed Findings accordingly, deleting Finding of Fact Nos. 77, 128, 130, 133, 134, and 135, and amending Finding of Fact Nos. 131, 132, and 136:



Finding of Fact No. . Stratum II is the uppermost aquifer underlying the site.<sup>28</sup>

Findings of Fact No. . Stratum III is correlatable across the site and is the lower confining unit.

Findings of Fact No. . Applicant properly evaluated the stratigraphy.

~~Finding of Fact No. 77. The landfill site overlies both the Cretaceous and Pennsylvanian formations, and the Pennsylvanian formation flows generally to the west.~~

~~Finding of Fact No. 128. The deeper, higher yielding wells are consistent with the depth of the Pennsylvanian formation.~~

~~Finding of Fact No. 130. Many of the nearby wells appear to be in the Stratum IA sands.~~

~~Finding of Fact No. 131. The Pennsylvanian formation does not yield significant quantities of usable groundwater and is not a regional aquifer as defined by the TCEQ regulations is critically important source of usable groundwater in the vicinity of the landfill; at many locations, there may be no other available water supply resource.~~

~~Finding of Fact No. 132. Applicant correctly identified the most important water-bearing units in the county are Pennsylvanian age, with minor contributions of groundwater by units of the Trinity Group and allavium as the regional aquifer in vicinity of the proposed landfill site.~~

~~Finding of Fact No. 133. Within one mile of the landfill site, there are usable amounts of groundwater in the Pennsylvanian formations.~~

~~Finding of Fact No. 134. Applicant did not adequately describe the present use of groundwater withdrawn from aquifers in the vicinity of the facility.~~

~~Finding of Fact No. 135. Applicant did not identify the location and list the aquifer of all water wells within one mile of the property boundaries of the facility.~~

~~Finding of Fact No. 136. Given that the application does not include the information identified in the two preceding Findings of Fact, a A special provision should be added to the permit requiring, that Applicant install 28 monitoring wells around the facility's perimeter that will screen contaminants in Stratum I and Stratum IA.~~

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<sup>28</sup> All proposed Findings of Fact, Conclusions of Law, and Ordering Paragraphs will be presented in strikeout format.



**2. Applicant adequately identified and evaluated all water wells within one mile of the proposed facility's boundaries in compliance with TCEQ regulations.**

The City excepts to the following Findings of Fact as proposed by the ALJ:

Finding of Fact No. 105. Because Applicant did not identify wells within one mile of the proposed facility, it consequently did not identify the base of the lowermost aquifer capable of providing useable groundwater.

Finding of Fact No. 125. Within one mile of Applicant's property boundaries, there are 46 wells, the majority of which are within one mile of the proposed permit's boundaries.

Finding of Fact No. 126. The wells range in depth from about 70 feet below grade to 500 feet, but most are between 100 and 300 feet deep.

Finding of Fact No. 127. The shallower wells are likely completed in the Twin Mountains or Trinity aquifer.

The Applicant identified and evaluated all water wells within a one mile radius of the proposed landfill site as required by applicable TCEQ rules and previous TCEQ practice and precedent. The Applicant utilized the same standard of professional practice and care as other applicants in the past have used in identifying water wells. The well search methodology employed by the Applicant has been approved by the Commission in other recent landfill permit proceedings. The expanded well search requirements proposed by the ALJ would result in a significant expansion of the explicit language of the regulation and would be a drastic departure from established Commission precedent.

The City begins by noting that the ALJ mischaracterizes the Applicant's identification of water wells within one mile of the proposed landfill. The ALJ's reliance on testimony by nearby property owners regarding undocumented wells is misplaced. The Applicant adequately described all water wells within one mile of the landfill site through its search of open and available water well records and by conducting a standard driving survey. A door-to-door survey for some undefined distance from a proposed landfill site as proposed by the ALJ has never been required by the Commission and is clearly not included in the regulatory language.



The ED was explicit that the water well search performed by the Applicant meets all regulatory requirements.<sup>29</sup>

The real danger to the Commission in adopting the Amended PFD as written is that it completely ignores the professional standard of care appropriate for preparing a MSW application. Some type of undefined door-to-door search would be inconsistent in both application and result. It would be inconsistent in its application because there is no reliable method for an applicant to access all private property in the area of a proposed landfill. This is particularly true in an area such as this part of Jack County with many non-resident landowners. It would be inconsistent in result since many owners of undocumented wells know nothing about the physical condition of their wells or the water quality. A professional standard of care must have consistency in both application and result. The Applicant's professional standard of care was appropriate in this case.

The Commission, by issuance of MSW permits with similar water well search methodology, has approved of the methodology used in this case. In the following applications, the Commission has issued permits utilizing the same water well identification methodology:

MSW Permit No. 576B, issued Dec. 12, 2002, to Waste Management of Texas, Inc.

MSW Permit No. 1428A, issued Aug. 14, 2003, to City of Wichita Falls

MSW Permit No. 2290, issued Oct. 31, 2003, to Texoma Area Solid Waste Authority

MSW Permit No. 1454B, issued Oct. 20, 2004, to B&B Landfill, Inc. d/b/a Waste Management of Texas

MSW Permit No. 47A, issued Aug. 17, 2007, to IESI TX Landfill, LP<sup>30</sup>

The particular significance of the above-referenced applications is that the Applicant utilized the same geoscientist, Mr. Snyder, who prepared the above referenced applications. In

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<sup>29</sup> See ED Ex. 4 at 2.

<sup>30</sup> The water well searches for the above referenced permits are attached hereto as Attachments A through E, respectively. The signed permits for the above referenced permits are attached hereto as Attachments F through J, respectively.



the above-referenced applications, Mr. Snyder performed the same type of water well searches as he did with this Application. In each instance, the Commission approved the applications without making any finding that the water well search methodology was improper. In contrast, Dr. Ross, the largest critic of the Applicant's water well search, has herself never designed a groundwater modeling plan, never prepared a MSW landfill application, and has no actual experience in conducting water well searches in accordance with MSW rules and regulations.<sup>31</sup>

Most recently Mr. Snyder's well search methodology was approved by the Commissioners in the BFI Sunset Farms application.<sup>32</sup> Section 1.4.5 of Attachment 4 to this application states "The search included a review of records and maps on file at the Texas Water Development Board (TWDB) and the Texas Commission on Environmental Quality (TCEQ). An attempt was made to locate wells and confirm water well locations, where visible from nearby roads and streets."<sup>33</sup> The Commissioners approved this heavily contested application without any question of the scope of the water well search since it met the regulatory requirements.

Moreover, regardless of the location or number of nearby water wells, it is important to note that the landfill's standard Subtitle D design will be fully protective of the groundwater - **period.**

Because the evidence in the record does not support the Findings of Fact noted above, the City hereby suggests the following changes to Findings of Fact Nos. 125 and 126 and proposes deletion of Fact No. 105 and 127.

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<sup>31</sup> Tr., Vol. 6, at 124, l. 20 through page 125, l. 1.

<sup>32</sup> An Order Granting in Part the Application of BFI Waste Systems of North America, LLC, for Type I MSW Permit No. 1447 A, *Application of BFI Waste Systems of North America, LLC*, SOAH Docket No. 582-08-2178, TCEQ Docket No. 2007-1774-MSW (September 14, 2009), attached hereto as Exhibit K.

<sup>33</sup> Part III – Site Development Plan, Attachment 4, Geology and Geotechnical Report, BFI/Sunset Farms Landfill, Travis County, Texas, TCEQ Permit No. MSW 1447-A, Permit Amendment Application, at APP000433, attached hereto as Exhibit L.



~~Finding of Fact No. 105. Because Applicant did not identify wells within one mile of the proposed facility, it consequently did not identify the base of the lowermost aquifer capable of providing useable groundwater.~~

~~Finding of Fact No. 125. Utilizing the proper regulatory standard of care for a water well search, Applicant identified five water wells within one mile of the permit boundary, two of which are within the permit boundary and not used. Within one mile of Applicant's property boundaries, there are 46 wells, the majority of which are within one mile of the proposed permit's boundaries.~~

~~Finding of Fact No. 126. Applicant identified all water wells within one mile of the permit boundary that are registered on state water well databases. The wells range in depth from about 70 feet below grade to 500 feet, but most are between 100 and 300 feet deep.~~

~~Finding of Fact No. 127. The shallower wells are likely completed in the Twin Mountains or Trinity aquifer.~~

For the reasons stated above, the City also excepts to the following Conclusion of Law:

Conclusion of Law No. 8. Applicant met its burden with respect to all referred issues except identification of groundwater wells within one mile of the proposed facility's boundaries and areas of water recharge.

Because the evidence in the record does not support the ALJ's proposed Conclusion of Law No. 8 as drafted by the ALJ, the City suggests the following changes to Conclusion of Law No. 8:

Conclusion of Law No. 8. Applicant met its burden with respect to all referred issues ~~except identification of groundwater wells within one mile of the proposed facility's boundaries and areas of water recharge.~~

### **3. Transcription Costs.**

The City is a public entity that needed to expend public funds to ensure a long-term waste solution for the City and Jack County. The City does not believe that 25% of transcription costs should be allocated to it simply because it took the necessary time during the hearing to demonstrate the lack of credibility of Dr. Ross' testimony and Mr. Chandler's testimony. Allocation of any costs to the City would be unjust since the Protestants could not defend any of their legal theories or find any regulatory flaws in the Application. Their arguments boiled down



to the NIMBY – not in my backyard – argument. Taxpayer money should not be allocated to defend against those baseless NIMBY arguments.

### **III. CONCLUSION**

The evidentiary record in this proceeding clearly demonstrates that the Applicant has satisfied all statutory and regulatory requirements for a municipal solid waste permit to be issued for this site.

The City of Jacksboro respectfully requests that the Commissioners confirm through appropriate Findings of Fact and Conclusions of Law that IESI's Application meets or exceeds all statutory and regulatory requirements and issue the requested municipal solid waste permit to IESI.

Respectfully submitted,

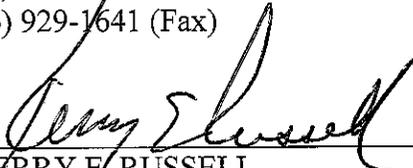
**RUSSELL & RODRIGUEZ, L.L.P.**

1633 Williams Drive, Building 2, Suite 200

Georgetown, Texas 78628

(512) 930-1317

(866) 929-1641 (Fax)



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KERRY E. RUSSELL

State Bar No. 17417820

ARTURO D. RODRIGUEZ, JR.

State Bar No. 00791551

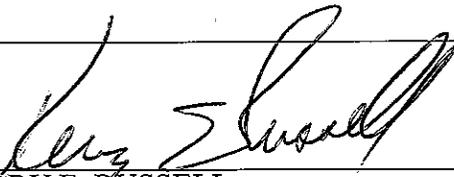
**ATTORNEYS FOR THE CITY OF  
JACKSBORO, TEXAS**



**CERTIFICATE OF SERVICE**

I hereby certify that on this 24<sup>th</sup> day of September, 2009, a true and correct copy of the foregoing document has been sent via facsimile, first class mail, or hand-delivered to the following counsel or party representatives of record:

<p>Honorable Sarah Ramos Administrative Law Judge 300 West 15<sup>th</sup> Street Austin, Texas 78701 Fax: 475-4994</p>	<p>Mr. Scott Humphrey, Attorney Office of Public Interest Counsel TCEQ - MC 103 P.O. Box 13087 Austin, Texas 78711-3087 Fax: 239-6377</p>
<p>Ron Olson, Staff Attorney Anthony Tatu, Staff Attorney Environmental Law Division MC-173 Texas Commission on Environmental Quality Post Office Box 13087 Austin, Texas 78711-3087 (512) 239-0600 (512) 239-0606 Fax</p>	<p>Docket Clerk Office of the Chief Clerk – MC 105 Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087 Fax: 239-3311</p>
<p>William Moltz Janessa M. Glenn Representing IESI Moltz, Morton, O'Toole, LLP 106 East 6th Street Suite 700 Austin, Texas 78701 (512) 439-2173 (512) 439-2165 Fax</p>	<p>Marisa Perales Lowerre, Frederick, Perales &amp; Allmon Two Bush Community Action Group 707 Rio Grande, Suite 200 Austin, Texas 78701 (512) 469-6000 (512) 482-9346 Fax</p>

  
 \_\_\_\_\_  
 KERRY E. RUSSELL

TEXAS  
 COMMISSION  
 ON ENVIRONMENTAL  
 QUALITY  
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#### 6.4 Proximity to Residences and Other Uses

Approximately 115 residences are located within the 1 mile radius of the site. The nearest residence to the site is located to the north approximately 400 feet. Six businesses are located within the 1 mile radius. The nearest business to the site, a wood pallet factory, is immediately adjacent to the site on the east. An American Legion Hall is located immediately adjacent to the site on the west. All residences and businesses are shown on Figure IID.1 - Land Use Map.

There are no known schools, day care facilities, hospitals, historical or archaeologically significant sites within the 1 mile radius of the landfill.

#### 6.5 Wells Within 500 Feet

In February 2001, a water-well search was conducted by GeoSearch of Austin, Texas. The purpose of the search was to identify water wells of record within 1 mile of the site boundary. The search identified 9 wells within the 1-mile radius and 2 wells just outside the 1-mile radius. The results of the water-well search are shown on Figure 4-A.4 and Figure IID.1 - Land Use Map.

The search included a review of records and maps on file at the TWDB and the TNRC. An attempt was made to locate wells and confirm water well locations, where visible from nearby roads and streets. None of the nine wells located within one mile of the site are within 500 feet of the site.

The search also showed that in 1963 a non-producing gas well was drilled on the landfill site and then plugged and abandoned. The location of the gas well was just north of US 82 and along the bank of Rice Creek. Records indicate that this well was abandoned in accordance with state regulations in existence at that time.

#### 6.6 Coordination

The proposed landfill expansion addresses area issues with regard to future planning. As shown in Section 3, the following local agencies have been contacted to ensure that the expansion meets future plans:

- Ark-Tex Council of Governments
- TXDOT Atlanta District

The Ark-Tex Council of Governments (COG) met on June 28, 2001, and a resolution was passed approving the proposed expansion. The resolution further stated that the proposed project is in compliance with and supports the State Solid Waste Strategic Plan, the Regional Solid Waste Plan, and any superseding plans. Similar coordination was also conducted with TXDOT as shown in Section 7, and the proposed expansion is







No aquifers containing potable water exist below the Quaternary alluvium in the Red River Basin area. Accordingly, the landfill site is not located over an aquifer requiring protection.

#### 1.4.1 Water-Well Locations

A water-well search was conducted within a two-mile radius of the site. The search did not identify any modern water wells within one mile of the site.

The search included a review of records and maps on file at the Texas Water Development Board (TWDB) and the Texas Natural Resource Conservation Commission (TNRCC). An attempt was made to locate wells and confirm water well locations, where visible from nearby roads and streets. A review of state records revealed no water wells within one mile of the facility. There are no wells on site. The ground search also did not identify any sites that are likely to be water wells based on the visual identification of surface equipment such as well houses, pump handles, etc. As required in 30 TAC §330.53(b)(8)(E), all wells within 500 feet should be shown on the Land Use Map in Part II. Since none were identified, no water wells are shown on the Part II map.







groundwater is confined by the lower permeability rocks above and below the Antlers. The nearest outcrop of the Trinity is more than 25 miles west of the site.

The development of the Antlers as a public water supply source began in the City of Sherman in 1889. The original well was 2,300 feet deep and produced 200 gallons per minute. Additional wells were drilled in 1921 and 1923. By 1912 the Cities of Gainesville and Valley View had producing Antlers wells. By 1940, most of the larger towns in Cooke and Grayson Counties were using Antlers groundwater. Antlers groundwater near the outcrop is mostly hard to very hard and becomes generally softer downdip. Typical groundwater withdrawn from Antlers wells in the area has total dissolved solids of 200 to 1000 milligrams per liter, (Nordstrom, 1982).

**Table 4-2**  
**Hydraulic Properties of Regional Aquifers**  
Compiled from Nordstrom, 1982 and Langley, 1999

Parameters	Woodbine Aquifer	Antlers Aquifer
Composition	Sandstone, siltstone, shaly sand	Sandstone, sand, limestone
Transmissivity	Average 4,700 gal/day/ft	Average range 5,000 to 10,000 gal/day/ft
Hydraulic Conductivity	Average 44 gal/day/ft <sup>2</sup>	Average range 25-53 gal/day/ft <sup>2</sup>
Water Table/Confined	Confined	Confined
Groundwater Flow Rate	10-20 feet per year	1-2 feet per year
Water Quality Total Dissolved Solids Other	250-1500 mg/L High Iron, High Sulfate	200-1000 mg/L
Recharge Zones	Outcrop area west of site	Outcrop area west in Cooke County
Regional Water Table	See Figure 4A.3	See Figure 4A.3a
Present Use of Water	Public supply, industrial, irrigation, some domestic. High iron causes problems for all uses.	Public water supply and domestic
Identification of Water Wells Within 1 Mile	See Figure 4A.4 and Table 4-3	See Figure 4A.4 and Table 4-3

#### 1.4.4 Water-Well Locations

A water-well search was conducted within a one-mile radius of the site. The search identified 21 modern water wells within one mile of the site. In addition, five houses were identified within one mile of the site that may have a water well. Each of the wells and possible wells are identified in figure 4A.4. Four wells that are located just outside the one-mile radius are also shown, including well numbers 101 and 102 which are public drinking-water supply wells operated by the Two-Way Water Corporation.







The search included a review of records and maps on file at the Texas Water Development Board (TWDB) and the Texas Natural Resource Conservation Commission (TNRCC). An attempt was made to locate wells and confirm water well locations, where visible from nearby roads and streets. A review of state records revealed four water wells within one mile of the proposed facility. There are two additional wells on site. The ground search identified 15 other sites that are likely to be water wells based on the visual identification of surface equipment such as well houses, pump handles, etc. No attempt was made to contact the individuals occupying the property where these wells were identified. Of the 21 wells located within one mile of the site, five are located within 500 feet. As required in 30 TAC §330.53(b)(8)(E), those wells are shown on the Land Use Map in Part II.

A cultural resources evaluation was conducted on the TASWA property. That evaluation revealed one crude water well constructed with a wash tube and pipe that is no longer in use. This well is not within the permit boundary, but is located southwest of the facility. Also, two cisterns were discovered northeast of the permit boundary. Each of the cisterns contained brush or other material that prevented an accurate reading of depth. The location of each of these wells/cisterns is shown on Figure 4A.4.

The information about each of the wells is summarized in Table 4-3.







Groundwater flows east-southeast in the Trinity Group at 2 to 20 feet per year depending on local gradients (Langley, 1999). Total dissolved solids (TDS) range between about 600 and 700 mg/L (Langley, 1999). TDS levels generally increase downdip. The transmissibility is highly variable, ranging from 3,700 to over 10,000 gallons/day/foot (gal/day/ft). Permeability averages 50 gal/day/ft<sup>2</sup>. The storage coefficient ranges between 0.0001 and 0.00025. Specific yields range between 15 and 25 percent (Nordstrom, 1982).

#### 1.4.2 Woodbine Aquifer

The Woodbine Aquifer is classified as a minor aquifer in Texas (Ashworth and Hopkins, 1995). This is the only minor aquifer beneath the site. Depth to the top of the Woodbine is about 650 feet in the site vicinity (Figure 4A.2). The thickness of the Woodbine is about 600 feet in the site vicinity. The Woodbine consists of sandstone interbedded with shale and clay. Water produced from this aquifer furnishes municipal, industrial, domestic, livestock, and small irrigation needs (Ashworth and Hopkins, 1995). Groundwater in the Woodbine Aquifer exists under confined conditions in the site vicinity.

Figure 4A.5 depicts the regional distribution and potentiometric surface of the Woodbine Aquifer, which is about 150 feet below ground surface in the site vicinity. Groundwater flows east-southeast in the Woodbine Aquifer. TDS is about 900 mg/L (Langley, 1999). TDS levels generally increase downdip. The transmissibility averages 4,700 gal/day/ft. Permeability averages 44 gal/day/ft<sup>2</sup>. The storage coefficient averages 0.00015. Specific yields average 15 percent (Nordstrom, 1982). There are no areas of recharge to the Woodbine Aquifer within five miles of the site. Groundwater is estimated to flow 10 to 20 feet per year depending on local gradients (Langley, 1999).

The Woodbine and Trinity Group aquifers are not hydraulically connected because they are separated by the Washita Group, an aquitard consisting of about 200 feet of low-permeability limestones, marls, and clays (Baker et al., 1990; Sellards et al., 1990).

#### 1.4.3 Water-Well Locations

A water-well search was obtained from Atlas E. R., Inc., Austin, Texas. The search included a review of records and maps on file at the Texas Water Development Board (TWDB) and the Texas Commission on Environmental Quality (TCEQ—note that the Texas Natural Resource Conservation Commission [TNRCC] is the predecessor agency to the TCEQ). The Atlas search identified 10 wells within 1 mile of the site (Figure 4A.6). The wells are listed in Figure 4A.7. Note that the location plotted as "5C" on Figure 4A.6 represents two wells. Well number 17-12-8(1) is listed as "location unknown" on Figure 4A.8 and could not be accurately located based on information provided by the driller, and is therefore not plotted on Figure 4A.6. Available well logs on file with the TWDB are shown in Figures 4A.8 through 4A.21. The quality of the copies represents the quality of the originals in agency files.



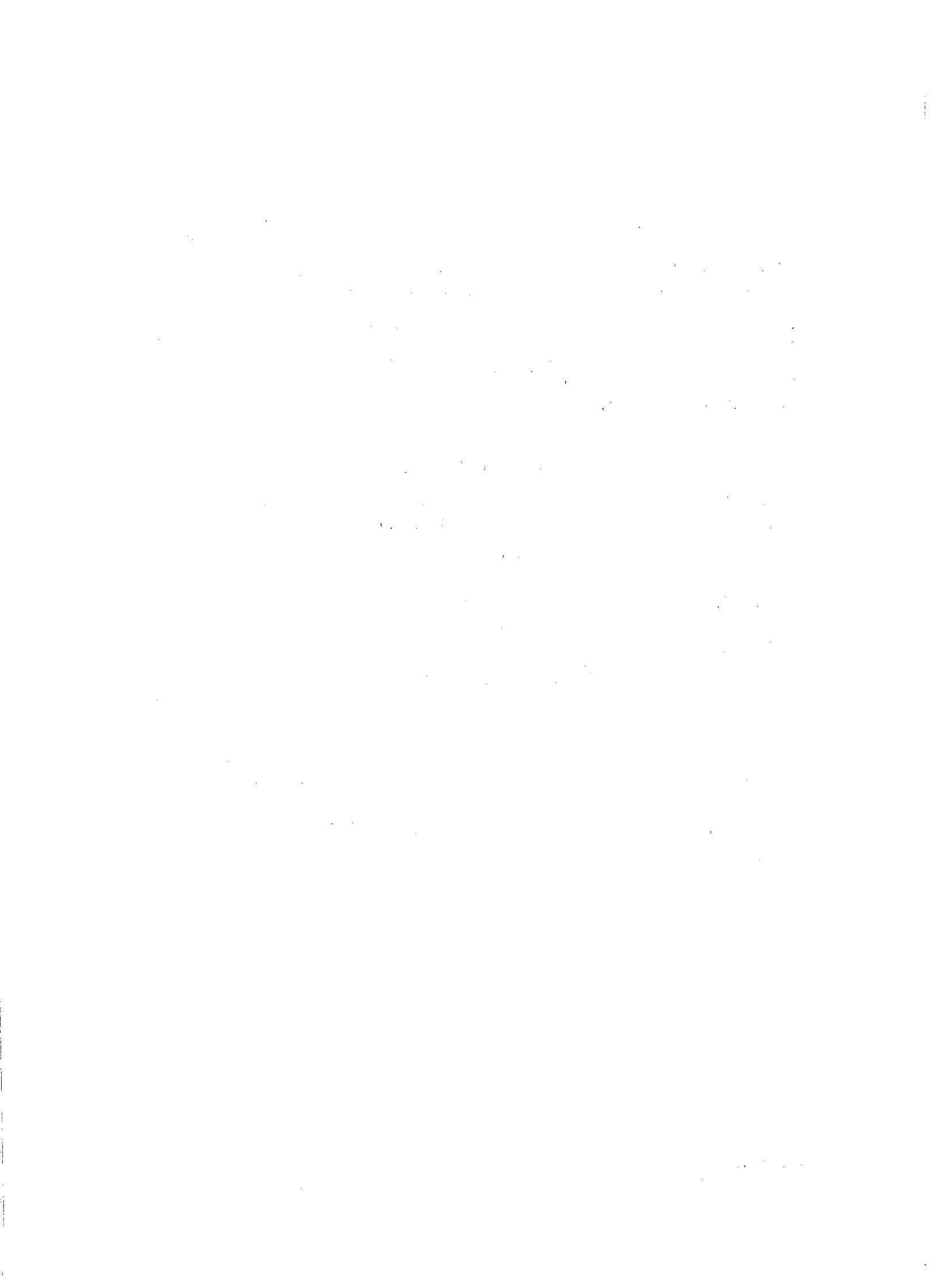




The number or letter designations on the well logs and in Figure 4A.7 indicate the status of the location. A complete well number, such as 83-20-901, indicates that the well location has been field-checked by a TWDB or USGS staff member, plotted on a suitable map, and assigned a well number. Wells that have been approximately spotted on county highway maps using information provided by drillers ("plotted water wells") are given a number such as 83-20-7B. The TWDB ceased plotting wells in June 1986. Where the well location is provided only to the nearest 2.5-minute quadrangle, a number is assigned such as 83-20-7(1). The locations of these "partially numbered water wells" are not reliable. Where no well locations have been assigned by the TWDB or TCEQ, the wells are referred to as "unnumbered water wells" and have numbers like the partially numbered water wells.

**Table 4-2  
Water Well Summary**

Well No.	Depth (ft)	Completion Formation	Well Use
<b>Wells Within 1 Mile</b>			
17-12-801	118	Bonham	Industrial
17-12-802	65	Bonham	Industrial
17-12-5C (1)	145	Bonham	Domestic
17-12-5C (2)	115	Bonham	Domestic
17-12-8A	117	Bonham	Domestic
17-12-9A	135	Bonham	Domestic
17-12-9B	28	Bonham	Domestic
17-12-9C	220	Bonham	Domestic
17-12-7(1)	81	Bonham	Domestic
17-12-8(1)*	114	Unknown	Domestic
* Location unknown			







are not regionally correlative. These sandstones and siltstones may contain groundwater.

### 1.4.3 Paluxy Sand

The Paluxy is an important source of groundwater in the region, supplying water to wells for municipal, industrial, domestic, and livestock use (Nordstrom, 1982). Sand in the Paluxy is commonly fine-grained and may be clayey or interbedded with clay. Iron is commonly present and can locally contribute high concentrations of iron to groundwater. The Paluxy crops out over much of the area and is exposed over most of the site. Where the full thickness can be measured, it averages about 22-feet thick in the site vicinity (Owen, 1979). The base of the Paluxy is at an elevation of about 980-feet above NGVD in the area and slopes gently to the east (Owen, 1979). Paluxy groundwater flows to the east at about 2 feet per year (Langley, 1999; Figure 4A.4).

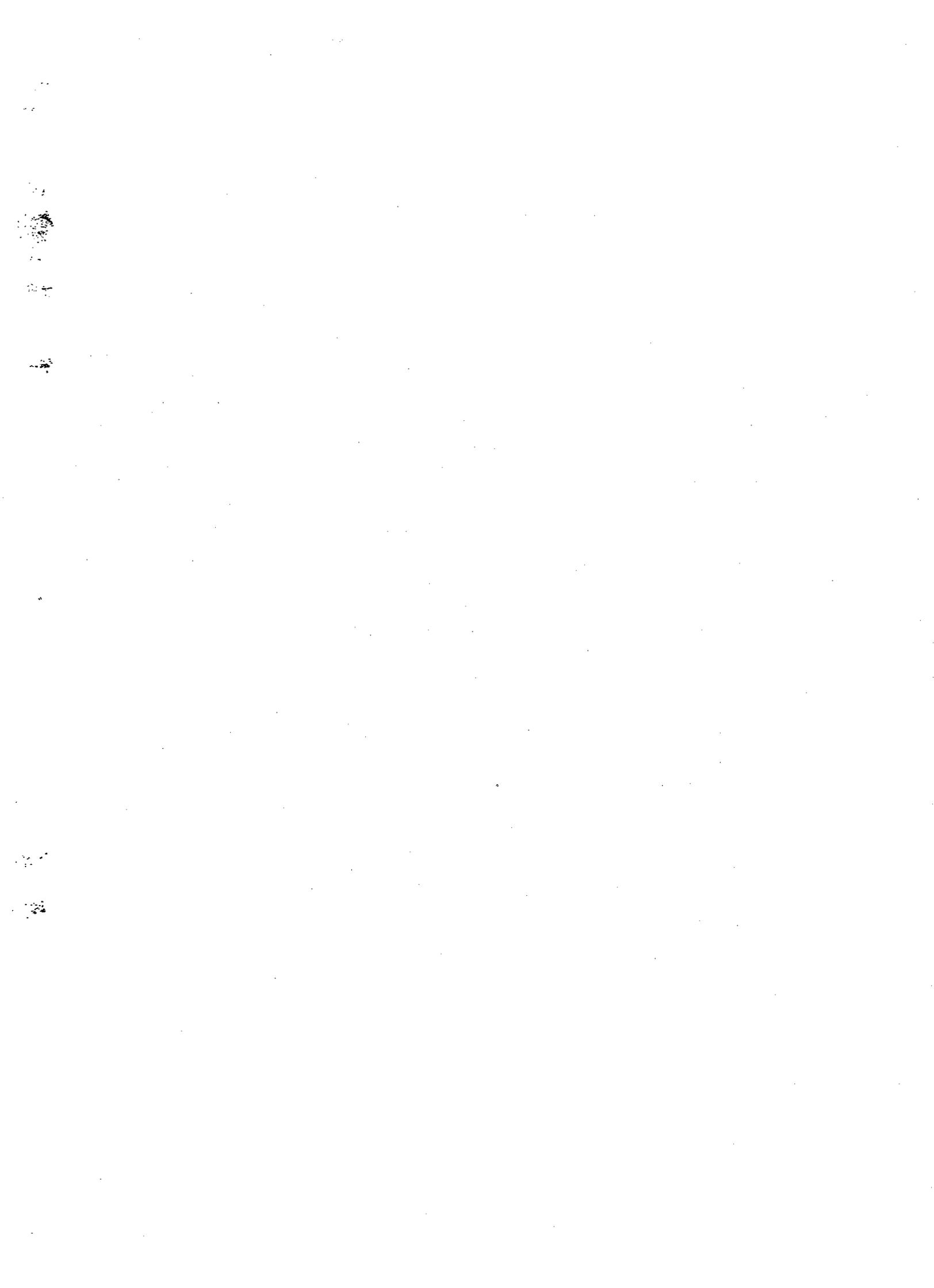
**Table 4-2**  
**Hydraulic Properties of Regional Aquifers**  
 (Compiled from Nordstrom, 1982 and Langley, 1999)

Parameters	Paluxy Aquifer	Twin Mountains Aquifer
Composition	Sandstone, siltstone, shaley sand	Sandstone, sand, limestone
Transmissivity	Average 5,000 gal/day/ft	Average range 5,000 to 10,000 gal/day/ft
Hydraulic Conductivity	Average 52 gal/day/ft <sup>2</sup>	Average 60 gal/day/ft <sup>2</sup>
Water Table/Confined	Confined Downgradient	Confined
Groundwater Flow Rate	2 feet per year	1-2 feet per year
Water Quality Total Dissolved Solids Other	200-1500 mg/L High Iron, High Sulfate	133-1735 mg/L Chloride 7-306 mg/L
Recharge Zones	Outcrop area near and west of site	Outcrop area west in Parker County
Regional Water Table	See Figure 4A.4	See Figure 4A.4a
Present Use of Water	Public supply, industrial, irrigation, some domestic. High iron causes problems for all uses.	Public water supply and domestic
Identification of Water Wells Within 1 Mile	See Figure 4A.4 and Table 4-3	See Figure 4A.4a and Table 4-3

### 1.4.4 Water-Well Locations 30 TAC §330.56(d)(4)(J)

A water-well search was obtained from GeoSearch. The search included a review of records and maps on file at the Texas Water Development Board (TWDB) and the Texas Commission on Environmental Quality (TCEQ). The GeoSearch water-well report identified 51 wells that are located within 1 mile of the site (Figure 4A.5). The







search also identified 4 wells whose locations are unknown that may be within the 1-mile radius. In addition, there is one well on the site. The wells are listed in Table 4-3. Available well reports on file with the TWDB are shown in Figures 4A.6 through 4A.117. The quality of the copies represents the quality of the originals in agency files.

An attempt was made to locate wells and confirm water well locations, where visible from nearby roads and streets. The ground search revealed 28 sites that are likely to be water wells based on the visual identification of surface equipment such as well houses, pump handles, etc. A City of Weatherford public water facility is located approximately 1¼ miles southwest of the site. The locations of the possible wells and the public water facility are shown on Figure 4A.5.

**Table 4-3  
Water Well Summary**

Map ID	TXID	State ID	Depth(ft)	Completion Formation	Well Use
1	TX321810038	32-18-1X	250	Twin Mtns	Domestic
2	TX321730052	N/A	150	Twin Mtns	Domestic
3	TX321810024	32-18-1U	280	Twin Mtns	Domestic
4	TX321810046	32-18-1S	290	Twin Mtns	Domestic
5	TX321810033	32-18-1	325	Twin Mtns	Domestic
6	TX321810044	32-18-1H	120	Twin Mtns	Home Use
7	TX321810012	32-18-1	280	Twin Mtns	Domestic
8	TX321810020	32-18-1	240	Twin Mtns	Domestic
9	TX321840002	32-18-4	200	Twin Mtns	Domestic
10	TX321810016	32-18-1	330	Twin Mtns	Domestic
11	TX321810034	32-18-1HH	278	Twin Mtns	Domestic
11	TX321810036	32-18-1HH	300	Twin Mtns	Domestic
12	TX321810030	32-18-1	460	Twin Mtns	Domestic
13	TX321810015	32-18-1	325	Twin Mtns	Domestic
13	TX321810026	32-18-1	220	Twin Mtns	Domestic
14	TX321810006	32-18-1	325	Twin Mtns	Domestic
14	TX321810021	32-18-1	250	Twin Mtns	Domestic
15	N/A	32-18-402	240	Twin Mtns	Public Supply
16	TX321810042	32-18-1F	320	Twin Mtns	Domestic
16	TX321810043	32-18-1F	205	Twin Mtns	Domestic
17	TX321810035	32-18-1LL	320	Twin Mtns	Domestic
18	TX321810045	32-18-1R	180	Twin Mtns	Domestic
19	TX321810017	32-18-1	335	Twin Mtns	Industrial
20	TX321810007	32-18-1	225	Twin Mtns	Domestic
21	TX321810019	32-18-1	300	Twin Mtns	Domestic
21	TX321810031	32-18-1	320	Twin Mtns	Domestic
22	TX321730051	N/A	285	Twin Mtns	Domestic
23	TX321810022	32-18-1	320	Twin Mtns	Domestic
23	TX321810029	32-18-1	350	Twin Mtns	Domestic
23	TX321810039	32-18-1V	435	Twin Mtns	Domestic
24	TX321810005	32-18-1	340	Twin Mtns	Domestic
24	TX321810010	32-18-1	320	Twin Mtns	Domestic







**Table 4-3  
Water Well Summary**

Map ID	TXID	State ID	Depth(ft)	Completion Formation	Well Use
25	G1840115A	32-18-4	340	Twin Mtns	Public Water System: Inactive
26	TX321810032	32-18-1	150	Twin Mtns	Domestic
27	TX321810018	32-18-1	335	Twin Mtns	Industrial
28	TX321730049	32-17-3	300	Twin Mtns	Domestic
29	N/A	32-18-403	287	Twin Mtns	Domestic
30	TX321840003	32-18-4	325	Twin Mtns	Domestic
31	TX321810040	32-18-1E	350	Twin Mtns	Domestic
31	TX321810041	32-18-1E	320	Twin Mtns	Domestic
31	TX321730053	N/A	320	Twin Mtns	Domestic
32	TX321810028	32-18-1	380	Twin Mtns	Domestic
33	TX321810011	32-18-1	325	Twin Mtns	Domestic
34	TX321730054	N/A	330	Twin Mtns	Domestic
35	TX321810027	32-18-1	340	Twin Mtns	Domestic
36	TX321810013	32-18-1	330	Twin Mtns	Domestic
37	TX321810037	32-18-1EE	260	Twin Mtns	Domestic
38	TX321730048	32-17-3BB	240	Twin Mtns	Domestic
38	TX321730050	32-17-3	280	Twin Mtns	Domestic
39	TX321810008	32-18-1	360	Twin Mtns	Domestic
40	TX321810023	32-18-1	320	Twin Mtns	Domestic
41	TX321730047	32-17-3A	280	Twin Mtns	Domestic
42	TX321810025	32-18-1	350	Twin Mtns	Domestic
43	TX321810004	32-18-1	300	Twin Mtns	Irrigation
44	TX321810009	32-18-1	340	Twin Mtns	Domestic
45	N/A	32-18-104	115	Twin Mtns	Domestic
46	TX311810001	32-18-1	360	Twin Mtns	Domestic
47	G1840040A	32-18-1	360	Twin Mtns	Public Water System:
48	G1840115B	32-18-1	340	Twin Mtns	Public Water System: Inactive
48	G1840124A	32-18-1	0	Twin Mtns	Public Water System: Inactive
49	N/A	32-17-602	6509	N/A	Not Reported
50	G1840139A	32-18-1	445	Twin Mtns	Test
51	TX321810014	32-18-1K	320	Twin Mtns	Domestic
52	Unknown	Unknown	Unknown	Unknown	Industrial
<b>Unlocated Water Wells Within 1 Mile</b>					
U	TX32181U01	32-18-1	300		Domestic
U	TX32184U02	32-18-4	300		Domestic
U	TX32181U03	32-18-1	320		Domestic
U	TX32181U04	32-18-1	340		Domestic

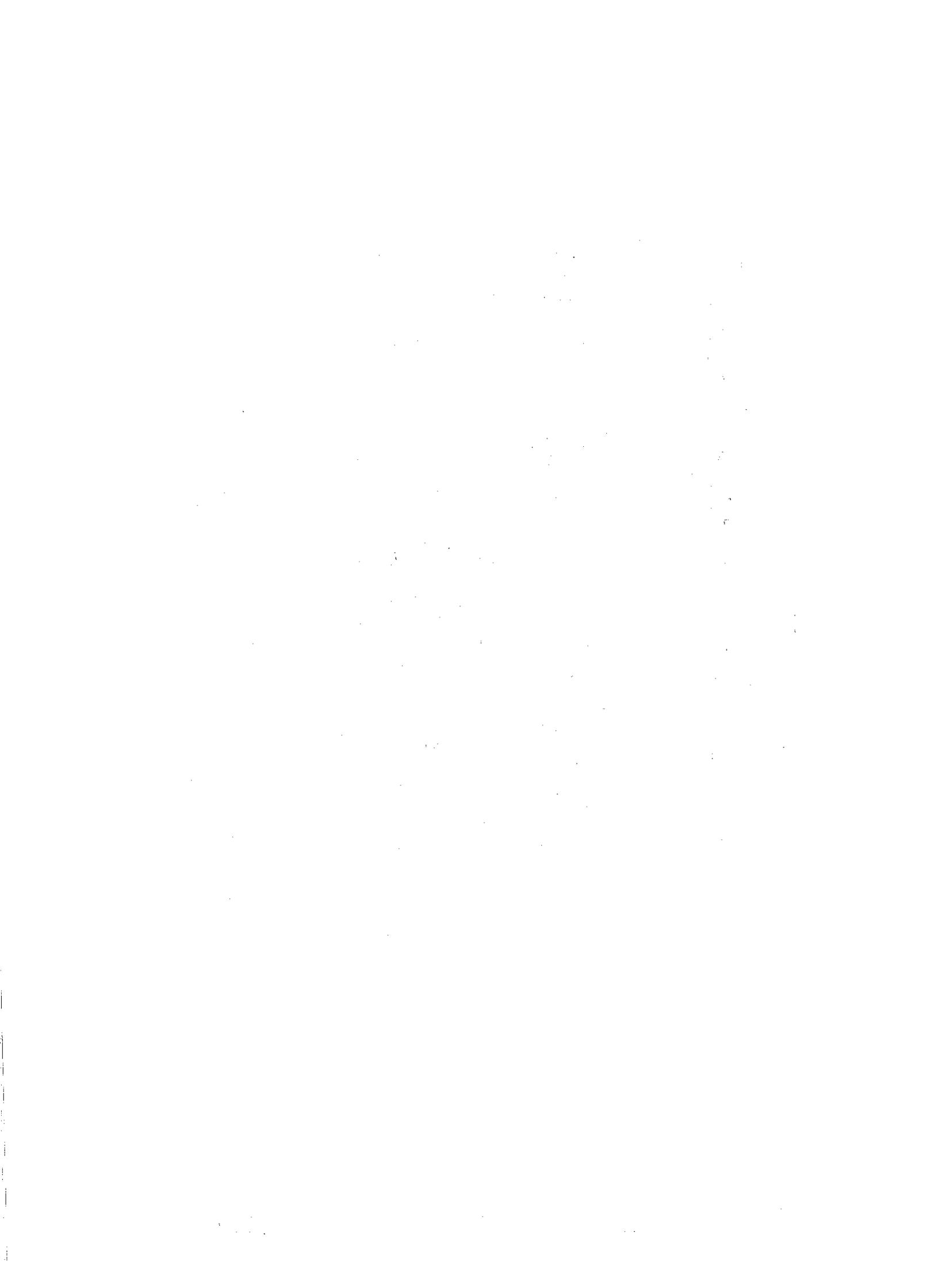






**Table 4-3  
Water Well Summary**

Well No.	Depth (ft)	Completion Formation	Well Use
<b>Possible Water Wells Within 1 Mile</b>			
P1	Unknown	Unknown	Unknown
P2	Unknown	Unknown	Unknown
P3	Unknown	Unknown	Unknown
P4	Unknown	Unknown	Unknown
P5	Unknown	Unknown	Unknown
P6	Unknown	Unknown	Unknown
P7	Unknown	Unknown	Unknown
P8	Unknown	Unknown	Unknown
P9	Unknown	Unknown	Unknown
P10	Unknown	Unknown	Unknown
P11	Unknown	Unknown	Unknown
P12	Unknown	Unknown	Unknown
P13	Unknown	Unknown	Unknown
P14	Unknown	Unknown	Unknown
P15	Unknown	Unknown	Unknown
P16	Unknown	Unknown	Unknown
P17	Unknown	Unknown	Unknown
P18	Unknown	Unknown	Unknown
P19	Unknown	Unknown	Unknown
P20	Unknown	Unknown	Unknown
P21	Unknown	Unknown	Unknown
P22	Unknown	Unknown	Unknown
P23	Unknown	Unknown	Unknown
P24	Unknown	Unknown	Unknown
P25	Unknown	Unknown	Unknown
P26	Unknown	Unknown	Unknown
P27	Unknown	Unknown	Unknown
P28	Unknown	Unknown	Unknown







Permit No. MSW 576-B

This permit supersedes and replaces Permit No. MSW 576A issued July 12, 1996.



### TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

PERMIT FOR MUNICIPAL  
SOLID WASTE MANAGEMENT SITE  
issued under provisions of Texas  
Health & Safety Code Ann.  
Chapter 361 (Vernon)

Site Operator: Waste Management of Texas, Inc.  
1600A South Railroad Street  
Lewisville, Texas 75067

Site Owner: Western Waste of Texas, LLC  
820 Gessner, Suite 940  
Houston, Texas 77024

Facility Name: New Boston Landfill

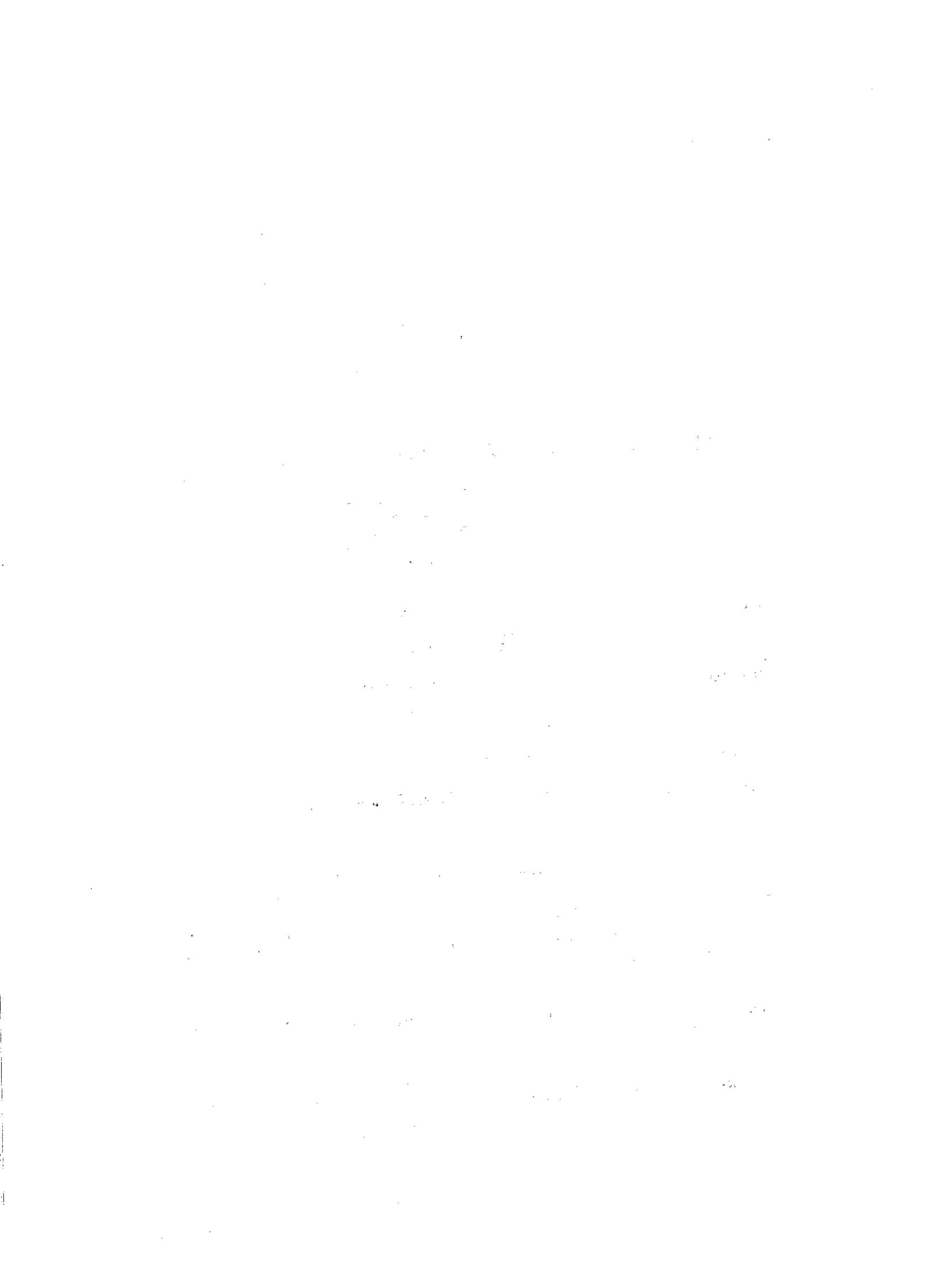
Classification of Site: Type I Municipal Solid Waste Management Facility

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

APPROVED, ISSUED AND EFFECTIVE in accordance with the Texas Health & Safety Code Chapter 361 and 30 Texas Administrative Code (30 TAC) Chapter 330.

ISSUED DATE: DEC 12 2002

*Margaret Hoffman*  
\_\_\_\_\_  
For the Commission



New Boston Landfill  
 Permit No. MSW 576-B

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New Boston Landfill  
Permit No. MSW 576-B

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I. Size and Location of Facility

- A. The New Boston Landfill is located in Bowie County approximately 1500 feet east of the intersection of Interstate Highway 30 and U.S. Highway 82 and approximately 2500 feet west of the city limits of the city of New Boston. The total permitted facility boundary is 97.1 acres.
- B. The legal description is in Attachment A to this permit.
- C. Coordinates and Elevation of the Permanent Site Benchmark:
- |            |  |
|------------|--|
| Latitude:  | 33° 28' 17.5" N                        |
| Longitude: | 94° 26' 45" W                          |
| Elevation: | 382.03 feet above mean sea level (msl) |

The general site plan and location of the permanent site benchmark are shown in Attachment B to this permit.

II. Incorporated Application Materials

This permit is based on and the permittee shall follow Parts I through IV of the permit application submittals dated July 2001, December 2001, and March 2002 which are hereby approved subject to the terms of this permit and any other orders of the TNRCC. These materials are incorporated into this permit by reference 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.

Part V of the permit application shall be submitted upon completion of construction of the facility. The permittee shall maintain Parts I through V of the application as described in 30 TAC §330.51 (a) at the facility and make them available for inspection by TNRCC personnel.

III. Facility and Operations Authorized

A. Days and Hours of Operation

The operating hours for the receipt of waste shall be any time between 7:00 a.m. to 7:00 p.m., Monday through Saturday.

B. Wastes Authorized at this Facility

The permittee is authorized to dispose of municipal solid waste as defined in 30 TAC Section 330.2 resulting from or incidental to municipal, community, commercial, institutional, and recreational activities. The permittee is authorized to dispose of construction and demolition waste as defined in 30 TAC Section 330.2. Special wastes as defined in 30 TAC Section 330.2 and which do not require prior approval may be accepted for disposal in accordance with 30 TAC Section 330.136. Class 2 and Class 3 industrial solid waste may be accepted in accordance with 30 TAC Sections 330.137(j) and (k).



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C. Wastes Prohibited at This Facility

The permittee shall comply with the general prohibitions set forth in 30 TAC Section 330.5. Any waste not authorized in Permit Provision II.B. is prohibited.

D. Waste Volume Available for Disposal

The total remaining waste disposal capacity of the landfill is approximately 4.35 million cubic yards, including waste and daily cover.

E. Operations Authorized

The following operations are authorized and are subject to the limitations contained herein. They shall be built, operated, and maintained in accordance with the conditions of this permit and shall be managed in a manner to protect human health and the environment. All waste disposal activities subject to permitting are to be confined to the following operations, which shall include associated units, structures, appurtenances, and improvements:

1. A Type I municipal solid waste landfill facility consisting of a total permitted boundary of 97.1 acres, with a waste disposal footprint of approximately 53.9 acres, and a total remaining landfill capacity (solid waste and daily cover) of approximately 4.35 million cubic yards; and
2. Access roads, scales, gate house, dikes, berms and temporary drainage channels, permanent drainage structures, stormwater management control structures, liners, groundwater monitoring well system, landfill gas management systems, contaminated water management systems, and other improvements.

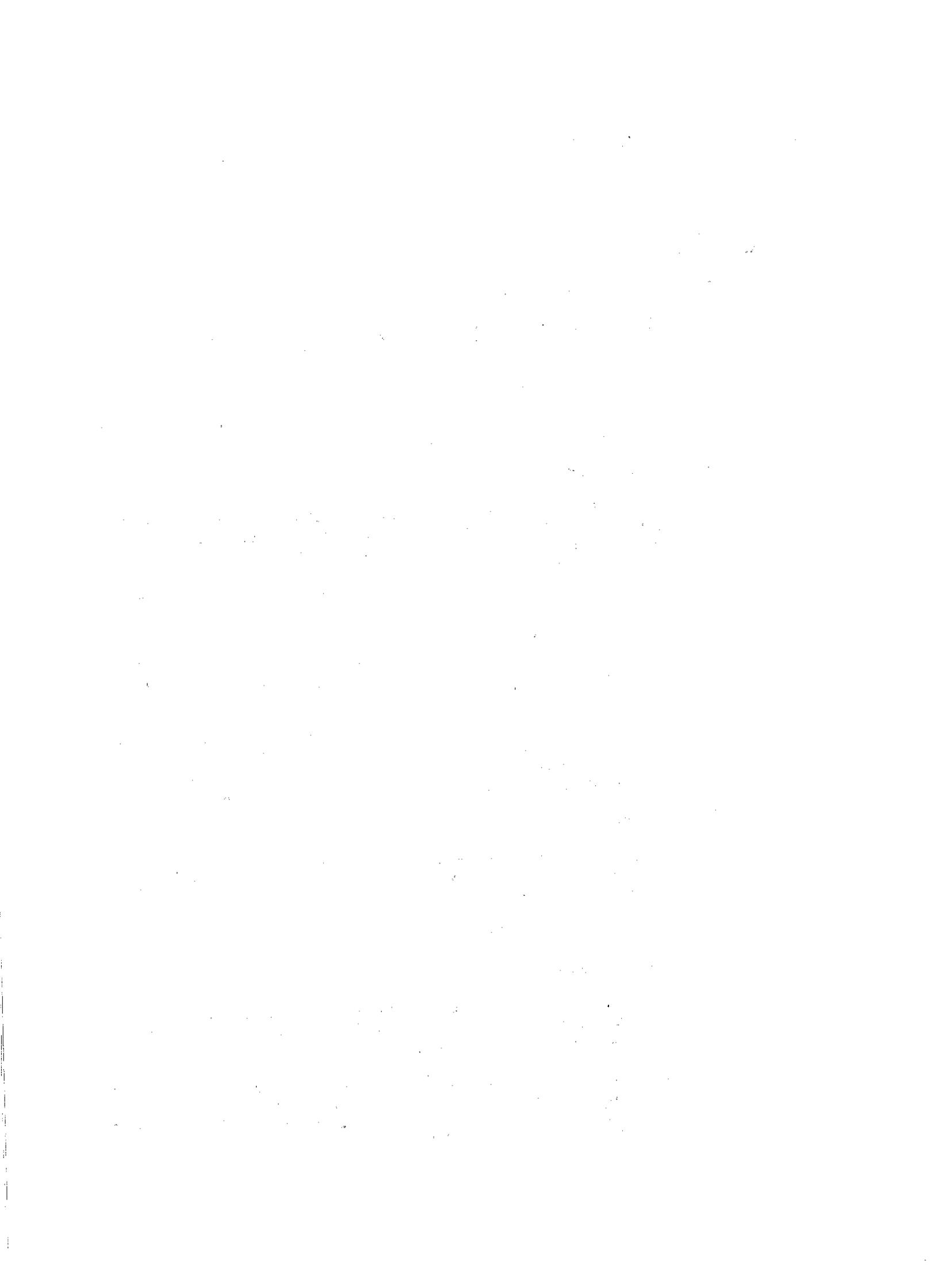
F. Changes

Any proposed facility changes must be authorized in accordance with Texas Natural Resource Conservation Commission (TNRCC) permit amendment or modification rules in 30 TAC Chapters 305 and 330.

IV. Facility Design, Construction, and Operation

A. General Requirements

1. Facility design, construction, and operation must comply with this permit, TNRCC rules (including the operational standards in 30 TAC Sections 330.111 through 330.139), and Parts I-IV of the application materials.
2. The 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§330.2 and to prevent inundation or discharge from the areas surrounding the facility components.



New Boston Landfill  
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Each receiving, storage, processing, and disposal area shall have a containment system to collect spills and incidental precipitation in such a manner as to:

- a. Preclude the release of any contaminated runoff, spills, or precipitation;
  - b. Prevent washout of any waste by a 100-year storm; and
  - c. Prevent run-on into the disposal areas from off-site areas.
3. The site shall be designed and operated so as not to cause a violation of:
- a. The requirements of the Texas Water Code §26.121;
  - b. Any requirements of the Federal Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements §402 as amended and the Texas Pollutant Discharge Elimination System (TPDES);
  - c. The requirements under the Federal Clean Water Act §404, as amended; and
  - d. Any requirement of an area wide or statewide water quality management plan that has been approved under the Federal Clean Water Act §208 or §319, as amended.

**B. Management of Contaminated Water, Leachate, and Gas Condensate**

1. Contaminated water is defined in 30 TAC§330.56(o)(1), as water which has come into contact with waste, leachate, or gas condensate. All leachate, gas condensate, and contaminated water shall be handled, stored, treated, disposed of, and managed in accordance with 30 TAC§§330.55(b)(6), 330.56(o)(1) through (4), 330.139, and the application materials.
2. Contaminated surface water and groundwater shall not be placed in or on the landfill.

**C. Liner**

1. A liner is included as part of the landfill design and includes a previously approved liner system for the existing landfill. For the proposed expansion area, the bottom and sides of the excavation in waste cells will be lined with a 24-inch compacted soil liner, overlain by a 60 mil high density polyethylene (HDPE) flexible membrane liner, a geocomposite drainage layer, and 24 inches of protective cover. The drainage layer above the liner system will be part of the leachate collection and removal system. This liner system shall be installed over the entire bottom and sidewalls of the proposed landfill expansion area as described in the application materials.



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2. The lowest elevation of waste disposal shall be 338 feet above msl.

D. Leachate Collection System

1. The leachate collection system shall be designed, constructed, and maintained in accordance with 30 TAC Sections 330.56(o), 330.200, 330.201, and the application materials.
2. The leachate collection system shall be constructed, operated, and maintained to remain functional for the life of the municipal solid waste facility and throughout the post-closure care period.
3. Leachate shall be transported to a publicly owned treatment works or recirculated to active areas of the landfill.
4. Leachate collection system components not within the confines of the landfill liner system shall provide for containment and collection of spills.

E. Above-Grade Waste Placement

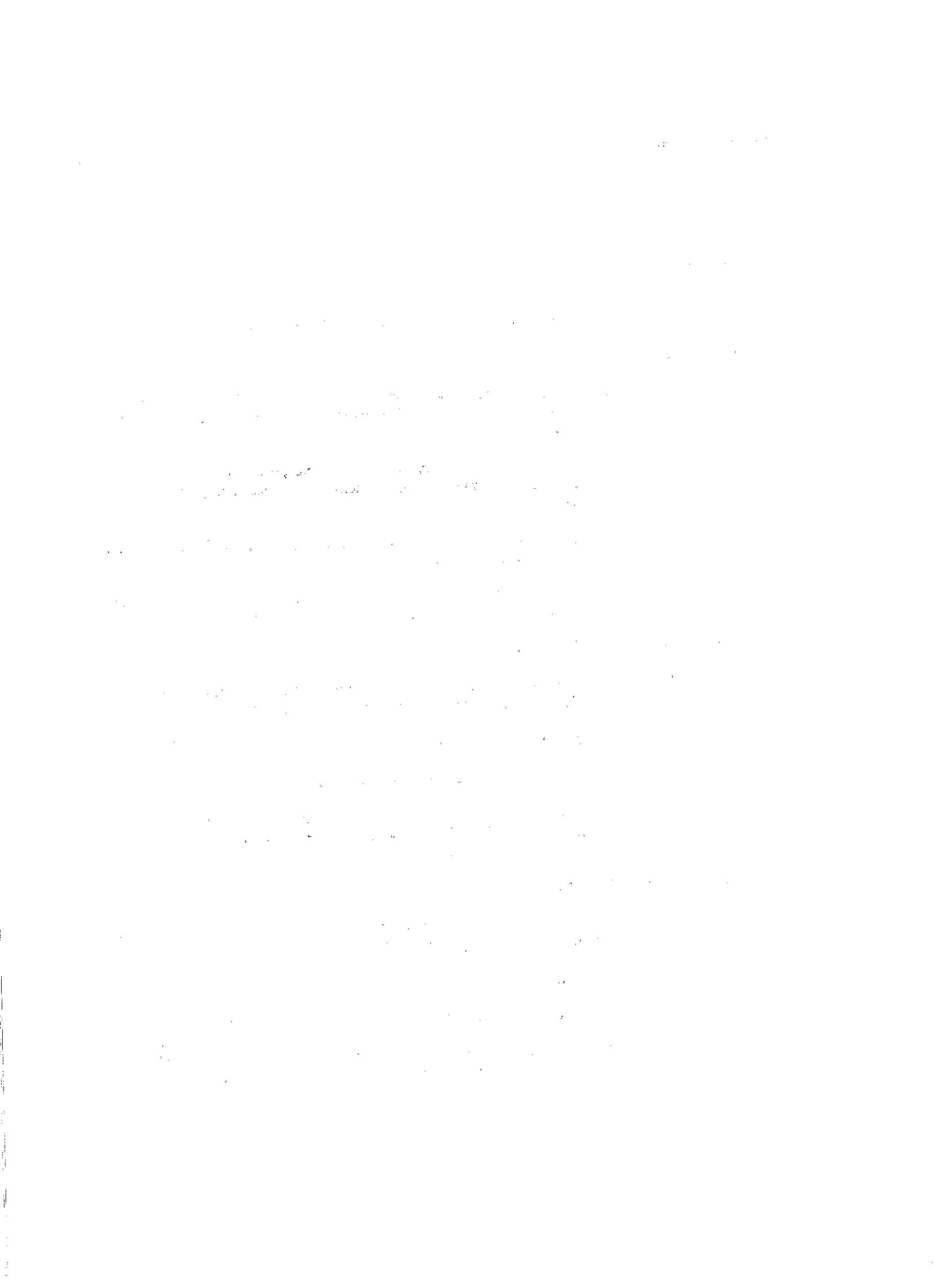
1. All waste deposited above grade shall be limited to the grades and elevations shown in Part III, Attachment 2 and Attachment 7 of the application materials.
2. The maximum elevation of waste disposal shall be 523 feet above msl.
3. The maximum elevation of the final cover shall be 525 feet above msl.
4. Top of cover and side embankment slopes of all above-grade waste disposal portions of the landfill shall be constructed to the grades and elevations as shown in the application materials.

F. Landfill Development

Landfill development and construction sequencing of fill areas and site appurtenances shall be performed as shown in the application materials.

G. Alternate Daily Cover

Alternate daily cover, when used, shall be placed in accordance with 30 TAC§330.133(c) and Part IV of the application materials. Stormwater runoff from areas with alternate daily cover shall be managed in accordance with the requirements of 30 TAC§330.55(b)(6), 330.56(o)(2) through (4), 330.139, and in accordance with the application materials.



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H. Final Cover

1. The final cover shall provide effective long-term erosional stability to the top dome surfaces and embankment side slopes.
2. The final cover system shall be designed and constructed in accordance with 30 TAC §330.253 (Closure Requirements for MSWLF Units That Receive Waste on or after October 9, 1993 and MSW Sites) and the application materials.
3. Temporary erosion and sedimentation control measures shall be maintained.

I. Landfill Gas Management Facilities

1. A landfill gas detection system shall be installed and shall consist of a perimeter network of landfill gas monitoring probes and landfill gas monitoring equipment for facility structures. The design, location, and operation of the landfill gas detection system shall be as described in the application materials. At a minimum, monitoring shall be conducted quarterly by appropriately trained persons.
2. If the methane concentration exceeds the lower explosive limit (LEL) at the facility boundary (i.e., 5% methane in air) or 25% of the LEL in facility structures, then a detailed control plan must be implemented as outlined in the application materials. This plan includes notification, protection of human health, and, if necessary, remediation.

J. Ground Water Monitoring System

1. The ground water monitoring system shall be used to monitor the quality of ground water in the uppermost aquifer in accordance with 30 TAC§330.231. The ground water monitoring system shall be constructed and operated in accordance with the application materials.
2. Monitoring wells shall be sampled in accordance with a monitoring program defined in 30 TAC§330.233 and the application materials. The frequency of ground water sampling and reporting of data collected from each sampling event shall be in accordance with 30 TAC§330.234.
3. Any monitoring well that is no longer used shall be properly plugged and abandoned in accordance with 30 TAC§330.242(g), 16 TAC§76.702 and §76.1004.

K. Markers

Markers shall be placed and maintained in accordance with 30 TAC §330.55(b)(10), 30 TAC§330.122, and the application materials.



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L. Liner Evaluation Reports

Soils and Liner Evaluation Reports (SLERs) and Flexible Membrane Liner Evaluation Reports (FMLERs) shall be submitted to the TNRCC for evaluation and approval in accordance with 30 TAC §§330.205 and 330.206.

M. Employee Training

All facility employees and other persons involved in facility operations shall be qualified, trained, educated, and experienced to perform their duties so as to achieve compliance with this permit. At least one individual who supervises or manages the operations of the New Boston Landfill facility must meet the qualifications of 30 TAC Chapter 30, Subchapter F. The permittee shall further ensure that personnel are familiar with safety procedures, contingency plans, the requirements of the Commission's rules and this permit, commensurate with their levels and positions of responsibility.

V. Financial Assurance

- A. Authorization to operate the facility is contingent upon compliance with provisions contained within the permit and maintenance of financial assurance in accordance with 30 TAC Chapter 37 and Chapter 330.
- B. Within 30 days after issuance of a permit amendment, the permittee shall provide financial assurance instrument(s) for demonstration of closure care in an amount not less than \$3,114,739 (2000 dollars). Financial assurance for closure shall be secured and maintained in compliance with 30 TAC Chapter 37.
- C. Within 30 days after issuance of a permit amendment, the permittee shall provide financial assurance instrument(s) for demonstration of post-closure care in an amount not less than \$1,312,656 (2000 dollars). Financial assurance for post-closure shall be secured and maintained in compliance with 30 TAC Chapter 37.
- D. The permittee shall annually adjust closure and/or post-closure care cost estimates for inflation within 60 days prior to the anniversary date of the establishment of the financial assurance instrument pursuant to 30 TAC Section 37.131.
- E. If the facility's closure and/or post-closure care plan is modified, the permittee shall provide new cost estimates in current dollars, which meet the requirements 30 TAC Chapter 37, 30 TAC Sections 330.281 and 330.283. Modifications shall be made pursuant to 30 TAC Section 305.70 and shall adjust financial assurance in accordance with any financial assurance regulation that is adopted by the TNRCC subsequent to the issuance of this permit and in compliance with the provisions contained within this permit.

VI. Facility Closure

- A. Closure shall commence:



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1. Upon direction by the Executive Director of the TNRCC for failure to comply with the terms and conditions of the permit or violation of State or Federal regulations;
  2. Upon abandonment of the site;
  3. Upon direction of the Executive Director for failure to secure and maintain an adequate bond or other financial assurance as required; or
  4. Upon permittee's notification to the Commission that the landfill will no longer operate.
- B. The landfill shall be closed in accordance with 30 TAC Chapter 330, Subchapter J. Upon closure, the permittee shall submit to the Executive Director documentation of closure as set out in 30 TAC§330.253.

**VII. Facility Post-Closure Care**

- A. Post-closure care maintenance shall be conducted in accordance with the application materials for a period of 30 years after completion of final closure requirements or as otherwise determined by the Executive Director pursuant to 30 TAC§330.254(b).
- B. 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 by an independent licensed professional engineer in accordance with 30 TAC§330.256.

**VIII. Standard Permit Conditions**

- A. Attachment C, consisting of minor amendments, modifications, and corrections to this permit, is hereby made a part of this permit.
- B. 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.
- C. A preconstruction conference shall be held pursuant to 30 TAC §330.64(d) prior to beginning any construction within permit boundary that was not already constructed pursuant to the prior permit.
- D. All discharge of stormwater will be in accordance with the U.S. Environmental Protection Agency NPDES requirements and the requirements of the Texas Pollutant Discharge Elimination System (TPDES).
- E. The tracking of mud off-site onto any public right-of-way shall be minimized.
- F. In accordance with 30 TAC §330.7, prior to beginning disposal operations on any portion of the site, the permittee shall record in the Bowie County deed records a metes and bounds



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- description of all portions within the permit boundary on which disposal of solid waste has and/or will take place. Future leases shall provide that the permittee shall have the right of access to the property for the purpose of maintenance and inspection until the post closure maintenance period expires. A certified copy of the recorded document(s) shall be provided to the Executive Director prior to any acceptance of waste in new areas granted by this amendment.
- G. Daily cover of waste fill areas shall consist of clean soil that has not been in contact with waste and/or with an alternate daily cover as described in Part IV of the application materials. Intermediate cover, run-on, and run-off controls shall not be constructed from soil that was previously used as daily cover or which contains waste.
- H. 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 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.
- I. 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§330.62(b).
- J. 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 Texas Health and Safety Code Section 361.032.
- K. 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.
- L. The permittee shall be required to meet all performance standards required by the permit, the Texas Administrative Code, local, State, and Federal laws regardless of the specific design details contained in the application materials.
- M. If differences arise between the rules, regulations, and Permit Provisions and the incorporated Parts I-V of the application materials, then the rules, regulations, and Permit Provisions shall prevail.
- N. The permittee shall comply with the requirements of the air permit by rule in 30 TAC §106.534 (Municipal Solid Waste Landfills and Transfer Stations), as applicable, and the Requirements for Permitting by Rule in 30 TAC§106.4. If the landfill should have non-methane, non-ethane emissions to the atmosphere that exceed the limits set by 30 TAC§106.4, a standard permit under 30 TAC§116.621 will be required. One authorization or the other must be in effect. Federal requirements must also be satisfied. The federal requirements are listed in the Standards for Performance for Municipal Solid Waste Landfills in 40 CFR Part 60, Subpart WWW.



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IX Incorporated Regulatory Requirements

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

X. Special Provisions

- A. Former waste disposal areas designated as Pits 1, 2, 3, 4, 5, 6, and 7 shall be excavated, and the old waste removed during the relocation of Rice Creek as described in the application materials. After excavation begins, daily cover and intermediate cover shall be placed over any exposed waste as described in 30 TAC§330.133(a) and (b). Any waste left in place shall be covered with at least 18 inches of compacted clay and 6 inches of topsoil in accordance with 30 TAC§330.251. The excavated waste shall be placed in the active working face of the landfill.
- B. A minimum vertical clearance of twenty-four (24) feet shall be provided between the overhead electric transmission lines in the Southwestern Electric Power Company easement and the access roads crossing that easement.
- C. Fleet trucks are prohibited from carrying waste in the back hopper of the rear-end load trucks and closing the top opening of the front-end load trucks.
- D. All waste transportation vehicles using this facility will be required to have adequate covers or other means of containment of waste materials. The adequacy of covers or containment of incoming wastes will be checked at the facility entrance.
- E. The permittee shall implement a program of surcharging all vehicles entering the landfill which have not properly secured their loads.
- F. Stockpiles of crushed stone or other suitable material must be available on-site for maintaining suitable road conditions.
- G. Existing cattle guards shall be maintained for mud removal and drainage.
- H. The permittee shall expeditiously clean U.S. Highway 82 if mud is tracked onto the roadway by vehicles using the facility. The permittee shall implement other procedures as necessary to prevent mud tracking onto U.S. Highway 82.
- I. The existing 6-foot high wooden privacy fence along 1000 feet of U.S. Highway 82 shall be maintained.



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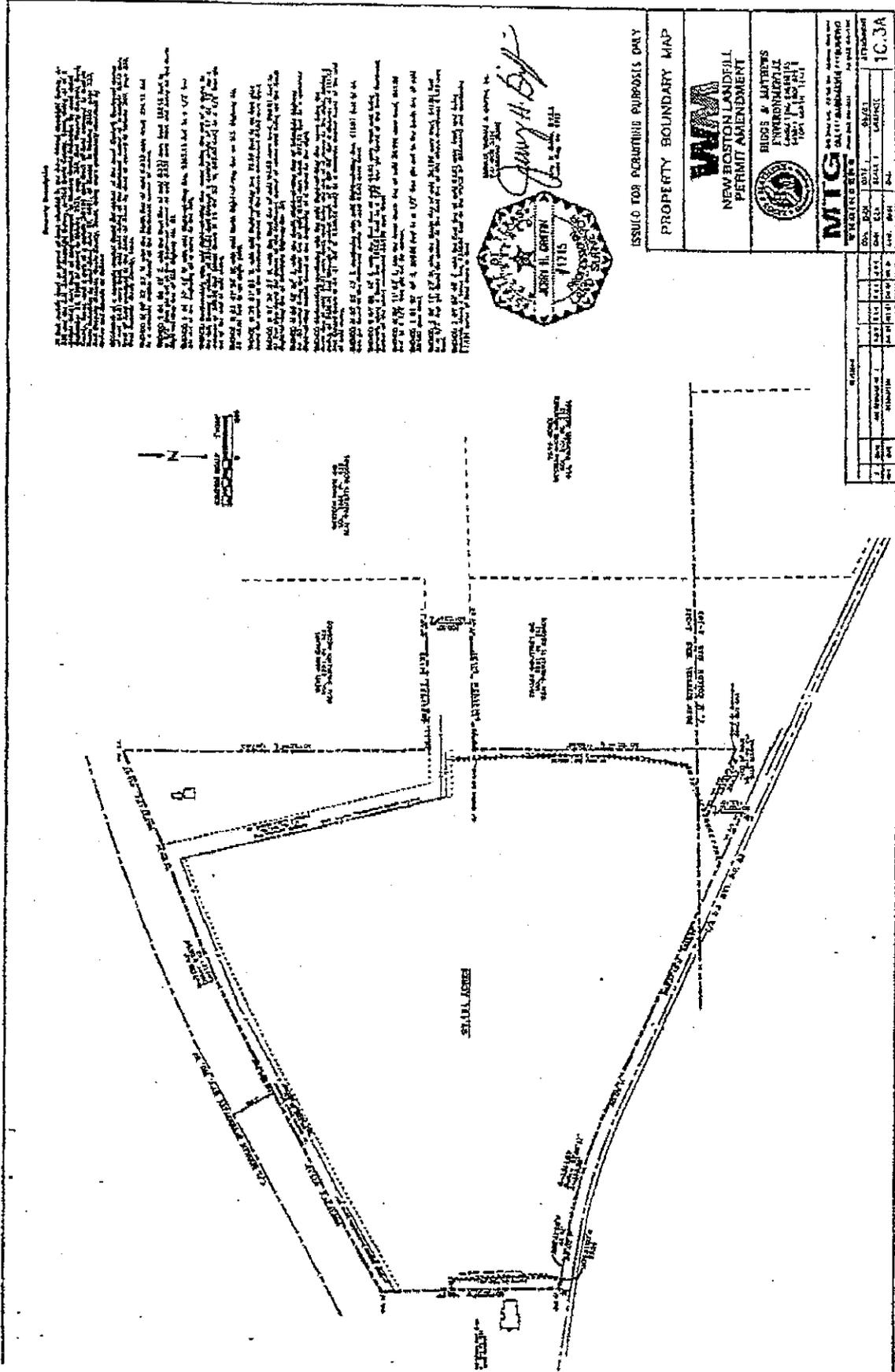
- J. The permittee shall revegetate completed slopes within four months of achieving appropriate grades.
- K. The permittee shall use screening fences at locations on the interim landfill slopes to block the line of site of landfill operations from U.S. Highway 82 and Interstate Highway 30.
- L. Fast growing trees shall be planted in areas of the landfill where vision from U.S. Highway 82 and Interstate Highway 30 is not currently obstructed. Vegetated screening shall be maintained.



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Attachment A  
Legal Description

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**Property boundaries:**  
The property boundaries shown on this map are based on the survey conducted by [Name] on [Date]. The boundaries are shown as solid lines. The area within the solid lines is the property of [Name]. The area outside the solid lines is not the property of [Name].

**Legal Description:**  
The property is located in [County], State of [State]. The property is bounded by [Description of boundaries]. The area within the boundaries is [Description of area].

