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April 7, 2008

Ms. LaDonna Castañuela
Texas Commission on Environmental Quality
Office of the Chief Clerk, MC-105
PO Box 13087
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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2008 APR -7 PM 4: 22
CHIEF CLERK'S OFFICE

Re: **SOAH DOCKET NO. 582-07-0863; TCEQ DOCKET NO. 2006-1931-MSW Application of Waste Management of Texas Inc. For TCEQ Permit No. MSW-66B**

Dear Ms. LaDonna Castañuela:

Enclosed please find an original and eleven (11) copies of Protestant TJFA'S Exceptions to the Administrative Law Judge's Proposal for Decision.

If you have any questions or concerns, please do not hesitate to contact me.

Respectfully Submitted,

Lawrence Dunbar w/permission by MP

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Enclosure
CC: Service List
SOAH ALJ

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

APPLICATION OF WASTE MANAGEMENT OF TEXAS, INC. FOR A MUNICIPAL SOLID WASTE PERMIT AMENDMENT; PERMIT NO. MSW-66B	§ § § § §	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

2008 APR -7 PM 4:22
CHIEF CLERKS OFFICE
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PROTESTANT TJFA'S EXCEPTIONS TO THE ADMINISTRATIVE LAW JUDGE'S PROPOSAL FOR DECISION

TO THE HONORABLE COMMISSIONERS OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY:

COMES NOW TJFA, L.P., hereinafter referred to as TJFA, one of the landowner Protestants in the above referenced matter, and hereby files its exceptions to the ALJ's Proposal for Decision (PFD) and corresponding proposed ORDER issued March 18, 2008. The ALJ's recommendation that the Texas Commission on Environmental Quality ("TCEQ" or "the Commission") grant this permit application is factually and legally flawed and should not be accepted. Because the Applicant failed to meet its burden of proof that the application complies with all legal requirements, the above-requested permit application should be **DENIED** by the Commission.

I. SUMMARY ARGUMENT

In this filing, TJFA identifies and excepts to certain factual statements and legal conclusions as discussed by the ALJ in her PFD as set forth below. TJFA believes the ALJ's PFD is therefore fatally flawed under the TCEQ rules, due in part to the following:

(1) the failure of the Applicant to properly characterize the geology, and related groundwater, associated with the uppermost aquifer (that fails to but should include Stratum IV), in clear violation of TCEQ rules;

(2) the failure of the Applicant to develop an adequate groundwater monitoring system that is in compliance with the TCEQ rules, particularly with regards to the location and depth of the wells;

(3) the failure of the Applicant to present an adequate surface water protection and drainage plan that is in compliance with Commission rules, and especially:

(a) the ALJ's incorrect legal conclusion that the Applicant has properly identified that the site is not located in the 100-year floodplain of Mesquite Creek (even though it is), by using the FEMA floodplain map (which shows no floodplain for this creek, since FEMA never studied or determined the floodplain for this creek). This is contrary to Commission precedent in both the *Juliff Gardens* and *Tan Terra* cases on this very issue; and

(b) the ALJ's incorrect legal conclusion that a 200% increase in storm water runoff volume at the permit boundary (due to the diversion of the natural flow of surface water as a result of drainage areas being redirected by the proposed landfill design) is not a significant alteration of natural drainage patterns, regardless of the adverse impacts on downstream properties. This is contrary to Commission precedent, rules and regulatory guidance on this issue.

(4) the failure of the Applicant to provide adequate evidence that landfill slopes will be stable by providing slope stability analyses that do not meet the minimum factor of safety; and

(5) the failure of the Applicant to present an adequate Site Operating Plan (SOP), since it does not include the TPWD recommendations to protect a rare species, nor does it include a safe site entrance design.

These issues are of particular concern that TJFA wants to bring to the attention of the Commission, as contrary to Commission precedent and/or unsupported by or contrary to the

evidence in the Application and presented at the hearing, potentially producing reversible error if adopted by the Commission and are discussed more fully below.

Finally, the ALJ and the Applicant have erroneously described the subject permit amendment application (PAA) as being for a "lateral expansion" in direct contradiction as to how that term is used in state and federal MSW regulations.

Following this Summary Argument, the specific sections of the PFD are addressed with TJFA exceptions as appropriate. TJFA incorporates its previous briefings herein for all purposes.

II. APPLICANT'S LACK OF COMPLIANCE WITH REQUIREMENTS PERTAINING TO GEOLOGY AND HYDROGEOLOGY

A. Uppermost Water-Bearing Zone Incorrectly Identified as Only Stratum III and Should Have Included the Fractured Portions of Stratum IV

TJFA takes exception to the ALJ's conclusion that the Applicant correctly identified, in accordance with 30 TAC 330.56(d)(5)(A)(ii), only Stratum III as the uppermost water-bearing zone or aquifer and that there are no hydraulically interconnected aquifers beneath Stratum III, such as the fractured portions of Stratum IV (PFD p. 22). The basis of the ALJ's incorrect conclusion is her belief that the borings and permeability tests in the Application sufficiently characterized Stratum III as the uppermost water-bearing zone and that there was so little water in the borings that penetrated Stratum IV that the ALJ believes it was reasonable to conclude that water does not move within the fractures identified in Stratum IV (PFD p. 22).

