SOAH DOCKET NO. 582-07-0863 TCEQ DOCKET NO. 2006-1931-MSW

APPLICATION OF WASTE § **MANAGEMENT OF TEXAS, INC.** § FOR A MUNICIPAL SOLID WASTE § OF **PERMIT AMENDMENT;** § PERMIT NO. MSW-66B §

BEFORE THE STATE OFFICE ADMINISTRATIVE HEARINGS

PROTESTANT TJFA'S CLOSING ARGUMENT

TO THE HONORABLE ADMINISTRATIVE LAW JUDGE:

COMES NOW, Protestant TJFA, L.P. (hereinafter "TJFA") and files its Closing Argument, and would show as follows:

I. BACKGROUND

The Permit Amendment Application of the Comal County Landfill (PAA), that is the subject of this contested case hearing, was filed with the Texas Commission on Environmental Quality (TCEQ) with the representation that the proposed expansion of the existing municipal solid waste (MSW) landfill facility has been designed in accordance with the rules and regulations of the TCEQ and therefore protective of the health, safety and welfare of the public and the environment. The Executive Director of the TCEQ (ED) found it to be both administratively and technically complete, and therefore issued a Draft Permit MSW-66B.

However, various landowners expressed concerns that representations made in the PAA may not be true, that portions of the PAA contain incorrect technical information, and that there was considerable information missing in the application that is required under the TCEQ rules (30 TAC § 330 rules). As a result, various landowners (including TJFA collectively referred to as the "Protestants") became parties in this contested case hearing to protest the issuance of the requested permit amendment MSW-66B as not being in accordance with the TCEQ rules and not being protective of the health, safety and welfare of the public and the environment.

Throughout the course of this contested case hearing, it became clear that Protestants' concerns were legitimate. A review of the evidence and testimony presented at the hearing shows that the following:

(1) the PAA does not comply with the TCEQ rules and regulations for applying for a MSW permit;

(2) the proposed landfill expansion has not been designed to be protective of the health, safety and welfare of the public and the environment; and(3) the existing landfill that was permitted under MSW-66A has numerous problems and deficiencies that indicate that it should never have been permitted, and probably would not have been if it had completed its contested case hearing.

The Applicant, Waste Management of Texas, Inc. (WMTX), is now applying for an amendment to its existing municipal solid waste permit MSW-66A for the operation of an expanded landfill facility in Comal County and Guadalupe County. This permit amendment, MSW-66B, seeks to extend the existing permit boundary into Guadalupe County in order to add an additional MSW landfill unit in Guadalupe County (Unit 2), while at the same time modifying the existing permitted MSW landfill units in Comal County (Units 1 and 3).

This is the first **contested case hearing** to be completed on an application by WMTX for a permit for this facility. Since this is a permit amendment, all of the design features of the facility, whether existing or proposed, can now be evaluated to determine if they comply with the applicable regulatory requirements of the TCEQ.

As shown during the contested case hearing, there are numerous problems and deficiencies with the PAA filed by WMTX with the TCEQ, even though this PAA was found to be technically complete by the staff of the Executive Director (ED). The following sections discuss the evidence presented during this hearing that demonstrates that this PAA does not comply with the applicable regulatory requirements of the TCEQ and therefore should be denied.

II. COMPLIANCE WITH REQUIREMENTS PERTAINING TO THE GEOLOGY OR HYDROGEOLOGY IN THE AREA

A. GEOLOGY REPORT FAILS TO COMPLY WITH TCEQ RULES

Attachment 4 of Part III of the PAA contains the Geology Report, which is required to include certain information as listed in 30 TAC § 330.56(d). However, this geology report does not contain all of the required information.

For example, any limitations associated with the facility due to unfavorable topography, such as floodplains, must be discussed in this report (see 30 TAC § 330.56(d)(1)). As presented below involving the section entitled "Issues Related to Flooding", no such floodplain information is provided in this report, even though this facility is located within the floodplain associated with Mesquite Creek. Therefore, this Geology Report fails to provide the requisite information to satisfy the legal requirements of the TCEQ regarding a permit application for a municipal solid waste facility.

In addition, the geology of the site needs to be fully and correctly characterized and understood. The Applicant acknowledged that it is important to describe the geology of the site correctly in order to design the groundwater monitoring system (Tr. P. 500, L. 18-P. 501, L. 5). However, the PAA fails to correctly and completely describe the geology that exists at this site.

For example, the PAA generally describes Stratum III as the weathered and fractured clay and claystone portion of the Lower Taylor Group and Stratum IV as the unweathered and unfractured portion (see APP-202 P. 1037; TJFA Exhibit 10; Tr. P. 872, L.6-P. 873, L. 1). Conceptually, all of the geology witnesses agreed that there is a weathered portion of the clay/claystone (being the uppermost aquifer) and an unweathered portion (being the aquitard). What was not clear, however, from the PAA or the Applicant's witnesses was where the transition between the two strata occurs. Knowing where the transition exists between the weathered and unweathered clay/claystone soils is important because this is where the bottom of the uppermost aquifer is located. Identification of the uppermost aquifer is required by the TCEQ rules (30 TAC § 330.56(e)(2)). Groundwater movement beneath this site will occur more quickly through the fracturing within the clay/claystone versus the unfractured portion of the clay/claystone (Tr. P. 1087, L. 13-22; Tr. P. 1087, L. 13-22). Dr. H. C. Clark, Protestants' expert, noted that where the fractures close within Stratum IV is where the transition should be established between the weathered portion of the clay/claystone ends (the bottom of the uppermost aquifer) and where the unweathered portion of the clay/claystone begins (the top of the aquitard) (see Tr. P. 839, L. 2-17).

The PAA contains boring logs that show weathering/fracturing within what the Applicant has designated as Stratum IV (Tr. P. 1087, L. 23-P. 1088, L. 11). The Applicant decided that a change in color alone should determine the location of the transition between weathered and unweathered clay/claystone, rather than where the actual fractures become closed and lack sufficient aperture to transmit groundwater (see TJFA Exhibit 10; Tr. P. 872, L. 6- P. 873, L. 1). This is not where the transition occurs. Mr. Johnny Williamson, the ED's staff geologist, agreed with Dr. Clark that the transition zone occurs in the upper portion of Stratum IV where the fracturing closes out, noting that this is also an area that exhibits the same hydraulic conductivity as Stratum III (Tr. P. 1096, L. 9 – P. 1097, L. 3).

Therefore, the Applicant has failed to correctly and completely characterize the geology of this site by not including the upper portions of Stratum IV as part of the weathered portion of the clay/claystone that can transmit groundwater through the fractures contained therein.