*Jerry H. [Signature]*  
[Name]  
[Title]

ISSUED FOR PERMITTING PURPOSES ONLY

PROPERTY BOUNDARY MAP

**NEW BOSTON LANDFILL PERMIT AMENDMENT**

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

**MISSISSIPPI**

DATE: 12/13/2002

PROJECT: MSW 576-B

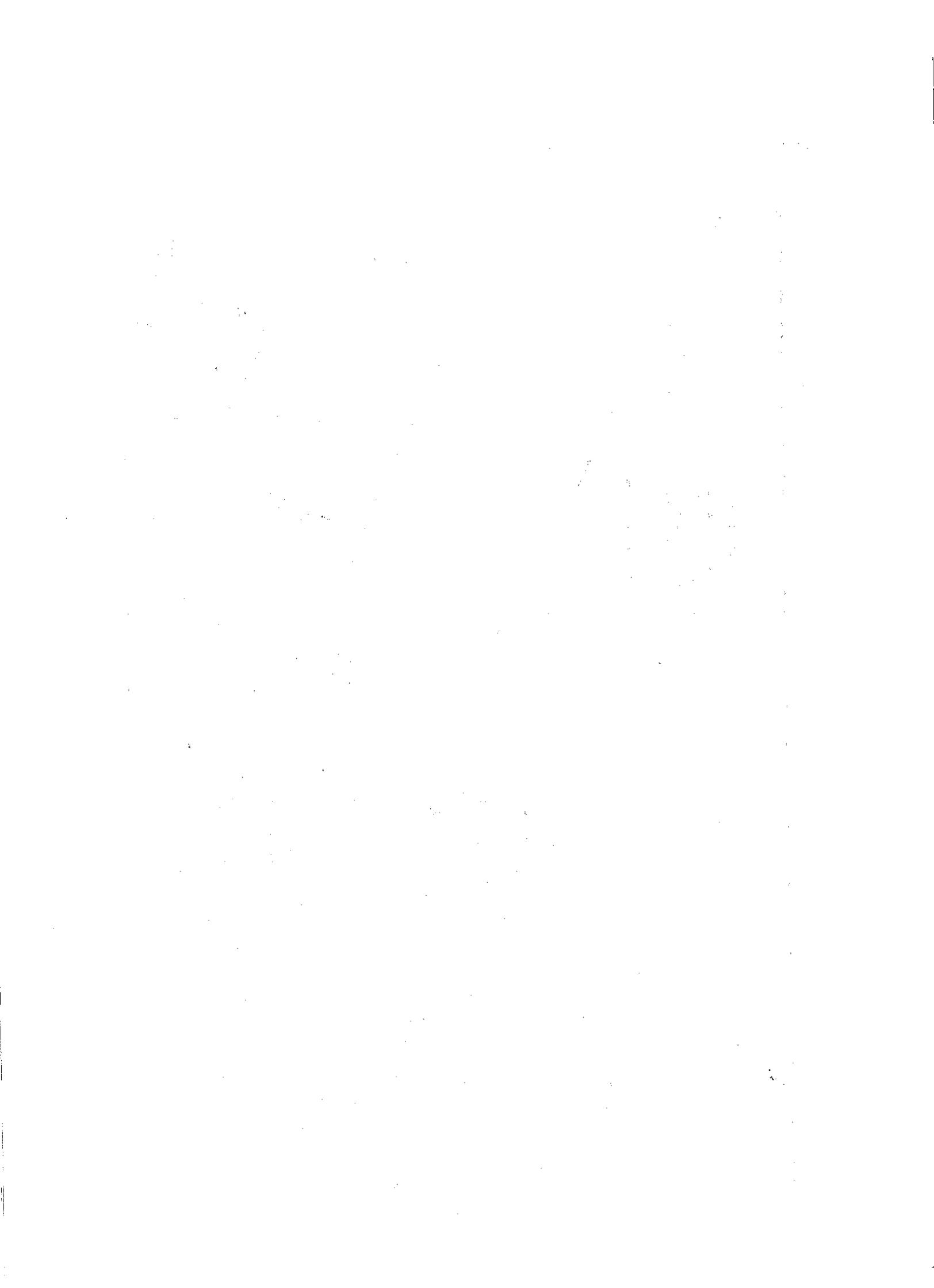
SCALE: 1" = 100'

APPENDIX 1C.3A

NO.	DATE	DESCRIPTION	BY
1	12/13/2002	ISSUED FOR PERMITTING PURPOSES ONLY	[Name]







New Boston Landfill  
Permit No. MSW 576-B

Attachment C  
Minor Amendments, Modifications, and Corrections  
to Permit No. MSW 576-B

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*[In lieu of this sheet, the agency document authorizing the permit change may be used.]*

Description of Permit Change:

Permit Sections Revised:

List of Items Revised in Parts I-IV of the Permit Application which are Incorporated by Reference in Permit Provision II:



Permit No. MSW-1428A

This permit supercedes and  
replaces Permit No. MSW-1428  
issued May 6, 1981.



msw/1428A/PA

## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PERMIT FOR MUNICIPAL  
SOLID WASTE MANAGEMENT SITE  
issued under provisions of Texas  
Health & Safety Code Ann.  
Chapter 361 (Vernon)

Site Operator: City of Wichita Falls  
P.O. Box 1431  
Wichita Falls, Texas 76307

Site Owner: City of Wichita Falls  
P.O. Box 1431  
Wichita Falls, Texas 76307

Facility Name: City of Wichita Falls Landfill

Classification of Site: Type I Municipal Solid Waste Management Facility

RECEIVED

AUG 14 2006

TCEQ  
CENTRAL FILE ROOM

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

APPROVED, ISSUED AND EFFECTIVE in accordance with the Texas Health & Safety Code Chapter 361 and 30 Texas Administrative Code (30 TAC) Chapter 330.

ISSUED DATE: AUG 14 2003

*Margaret Hoffman*

For the Commission

Exhibit G

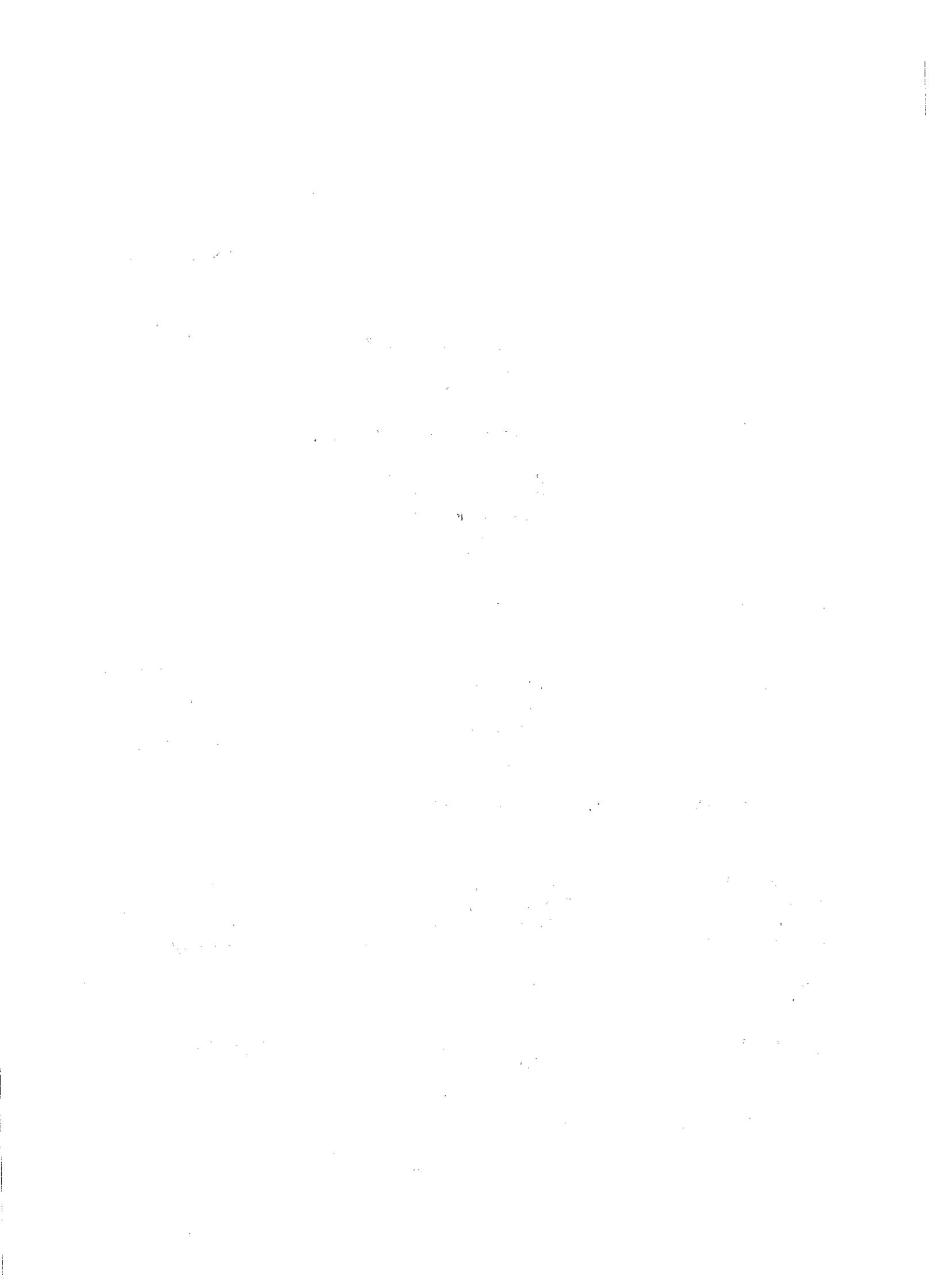


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I. Size and Location of Facility

- A. The City of Wichita Falls Landfill is located in Wichita County, approximately 3 miles west of the city limits of the City of Wichita Falls and about 2 miles north of State Highway 258 on Wylie Road and about 2.5 miles south of the City of Iowa Park. The total permitted facility boundary is approximately 564.5 acres.
- B. The legal description is in Attachment A to this permit.
- C. Coordinates and Elevation of the Permanent Site Benchmark:

Latitude: 33° 53' 44" N  
Longitude: 98° 40' 45" W  
Elevation: 995.62 feet above mean sea level (msl)

The general site plan and location of the permanent site benchmark are shown in Attachment B to this permit.

II. Incorporated Application Materials

This permit is based on and the site owner/operator shall follow Parts I through IV of the permit application submittals dated June 2002 and revised November 2002 and December 2002. 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.

Part V of the permit application shall be submitted upon completion of construction of the facility. The permittee shall maintain Parts I through V of the application as described in 30 TAC §330.51(a) at the facility and make them available for inspection by TCEQ personnel.

III. Facility and Operations Authorized

A. Days and Hours of Operation

The operating hours for the receipt of waste shall be 7:00 a.m. to 7:00 p.m. Monday through Saturday.

B. Wastes Authorized at this Facility

The permittee is authorized to dispose of municipal solid waste as defined in 30 TAC Section 330.2 resulting from or incidental to municipal, community, commercial, institutional, and recreational activities, including garbage, putrescible wastes, rubbish, ashes, brush, street cleanings, dead animals, abandoned automobiles, and all other solid waste other than industrial solid waste. The permittee is authorized to dispose of construction and demolition waste as defined in 30 TAC Section 330.2. Special wastes as defined in 30 TAC Section 330.2 may be accepted for disposal in accordance with 30 TAC



Section 330.136 and the permit application. Class 2 and Class 3 industrial solid waste may be accepted for disposal in accordance with 30 TAC Section 330.137.

C. Wastes Prohibited at This Facility

The permittee shall comply with the general prohibitions set forth in 30 TAC Section 330.5. Any waste not authorized in Permit Provision III.B. is prohibited.

D. Waste Volume Available for Disposal

The total permitted waste disposal capacity of the landfill is approximately 76 million cubic yards, including waste and daily cover.

E. Operations Authorized

The following operations are authorized and are subject to the limitations contained herein. They shall be built, operated, and maintained in accordance with the conditions of this permit and shall be managed in a manner to protect human health and the environment. All waste disposal activities subject to permitting are to be confined to the following operations, which shall include associated units, structures, appurtenances, and improvements:

1. A Type I municipal solid waste landfill facility consisting of a total permitted boundary of approximately 564.5 with a waste disposal footprint of approximately 352 acres and a composting operation; and
2. Access roads, scales, gate house, dikes, berms and temporary drainage channels, permanent drainage structures, stormwater management control structures, liners, groundwater monitoring well system, landfill gas management systems, contaminated water management systems, and other improvements.

F. Changes

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

IV. Facility Design, Construction, and Operation

A. General Requirements

1. Facility design, construction, and operation must comply with this permit, TCEQ rules (including the operational standards in 30 TAC Sections 330.111 through 330.139), and Parts I-IV of the application materials.
2. The 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§330.2 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:

- a. Preclude the release of any contaminated runoff, spills, or precipitation;
- b. Prevent washout of any waste by a 100-year storm; and
- c. Prevent run-on into the disposal areas from off-site areas.

3. The site shall be designed and operated so as not to cause a violation of:

- a. The requirements of the Texas Water Code §26.121;
- b. Any requirements of the Federal Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements §402 as amended and the Texas Pollutant Discharge Elimination System (TPDES);
- c. The requirements under the Federal Clean Water Act §404, as amended; and
- d. Any requirement of an area wide or statewide water quality management plan that has been approved under the Federal Clean Water Act §208 or §319, as amended.

B. Management of Contaminated Water, Leachate, and Gas Condensate

1. Contaminated water is defined in 30 TAC§330.56(o)(1), as water which has come into contact with waste, leachate, or gas condensate. All leachate, gas condensate, and contaminated water shall be handled, stored, treated, disposed of, and managed in accordance with 30 TAC§§330.55(b)(6), 330.56(o)(1) through (4), 330.139, and the application materials. Contaminated water and leachate will be disposed of at an authorized facility.
2. Contaminated surface water and groundwater shall not be placed in or on the landfill.

C. Liner

1. The bottom and sides of the excavation in the waste cells shall consist of at least 6 inches of recompacted subgrade overlain by a 60 mil high density polyethylene (HDPE) geomembrane, a geocomposite drainage blanket, and 24 inches of protective cover. The liner shall be constructed in accordance with and must meet or exceed the specifications in the application materials.



The drainage layer above the liner system will be part of the leachate collection and removal system. This liner system shall be installed over the entire bottom and sidewalls of the proposed landfill expansion area as described in the application materials.

Frozen material shall not be incorporated into the liner subgrade. Liner subgrade material shall not be placed on frozen ground and shall not be compacted if the ground surface is frozen.

2. The lowest elevation of waste disposal shall be approximately 938 feet above msl.

D. Leachate Collection System

1. The leachate collection system shall be designed, constructed, and maintained in accordance with 30 TAC Sections 330.56(o), 330.200, 330.201, and the application materials.
2. The leachate collection system shall be constructed, operated, and maintained to remain functional for the life of the municipal solid waste facility and throughout the post-closure care period.
3. Leachate shall be handled in accordance with Permit Provision IV.B. and Attachment 15 of the application materials.
4. The leachate collection system components not within the confines of the landfill liner system shall provide for containment and collection of spills.

E. Above-Grade Waste Placement

1. All waste deposited above grade shall be limited to the grades and elevations shown in Part III, Attachment 2 and Attachment 7 of the application materials and as stated in this permit.
2. The maximum elevation of waste disposal shall be approximately 1207 feet above msl.
3. The maximum elevation of the final cover shall be approximately 1211.5 feet above msl.
4. Top of cover and side embankment slopes of all above-grade waste disposal portions of the landfill shall be constructed to the grades and elevations as shown in the application materials.

F. Landfill Development

Landfill development and construction sequencing of below-grade fill areas, aerial fill areas, and site appurtenances shall be performed as shown in the application materials.



G. Final Cover

1. The final cover shall provide effective long-term erosional stability to the top dome surfaces and embankment side slopes.
2. The final cover system shall be designed and constructed in accordance with 30 TAC §330.253 (Closure Requirements for MSWLF Units That Receive Waste on or after October 9, 1993 and MSW Sites) and the application materials.
3. Temporary erosion and sedimentation control measures shall be maintained.

H. Landfill Gas Management Facilities

1. A landfill gas detection system shall be installed and shall consist of a perimeter network of landfill gas monitoring probes and landfill gas monitoring equipment for facility structures. The design, location, and operation of the landfill gas detection system shall be as described in the application materials. At a minimum, monitoring shall be conducted quarterly by appropriately trained persons.
2. If the methane concentration exceeds the lower explosive limit (LEL) at the facility boundary (i.e., 5% methane in air) or 25% of the LEL in facility structures, then a detailed control plan must be implemented as outlined in the application materials.

I. Ground Water Monitoring System

1. The ground water monitoring system shall be used to monitor the quality of ground water in the uppermost aquifer in accordance with 30 TAC§330.231. The ground water monitoring system shall be constructed and operated in accordance with the application materials.
2. Monitoring wells shall be sampled in accordance with a monitoring program defined in 30 TAC§330.233 and the application materials. The frequency of ground water sampling and reporting of data collected from each sampling event shall be in accordance with 30 TAC§330.234 and the application materials.
3. Any monitoring well that is no longer used shall be properly plugged and abandoned in accordance with 30 TAC§330.242(g), 16 TAC§76.702 and §76.1004, unless it is converted for use as a piezometer.

J. Markers

Markers shall be placed and maintained in accordance with 30 TAC §330.55(b)(10), 30 TAC§330.122, and the application materials.

K. Liner Evaluation Reports



Soils and Liner Evaluation Reports (SLERs) and Flexible Membrane Liner Evaluation Reports (FMLERs) shall be submitted to the TCEQ for evaluation and approval in accordance with 30 TAC §§330.205 and 330.206.

L. Employee Training

All facility employees and other persons involved in facility operations shall be qualified, trained, educated, and experienced to perform their duties so as to achieve compliance with this permit. At least one individual who supervises or manages the operations of the City of Wichita Falls Landfill facility must meet the qualifications of 30 TAC Chapter 30, Subchapter F. The permittee shall further ensure that personnel are familiar with safety procedures, contingency plans, the requirements of the Commission's rules and this permit, commensurate with their levels and positions of responsibility.

V. Financial Assurance

- A. Authorization to operate the facility is contingent upon compliance with provisions contained within the permit and maintenance of financial assurance in accordance with 30 TAC Chapter 37 and Chapter 330.
- B. Within 30 days after issuance of a permit amendment, the permittee shall provide financial assurance instrument(s) for demonstration of closure care in an amount not less than \$11,674,592 (2001 dollars). Financial assurance for closure shall be secured and maintained in compliance with 30 TAC Chapter 37.
- C. Within 30 days after issuance of a permit amendment, the permittee shall provide financial assurance instrument(s) for demonstration of post-closure care in an amount not less than \$5,099,040 (2001 dollars). Financial assurance for post-closure shall be secured and maintained in compliance with 30 TAC Chapter 37.
- D. The permittee shall annually adjust closure and/or post-closure care cost estimates for inflation within 60 days prior to the anniversary date of the establishment of the financial assurance instrument pursuant to 30 TAC Section 37.131.
- E. If the facility's closure and/or post-closure care plan is modified, the permittee shall provide new cost estimates in current dollars, which meet the requirements 30 TAC Chapter 37 and 30 TAC Sections 330.281 and 330.283. Modifications shall be made pursuant to 30 TAC Section 305.70 and shall adjust financial assurance in accordance with any financial assurance regulation that is adopted by the TCEQ subsequent to the issuance of this permit and in compliance with the provisions contained within this permit.

VI. Facility Closure

- A. Closure shall commence:
  - 1. Upon direction by the Executive Director of the TCEQ for failure to comply with the terms and conditions of the permit or violation of State or Federal regulations;



2. Upon abandonment of the site;
  3. Upon direction of the Executive Director for failure to secure and maintain an adequate bond or other financial assurance as required; or
  4. Upon permittee's notification to the Commission that the landfill will no longer operate.
- B. The landfill shall be closed in accordance with 30 TAC Chapter 330 Subchapter J. Upon closure, the permittee shall submit to the Executive Director documentation of closure as set out in 30 TAC§330.253.

VII. Facility Post-Closure Care

- A. Post-closure care maintenance shall be conducted in accordance with the application materials for a period of 30 years after completion of final closure requirements or as otherwise determined by the Executive Director pursuant to 30 TAC§330.254(b).
- B. 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 by an independent licensed professional engineer in accordance with 30 TAC§330.256.

VIII. Other Permit Conditions

- A. Attachment C, consisting of minor amendments, modifications, and corrections to this permit, is hereby made a part of this permit.
- B. 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.
- C. A preconstruction conference shall be held pursuant to 30 TAC§330.64(d) prior to beginning any construction within the permit boundary that was not already constructed pursuant to the prior permit.
- D. All discharge of stormwater shall be in accordance with the U.S. Environmental Protection Agency NPDES requirements and requirements of the TPDES.
- E. The tracking of mud off-site onto any public right-of-way shall be minimized.
- F. In accordance with 30 TAC §330.7, prior to beginning disposal operations on any portion of the site, the permittee shall record in the Wichita County deed records a metes and bounds description of all portions within the permit boundary on which disposal of solid waste has and/or will take place. Future leases shall provide that the permittee shall have the right of access to the property for the purpose of maintenance and inspection until the post closure maintenance period expires. A certified copy of the recorded document(s) shall



- be provided to the Executive Director prior to any acceptance of waste in new areas granted by this amendment.
- G. Daily cover of waste fill areas shall consist of clean soil that has not been in contact with waste as described in Part IV of the application materials. Intermediate cover, run-on, and run-off controls shall not be constructed from soil that was previously used as daily cover or which contains waste.
  - H. 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 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.
  - I. 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§330.62(b).
  - J. 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.
  - K. 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.
  - L. The permittee shall be required to meet all performance standards required by the permit, the Texas Administrative Code, local, State, and Federal laws regardless of the specific design details contained in the application materials.
  - M. If differences arise between the rules, regulations, and permit provisions and the incorporated Parts I-V of the application materials, then the rules, regulations, and permit provisions shall prevail.
  - N. The permittee shall comply with the requirements of the air permit by rule in 30 TAC §106.534 (Municipal Solid Waste Landfills and Transfer Stations), as applicable, and Requirements for Permitting by Rule in 30 TAC§106.4. If the landfill should have non-methane, non-ethane emissions to the atmosphere that exceed the limits set by 30 TAC§106.4, a standard permit under 30 TAC§116.621 will be required. One authorization or the other must be in effect. Federal requirements must also be satisfied. The federal requirements are listed in the Standards for Performance for Municipal Solid Waste Landfills in 40 CFR Part 60, Subpart WWW.
  - O. All waste transportation vehicles using this facility will be required to have adequate covers or other means of containment of waste materials. The adequacy of covers or containment of incoming wastes will be checked at the facility entrance.



- P. The owner or operator shall take action to ensure that vehicles hauling waste to the site are enclosed or provided with a tarpaulin, net, or other means to properly secure the load in order to prevent the escape of any part of the load by blowing or spilling. Such actions include posting signs, reporting offenders to law enforcement officers, adding surcharges, or similar measures. The owner or operator shall be responsible for the cleanup of waste materials spilled along and within the right-of-way of public access roads serving the site for a distance of two miles in either direction from the site entrances used for waste delivery.
- Q. On-site road conditions shall be maintained in suitable condition for site traffic by using crushed stone or other suitable materials and equipment. All-weather roads shall be provided within the site for unloading of waste during wet weather operations. Access roads shall be regraded as necessary to minimize depressions, ruts, and potholes. Dust from on-site and other access roadways shall not become a nuisance to surrounding areas.
- R. After the date of issuance of this permit and within 180 days following the TCEQ publishing technical guidance for the development of a Site Operating Plan (SOP) for a municipal solid waste management facility, the permittee shall review their SOP for compliance with the published guidance and provide revisions as necessary as a modification to the SOP of this permit for agency approval.

IX. Incorporated Regulatory Requirements

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



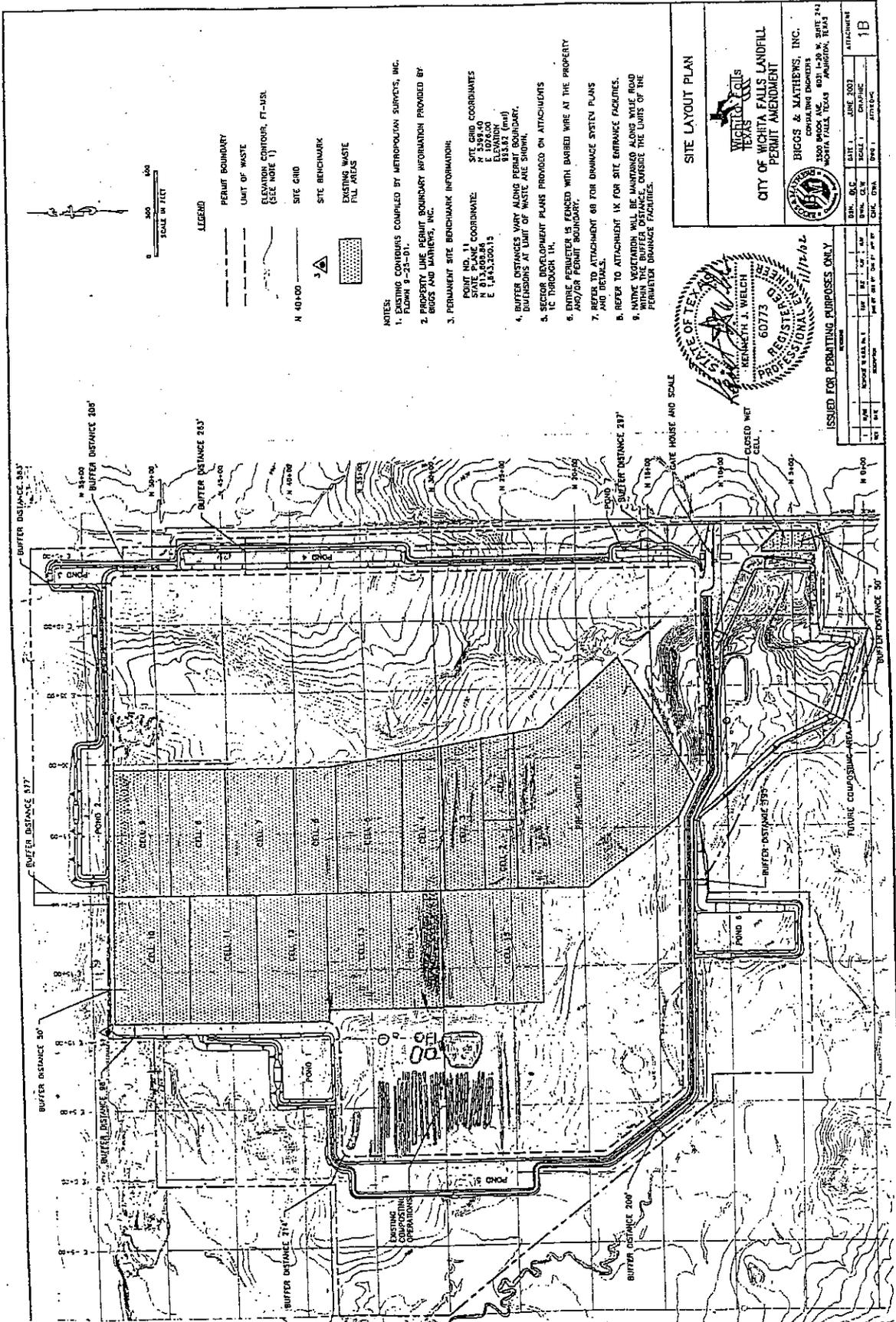
ATTACHMENT A

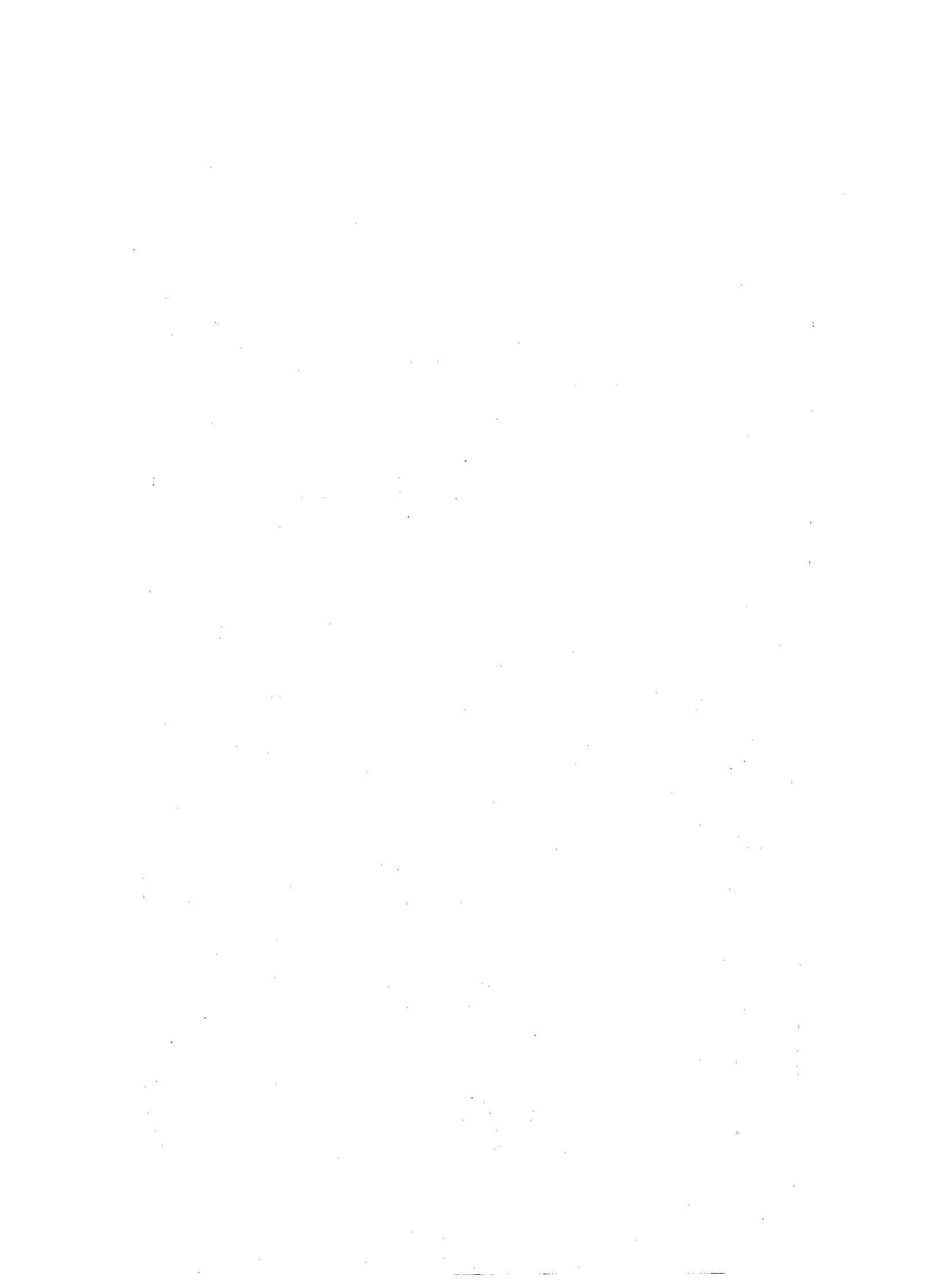
Parts I - IV of the Permit Application



ATTACHMENT B

General Site Layout





ATTACHMENT C

Minor Amendments, Modifications, and Corrections  
to Permit No. MSW 1428A

*[In lieu of this sheet, the agency document authorizing the permit change may be used.]*

Description of Permit Change:

Permit Sections Revised:

List of Items Revised in Parts I-IV of the Permit Application which are Incorporated by Reference in Permit Provision II:





## TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

PERMIT FOR MUNICIPAL  
SOLID WASTE MANAGEMENT SITE  
issued under provisions of Texas  
Health & Safety Code Ann.  
Chapter 361 (Vernon)

Permit No. MSW-2290 (Final Draft Permit, November 16, 2001)

Name of Permittee and Site Owner: Texoma Area Solid Waste Authority  
P.O. Box 249  
Whitesboro, Texas 76273

Facility Name: TASWA Solid Waste Disposal and Recycling Facility

Classification of Site: Type I Municipal Solid Waste Management Facility

Wastes to be Accepted: Municipal solid waste from residential, municipal, community, commercial, institutional, agricultural, and recreational activities, including garbage, brush, rubbish; yard waste, and street cleanings; construction-demolition wastes from municipal projects; certain special wastes; and Class 2 & 3 nonhazardous industrial waste.

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

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

ISSUED DATE: OCT 31 2003

  
For the Commission

Exhibit H



Table of Contents  
Texoma Area Solid Waste Authority  
TASWA Solid Waste Disposal and Recycling Facility  
Permit N<sup>o</sup> MSW-2290

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## PART NO. 1

### I. Size and Location of Facility

- A. This Type I municipal solid waste management facility is located on a 392.75 acre site 1.0 mile east of the intersection of SH-56 and FM-901, approximately 3 miles east of Whitesboro, in Grayson County, Texas.
- B. The legal description is contained in Appendix 1C of Part I found in Attachment A of this permit.
- C. Coordinates and Elevation of Site Permanent Benchmark:
- Latitude: 33° 38' 14" North  
Longitude: 96° 49' 59" West  
Elevation: 757.45 feet above mean sea level (msl)

The location of the permanent site benchmark is shown on Attachment 1B of Part III found in Attachment A of this permit.

### II. Facilities and Operations Authorized

#### A. Days and Hours of Operation

The operating hours for receipt of waste and for all landfill related operations at this municipal solid waste facility shall be any time between the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday. The site will be closed on Sunday.

#### B. Wastes Authorized at this Facility

The permittee is authorized to dispose of municipal solid waste resulting from or incidental to municipal, community, residential, commercial, institutional, and recreational activities including street cleanings; rubbish; yard waste; brush; construction-demolition debris from municipal projects; inert material; Class 2 & 3 nonhazardous industrial waste; and certain special wastes that are identified in Part IV found in Attachment A of this permit. The acceptance of the special wastes, indicated in Part IV of Attachment A of this permit, is contingent upon such waste being handled in accordance with 30 Texas Administrative Code (TAC) Section (§) 330.136, and in accordance with the listed and described procedures in Part IV found in Attachment A of this permit, subject to the limitations and special provisions provided herein.



C. Wastes Prohibited at This Facility

The permittee shall comply with the waste disposal restrictions set forth in 30 TAC §330.5(e). Class 1 nonhazardous industrial solid waste, hazardous waste from any source, and any other waste not identified in Section II.B. of this permit shall not be accepted at this facility.

D. Waste Acceptance Rate

Authorized solid waste may be accepted for disposal at this site at a rate of approximately, but not limited to, 513 tons per day.

E. Waste Volume Available for Disposal

The total waste disposal capacity of the landfill is based upon the information contained in Section 2 of Part III found in Attachment A of this permit.

F. Facilities Authorized

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

G. Changes, Additions, or Expansions

Any proposed facility changes must be authorized in accordance with Texas Natural Resource Conservation Commission (TNRCC) permit amendment or modification rules, 30 TAC Chapter 305 and 30 TAC Chapter 330.

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

- A. Facility design, construction, and operation and/or maintenance must comply with this permit; Commission Rules, including 30 TAC §§330.111 through 330.139; special provisions contained in this permit; and Parts I-IV of the Site Development Plan found in Attachment A of this permit, and shall be managed in a manner to protect human health and the environment.



- B. The entire waste management facility shall be designed, constructed, operated, and maintained to prevent the release and migration of any waste, contaminant, or pollutant beyond the point of compliance as defined in 30 TAC §330.2 and to prevent inundation or discharge from the areas surrounding the facility components. Each receiving, storage, processing, and disposal area shall have a containment system that will collect spills and incidental precipitation in such a manner as to:
1. Preclude the release of any contaminated runoff, spills, or precipitation;
  2. Prevent washout of any waste by a 100-year storm; and
  3. Prevent run-on into the disposal areas from off-site areas.
- C. The site shall be designed and operated so as not to cause a violation of:
1. The requirements of the Texas Water Code §26.121;
  2. Any requirements of the Federal Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements §402, as amended;
  3. The requirements under the Federal Clean Water Act §404, as amended; and
  4. Any requirement of an area wide or statewide water quality management plan that has been approved under the Federal Clean Water Act §208 or §319, as amended.
- D. All working-face contaminated water shall be handled, stored, treated, disposed of, and managed in accordance with 30 TAC §330.55(b)(6), 30 TAC §§330.56(o)(1) through (4), 30 TAC §330.139, and in accordance with Part III, Attachment 15 found in Attachment A of this permit. Other methods may be considered for approval as a modification to this permit.
- E. Temporary erosion and sedimentation control measures shall remain functional until the permanent vegetative cover has become established or as required to control erosion on areas having completed final cover throughout the post-closure care period in accordance with Part III Attachment 13 found in Attachment A of this permit.
- F. Storm water runoff from the active portion of the landfill shall be managed in accordance with 30 TAC §§330.55(b)(3) and 330.133(b), and as described in Part III found in Attachment A of this permit.



- G. All facility employees and other persons involved in facility operations shall be qualified, trained, educated, and experienced to perform their duties so as to achieve compliance with this permit. The permittee shall comply with 30 TAC §330.52(b)(9) and as described in Part I found in Attachment A of this permit. The permittee shall further ensure that personnel are familiar with safety procedures, contingency plans, the requirements of the Commission's rules and this permit, commensurate with their levels and positions of responsibility, in accordance with Part III and Part IV found in Attachment A of this permit. All facility employees and other persons involved in facility operations shall be certified and shall obtain the appropriate level of operator certification as required by recent changes in the statute and applicable regulations.
- H. The facility shall be properly supervised to assure that bird populations will not increase and that appropriate control procedures will be followed. Any increase in bird activity that might be hazardous to safe aircraft operations will require prompt mitigation actions.

#### IV. Financial Assurance

- A. General. Authorization to operate the facility is contingent upon compliance with provisions contained within the permit and maintenance of financial assurance in accordance with Subchapter K. of 30 TAC Chapter 330 and 30 TAC Chapter 37.
- B. Closure Care Cost Estimates. Within 60 days prior to the initial receipt of waste, the permittee shall provide financial assurance instrument(s) for demonstration of closure care in an amount determined as described in Provision IV.C. of this permit. The closure cost estimate of \$4,675,905.63 (2000 dollars) is based on estimates as described in Part III Attachment 8 and Attachment 12 found in Attachment A of this permit. The financial assurance instrument shall be in an amount that includes the inflation factors for each calendar year since 2000 to the year the permit is issued.
- C. Closure Financial Assurance. The amount of financial assurance for closure must be posted in one of the following amounts:
  - 1. In an amount equal to closing the largest area of the landfill ever requiring closure at any time during the active life of the unit, as described in the Site Development Plan and pursuant to 30 TAC §330.253,
  - 2. In an amount equal to closing an entire unit(s) pursuant to 30 TAC §330.253,  
or



3. In an amount equal to closing a partial unit(s) contingent upon, at a minimum, placement of a certified final cover system pursuant to 30 TAC §330.253(e).
- D. **Post-Closure Care Cost Estimates.** Within 60 days prior to the initial receipt of waste, the permittee shall provide financial assurance instrument(s) for demonstration of post-closure care in an amount for the entire landfill facility. The post-closure care cost estimate of \$3,462,131.64 (2000 dollars) is based on estimates as described in Part III Attachment 8 and Attachment 13 found in Attachment A of this permit. The financial assurance instrument shall be in an amount that includes the inflation factors for each calendar year since 2000 to the year the permit is issued.
- E. The owner and/or operator shall annually adjust closure and/or post-closure care cost estimates for inflation within 60 days prior to the anniversary date of the establishment of the financial assurance instrument pursuant to 30 TAC §§330.281 and 330.283, as applicable.
- F. **Modifications.** If the facility's closure and/or post-closure care plan is modified in accordance with 30 TAC §305.70, the permittee shall provide new cost estimates in current dollars which meet the requirements of Sections IV.C. & IV.D. of this permit. The amount of the financial assurance mechanism shall be adjusted within 20 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 TNRCC subsequent to the issuance of this permit, shall be initiated as a modification within 30 days after the effective date of the new regulation.