There is no evidence or insufficient evidence in the Application or presented at the hearing to support the ALJ's finding and conclusion. The Applicant did not install any

piezometers in Stratum IV in order to determine how water moves within the fractures that had been identified in that stratum (PFD p. 20). Thus, the ALJ had no evidence of how groundwater moves through or within the fractures of Stratum IV. The ALJ simply concluded that water does not move within the fractures in Stratum IV because there was so little water noted in the borings in Stratum IV, according to the Applicant (PFD p. 22). However, there were at least two borings in the Application in which it was noted that water was "lost" somewhere in the fractures in Stratum IV (PFD p. 17). Yet, without any further investigation by the Applicant of this water "loss" in Stratum IV, the ALJ somehow concludes water does not move within this stratum. This is contrary to the evidence presented in the Application and at the hearing.

TJFA agrees with the ALJ's conclusion that Stratum IV is a confining unit <u>at its base</u> and at least the lower portion is the aquiclude underneath the site (PFD p. 22). However, there are fractures and weathering in the <u>upper</u> portion of Stratum IV that the Applicant failed to investigate as to whether this portion of the Stratum transmits groundwater. The upper portion of Stratum IV is essentially a hydraulically connected underlying aquifer. Even the ED's geologist, Mr. Williamson, testified about this and noted that this upper portion of Stratum IV exhibits the same kind of hydraulic conductivity (ability to transmit water) as Stratum III (PFD p. 21).

Therefore, the Applicant failed to fully characterize the soil characteristics of Stratum IV, the upper portions of which contain fractures and should have been included as part of the uppermost water bearing zone or aquifer, in accordance with 30 TAC 330.56(d)(5)(A)(ii). Because the Applicant failed to include the upper portions of Stratum IV into the uppermost aquifer, the application also cannot meet the groundwater monitoring requirements of 30 TAC 330.231(a).

B. Applicant Failed to Conduct Testing of Groundwater Flow for Stratum IV Into Which Excavations will Extend

TJFA takes exception to the ALJ's incorrect finding and legal conclusion that the Applicant adequately analyzed data regarding the site's hydrogeology (PFD p. 22). The ALJ was incorrect in finding that the PAA complies with TCEQ rules, specifically 30 TAC 330.56(d)(5)(B)(i) and (ii) requiring permeability testing of each soil layer or stratum along the side of and below proposed excavations, because the facts and evidence in the Application and presented at the hearing do not support, and in fact are contrary to, such a finding and conclusion.

The ALJ specifically noted the evidence presented during the hearing that excavations will extend into Stratum IV (PFD p. 27 and 28). The ALJ also correctly notes that the "*Applicant tested neither Stratum IV's groundwater flow direction and rate nor its horizontal hydraulic conductivity...*" and that "... *Ms. Meaux admitted that previous field tests conducted by others in Stratum IV under Unit 1 were unreliable for use in this application...*" (PFD p. 20 and 21). As TJFA has previously pointed out (Closing Argument, pages 4-5, Reply Brief, page 7), the Application does not meet the MSW rules associated with the requirements for the Geotechnical Report, clearly stated at 30 TAC 330.56(d)(5)(B)(i) and 330.56(d)(5)(B)(ii):

> "*(i) A laboratory report of soil characteristics shall be determined from at least one sample from each soil layer or stratum that will form the bottom and side of the proposed excavation and from those that are less than 30 feet below the lowest elevation of the lowest excavation...*"

"*(ii) ... Those undisturbed samples that represent the sidewall of any proposed trench, pit, or excavation shall be tested for the coefficient of permeability on the sample's in-situ horizontal axis ...*"

As can be seen, this rule requires the horizontal permeability of the stratum that will form the sidewall of any excavation to be tested. The ALJ knows that excavations will extend into Stratum IV and that no reliable testing of the horizontal permeability of this stratum was conducted by the Applicant or provided in the Application. Yet she somehow finds that the PAA complies with these rules. This is contrary to the evidence presented at the hearing.

For example, the evidence at the hearing revealed that the Applicant did not conduct any permeability testing within the upper portions of this Stratum IV, and this was even stipulated to by the Applicant's attorney (Tr. P. 1093, L. 16 – P. 1095, L. 18); therefore, neither the Applicant nor the ALJ can know if and/or how groundwater moves through the fractures in the weathered portions of this soil layer. The only evidence presented at the hearing regarding groundwater movement in Stratum IV is associated with permeability tests previously conducted by others under Unit 1 only. However, the three permeability tests that were run previously by others on the upper portions of Stratum IV under Unit 1 were found by Ms. Meaux at the hearing to be "unreliable" (Tr. P. 510, L. 15 – P. 511, L. 17).

Therefore, TJFA contends that the evidence presented at the hearing shows that the Applicant clearly failed to comply with this TCEQ rule regarding the determination of soil characteristics along the side of and beneath the landfill excavation in Stratum IV. This determination is necessary to provide the appropriate depth of screening for groundwater

monitoring wells that need to extend below the landfill, as discussed below. This fatal flaw in the Application requires this permit request be DENIED.

C. Other Relevant Issues Not Addressed by ALJ in the PFD

The PFD does not address other defects in the Application that were raised by the Protestants and discussed in their briefing on Closing Arguments, one of which is as follows:

GEOLOGY REPORT FAILS TO COMPLY WITH TCEQ RULES

TJFA raised an issue during the hearing and in its Closing Argument that the Geology Report failed to comply with TCEQ rules. Specifically, 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 discussed below regarding the FEMA floodplain map, no such floodplain information is provided in this report, even though this site 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. Therefore, TJFA contends that this PAA must be denied.