Fully and correctly characterizing the geology of the site and the transition between fractured and unfractured claystone is critical to understanding and identifying how groundwater will be moving beneath the landfill through the network of fractures that exist in the weathered portions of the clay/claystone that underlie this site, i.e. the uppermost aquifer, and therefore where to establish the groundwater monitoring system in order to detect any contamination leaving the landfill.

B. GROUNDWATER CHARACTERIZATION REPORT FAILS TO COMPLY WITH TCEQ RULES

Attachment 5 of Part III of the PAA contains the Groundwater Characterization Report, which is required to contain certain information listed in 30 TAC § 330.56(e). This report also does not contain all of the required information.

For example, this report must include an identification of the uppermost aquifer (UMA), including groundwater flow direction and rate (see 30 TAC § 330.56(e)(2)). The Applicant's expert, Ms. Janet Meaux, acknowledged the need to identify the uppermost aquifer, or uppermost water-bearing zone (Tr. P. 501, L. 22-25). She even cited the regulation that requires identification of the uppermost aquifer, which she equates with the uppermost water-bearing zone. (Tr. P. 502, L.1 - P. 504, L. 4). Furthermore, she acknowledged that it is important to know where groundwater moves under the landfill in order to establish the point of compliance and where to place the screening for the monitoring wells in order to detect groundwater contamination (Tr. P. 512, L. 21 – P. 513, L. 10).

Ms. Meaux identified the uppermost aquifer as being only the lower 10 feet of Stratum III, which is where the piezometers that were installed for the subsurface investigation were screened and yielded water (Tr. P. 504, L. 24 - P. 505, L. 22). She presumes that since all of these piezometers that were screened at the base of Stratum III yielded water, that groundwater must move vertically through the fracturing in Stratum III until it gets to the base of Stratum III; and that while moving vertically, the groundwater was somehow flowing at a faster rate than the rate of horizontal groundwater movement. (Tr. P. 534, L. 15 - P. 538, L. 1). This is despite the fact that the horizontal hydraulic conductivity of the Stratum III clay/claystone shows faster movement of groundwater than the vertical hydraulic conductivity (Id).

Furthermore, Ms. Meaux does not even know the horizontal hydraulic conductivity or flow rate of groundwater beneath this site in the upper portions of what she has labeled Stratum IV at the site. This is because the horizontal hydraulic conductivity was never tested or determined in the field or in the lab for Stratum IV (Tr. P. 553 L. 1-19). This is contrary to the rules that require such information for portions of the UMA that lie beneath and/or along the side of the excavation of the landfill (30 TAC § 330.56(d)(5)(B)(ii)). Both Units 1 and 2 will have excavation that will be within what she has labeled Stratum IV; therefore, this stratum must have a horizontal permeability determined. This PAA contains no such information for the expansion area under Unit 2, as stipulated to by the Applicant's attorney, Mr. Bryan Moore (Tr. P. 1093, L. 18 – P. 1095, L. 16). Previous field tests conducted by others in Stratum IV under Unit 1 were considered "unreliable" by Ms. Meaux and therefore she testified that she did not rely on this information in her work (Tr. P. 510, L. 15-P. 511, L. 17).

This lack of information is also contrary to the TCEQ rules regarding the development of an acceptable groundwater monitoring system (30 TAC § 330.231(e)(1)). Specifically, the design of a monitoring system shall be based on site-specific technical information that must include a thorough characterization of the following:

- aquifer thickness
- groundwater flow rate
- groundwater flow direction
- effect of site construction/operation on groundwater flow direction and rates
- hydraulic characteristics of geologic materials above, within and below the UMA.

The PAA does not provide the information in Attachments 4 or 5 as required by the TCEQ rules, and therefore is inadequate and fails to provide the requisite basis for establishing a monitoring system in accordance with the rules to yield representative samples from the uppermost aquifer.

III. ADEQUACY OF GROUNDWATER MONITORING SYSTEM

The TCEQ rules require that the groundwater monitoring system to be installed must consist of a sufficient number of wells installed at appropriate locations and depths to yield representative samples from the uppermost aquifer (30 TAC § 330.231(a)). Furthermore, the rules require that upgradient well(s) be sampled to establish background groundwater quality and downgradient wells installed to ensure that any contamination in

the uppermost aquifer is detected as it passes the point of compliance (30 TAC 330.231(a)(1) and (2)).

A. WELL SYSTEM PROPOSED FOR UNIT 2 FAILS TO COMPLY WITH TCEQ RULES

The PAA proposes to install monitoring wells around the new Unit 2 spaced no more than 600 feet apart to comply with TCEQ rules (APP-202 P. 01738). Additional wells are also being proposed around Unit 1 to satisfy this 600-foot spacing requirement (Tr. P. 624, L. 14-24). The spacing of these new wells is not of concern; rather, it is the proposed depth of the screening of these wells that is the primary problem. These wells are proposed to be screened at the base of what has been designated in the PAA as Stratum III, which the Applicant has also identified as the base of the uppermost aquifer and where the transition occurs between the weathered and unweathered clay/claystone of the clay/claystone was observed and is evident in the upper portions of Stratum IV, which the Applicant has identified as being the unweathered clay/claystone, especially on the southeast side of the site closest to an inferred fault (Tr. P. 547, L. 11 – P. 525, L. 25). Occurrences of water loss during the drilling of some of these borings in this area went uninvestigated (Id.).

The Applicant did not conduct any permeability testing within the upper portions of this Stratum IV, as stipulated to by the Applicant's attorney (Tr. P. 1093, L. 16 – P. 1095, L. 18). Therefore, the Applicant does not know if and/or how groundwater moves through the fractures in the weathered portions of Stratum IV. The only information regarding groundwater movement in Stratum IV is associated with permeability tests previously conducted by others under Unit 1. However, the three permeability tests that were run previously by others on the upper portions of Stratum IV under Unit 1 were determined by Ms. Meaux to be "unreliable" (Tr. P. 510, L. 15 – P. 511, L. 17).

Therefore, the Applicant does not know how far the uppermost aquifer extends down into Stratum IV and thus does not know how deep to set the screening of the monitoring wells around Unit 2 in order to "... ensure the detection of groundwater contamination in the uppermost aquifer ..." (30 TAC § 330.231(a)(2)).

In addition, there are no wells proposed to be located between the landfill unit and the leachate evaporation ponds (APP-202 P. 01752, Drawing 5-1; Tr. P. 1133, L. 6-9). As such, there would be uncertainty as to the source of any groundwater contamination that might be detected by wells downgradient from these ponds (Tr. P. 1133, P. 22 – P. 1134, L. 4). The source could be a leak in the landfill or a leak in these ponds. Further sampling of groundwater would have to be done in order to isolate the source.