## V. Facility Closure

Closure of the facility shall commence:

- A. Upon completion of the disposal operations and the site is completely filled or rendered unusable in accordance with Part III Attachment 7 found in Attachment A of this permit;
- B. Upon direction by the Executive Director of the TNRCC for failure to comply with the terms and conditions of this permit or violation of State or Federal regulations. The Executive Director is authorized to issue emergency orders to the permittee in accordance with §§ 5.501 and 5.512 of the Water Code regarding this matter after considering whether an emergency requiring immediate action to protect the public health and safety exists;
- C. Upon abandonment of the site;



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

#### **VI. Site Completion and Closure**

The landfill shall be completed and closed in accordance with 30 TAC §330.250 and the applicable portions of 30 TAC §§330.251 through 330.256. Upon closure, the permittee shall submit to the Executive Director documentation of closure as set out in 30 TAC §330.253. Post-closure care and maintenance shall be conducted in accordance with Part III Attachment 13 found in Attachment A of this permit, for a period of 30 years or as otherwise determined by the Executive Director pursuant to 30 TAC §330.254(a).

#### **VII. Standard Permit Conditions**

- A. Parts I-IV, as described in 30 TAC §330.51(a), which comprise the Permit Application for Permit N<sup>o</sup> MSW-2290 are hereby made a part of this permit as Part No. 2: Attachment A. The permittee shall maintain Parts I-IV and Part V, as described in 30 TAC §330.51(a), at the facility and make them available for inspection by TNRCC personnel.
- B. Part No. 3: Attachment B, consisting of minor amendments, modifications, and corrections to this permit, is hereby made a part of this permit.
- C. The permittee shall comply with all conditions of this permit. Failure to comply with any permit condition may constitute a violation of the permit, the rules of the Commission, and the Texas Solid Waste Disposal Act and is grounds for an enforcement action, revocation, or suspension.
- D. A preconstruction conference shall be held pursuant to 30 TAC §330.64(d) prior to beginning any construction within the permit boundary to ensure that all aspects of this permit, construction activities, and inspections are met. Additional preconstruction conferences may be held prior to the opening of the facility.
- E. The permittee shall monitor sediment accumulations in ditches and culverts on a quarterly basis, and remove sedimentation to re-establish the design flow grades on an annual basis or more frequently if necessary to maintain the design flow.



- F. The tracking of mud off-site onto any public right-of-way shall be minimized.
- G. In accordance with 30 TAC §330.7(a), within 30 days after the issuance of this permit, the permittee shall record in the Deed Records of Grayson 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. The permittee shall maintain the right of access to the property for the purpose of maintenance and inspection until the post closure maintenance period expires. A certified copy of the recorded document(s) shall be provided to the Executive Director within 30 days after the issuance of this permit.
- H. Daily cover of the waste fill areas shall be performed with clean soil that has not been in contact with waste or with an alternate daily cover which has been approved in accordance with 30 TAC §330.70. 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. In complying with the requirements of 30 TAC §330.123, 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.
- K. 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 §330.62(b).
- L. 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 Health and Safety Code.
- M. 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.



- N. Regardless of the specific design contained in Attachments A and B of this permit, the permittee shall be required to meet all performance standards required by the permit, the regulations, and as required by local, State, and Federal laws or ordinances.
- O. If differences arise between these permit provisions and incorporated Parts I-IV of Attachment A of this permit, these Permit Provisions shall prevail.
- 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.
- Q. All discharge of storm water will be in accordance with the U.S. Environmental Protection Agency NPDES requirements or the State of Texas TPDES requirements as applicable.

**VIII. Incorporated Regulatory Requirements**

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

**IX. Special Provisions**

None.

**PART NO. 2: ATTACHMENT A.**

Parts I - IV of the Permit Application Document shall be considered the Site Development Plan, with all the attachments and supporting data.

**PART NO. 3: ATTACHMENT B.**

Minor Amendments, Modifications, and Corrections may be issued for Permit N° MSW-2290.

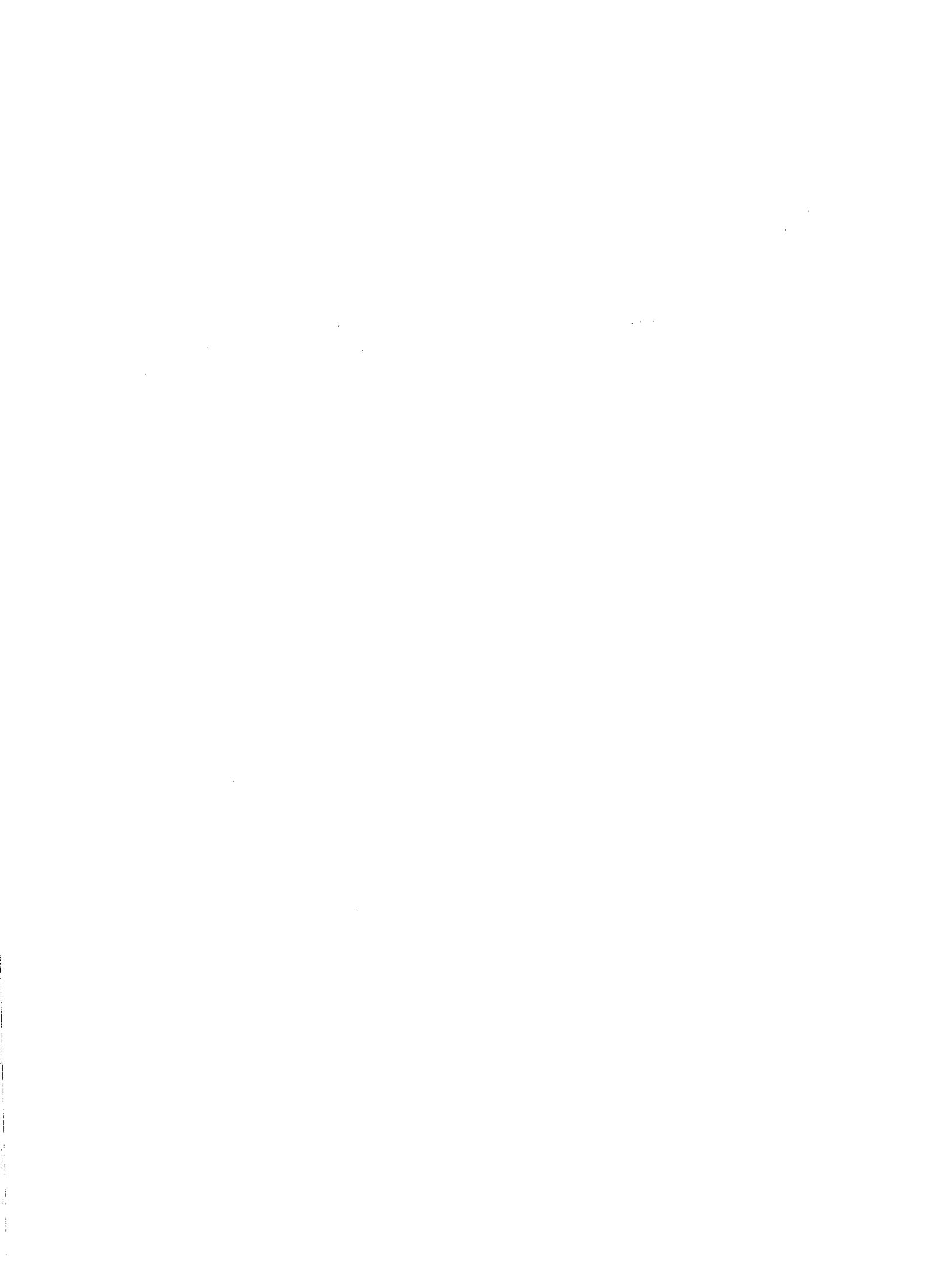


Texoma Area Solid Waste Authority

Permit N° MSW-2290

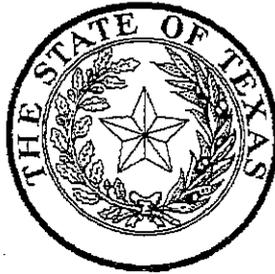
Page 11

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









## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PERMIT FOR MUNICIPAL  
SOLID WASTE MANAGEMENT SITE  
issued under provisions of Texas  
Health & Safety Code Ann.  
Chapter 361 (Vernon)

MSW Permit No. 1454B

Name of Permittee  
and Site Owner:

B&B Landfill, Inc. d/b/a Waste Management of Texas ("Waste  
Management")  
1600A South Rail Road Street  
P.O. Box 31  
Lewisville, Texas 75067

Facility Name:

Paris Landfill

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 amended permit is granted subject to the rules and orders of the Commission and laws of the State of Texas and it replaces any previously issued permit. Nothing in this permit exempts the permittee from compliance with other applicable rules and regulations of the Texas Commission on Environmental Quality. This permit will be valid until canceled, amended, or revoked by the Commission, or until the site is completely filled or rendered unusable, whichever occurs first.

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

ISSUED DATE:

OCT 20 2004

A handwritten signature in black ink, appearing to be "D. B. White", written over a horizontal line.

For the Commission

Exhibit I



Table of Contents  
Paris Landfill  
Lamar County  
MSW Permit No. 1454B

**PART NO. 1**

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## **PART NO. 1**

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

- A. The Paris Landfill facility is located approximately 7 miles northwest of the City of Paris, Lamar County Texas, about 2 miles northwest of the intersection of US 271 and CR 33900, on CR 33900. CR 33900 is approximately 5 miles north of the intersection of US 271 and US 82 in Lamar County Texas.
- B. The legal description is contained in Part I of the application found in Attachment A of this permit.
- C. Coordinates and Elevation of Site Permanent Benchmark:
- |            |   |
|------------|---|
| Latitude:  | 33° 46' 50" N                             |
| Longitude: | 95° 34' 20" W                             |
| Elevation: | 536.52 feet above mean sea level (ft-msl) |

### **II. Facilities and Operations Authorized**

#### **A. Days and Hours of Operation**

The operating hours for receipt of waste and for all landfill related operations at this municipal solid waste facility shall be within the hours of 6:00 a.m. to 7:00 p.m., Monday through Friday, and 7:00 a.m. to 12:00 p.m. Saturday.

#### **B. Wastes Authorized at This Facility**

The permittee is authorized to dispose of municipal solid waste resulting from, or incidental to, municipal, community, commercial, institutional, and recreational activities, including garbage, putrescible wastes, rubbish, ashes, brush, street cleanings, dead animals, abandoned automobiles, construction-demolition waste, yard waste, and all other solid waste other than industrial solid waste. Class 2 nonhazardous industrial solid waste, Class 3 nonhazardous industrial solid waste, and certain other special wastes that are identified in Part IV found in Attachment A of this permit may also be accepted for disposal at the facility, subject to such waste being handled in accordance with the listed and described procedures provided therein and in accordance with 30 Texas Administrative Code (TAC) Section (§) 330.136, and to the limitations and special provisions contained herein.



C. Wastes Prohibited at This Facility

The permittee shall comply with the waste disposal restrictions set forth in 30 TAC §330.5(e). Hazardous waste, radioactive waste, PCB waste, Class 1 nonhazardous industrial solid waste, liquid waste, infectious medical waste, and any other waste not identified in Section II.B. of this permit shall not be accepted at this facility.

D. Waste Acceptance Rate

Authorized solid waste may be accepted for disposal at this site at an average rate of approximately 676 tons per day with a projected maximum waste acceptance rate of 795 tons per day at the end of the life of the site.

E. Waste Volume Available for Disposal

The total disposal capacity of the landfill is 22.163 million cubic yards. The net available disposal volume (waste and cover soil capacity) is approximately 19.3 million cubic yards. The total waste disposal capacity of the landfill is based upon the information contained in Appendix IIIA of Part III found in Attachment A of this permit.

F. Facilities Authorized

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

G. Changes, Additions, or Expansions

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



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

- A. Facility design, construction, and operation and/or maintenance must comply with the provisions of this permit; Commission rules, including 30 TAC §330.51 through 330.58, 330.62 through 330.64, 330.111 through 330.139, 330.200 through 330.206, 330.230 through 330.242, 330.250 through 330.256, 330.280 through 330.284, and 330.300 through 330.305; special provisions contained in this permit; and Parts I-IV of the application found in Attachment A of this permit, and shall be managed in a manner to protect human health and the environment.
- B. The entire waste management facility shall be designed, constructed, operated, and maintained to prevent the release and migration of any waste, contaminant, or pollutant beyond the point of compliance as defined in 30 TAC §330.2 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 washouts of any waste by a 100-year storm; and
  3. Prevent run-on into the disposal areas from off-site areas.
- C. The site shall be designed and operated so as not to cause a violation of:
1. The requirements of the Texas Water Code §26.121;
  2. Any requirements of the Federal Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements pursuant to §402, as amended, and/or the Texas Pollutant Discharge Elimination System (TPDES), as amended;
  3. The requirements under the Federal Clean Water Act §404, as amended; and
  4. Any requirement of an area wide or statewide water quality management plan that has been approved under the Federal Clean Water Act §208 or §319, as amended.
- D. All working-face contaminated water shall be handled, stored, treated, disposed of, and managed in accordance with 30 TAC §330.55(b)(6), 30 TAC §330.56(o)(1) through (4), 30 TAC §330.139, and in accordance with Part III, Attachment 15 found in Attachment A of this permit. Other methods may be considered for approval as



a modification to this permit. Contaminated surface water and groundwater shall not be placed in or on the landfill.

- E. A composite liner system designed to meet the requirements of 30 TAC §330.200 through 330.206, incorporating a geocomposite leachate collection system designed to meet the requirements of 30 TAC §330.56(o), will be installed. The liner system consists of the following components (listed in order top to bottom of the liner system):

- 24-inch thick protective cover
- geocomposite leachate collection system
- 60-mil HDPE geomembrane layer
- 24-inch thick layer of compacted clay
- groundwater underdrain system and sumps

Frozen material shall not be incorporated into the liner subgrade. Liner subgrade material shall not be placed on frozen ground and shall not be compacted if ground surface is frozen.

- F. A final cover system designed and constructed to meet the requirements of 30 TAC §330.253, and Part III, Attachment 12 found in Attachment A of this permit will be placed on the above grade waste to limit the infiltration of rainfall and prevent washout of solid waste. The maximum final elevation of the final cover will be approximately 685 ft-msl. The final cover system consists of the following components (listed in order from top to bottom of the final cover system):

- 12-inch thick vegetative/erosion soil layer
- geotextile/geocomposite drainage layer
- 40-mil LLDPE geomembrane
- 18-inch thick compacted clay infiltration layer
- 12-inch thick intermediate cover soil

- G. Temporary erosion and sedimentation control measures shall remain functional until the permanent vegetative cover has become established or as required to control erosion on areas having completed final cover throughout the post-closure care period in accordance with Part III Attachment 13 found in Attachment A of this permit.

- H. The lowest elevation of landfill excavation is 488 ft-msl at the bottom of the leachate collection sumps and/or at the bottom of the groundwater underdrain sumps. The minimum elevation of waste placement will be approximately 495 ft-msl and in accordance with the grades and elevations shown in Part III, Attachment 2 and Attachment 15 found in Attachment A of this permit. The maximum final elevation



of waste placement will be approximately 681.5 ft-msl. All waste deposited above grade shall be limited to the grades and elevations shown in Part III, Attachment 2 and Attachment 7, found in Attachment A of this permit. Top of cover and side embankment slopes of all above grade waste disposal portions of the landfill shall be constructed to the grades and elevations as shown in Attachments 2 and 12 found in Attachment A of this permit.

- I. Landfill development and construction sequencing of below-grade, aerial fill areas and site appurtenances shall be performed as shown in Part III, Attachment 1 - Site Layout Plan and Attachment 6 - Ground and Surface Water Protection Plan found in Attachment A of this permit.
- J. A landfill gas management system shall be used on the landfill unit as required by the TCEQ rules and regulations to reduce the potential for offsite subsurface migration of landfill gas. The landfill gas management system shall be designed and operated in accordance with 30 TAC §330.56(n) - Landfill Gas Management Plan, and as described in Part III, Attachment 14 - Landfill Gas Management Plan found in Attachment A of this permit. Landfill gas migration will be monitored around the perimeter of the facility utilizing permanent gas probes.
- K. A groundwater monitoring system shall be used to monitor the quality of groundwater in the uppermost aquifer in accordance with 30 TAC §330.230 through §330.242, to provide data for the early detection of potential releases from the facility. The groundwater monitoring system shall be constructed and operated as described in Part III, Attachment 5 - Groundwater Characterization Report, and Attachment 11 - Groundwater Sampling and Analysis Plan found in Attachment A of this permit.
- L. Landfill markers shall be placed and maintained in accordance with 30 TAC §330.55(b)(10), §330.122, and Part IV, Section 4.7 Landfill Markers and Benchmark found in Attachment A of this permit.
- M. Soils and Liner Evaluation Reports (SLERs) shall be submitted to the TCEQ for evaluation and approval in accordance with 30 TAC §330.205 - Soils and Liner Quality Control Plan (SLQCP), and §330.206 - Soils and Liner Evaluation Report, and in accordance with Attachment 10 - Soils and Liner Quality Control Plan found in Attachment A of this permit.
- N. Storm water runoff from the active portion of the landfill shall be managed in accordance with 30 TAC §330.55(b)(3) and 330.133(b), and as described in Part III Attachment 15, found in Attachment A of this permit.



- O. All facility employees and other persons involved in facility operations shall be qualified, trained, educated, and experienced to perform their duties so as to achieve compliance with this permit. The permittee shall comply with 30 TAC §330.52(b)(9) and as described in Part I found in Attachment A of this permit. The permittee shall further ensure that personnel are familiar with safety procedures, contingency plans, the requirements of the Commission's rules and this permit, commensurate with their levels and positions of responsibility, in accordance with Part III and Part IV found in Attachment A of this permit. All facility employees and other persons involved in facility operations shall be certified and shall obtain the appropriate level of operator certification as required by recent changes in the statute and applicable regulations.
- P. The facility shall be properly supervised to assure that bird populations will not increase and that appropriate control procedures will be followed. Any increase in bird activity that might be hazardous to safe aircraft operations will require prompt mitigation actions.

#### IV. Financial Assurance

- A. General. Authorization to operate the facility is contingent upon compliance with provisions contained within the permit and maintenance of financial assurance in accordance with Subchapter K of 30 TAC Chapter 330 and 30 TAC Chapter 37.
- B. Closure Care Cost Estimates. Within 60 days after the date of issuance of this permit, the permittee shall provide financial assurance instrument(s) in an amount not less than \$7,635,440 (2004 dollars) based on the closure cost estimates described in Part III Attachment 8 and Attachment 12 found in Attachment A of this permit and in compliance with the provisions of 30 TAC §330.253(d)(6) and 330.281. During the active life of the facility, the permittee shall annually adjust the closure cost estimate and the amount of the financial assurance for inflation in accordance with 30 TAC Chapter 37, Subchapter R.
- C. Post-Closure Care Cost Estimates. Within 60 days after the date of issuance of this permit, the permittee shall provide financial assurance instrument(s) in an amount not less than \$3,437,309 (2004 dollars) based on the post-closure care cost estimates described in Part III Attachment 8 and Attachment 13 found in Attachment A of this permit and in compliance with the provisions of 30 TAC §330.254(b)(3)(D) and 330.283. The permittee shall annually adjust the cost estimate for post-closure care and the amount of the financial assurance for inflation in accordance with 30 TAC Chapter 37, Subchapter R. Continuous financial assurance coverage for post-closure care shall be provided until the site is officially released in writing by the executive director from the post-closure care period in accordance with all requirements of the post-closure care plan.



- D. Modifications. If the facility's closure and/or post-closure care plan is modified in accordance with 30 TAC §305.70, the permittee shall provide new cost estimates in current dollars in accordance with 30 TAC §330.253(d)(6), 330.254(b)(3)(D), 330.281, and 330.283, 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 permit modification within 30 days after the effective date of the new regulation.

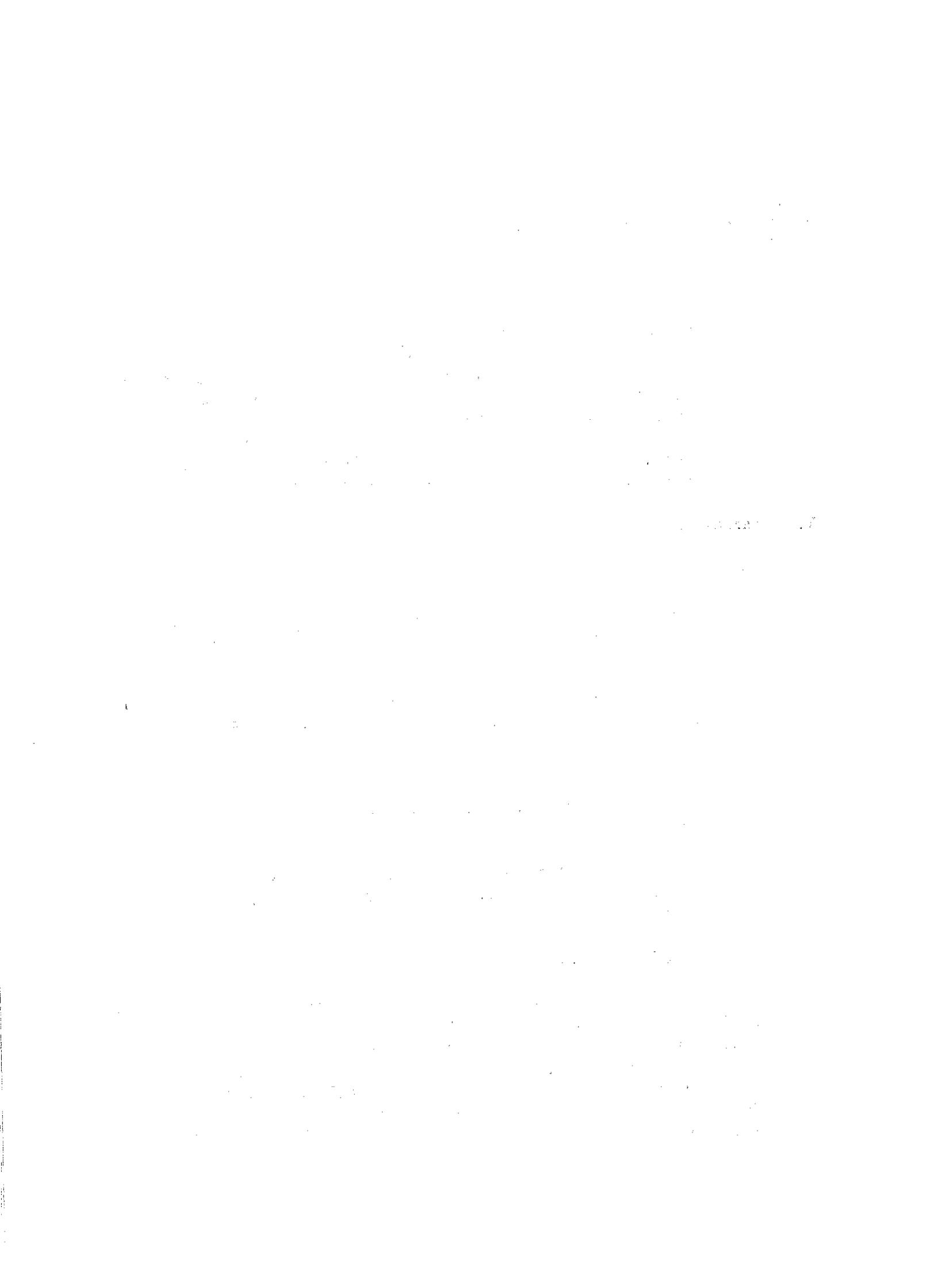
**V. Facility Closure**

Closure of the facility shall commence:

- A. Upon completion of the disposal operations and the site is completely filled or rendered unusable in accordance with Part III Attachments 7 and 12 found in Attachment A of this permit;
- B. Upon direction by the executive director of the TCEQ for failure to comply with the terms and conditions of this permit or violation of State or Federal regulations.
- C. Upon abandonment of the site;
- D. For failure to secure and maintain an adequate bond or other financial assurance as required; or
- E. Upon the permittee's notification to the TCEQ that the landfill will cease to accept waste and no longer operate at any time prior to the site being completely filled to capacity.

**VI. Site Completion and Closure**

The landfill shall be completed and closed in accordance with 30 TAC §330.250 and the applicable portions of 30 TAC §330.251 through 330.256 and as described in Part III, Attachment 12 - Final Closure Plan found in Attachment A of this permit. Upon closure, the permittee shall submit to the executive director documentation of closure as set out in 30 TAC §330.253. Post-closure care and maintenance shall be conducted in accordance with Part III Attachment 13 found in Attachment A of this permit, for a period of 30 years or as otherwise determined by the executive director pursuant to 30 TAC §330.254(b).



## VII. Standard Permit Conditions

- A. Parts I-IV, as described in 30 TAC §330.51(a), which comprise the Permit Application for MSW Permit No. 1454B are hereby made a part of this permit as Part No. 2, Attachment A. The permittee shall maintain Parts I-IV and Part V, as described in 30 TAC §330.51(a), at the facility and make them available for inspection by TCEQ personnel.
- B. Attachment B, consisting of minor amendments, modifications, and corrections to this permit, is hereby made a part of this permit as Part No. 3, Attachment B.
- 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 preconstruction conference shall be held pursuant to 30 TAC §330.64(d) prior to beginning any construction in the lateral expansion areas within the permit boundary to ensure that all aspects of this permit, construction activities, and inspections are met. Additional preconstruction conferences may be held prior to the opening of new landfill units at the facility.
- E. The permittee shall monitor sediment accumulations in ditches, sedimentation ponds, and culverts on a quarterly basis, and remove sedimentation to re-establish the design flow grades on an annual basis or more frequently if necessary to maintain the design flow.
- F. The tracking of mud off-site onto any public right-of-way shall be minimized.
- G. In accordance with 30 TAC §330.7(a), the permittee shall record in the Deed Records of Lamar 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 §330.7(b).
- H. Daily cover of the waste fill areas shall be performed with clean soil that has not been in contact with waste or with an alternate daily cover which has been approved in accordance with 30 TAC §330.133(c) and 305.70. 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. In complying with the requirements of 30 TAC §330.123, 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.
- K. 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 §330.62(b).
- L. 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 Health and Safety Code.
- M. 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.
- N. Regardless of the specific design contained in Attachments A and B of this permit, the permittee shall be required to meet all performance standards required by the permit, the regulations, and as required by local, State, and Federal laws or ordinances.
- O. If differences arise between these permit provisions and incorporated Parts I-IV of Attachment A of this permit, these Permit Provisions shall prevail.
- 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.
- 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. To the extent applicable, the requirements of 30 TAC Chapters 37, 281, 305, and 330 are adopted by reference and are hereby made provisions and conditions of this permit.
- B. The permittee shall comply with all applicable Federal, State, and local regulations and shall obtain any and all other required permits prior to the beginning of any on-site improvements or construction approved by this permit.

**IX. Special Provisions**

None.

**PART NO. 2**

**Attachment A**

Parts I-IV, as described in 30 TAC §330.51(a), which comprise the Permit Application for MSW Permit No. 1454B.

**PART NO. 3**

**Attachment B**

Minor Amendments, Modifications, and Corrections may be issued for MSW Permit No. 1454B. The minor amendment, modification, or correction document prepared and executed with an approval date shall be attached to this attachment. There is no limitation on the number of these documents that may be included in Attachment B of this permit.





## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PERMIT FOR MUNICIPAL  
SOLID WASTE MANAGEMENT FACILITY  
issued under provisions of Texas  
Health & Safety Code Ann.  
Chapter 361 (Vernon)

MSW Permit No.: 47A

Name of Permittee: IESI TX Landfill, LP  
and 2301 Eagle Parkway, Suite 200  
Site Owner: Fort Worth, TX 76177

Facility Name: IESI Weatherford Landfill

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 amended permit is granted subject to the rules and orders of the Commission and laws of the State of Texas and it replaces any previously issued permit. Nothing in this permit exempts the permittee from compliance with other applicable rules and regulations of the Texas Commission on Environmental Quality. This permit will be valid until canceled, amended, or revoked by the Commission, or until the site is completely filled or rendered unusable, whichever occurs first.

APPROVED, ISSUED AND EFFECTIVE in accordance with Title 30 Texas Administrative Code Chapter 330 as in effect before March 27, 2006.

ISSUED DATE: **AUG 17 2007**

A handwritten signature in black ink, appearing to be "D. J. [unclear]".

\_\_\_\_\_  
Executive Director  
Texas Commission on Environmental Quality



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IESI Weatherford Landfill  
MSW Permit No. 47A

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**I. Size and Location of Facility**

- A. The IESI Weatherford Landfill is located in Parker County, Texas approximately 1¼ miles southwest of the City of Weatherford municipal limits, about one mile east of the intersection of Dennis Road and Old Brock Road, at 3131 Old Brock Road. The address of the landfill entrance is 3131 Old Brock Road.
- B. The legal description is contained in Part I of the application found in Attachment A of this permit.
- C. Coordinates and Elevation of Site Permanent Benchmark:

Latitude: N 32° 43' 7.2"  
Longitude: W 97° 51' 32.2"  
Elevation: 1,034.04 feet above mean sea level (msl)

**II. Incorporated Application Materials**

This permit is based on and the permittee shall follow Parts I through IV of the permit application submittals, which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality (TCEQ). These materials are incorporated into this permit by reference in Attachment A as if fully set out herein. Any and all revisions to these application materials shall become conditions of this permit upon the date of approval by the Commission.

Part V of the permit application shall be submitted upon completion of construction of the facility. The permittee shall maintain Parts I through V of the application as described in 30 TAC §330.51(a) at the facility and make them available for inspection by TCEQ personnel. [Chapter 330 rule citations here and forward in this permit were those in effect before the March 27, 2006 revisions.]

**III. Facilities and Operations Authorized**

- A. Days and Hours of Operation and Waste Acceptance

The facility is authorized to operate from 5:00 am to 9:00 pm, Monday through Friday and to accept waste from 7:00 am to 7:00 pm, Monday through Friday. The facility is also authorized to operate and accept waste on an alternative schedule during special occasions, special purpose events, holidays, or other special occurrences. These special occurrences and associated alternative hours are provided in Part IV of the amendment application.



B. Wastes Authorized at This Facility

The permittee is authorized to dispose of municipal solid waste including household solid waste, commercial solid waste, construction and demolition waste, and yard waste; class 2 and class 3 non-hazardous industrial solid waste; non-regulated asbestos-containing material (non-RACM); treated medical waste; conditionally exempt small quantity generator (CESQG) waste; and certain other special wastes that are identified in Part IV found in Attachment A of this permit. The acceptance of the special wastes, indicated in Part IV of Attachment A of this permit, is contingent upon such waste being handled in accordance with Title 30 Texas Administrative Code (30 TAC) Section (§) 330.136, and in accordance with the listed and described procedures in Part IV found in Attachment A of this permit, subject to the limitations and special provisions provided herein.

C. Wastes Prohibited at This Facility

The permittee shall comply with the waste disposal restrictions set forth in 30 TAC §330.5(e). Regulated hazardous waste, class 1 non-hazardous industrial waste, regulated asbestos-containing material (RACM), polychlorinated biphenyl (PCB) waste, radioactive waste, untreated medical waste, lead acid storage batteries, used motor vehicle oil, used oil filters from internal combustion engines, whole used or scrap tires, prohibited liquid waste, and any waste not identified in Section III.B of this permit shall not be accepted at this facility.

D. Waste Acceptance Rate

Authorized solid waste may be accepted for disposal at this site at the initial rate of approximately 214,500 tons per year (825 tons per day, five days per week), increasing over time to an acceptance rate of approximately 286,000 tons per year (1,100 tons per day, five days per week). The actual yearly waste acceptance rate is a rolling quantity based on the sum of the previous four quarters of waste acceptance. More details regarding present and future waste acceptance rates are in the permit application, Part I, Section 1.3.

E. Waste Volume Available for Disposal

The total waste disposal capacity of the landfill is 7,348,000 cubic yards.



F. Facilities Authorized

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

G. Changes, Additions, or Expansions

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

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

A. Facility design, construction, and operation and/or maintenance must comply with the provisions of this permit; Commission Rules, including 30 TAC §§330.50 through 330.65, 330.111 through 330.139, 330.150 through 330.159, 330.200 through 330.206, 330.230 through 330.242, 330.250 through 330.256, 330.280 through 330.284, and 330.300 through 330.305; Chapter 37, Subchapter R; special provisions contained in this permit; and Parts I through IV of the application found in Attachment A of this permit, and shall be managed in a manner to protect human health and the environment.

B. The entire waste management facility shall be designed, constructed, operated, and maintained to prevent the release and migration of any waste, contaminant, or pollutant beyond the point of compliance as defined in 30 TAC §330.2 and to prevent inundation or discharge from the areas surrounding the facility components. Each receiving, storage, processing, and disposal area shall have a containment system that will collect spills and incidental precipitation in such a manner as to:

1. preclude the release of any contaminated runoff, spills, or precipitation;
2. prevent washout of any waste by a 100-year storm; and
3. prevent run-on into the disposal areas from off-site areas.



- C. The site shall be designed and operated so as not to cause a violation of:
1. the requirements of §26.121 of the Texas Water Code;
  2. any requirements of the Federal Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements of §402, as amended, and/or the Texas Pollutant Discharge Elimination System (TPDES), as amended;
  3. the requirements of §404 of the Federal Clean Water Act, as amended; and
  4. any requirement of an area wide or statewide water quality management plan that has been approved under §208 or §319 of the Federal Clean Water Act, as amended.
- D. Contaminated water shall be handled, stored, treated, disposed of, and managed in accordance with 30 TAC §330.55(b)(6), 30 TAC §330.56(o), and Part III, Attachment 15 found in Attachment A of this permit.
- E. Best management practices for temporary erosion and sedimentation control shall remain in place until sufficient vegetative cover has been established to control and mitigate erosion on areas having final cover. Vegetative cover will be monitored and maintained throughout the post-closure care period in accordance with Part III, Attachment 13 found in Attachment A of this permit.
- F. Storm water runoff from the active portion of the landfill shall be managed in accordance with 30 TAC §§330.55(b)(3) and 330.133(b), and as described in Part III found in Attachment A of this permit.
- G. All facility employees and other persons involved in facility operations shall be qualified, trained, educated, and experienced to perform their duties so as to achieve compliance with this permit. The permittee shall comply with 30 TAC §330.52(b)(9) and as described in Part I found in Attachment A of this permit. The permittee shall further ensure that personnel are familiar with safety procedures, contingency plans, the requirements of the Commission's rules and this permit, commensurate with their levels and positions of responsibility, in accordance with Part III and Part IV found in Attachment A of this permit. All facility employees and other persons involved in facility operations shall obtain the appropriate level of operator certification as required by statute and applicable regulations.



- H. The facility shall be monitored for increases in bird populations. Any increase in bird activity that might be hazardous to safe aircraft operations will require prompt mitigation actions.

**V. Financial Assurance**

- A. Authorization to operate the facility is contingent upon compliance with provisions contained within the permit and maintenance of financial assurance in accordance with 30 TAC Chapter 330, Subchapter K and 30 TAC Chapter 37, Subchapter R.
- B. Within 60 days after the date of issuance of this permit, the permittee shall provide financial assurance instrument(s) for demonstration of closure of the landfill in accordance with 30 TAC §§330.253(d)(6) and 330.281. The closure cost estimate of \$1,869,311 (2005 dollars) is based on estimates as described in Part III Attachments 8 and 12 found in Attachment A of this permit. The financial assurance instrument shall be in an amount that includes the inflation factors for each calendar year following 2005.
- C. Within 60 days after the date of issuance of this permit, the permittee shall provide financial assurance instrument(s) for demonstration of post-closure care of the landfill in an amount for the entire landfill facility. The post-closure care cost estimate of \$1,748,236 (2005 dollars) is based on estimates as described in Part III Attachments 8 and 13 found in Attachment A of this permit. The financial assurance instrument shall be in an amount that includes the inflation factors for each calendar year following 2005.
- D. The owner and/or operator shall annually adjust closure and/or post-closure care cost estimates for inflation within 60 days prior to the anniversary date of the establishment of the financial assurance instrument pursuant to 30 TAC §§330.281 and 330.283, as applicable.
- E. If the facility closure and/or post-closure care plan is modified in accordance with 30 TAC §305.70, the permittee shall provide new cost estimates in current dollars in accordance with 30 TAC §§330.253(d)(6), 330.254(b)(3)(D), 330.281, and 330.283, 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.



**VI. Facility Closure**

Closure of the facility shall commence:

- A. Upon completion of the disposal operations and the site is completely filled or rendered unusable in accordance with Part III, Attachment 7 found in Attachment A of this permit;
- B. Upon direction by the Executive Director of the TCEQ for failure to comply with the terms and conditions of this permit or violation of State or Federal regulations. The Executive Director is authorized to issue emergency orders to the permittee in accordance with §§ 5.501 and 5.512 of the Water Code regarding this matter after considering whether an emergency requiring immediate action to protect the public health and safety exists;
- C. Upon abandonment of the site;
- D. For failure to secure and maintain an adequate bond or other financial assurance as required; or
- E. Upon the permittee's notification to the TCEQ that the landfill will cease to accept waste and no longer operate at any time prior to the site being completely filled to capacity.

**VII. Site Completion and Closure**

The landfill shall be completed and closed in accordance with 30 TAC §330.250 and the applicable portions of 30 TAC §§330.253 through 330.256. Upon closure, the permittee shall submit to the Executive Director documentation of closure as set out in 30 TAC §330.253. Post-closure care and maintenance shall be conducted in accordance with Part III, Attachment 13 found in Attachment A of this permit, for a period of 30 years or as otherwise determined by the Executive Director pursuant to 30 TAC §330.254(b).

**VIII. Standard Permit Conditions**

- A. Parts I through IV, as described in 30 TAC §330.51(a), which comprise the Permit Application for MSW Permit No. 47A are hereby made a part of this permit as Attachment A. The permittee shall maintain Parts I through IV and Part V, as described in 30 TAC §330.51(a), 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 §§330.54 and 330.55. 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 §§330.57 and 330.114.