III. INADEQUATE GROUNDWATER MONITORING SYSTEM

TJFA takes exception to the ALJ's findings and conclusion that the proposed groundwater monitoring system complies with the TCEQ rules. The failure of the Applicant's geologist, Ms. Meaux, to adequately characterize the geology and hydrogeology of the site as discussed above results in an inadequate groundwater monitoring system. Furthermore, Ms. Meaux is not even identified in the PFD as a "qualified groundwater scientist" as that term is defined and required in the MSW regulations (e.g. PFD, page 8). The application's groundwater monitoring system won't meet 30 TAC 330.231(e). Specific inadequacies are discussed below.

A. Wells Should Be Screened Below Excavation into Stratum IV

TJFA takes exception to the ALJ's conclusion that the proposed groundwater monitoring wells that will be screened only into Stratum III and not into the fractured portions of Stratum IV (where some excavation and landfilling will extend) meets TCEQ's regulatory requirements. According to the ED's geologist, Mr. Williamson, portions of the landfill will be excavated into Stratum IV and the pollutant pathway could be in this stratum (PFD p. 23 and 27). As such, failing to screen any monitoring wells below this excavation and into the fractured portions of Stratum IV fails to comply with TCEQ rules, e.g. 30 TAC 330.231(e)(1).

Apparently, the ALJ is only concerned about potential contamination from this proposed landfill reaching the Edwards Aquifer (PFD p. 28). This is <u>not</u> what concerns TJFA and the other landowner Protestants. The concern is the potential contamination of the groundwater in both Stratum III and the upper portions of Stratum IV, and subsequent contamination of surface

waters in the area. Yet only Stratum III will be monitored. This is not being protective of human health and the environment.

Therefore, TJFA contends that the groundwater monitoring system as proposed in the application fails to comply with TCEQ rules, and recommends that the proposed groundwater monitoring system be modified in order to require that some of the wells in the vicinity of the proposed excavation of the landfill into Stratum IV be screened below that excavation.

B. Wells Should Be Located Along Kohlenberg Lane Adjacent to Unit 1

TJFA takes exception to the ALJ's conclusion that it is not necessary to place a monitoring well along Kohlenberg Lane adjacent to Unit 1 (PFD p. 34). The ALJ bases her conclusion on the testimony of Mr. Williamson, the ED's geologist, who said that groundwater does not move towards Kohlenberg Lane, based on the potentiometric maps contained in the Application (PFD p. 33-34).

There is clearly the need for monitoring wells along Kohlenberg Lane adjacent to Unit 1. This landfill is one of the oldest landfills (MSW-66) still in operation in the state. Unit 1 includes the original landfill disposal cells from the 1970s at a time when no requirements existed for the construction or testing of liners or leachate collection systems. There is no evidence that approved landfill liners were installed in these old cells that were filled adjacent to Kohlenberg Lane.

Currently, there is only one monitoring well along this roadway, MW-2. However, the Applicant proposes to remove this well, as being at best a side-gradient well, leaving no wells

along this roadway adjacent to Unit 1. The groundwater contour map (Drawing 4-13A on page 1105 of APP-202) contained in the Application shows that groundwater does flow downgradient towards and potentially under this roadway before reaching Mesquite Creek, according to Dr. Clark (Tr. P. 890, L. 6 – P. 891, L. 14). It is interesting to note that in recent draft guidance for evaluating permit modifications related to the placement of monitoring wells as required by the March 2006 rule revisions, the TCEQ staff stated that side-gradient wells should be considered downgradient and included in the Point of Compliance. Therefore, it is important that there be monitoring wells along this flow path, in order to be in compliance with the TCEQ rules (30 TAC § 330.231(a)(2)). Having too many monitoring wells versus too few is in keeping with the intent of the TCEQ rules as being protective of human health and the environment.

Therefore, TJFA recommends that MW-2 remain as a down-gradient well along Kohlenberg Lane and not be removed as proposed by the Applicant and as recommended in the PFD.

C. Wells Adjacent to Unit 1 Will Be Influenced by Water in Ponds A and B

TJFA takes exception to the ALJ's conclusion that water in Ponds A and B will not influence wells adjacent to Unit 1, as being contrary to the evidence presented at the hearing or not supported by any evidence (PFD p. 35). The ALJ bases her conclusion on the mistaken belief that these ponds are designed for "detaining" water rather than "retaining" water (PFD p. 35). This is in spite of the testimony of the Applicant's own geologist who testified that there was a possibility that the stored water in Pond A could influence MW-2A (PFD p. 35). And 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).

The Applicant argued in its Closing Argument that Ms. Meaux's acknowledgement of a possible influence of these ponds on groundwater monitoring wells is predicated on the assumption (also made by the ALJ) that these ponds are "retention" ponds rather than "detention" ponds (Appl. Closing Argument p. 20). However, the only assumption Ms. Meaux was asked to make at the hearing when asked this question was that water could sit within Pond A between its bottom (at elevation 593.0) and six inches higher (at elevation 593.5), which is what Mr. Graves testified as being how Pond A functions as constructed (TR. p. 146:14-20). Within this six-inch range, Pond A does function like a retention pond, according to Mr. Graves, unlike all of the real detention ponds proposed around Unit 2. Ms. Meaux reached her conclusion that Pond A could influence MW-2A only after considering this information and checking groundwater levels in this area.