B. WELL SYSTEM PROPOSED FOR UNIT 1 FAILS TO COMPLY WITH TCEQ RULES

The PAA proposes to plug and abandon certain existing monitoring wells and to install additional monitoring wells around Unit 1. There is clearly the need for additional monitoring wells around Unit 1, especially along Kohlenberg Lane, according to Dr. Clark (Tr. P. 890, L. 6 – P. 891, L. 14). Currently, there is only one monitoring well along this roadway, MW-2. However, the PAA proposes to remove this well, leaving no wells along this roadway adjacent to Unit 1. The groundwater contour map (Drawing 4-13A on page 1105 of APP-202) and the statement that groundwater flow tends to follow surface topography contained in the PAA show that groundwater does flow downgradient towards and under this roadway before reaching Mesquite Creek. Therefore, it is important that there be monitoring wells along this downgradient flow path, in order to be in compliance with the TCEQ rules (30 TAC § 330.231(a)(2)).

In addition, there is an area between MW-6 and PZ-3 along the tributary of Mesquite Creek that currently does not have any monitoring wells in this area to detect groundwater (APP-202 P. 01752, Drawing 5-1). However, based on surface topography and the elevation of groundwater shown on the contour maps in the PAA, this is a downgradient location for Unit 1 (Tr. P. 628, L. 10 – P. 632, L. 4). Therefore, this area should also have additional monitoring wells installed to be in compliance with the TCEQ rules.

Furthermore, a true upgradient well needs to be installed in the vicinity of Unit 1 to provide the requisite background groundwater quality (see 30 TAC § 330.231(a)(1)). The sole existing "upgradient" well for Unit 1 is identified by the Applicant as MW-1 (Tr. P. 602, L.13-22). However, the groundwater contour maps and groundwater level data in the PAA show that MW-1 is actually downgradient from an area further northeast of this MW-1, adjacent to Kohlenberg Lane near its intersection with FM 1101 (Tr. P. 607, L. 7-12; Tr. P. 1125, L. 8-11). This area is shown on Drawing 5-1 and is in the vicinity of Piezometers 1 and 11 (see APP-202 P. 01752).

Finally, the monitoring wells around Unit 1 have the same problem as those proposed around Unit 2; that is, the depth of the screening does not extend into the upper portions of Stratum IV, where fracturing is shown to exist, and to the depth of the excavation of the existing landfill (APP-202 P. 01100, Drawing 4-8).

C. WELL SYSTEM PROPOSED FOR UNIT 3 FAILS TO COMPLY WITH TCEQ RULES

The PAA does not propose to install any monitoring wells around Unit 3 (APP-202 P. 01752, Drawing 5-1). There is no upgradient well associated with this landfill unit, nor is there one designated to fulfill that role, contrary to the rules of the TCEQ (30 TAC § 330.231(a)(1)). Furthermore, the only downgradient well identified by the Applicant for this unit is MW-6, which also serves as the downgradient well for Unit 1 (Tr. P. 1131, L. 14-18). As such, any contamination detected by this well would still leave open the question of the source of this contamination, being either Unit 1 or 3. In fact, Ms. Meaux testified that if well MW-6 detected pollutants, she wouldn't be able to tell if the source was Unit 1 or Unit 3 (Tr. P. 635, L. 14-18). Therefore, additional monitoring wells need to be located around Unit 3 in order to detect any pollutant migration from that unit.

In addition, the PAA does not show the direction of groundwater in the vicinity of Unit 3 (Tr. P. 1131, L. 19 – P. 1132, L. 8). This is contrary to the TCEQ rules (30 TAC 330.231(e)(1)).

D. WELLS ADJACENT TO UNIT 1 ARE INFLUENCED BY PONDS A AND B

The movement of groundwater can be influenced by surface water features, such as stormwater ponds. Surface water leaking from such ponds can dilute the underlying groundwater and invalidate a sample taken from a nearby monitoring well. The TCEQ noted that this could happen in its letter to the Applicant regarding monitoring well 3 (see Tr. P. 591, L. 2 – P. 592, L. 5). Ponds A and B are located adjacent to Unit 1 and act as retention ponds, storing water in them for long periods of time. As such, any samples taken from wells located in the vicinity of these ponds can be diluted and as such may not allow detection of the presence of groundwater contamination being released from the landfill, as required by the TCEQ rules (see 30 TAC § 330.231(a)(2)). For example, Ms. Meaux agrees that the water in Pond A could influence MW-2A, a nearby monitoring well (Tr. P. 618, L. 4 – P. 619, L. 2). She doesn't know if MW-4 would be influenced by Pond B, since neither she nor Mr. Graves know the elevation of Pond B (Tr. P. 620, L. 24 – P. 625, L. 19). Therefore, any such ponds need to be lined so that the surface water contained within them cannot interfere or influence groundwater movement or sampling (Tr. P. 887, L. 2-13).

E. WELLS NEED TO BE SCREENED BELOW EXCAVATION

Portions of Units 1 and 2 will be excavated into Stratum IV (Tr. P. 1109, L. 7-9). Therefore, groundwater monitoring wells around these two units need to be screened below such excavation and into Stratum IV since the pollutant pathway could be in this stratum (Tr. P. 1109, L. 10-13). Such screening would be necessary in order to be able to detect any potential contamination leaving the landfill at the point of compliance (POC), in accordance with 30 TAC § 330.231. For example, MW-3 is screened at the bottom of Stratum III, yet immediately up-gradient of this well is an excavation of Unit 1 that is below this screening. Therefore, as Dr. Clark pointed out in his testimony, MW-3 needs to be screened lower; or an additional well needs to be installed next to this MW-3 and screened into Stratum IV below the excavation (Tr. P. 892, L. 13 – P. 895, L. 20). Mr. Williamson, the geologist for the ED, agreed with this (Tr. P. 1112, L. 18 – P. 1113, L.

19). This is also true for proposed wells MW-2A and MW-7A (see APP-202 P. 01752, Drawing 5-1).

Likewise, there will be excavation in Unit 2 into Stratum IV, and as such, additional screening and/or wells need to be provided so that sampling of groundwater will occur in the uppermost aquifer below and/or along the sidewall of such excavation.