- B. Attachment B, consisting of minor amendments, modifications, and corrections to this permit, is hereby made a part of this permit.
- C. The permittee shall comply with all conditions of this permit. Failure to comply with any permit condition may constitute a violation of the permit, the rules of the Commission, and the Texas Solid Waste Disposal Act, and is grounds for an enforcement action, revocation, or suspension.
- D. A pre-construction conference shall be held pursuant to 30 TAC §330.64(c) before any expansion-related construction is begun within the permit boundary to ensure that all aspects of this permit, construction activities, and inspections are met. Additional pre-construction conferences may be held prior to the opening of the facility.
- E. A pre-opening inspection shall be held pursuant to 30 TAC §330.64(d) for the expansion-related construction areas.
- F. The permittee shall monitor sediment accumulations in ditches and culverts on a quarterly basis, and remove sedimentation to re-establish the design flow grades on an annual basis or more frequently if necessary to maintain the design flow.
- G. The tracking of mud off-site onto any public right-of-way shall be minimized.
- H. In accordance with 30 TAC §330.7(a), the permittee shall record in the deed records of Parker 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 §330.7(b).
- I. Daily cover of the waste fill areas shall be performed with clean soil that has not been in contact with waste or with an alternate daily cover which has been approved in accordance with 30 TAC §§330.133(c) and 305.70. Intermediate cover, run-on, and run-off controls shall not be constructed from soil that has been scraped up from prior daily cover or which contains waste.
- J. During construction and operation of the facility, measures shall be taken to control runoff, erosion, and sedimentation from disturbed areas. Erosion and sedimentation



control measures shall be inspected and maintained at least monthly and after each storm event that meets or exceeds the design storm event. Erosion and sedimentation controls shall remain functional until disturbed areas are stabilized with established permanent revegetation. The permittee shall maintain the on-site access road and mud control devices, if present, in such a manner as to minimize the buildup of mud on the access road and to maintain a safe road surface.

- K. In complying with the requirements of 30 TAC §330.123, 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 §330.62(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 §561.052 of the Texas Health and Safety Code.
- N. The provisions of this permit are severable. If any permit provision or the application of any permit provision to any circumstance is held invalid, the remainder of this permit shall not be affected.
- O. Regardless of the specific design contained in Attachments A and B of this permit, the permittee shall be required to meet all performance standards required by the permit, the regulations, and as required by local, state, and federal laws or ordinances.
- P. If differences exist between permit provisions, application materials (incorporated as Parts I through IV of Attachment A of this permit), and the rules under 30 TAC Chapter 330, then the permit provisions and the rules shall hold precedence over the application materials.
- Q. The permittee shall comply with the requirements of the air permit exemption in 30 TAC §106.534, if applicable, and the applicable requirements of 30 TAC Chapters 106 and 116.
- R. All discharge of storm water will be in accordance with the U.S. Environmental Protection Agency NPDES requirements and/or the State of Texas TPDES requirements, as applicable.



**IX. Incorporated Regulatory Requirements**

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

**X. Special Provisions**

None

**Attachment A**

Parts I through IV of the Permit Application

**Attachment B**

Minor Amendments, Corrections, and Modifications that may be issued for MSW Permit No. 47A

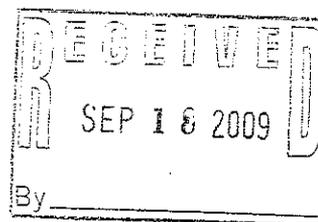
The minor amendment, modification, or correction document prepared and executed with an approval date shall be attached to this attachment. There is no limitation on the number of these documents that may be included in Attachment B of this permit.







Bryan W. Shaw, Ph.D., *Chairman*  
Buddy Garcia, *Commissioner*  
Carlos Rubinstein, *Commissioner*  
Mark R. Vickery, P.G., *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

September 17, 2009

TO: Persons on the attached mailing list.

RE: BFI Waste Systems of North America, LLC  
TCEQ Docket No. 2007-1774-MSW; SOAH Docket No. 582-08-2178  
MSW Permit No. 1447A

### **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, as described below, 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 20 days after the date a person is notified of the Commission's order on this application. A person is presumed to have been notified on the third day after the date that this order is mailed.

Motions may be filed with the chief clerk electronically at <http://www10.tceq.state.tx.us/epic/efilings/> or by filing an original and 7 copies with the Chief Clerk at the following address:

LaDonna Castañuela, 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 motions for rehearing and responses are located in 30 Texas Administrative Code (TAC) §80.272 and 30 TAC §1.10-1.11. The hardcopy filing requirement is waived by the General Counsel pursuant to 30 TAC §1.10(h).

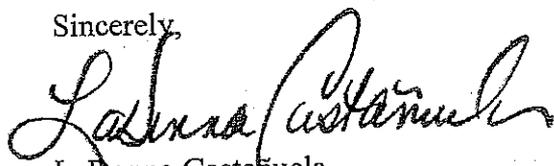
Exhibit K

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 or official docket number assigned by the Commission; (3) the date of the order; and (4) a concise statement of each allegation of error.

Unless the time for the Commission to act on the motion is extended, the MFR is overruled by operation of law 45 days after a person is notified of the Commission's order on this application. If the Commission does not receive a motion for rehearing, the permit will be issued and forwarded to appropriate parties.

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

Sincerely,



LaDonna Castañuela  
Chief Clerk

LDC/ms

Enclosures

BFI Waste Systems of North America, LLC  
TCEQ Docket No. 2007-1774-MSW  
SOAH Docket No. 582-08-2178

FOR THE APPLICANT:

Paul Gosselink \*  
John Carlson  
Lloyd Gosselink Rochelle & Townsend, P.C.  
816 Congress Avenue, Suite 1900  
Austin, Texas 78701

Brad Dugas  
South Central Texas District Manager  
BFI Waste Systems of North America, Inc.  
4542 Southeast Loop 410  
San Antonio, Texas 78222

Ray Shull, P.E., President  
Associated Consulting Engineers, Inc.  
901 South MoPac Expressway,  
Building II, Suite 165  
Austin, Texas 78746

INTERESTED PERSONS:

See attached list.

FOR THE EXECUTIVE DIRECTOR  
via electronic mail:

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

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

FOR OFFICE OF PUBLIC ASSISTANCE  
via electronic mail:

Bridget Bohac, Director  
Texas Commission on Environmental Quality  
Office of Public Assistance MC-108  
P.O. Box 13087  
Austin, Texas 78711-3087

FOR PUBLIC INTEREST COUNSEL  
via electronic mail:

Amy Swanholm, 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:

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

\* The Honorable William G. Newchurch  
Administrative Law Judge  
State Office of Administrative Hearings  
P. O. Box 13025  
Austin, Texas 78711-3025

\* Courtesy Copy via inter-agency mail



ADAMS , CHRISTOPHER & LORRIE  
7012 MUCKENDER LN  
AUSTIN TX 78754-5736

AHNELL , LANE E  
11605 RYDALWATER LN  
AUSTIN TX 78754-5720

ALBEE , KATHRYN E  
11406 BIRCHOVER LN  
AUSTIN TX 78754-5717

ALBRECHT , EMILY & LESLIE  
3500 QUIETTE DR  
AUSTIN TX 78754-4925

AMES , VA  
11311 AVERING LN  
AUSTIN TX 78754-5742

ANDREWS , ROBERT G  
6815 ASHPRINGTON LN  
AUSTIN TX 78754-5710

ANGLIN , GERI  
19301 EYERLEY RD  
MANOR TX 78653-4831

ASCOT , KARIN  
405 ACADEMY DR  
AUSTIN TX 78704-1812

ATTRA , ED  
1613 BRUSHY VIEW CV  
AUSTIN TX 78754-2000

AVILA , ISRAEL  
6721 CROMARTY LN  
AUSTIN TX 78754-5824

BALLARD , TODD  
6502 CARISBROOKE LN  
AUSTIN TX 78754-5700

BELCHER , CHARLES G  
6924 THISTLE HILL WAY  
AUSTIN TX 78754-5803

BELCHER , CYNTHIA R  
6924 THISTLE HILL WAY  
AUSTIN TX 78754-5803

BENTLEY , JEREMIAH  
12100 KILMARTIN LN  
MANOR TX 78653-4772

BESS , LIONEL  
4713 FORT MOULTRIE LN  
AUSTIN TX 78754-5408

BEST , JOYCE  
4001 LICORICE LN  
AUSTIN TX 78728-3617

BISCOE, SAMUEL T & DAUGHERTY, GERALD  
PO BOX 1748  
AUSTIN TX 78767-1748

BLACKBURN JR , JAMES B \*  
BLACKBURN CARTER PC  
4709 AUSTIN ST  
HOUSTON TX 77004-5004

BORST , GAYLE  
2313 W 8TH ST  
AUSTIN TX 78703-4318

BOWLES , JIM  
7117 WHIFFLEWIND WAY  
AUSTIN TX 78754-5765

BRADLEY , JAMES E  
BRADLEY LAW FIRM  
STE 1525  
5718 WESTHEIMER RD  
HOUSTON TX 77057-5745

BREAZEALE , DR. & MRS J L  
PO BOX 142427  
AUSTIN TX 78714-2427

BROOKS , DEWY  
9210 WELLESLEY DR  
AUSTIN TX 78754-5020

BULLOCK , LINDA & PAUL  
11501 LOWESWATER LN  
AUSTIN TX 78754-5727

BULLOCK , LINDA  
11501 LOWESWATER LN  
AUSTIN TX 78754-5727

BUNODONO , TONY  
11105 SEAY ST  
AUSTIN TX 78754-5766

CAINAL , TERRY  
11017 RELIANCE CREEK DR  
AUSTIN TX 78754-5918

CANNON , CARRIE & MATTHEW  
11621 RYDALWATER LN  
AUSTIN TX 78754-5720

CARMAN , NEIL  
TEXAS STATE SIERRA CLUB & LOCAL CHAP  
1202 SAN ANTONIO ST  
AUSTIN TX 78701-1834

CARMAN , NEIL J PHD CLEAR AIR DIR  
LONE START CHAPTER SIERRA CLUB  
PO BOX 1931  
AUSTIN TX 78767-1931

CARTER, MARY W  
BLACKBURN CARTER PC  
4709 AUSTIN ST  
HOUSTON TX 77004-5004

COOK, LEE  
9500 E HIGHWAY 290  
AUSTIN TX 78724-2316

COTTLE, SEAN  
11009 SILO VALLEY DR  
AUSTIN TX 78754-5914

CUEVA, TERRY  
HARRIS BRANCH  
6008 SPEYSIDE DR  
MANOR TX 78653-4750

CULLENDER, DOKA  
6309 BOYCE LN  
MANOR TX 78653-4774

DABBS, CHUCK  
11410 BIRCHOVER LN  
AUSTIN TX 78754-5717

DANIEL, JAMES  
11333 AVERING LN  
AUSTIN TX 78754-5742

DAVIS, RON  
TRAVIS CO COMM CRT PCT 1  
PO BOX 1748  
AUSTIN TX 78767-1748

DEANDA, JUAN  
6916 THISTLE HILL WAY  
AUSTIN TX 78754-5803

DOCTOROFF, MANDY  
6417 BOYCE LN  
AUSTIN TX 78754

DOHERTY, JOCELYN  
1103 BYERS LN  
AUSTIN TX 78753-6904

DOUGLAS, MANDY N  
7020 THISTLE HILL WAY  
AUSTIN TX 78754-5805

ECKHARDT, SARAH  
PO BOX 1748  
AUSTIN TX 78767-1748

ENGLISH, B TREK  
3616 QUIETTE DR  
AUSTIN TX 78754-4927

ENGLISH, B TREK  
NORTHEAST ACTION GROUP  
3705 TOBY CT  
ARLINGTON TX 76001-5372

ESPINOZA, ABEL & ANNA  
6905 WILLIAM WALLACE WAY  
AUSTIN TX 78754-5808

ESPINOZA, DAVID  
11445 GLEN FALLOCH CT  
AUSTIN TX 78754-5796

FERGUSON, JEANIE C  
4712 VIRGINIA DARE LN  
AUSTIN TX 78754-5438

FIELDS, MELISSA  
3521 LONG DAY DR  
AUSTIN TX 78754-5921

FLEETWOOD, TIM  
9011 MAGNA CARTA LOOP  
AUSTIN TX 78754-5429

FOWLER, MARSHA & WALLACE  
3604 EK LN  
AUSTIN TX 78754-4923

FRIESEN, KYLE  
4714 VIRGINIA DARE LN  
AUSTIN TX 78754-5438

FRIESEN, KYLE & SARA  
4714 VIRGINIA DARE LN  
AUSTIN TX 78754-5438

GARCIA, DEL  
7004 DAGON DR  
AUSTIN TX 78754-5760

GERNALE, CHRISTINA  
4800 DORCHESTER HEIGHTS LN  
AUSTIN TX 78754-5404

GOMEZ, MARGARET TRAVIS CO COMMISSION  
TRAVIS COUNTY COMMISSIONER  
PO BOX 1748  
AUSTIN TX 78767-1748

GONZALES, HECTOR  
PO BOX 367  
WEBBERVILLE TX 78653-0367

GRAHAM, CHRIS & DIANE  
11317 AVERING LN  
AUSTIN TX 78754-5742

GUDENRATH, JEFF & JENNIFER  
5600 CLYDE LN  
MANOR TX 78653-5085

GUNLOCK, MR DAVID  
8004 BROWN CEMETERY RD  
MANOR TX 78653-4986

GUTIERREZ, JOCABED  
3404 LONG DAY DR  
AUSTIN TX 78754-5920

HAIRSTON, NANA T  
8109 GEORGIAN DR  
AUSTIN TX 78753-6439

HALLOCK, CHRISTINE  
1304 E APPLGATE DR  
AUSTIN TX 78753-4009

HANNA, MICHAEL  
3612 SAVAGE SPRINGS DR  
AUSTIN TX 78754-5906

HEAD, J D   
FRITZ BYRNE HEAD & HARRISON PLLC  
STE 2000  
98 SAN JACINTO BLVD  
AUSTIN TX 78701-4082

HERNANDEZ, ANTONIO  
127 OLD AUSTIN TRL  
ELGIN TX 78621-5744

HILL, JULIE L  
7004 WILLIAM WALLACE WAY  
AUSTIN TX 78754-5809

HILLE JR, JOHN C DIRECTOR, TRANSACTIONS  
DIVISION  
TRAVIS COUNTY  
PO BOX 1748  
AUSTIN TX 78767-1748

HIRONYMOUS, ELLEN  
2402 POST OAK RD  
WEBBERVILLE TX 78653-5305

HOBBS, DENNIS L  
PO BOX 17126  
AUSTIN TX 78760-7126

HOTCHKISS, JOEL & LISA  
12012 KILMARTIN LN  
MANOR TX 78653-4770

IVERSON, KAY  
11329 FABER VALLEY CV  
AUSTIN TX 78754-3915

JOHNSON, DUSTIN  
11732 DUNFRIES LN  
AUSTIN TX 78754-5820

JOHNSON, LESLIE  
11732 DUNFRIES LN  
AUSTIN TX 78754-5820

JONES, KIM  
7024 THISTLE HILL WAY  
AUSTIN TX 78754-5805

JUNKER, CAM & RONALD  
11709 LANSDOWNE RD  
AUSTIN TX 78754-5817

JUNKER, CAM  
11709 LANSDOWNE RD  
AUSTIN TX 78754-5817

JUNKER, RON  
11709 LANSDOWNE RD  
AUSTIN TX 78754-5817

KANNAPPAN, SHEILA  
7120 DAGON DR  
AUSTIN TX 78754-5761

KERSTEN, AMY  
9038 WELLESLEY DR  
AUSTIN TX 78754-5016

KLOTZ, JANET  
11100 TERRACE BLUFF DR  
AUSTIN TX 78754-2022

KOOCK, KEN  
6106 SKAHAN LN  
AUSTIN TX 78739-1630

KUSTERER, ROBERT  
11501 GLEN FALLOCH CT  
AUSTIN TX 78754-5807

LANFORD, ROBERT L  
PO BOX 141411  
AUSTIN TX 78714-1411

LEHMAN, MARY  
110 E 37TH ST  
AUSTIN TX 78705-1567

LEITNER, LARRY  
11328 AVERING LN  
AUSTIN TX 78754-5741

LONG, WELDON  
2118 S CONGRESS AVE  
AUSTIN TX 78704-4317

LONGORIA, NORA  
7005 DAGON DR  
AUSTIN TX 78754-5762

LUTTIG, ALLAN  
11105 SEAY ST  
AUSTIN TX 78754-5766

LUTTIG, PAM  
11105 SEAY ST  
AUSTIN TX 78754-5766

LUTTIG-BUONODONO, AMBER  
11105 SEAY ST  
AUSTIN TX 78754-5766

LYONS, LARRY  
1502 ECHO BLUFF CV  
AUSTIN TX 78754-2015

MARCHAK, JAMES  
6300 THIRLMARE CT  
AUSTIN TX 78754-5732

MARTINEZ, ADRIANA  
9009 MAGNA CARTA LOOP  
AUSTIN TX 78754-5429

MARTINEZ, EMILIO  
9009 MAGNA CARTA LOOP  
AUSTIN TX 78754-5429

MARTINEZ, FABIAN  
9009 MAGNA CARTA LOOP  
AUSTIN TX 78754-5429

MARTINEZ, JESUS  
9009 MAGNA CARTA LOOP  
AUSTIN TX 78754-5429

MARTINEZ, MARIA  
9009 MAGNA CARTA LOOP  
AUSTIN TX 78754-5429

MARTINEZ, REBECCA  
1613 BRUSHY VIEW CV  
AUSTIN TX 78754-2000

MCAFFEE, ANNE C  
4831 TIMBERLINE DR  
AUSTIN TX 78746-5630

MCAFFEE, MARK  
10463 SPRINKLE RD  
AUSTIN TX 78754-9604

MCAFFEE, MARK & MELANIE  
6315 SPICEWOOD SPRINGS RD  
AUSTIN TX 78759-7703

MCAFFEE, MARK  
6315 SPICEWOOD SPRINGS RD  
AUSTIN TX 78759-7703

MCAFFEE, MELANIE  
6315 SPICEWOOD SPRINGS RD  
AUSTIN TX 78759-7703

MCAFFEE, MELANIE  
NORTHEAST ACTION GROUP  
10463 SPRINKLE RD  
AUSTIN TX 78754-9604

MCCULLOUGH, OTIS D  
11731 RYDALWATER LN  
AUSTIN TX 78754-5725

MCCULLOUGH, PAMELA J  
11731 RYDALWATER LN  
AUSTIN TX 78754-5725

MCLEOD, C ROSS  
1608 PAYTON FALLS DR  
AUSTIN TX 78754-5874

MELVIN, MICHAEL  
6514 CARISBROOKE LN  
AUSTIN TX 78754-5700

MILLER, CHRISTINE & KENNETH W  
6823 ASHPRINGTON LN  
AUSTIN TX 78754-5710

MILSTEAD, JAN  
1903 REDLANDS ST  
AUSTIN TX 78757-2827

MONTOYA, CINDY  
6701 TULLOCH WAY  
AUSTIN TX 78754-5822

MONTOYA, CINDY & ROBERTO  
6701 TULLOCH WAY  
AUSTIN TX 78754-5822

MORGAN, SUSAN  
1611 BRUSHY VIEW CV  
AUSTIN TX 78754-2000

MORSE, KEVIN ASST COUNTY ATTY \*  
TRAVIS COUNTY  
PO BOX 1748  
AUSTIN TX 78767-1748

NAUERT, ALTO & ROSEMARY  
11201 AUS TEX ACRES LN  
MANOR TX 78653-3646

NAUERT, ROSEMARY M  
11201 AUS TEX ACRES LN  
MANOR TX 78653-3646

NAZOR, CRAIG  
11701 BARCHETTA DR  
AUSTIN TX 78758-3762

NGUYEN, DAN  
6904 THISTLE HILL WAY  
AUSTIN TX 78754-5803

NOELKE, HOLLY C ASST CITY ATTY \*  
CITY OF AUSTIN  
PO BOX 1088  
AUSTIN TX 78767-1088

O'BRIEN, MIKE  
6610 BRAMBER LN  
AUSTIN TX 78754-5713

ODOM, DOLORES  
3004 MURRELET WAY  
PFLUGERVILLE TX 78660-7780

OWEN,  
6506 CARISBROOKE LN  
AUSTIN TX 78754-5700

PENNEY, ALICE  
1411 ALMA DR  
AUSTIN TX 78753-6813

PORRAS, ABEL  
6834 WILLIAM WALLACE WAY  
AUSTIN TX 78754-5799

PRINCE, LEAHBETH  
11613 RYDALWATER LN  
AUSTIN TX 78754-5720

PYKA, DAN  
8807 NEWPORT LN  
AUSTIN TX 78754-5049

PYLE, SHERRY  
1509 PAYTON FALLS DR  
AUSTIN TX 78754-5814

REILLY, LESLIE  
455 CYPRESS CREEK LN  
WIMBERLEY TX 78676-3650

REINMOND, ALICIA  
LCRA  
L421  
3700 LAKE AUSTIN BLVD  
AUSTIN TX 78703-3504

REMMERT, CECIL & EVELYN  
11815 CAMERON RD  
MANOR TX 78653-9792

REMMERT, EVELYN  
11815 CAMERON RD  
MANOR TX 78653-9792

RENBARGER, BOB \*  
FRITZ BYREN HEAD & HARRISON PLLC  
STE 2000  
98 SAN JACINTO BLVD  
AUSTIN TX 78701-4082

RICH, GEORGIA  
1609 BRUSHY VIEW CV  
AUSTIN TX 78754-2000

RIGHTMER, MERRY  
6305 THIRLMARE CT  
AUSTIN TX 78754-5732

RINEHART, F  
7793 BURNET RD  
AUSTIN TX 78757-1276

RODRIGUEZ JR, ARTURO D \*  
RUSSELL & RODRIGUEZ LLP  
BLDG 2 STE 200  
1633 WILLIAMS DR  
GEORGETOWN TX 78628-3659

ROGERS, DELMER D.  
5901 SPEYSIDE DR  
MANOR TX 78653-4747

ROUNTREE, MIKE & RAMONA  
6920 THISTLE HILL WAY  
AUSTIN TX 78754-5803

ROUNTREE, RAMONA  
6920 THISTLE HILL WAY  
AUSTIN TX 78754-5803

SCARBOROUGH, CELESTE  
1632 PAYTON FALLS DR  
AUSTIN TX 78754-5815

SCARBOROUGH, CELESTE  
10621 PIONEER FARMS DR  
AUSTIN TX 78754-5415

SCHNEIDER, ROBIN EXECUTIVE DIRECTOR  
TEXAS CAMPAIGN FOR THE ENVIRONMENT  
STE 200  
611 S CONGRESS AVE  
AUSTIN TX 78704-8706

SEIDER, JEFFREY  
6605 CARISBROOKE LN  
AUSTIN TX 78754-5701

SMITH JR, JANET & ROY  
11815A CAMERON RD  
MANOR TX 78653-3841

SMITH, JANET  
11815 CAMERON RD  
MANOR TX 78653-9792

SMITH, KATHY  
6702 CARISBROOKE LN  
AUSTIN TX 78754-5704

SMITH, PATRICK L  
11516 LOWESWATER LN  
AUSTIN TX 78754-5726

SMITH, ROY  
11815A CAMERON RD  
MANOR TX 78653-3841

SPRADLING, CLOYCE  
20560 NW SEDONA LN  
BEAVERTON OR 97006-2030

STEELE, CHRISTI  
12204 INNESVIEW LN  
MANOR TX 78653-4768

SWENSON, GERMAINE  
20826 BLAKE MANOR RD  
MANOR TX 78653-4976

TRAN, CAMTU  
12313 INNESVIEW LN  
MANOR TX 78653-4766

TRONCALE, ANDREA & JASON  
4702 VALCOUR BAY LN  
AUSTIN TX 78754-5436

VEST, JEREMY  
5917 BOYCE LN  
MANOR TX 78653-4737

WALKER, MIRIAM  
6904 BREEZY HILL DR  
AUSTIN TX 78724-2928

WARD, MARTHA KOOCK  
905 E 55TH 1/2 ST  
AUSTIN TX 78751-1615

WERSTLER, ROBERT  
6708 CARISBROOKE LN  
AUSTIN TX 78754-5704

WILKINSON, TONI  
11908 DUNFRIES LN  
AUSTIN TX 78754-5821

WILLIAMS, EVAN M  
524 N LAMAR BLVD STE 203  
AUSTIN TX 78703-5422

STRAMA, THE HONORABLE MARK  
TEXAS HOUSE OF REPRESENTATIVES - DIST 50  
PO BOX 2910  
AUSTIN TX 78768-2910

TERRILL III, PAUL M   
THE TERRILL FIRM PC  
810 W 10TH ST  
AUSTIN TX 78701-2005

TRAN, VU  
6854 THISTLE HILL WAY  
AUSTIN TX 78754-5800

TROUCALE, JASON  
4702 VALCOUR BAY LN  
AUSTIN TX 78754-5436

VEST, KAREN  
5917 BOYCE LN  
MANOR TX 78653-4737

WALTER, K C  
8602 KARLING DR  
AUSTIN TX 78724-1802

WATSON, THE HONORABLE KIRK  
TEXAS SENATE  
PO BOX 12068  
AUSTIN TX 78711-2068

WILKERSON, MURK  
5909 BOYCE LN  
MANOR TX 78653-4737

WILLIAMS, DAVID  
11604 RYDALWATER LN  
AUSTIN TX 78754-5719

WILLIAMSON, AMY  
11017 RELIANCE CREEK DR  
AUSTIN TX 78754-5918

SUTTON, VALERIE  
4810 VALCOUR BAY LN  
AUSTIN TX 78754-5437

THORESEN, JOYCE  
WALNUT PLACE NEIGHBORHOOD ASSOC  
3600 CARLA DR  
AUSTIN TX 78754-4920

TREVINO, ELIZABETH  
12209 LITTLE FATIMA LN  
AUSTIN TX 78753-7073

VALLES, ROLAND  
8805 NEWPORT LN  
AUSTIN TX 78754-5049

VON HAREN, PATRICK  
405 ACADEMY DR  
AUSTIN TX 78704-1812

WARD, MARSHALL L  
11313 AVERING LN  
AUSTIN TX 78754-5742

WENDLAND, ALFRÉD  
16519 MAHLOW RD  
MANOR TX 78653-3529

WILKINS, JOHN A  
803 CUTLASS  
LAKEWAY TX 78734-5338

WILLIAMS, EVAN M  
PO BOX 2144  
AUSTIN TX 78768-2144

WINCHELL, BARBARA  
11341 AVERING LN  
AUSTIN TX 78754-5742

WOLFINGTON, KATHLEEN  
127 OLD AUSTIN TRL  
ELGIN TX 78621-5744

WOODS, JAMES L  
6609 CROMARTY LN  
AUSTIN TX 78754-5823

YOCUM, REX  
11712 DUNFRIES LN  
AUSTIN TX 78754-5820

YOUNG, MICHAEL S  
8901 NEWPORT LN  
AUSTIN TX 78754-5011



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



## AN ORDER

## GRANTING IN PART THE APPLICATION OF BFI WASTE SYSTEMS OF NORTH AMERICA, LLC, FOR TYPE I MSW PERMIT NO. 1447A; SOAH DOCKET NO. 582-08-2178; TCEQ DOCKET NO. 2007-1774-MSW

On September 9, 2009, the Texas Commission on Environmental Quality (TCEQ of Commission) considered the application (Application) of BFI Waste Systems of North America, LLC (BFI) for Type I Municipal Solid Waste Permit No. MSW-1447A. A Proposal for Decision (PFD) was presented by William G. Newchurch, an Administrative Law Judge (ALJ) with the State Office of Administrative Hearings (SOAH), who conducted a hearing in this case from January 20 through January 30, 2009, in Austin, Texas.

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

### I. FINDINGS OF FACT

#### *General Findings*

1. The applicant is BFI Waste Systems of North America, LLC (BFI). Its business address is 4542 Southeast Loop 410, San Antonio, Texas 78222.
2. The facility is the Sunset Farms Landfill (Sunset Farms, Landfill, or the Facility). The street and mailing address for the Facility is 9912 Giles Lane, Austin, Texas 78754.

3. Sunset Farms is located in Travis County at the intersection of Giles Lane and Blue Goose Road, approximately five miles east of the intersection of U.S. 290 and I.H. 35. The Facility is bounded by Blue Goose Road to the north, Giles Lane to the east, the Austin Community Landfill to the south and southwest, and open land to the west.
4. A portion of the permitted boundary is located within the city limits of Austin, Texas, and the remainder of the site is within the extra-territorial jurisdiction (ETJ) of Austin.
5. Sunset Farms is an existing Type I Municipal Solid Waste (MSW) Landfill operating under TCEQ Permit No. MSW-1447. The original permit for the Facility was issued by the Texas Department of Health in 1981.
6. The Facility is currently authorized to accept municipal solid waste, Class 2 and Class 3 industrial nonhazardous solid waste, Class 1 industrial waste that is Class 1 only because of asbestos content, and certain special wastes.
7. The Facility is approximately 349.4 acres in size. The landfill footprint is approximately 251.5 acres.
8. The maximum elevation of waste allowed under the existing permit is 720 feet above mean sea level (msl).
9. The currently permitted landfill has a total disposal capacity of approximately 27.7 million cubic yards.
10. The land on which the Facility is located is owned by BFI and Giles Holding, L.P. (Giles). BFI owns an approximately 55-acre tract within the permit boundaries; Giles owns three other tracts that together comprise the remaining acreage of the Facility.
11. BFI operates the Facility and is the sole permittee under the existing permit. The relationship between BFI and Giles is one of landlord (Giles) and tenant (BFI) with respect to the three Giles-owned tracts.
12. BFI initially submitted its application to the TCEQ Executive Director (ED) on January 20, 2006.

13. Notice that the Application was deemed administratively complete by the ED was issued on January 31, 2006.
14. Notice of the ED's determination that the Application was technically complete was issued on March 21, 2007.
15. The ED issued a draft permit (proposed Permit No. MSW-1447A) on March 21, 2007. A revised draft permit was issued on October 23, 2007 (Draft Permit). The ED prepared the attached Updated Revised Draft Permit, which was admitted into evidence without objection on February 4, 2009.
16. The Notice of Receipt of Application and Intent to Obtain Municipal Solid Waste Permit Amendment containing the information specified in 30 Tex. Admin. Code (TAC) § 39.411 was published on February 27, 2006 in the *Austin American-Statesman*, and on March 2, 2006 in Spanish in the *El Mundo* newspaper.
17. The *Austin American-Statesman* is the newspaper of largest general circulation that is published in the county in which the facility is located.
18. The *El Mundo* newspaper is a publication of general circulation in the City of Austin and Travis County, and is published primarily in Spanish. The *El Mundo* notice was in Spanish.
19. The Notice of Application and Preliminary Decision containing the information required by 30 TAC § 39.411 was published on April 26, May 3, May 10, and May 17, 2007, in the *Austin American-Statesman* and in Spanish in the *El Mundo* newspaper on the same dates.
20. On February 28, 2008, the Commission issued an interim order granting several hearing requests and referring 26 issues to SOAH for a contested case hearing.
21. The Notice of Hearing on the Application was published on April 7, 2008, in the *Austin American-Statesman*.

22. On April 3, 2008, the TCEQ Chief Clerk mailed the Notice of Hearing on the Application to potentially affected persons identified in the Application, to various state and local agencies and officials, to state legislators for the districts in which the Facility is located, and to other persons specified in 30 TAC § 39.413.
23. The Application was filed prior to amendments to Title 30, Chapter 330 of the Texas Administrative Code (the MSW rules) that were implemented and became effective on March 27, 2006. The Application is subject to the version of the MSW rules in effect at the time it was filed. Unless otherwise noted, all references in this Order to rules in Chapter 330 are to those pre-March 27, 2006 rules.
24. As part of the Application, BFI is requesting an authorization (Permit No. MSW-1447A) to vertically expand the Landfill such that the maximum elevation of waste will be 770 feet msl on its eastern portion and 795 feet msl on the western portion.
25. As part of the Application, BFI is requesting to increase the disposal capacity of the Facility by approximately 10.6 million cubic yards.
26. BFI is not requesting an authorization to laterally expand the landfill or to modify the existing permit boundaries.
27. BFI is seeking to make certain drainage improvements at the Facility as part of the Application for vertical expansion.
28. The preliminary hearing on the Application commenced before ALJ William Newchurch at 10:00 a.m. on May 8, 2008, at the SOAH hearing rooms, William P. Clements Building, 300 West 15th Street, Austin, Texas 78701.
29. The following persons and entities were named as parties to the proceeding: BFI, Giles, the ED, the Office of Public Interest Counsel (OPIC), Travis County, the City of Austin, TFJA, L.P. (TJFA), Northeast Neighbors Coalition (NNC), Mark McAfee, Melanie McAfee, Roger Joseph, Delmer D. Rogers, Williams, Ltd. (Williams), and Pioneer Farms.

*Settlement and Agreements*

30. Before or during the hearing, BFI reached partial agreements with several of the parties, settling portions of the dispute. These agreements culminated in both stipulations on some issues, requests for special conditions to the permit, and changes to the Application.
31. Pioneer Farms withdrew prior to the Hearing on the Merits as part of a settlement agreement with BFI.
32. In accordance with these agreements, several issues which were referred by the Commission were stipulated to by some of the parties and not objected to by any other party. All of these stipulations were either supported by the evidence at the hearing or were not contradicted by the evidence. Based on these stipulations:
  - a. Identification and/or protection of wetlands has not been referred as an issue.
  - b. BFI has in all respects satisfied any burden pertaining to matters regarding the identification and/or protection of wetlands in this proceeding.
  - c. Referred Issue J, pertaining to whether the application includes adequate provisions for closure and post closure care in accordance with TCEQ rules, is adequately addressed in the Application and Draft Permit and is not in dispute and may be resolved as if BFI had obtained summary disposition in its favor with respect to this issue. The stipulation does not extend to the adequacy of the final cover provisions of the closure plan, which is addressed under other issues.
  - d. Referred Issue S, pertaining to whether the application includes adequate provisions for fire protection in accordance with TCEQ rules, is adequately addressed in the Application and Draft Permit and is not in dispute and may be resolved as if BFI had obtained summary disposition in its favor with respect to this issue.
  - e. Referred Issue Z, pertaining to whether the storage, treatment and disposal of contaminated water, is adequately addressed in the Application and Draft Permit and is not in dispute and may be resolved as if BFI had obtained summary disposition in its favor with respect to this issue.
33. BFI has requested inclusion of several special conditions to the permit. All of these special conditions were supported by the evidence at the hearing or were not contradicted by the evidence. Inclusion of these special conditions will make the permit more

protective than it would have been if issued as originally proposed. These special conditions are:

- a. The permittee shall comply with the conditions specified in a letter from the Capital Area Council of Governments (CAPCOG) to the TCEQ, dated August 23, 2006, and agreed to by the applicant in a letter to CAPCOG dated January 18, 2007, as described in Section I.B (Supplementary Technical Report) of Part I of the Application and documented in Section II.K (Coordination Letters) of Part II of the Application.
- b. All waste receipt shall cease on or before November 1, 2015. The permittee shall restrict the property on which the landfill currently operates from use for transfer station operations on or after November 1, 2015. After the last receipt of wastes, the permittee shall complete installation of the permitted final cover system in accordance with 30 TAC § 330.253. The maximum heights, depths and footprint for the landfill fill area, as approved by the TCEQ under permit No. MSW 1447A, shall not be exceeded by any subsequent modification or amendment of the permit.
- c. Leachate and gas condensate shall not be recirculated.
- d. The permittee shall repair eroded cover within five days of detection unless the Commission's regional office approves otherwise.
- e. Special Provisions E.1 – E.9 identified in the Updated Revised Draft Permit proposed by the Executive Director are incorporated as a result of a Settlement Agreement between BFI, Giles, and the City of Austin, filed with SOAH on October 31, 2008 (Settlement Agreement). They include various requirements to control erosion, which are described in detail in the Findings of Fact below. These enhanced erosion controls include increased vegetative cover, irrigation requirements, permanent erosion control devices on top decks, side slope, and soil stockpiles and maintenance requirements for the water quality detention pond.
- f. BFI will not use alternative material daily cover (ADC) at the Sunset Farms Landfill.

#### ***Sufficiency of the Permit Application and Draft Permit***

34. The Application was prepared by Associated Consulting Engineers, Inc. (ACE) pursuant to a Notice of Engineer's Appointment prepared by BFI. The lead project engineer was Ray Shull, P.E. The lead project geoscientist was John Michael Snyder, P.G., of Biggs &

Mathews Environmental, Inc. Other licensed professional engineers and geoscientists assisted in preparation of various portions of the Application.

35. The seals of Mr. Shull or other engineers licensed in the State of Texas were affixed to all engineering plans and drawings and on the Application cover pages. The seal of Mr. Snyder was affixed to Part III, Attachments 4, 5, and 11 and to various plans and drawings contained within those sections. The seal of Gregory Adams, P.E., was affixed to the geotechnical report (a portion of Part III, Attachment 4), the Soil and Liner Quality Control Plan (Part III, Attachment 12), and the Final Cover Quality Control Plan (Part III, Attachment 12, Appendix 12A).
36. BFI has coordinated with all appropriate agencies, officials, and authorities that may have a jurisdictional interest in the Application.
37. BFI has provided complete information concerning governmental permits, authorizations, and construction approvals it has received or applied for.
38. The Application contains all information required of applicants under Title 30, Chapter 330 of the Texas Administrative Code and other regulations that govern MSW applications in Texas.
39. The conditions which exist at and near the Facility are favorable for the vertical expansion of an existing MSW landfill that is designed, constructed, and operated in a manner considered standard by engineers and geoscientists specializing in their respective fields and which is embodied in the MSW rules.
40. There are no site-specific conditions that require special design considerations. The site is well suited to the design, construction, operation, and, ultimately, closure and post-closure of an MSW landfill.