The lack of information in the Application or presented at the hearing regarding these two storm water ponds is disturbing. These two ponds were not part of the previous permit amendment application for MSW-66A, and yet were constructed some time after that permit amendment was granted by the TCEQ and before this current permit amendment application was filed. There was no evidence presented during the hearing that the TCEQ ever approved the design or construction of these two ponds.

Mr. Graves testified that he did not include much information about these two ponds in the Application because they were existing ponds (TR. p. 142:1-5). Ms. Meaux obviously did

not know anything about these two ponds nor did she consider how they might influence groundwater in the vicinity of these ponds when she was characterizing groundwater flow in the area and proposing her groundwater monitoring system.

This lack of information in the PAA regarding these two ponds and their potential for influencing groundwater flow in the area is a failure to comply with the TCEQ rules and forms a basis for recommending denial of this permit application request.

Therefore, TJFA contends that the evidence does not support the ALJ's findings regarding these two ponds influencing groundwater in nearby monitoring wells, and recommends that these two ponds be lined so that any standing water in them will not influence groundwater in the vicinity of these ponds.

D. Applicant Should Have Been Required to Conduct Assessment Monitoring

TJFA takes exception to the ALJ's conclusion that the Applicant was not required to conduct assessment monitoring due to the detection of 1,1-DCE at MW-3 (PFD p. 37). The ALJ reaches her conclusion based on her finding that "... 1,1-DCE was not confirmed..." through re-sampling, although if had it been, then assessment monitoring would have been required (PFD p. 37).

The evidence presented in the Application and at the hearing showed that on at least four separate occasions over a two-year period, 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 down-gradient of the existing Unit 1 (where unlined cells were filled as part of the old landfill)

and just up-gradient of Mesquite Creek. The level of contamination detected in this monitoring well was at or above 0.007 mg/l, which is the Maximum Contaminant 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). Each time a re-sampling was conducted by the Applicant, the level was below the detectable level of 0.005 mg/l. The repeated detection of this contaminant at or above the MCL should have triggered an assessment monitoring according to the TCEQ rules at 30 TAC 330.235 to determine its source, yet this was not done by the Applicant, and the ED did not require it.

At the hearing, the Applicant brought forward Mr. Kerfoot, a witness who confirmed that 1,1-DCE occurred in the groundwater, but only before and during landfill gas exceedances, (PFD p. 37). This is an admission by the Applicant that this contaminant was detected in the groundwater, and therefore this should have triggered an assessment monitoring.

TJFA recommends that the TCEQ require the Applicant to conduct an assessment monitoring of MW-3 for the presence of 1,1-DCE that had previously been detected in order to determine its source, in accordance with TCEQ rules. Elimination of any influence by Pond A on this monitoring well may be needed to accomplish this.

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

A. 200% Increase in Runoff Volume Due to Diverted Drainage Area Violates TCEQ Rules and State Law

TJFA takes exception to the ALJ's conclusion that natural drainage patterns will not be significantly altered by the development of the proposed landfill, despite the fact that the runoff volume will increase by about 200% at the permit boundary (PFD p. 39). The ALJ bases her conclusion on the fact that the Applicant showed that the "peak" discharge rates will be reduced by the use of storm water "retention" ponds (PFD p. 39).

The use of "retention" ponds is one of the specific methods which the TCEQ Guidance Document RG-417 provides for controlling increases in "runoff volume" so as not to have a significant alteration at the permit boundary (PFD p. 40). However, the evidence in the Application and presented at the hearing shows that the pond controlling runoff at Discharge Point E, where the runoff volume is increasing 200%, is NOT a "retention" pond, but rather a "detention" pond. Specifically, the ALJ noted that Mr. Graves explained that increased volumes of storm water runoff resulting from the landfill's development will be "detained" and subsequently discharged at the site's drainage points, and that the "... peak flow will be reduced by the use of the ponds..." (PFD p. 41). As such, even after the storm water leaves this "detention pond", the runoff volume is still 200% more than natural conditions at the permit boundary, even though the "peak" flow will be reduced.

Assuming the ALJ meant to write "detention pond" rather than "retention pond" in her PFD (she does use "detention" ponds on pages 41 and 44 of her PFD), the evidence provided at the hearing and in the Application establishes that only the "peak" discharge rate is being reduced at Discharge Point E. Almost all other discharge rates less than the peak rate crossing the permit boundary at this location will be greater than would naturally occur due to the

substantial increase in runoff volume (about 200%), diverted away from where it naturally flows and redirected towards Discharge Point E.

The evidence presented in the Application and at the hearing shows that the area draining to Discharge Point E, and the resulting runoff volume, will increase about 200% as a result of the development of 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 done so as not to cause this diversion of storm water away from its natural pathway (Tr. P. 96, L. 6-18). Yet in this case it was done in order to make other "peak" discharges not be significantly altered as storm water leaves the site at those other locations (Tr. P. 101, L. 4-10). So what happens with all of this storm water that is to be artificially diverted away from its natural direction and 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 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 storm water 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 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 storm water leaving the landfill site combines with storm water 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). Timing is an important parameter to evaluate even according to the TCEQ Guidance Document RG-417 (see Section 5.3).