IV. ADEQUACY OF GROUNDWATER AND SURFACE WATER PROTECTION PLAN AND DRAINAGE PLAN

A. ISSUES RELATED TO DRAINAGE

(1) Significant Increase in Runoff Volume at Discharge Point E Due to Landfill Design

The primary regulatory requirement of the TCEQ applicable to the Drainage Plan associated with a proposed landfill permit application is that there be "... discussion and analyses to demonstrate that no significant alteration of natural drainage patterns..." would occur as a result of the development of the landfill (30 TAC § 330.56(f)).

The TCEQ even issued a Technical Guidance document in June 2004 to assist applicants in understanding this requirement and in determining what information is needed in the application in order to comply with it (see APP-209). This guidance document, RG-417, presents a discussion of the various parameters that are associated with "natural drainage patterns" that are not to be significantly altered by the development of the landfill as proposed in the permit application.

One of those parameters is the runoff volume, the total amount of water that runs off of the property after a storm event. The PAA identified the runoff volume leaving the landfill site at five discharge points (A, B, C, D and E). The PAA tabulated this information and showed that the runoff volume at Discharge Point E would almost double as a result of the landfill as compared to conditions before the landfill (APP-202 Table 3.5.1-3 p. 01820). This doubling of the runoff volume is a direct result of the design of the landfill's drainage plan, in which certain drainage areas are to be diverted away from their natural pathways and redirected towards other areas, such as Discharge Point E (APP-202 Table 3.5.1-1 p. 01819). This is not something that had to be done; the design could have easily been adjusted so as not to cause this diversion of stormwater away from its natural pathway (Tr. P. 96, L. 6-18). Yet in this case it made other discharge points look good, showing a decrease in peak discharge as stormwater leaves the site (Tr. P. 101, L. 4-10). So what happens with all of this stormwater that is to be artificially diverted towards Discharge Point E?

The permit engineer, Mr. Scott Graves, testified that even though the runoff volume increases by almost a factor of two at Discharge Point E, he didn't think that such a doubling is a significant increase because the associated peak discharge would be reduced at that point (Tr. P. 346, L. 14 – P. 348, L. 15). Therefore, he is confident that there would be no significant impacts downstream (Id). He further stated that he came to this conclusion using "engineering judgment" based on site-specific behavior of the watershed, the site itself and the potential for anything downstream to be affected. (Tr. P. 349, L. 20 – P. 350, L. 10). He stated he wasn't concerned at all about the doubling of the stormwater runoff volume leaving Discharge Point E because he said he considered the timing of the flows leaving the site in relation to flows off-site (Tr. P. 99, L. 5 – P. 100, L. 14). Yet, Mr. Graves acknowledged he knows little to nothing about flows off-site at Discharge Point E.

Mr. Graves recognized that the timing of the discharge rates is an important parameter that is typically looked at in making these types of evaluations (Tr. P. 290, L. 12 – P. 291, L. 5). Timing is important to know as stormwater leaving the landfill site combines with stormwater occurring off-site. Timing was one of the parameters that Mr. Graves testified to as something to be looked at in determining if the design complies with the TCEQ rules regarding no significant alteration (Tr. P. 66, L. 18 – P. 68, L. 5). The ED's witness, Mr. P. Hunt Prompuntagorn, also testified that the timing of the discharge was an important parameter that he considers in his review of the drainage aspects of a landfill permit application, and that this timing parameter is sometimes critical to

concerns about properties downstream, which needs to be considered on a case-by-case basis (Tr. P. 945, L. 24 – P. 948, L. 5).

Yet neither the ED nor the Applicant have any idea how the timing and quantity of stormwater leaving Discharge Point E combines with the timing and quantity of stormwater off-site and immediately downstream of Discharge Point E. The Applicant's permit engineer, Mr. Graves, acknowledged that there was the potential for impacts just downstream of Discharge Point E where a natural drainage course runs along the properties of others (Tr. P. 350, L. 11-22). However, he has no idea what that natural drainage course looks like or how it functions during a major storm event. He admitted that he doesn't know the following:

- 1. If this drainage course has banks or not;
- 2. How deep water would rise in this drainage course for different flood events:
- 3. If this drainage course floods properties that it crosses;
- 4. The peak discharge in this drainage course running across various properties;
- 5. The time when the peak discharge occurs in this watercourse; and

6. The drainage area of this watercourse upstream of Discharge Point E, nor whether it is greater than or less than 13 acres, the natural drainage area of DP-E (Tr. P. 351, L. 12 – P. 353, L. 11; Tr. P. 355, L. 19 – P. 356, L. 1).

Therefore, Mr. Graves could not have been able to reach any conclusion about the potential for impacts immediately downstream from this location of the landfill site since he has no site-specific information or knowledge about conditions downstream and the potential for impacts downstream. These are the very things Mr. Graves stated he would need in order to be able to use "engineering judgment" to reach any conclusion about the significance of the increase in runoff volume being shown for Discharge Point E. Engineering judgment cannot be undertaken when there is no data upon which to use that judgment.

Even the ED's witness, Mr. Prompuntagorm, admitted that he was concerned about the almost doubling of the runoff volume leaving the landfill site at Discharge Point E and the potential for impacting the properties downstream along the natural watercourse, and so should the people who live there (Tr. P. 980, L. 20 - P. 981, L. 13; Tr. P. 982, L. 18 - P. 983, L. 9). He admitted that he also has no idea how stormwater leaving Discharge

Point E would affect, relate to, interfere with or combine with water flowing across those other properties along this natural watercourse just downstream of Discharge Point E (Tr. P. 984, L. 13 – P. 985, L. 6). But he acknowledged that providing for this diversion of stormwater towards Discharge Point E helped the design of the landfill to maintain the peak discharge at Discharge Point B, which is along Mesquite Creek (Tr. P. 985, L. 7 – P. 986, L. 10).

Therefore, since the Applicant has not and could not have determined whether or not the significant increase in runoff volume to be discharged at Discharge Point E will adversely impact properties immediately downstream, this PAA fails to comply with this critical TCEQ rule.

Finally, there is <u>no</u> discussion in the PAA regarding this issue, as required by the TCEQ rules, and how or why the almost doubling of the area draining to, and the resulting runoff volume leaving Discharge Point E may or may not impact properties downstream. This issue was simply ignored by the Applicant so that anyone reading this PAA would not become aware of this issue.

In fact, not only did the Applicant attempt to hide this issue, the Applicant attempted to misrepresent what is really happening here. Mr. Graves testified that the only place in the PAA where there is any discussion or narrative description of the alteration of natural drainage patterns is within the first paragraph on page 01821 of the PAA (Tr. P. 282, L. 14 - P. 283, L. 17). Within this paragraph of the PAA, the Applicant actually states that the drainage areas and runoff volumes are "similar" for natural conditions, predevelopment conditions and post-development conditions, and thereby is able to conclude that "... this information demonstrates that natural and currently permitted drainage patterns will not be significantly altered or adversely affected by the proposed expansion."