***Governmental Coordination, Authorizations, and Permits***

41. BFI (or consultants on its behalf) coordinated the Application with the following governmental agencies:

- a. U.S. Army Corps of Engineers;
  - b. Texas Parks and Wildlife Department;
  - c. U.S. Fish and Wildlife Department;
  - d. Federal Aviation Administration;
  - e. TCEQ Watershed Management Team;
  - f. Texas Historical Commission; and
  - g. Texas Department of Transportation.
42. Each of these federal and state governmental agencies responded that the Application was not problematic with respect to that agency's jurisdictional area. Agency coordination letters were included in Part II, Section II.K of the Application.
43. BFI also provided written information regarding the proposed expansion to the CAPCOG, which is a 10-county regional planning commission. CAPCOG issued its conditional conformance letter on August 23, 2006, in which it made the determination that the proposed vertical expansion conformed to CAPCOG's regional solid waste management plan provided that BFI agreed to conform the project to the conditions set forth in CAPCOG's letter. BFI agreed to the conditions of CAPCOG's conditional conformance letter in a letter it sent to CAPCOG on January 18, 2007.
44. Based on the Special Conditions which satisfy requests of CAPCOG, the requested vertical expansion of the Sunset Farms landfill conforms to CAPCOG's regional solid waste management plan.
45. BFI has obtained development permits from the City of Austin and Travis County for the new sedimentation/water quality pond that is being proposed in the permit application.
46. BFI has applied for a site development permit from Travis County in connection with the proposed vertical expansion.
47. BFI has applied for a site development permit from the City of Austin in connection with the proposed vertical expansion.

48. Based on the Special Provisions which satisfy the Settlement Agreement between BFI and the City of Austin, BFI is in compliance with all development permitting requirements of the City of Austin.
49. BFI operates its storm water controls pursuant to the Texas Pollutant Discharge Elimination System (TPDES) General Multi-Sector Permit.
50. BFI has prepared and implemented a Storm Water Pollution Prevention Plan (SWPPP) in connection with TCEQ's approval of its notice of coverage under the TPDES program.
51. With respect to air quality authorizations (for landfill emissions and gas flares), BFI holds a current General Operating Permit as well as a current Standard Air Permit that have both been approved by TCEQ.

#### *Transfer of the Permit Application*

52. The application was originally filed – and the draft permit issued – in the name of “BFI Waste Systems of North America, Inc.”
53. In December 2007, BFI changed corporate form from a regular corporation to a limited liability corporation, “BFI Waste Systems of North America, LLC.”
54. BFI mailed a notice of the proposed transfer of the permit amendment Application to potentially affected persons on April 11, 2008.
55. BFI also identified the transfer of the permit amendment Application from the regular corporation to the limited liability corporation in its April 7, 2008 published notice of the jurisdictional hearing in the *Austin American-Statesman*.
56. BFI complied with all notice requirements to effect the transfer of the Application. TCEQ approved the transfer of the MSW permit and Application.
57. The transfer of the permit amendment Application was the result of a mere change in corporate form and nothing more. The change had no (non-tax) effect on the ownership, management, or operation of the Landfill.

58. During the course of the contested case hearing, BFI's parent company, Allied Waste Industries, Inc., merged with Republic Services, Inc. The merger had no effect on the corporate structure of the applicant, BFI Waste Systems of North America, LLC.

*No Significant Alteration of Natural Drainage Patterns*

59. There are six surface water drainage outfalls (Outfalls) from the Facility.
60. For each of the six Outfalls, the Application compares the peak flow rate, the peak flow velocity, and the total volume for the 25-year, 24-hour storm event under the "predevelopment condition" to those for the 25-year, 24-hour storm event for the "postdevelopment condition" to determine whether natural drainage patterns will be significantly altered as a result of the expansion.
61. The "predevelopment condition" is the "existing permitted condition" as it would be constructed under the current permit. It would be the condition that the landfill would ultimately be in when the landfill closes if the newly requested amendment were not granted.
62. The drainage analyses performed by BFI for its original permit application in 1981 and subsequent permit modifications were all reviewed by the TCEQ under the same regulatory requirement-- that natural drainage patterns not be significantly altered -- and determined to not significantly alter those natural drainage conditions. Therefore, BFI's "existing permitted condition" replicates the drainage patterns that existed at the time of its original application.
63. The TCEQ has provided Technical Guidance Document RG-417 in accordance with its normal practice of publishing regulatory guidance documents.
64. RG-417 defines "natural drainage patterns" to mean "existing permitted conditions."
65. The "postdevelopment condition" is the condition that the landfill would be in at the time of landfill closure if the amendment were granted.

66. The Application also compares the same parameters for the 100-year, 24-hour storm event under the "predevelopment condition" to the 100-year, 24-hour storm event for the "postdevelopment condition."
67. For the 25-year, 24-hour storm event, the peak flow rates, the peak velocity, and the total volume are shown in the following table:

OUTFALL	PEAK FLOWRATE (CFS)		RUN-OFF VOLUME (AC-FT)		DISCHARGE VELOCITY (FT/SEC)	
	Pre-Development	Post-Development	Pre-Development	Post-Development	Pre-Development	Post-Development
1	1045	954	236.4	242.9	1.4	1.4
2	275	270	29.1	26.8	3.2	3.2
3	98	89	10.1	8.5	6.7	6.7
4	66	61	6.6	6.4	2.3	2.2
5	175	171	20.0	17.8	2.8	2.8
6	9	9	1.5	1.5	1.3	1.3

68. For the 100-year, 24-hour storm event, the peak flow rates, the peak velocity, and the total volume are shown in the following table:

OUTFALL	PEAK FLOWRATE (CFS)		RUN-OFF VOLUME (AC-FT)		DISCHARGE VELOCITY (FT/SEC)	
	Pre-Development	Post-Development	Pre-Development	Post-Development	Pre-Development	Post-Development
1	1354	1302	321.1	329.8	1.5	1.5
2	393	386	39.0	35.9	3.7	3.7
3	141	128	13.5	11.4	6.7	6.7

4	94	88	8.8	8.5	2.5	2.5
5	251	245	26.8	23.8	3.1	3.1
6	13	13	2.1	2.1	1.9	1.9

69. For both the 25- and 100-year events, the peak flow rates, total volumes, and peak velocities for Outfalls 2, 3, 4, 5 and 6 in the "postdevelopment" condition are equal to or less than in the "predevelopment" condition.
70. A detention/water quality pond will reduce peak flow rates for the 25, and 100-year storm events at Outfall 1. The detention volume for the pond will be approximately 1.2 million cubic feet. The pond includes additional volume for water quality enhancement.
71. For Outfall 1, the peak flow rate and runoff velocity in the "postdevelopment" condition are equal to or less than in the "predevelopment" condition.
72. For Outfall 1, the total volume for the "postdevelopment" condition is approximately 2% higher than for the "predevelopment" condition for both the 25- and 100- year events. However, the additional volume will be released at a slower rate such that it will not adversely affect downstream water bodies or significantly alter natural drainage patterns.
73. The "predevelopment condition" was determined using the landfill's currently permitted geometry. The currently permitted geometry is that which was approved in a modification request that was approved in 2006 (the 2006 Mod). The geometry of the 2006 Mod was the proper baseline to use for the comparison of predevelopment conditions to postdevelopment conditions for this Application.
74. The predevelopment condition in the 2006 Mod reflects the same landfill design, geometry and runoff conditions as existed in the 2002 drainage modification (2002 Mod) except for the deletion of eleven acres in the northeast corner of the footprint of the landfill and the resultant change in flows through Outfall 1. All other aspects of the landfill, including the flows at Outfalls 2 through 6, were unchanged from the 2002 Mod to the 2006 Mod.

75. The “predevelopment condition” was calculated in the Application using updated methodology and more accurate information regarding the drainage areas than was used in the 2002 Mod.
76. The drainage analysis provided in the 2006 Mod included a topographic map that was based on an aerial survey.
77. An on-the-ground survey of the northwest corner of the buffer zone showed that the aerial-survey-based topography was incorrect.
78. The error in the topographic map was in the natural ground within the permitted boundaries but outside of the landfill fill area. It was not part of the landfill design. No construction to modify the topography was proposed or performed prior to the 2006 Mod, as part of the 2006 Mod, or subsequent to the 2006 Mod.
79. The aerial-survey-based topographic map incorrectly showed that a very small area (approximately 2.5 acres) drained to Outfall 1, when it actually drained to Outfall 5. The on-the-ground survey reflected the correct drainage pattern.
80. The correct topography was utilized in calculating both the “predevelopment condition” and the “postdevelopment condition” that was used in the Application.
81. The buffer zones that drain to Outfalls 4 and 5 were not included in the calculations in either the 2002 Mod or 2006 Mod drainage analyses.
82. The buffer zones were included in the drainage calculations in the Application, in both the “predevelopment condition” and the “postdevelopment condition” that were used in the Application.
83. After the 2002 Mod was submitted but before the 2006 Application was submitted, the Texas Department of Transportation (TxDOT) Hydraulic Design Manual (rev. March 2004), which the TCEQ requires applicants to use in their drainage analyses, was changed.

84. The new TxDOT drainage formula resulted in a significant increase in the projected (i.e., calculated) flows at all the outfalls even though it had no effect on actual flows on the ground.
85. For the Application, peak flowrates for Outfall 1 (predevelopment and postdevelopment) were computed using HEC-HMS.
86. For the Application, peak flowrates for Outfalls 2, 3, 4, 5, and 6 (predevelopment and postdevelopment) were computed using the TxDOT Rational Method.
87. For the Application, run-off volumes for Outfall 1 (predevelopment and postdevelopment) were computed using HEC-HMS.
88. For the Application, run-off volumes for Outfalls 2, 3, 4, 5, and 6 (predevelopment and postdevelopment) were computed using the NRCS runoff curve number method.
89. For the Application, velocities for Outfall 1 (predevelopment and postdevelopment) were calculated using HEC-RAS.
90. For the Application, velocities for Outfalls 2, 3, 4, 5, and 6 (predevelopment and postdevelopment) were calculated using Flowmaster.
91. All of the methodologies for calculating predevelopment and postdevelopment velocities, volumes, and peak flow rates in the Application were proper and in compliance with the TCEQ regulations.
92. The Application included similar calculations based on the City of Austin's criteria.
93. At all six Outfalls, the peak flowrates for the postdevelopment 25-year and 100-year events were the same or less than for the predevelopment 25-year and 100-year events using the City of Austin criteria.
94. At all six Outfalls, the peak velocities associated with the peak flowrates for both the postdevelopment 25-year and 100-year events were the same or less than for the predevelopment 25-year and 100-year events using the City of Austin criteria.

95. At Outfalls 2-6, the total runoff volumes for both the postdevelopment 25-year and 100-year events were the same or less than for the predevelopment 25-year and 100-year events using the City of Austin criteria.
96. At Outfall 1, using the City of Austin criteria, the total runoff volume is approximately 2% greater for both the postdevelopment 25-year and 100-year events, but the additional volume will be released at a slower rate such that it will not adversely affect downstream water bodies or significantly alter natural drainage patterns.
97. The numerical representations of the projected flows at Outfalls 4 and 5 are different between the analyses performed using the TCEQ criteria reflected in BFI Exhibits 16 and 17 and the analyses performed using the City of Austin criteria as reflected in BFI Exhibits 34 and 35. The different numbers for the projected flows reflect the impact of the different methods used – they do not mean that there are different actual on-the-ground flows at Outfalls 4 and 5.
98. Natural drainage patterns will not be significantly altered as a result of the proposed expansion.

#### *Sufficiency of Erosion Control Methods*

99. The Application includes: (1) structural controls for capturing sediment before it leaves the site in both interim and final configurations, (2) erosion control practices to prevent erosion in the interim and final configurations, and (3) calculations to show that erosion in the final configuration will be below permissible levels.
100. The existing Facility has a number of structural controls that control erosion and sedimentation. Among other structural controls, the existing Facility has:
  - a. two existing sedimentation basins that correspond to Outfalls 4 and 5 on the western boundary of the site;
  - b. two sediment traps that correspond to Outfalls 2 and 3 on the southern boundary of the site;

- c. several rock berm sediment traps and sediment pools that are part of a channel improvement project that was implemented on the northern side of the site and drains to Outfall 1;
  - d. an existing detention pond that drains to Outfall 1;
  - e. silt fences, rock berms and grass lined swales throughout the site; and
  - f. temporary earthen berms and downchutes on the side slopes of the landfill.
101. The City of Austin, BFI, and Giles entered into a Settlement Agreement on October 31, 2008, which required BFI to institute additional erosion control measures and which satisfied all parties' concerns regarding erosion and sedimentation control practices except TJFA's and NNC's.
102. The erosion control measures set forth in the Settlement Agreement were included as Special Provisions in the proposed Draft Permit.
103. All parties agreed to the language in the proposed Special Provisions if a permit is issued. However, TJFA and NNC stated that they opposed permit issuance even including these Special Provisions.
104. The vertically expanded facility will also have:
- a. a new, larger sedimentation/water quality/detention pond to be constructed in place of the existing detention pond on the northern portion of the site. This pond will provide for sediment capture for runoff that is discharged from Outfall 1, the outfall that has the largest contributing watershed area.
  - b. additional silt fences, rock berms, and grass-lined swales throughout the site, including:
    - i. perimeter silt fences, hay bales, mulch tubes or mulch berms at soil stock piles;
    - ii. soil stock piles with slope lengths greater than 20 feet will have mid-slope temporary stabilization controls within fourteen days of the initial establishment of the soil stock pile;

- iii. silt fences or mulch berms at the base of all side slope and top deck area within fourteen days of completion of intermediate cover in those areas, until adequate vegetation growth is achieved; and
  - iv. permanent earthen berms and downchutes on the side slopes of the landfill (these berms and downchutes reduce the erosion that might otherwise flow to all the outfalls).
105. Outfall 1 releases runoff from on-site drainage areas 2, 3, and 9. The runoff from all of these areas is treated by silt fences, rock berms, and grass swales. In addition, the runoff from Drainage Area 2 will be treated by the water quality/detention pond. Drainage Area 2 is approximately 80.5 acres.
106. Outfall 1 also releases runoff from approximately 200 off-site acres which drain through the Facility. That offsite area is generally agricultural in nature. Agricultural land produces a high degree of sediment. Although that area is treated by the water quality pond, there is no requirement to treat runoff from off-site.
107. The runoff to Outfalls 2 and 3 is treated by silt fences, rock berms and grass swales, then by the existing sedimentation basins. These basins were constructed and are maintained to have sufficient volume to capture and treat the first ½ inch of runoff that drains to them.
108. The runoff to Outfalls 4 and 5 is treated by silt fences, rock berms, and grass swales, then by the existing sedimentation basins. These basins were designed as part of the 2006 Mod and have sufficient volume to capture and treat the first ½ inch of runoff from the area that drains to them.
109. No disturbance is proposed in the area that drains to Outfall 6, so no specific erosion controls are necessary in this area.
110. In addition to the structural controls, a number of non-structural practices will be implemented to control and prevent erosion. These include:
- a. irrigation of seeded areas, including intermediate cover, to help establish vegetation more quickly;

- b. seeding of intermediate cover side slope areas on which waste placement activity has not recommenced within 60 days, except during the months of July and August;
  - c. seeding of intermediate cover on the top deck of the landfill in all areas on which waste placement activity has not recommenced within 120 days except for certain areas that will receive sod;
  - d. placement of buffalo grass sod on areas immediately up gradient of the five constructed temporary drainage downchutes;
  - e. inspections at least weekly of the intermediate cover to verify the integrity of the cover material, and the next operating day after each day that measurable rainfall occurs at the site;
  - f. repair of eroded cover within five days of detection;
  - g. seeding of the topsoil layer immediately following the application of the final cover in order to minimize erosion; and
  - h. routing of the runoff from drainage Area 2 through the existing detention pond or the proposed water quality pond, when that drainage area has reached final grades.
111. The Application includes soil erosion loss calculations for the final configuration of top surfaces and embankment slopes using the US Department of Agriculture's Soil Conservation Service's Revised Universal Soil Loss Equation (RUSLE).
112. RUSLE calculations are required for the final cover configuration but not for the interim configuration, because RUSLE calculations are required to confirm the long term sustainability of the landfill cover, *i.e.*, that in the final configuration, soil will be replenished at least as quickly as it is eroded.
113. Based on the RUSLE calculations, the soil loss from the final cover will be 0.7 tons/acre/year for the top slope, and 2.18 tons/acre/year for the sideslopes.
114. Average soil losses of two to three tons/acre/year are acceptable for landfill cover systems.
115. The soil loss for the final cover will not exceed the permissible soil loss for comparable soil-slope lengths and soil cover conditions.

116. All downchutes are properly designed to safely convey the flow of the 25-year, 24-hour storm.
117. All downchutes are properly designed to safely convey the flow of greater than the 100-year storm.
118. All side slope berms are properly designed to reduce the velocity of runoff on the landfill and the potential for erosion.
119. All side slope berms are constructed with erosion control matting and can be constructed as designed.
120. Sedimentation ponds at Outfalls 4 and 5 were designed to capture the first ½ inch of runoff consistent with City of Austin design requirements.
121. Sedimentation traps at Outfalls 2 and 3 will be maintained so as to be able to capture the first ½ inch of runoff.
122. Inspectors for the TCEQ and the City of Austin found no evidence that eroded sediment had been discharged at any outfalls and found no permit violations during investigations in response to four separate complaints after rainfall events.
123. The erosion control methods identified in the application and Draft Permit are sufficient.

*Adequacy of Storage, Treatment, and Disposal of Contaminated Water*

124. Leachate and gas condensate will not be recirculated.
125. The Application provides for the proper storage, treatment, and disposal of contaminated water.
126. The Application contains a leachate and contaminated water plan.
127. Contaminated water will not be discharged without specific written authorization from TCEQ. Water that has become contaminated by contact with the working face or with

leachate will be segregated from uncontaminated surface and groundwater and properly managed.

128. The storage, treatment, and disposal of contaminated water are adequately addressed in the Application and Draft Permit.

### *Protection of Surface Water*

129. Ponding of water over waste areas will be minimized and eliminated. Ponding in any portion of the Facility will be eliminated and the area in which the ponding occurred will be filled and regraded within seven days of the occurrence. The Application includes provisions to prevent the ponding of water over waste.
130. The Application properly identifies and provides protection for wetlands.
131. BFI has in all respects satisfied any burden pertaining to matters regarding the identification and/or protection of wetlands in this proceeding.
132. The Facility operates under the TPDES Storm Water Multi-Sector General Permit.
133. BFI has prepared a SWPPP as required by the TPDES General Permit.
134. The Facility has submitted a Notice of Intent (NOI) as required by the TPDES General Permit.
135. The Application includes provisions that will prevent sediment from leaving the site in compliance with the Facility's TPDES permit. These provisions include sedimentation traps and basins, silt fences, vegetative swales, rock berms, and a sedimentation/water quality/detention pond.
136. The Facility will be able to achieve 85% vegetative cover.
137. Sedimentation ponds at the Facility are adequately sized to capture sediment.

138. Drainage downchutes and their component materials are appropriately designed and sized to control surface drainage off the Landfill.
139. The Facility will not cause a discharge of solid wastes or pollutants adjacent to or into the water in the state, including wetlands, that is in violation of the requirements of the Texas Water Code § 26.121.
140. The Facility will not cause a discharge of pollutants into waters of the United States, including wetlands, that violates any requirements of the Clean Water Act, including the National Pollutant Discharge Elimination System (NPDES) requirements, pursuant to section 402, as amended.
141. The Facility will not cause a discharge of dredged or fill material to waters of the United States, including wetlands, that is in violation of the requirements under federal Clean Water Act § 404, as amended.
142. The Facility will not cause a discharge of a nonpoint source pollution of waters of the United States, including wetlands, that violates any requirement of an areawide or statewide water quality management plan that has been approved under the federal Clean Water Act § 208 or § 319, as amended.
143. The Application includes a surface water protection plan and drainage plan which includes the locations, details, and typical sections of the facilities that relate to the protection of surface water, and it shows the adequacy of provisions for safe passage of all internal and externally adjacent floodwaters.
144. The Application proposes adequate protection of surface water.

***Protection of Groundwater***

145. The Landfill site is in central Travis County within the general outcrop area of the Taylor Group of the Cretaceous System.
146. The Taylor Group is composed of impermeable clays/shales and underlies the Facility down to approximately 400 feet below the surface elevation.

147. The soils of this group are divided into the upper weathered Taylor and the lower unweathered Taylor.
148. At the site, the weathered Taylor consists of 30 to 75 feet of stiff-to-hard clay weathered from the marl; the average thickness of the weathered Taylor across the site is approximately 45 feet.
149. The weathered Taylor is the uppermost aquifer for the purposes of groundwater monitoring at the Landfill site.
150. The Austin Group lies immediately beneath the Taylor Group.
151. Beneath the Austin Group lies an alternating sequence of limestone and clay formations that generally comprise the Edwards Aquifer.
152. The unweathered Taylor is of sufficiently low permeability and of lateral areal extent to prevent the downward migration of shallow groundwater from the uppermost aquifer to deeper aquifers.
153. The Application adequately describes the regional geology in the vicinity of the Facility.
154. No active faults are located at or near the Sunset Farms site.
155. The regional geology should not require any limits to be placed on the design, construction, or operation of the Landfill.
156. The Landfill is located in the Blackland Prairie, which consists of rolling hills.
157. There is no unfavorable topography in the area that would limit the Landfill's design, construction, or operation.
158. All of the disposal cells at the Landfill have been excavated and lined. No additional excavations will occur in connection with the vertical expansion of the Landfill.
159. The proposed vertical expansion does not change the already-approved excavation plan, the limits of the liner, or the design of the liner system.

160. Soils at the site are suitable for use as liner material.
161. The Application proposes adequate protection of groundwater.

*Slope Stability*

162. The Application contains a geotechnical report that describes and summarizes the geotechnical properties of the subsurface and discusses the suitability of the soils for the uses for which they are intended.
163. There are two layers that form the sides and bottom of the excavation or are less than 30 feet below the lowest excavation: the weathered Taylor is comprised of hard clays and the unweathered Taylor is comprised of hard clayey shales.
164. The weathered Taylor and the unweathered Taylor have been extensively tested as part of subsurface investigations at the site.
165. In-situ soils at the site possess sufficient characteristics to preclude the possibility of development of a bearing capacity type foundation failure under the anticipated overburden pressure of the Landfill.
166. In-situ soils at the site possess sufficient characteristics to support the 3H:1V excavation slopes and provide for slope stability.
167. In-situ soils at the site are not susceptible to excessive differential settlement that could detrimentally affect the performance of the Landfill's liner.
168. The subsurface soils beneath the facility are suitable for landfill construction.
169. BFI included slope stability analyses in the Application. The analyses were prepared and sealed by a licensed professional geotechnical engineer, Gregory Adams.
170. The slope stability calculations were based on conservative input parameters using site-specific data.

171. Final (long-term) and interim (short-term) conditions will be stable and well within the accepted factors of safety.
172. No areas of the site are susceptible to mass movement.
173. No areas of the site are located over Karst Terrain formations.
174. No portion of the solid waste disposal area is located over an area with poor foundation conditions.
175. The Application contains an Unstable Area Location Restriction Demonstration.
176. The Application includes adequate analysis of and provisions to ensure slope stability.

#### ***Groundwater Monitoring***

177. Data compiled from numerous site investigations were used to design the groundwater monitoring network, the purpose of which is to detect any release of contaminants into the groundwater beneath the facility.
178. The existing groundwater monitoring system is comprised of 17 groundwater monitoring wells that are located around the perimeter of the facility. These wells are screened within the saturated portion of the weathered Taylor to monitor the shallow groundwater beneath the site.
179. The groundwater monitoring system will be expanded from 17 to 32 wells in connection with the vertical expansion. Two of the existing wells will be decommissioned and replaced with new wells. The wells in the enhanced system are spaced an average distance of approximately 500 feet apart and no wells are more than 600 feet apart.
180. The wells of the proposed system will continue to be screened within the saturated portion of the weathered Taylor to monitor the shallow groundwater beneath the site and are designed to monitor the interface between the weathered and unweathered Taylor.

181. The 17 new monitoring wells are designed and will be installed to TCEQ-required specifications.
182. The point of compliance was correctly identified as the entire perimeter of the site because most of the facility perimeter is directly downgradient or located such that groundwater flows parallel or obliquely to the site boundary.
183. The Groundwater Sampling and Analysis Plan (GWSAP) contained in the Application provides procedures for collecting representative samples from groundwater monitoring wells and quality assurance/quality control procedures required to ensure valid analytical results. The GWSAP also includes methodology for establishing background water quality in each well and for comparison of the subsequent results to background values in the same well in order that any statistically significant increase may be detected.
184. The Application includes adequate provisions for groundwater monitoring.

*Calculation of the Estimated Rate of Solid Waste Deposition and Operating Life of the Site*

185. All waste receipt will cease on or before November 1, 2015. BFI will restrict the property on which the landfill operates from use for transfer station operations on or after November 1, 2015. After the last receipt of wastes, BFI will complete installation of the permitted final cover system in accordance with 30 TAC § 330.253. The maximum heights, depths and footprint for the landfill fill area, as approved by the TCEQ under Permit No. MSW 1447A, shall not be exceeded by a subsequent modification or amendment of the permit.
186. BFI measures and computes the rate of solid waste deposition both in the tons of waste received at the scale house and by geometric measurements obtained through annual flyovers and topographic mapping efforts.
187. The landfill volume is currently being consumed at a rate of approximately 20,000 cubic yards per month, as computed from the aerial topographic data between March 2003 and March 2004.

188. The site life calculations in the Application reflect the 2015 closure date.
189. The Application includes adequate provisions calculating the estimated rate of solid waste deposition and operating life of the site.

***Provisions for Closure and Post-Closure***

190. The Application contains closure cost estimates, including a "worst case closure cost estimate" and a "post-closure care cost estimate."
191. The Application includes a Final Closure Plan and a Post-Closure Care Plan.
192. All of the landfill cells will be closed with a final cover system, meeting the criteria for cover over post-Subtitle D liner systems.
193. Within 180 days after the last receipt of waste for the site, installation of the final cover system will be initiated.
194. The site will be closed in an orderly fashion, in compliance with established steps and timelines for implementation.
195. Post-closure care will last for a period of 30 years after final closure of the landfill, unless an alternative period is required or approved by the TCEQ.
196. Post-closure care maintenance will be performed in accordance with regulatory requirements.
197. The Application includes adequate provisions for closure and post-closure care.

***Provisions for Cover***

198. The Application includes two options for the final cover system.
199. Option A consists of the following components (from the intermediate cover layer upwards):

- a. a compacted clay cover consisting of a minimum of 18 inches of earthen material with a coefficient of permeability no greater than  $1.0 \times 10^{-5}$  cm/sec;
  - b. a 40-mil Linear Low Density Polyethylene (LLDPE) geomembrane;
  - c. a drainage layer consisting of a double-sided drainage geocomposite;
  - d. an erosion layer consisting of 12 inches of soil; and
  - e. a topsoil layer consisting of a minimum of six inches of earthen material that is capable of sustaining native plant growth.
200. Option B modifies Option A by replacing the compacted clay layer with a geosynthetic clay liner. It consists of the following components from the intermediate cover upwards:
- a. a geosynthetic clay liner (GCL) comparable to the 18-inch thick compacted clay liner specified in Option A;
  - b. a 40-mil LLDPE geomembrane;
  - c. a drainage layer consisting of a double-sided drainage geocomposite;
  - d. an erosion layer consisting 12 inches of soil; and
  - e. a topsoil layer consisting of a minimum of six inches of earthen material that is capable of sustaining native plant growth.
201. Both Option A and Option B of the final cover designs are in accordance with the site closure plan and satisfy all regulatory requirements for final cover.
202. The final cover top soil layer will be seeded immediately following the application of the final cover in order to minimize erosion.
203. On approximately 15% of the surface area of the eastern and northern slopes of the landfill, seeding will be of a seasonally appropriate 609-S (native seeds) mix as defined in Exhibit 3 of the Special Provisions of the attached permit. On the remainder of the site, seeding will be of a seasonally appropriate mix.

204. Landfill Final cover will be inspected for erosion not later than the next operating day after each day that measurable rainfall occurs at the site.
205. The Application includes soil erosion loss calculations for the top surfaces and embankment slopes using the US Department of Agriculture's Soil Conservation Service's Universal Soil Loss Equation.
206. Based on those calculations, the soil loss from the final cover will be 0.7 tons/acre/year for the top slope, and 2.18 tons/acre/year for the sideslopes.
207. Average soil losses of two to three tons/acre/year are acceptable for landfill cover systems.
208. The soil loss for the final cover will not exceed the regulatory permissible soil loss for comparable soil-slope lengths and soil cover conditions.
209. Erosion of final cover will be repaired within five days of detection, unless approval is obtained from the regional office of the TCEQ.
210. The date of detection of erosion and date of completion of repairs will be documented in the cover inspection record.
211. Inspections of the final cover will be conducted at least monthly during the operating life of the landfill, and will be conducted at least semi-annually during the post-closure care period of the landfill. Any areas requiring maintenance will be promptly restored during the entire operational life and for the post-closure maintenance period of the facility. These cover erosion inspections will be documented on the Monthly Inspection Report.
212. The Facility will keep a cover application record on site.
213. The final cover design will provide effective long-term erosional stability to the top dome surfaces and embankment sideslopes.
214. The Application includes adequate provisions for final cover.

### *Financial Assurance*

215. BFI has provided financial assurance in the form of a bond for closure under its existing permit. That financial assurance is currently in place.
216. BFI has provided a letter of intent to post financial assurance with the Application.
217. Financial assurance in accordance with the Application is not required unless/until the Application is approved.
218. The Application contains an accurate estimate of the amount of financial assurance required.
219. The Applicant has complied with financial assurance requirements.

### *Control of Disease Vectors*

220. Vector control will be achieved through the following practices:
  - a. Proper waste compaction and proper application of daily cover.
  - b. A minimum of six inches of daily cover will be used.
  - c. Poned water will be controlled.
  - d. The size of the working face will be minimized.
  - e. A licensed commercial pesticide applicator will conduct at least semiannual inspections, and if necessary, a pest management program will be developed and implemented.
  - f. A bird abatement program has been and will be implemented using pyrotechnic devices. The bird abatement program will be continued throughout the acceptance of waste at the site and a copy of the plan will be available at the site.
221. The bird abatement plan has significantly reduced the number of buzzards and other birds that visit the site to numbers at or below levels that would be expected if there were no landfill present.

222. Buzzards roost on power lines along Springdale Road. The buzzards are attracted to the area primarily because of the presence of the power lines as a roosting site, not because of the presence of the Landfill.

223. The Application includes adequate provisions to control disease vectors.

### *Control of Odors*

224. The Landfill uses several operational methods to prevent and control odors. These include:

- a. Wastes are deposited at the working face, spread into layers that can be readily compacted, and covered with a minimum of six inches of soil or other waste material.
- b. The working face is sized to minimize the amount of waste exposed while still providing adequate area for safe and efficient vehicle unloading.
- c. Odiferous wastes are handled so as to minimize odors.
- d. Mister-type equipment may be installed at appropriate locations.
- e. Odor controlling sprays applied directly to the working face may also be used to manage odors as determined by the Site Manager.
- f. Pondered water at the site is controlled to prevent the occurrence of odors.

225. BFI will not accept liquid waste as defined in 30 TAC § 330.2(70) and will not construct or operate a liquid waste stabilization/solidification basin at the Sunset Farms Landfill.

226. BFI will not use alternative material daily cover (ADC) at the Sunset Farms Landfill.

227. The Facility's will control odors through implementation of a Landfill Gas Collection and Control System (GCCS) pursuant to the Landfill Gas Management Plan.

228. The Landfill has successfully controlled odors through the expansion of the GCCS system.

- 229. Daily odor inspections will be performed at the Facility.
- 230. The Application includes adequate provisions to control odors.

*Management of Landfill Gas*

- 231. The Application contains a Landfill Gas Management Plan which includes a Landfill Gas Collection and Control System (GCCS) (Part III, Attachment 14 of the Application), which is incorporated into the Site Operating Plan.
- 232. The GCCS serves the dual purpose of controlling surface emissions and gas-related odors.
- 233. The GCCS is comprised of 180 extraction wells, an enclosed landfill gas (LFG) flare, and a landfill-gas-to-energy (LFGTE) facility. The LFGTE facility is operated by GRS pursuant to a separate air authorization.
- 234. BFI will expand the GCCS as the Landfill is vertically expanded.
- 235. The existing perimeter gas monitoring system at the site consists of fifteen gas probes. Each of these probes has been installed to a depth equal to either the depth of groundwater or the depth of the deepest waste within 1,000 feet of the probe.
- 236. BFI will add six additional gas probes to the perimeter gas monitoring system in connection with the vertical expansion - one between existing probes GMP-7A and GMP-8 and five along the southern permit boundary between the Sunset Farms Landfill and the Austin Community Landfill.
- 237. The Landfill Gas Management Plan includes an Exceedance Action Plan, which details the steps to be taken in the event a regulatory exceedance of gas is detected during a regular monitoring event or by a building monitor. A Remediation Plan is also included with the Landfill Gas Management Plan.
- 238. The Application includes adequate provisions to manage landfill gas.

*Control of Spilled and Windblown Waste and Cleanup of Spilled Waste*

239. BFI will take steps to discourage commercial waste hauling vehicles from utilizing Blue Goose Road as ingress or egress to the Sunset Farms Landfill except for those few vehicles which service businesses and residences in that area. These steps may include reprimanding drivers, posting signs, adding surcharges, or similar measures.
240. BFI will take the necessary steps to ensure that vehicles hauling waste to the site properly secure their loads in order to prevent the escape of any part of the load by blowing or spilling. BFI will, as necessary, post signs at the Landfill entrance requiring loads to be covered or enclosed and the potential consequences for non-compliance – including the assessment of surcharges and the reporting of offenders to law enforcement.
241. The Site Operating Plan provides that the working face will be maintained and operated in a manner to control windblown solid waste.
242. Daily cover and litter fences will be employed to control windblown waste from the working face.
243. BFI will not use alternative material daily cover (ADC) at the Sunset Farms Landfill.
244. The Landfill has installed permanent litter fences up to 20 feet tall to capture windblown waste before it leaves the site.
245. Each day that the landfill is open, public roads used to access the Landfill will be inspected and cleaned of spilled materials and windblown waste for a distance of two miles in either direction from any entrance used for the delivery of waste to the site.
246. The Application includes adequate provisions to control spilled and windblown waste and clean up spilled waste.

### *Management and Disposal of Special Waste*

247. BFI will not accept liquid waste as defined in 30 TAC § 330.2(70) and will not construct or operate a liquid waste stabilization/solidification basin at the Landfill.
248. The Site Operating Plan provides detailed procedures for handling special wastes that do not require written authorization from the TCEQ.
249. Special wastes that require written authorization will be handled in accordance with the written authorization.
250. The Application includes adequate provisions to manage and dispose of special waste.

### *Prevention of Disposal of Unauthorized Wastes*

251. Prohibited wastes include regulated hazardous waste (except municipal hazardous waste from conditionally exempt small quantity generators), certain PCB wastes, lead acid storage batteries, do-it-yourself used motor vehicle oil, used oil filters from internal combustion engines, whole used or scrap tires, items containing CFCs, and unauthorized special waste.
252. To prevent the disposal of unauthorized waste at the Facility, BFI will:
  - a. post signs regarding hazardous and other unacceptable wastes,
  - b. screen wastes,
  - c. use video monitoring systems at the site entrance to allow site personnel to visually inspect open-topped waste loads,
  - d. provide personnel training,
  - e. reject haulers carrying unauthorized wastes, and
  - f. perform random inspections on at least one vehicle per day.

253. The working face will be confined to as small an area as practicable. A trained employee will be present at the active disposal area during operating hours to monitor all incoming loads of waste.
254. The Site Operating Plan specifies procedures for random inspections of incoming waste.
255. Access to the Facility will be controlled using a perimeter fence and a gated entrance.
256. The Application includes adequate provisions to prevent unauthorized wastes from being disposed in the landfill.

#### *Dust Control*

257. The Site Operating Plan specifies procedures to minimize the tracking of mud and dirt by vehicles entering or exiting the Facility onto public roadways. Vehicles will traverse all-weather site access roads and paved site entrance roads, allowing for mud to be removed from the vehicle.
258. The main access road to the site is a paved surface road.
259. The access road will be swept at least weekly.
260. Other access roads to the waste fill area are unpaved and will be amended with gravel or ground woody wastes to reduce dust and improve traction. During dry conditions, the unpaved roads will be periodically wetted to reduce dust.
261. BFI has installed a permanent wheel wash near the site entrance for use by exiting vehicles when the disposal area is muddy. The wheel wash is a drive-through unit and provides for direct washing of the wheels of waste hauling vehicles.
262. BFI regularly sweeps the streets near the entrance to the Facility to remove mud.
263. Much of the area around the landfill is used for agriculture. The largest land use within one mile of the permit boundary is classified as open (including vacant, agricultural, or

rights-of-way), comprising approximately 65% of the land area. Agricultural fields produce dust.

264. The Application includes adequate provision for dust control.

#### *Maintenance of Site Access Roads*

265. All on-site and other access roadways will be maintained on a regular basis. Non-paved access roadways will be regraded as necessary to minimize depressions, ruts, and potholes. These roads will be inspected at least weekly to determine the need for regrading. Non-paved access roads actively used by waste hauling vehicles will be regraded after initial construction at least once every three months.

266. The Application includes adequate provision for maintenance of site access roads.

#### *Daily and Intermediate Cover*

267. BFI will not use alternative material daily cover (ADC) at the Sunset Farms Landfill.

268. Daily cover will have a total thickness of at least six inches of well-compacted soil not previously mixed with solid waste.

269. Daily cover will be sloped to drain and will promote runoff and minimize infiltration. Care will be exercised to eliminate areas which will pond water in the event of rainfall.

270. Daily cover will be applied during the day as waste placement is in progress and upon completion of daily waste acceptance to assure complete covering of the active face.

271. Intermediate cover will consist of at least twelve inches of compacted, clean earthen material that has not been previously mixed with garbage, rubbish or other solid waste materials. The earthen material will be capable of sustaining native plant growth and may include the previously placed six inches of daily cover material. Twelve inches of compacted, clean soil may also be applied to serve as both daily and intermediate covers.

272. The intermediate cover will be graded to prevent ponding of water.
273. The Site Operating Plan establishes that inspections of the intermediate cover will be conducted at least weekly to verify the integrity of the cover material, and the next operating day after each day that measurable rainfall occurs at the site.
274. Eroded cover will be repaired within five days of detection.
275. Intermediate cover will be placed and seeded on all side slope areas on which waste placement activity has not recommenced within 60 days, except during the months of July and August. These seeded areas will be irrigated.
276. Intermediate cover will be placed and seeded on the top deck of the landfill in all areas on which waste placement activity has not recommenced within 120 days, except for certain areas that will receive sod.
277. Initial seeding will be done by hydromulch and using a seasonally appropriate mix.
278. The Application includes adequate provisions for daily and intermediate cover.