Yet, on cross-examination, neither the ED nor the Applicant witnesses had any idea how the timing and quantity of storm water leaving Discharge Point E combines with the timing and quantity of storm water runoff off-site and immediately downstream of Discharge Point E. For example, 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, and 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 flooding or adverse impacts immediately downstream from this discharge 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 are no data upon which to base 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 storm water 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 storm water away from its natural pathway and instead towards Discharge Point E helped the design of the landfill maintain the peak discharge at Discharge Point B, which is along Mesquite Creek, at its natural drainage conditions (Tr. P. 985, L. 7 – P. 986, L. 10).

Therefore, since the Applicant, the ED and the ALJ have 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 Application fails to comply with TCEQ rules regarding "no significant alteration of natural drainage patterns".

In addition, the following TCEQ rule is also of importance in establishing the requirement that the Applicant must make such an off-site evaluation:

- 30 TAC 301.34(3) - (referenced in 30 TAC 330.53(b)(12)(A) & 330.55(b)(7)) - Criteria for approval of preliminary plans for drainage improvements by the Commission shall include the requirement that the design "... will not increase flooding or divert waters in such a way that any person's life or property will be endangered or subjected to significantly increased flooding. The Commission shall not approve plans for levees or other improvements which will significantly increase flood rises on any person's land..."

Such increased flooding on off-site properties can occur even with a reduction in the "peak" discharge rate at the permit boundary, if the timing of flows changes or the volume of

runoff increases enough. A 200% increase in runoff volume at the permit boundary is a significant alteration of natural drainage patterns at this location under any reasonable definition. Yet the ALJ and the Applicant believe that this is acceptable simply because the "peak" discharge rate leaving this location at the permit boundary is decreased over natural conditions by the use of a detention pond; and, therefore, this somehow proves that there will not be any adverse affects on downstream properties. However, the Applicant did no analysis off-site in order to determine if this was actually true, claiming such is not required by TCEQ rules.

The ALJ states on page 44 of her PFD that she finds that "... the application complies with the Commission's guidelines as well as with the applicable rule..." (i.e. that natural drainage patterns shall not be significantly altered). As noted above, the ALJ only cites the rules – specifically 30 TAC 330.55(b)(5)(D) and 330.56(f)(4)(A)(iv) - relative to "*natural drainage patterns will not be significantly altered.*" She further cites to the *Blue Flats* and *North Texas* cases as Commission precedent on this issue (PFD p. 44). According to the ALJ, these two cases rejected any off-site analyses of storm water in determining whether significant alteration of natural drainage patterns would occur (PFD p. 44). Yet the Commission's guidelines specifically state that off-site analyses can/should be performed in order to make this determination (RG-417, specifically Sections 2.1 and 5.3). Furthermore, 30 TAC 301.33 specifically requires the Commission to consider the potential for increased flooding of off-site properties in evaluating drainage improvements for a landfill.

Finally, the Guidance Document RG-417 states that even with a detention pond, not only should the "peak" flow rate not significantly change, but also the "volume of storm water ...

should not change significantly when compared with predevelopment conditions..." (Section 7.1).

Therefore, this Application cannot comply with both Commission precedent as cited and interpreted by the ALJ in her PFD and Commission guidance and rules on this issue because the guidelines and rules are not consistent with the Commission precedent, as it is being interpreted by the ALJ. Relying on a decrease in "peak" discharge rate at the permit boundary as the sole factor for determining that "natural drainage patterns are not significantly altered" from the landfill is contrary to common sense and the Commission's ruling in the *Blue Flats* case, TCEQ rules and TCEQ Regulatory Guidance. An increase in area, and corresponding runoff volume, draining to and off the permit boundary of over 200% should be per se a significant alteration of natural drainage patterns, unless it can be demonstrated otherwise by the Applicant, as provided for in the Guidance Document - RG-417.

Finally, the ALJ states that the June 2004 Guidance Document acknowledges that an increase in volume may need to be mitigated by controlling the rate of discharge (PFD p. 44). TJFA agrees that the Guidance Document say this. However, the ALJ and the Applicant do not contend that the rate of discharge is being controlled, only the "peak" rate of discharge (PFD p. 42). Virtually all other discharge rates leaving the permit boundary from Discharge Point E are greater than natural conditions because of this increased volume of discharge, and the Applicant's engineer does not know how these increased discharge rates will affect downstream flooding when they combine with storm water runoff off-site (PFD p. 43).

TCEQ's Guidance Document, RG-417, presents a discussion of the various parameters 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. Yet, there is no 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. Anyone reading the PAA likely 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, pre-development 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. It is incumbent on the Applicant to explain exactly how a doubling of the runoff volume being discharged off-site will not impact properties downstream. Only by doing so can the Applicant meet the TCEQ requirement of demonstrating no significant alteration of natural drainage patterns due to the landfill development. The very lack of such a discussion regarding a significant increase in runoff volume is what led the Commission to deny the permit application in the *Blue Flats* Case.

Therefore, TJFA contends that this PAA fails to demonstrate that natural drainage patterns will not be significantly altered as a result of the development of the proposed landfill, in violation of TCEQ Regulatory Guidance, 30 TAC 301.33 and 30 TAC 330.56(f)(4)(A), as well as Section 11.086 of the Texas Water Code. As such, this PAA must be DENIED.

B. Applicant Used Unreliable FEMA Floodplain Map

TJFA takes exception to the ALJ's conclusion that the evidence demonstrates that the landfill would comply with requirements regarding protections from flooding, because the ALJ and the Applicant erroneously relied on the FEMA floodplain map to determine that this site is not in the 100-year floodplain of Mesquite Creek (PFD p. 50).