No one with any common sense would believe that an almost doubling of the drainage area and runoff volume between pre- and post- development of the landfill would be considered "similar" values. The Applicant was simply hoping that no one would notice the tabulated data, and instead, would simply read and rely on the narrative discussion to accurately portray the information and results of the technical analyses contained within the PAA. This is why the TCEQ rules require a "discussion" and analyses in order to explain how a doubling of the runoff volume being discharged off-site will not impact properties downstream, so as to meet the TCEQ requirement of demonstrating no significant alteration of natural drainage patterns due to the landfill development.

The PAA fails to comply with this important TCEQ rule that is intended to inform the public of any potential impacts from the proposed permit application and to protect the property of others. Failing to comply with the TCEQ rules regarding a permit application is a basis for recommending denial of this permit application. Furthermore, making false statements in the PAA is grounds for denial of the permit application (30 TAC § 330.51(b)(2).

(2) Failure to Show Drainage Patterns on Attachments 3 and 7

The TCEQ rules require that natural drainage patterns be shown on Attachments 3 and 7 of Part III of the PAA for natural and post-development conditions, respectively. Specifically, 30 TAC § 330.56(c) and (g) provide that these attachments show the location and quantities of surface drainage entering, exiting and internal to the site.

Mr. Graves admitted that Attachment 3 is required to show the natural drainage patterns and that Attachment 7 is required to show the post-development drainage patterns (Tr. P. 104, L. 1-21). The ED's witness, Mr. Prompuntagorn, also agreed with Mr. Graves regarding the rules pertaining to these two attachments, and testified that Attachment 3 does not show where stormwater is going (Tr. P. 986, L. 25 – P. 987, L. 22). He also testified that Attachment 7 does not show where stormwater is going (Tr. P. 986, L. 25 – P. 987, L. 22). He also testified that Attachment 7 does not show where stormwater is going (Tr. P. 986, L. 25 – P. 987, L. 20 – P. 990, L. 16). Mr. Graves explanation as to why he didn't show any of this information in these attachments is that "... I don't believe the rules require me to delineate or quantify the flow coming onto the site, so I have not specifically set out to do that..." (Tr. P. 123, L. 13-16).

Yet, because Mr. Graves didn't show this information, there was considerable confusion during the hearing as to what was the amount of water entering the landfill site, since it wasn't shown on either of these attachments as it should have been. Mr. Graves couldn't even figure it out, and had to write two different sets of numbers on the exhibits (see TJFA Exhibits 7 and 8). It even took him some time to figure out which direction water was flowing. He also had difficulty in figuring out why the drainage areas were different at the location of the tributary to Mesquite Creek, concluding that he would have to take a closer look at it to really say if he made a mistake (Tr. P. 124, L. 2-7).

Complying with the TCEQ rules for Attachments 3 and 7 would also have revealed where the various diverted drainage areas were and how they were being redirected. But again, the Applicant wanted this information to be hidden from the public, the local government officials and the regulatory entities, so this was not shown on these attachments and instead the narrative discussion in the PAA simply stated that the drainage areas were "similar" between natural and post-development conditions, which of course is not true.

(3) Required Information Missing regarding Ponds A and B

The TCEQ rules require complete information be provided in the PAA regarding the design of the landfill, including the Drainage Plan (see 30 TAC § 330.55(b)(5)(C), 30 TAC § 330.56(f) and 30 TAC § 330.56(f)(4)(A)(iii) and (v)). Included in Attachment 6 of Part III of the PAA must be a maintenance plan to ensure the continued operation of drainage and/or storage facilities (see 30 TAC § 330.56(f)(4)(A)(vi).

Part of the Drainage Plan for providing and handling the drainage of stormwater off of the landfill includes the existing Ponds A and B, located between Unit 1 and Mesquite Creek. These ponds were not included as part of the previous permit amendment MSW-66A, but were constructed after that permit amendment was issued and before this current PAA was filed (Tr. P. 966, L. 13-16). The purpose for these ponds being constructed was apparently to help control the release of sedimentation from the existing landfill due to some erosion problems (Tr. P. 966, L. 17-23).

However, Mr. Graves testified that these two ponds are sediment ponds that allow sediment to build up within them and as such they need to be cleaned out on a regular basis (Tr. P. 138, L. 8-21). Yet no such maintenance plan is included in the PAA, as required by the TCEQ rules (Tr. P. 138, L. 22 – P. 140, L. 1).

Mr. Graves also testified that these two ponds help reduce peak flow rates at Discharge Point B in order to be less than natural conditions (Tr. P. 84, L. 13-25). Yet, he stated that he failed to show any plan view of Pond A, as he had done for the other ponds, since this pond is already constructed (Tr. P. 141, L. 17 – P. 142, L. 5). He doesn't know if a prior design of these two ponds was ever done (Tr. P. 147, L. 21 – P. 148, L. 10). He doesn't have any information about Pond B, in order to determine how high water can get before overflows into or out of this pond would occur (Tr. P. 143, P. 17 – P. 144, L. 2). For Pond A, he admitted that the PAA does not identify the outlet for this pond, and therefore doesn't know where the emergency spillway is located or even if one exists (Tr. P. 144, L. 23 – P. 145, L. 8).

The failure of the PAA to include any design information for Pond B and incomplete design information for Pond A is not in compliance with the TCEQ rules for the requisite information that must be included in a permit application (e.g. see 30 TAC 330.55(b)(5)(C).

B. ISSUES RELATED TO FLOODING

(1) Failure to Determine if the Existing/Proposed Landfill Units are in a 100-year Floodplain

The failure by the Applicant to determine the 100-year floodplain of Mesquite Creek as it passes through the site is the most blatant disregard of the rules identified in this contested case hearing. The TCEQ rules require that a permit application identify whether a landfill will be located within a 100-year floodplain (see 30 TAC 330.56(f)(3), 30 TAC § 330.56(f)(4)(B)(i) and 30 TAC § 330.301). "Floodplain" is

defined by the TCEQ as essentially areas inundated by the 100-year flood (30 TAC § 330.2(48)).

If a site is determined to be located within a 100-year floodplain, then the Applicant must provide the specific 100-year flooding levels and any other special flooding factors that need to be considered in designing the landfill or that may impact the flood protection of the facility (see 30 TAC § 330.56(f)(4)(b)(i) and (ii)). The Applicant must also demonstrate that the landfill design will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in the washout of solid waste so as to pose a hazard to human health and the environment (see 30 TAC § 330.301).