#### ***Fire Protection***

279. The Site Operating Plan includes detailed provisions for fire protection.
280. A minimum of six inches of daily cover will be used in order to reduce the possibility of fire.
281. Waste will be compacted to aid in fire protection.
282. The Application contains adequate provisions for fire protection.

#### ***Operational Hours***

283. The Facility is currently authorized to operate 24 hours per day, seven days per week.
284. The Application does not seek to change the operating hours for the Facility.

285. The current operating and waste acceptance hours, as posted at the site entrance, are 24 hours per day Monday through Friday and from 12:00 am to 3:00 pm on Saturdays. No waste is currently accepted on Sundays.

286. The evidence shows that the landfill's operating hours are appropriate.

*Designation of Owner and Operator*

287. The Application designates both BFI and Giles as Owners of the Facility.

288. The land on which the Facility is located is owned by BFI and Giles. BFI owns an approximately 55-acre tract within the permit boundaries; Giles owns three other tracts that together comprise the remaining acreage of the Facility.

289. BFI and Giles are co-owners of the Facility.

290. The Application includes a legal description of each piece of property that makes up the Facility.

291. The Application includes a properly executed property owner affidavit.

292. The Application designates BFI as the Operator of the Facility.

293. The Application includes a verification of BFI's legal status.

294. BFI is the sole operator of the Facility, and has operated it (either in the corporation's present corporate form or as a predecessor-in-interest) continuously since the landfill was first permitted in 1981.

295. With respect to the tracts owned by Giles, BFI operates the facility under a landlord-tenant relationship.

296. BFI is the sole "Site Operator."

297. BFI is the sole party responsible for the operation of the Facility.

298. The Application designates BFI as the sole Applicant.

299. The Application includes adequate provisions designating the owner and operator.

***Designation of Responsible Parties and Qualified Personnel***

300. The Application includes evidence of BFI's competency.

301. The Application includes appointments of the person signing the Application and the engineer.

302. The Application is signed by Brad Dugas of BFI.

303. Brad Dugas is a responsible corporate officer who has (and has had) authority to sign the Application documents.

304. Associated Consulting Engineers, Inc. is the duly appointed consulting and design engineers for the Application.

305. Key personnel are described in the Application and are qualified to operate the site.

306. The Application includes adequate provisions designating responsible parties and qualified personnel.

***Transportation Information***

307. The primary access roads to Sunset Farms are U.S. 290, Giles Lane, Johnny Morris Road, Blue Goose Road, and Cameron Road.

308. Vehicles traveling to the Landfill typically approach the Facility from the south by turning north onto Giles Lane from U.S. 290 and then turning westward into the Facility's entrance. Vehicles leaving the landfill typically turn south onto Giles Lane toward U.S. 290.

309. U.S. 290 is a major east-west highway and is the primary road traveled by trucks approaching or leaving the facility. It is a four-lane road with a grass median dividing the two directions of travel.

310. U.S. 290 is signaled at its intersection with Giles Lane. There is a 500-foot left-turn lane for eastbound vehicles (including refuse trucks) turning north onto Giles Lane toward the Facility's entrance. Vehicles traveling westbound, including trucks approaching the landfill from the east, have a separate right-turn lane beginning approximately 200 feet from the intersection.
311. There are no weight restrictions for vehicles traveling on U.S. 290 in the proximity of the landfill other than the statewide vehicular weight limit of 80,000 pounds.
312. TxDOT maintains U.S. 290. It is planning to reconstruct the existing highway in the vicinity of the landfill into a six-lane tolled freeway with three lanes in each direction. Non-tolled frontage roads (three lanes in each direction) are also planned. Construction is scheduled for completion in 2013.
313. Landfill traffic represents only approximately one percent of the peak hour traffic volume on U.S. 290.
314. Sunset Farms' entrance is located on the west side of Giles Lane, which runs in a north/south direction from its intersection with U.S. 290. It is a four-lane divided asphalt-surfaced crush limestone based roadway, consisting of 12-foot travel lanes with a curb-and-gutter section and a grass median.
315. The statewide maximum legal weight limit of 80,000 pounds applies to Giles Lane.
316. The City of Austin maintains Giles Lane and other City roadways in the vicinity of the Facility. The stretch of Giles Lane between U.S. 290 south of the Landfill and Harris Branch Parkway north of the Landfill was reconstructed in 2001.
317. Johnny Morris Road is a continuation of Giles Lane south of U.S. 290. It is a four-lane undivided asphalt-surfaced roadway, consisting of 12-foot travel lanes. The maximum legal weight of vehicles traveling on Johnny Morris Road is also 80,000 pounds.
318. Blue Goose Road is a two-lane roadway that runs east/west along the northern boundary of the Landfill. It intersects with Giles Lane at the northeast corner of the Landfill. Travis County maintains Blue Goose Road west of Giles Lane as part of its Pavement

Management System. The standard statewide weight restriction for Blue Goose Road of 80,000 pounds also applies to Blue Goose Road.

319. BFI prohibits its refuse truck drivers from using Blue Goose Road to access the Facility and has entered into a settlement agreement with the City memorializing this restriction.
320. Cameron Road is a two-lane road that runs northeast/southwest between Parmer Lane on the north and intersects Blue Goose Road near the northwest corner of the Landfill. The City of Austin maintains the stretch of Cameron Road between Parmer Lane and Yager Lane. Cameron Road also has the statewide maximum weight limit of 80,000 pounds.
321. The Application provides traffic volumes for area roadways in the vicinity of the Landfill as required by regulation: U.S. 290, Giles Lane, Johnny Morris Road, Blue Goose Road, and the Facility's driveway. These data were updated/confirmed in September 2008 prior to the evidentiary hearing.
322. All of the roadways that may be used to access the site are presently operating well below their capacities.
323. All of these roadways presently have a level of service (LOS) rating of "A" – the highest rating.
324. Non-landfill traffic (i.e., background traffic) on the roadways in the vicinity of the Landfill is estimated to increase annually by five percent. Landfill traffic is estimated to increase annually by one percent until cessation of waste acceptance on or before November 1, 2015.
325. The projected LOS for all of the site access roadways in 2015 remains "A" except for U.S. 290, which would go to a "B" rating (if the highway is upgraded to a tollway as planned) or a "C" rating (if the planned upgrades are not made). LOS ratings of "B" and "C" are still acceptable.
326. The adequacy and design capacities of the site access roadways are sufficient to safely accommodate any additional traffic generated by the Landfill if the permit for the vertical expansion is granted.

327. No public use airport is located within five miles of the Facility's boundaries.
328. The permit boundary is not located within 10,000 feet of the end of an airport servicing turbojet aircraft or within 5,000 feet of the end of a runway serving piston-type aircraft.
329. The Federal Aviation Administration has no objection to the expansion of this landfill from the standpoint of bird hazards to aircraft.
330. The expanded Facility will not constitute a bird hazard to aircraft.
331. The Application provides adequate information related to transportation.

#### *Protection of Endangered and Threatened Species*

332. BFI filed a motion for partial summary disposition of this issue. No party filed a response to the motion.
333. This is a vertical only expansion over land that was previously disturbed.
334. Associated Consulting Engineers, Inc. corresponded with the U.S. Fish and Wildlife Department and the Texas Parks and Wildlife Department regarding the potential impact of the proposed expansion on endangered and threatened species and their critical habitat. Both agencies determined that there would be no impact.
335. The Application considers and avoids impacts to endangered and threatened species.
336. The Application includes adequate provisions to protect endangered or threatened species.

#### *Compliance History*

337. The Executive Director prepared compliance summaries for BFI, Giles, and the Facility.
338. "BFI Waste Services Austin" is designated as the Regulated Entity for four Customer designations.

339. The four Customer Designations under this Regulated Entity are: Browning-Ferris Industries, Inc.; BFI Waste System of North America, Inc.; Giles Holdings, L.P.; and BFI Waste Services of Texas, LP.
340. The compliance history rating for Browning-Ferris Industries, Inc. is Average/4.84.
341. The compliance history rating for BFI Waste System of North America, Inc. is Average/2.59. At the time the compliance history was prepared, BFI Waste Systems of North America, LLC (the Applicant) was known as BFI Waste Systems of North America, Inc.
342. The compliance history rating for Giles Holdings, L.P. is Average/17.77.
343. The compliance history rating for BFI Waste Services of Texas, LP is Average/3.27.
344. BFI's compliance history does not warrant denial of the Application.

#### *Land Use Compatibility*

345. No portion of the Facility is located within the city limits of any incorporated city except for an approximately 200-foot-wide strip along Giles Lane in the far eastern portion the permit boundaries which was annexed by the City of Austin in 1985.
346. The remainder of the Facility is located within the extraterritorial jurisdiction (ETJ) of the City of Austin.
347. The approximately 200-foot-wide strip along the eastern boundary is zoned "DR" by the City of Austin. No other zoning ordinance or designation applies to the remainder of the Facility.
348. The "DR" designation applicable to the 200-foot-wide strip is an interim zoning designation that does not restrict or prohibit the proposed vertical expansion of the landfill. No zoning ordinance restricts or prohibits the proposed vertical expansion of the landfill.

349. The City of Austin's Smart Growth Initiative does not address or prohibit the proposed vertical expansion. The Smart Growth Initiative is merely a guide to growth and is not enforceable in the manner that zoning ordinances are.
350. The predominant land use (62%) within one mile of the permit boundary is open, which includes agricultural property, vacant property and rights-of-way. The next largest land use (21%) is industrial, which includes two active landfills (Sunset Farms and the Austin Community Landfill), the Applied Materials manufacturing facility, and other industrial uses along U.S. 290 and Johnny Morris Road. The next largest land use (11%) is residential, and the remaining land uses (commercial, recreational, water and institutional) comprise 6% of the land area within one mile of the permit boundary.
351. Solid waste disposal has been a historically and geographically significant land use within one-mile of the Facility since at least 1968. Of the 4,338 acres within one mile of Sunset Farms, approximately 795 acres (18%) have been permitted for waste disposal purposes at one time or another.
352. While substantial residential growth is occurring within one mile of the permit boundaries of Sunset Farms (524 residences constructed between 2004 and 2008), most of this activity is relatively distant from the Landfill.
353. Almost 90% of the residences that are located within one mile of the permit boundary have been built while Sunset Farms and the other landfills have been operating.
354. A school and a day care center are located within one mile of the permit boundary. Both the school and day care center were built while Sunset Farms and the Austin Community Landfill were operating.
355. The City of Austin is the community that is located closest to the Landfill.
356. The bulk of the City of Austin is located to the west of Sunset Farms. However, the City has annexed properties (including the Harris Branch subdivision) immediately to the east of the Facility.

357. From 1990 to 2000, the predominant direction of residential growth for the City of Austin was northerly. Sunset Farms is located within the fastest growing sector of the City from 1990 to 2000.
358. Sunset Farms has not deterred growth in the vicinity of the landfill.
359. The nearest residence is approximately 1,045 feet east of the permit boundary and 1,830 feet from the limit of fill. One school is located 2,035 feet north of the permit boundary and 2,355 from the limit of fill. One day care center is located 660 feet east of the permit boundary and 1,450 feet from the limit of fill. Each of these locations is more than one-quarter mile away from the limit of fill.
360. Waste disposal operations will effectively recede from surrounding land uses because the Application proposes a vertical expansion only. In effect, the limit of fill for the vertical expansion area is 600 feet inside the existing limit of fill due to the 4H:1V side slopes.
361. BFI conducted a water well search for wells located within one mile of the permit boundary, including a review of records and maps that are on file at the Texas Water Development Board and TCEQ, a review of previous permitting documents, and a visual survey of properties in the vicinity of the facility.
362. There are twelve identified water wells within one mile of the facility – two of which are located on-site. Of the remaining identified wells, only one is located within 500 feet of the permit boundary.
363. Most or all of the water wells appear to be shallow wells – often hand-dug. None of the identified wells appears to be used for drinking water purposes by the landowners.
364. The weathered Taylor group does not produce adequate amounts of water for domestic use, and the areas in the vicinity of the facility are served by public water suppliers.
365. The TCEQ considered the impact of the site upon the city, community and nearby property owners and individuals in terms of compatibility of land use, zoning, community growth patterns, and other factors associated with the public interest.

366. BFI included sufficient information in the Application pertaining to land use and land use compatibility.
367. The existing Sunset Farms Landfill is compatible with surrounding land uses.
368. The continued use of the land for an MSW site will not adversely impact human health, safety, or welfare.
369. The inclusion of the requested special provisions will improve the compatibility of the Landfill with surrounding land uses, as will the two-tiered design BFI has proposed, its plans to “paint” the Landfill with wildflowers upon closure, and its implementation of landscaping and screening at the site.
370. The proposed expansion is compatible with land use in the surrounding area

#### ***Buffer Zones and Landscape Screening***

371. The Facility includes a buffer that is a minimum of 50 feet wide around the perimeter of the Landfill. The approximate 55-acre area in the northeast corner of the Facility that is not used for landfilling activities serves as additional buffer for potential receptors to the north and east.
372. BFI has designed and implemented landscape and aesthetic enhancements at the facility for three purposes: (1) to visually screen where possible; (2) to create a defined edge for a sense of separation; and (3) to refine the visual image of the landfill. Design elements (1) and (2) have occurred or are in progress at the facility. Design element (3) will occur when the landfill is completed as a result of the two-tiered massing of the landfill and BFI’s agreement to “paint” the landfill with wildflowers upon closure.
373. The Site Operating Plan specifically prohibits solid waste unloading, storage, disposal or processing operations from occurring within any easement that crosses the site or within any buffer zone.

374. The provisions proposed for buffer zones and landscape screening comply with agency rules.

*Health of Hearing Requesters and Their Families*

375. The Application meets the requirements of the Commission's rules and goes beyond those requirements in many respects.
376. No evidence was presented that any individual has suffered any adverse health effects due to the Landfill.
377. No evidence was presented that any individual will suffer adverse health effects as a result of expansion of the landfill.
378. The Application proposes sufficient provisions to protect groundwater and surface waters.
379. The Application proposes sufficient provisions regarding air emissions, landfill gas management, odor controls, dust controls, vector controls, and other measures that will be protective of human health and the environment.
380. The vertical-only expansion will not increase the likelihood that any individual's health will be adversely affected.
381. The Application proposes sufficient provisions to protect the health of requesters and their families.

*Nuisance*

382. Nuisance is defined in the Commission's rules as "municipal solid waste that is stored, processed, or disposed of in a manner that causes the pollution of the surrounding land, the contamination of groundwater or surface water, the breeding of insects or rodents, or the creation of odors adverse to human health, safety, or welfare." 30 TAC § 330.2(86).

383. Operation of the expanded landfill as requested in the Application will not result in pollution of the surrounding land.
384. Operation of the expanded landfill as requested in the Application will not result in contamination of groundwater and surface water.
385. Operation of the expanded landfill as requested in the Application will not result in breeding of insects or rodents.
386. Operation of the expanded landfill as requested in the Application will not result in the creation of odors adverse to human health, safety, or welfare.
387. Noise is not a component of the Commission's definition of nuisance.
388. Noise from the Landfill does not and will not rise to a level that would constitute a nuisance.
389. BFI has never been cited for any nuisance-level noise conditions.
390. Municipal solid waste will not be stored, processed, or disposed of at the Facility in a manner that causes the pollution of the surrounding land, the contamination of groundwater or surface water, the breeding of insects or rodents, or the creation of odors adverse to human health, safety, or welfare.
391. The Application proposes sufficient provisions to avoid causing a nuisance.

***Reporting and Transcription Costs***

392. Reporting and transcription costs of \$12,612.95 were incurred for the prehearing conference and evidentiary hearing.
393. TJFA is a Texas limited partnership. TJFA was formed in November 2004.
394. Bob Gregory is the sole (99%) limited partner of TJFA.

395. Garra de Aguila, Inc., a Texas corporation, owns the remaining 1% interest in TJFA and serves as the managing general partner of TJFA.
396. Bob Gregory owns 100% of the shares of Garra de Aguila, Inc.
397. Bob Gregory serves as president, chief executive officer, and principal owner of Texas Disposal Systems Landfill, Inc. (TDSL) and Texas Disposal Systems, Inc. (TDS).
398. TDSL owns a municipal solid waste landfill near Creedmoor in southeast Travis County.
399. Neither TJFA nor Garra de Aguila, Inc. has any employees.
400. Dennis Hobbs currently serves as the sole officer and director of Garra de Aguila, Inc.
401. Dennis Hobbs is employed by TDS as its Director of Special Projects.
402. TJFA shares a common business location, telephone number and fax number with TDSL and TDS.
403. TJFA is an affiliate of TDSL, a business competitor of BFI.
404. TJFA purchased a property near the BFI landfill in November 2004. TJFA has purchased properties next to four Central Texas landfills (Sunset Farms and three facilities operated by Waste Management) and participated as a party-protestant in four separate MSW permitting proceedings in the past four years.
405. TJFA spent several hundred thousand dollars in expert witness fees alone in this proceeding.

***Other Remaining Issues***

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

## II. CONCLUSIONS OF LAW

1. The Commission has jurisdiction over the disposal of municipal solid waste and the authority to issue this permit under TEX. HEALTH & SAFETY CODE ANN. § 361.061.
2. Notice was provided in accordance with TEX. HEALTH & SAFETY CODE ANN. § 361.0665, 30 TEX. ADMIN. CODE §§ 39.405 and 39.501, and TEX. GOV'T CODE §§ 2003.051 and 2003.052.
3. SOAH has jurisdiction to conduct a hearing and to prepare a Proposal for Decision in contested cases referred by TCEQ under TEX. GOV'T CODE § 2003.47.
4. The provisions of 30 TEX. ADMIN. CODE ch. 330 in effect prior to the March 27, 2006 amendments apply to the Application.
5. BFI submitted an administratively and technically complete permit amendment application, as required by TEX. HEALTH & SAFETY CODE ANN. §§ 361.066 and 361.068, that demonstrates that it will comply with all relevant aspects of the Application and design requirements as provided in 30 TEX. ADMIN. CODE §§ 330.4(m) and 330.51(b)(1).
6. The Application was processed and the proceedings described in this Order were conducted in accordance with applicable law and rules of the TCEQ, specifically 30 TEX. ADMIN. CODE § 80.1 *et seq.*, and the State Office of Administrative Hearings, specifically 1 TEX. ADMIN. CODE § 155.1 *et seq.*, and Subchapter C of TEX. HEALTH & SAFETY CODE ANN. Chapter 361.
7. The burden of proof was on the Applicant, in accordance with 30 TEX. ADMIN. CODE § 80.17(a). BFI met its burden with respect to all referred issues.

8. The evidence in the record is sufficient to meet the requirements of applicable law for issuance of the Draft Permit, including TEX. HEALTH & SAFETY CODE ANN. Chapter 361 and 30 TEX. ADMIN. CODE Chapter 330.
9. The TCEQ's guidance RG-417, as employed by the Applicant in preparing the Application, is a proper interpretation of the TCEQ's regulation 30 TEX. ADMIN. CODE § 330.56(f)(4)(A)(iv), which requires that an applicant provide a "discussion and analyses to demonstrate that natural drainage patterns will not be significantly altered as a result of the proposed landfill development."
10. BFI has demonstrated that natural drainage patterns will not be significantly altered as a result of the proposed Landfill development, as required by 30 TEX. ADMIN. CODE § 330.56(f)(4)(A)(iv).
11. The Application includes adequate provisions to control disease vectors as required by 30 TEX. ADMIN. CODE §§ 330.126 and 330.133(a);
12. As required by 30 TEX. ADMIN. CODE § 330.51(b)(6), BFI has submitted documentation of coordination with TCEQ for compliance with the federal Clean Water Act, Section 208.
13. The Applicant has submitted wetland determinations required by applicable federal, state, and local laws as required by 30 TEX. ADMIN. CODE §§ 330.51(b)(7) and 330.53(b)(12).
14. The Settlement Agreement between the City of Austin and BFI which was filed with SOAH on October 31, 2008, is enforceable against the parties thereto pursuant to TEX. RULES OF CIV. PROC. Rule 11.
15. Applicant submitted a subsurface investigation report that complies with 30 TEX. ADMIN. CODE § 330.56(d)(5).

16. BFI's borings were in compliance with the depth requirements contained in 30 TEX. ADMIN. CODE § 330.56(d)(5)(A)(ii).
17. BFI has thoroughly investigated for the presence of geologic faults as required by 30 TEX. ADMIN. CODE § 330.56(d)(3)(A).
18. The Application meets the requirements of 30 TEX. ADMIN. CODE §§ 330.55 and 330.200-300.206, concerning groundwater protection.
19. The Application proposes adequate protection of groundwater and surface water, in compliance with agency rules, including 30 TEX. ADMIN. CODE §§ 330.55(b)(1), 330.56(f), 330.134, and 330.200-330.206.
20. The Application includes adequate provisions to control odors in compliance with agency rules, including 30 TAC §§ 330.125(b) and 330.133(a).
21. The Landfill gas monitoring system complies with 30 TEX. ADMIN. CODE § 330.130.
22. The Facility is operated in accordance with the federal New Source Performance Standards and under the Commission's Title V General Operating Permit.
23. The Application includes adequate provisions to manage landfill gas, in compliance with agency rules, including 30 TAC §§ 330.56(n) and 330.130.
24. The Application includes adequate provisions for proper slope stability, in compliance with agency rules, including 30 TAC §§ 330.55(b)(8) and 330.56(1).
25. The methods specified in the Site Operating Plan for the control of windblown waste and litter comply with the MSW rules, including 30 TEX. ADMIN. CODE §§ 330.117, 330.120, 330.123, and 330.127.

26. The groundwater sampling and analysis plan meets the requirements set forth in 30 TEX. ADMIN. CODE §§ 330.56(k) and 330.230-330.234.
27. The Application includes adequate provisions calculating the estimated rate of solid waste deposition and operating life of the site, in compliance with agency rules, including 30 TEX. ADMIN. CODE § 330.55(a)(4).
28. BFI has submitted information regarding closure and post-closure that demonstrates compliance with the requirements of 30 TEX. ADMIN. CODE §§ 330.56(1) and (m), 330.253, and 330.254(b).
29. The parties have stipulated that referred Issue J, pertaining to whether the application includes adequate provisions for closure and post closure, in compliance with agency rules, is adequately addressed in the Application and Draft Permit and is not in dispute and may be resolved as if BFI had obtained summary disposition in its favor with respect to this issue. (This stipulated finding does not extend to the sufficiency of final cover, addressed elsewhere herein.)
30. BFI has provided sufficient information concerning its acceptance or disposal of "special waste," as defined by 30 TEX. ADMIN. CODE § 330.2.
31. BFI has demonstrated compliance with 30 TEX. ADMIN. CODE § 330.136 regarding disposal of special wastes.
32. The Site Operating Plan's special waste acceptance procedures ensure that special waste, as that term is defined in 30 TEX. ADMIN. CODE § 330.2, will not be accepted or disposed of without the prior written authorization from TCEQ, except with respect to certain special wastes the acceptance of which is previously authorized.
33. Under 30 TEX. ADMIN. CODE § 330.62(a), BFI possesses sufficient property rights in the Facility for which the permit will be issued and through the post-closure care period.

34. BFI and Giles Holdings, L.P. are the "owners" of the Facility as defined in 30 TEX. ADMIN. CODE § 330.2(94).
35. BFI is the "site operator" of the Facility as defined in 30 TEX. ADMIN. CODE § 330.2(132).
36. BFI is the "operator" of the Facility as defined in 30 TEX. ADMIN. CODE § 330.2(91).
37. The Application includes adequate provisions to prevent unauthorized wastes from being disposed in the landfill, in compliance with agency rules, including 30 TEX. ADMIN. CODE § 330.114(5).
38. As required by 30 TEX. ADMIN. CODE § 330.51(b)(6), BFI has submitted documentation of coordination with the Federal Aviation Administration for compliance with airport location restrictions.
39. As required by 30 TEX. ADMIN. CODE § 330.51(b)(6), BFI has submitted documentation of coordination with the Texas Department of Transportation for traffic and location restrictions.
40. BFI includes adequate provisions for dust control and maintenance of site access roads, in compliance with agency rules, including 30 TEX. ADMIN. CODE § 330.127.
41. Applicant has submitted Endangered Species Act compliance demonstrations under state and federal laws as required by 30 TEX. ADMIN. CODE §§ 330.51(b)(8), 330.53(b)(13), and 330.55(b)(9).
42. The Application conforms to the applicable requirements of the Engineering Practice Act, TEX. REV. CIV. STAT. ANN. art. § 3271a, as provided in 30 TEX. ADMIN. CODE § 330.51(d) and 22 TEX. ADMIN. CODE § 131.166.

43. BFI submitted a Motion for Partial Summary Disposition requesting resolution in its favor of Issue P, pertaining to the protection of endangered or threatened species. No party responded to BFI's motion. Summary disposition is granted in favor of BFI as to referred Issue P.
44. The Application includes adequate provisions for cover, in compliance with agency rules, including 30 TEX. ADMIN. CODE § 330.133.
45. The Applicant's compliance history was reviewed by the Executive Director and is acceptable under 30 TEX. ADMIN. CODE §§ 305.66 and 361.089 and 30 TEX. ADMIN. CODE Chapter 60.
46. In accordance with 30 TEX. ADMIN. CODE § 330.115, the fire protection plan in the Site Operating Plan includes fire protection standards and site personnel training requirements.
47. The parties have stipulated that referred Issue S, pertaining to whether the application includes adequate provisions for fire protection in accordance with TCEQ rules, is adequately addressed in the Application and Draft Permit and is not in dispute and may be resolved as if BFI had obtained summary disposition in its favor with respect to this issue.
48. BFI has submitted information regarding financial assurance that complies with 30 TEX. ADMIN. CODE §§ 330.52(b)(11) and 330.280-.286.
49. The land use information provided in the Application contains the technical information required under 30 TEX. ADMIN. CODE § 330.53(b).
50. As required by TEX. HEALTH & SAFETY CODE ANN. § 361.069, Sunset Farms Landfill is compatible with surrounding land uses.

51. Operation of an MSW Landfill in accordance with the applicable law and regulations is a proper land use of the property described in the Application.
52. The buffer zones established by BFI between the edge of fill and the site boundary are compliant with the MSW rules, including 30 TEX. ADMIN. CODE §§ 330.121(b) and 330.138. The Application satisfies all applicable screening requirements.
53. The vertical expansion of the Landfill, if constructed and operated in accordance with the TEX. HEALTH & SAFETY CODE ANN. Chapter 361, 30 TEX. ADMIN. CODE Chapter 330, the Application, and the Draft Permit, will not adversely affect the health of the requestors or their families.
54. The vertical expansion of the Landfill, if constructed and operated in accordance with the TEX. HEALTH & SAFETY CODE ANN. Chapter 361, 30 TEX. ADMIN. CODE Chapter 330, the Application, and the Draft Permit, will not cause the creation or maintenance of a nuisance in violation of Commission rules, including 30 TAC § 330.5(a)(2).
55. The operating hours proposed in the Application are appropriate.
56. The erosion control methods identified in the Application and Draft Permit are sufficient.
57. The parties have stipulated that referred Issue Z, pertaining to whether the storage, treatment and disposal of contaminated water is adequately addressed in the Application and Draft Permit and is not in dispute and may be resolved as if BFI had obtained summary disposition in its favor with respect to this issue.
58. The provisions of 30 TEX. ADMIN. CODE Chapter 330 apply specifically to "all aspects of municipal solid waste management," and are based primarily on the stated purpose of TEX. HEALTH & SAFETY CODE ANN. Chapter 361.

59. No site-specific conditions exist at the site that will require special consideration as provided in 30 TEX. ADMIN. CODE §§ 330.51(b)(3) and 330.53(b)(4).
60. The contents of the permit to be issued to the Facility meet the requirements of TEX. HEALTH & SAFETY CODE ANN. §§ 361.086(b) and 361.087.
61. The TCEQ is not prohibited by TEX. HEALTH & SAFETY CODE ANN. § 361.122 from issuing Permit No. MSW-1447A.
62. BFI has submitted documentation of compliance with the National Pollutant Discharge Elimination System (NPDES) program under the federal Clean Water Act Section 402, as amended, as required by 30 TEX. ADMIN. CODE § 330.51(b)(5).
63. Part I of the Application meets the technical requirements of 30 TEX. ADMIN. CODE §§ 305.45 and 330.52.
64. Part II of the Application meets the technical requirements of 30 TEX. ADMIN. CODE § 330.53.
65. The Site Development Plan, which supports Parts I and II of the Application, meets the requirements of 30 TEX. ADMIN. CODE §§ 330.54, 330.55, and 330.56.
66. Part IV of the Application, (the Site Operating Plan) meets the requirements of 30 TEX. ADMIN. CODE §§ 330.57 and 330.114.
67. BFI has shown that it will comply with the operational prohibitions and requirements in 30 TEX. ADMIN. CODE §§ 330.5, 330.11 330.139.
68. Pursuant to the authority of, and in accordance with applicable laws and regulations, the attached Permit should be granted.

69. Pursuant to 30 TEX. ADMIN. CODE § 80.23(d)(2), the Executive Director and Office of Public Interest Counsel may not be assessed any portion of the transcript and reporting costs.
70. For the reasons set out in the Findings of Fact, the court reporting and transcript costs should be assessed as follows: 50% to BFI and 50% to TJFA.
71. In accordance with 30 TEX. ADMIN. CODE § 50.117, the Commission issues this Order and the attached permit as its single decision on the permit amendment application. Information in the agency record of this matter, which includes evidence admitted at the hearing and part of the evidentiary record, documents the Executive Director's review of the permit amendment application, including that part not subject to a contested case hearing, and establishes that the terms of the attached permit are appropriate and satisfy all applicable federal and state requirements.

### III. EXPLANATION OF CHANGES

1. The Commission adopted the Executive Director's clarifying and grammatical changes from his exceptions to the ALJ's PFD and Proposed Order. The ALJ recommended adoption of the Executive Director's proposed changes in his June 29, 2009 letter. Accordingly, changes were made to Finding of Fact Nos. 16, 19, 22, 35, and 104 and Conclusion of Law Nos. 2 and 4 to correct citations and grammatical errors.
2. In response to the ALJ's June 29, 2009 letter regarding operating hours, the Commission adopted the ALJ's conclusion that the Applicant's existing and proposed 24 hour per day, seven day per week operating hours are appropriate for the Landfill. However, the Commission modified the ALJ's underlying reasoning, finding instead that the Applicant bore the burden of proof on all issues in this matter and that it presented sufficient evidence to meet its burden on all issues referred to SOAH by the Commission. With regard to operating hours, the Commission determined that the evidence in the record supported a finding that BFI made a prima facie showing that its' existing and proposed

operating hours are appropriate and there was no contravening evidence offered by the Protestants in the record to warrant any changes to those hours. Thus, the Commission modified proposed Finding of Fact No. 286 and proposed Conclusion of Law Nos. 7 and 55 to reflect that the proposed operating hours for the facility are appropriate and that the Applicant bore the burden of proof on all issues referred to SOAH for hearing in this matter. Conforming clarification changes to proposed Conclusion of Law No. 68 and Ordering Provision No. 1 were also made to effectuate the clear intent of the Commission's action on this matter, pursuant to the Commission's Resolution in Docket No. 2009-0059-RES.

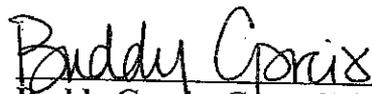
**NOW, THEREFORE, BE IT ORDERED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY, IN ACCORDANCE WITH THESE FINDINGS OF FACT AND CONCLUSIONS OF LAW THAT:**

1. The attached Type I Municipal Solid Waste Permit No. MSW-1447A is granted to BFI Waste Systems of North America, LLC.
2. The Commission adopts the Executive Director's Response to Public Comment in accordance with 30 TEX. ADMIN. CODE § 50.117. Also in accordance with Section 50.117, the Commission issues this Order and the attached permit as its single decision on the permit amendment application. Information in the agency record of this matter, which includes evidence admitted at the hearing and part of the evidentiary record, documents the Executive Director's review of the permit amendment application, including that part not subject to a contested case hearing, and establishes that the terms of the attached permit are appropriate and satisfy all applicable federal and state requirements.
3. The Applicant shall pay 50% of the court reporting and transcript costs for this case and TFJA, L.P. shall pay the remaining 50%.

4. The Chief Clerk of the Commission shall forward a copy of this Order to all parties and issue the attached permit as changed to conform to this Order.
5. All other motions, requests for specific Findings of Fact or Conclusions of Law, and other requests for general and specific relief, if not expressly granted, are denied for want of merit.
6. If any provision, sentence, clause, or phrase of this Order is for any reason held to be invalid, the invalidity of any portion shall not affect the validity of the remaining portions of this Order.
7. The effective date of this Order is the date the Order is final, as provided by 30 TAC § 80.273 and TEX. GOV'T CODE ANN. § 2001.144.

ISSUED: SEP 14 2009

TEXAS COMMISSION ON  
ENVIRONMENTAL QUALITY

  
Buddy Garcia, Commissioner  
For the Commission





## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

MSW Permit No.: 1447A TCEQ Docket No.: 2007-1774-MSW

Site Operator / Permittee: BFI Waste Systems of North America, LLC  
4542 SE Loop 410  
San Antonio, Texas 78222-3925

Property Owners: BFI Waste Systems of North America, LLC  
4542 SE Loop 410  
San Antonio, Texas 78222-3925

Giles Holdings, L.P.  
1223 Judson Road  
Longview, Texas 75601-3922

Facility Name: BFI Sunset Farms Landfill

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 amended permit is granted subject to the rules and orders of the Commission and laws of the State of Texas and it replaces any previously issued permit. Nothing in this permit exempts the permittee from compliance with other applicable rules and regulations of the Texas Commission on Environmental Quality. This permit will be valid until canceled, amended, or revoked by the Commission.

APPROVED, ISSUED AND EFFECTIVE in accordance with Title 30 Texas Administrative Code Chapter 330, as in effect before March 27, 2006.

ISSUED DATE:

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For the Commission

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**MSW Permit No. 1447A**  
**Travis County**

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## **PART NO. 1**

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

- A. The BFI Waste Systems of North America Sunset Farms Landfill is located approximately three quarters of a mile north of the intersection of Giles Road and U.S. Highway 290, in Travis County, Texas. The site is within the city limits and extra-territorial jurisdiction of the City of Austin. The address of the landfill entrance is 9912 Giles Road.
- B. The legal description is contained in Part I of the application, in Attachment A of this permit.
- C. Coordinates and Elevation of Site Permanent Benchmark:
- |            |  |
|------------|--|
| Latitude:  | N 30° 20' 21"                          |
| Longitude: | W 97° 37' 01"                          |
| Elevation: | 613.40 feet above mean sea level (msl) |
- D. The total area within the permit boundary is approximately 349.4 acres, of which approximately 251.5 acres will be used for waste disposal. The final maximum elevation of the waste fill and final cover material will be 795 feet msl.

### **II. Incorporated Application Materials**

This permit is based on and the permittee shall follow Parts I through IV of the permit application dated August 1, 2005, and the revisions dated May 8, 2006, August 22, 2006, November 10, 2006, January 18, 2007, February 12, 2007, March 14, 2007, May 12, 2008, January 16, 2009 and January 29, 2009, which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality (TCEQ). These materials are incorporated into this permit by reference in Attachment A as if fully set out herein. Any and all revisions to these application materials shall become conditions of this permit upon the date of approval by the Commission.

Part V of the permit application shall be submitted upon completion of construction of the facility. The permittee shall maintain Parts I through V of the application as described in Title 30 Texas Administrative Code (30 TAC), Chapter 330, Section (§) 330.51(a) at the facility and make them available for inspection by TCEQ personnel. (Chapter 330 rule citations in this document refer to the rules in effect at the time of the application, before the March 27, 2006, revisions.)

### III. Facilities and Operations Authorized

#### A. Days and Hours of Operation

The facility is authorized to operate and accept waste 24 hours per day, seven days per week.

#### B. Wastes Authorized at This Facility

The permittee is authorized to dispose of municipal solid waste resulting from or incidental to municipal, community, commercial, institutional, and recreational activities, including household garbage, putrescible wastes, rubbish, ashes, brush, street cleanings, dead animals, construction-demolition waste, and yard waste. The facility may also accept, regulated asbestos-containing material from municipal sources, Class 1 industrial nonhazardous solid waste that is considered Class 1 only because of asbestos content (30 TAC §330.136(b) and §330.137(b)), Class 2 industrial nonhazardous solid waste, Class 3 industrial nonhazardous solid waste, and certain special wastes identified in Part IV in Attachment A of this permit. The acceptance of special wastes is contingent upon such waste being handled in accordance with 30 TAC §330.136, and in accordance with the listed and described procedures in Part IV in Attachment A of this permit, subject to the limitations and special provisions provided herein.

#### C. Wastes Prohibited at This Facility

The permittee shall comply with the waste disposal restrictions set forth in 30 TAC §330.5(e). Hazardous wastes (other than municipal hazardous waste from conditionally exempt small quantity generators), radioactive wastes, polychlorinated biphenyl (PCB) wastes, nonhazardous Class 1 industrial wastes (other than that considered Class 1 only because of asbestos content), or any other wastes not identified in Section III.B. of this permit shall not be accepted at this facility.

#### D. Waste Acceptance Rate

Authorized solid waste may be accepted for disposal at this site at the initial rate of approximately 3,150 tons-per-day and increasing over time to a maximum acceptance rate of approximately 5,000 tons-per-day. The actual yearly waste acceptance rate is a rolling quantity based on the sum of the previous four quarters of waste acceptance. Present and future waste acceptance rates are detailed in Part III, Appendix IIIA in Attachment A of this permit.

E. Volume Available for Waste Disposal

The total waste disposal capacity of the landfill is 38,333,735 cubic yards, based on the information contained in Appendix III-A of Part III, in Attachment A of this permit.