While it is true that it is generally acceptable to TCEQ to rely on the FEMA map to determine floodplain areas, this is only true when FEMA has actually studied and determined the floodplain of the creek of interest. If FEMA never studied or analyzed the floodplain of a particular stream or creek, FEMA will not show an indication of a 100-year floodplain along such a creek on its floodplain map. Use of such a FEMA map to conclude that this creek does not have a floodplain would be arbitrary and capricious, especially when it is known that this creek does in fact have a floodplain. The TCEQ rules provide for means by which to determine if a site is in the 100-year floodplain other than the FEMA map if it's not useable (30 TAC 330.56(f)(4)(B)(i)). Use of such a FEMA map has previously been found to be inadequate and unreliable by the Commission in both the *Juliff Garden* and *Tan Terra* cases. Yet the ALJ is recommending that the Commission allow this very thing to happen in this case, contrary to Commission precedent and common sense.

The TCEQ rules require that a permit application identify whether a landfill will be located within a 100-year floodplain (e.g. 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 associated with that floodplain, reduce the temporary water storage capacity of that

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 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 of any stream or creek, including Mesquite Creek (Tr. P. 150, L. 21 – P. 151, L. 16).

Contrary to the assertion of the Applicant, this FEMA map cannot be used to determine whether the site is in a 100-year floodplain since the FEMA map does not identify whether or not there is any 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). But he did admit that he believes 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 under certain conditions, as shown in Section 6H of Attachment 6 of the Application (APP-202 p.02107). But he testified that this analysis of his is <u>not</u> a determination of the 100-year floodplain for Mesquite Creek, since he did not take into consideration downstream features, such as Kohlenberg Lane 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 for Mesquite Creek when he was conducting this

limited analysis (Tr. P. 177, L. 7-13). He even discussed how he would go about making an analysis of the floodplain for Mesquite Creek, which would include 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). But he didn't know if FEMA looked at or determined whether or not Mesquite Creek has a floodplain (Tr. P. 996, L. 2-8). Yet he acknowledged that the Applicant nonetheless 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 an 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 limited to being only the one defined by FEMA (Tr. P. 996, L. 9 – P. 999, L. 18).

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 any portion of Mesquite Creek, even though a floodplain does exist for this creek. The FEMA map also doesn't show the flood pool that inundates portions of the landfill site that is created by a flood control structure that impounds Freedom Lake located just downstream of the landfill site. 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 must conduct its own floodplain analysis in order to comply with the requirements of the TCEQ rules regarding locating a landfill in a floodplain.

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

Therefore, TJFA asserts that the Applicant has failed to demonstrate that this site is not in the 100-year floodplain of Mesquite Creek, or its tributary, based solely on its reliance on the FEMA floodplain map. The FEMA map is clearly unreliable with respect to Mesquite Creek, and the Applicant's reliance on it is contrary to the evidence in the application and presented at the hearing. Mesquite Creek is bordered by a floodplain where it crosses the landfill site but the Applicant does not know the extent of it (see PFD, Page 50, first and second paragraphs – The Applicant "*admitted that Mesquite Creek has floodplain characteristics and is within Freedom Lake's flood pool...*"). Thus, this permit application must be DENIED.

C. Other Relevant Issues Not Discussed in PFD

There are some other issues regarding the Drainage Plan that were presented in the hearing and in TJFA's briefing that were not discussed in the PFD, as follows:

1. 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 flood waters up to and including the 100-year event.

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 for the 100-year event (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.

2. Required Information Missing regarding Existing Ponds A and B

The TCEQ rules require complete information be provided in a permit application 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)). For example, included in

Attachment 6 of Part III of the Application 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 presented in this PAA for providing and handling the drainage of storm water off the landfill includes the existing Ponds A and B, located between Unit 1 and Mesquite Creek. These ponds were not included in the previous permit amendment MSW-66A, but were constructed after that permit amendment was issued and before this current Application was filed (Tr. P. 966, L. 13-16). The purpose of these ponds being constructed was apparently to help control the release of sediment from the existing landfill due to some erosion problems (Tr. P. 966, L. 17-23). There is no evidence that TCEQ has ever reviewed or approved the design and/or construction on these ponds.

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 Application, 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 flow rates at Discharge Point B to 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 was 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). In fact, he didn't have any information about Pond B, in order to determine how high water can get in that pond before it would overflow (Tr. P. 143, P. 17 – P. 144, L. 2). For Pond A, he admitted that the Application does not identify the outlet for

this pond; therefore, he doesn't know where the emergency spillway is located or if one even exists (Tr. P. 144, L. 23 – P. 145, L. 8).

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

V. NONCOMPLIANCE WITH GEOTECHNICAL REQUIREMENTS FOR SLOPE STABILITY

TJFA takes exception to the ALJ's conclusion that the Application presents a safe design regarding slope stability in accordance with TCEQ rules (e.g. 330.305). The ALJ found that the Applicant's slope stability analysis demonstrated that the waste slopes will be stable, based on the testimony of the Applicant's engineer, Dr. Gross, regarding this analysis (PFD p. 54). However, the evidence presented at the hearing does not support such a conclusion, particularly with regards to the minimum factor of safety acceptable for such analyses.

The ED's witness, Mr. Prompuntagorn, testified that the TCEQ policy regarding minimum factor of safety for slope stability analyses for municipal solid waste landfills is 1.25 (TR 1011, L 1-18, TR 1014, L 12-18, TR 1016, L 2-5). Yet, some of the factors of safety used in the Applicant's slope stability analyses were as low as 1.0 (APP-202, pages 01632—01633), clearly below the acceptable level set by TCEQ policy.