The PAA contains statements that this landfill site is not located within the 100-year floodplain. These statements are based solely on the fact that the FEMA floodplain map for this general area does not show this site to be located within a floodplain associated with Mesquite Creek (see APP-211). Mr. Graves testified that since the TCEQ "typically" accepts this FEMA map as a reliable source of information, he used this map to conclude that this landfill site is not within a 100-year floodplain (Tr. P. 150, L. 21 – P. 151, L. 16).

Unfortunately for Applicant, this FEMA map cannot be used to make this determination since the FEMA map does not identify whether or not there is a 100-year floodplain associated with Mesquite Creek. Mr. Graves admitted that he doesn't know if FEMA has ever determined if Mesquite Creek has a floodplain (Tr. P. 151, L. 17 – P. 152, L. 5). He did admit that Mesquite Creek does in fact have a 100-year floodplain (Tr. P. 381, L. 25 – P. 382, L. 4). He even performed some calculations to determine some 100-year flood levels, as shown in Section 6H of Attachment 6 of the PAA (APP-202 p.02107). But he testified that his analysis is not a determination of the floodplain for Mesquite Creek, since he did not take into consideration downstream features, such as Kohlenberg Land and Freedom Lake (Tr. P. 158, L. 4 – P. 163, L. 19; Tr. P. 172, L. 13-18; Tr. P. 173, L. 18-22). He made it clear that it was not his intent to delineate the 100-year floodplain (Tr. P. 177, L. 7-13). Under cross-examination by TJFA's attorney, he even discussed

how he would go about making such an analysis, including taking into account downstream obstructions (Tr. P. 179, L. 22 – P. 180, L. 21).

The ED's witness, Mr. Prompuntagorn, also agreed that there is a floodplain associated with Mesquite Creek, and that there are areas along Mesquite Creek that would be inundated by a 100-year flood (Tr. P. 993, L. 10-15). He acknowledged that the PAA used the FEMA map to conclude that the site is not located within a floodplain (Tr. P. 998, L. 17 – P. 999, L. 1). He further agreed that a 100-year frequency analysis for determining the floodplain along Mesquite Creek should consider all features that would affect the 100-year water level, including downstream obstructions (Tr. P. 995, L. 12-17). Finally, Mr. Prompuntagorn agreed that the TCEQ rules do not indicate that the "floodplain" being referred to in these rules is the FEMA floodplain (Tr. P. 996, L. 9 – P. 999, L. 18). He doesn't even know if FEMA looked at or determined whether or not Mesquite Creek has a floodplain (Tr. P. 996, L. 2-8).

Based on the above testimony from Mr. Graves and Mr. Prompuntagorn, it is clear that the FEMA floodplain map available for this area cannot be used or relied upon to make the requisite determination as to whether this landfill site is within the 100-year floodplain of Mesquite Creek. This is because the FEMA map does not show a floodplain for Mesquite Creek, even though a floodplain does exist for this creek. FEMA does not study, identify and map the floodplain of every creek or stream in the country. Neither witness knew whether or not FEMA even made any type of analysis of the floodplain for this creek. In such a case, the Applicant <u>must</u> conduct its own floodplain analysis in order to comply with the requirements of the TCEQ rules regarding locating a landfill in a floodplain, and must be denied.

In this case, the PAA does not include any floodplain analysis for Mesquite Creek, as testified to by the Applicant's own permit engineer, Mr. Graves. Therefore, the PAA cannot and in fact does not comply with the applicable TCEQ rules regarding locating a landfill in a floodplain.

(2) Failure to Show Floodplain Areas on Attachments 3 and 7

The TCEQ rules require that the areas subject to flooding by the 100-year flood be shown on Attachments 3 and 7 of Part III of the PAA (see 30 TAC § 330.56(c) and (g), respectively). The purpose of this is to demonstrate that the landfill design will not adversely impact the 100-year floodplain of any adjacent or nearby creek or stream, or that the landfill itself will not be adversely impacted by any adjacent flood waters.

In reviewing the PAA, it is clear that these attachments do not show any areas subject to flooding by the 100-year flood along Mesquite Creek or its tributary. Mr. Graves agreed as much (Tr. P. 177, L. 24 – P. 178, L. 8). Mr. Prompuntagorn agreed as much (Tr. P. 990, L. 3 - P. 992, L. 8). Yet both Mr. Graves and Mr. Prompuntagorn agreed and testified that in fact there is a floodplain associated with Mesquite Creek (Tr. P. 999, L. 2-5).

Therefore, even though there are areas along this creek that would be inundated during a 100-year flood, such areas were not identified and located on these two attachments, as required by the TCEQ rules. As such, no one, including the TCEQ, the public or the Applicant, can conclude if any of the landfill features would be located within the 100-year floodplain, as required by the TCEQ rules.

C. OTHER PERTINENT ISSUES TO THESE PLANS

(1) Contaminated Water Containment Berms Not Adequately Designed

Contaminated water includes any water that comes in contact with the landfill working face or runs off of daily cover (Tr. P. 243, L. 6-11; APP-202 P. 02093). Daily cover can remain over waste for as long as 180 days before having to be replaced with intermediate cover (Tr. P. 248, L. 10 – P. 249, L. 18). Such water needs to be collected and appropriately handled in accordance with the TCEQ rules (see 30 TAC § 330.139 and 30 TAC § 330.55(b)(6).

The berms that have been proposed in the PAA for containing this contaminated water before it is transported off of the landfill unit have been sized for a working face up to two acres only (Tr. P. 245, L. 7-12; APP-202 P. 02096). However, the PAA identifies the size of working faces can be as large as ten acres (Tr. P. 245, L. 18 – P. 246, L. 22; APP-202 P. 02839). Therefore, the PAA fails to provide an adequate design for containing contaminated water that might be generated by the landfill operations.

(2) Recirculation of Contaminated Water Does Not Comply With TCEQ Rules

Contaminated water is currently stored in the existing leachate storage tanks located adjacent to Unit 1 and will continue to do so under this PAA (Tr. P. 233, L. 1-8; APP-202 P. 2550). Leachate is also currently stored in these same tanks and will continue to do so under this PAA (Id; APP-202 P. 2556, Drawing 15-1; Tr. P. 229, L. 6-23). This is inconsistent with the portion of the PAA where it states that contaminated water and leachate will kept separated (APP-202 P. 01810; Tr. P. 237, L. 25 – P. 204, L. 16). There is no method or procedure indentified in the PAA to prevent leachate and/or gas condensate from being mixed with contaminated water.