F. Facilities Authorized

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

G. Changes, Additions, or Expansions

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

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

- A. Facility design, construction, and operation and/or maintenance must comply with the provisions of this permit; Commission Rules, including 30 TAC §§330.50 through 330.65, 330.111 through 330.139, 330.150 through 330.159, 330.200 through 330.206, 330.230 through 330.242, 330.250 through 330.256, 330.280 through 330.284, and 330.300 through 330.305; Chapter 37, Subchapter R; special provisions contained in this permit; and Parts I through IV of the application in Attachment A of this permit, and shall be managed in a manner to protect human health and the environment.
- B. The entire waste management facility shall be designed, constructed, operated, and maintained to prevent the release and migration of any waste, contaminant, or pollutant beyond the point of compliance as defined in 30 TAC §330.2 and to prevent inundation or discharge from the areas surrounding the facility components. Each

receiving, storage, processing, and disposal area shall have a containment system that will collect spills and incidental precipitation in such a manner as to:

1. Preclude the release of any contaminated runoff, spills, or precipitation;
  2. Prevent washout of any waste by a 100-year storm; and
  3. Prevent run-on into the disposal areas from off-site areas.
- C. The site shall be designed and operated so as not to cause a violation of:
1. The requirements of §26.121 of the Texas Water Code;
  2. Any requirements of the Federal Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements of §402, as amended, and/or the Texas Pollutant Discharge Elimination System (TPDES), as amended;
  3. The requirements under §404 of the Federal Clean Water Act, as amended; and
  4. Any requirement of an area wide or statewide water quality management plan that has been approved under §208 or §319 of the Federal Clean Water Act, as amended.
- D. Contaminated water shall be handled, stored, treated, disposed of, and managed in accordance with 30 TAC §330.55(b)(6), 30 TAC §330.56(o), and Part III, Attachment 15 in Attachment A of this permit.
- E. Best management practices for temporary erosion and sedimentation control shall remain in place until sufficient vegetative cover has been established to control and mitigate erosion on areas having final cover. Vegetative cover will be monitored and maintained throughout the post-closure care period in accordance with Part III, Attachment 13 in Attachment A of this permit.
- F. Storm water runoff from the active portion of the landfill shall be managed in accordance with 30 TAC §330.55(b)(3) and §330.133(b), and as described in Part III in Attachment A of this permit.
- G. All facility employees and other persons involved in facility operations shall be qualified, trained, educated, and experienced to perform their duties so as to achieve

compliance with this permit. The permittee shall comply with 30 TAC §330.52(b)(9) and as described in Part I in Attachment A of this permit. The permittee shall further ensure that personnel are familiar with safety procedures, contingency plans, the requirements of the Commission's rules and this permit, commensurate with their levels and positions of responsibility, in accordance with Part III and Part IV in Attachment A of this permit. All facility employees and other persons involved in facility operations shall obtain the appropriate level of operator certification as required by recent changes in the statute and applicable regulations.

- H. The facility shall be properly supervised to assure that bird populations will not increase and that appropriate control procedures will be followed. Any increase in bird activity that might be hazardous to safe aircraft operations will require prompt mitigation actions.

**V. Financial Assurance**

- A. Authorization to operate the facility is contingent upon compliance with provisions contained within the permit and maintenance of financial assurance in accordance with 30 TAC Chapter 330, Subchapter K and 30 TAC Chapter 37, Subchapter R.
- B. Within 60 days after the date of issuance of this permit, the permittee shall provide financial assurance instrument(s) for demonstration of closure of the landfill in accordance with 30 TAC §§330.253(d)(6) and 330.281. The closure cost estimate of \$39,099,849 (2004 dollars) is based on estimates as described in Part III, Attachments 8 and 12, in Attachment A of this permit. The financial assurance instrument shall be in an amount that includes the inflation factors for each calendar year following 2004 until the year the permit is issued.
- C. Within 60 days after the date of issuance of this permit, the permittee shall provide financial assurance instrument(s) for demonstration of post-closure care of the landfill in an amount for the entire landfill facility. The post-closure care cost estimate of \$7,984,570 (2005 dollars) is based on estimates as described in Part III, Attachments 8 and 13, in Attachment A of this permit. The financial assurance instrument shall be in an amount that includes the inflation factors for each calendar year following 2005 until the year the permit is issued.
- D. The owner and/or operator shall annually adjust closure and/or post-closure care cost estimates for inflation within 60 days prior to the anniversary date of the establishment of the financial assurance instrument pursuant to 30 TAC §330.281 and §330.283, as applicable.

- E. If the facility closure and/or post-closure care plan is modified in accordance with 30 TAC §305.70, the permittee shall provide new cost estimates in current dollars in accordance with 30 TAC §§330.253(d)(6), 330.254(b)(3)(D), 330.281, and 330.283, 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.

## VI. Facility Closure

Closure of the facility shall commence:

- A. Upon completion of the disposal operations and the site is completely filled or rendered unusable in accordance with Part III, Attachment 7 in Attachment A of this permit. All waste receipt shall cease on or before November 1, 2015. After the last receipt of wastes, the permittee shall complete installation of the permitted final cover system in accordance with 30 TAC §330.253;
- B. Upon direction by the Executive Director of the TCEQ for failure to comply with the terms and conditions of this permit or violation of State or Federal regulations. The Executive Director is authorized to issue emergency orders to the permittee in accordance with §5.501 and §5.512 of the Water Code regarding this matter after considering whether an emergency requiring immediate action to protect the public health and safety exists;
- C. Upon abandonment of the site;
- D. For failure to secure and maintain an adequate bond or other financial assurance as required; or
- E. Upon the permittee's notification to the TCEQ that the landfill will cease to accept waste and no longer operate at any time prior to the site being completely filled to capacity.

## VII. Site Completion and Closure

The landfill shall be completed and closed in accordance with 30 TAC §330.250 and the applicable portions of 30 TAC §§330.253 through 330.256. Upon closure, the permittee shall submit to the Executive Director documentation of closure as set out in 30 TAC

§330.253. Post-closure care and maintenance shall be conducted in accordance with Part III, Attachment 13 found in Attachment A of this permit, for a period of 30 years or as otherwise determined by the Executive Director pursuant to 30 TAC §330.254(b).

#### VIII. Standard Permit Conditions

- A. Parts I through IV, as described in 30 TAC §330.51(a), which comprise the Permit Application for MSW Permit No. 1447A are hereby made a part of this permit as Attachment A. The permittee shall maintain Parts I through IV and Part V, as described in 30 TAC §330.51(a), 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 §330.54 and §330.55. 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 §330.57 and §330.114.
- B. Attachment B, consisting of minor amendments, modifications, and corrections to this permit, is hereby made a part of this permit.
- C. The permittee shall comply with all conditions of this permit. Failure to comply with any permit condition may constitute a violation of the permit, the rules of the Commission, and the Texas Solid Waste Disposal Act, and is grounds for an enforcement action, revocation, or suspension.
- D. A pre-construction conference shall be held pursuant to 30 TAC §330.64(c) before beginning any construction within the permit boundary to ensure that all aspects of this permit, construction activities, and inspections are met. Additional pre-construction conferences may be held prior to the opening of the facility.
- E. A pre-opening inspection shall be held pursuant to 30 TAC §330.64(d).
- F. The permittee shall monitor sediment accumulations in ditches and culverts on a quarterly basis, and remove sedimentation to re-establish the design flow grades on an annual basis or more frequently if necessary to maintain the design flow.
- G. The tracking of mud off-site onto any public right-of-way shall be minimized.
- H. In accordance with 30 TAC §330.7(a), the permittee shall record in the deed records of Travis County, a metes and bounds description of all portions within the permit boundary on which disposal of solid waste has and/or will take place. A certified

- copy of the recorded document(s) shall be provided to the Executive Director in accordance with 30 TAC §330.7(b).
- I. Daily cover of the waste fill areas shall be performed with clean soil that has not been in contact with waste. Intermediate cover, run-on, and run-off controls shall not be constructed from soil that has been scraped up from prior daily cover or which contains waste.
  - J. During construction and operation of the facility, measures shall be taken to control runoff, erosion, and sedimentation from disturbed areas. Erosion and sedimentation control measures shall be inspected and maintained at least monthly and after each storm event that meets or exceeds the design storm event. Erosion and sedimentation controls shall remain functional until disturbed areas are stabilized with established permanent revegetation. The permittee shall maintain the on-site access road and speed bumps/mud control devices in such a manner as to minimize the buildup of mud on the access road and to maintain a safe road surface.
  - K. In complying with the requirements of 30 TAC §330.123, 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 §330.62(b).
  - M. Inspection and entry onto the site by authorized personnel shall be allowed during the site operating life and until the end of the post-closure care period as required by §361.032 of the Texas Health and Safety Code.
  - N. The provisions of this permit are severable. If any permit provision or the application of any permit provision to any circumstance is held invalid, the remainder of this permit shall not be affected.
  - O. Regardless of the specific design contained in Attachments A and B of this permit, the permittee shall be required to meet all performance standards required by the permit, the regulations, and as required by local, state, and federal laws or ordinances.
  - P. If differences exist between permit provisions, application materials (incorporated as Parts I through IV of Attachment A of this permit) and the rules under 30 TAC Chapter 330, then the permit provisions and the rules shall hold precedence over the

application materials. The Special Provisions contained in Section X of this permit shall hold precedence over any inconsistent provisions in this permit.

- Q. The permittee shall comply with the requirements of the air permit exemption in 30 TAC §106.534, if applicable, and the applicable requirements of 30 TAC Chapters 106 and 116.
- R. All discharge of storm water will be in accordance with the U.S. Environmental Protection Agency NPDES requirements and/or the State of Texas TPDES requirements, as applicable.

**IX. Incorporated Regulatory Requirements**

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

**X. Special Provisions**

- A. The permittee shall comply with the conditions specified in a letter from the Capital Area Council of Governments (CAPCOG) to the TCEQ, dated August 23, 2006, and agreed to by the applicant in a letter to CAPCOG dated January 18, 2007, as described in Section I.B (Supplementary Technical Report) of Part I of the application and documented in Section II.K (Coordination Letters) of Part II of the application, in Attachment A of this permit.
- B. All waste receipt shall cease on or before November 1, 2015. The permittee shall restrict the property on which the landfill currently operates from use for transfer station operations on or after November 1, 2015. After the last receipt of wastes, the permittee shall complete installation of the permitted final cover system in accordance with 30 TAC §330.253. The maximum heights, depths and footprint for the landfill fill area, as approved by the TCEQ under permit No. MSW 1447A shall not be exceeded by any subsequent modification or amendment of the permit.
- C. Leachate and gas condensate shall not be recirculated.

- D. The permittee shall repair eroded cover within 5 days of detection unless the commission's regional office approves otherwise.
- E. The following Special Provisions are incorporated as a result of a settlement agreement between the permittee, Giles Holdings, L.P., and the City of Austin, and include the definitions below which apply to Special Provisions E.1 through E.9:

**Side slope** means the exterior edges of fill areas or sidewalls of detention ponds which generally will have a slope steeper than 10%.

**Top deck** means the top portion of the landfill which generally will have a slope flatter than 10%.

**Adequate vegetation growth** means 85% surface area coverage in vegetation at least 1" tall.

**Seeding events** means seeding in compliance with City of Austin Environmental Criteria Manual (ECM) Section 1.4.7 A (Exhibit 1) except as otherwise noted.

**Amended landfill permit** means proposed TCEQ draft permit 1447A for the Sunset Farms Landfill.

**Property** means the property on which the Landfill operates as described in the amended landfill permit application.

1. BFI shall place intermediate cover and implement seeding events, on all side slope areas on which waste placement activity has not recommenced within 60 days except BFI is under no obligation to seed such areas during the months of July and August. These seeded areas shall be irrigated in accordance with the requirements of Exhibit 1. This provision is not intended to modify the requirement to seed or sod immediately following the application of final cover as required by 30 TAC §330.253(b)(3).
2. BFI shall place intermediate cover and implement seeding events on the top deck of the landfill in all areas on which waste placement activity has not recommenced within 120 days except for that area immediately up gradient of the five constructed temporary drainage down chutes on intermediate cover areas as shown on attached Exhibit 2. Those up gradient areas shall be immediately vegetated upon construction of each down chute with a filter strip of buffalo grass sod that extends at least 100 feet out from each down chute inlet and is wide enough to filter the run off to be directed to each down

chute (See Exhibit 2 for width dimensions). The buffalo grass filter strip shall be maintained until final cover is placed. In addition, a silt fence or mulch berm or other erosion control mechanisms approved by the TCEQ shall be placed on the top deck in front of the inlet of each down chute and at the end of each constructed down chute (See Exhibit 2 for locations). These controls shall remain in place and be maintained until the areas contributing runoff to these down chutes achieve adequate vegetation growth. This provision is not intended to modify the requirement to seed or sod immediately following the application of final cover as required by 30 TAC §330.253(b)(3).

3. The initial seeding event for all areas will be accomplished using hydro-mulch seeding application procedures per Exhibit 1.
4. Seeding will be of a seasonally appropriate mix. Currently the seed mix is bermuda/millet for warm weather and rye for cold weather. When cold weather seed is used the seeded area shall be reseeded with warm weather mix within 60 days of the onset of sufficiently warm weather to support the warm weather mix. The reseeded area shall be irrigated until adequate vegetation growth is achieved.
5. Seeding for the final cover shall include a seasonally appropriate 609-S (native seeds) mix as defined in Exhibit 3, excerpt from the City of Austin Standard Specifications Manual, on approximately 15% of the surface area of the eastern and northern slopes of the landfill and for the remainder of the site a seasonally appropriate mix.
6. Perimeter sediment/erosion control devices such as silt fences, hay bales, mulch tubes or mulch berms shall be in place prior to the establishment of any soil stock piles on site. For soil stock piles which have slope lengths greater than 20 feet, mid-slope temporary stabilization controls such as seeding, tarping or placement of silt fences or mulch berms shall be implemented within fourteen days of the initial establishment of the soil stock pile and shall be maintained in good working condition until the stockpile is removed.
7. BFI shall install and maintain silt fences or mulch berms within 14 days of completion of intermediate cover at the base of all side slope and top deck intermediate cover areas until adequate vegetation growth is achieved.

8. Stormwater runoff from the landfill area designated as Drainage Area 2 shall be routed through the existing detention pond, or the proposed water quality/detention pond, when the waste fill in Drainage Area 2 has reached the final grades proposed in the landfill expansion plan.
  9. BFI will ensure that the side slopes of the existing detention pond and the side slopes of the proposed water quality/detention pond in the northeast portion of the landfill shall be adequately stabilized through proper grading and maintenance and by implementing/applying vegetation on the side slopes of the ponds within thirty days of completion of construction of the pond. BFI further agrees to inspect the sedimentation ponds/basins every three months and after every half-inch rainfall event and to clean the ponds/basins by removing the accumulated sediment once the sediment has reached 25% of the respective pond capacity.
  10. BFI shall not accept liquid waste as defined in 30 TAC §330.2(70) and shall not construct or operate a liquid waste stabilization/solidification basin at the Sunset Farms Landfill.
  11. BFI shall take steps to discourage commercial waste hauling vehicles from utilizing Blue Goose Road as ingress or egress to the Sunset Farms Landfill except for those few vehicles which service businesses and residences in that area. These steps may include posting signs, adding surcharges, or similar measures.
- F. BFI shall not use alternative material daily cover (ADC) at the Sunset Farms Landfill.

**PART NO. 2**

**Attachment A**

Parts I through IV of the permit application.

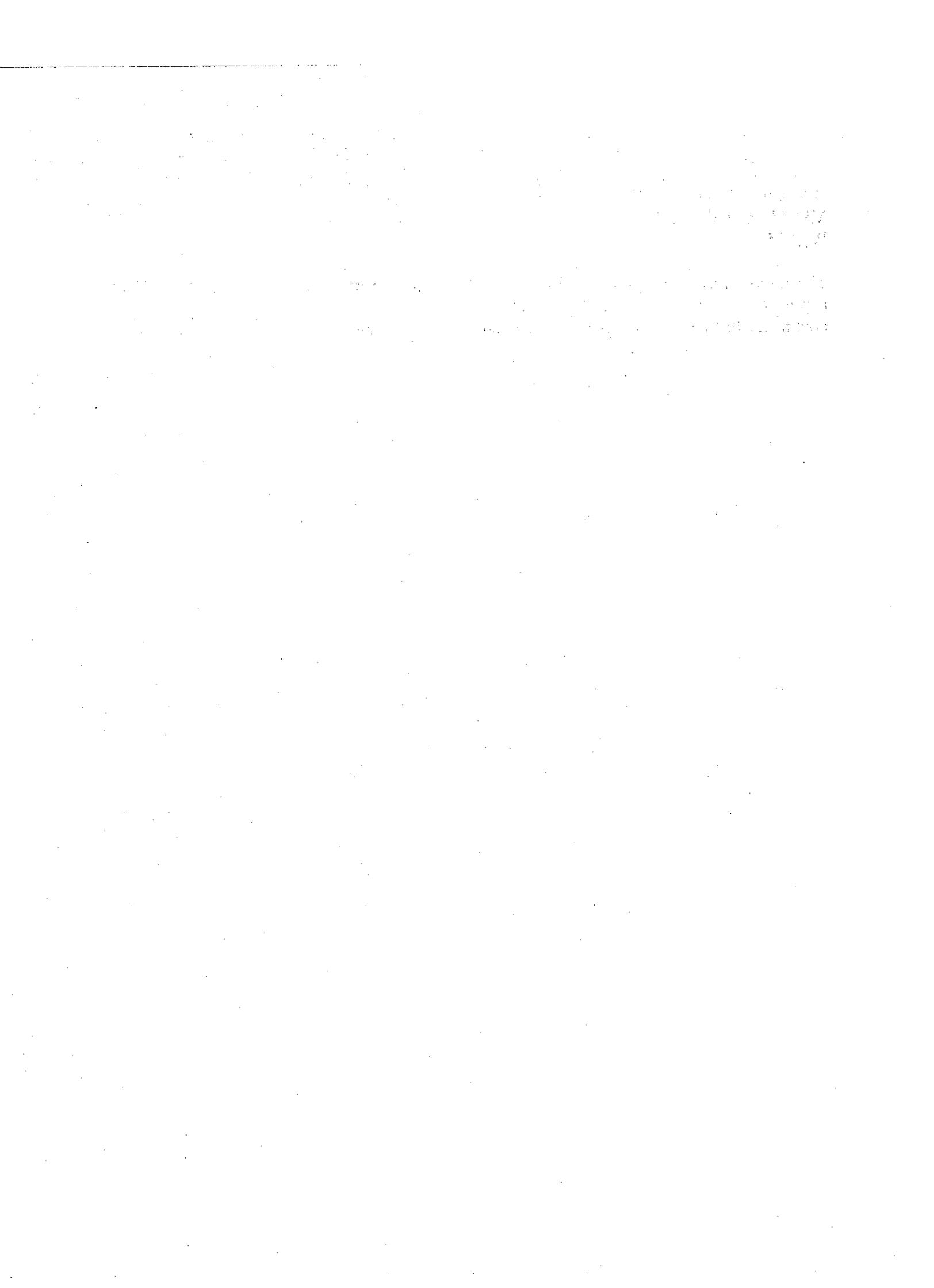
**PART NO. 3**

**Attachment B**

Minor Amendments, Corrections, and Modifications that may be issued for MSW Permit No. 1447A

BFI Sunset Farms Landfill  
MSW Permit No. 1447A  
Page 15

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



## EXHIBIT 1

### Vegetative Practices

#### *Temporary Vegetative Stabilization of Disturbed Areas*

1. Description.

Stabilize soil in disturbed areas with temporary vegetation or mulching.

2. Purpose.

To stabilize the soil; to reduce damages from sediment and runoff to downstream areas; improve wildlife habitat; enhance natural beauty.

3. Conditions Where Practice Applies.

Use vegetation to temporarily stabilize the soil on disturbed, graded or cleared areas prior to establishment of permanent vegetation.

4. Design Criteria.

Prior to vegetative establishment, install needed erosion control practices, such as diversions, grade stabilization structures, berms, dikes, level spreaders, and sediment basins.

Final grading and shaping has usually not been completed for temporary stabilization.

5. Fertilizer.

For temporary vegetative establishment, apply fertilizer with an analysis of 15-15-15 at the rate of .5 pounds of nitrogen per 1,000 square feet during the installation period. In order to avoid the conveyance of nutrients off-site, the timing shall not occur when rainfall is expected.

6. Seed Bed Preparation.

Prepare a suitable seed bed which allows good seed-to-soil contact and soil conditions that are conducive to vegetative growth. Do not disturb the soil within the critical root zone of existing trees.

Areas of compacted soil shall be loosened to a depth of at least two (2) inches by plowing, discing, raking or other acceptable means before seeding. In areas where no topsoil exists, or where fill is needed, the subgrade shall be loosened by discing or by scarifying to a depth of at least two (2) inches to permit bonding of the topsoil to the subsoil.

Topsoil, when used, shall have the following requirements: The depth of the topsoil shall be a minimum of 6" in all areas except within the critical root zone of existing trees. Do not add topsoil within the critical root zone of existing trees.

For temporary vegetative stabilization, the top six inches of soil used for intermediate cover must contain sufficient organic matter and nutrients to support vegetative cover. The following description is not required but is a suggested mix which will be presumed to meet this performance requirement: *The topsoil shall be composed of 3 parts of soil mixed with 1 part Compost, by volume. The compost*

shall be Dillo Dirt or an equal approved by the Engineer, or designated representative. The soil shall be locally available native soil that meets the following specifications:

- Shall be free of trash, weeds, deleterious materials, rocks, and debris.
- 100% shall pass through a 0.75-inch screen.
- Less than 25 % shall pass through a #200 sieve.

Topsoil salvaged from the existing site may often be used, but it should meet the same standards as set forth in these standards.

7. Seeding.

If seeding is to be conducted during the cool season (November 1 to February 15) select species noted as "cool season cover crop" from the tables in Standard Specification 604S and/or 609S. If seeding is to be conducted during the warm season (February 16 to October 31) use one of the following options (whichever is applicable).

- Native Seeding: Green Sprangletop (*Leptochloa dubia*) at the rate of 4 lbs. per acre.
- Non-native Seeding: Comply with 604S.5 using Bermuda grass.
  - Apply seed uniformly with a seed spreader, drill, cultipacker seeder or hydroseeder (slurry includes seed, fertilizer and binder).

8. Protection of Seed Bed with Hydromulching or Soil Retention Blanket.

Newly-installed temporary vegetation must be protected by hydromulch or soil retention blanket (refer to Standard Specification 605S Soil Retention Blanket) immediately after seeding. Protection of the seed bed shall occur in a manner that will allow seed germination and that encourages effective vegetative growth. Hydromulching, when used, shall comply with the requirements of Table 1.4.7-A: Hydromulching for Temporary Vegetative Stabilization.

Table 1.4.7-A: Hydromulching for Temporary Vegetative Stabilization

Material	Description	Longevity	Typical Applications	Application Rates
70/30 Wood/Cellulose Blend Mulch	70% Wood 30% Paper 3% Tackifier	0-3 months	Moderate slopes; from flat to 3:1	45.9 lbs/1000 sf
Wood Fiber Mulch	96% Wood 3% Tackifier	0-3 months	Moderate slopes; from flat to 3:1	45.9 lbs/1000 sf

a. 70/30 Wood/Cellulose Blend Fiber Mulch. Wood/Cellulose blend fiber mulch shall consist of 70% long wood grain fibers produced from grinding clean, whole wood chips and 30% cellulose fiber produced from ground newsprint. Refer to Table 1.4.7-B for mulch properties and to Standard Specification 604S – Seeding for additional mulch requirements.

b. Wood Fiber Mulch. Wood fiber mulch shall consist of 100% long wood grain fibers produced from grinding clean, whole wood chips. Refer to Table 1.4.7-C for mulch properties and to Standard Specification 604S – Seeding for additional mulch requirements.

**Table 1.4.7-B: Properties of 70/30 Wood/Cellulose Blend Fiber Mulch**

Property (Test Method)	Required Value
Moisture content %	12.0% ±3.0% (max.)
Organic matter % - wood fiber	70% ±1% Oven Dry Basis (min.)
Organic matter % - paper fiber	30.0% ±1% Oven Dry Basis (max.)
Tacking Agent	3.0% (min.)
Water holding capacity	1,000 Grams of water per 100 grams of fiber (min.)

**Table 1.4.7-C: Properties of Wood Fiber Mulch**

Property (Test Method)	Required Value
Moisture content %	12.0% ±3.0% (max.)
Organic matter % - wood fiber	96% ±1% Oven Dry Basis (min.)
Organic matter % - paper fiber	30.0% ±1% Oven Dry Basis (max.)
Tacking Agent	3.0% (min.)
Water holding capacity	1,000 Grams of water per 100 grams of fiber (min.)

9. Watering

Seed germination will be expected within 1 week of sowing. Watering is required to germinate seed and maintain growth. Seedlings shall be watered daily, or more often as necessary to ensure growth and to ensure that the vegetative cover stabilizes the soil as required.



Exhibit 2

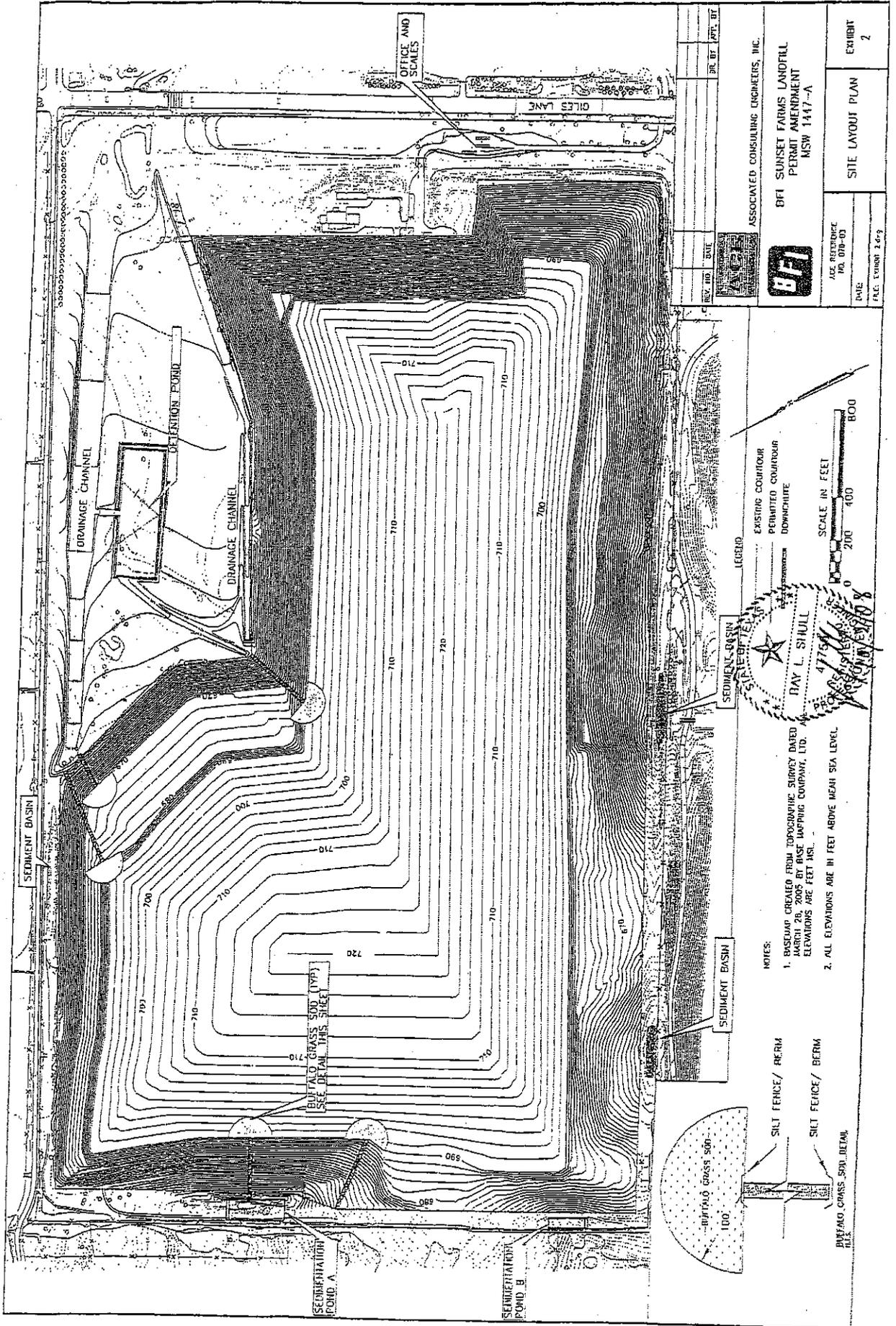


EXHIBIT 3

If the native grassland is being installed during the cool season (November 1 to February 15), the cool season cover crop species (as listed) shall be included in the mix.

The rooted plants shall be applied in accordance with appropriate 'growing environments' (UFS = Upland Full Sun; USD = Upland Shade-Dappled; and FHM = Facultative, Moderate to High Moisture)

Table 2: Native Grass Planting Options				
Select Rooted Grasses For Appropriate Environments On Project Site Use Several Species If Site Environment Is Diverse Or To Achieve Greater Diversity				
Common Name	Botanical Name	Spacing	Size	Preferred Environment
Buffalo Grass	<i>Buchloe dactyloides</i>	5 foot centers	16" X 24" piece of sod	UFS
Sideoats Grama	<i>Bouteloua curtipendula</i>	5 foot centers	1 gallon equivalent	UFS
Green Sprangletop	<i>Leptochloa dubia</i>	5 foot centers	1 gallon equivalent	UFS
Little Bluestem	<i>Schizachyrium scoparium</i>	5 foot centers	1 gallon equivalent	UFS
Blue Grama Grass	<i>Bouteloua gracilis</i>	5 foot centers	1 gallon equivalent	UFS
Big Bluestem	<i>Andropogon gerardii</i>	5 foot centers	1 gallon equivalent	UFS or FHM
Indiangrass	<i>Sorghastrum nutans</i>	5 foot centers	1 gallon equivalent	UFS or FHM
Bushy Bluestem	<i>Andropogon glomeratus</i>	5 foot centers	1 gallon equivalent	FHM
Big Muhly (Lindheimer's)	<i>Muhlenbergia lindheimeri</i>	5 foot centers	1 gallon equivalent	FHM
Eastern Gama Grass	<i>Tripsacum dactyloides</i>	5 foot centers	1 gallon equivalent	FHM
Switchgrass	<i>Panicum virgatum</i>	5 foot centers	1 gallon equivalent	FHM
Inland Sea Oats	<i>Chasmanthium latifolium</i>	5 foot centers	1 gallon equivalent	USD
Canada Wild Rye	<i>Elymus canadensis</i>	5 foot centers	1 gallon equivalent	USD
Caric Sedges	<i>Carex spp.</i>	5 foot centers	1 gallon equivalent	USD
Canada Wild Rye	<i>Elymus canadensis</i>	5 foot centers	1 gallon equivalent	USD

The seed mixture and the rate of application shall be as follows for both native grasses and wildflowers:

Common Name	Botanical Name	Application rates	
		Lbs/1000 feet <sup>2</sup>	kg/ 100 meter <sup>2</sup>
Indiangrass	<i>Sorghastrum nutans</i>	0.2	0.10
Sideoats grama	<i>Bouteloua curtipendula</i>	0.2	0.10
Green sprangletop	<i>Leptochloa dubia</i>	0.2	0.10
Buffalo Grass	<i>Buchloe dactyloides</i>	0.1	0.05
Little Bluestem	<i>Schizachyrium scoparium</i>	0.05	0.025
Blue Grama Grass	<i>Bouteloua gracilis</i>	0.2	0.10
Canada Wild Rye	<i>Elymus canadensis</i>	0.2	0.10
Eastern gamagrass	<i>Tripsacum dactyloides</i>	0.2	0.10
Switchgrass	<i>Panicum virgatum</i>	0.1	0.05
Big Bluestem	<i>Andropogon gerardii</i>	0.05	0.025
Total Grass Seeding Rate		1.5	0.75

Common Name	Botanical Name	Application rates	
		Lbs/1000 feet <sup>2</sup>	kg/ 100 meter <sup>2</sup>
Black-Eyed Susan	<i>Rudbeckia hirta</i>	0.05	0.025
Bundleflower	<i>Desmanthus illinoensis</i>	0.05	0.025
Scarlet Sage	<i>Salvia coccinea</i>	0.10	0.05
Pink Evening Primrose	<i>Oenothera speciosa</i>	0.05	0.025
Phlox	<i>Phlox Drummondii</i>	0.05	0.025
Coreopsis	<i>Coreopsis tinctoria</i>	0.05	0.025
Greenthread	<i>Thelesperma filifolium</i>	0.05	0.025
Purple Prairie Clover	<i>Petalostemum purpurea</i>	0.05	0.025
Cutleaf Daisy	<i>Engelmannia pinnatifida</i>	0.05	0.025
Partridge Pea	<i>Cassia fasciculata</i>	0.1	0.05
Indian Blanket	<i>Gaillardia pulchella</i>	0.1	0.05
Bluebonnet	<i>Lupinus texensis</i>	0.15	0.075
Mexican Hat	<i>Ratibida columnaris</i>	0.05	0.025
Maximilian Sunflower	<i>Helianthus maximiliani</i>	0.1	0.05
Total Wildflower Seeding Rate		1.0	0.5
Total Warm Season		2.5	1.25

Seeding Rate (Grass & Wildflowers)			
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Table 5: Cool Season Cover Crop			
Common Name	Botanical Name	Application rates	
		Lbs/1000 feet <sup>2</sup>	kg/ 100 meter <sup>2</sup>
Wheat	Triticum aestivum	0.5	0.25
Oats	Avena sativa	0.5	0.25
Cereal Rye Grain	Secale cereale	0.5	0.25
Total Cool Season Cover Crop Seeding Rate		1.5	0.75
Total Cool Season Seeding Rate (Grass, Wildflowers, & Cover Crop)		4.0	2.0

Species substitution as necessary due to availability shall be approved by the Engineer or designated representative. Watering and fertilizer application shall follow procedures outlined above or as otherwise specified on the Drawings.

Seed shall be applied by broadcast or drill method and shall be distributed evenly over the topsoil. Mulching shall immediately follow seed application.

September 15 to March 1:

Add 1.5 pounds per 1000 square feet (0.75 kilograms per 100 square meters) of cool season cover crop to grass and wildflower mixture.

## 2 SUBSURFACE INVESTIGATION REPORT

### 2.1 Site Topography

In its original condition, prior to site excavation activities, the relief on the site ranged from about elevation 650 feet msl on a slight ridge in the west-central portion of the site to low areas on the east at about 600 feet msl and on the west to about 600 feet msl as the topographic surface begins to descend into the nearest surface water body, Walnut Creek, about ½ mile west of the site. The upper reaches of Lake Walter E. Long are approximately 2 miles southeast of the site. There is a low-lying, flat area on the northeast portion of the site where natural drainage occurs. There are no topographic conditions on the site such as cliffs or floodplains that would be unfavorable to landfill development. Natural site topography is shown in Figures 4A.4 and 4B.2. Water bodies are shown on Figures 4A.1 and 4A.4. Existing surface elevations range from 600 feet msl to 714 feet msl and are shown on the Existing Contour Plan in Attachment 3 of this application.

In its original condition, prior to site excavation and filling activities, the natural slope of the land surface on the approximate eastern 80 percent of the site ranged from about 2 percent to about 6 percent slope to the east, south, and north. On the approximate western 20 percent of the site that slopes to the west toward the tributary of Walnut Creek, the natural slope is slightly greater as it approaches the drainageway and ranges from about 7 percent to 12 percent.

The drainageways that direct natural drainage to tributaries of Walnut Creek flow generally to the northwest from the site into the southwest trending tributary to Walnut Creek. The drainageways that flow off the site to the east, south, and north ultimately flow southeast and south, eventually making their way toward Walter E. Long Reservoir southeast of the site.

### 2.2 Site Stratigraphy and Structure

The soils encountered at this site are the marls and clay/shale of the Cretaceous Taylor Group. While the soils are one geologic formation, they have been divided into the upper weathered portion and the lower unweathered portion. The Taylor is approximately 400 feet thick beneath the site. Logs showing the lithology encountered in site borings appear in Appendix 4B, Figures 4B.5 through 4B.111. Generalized geologic cross-sections were developed from the samples obtained in the borings, the topography of the site and an interpretation of the geologic depositional environments and subsequent weathering trends. The lines designating boundaries between strata are interpretations of the contact between the upper weathered Taylor and the lower unweathered Taylor. Actual transitions between soil types may be gradual. Geologic cross-sections are shown as Figures 4C.1 through 4C.10 in Attachment 4, Appendix 4C.



Taylor Group is separated from those lower aquifers by several hundred feet of low permeability clay and calcareous marl. The aquifers are discussed in the following sections in order from deep to shallow. The area around the site (Figure 4A.3e) is rated by the Texas Department of Water Resources (now the Texas Water Development Board) to have generally unfavorable conditions for groundwater development (Brune and Duffin, 1983).

#### 1.4.2 Trinity Aquifers

##### LOWER TRINITY

The Lower Trinity Aquifer consists of the Hosston formation, which is often known as "the Lower Trinity Sand". The Hosston lithology consists of clastic materials ranging from a sandy, pebbly conglomerate with occasional large boulders to fine to coarse grained sand and sandstone with calcite and silica cement (Brune and Duffin, 1983). In the southeastern part of Travis County, the Hosston grades upward into a crystalline to chalky limestone and dolomite known as the Sligo formation. The Hosston is a confined aquifer. The Lower Trinity aquifer facies are overlain by the Hammett Shale, separating those units from the overlying Middle Trinity aquifer units. The Lower Trinity is typically confined. Most of the groundwater produced from the Lower Trinity in Travis County is west and south of Austin (Brune and Duffin, 1983). See Figure 4A.3b.

##### MIDDLE TRINITY

The Middle Trinity consists of Hammett Shale, Cow Creek Limestone, and Hensell Sand members of the Travis Peak Formation and the Lower Member of the Glen Rose. The Middle Trinity is approximately 450 thick in the south-central part of Travis County (Brune and Duffin, 1983). Groundwater in the Middle Trinity becomes highly saline to the east and north of Austin. See Figure 4A.3a.

#### 1.4.3 Edwards Aquifer

In the Travis County area, most of the groundwater produced from the Edwards Aquifer occurs from the saturated portion found in the Balcones Fault Zone (Figure 4A.3c). West of the Balcones, the Edwards is often found as erosional remnants capping hills and is not fully saturated and is under water table (unconfined) conditions. Down dip from the Balcones Fault Zone the water becomes saline (Brune and Duffin, 1983).

#### 1.4.4 Alluvium and Terrace Deposits

The alluvium and terrace deposits consist of gravel, sand, and silt and occur along the Colorado River and its tributaries in the east-southeast portion of Travis County (Brune and Duffin, 1983). Recharge to these deposits is primarily from rainfall, lakes, and streams, which cross their outcrop. Groundwater typically occurs under water table conditions. There are no alluvium or terrace deposits on the site (Figure 4A.3d).