In addition, applicant's "expert" witness, Dr. Gross, whose testimony was somehow found by the ALJ to be credible, testified that she didn't know if U.S. EPA had minimum recommended factors of safety for slope stability (see TR p. 751-752). Further, she testified that

she was not aware of any U.S. EPA document that has minimum factors of safety for MSW landfill slope stability (see TR p. 756, L 9-15; TR 758, L 17-19: TR 758, L 20-24). In apparent contradiction to this "credible" opinion by the Applicant's witness, the Application itself references a current U.S. EPA document that contains U.S. EPA's recommended minimum factors of safety for slope stability analyses for MSW landfills (see TR p. 745, L 6-12; APP-202 p. 01649, *Solid Waste Disposal Facility Criteria, Technical Manual*, p. 55).

Since Dr. Gross' slope stability analyses fail to meet the minimum standard of the U.S. EPA and TCEQ policy, TJFA recommends that this permit request be denied.

VI. INADEQUACY OF SOP AND FACILITY ENTRANCE DESIGN

A. Operating Hours in Settlement Agreement with County Should be in Draft Permit

TJFA agrees with the ALJ's recommendation that the operating hours in the Draft Permit be changed to reflect the operating hours in the Applicant's agreement with Guadalupe County. These operating hours were a critical part of the agreement that the Applicant entered into with the County in order to get the County to withdraw its opposition to the PAA. There is no evidence that longer operating hours are required for normal landfill operations at this facility. Also, TCEQ rules already provide for extended operating hours in response to an emergency.

B. TPWD's Four Recommendations Should All Be Included in the SOP

TJFA takes exception to the ALJ including only one of the four TPWD recommendations regarding the protection of a rare species (the Mount Plover) into the proposed Site Operating

Plan (SOP) for this landfill. TJFA agrees with the OPIC that "... all four of TWPD's recommendations be included in the landfill's construction plan and SOP..." (PFD p. 68). The ALJ concludes that only the first TPWD recommendation be included in the SOP, i.e. that landfill personnel should be educated about the Mountain Plover so that adverse impacts to this rare species are avoided, since including such a recommendation would not be too onerous on the Applicant (PFD p. 63 and 66). TJFA agrees that such a requirement should not be onerous on the Applicant; however, such should not be the standard. Rather, the standard is to protect the environment.

Yet, based on this ALJ's standard, the ALJ chose not to agree with the second TPWD recommendation, which was for placing a restriction on land-clearing activities during bird-nesting season. The ALJ rejected this recommendation stating her concern that the term "land-clearing activities" could be construed to encompass various types of landfill operations and therefore be too onerous on the Applicant (PFD p. 66). TJFA believes that if this is a concern of the ALJ, then the SOP could be clarified so that "land-clearing activities" would only involve the disturbance of native vegetation (where bird nesting might occur) so as not to prohibit waste disposal operations or other normal landfill operations that do not involve the clearing of such vegetation. It would not seem to be an onerous burden on the Applicant to limit its land-clearing activities to those parts of the year that are not the bird-nesting season.

The third TPWD recommendation involved maintaining vegetated buffer zones along the riparian corridors to minimize adverse impacts to valuable ecosystems (PFD p. 63). The ALJ fails to discuss this particular recommendation in her PFD, other than to state that "the ALJ

suggests no changes regarding vegetation in the SOP" (PFD p. 66). Again, TJFA believes preserving the riparian vegetated buffers, such as they exist, is not an onerous burden on the Applicant and sees no reason why this should not be done, especially since all the witnesses at the hearing, even the Applicant's own expert, agreed that this recommendation of the TPWD should be included in the SOP.

Finally, the TPWD recommended that disturbed areas be re-vegetated with specific native plant species (PFD p. 63). The ALJ disagreed, believing that almost any actively-worked area could be considered "disturbed" and, thus, the timing of re-vegetation would not be clear (PFD p. 66). Again, TJFA contends that any such confusion could be clarified in the SOP and that the timing of such re-vegetation could be clarified as well, as is the normal practice in other SOPs.

C. Site Entrance as Designed is Unsafe and Fails to Meet Standards

TJFA takes exception to the ALJ concluding that the Applicant can fix the unsafe design of its proposed new landfill entrance by submitting to the TCEQ staff prior to construction a different location and design for its new entrance that complies with safety design standards. The ALJ acknowledges that the application had to include sufficient data to show the design will not pose adverse effects on nearby persons or property owners (PFD p. 69), but the evidence presented at the hearing showed that the current design does not meet AASHTO standards regarding safe line-of-sight distances. The Applicant provided an alternative location and design for its new entrance at the hearing, but did not offer to amend its Application to incorporate this

new design.. Therefore, the PAA is deficient and fails to comply with TCEQ rules regarding a safe landfill design.

VII. TRANSCRIPT COSTS SHOULD BE APPORTIONED JUSTLY

TJFA takes exception to the ALJ apportioning half of the normal transcript costs to TJFA for having significantly participated in the hearing.

The ALJ acknowledges that the Protestants raised reasonable concerns regarding the application during this public hearing (PFD p. 71). A number of issues were identified regarding the lack of an adequate and safe design, some of which even the ALJ has identified and has recommended be changed in order to make the Application more protective of human health and the environment (PFD p. 71).