The PAA also proposes to pump the water being stored in these tanks into the leachate evaporation ponds across the creek next to Unit 2 (APP-202 P. 2556, Drawing 15-1; Tr. P. 230, L. 16-22). The PAA further proposes to recirculate the water that is to be stored in these evaporation ponds onto Unit 2 (Tr. P. 225, L. 1 – P. 226, L. 8). This is in violation of TCEQ rules since such recirculated water would necessarily include a mixture of leachate and contaminated water, which is not allowed to be recirculated onto a landfill unit (APP-202 P. 02546; 30 TAC § 330.56(o)(2)).

V. COMPLIANCE WITH GEOTECHNICAL REQUIREMENTS, INCLUDING SLOPE STABILITY

The PAA contains a series of slope stability analyses that provide an indication of the relative stability of the various excavation slopes and constructed soil slopes that will occur during the construction and operation of this proposed landfill. The measure by

which the stability of these slopes is evaluated is based on the resulting factor of safety, based on the foundation conditions, the liner system and the stability of the constructed liner (see 30 TAC § 330.305, 30 TAC § 330.205(a), and 30 TAC § 330.203(a), (b) and(d)).

According to the ED's witness, Mr. Prompuntagorn, the TCEQ's minimum acceptable factor of safety for a landfill project is 1.25 (Tr. P. 1011, L. 1-18; Tr. P. 1012, L. 2-5; Tr. P. 1014, L. 12-18). Yet, there were instances where the computed factor of safety was less than this minimum value (APP-202 P. 01632-3).

The explanation given for allowing this factor of safety to be less than the minimum of 1.25 was based on some information presented in a seminar that Mr. Prompuntagorn could not identify (Tr. P. 1016, L. 18 – P. 1018, L. 12). Even the Applicant's witness did not reference in the PAA the source of the information that led her to believe that a factor of safety less than the minimum 1.25 was acceptable (Tr. P. 742, L. 17 – P. 746, L. 25).

Thus, the PAA does not provide competent information to show that this construction of the landfill will be stable as required by the TCEQ rules.

VI. ADEQUACY OF SITE OPERATING PLAN AND FACILITY ENTRANCE DESIGN

A. OPERATING HOURS

The PAA proposes to be allowed to have the landfill operations occur 24 hours a day, 7 days a week (APP-202 P. 02847; Tr. P. 34, L. 21-24). The reason given for this is to allow "flexibility" in the daily operations of the landfill, especially in times of an emergency (Tr. P. 34, L. 25 – P. 36, L. 20). However, flexibility to extend operating hours has never been a problem at this landfill.

Mr. Don Smith, the Applicant representative and employee of WMTX, acknowledged that this landfill has been operating for almost 30 years under more standard operating hours (Tr. P. 36, L. 21 - P. 37, L. 1). He testified that the Applicant really does not intend

to actually accept waste 24 hours a day, seven days a week (Tr. P. 35, L. 20-22). Furthermore, the Applicant has entered into a settlement agreement with Guadalupe County, in which the operating hours have been set to be other than 24/7 (see CCL Exhibit 5). The ED's witness admitted that any contract limitations involving operating hours should be included in any permit issued (Tr. P. 1033, L. 18 – P. 1034, L. 11).

Therefore, if this permit is to be issued, it should include the operating hours as specified in the TCEQ rules that have been adequate for the operation of this landfill for the past 30 years, or alternatively, the operating hours identified in the settlement agreement.

B. FIRE PROTECTION

The Site Operating Plan (SOP) found in Part IV of the PAA proposes to provide a certain amount and type of equipment in order to be in compliance with the TCEQ rules regarding fire protection (APP-202 P. 02840-41; 30 TAC 330.115). However, the amount of equipment being provided is only associated with one-half the size of a typical working face, and does not consider having two working faces or one with as much as ten acres (APP-202 P. 02840; Tr. P. 255, L. 19 – P. 256, L. 1; P. 1031, L. 18-23). Therefore, either the amount of equipment needs to be increased, or the size of the working face needs to be limited to match the fire fighting equipment being provided.

Furthermore, TCEQ policy requires that the SOP include provisions for coordination with the local fire department (APP-202 P. 02837). Yet, the Applicant does not know who is the local fire department nor is it identified in the PAA (Tr. P. 251, L. 4 - P. 252, L. 2).

C. TEXAS PARKS AND WILDLIFE RECOMMENDATIONS

As a part of the TCEQ rules pertaining to the permit application process requiring coordination with other governmental agencies, the Applicant has corresponded with Texas Parks and Wildlife Department regarding endangered, threatened or rare species in the vicinity of the Comal County Landfill. In a response letter dated October 12, 2005, the Texas Parks and Wildlife Department (TPWD) set forth four recommendations

regarding the development and/or operation of the Comal County Landfill in regards to the protection of endangered or threatened species (APP-202 P. 0582-3). Those recommendations are as follows:

- 1. In addition, Mountain Plovers have been previously sighted in the general area near the landfill. Measures should be taken to educate landfill personnel so that adverse impacts to this rare bird species are avoided.
- 2. The Texas Parks and Wildlife Department recommends that land clearing activities not be conducted during the general bird nesting season, from March to August, to avoid adverse impacts to nesting birds.
- 3. TPWD recommends maintaining vegetated buffers along the riparian corridors to minimize adverse impacts to these valuable ecosystems.
- 4. TPWD recommends revegetating disturbed areas within the project area with site specific native plant species to reduce the potential for soil erosion and to provide habitat for native wildlife species.

In testimony presented at the contested case hearing, Ms. Barbara Castille, Applicant's endangered species expert, agreed with each of the TPWD recommendations. Specifically, Ms. Castille agreed with recommendation number 1 (Tr. P.405, L. 7-22), recommendation number 2, (Tr. P.406, L.8 – P. 407, L. 14), recommendation number 3, (Tr. P.408, L.25 - P.409, L.10) and recommendation number 4 (Tr. P.409, L.13-24).

Despite this testimony, the TPWD recommendations were not and have still not been incorporated into the Site Operating Plan (SOP) for this PAA. This was brought to the surface at the hearing when Ms. Castille was questioned about insertion of these recommendations into the SOP and admitted that they have not been incorporated into the SOP contained in the PAA, in spite of her concurrence with these recommendations (Tr. P. 446 L 22 - P. 447 L 4).

TJFA maintains that for the various reasons set forth herein, this permit application should be denied. However, if a recommendation is made to issue the permit, then TJFA, at a minimum, requests and urges that the four TPWD recommendations as set forth above be incorporated into the SOP as a special condition to the permit.

D. TRAFFIC, INCLUDING SITE ENTRANCE

The traffic into and out of the landfill currently utilizes Kohlenberg Lane in Comal County. The proposed site entrance for the new landfill unit will be off of Kohlenberg Lane in Guadalupe County (APP-202 P. 1001, Drawing 1-4). This site entrance as designed and proposed in the PAA is not in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards as to line-of-sight (Tr. P. 1163, L. 4-6). The Applicant's witness, Mr. Graves, acknowledged as much during cross-examination. He also recognizes the concern of the public regarding traffic safety associated with the site entrance (Tr. P. 259, L. 8-19). He just didn't think he needed to look at safety issues under the TCEQ rules (Tr. P. 260, L. 3-15). Yet, he presented an alternative design during rebuttal that he believed would be in compliance with this standard (APP-214). But this alternative design has not been made a part of the PAA. Mr. Prompuntagorn expressed his concern about the site entrance now that he has heard testimony during the hearing, but didn't have any such concern when he was reviewing the PAA (Tr. P. 1023, L. 1-19).

VII. ADDITIONAL ISSUES

A. CONTAMINATION OF GROUNDWATER DETECTED AT MW-3

On at least four separate occasions, the contaminant 1,1-dichloroethylene (DCE) was detected in the groundwater at MW-3 (TJFA Exhibit 3 P. 9, L. 38-44). This well is located between the existing Unit 1 and Mesquite Creek. The level of groundwater contamination detected was at or above 0.007 mg/l, which is the maximum containment level (MCL) for this contaminant (see 30 TAC § 330.200(d)(8) Table 1). The minimum level of detection or the reporting limit for this contaminant is 0.005 mg/l (Tr. P. 1213, L. 25 - P. 1214, L. 19).

No action was taken by the ED regarding this detection of this groundwater contaminant because after each such detection, the subsequent testing revealed no detectable amount of this contaminant above 0.005 mg/l. This does not mean the contamination did not

exist, just that it was not detectable upon retesting (<u>Id</u>). But, to have this contaminant detected four times over a two-year period indicates that there has been a detection of this contaminant in the groundwater at this well, regardless of intermediate resampling results at such detectable levels.

The Applicant even brought in an expert from California, Mr. Kerfoot, in an attempt to show that the source of this groundwater contaminant was from landfill gas; he did not say that this contamination never existed nor that the groundwater was not contaminated (Tr. P. 1184, L. 1-11). Of course on close examination of Mr. Kerfoot's drawings/figures in which he attempted to link this detection of 1,1-DCE with landfill gas, he had showed only that this groundwater contaminant occurred before and during landfill gas exceedances, and no longer appeared after excavation of Unit 1 below MW-3 had occurred and/or the construction of the stormwater ponds A and B had occurred that could have diluted the sample (APP-803).

Given this detection of 1,1-DCE, the TCEQ rules require a plume description be provided (30 TAC § 330.56(e)(4), as well as an Assessment Monitoring Program (30 TAC § 330.56(e)(7) and/or a Corrective Action Plan (30 TAC § 330.56(e)(8). None of this has been provided by the Applicant in the PAA or elsewhere.

VIII. HOW SHOULD TRANSCRIPT COSTS BE APPORTIONED?

The Protestants have identified during this contested case hearing numerous issues with the PAA that indicate it does not comply with the rules of the TCEQ, even after the PAA was submitted to the TCEQ and found technically complete by the ED. These issues that were identified by the Protestants demonstrate either design flaws or lack of requisite information and/or misrepresentations that indicate that this PAA, if granted, would not be protective of human health and the environment.

As such, the Applicant should bear the entire transcript costs of this contested case hearing.

IX. CONCLUSION

This PAA fails to meet many of the mandatory requirements set forth in TCEQ regulations regarding an application for a municipal solid waste landfill facility. These failures, as explained above, include misrepresentations of facts, inaccurate geologic/hydrogeologic characterization, inadequate ground water monitoring, improper controls for drainage/flooding, problems with slope stability, an inconsistent site operating plan, a dangerous entrance design, and it ignored existing ground water contamination. This proposed PAA is not in compliance with the municipal solid waste regulations and is not protective of human health, safety and welfare or the environment.

WHEREFORE, PREMISES CONSIDERED, Protestant TJFA requests that the PAA for MSW-66B be recommended for DENIAL.

Respectfully submitted,

DUNBAR HARDER PLLC

by_

Lawrence G. Dunbar SBN: 06209450 One Riverway, Suite 1850 Houston, Texas 77056 713-782-4646 713-782-5544 (fax)

BRADLEY LAW FIRM

by_

James E. Bradley SBN: 02824700 5718 Westheimer, Suite 1525 Houston, Texas 77057 713-974-4800 713-781-4186 (fax)

ATTORNEYS FOR PROTESTANT TJFA,LP

CERTIFICATE OF SERVICE

I certify that a true and correct copy of the foregoing document has been served on the following via hand delivery, express mail, electronic mail, facsimile, and/or U.S. First Class Mail, on this the _____ day of December, 2007.

Anthony C. Tatu *Texas* Staff Attorney *Quality* Texas Commission on Environmental Quality P.O. Box 13087, MC-173 Austin, Texas 78711-3087 Fax (512) 239-0606

Garrett Arthur Office of the Public Interest Counsel Texas Commission on Environmental Quality P.O. Box 13087, MC-103 Austin, Texas 78711-3087 Fax (512) 239-6377

Bryan J. Moore Vinson & Elkins 2801 Via Fortuna, Suite 100 The Terrace 7 Austin, Texas 78746 Fax (512) 236-3329

James Ballowe Solid Waste Manager 424 S. Castell Avenue New Braunfels, Tx. 78130 Fax: (830) 608-2109

Robert Etlinger Assistant County Attorney 101 E. Court Street, Ste. 104 Seguin, Tx. 78155 Fax: (830) 379.9491

Judy Cope County Commissioner Precinct 4 307 West Court Street Seguin, Tx. 78155 Fax: (830) 303.4064 Representing the Exec. Dir. of the Commission on Environmental

Representing the TCEQ Office of the Public Interest Counsel

Representing Waste Management

Representing City of New Braunfels

Representing Guadalupe County

Representing Guadalupe County

Nancy Schwarzlose 2041 Schwarzlose Rd. New Braunfels, Tx. 78130 Fax: (830) 608.0695

John Holtman 1520 Schwarzlose Rd. New Braunfels, Tx. 78130 Ph: (210) 364.4618 Rep. Concerned Citizens and Landowners

Rep. Concerned Citizens and Landowners

Lawrence G. Dunbar