TJFA believes that this is the very purpose for having public hearings and the ALJ should recognize the valuable role played by Protestants, such as TJFA, and the public in this permitting process. For these Protestants to then be penalized for actively participating in the public hearing, bringing up reasonable concerns about the application and its proposed landfill design, and identifying issues that will result in an improved and safer design with which even the ALJ agrees, would tend to stifle participation by protestants in future public hearings.

Furthermore, the financial burden on Protestants who participate in these hearings is significant already. There is no financial reward for the Protestants even if they are successful in their efforts, unlike for the Applicant. The Applicant should expect that its application may be contested and anticipate that there will be costs associated therewith. The Applicant assumes the

risk of such a hearing and the costs that go along with it, especially when reasonable concerns are raised regarding the adequacy of its design, as is the case here. This is why all of the transcript costs should be borne by the Applicant in this case.

In addition, the ALJ assumed that TJFA, a real estate investment limited partnership, had the financial ability to pay for a share of the transcript costs based on her conclusion that since Mr. Bobby Gregory, TJFA's representative in this matter, also is the principal owner of a separate corporation that owns a landfill, this somehow means TJFA has the financial ability to pay a portion of the transcript costs (PFD p. 70). It is unclear how Mr. Gregory's involvement in a different corporation that owns a landfill facility is relevant to whether TJFA has the financial ability to pay transcript costs in this case. Certainly his ownership interest in a landfill elsewhere has no bearing on TJFA's status in these proceedings, nor should it. The fact that the ALJ even mentions this other landfill business at all raises the question of whether this influenced the ALJ in the rendering of her PFD.

VIII. NO "LATERAL EXPANSION" INVOLVED

TJFA takes exception to the ALJ and the Applicant erroneously describing this PAA as being for a "lateral expansion", given how this term is defined in the regulations (PFD p. 1). The testimony during the hearing verified that the PAA is for a new "*unit 2, which will not be physically connected to the areas that are already permitted, Units 1 and 3...*" (PFD p. 4).

Construction of a new MSW landfill unit, as is the case here, does not meet the regulatory definition of a "lateral expansion", which is defined as "a horizontal expansion of the waste

boundaries of an existing municipal solid waste landfill unit" (30 TAC 330.2(63)). The PFD and the Applicant erroneously use the term "lateral expansion" to describe the current permit amendment being sought by Waste Management of Texas, Inc. (WMTX). This misuse of this term has continued throughout this permitting process even after TJFA had the Applicant read the TCEQ rule 330.2 definition of "lateral expansion" into the record to avoid any ambiguity as to the regulatory meaning of that term (TR 344, L 1-3).

Applicant's representative, Mr. Don Smith, testified:

- the proposed disposal area is in no way connected to the current permitted disposal area (TR 17, L 2-5);
- a new disposal unit is proposed in 66B [application] and is in no way connected to the disposal unit in 66A [current permit] (TR 18, L 6-12); and
- Mesquite Creek separates the current permitted disposal area and the proposed disposal area (TR 19, L 12-15).

Applicant's Engineer of Record, Mr. Scott Graves P.E., further testified:

- the proposed permit amendment proposes three discrete areas or landfill units (TR 344, L 17-20); and
- the proposed permit amendment would not expand [existing] Unit No. 1 (TR 344, L 22-25)

Applicant's intent to construct a new MSW landfill unit was even confirmed by Applicant's own closing argument "*The existing facility consists of two disposal units, Unit 1 and Unit 3... WMTX is seeking to expand the facility to add a third* [new] *disposal unit, Unit 2.*" (page 3, paragraph 1, lines 5-6, paragraph 2, lines 3-4). Construction of the new MSW landfill Unit 2 does not meet the TCEQ definition of a "lateral expansion".

The PFD's misuse of the term "lateral expansion" for describing this PAA is consistent with that of the Applicant. Such use may be an attempt by the Applicant to

circumvent the prohibitions of the federal Ford Aviation Act against siting new landfill units within six miles of public airports. Therefore, TJFA requests that the Commission demand that the PFD be corrected, and its findings be clarified to clearly show that this permit amendment request is simply for an expansion of an existing municipal solid waste facility, and not a "lateral expansion", as that term is defined in state and federal regulations.

IX. CONCLUSION

In conclusion, TJFA excepts to the PFD that recommends the permit amendment request, with modifications, be granted. TJFA believes it will be reversible error if the Commission accepts this PFD as rendered, particularly the findings and conclusions regarding (1) the site not being in the 100-year floodplain of Mesquite Creek based solely on an unreliable FEMA floodplain map, (2) a 200% increase in runoff volume leaving the site as not being a significant alteration of natural drainage patterns, and (3) the failure of the Applicant to conduct horizontal permeability tests in Stratum IV into which the excavation will extend. TJFA excepts to all of the findings of fact and conclusions of law included in the PFD that are contrary to the position taken by TJFA as discussed herein. As such, TJFA would recommend that its Findings of Fact and Conclusions of Law attached herein as Exhibit A be adopted by the Commission.

Furthermore, TJFA believes that the ALJ's reference to TJFA's representative and his involvement in another landfill business is irrelevant. As such, TJFA believes that the issues raised and argued by TJFA during this proceeding may not have been fairly evaluated and considered, to the prejudice of TJFA and the other Protestants.

TJFA again asserts that the Application of Waste Management of Texas, Inc. ("Applicant") for Permit Amendment No. MSW-66B should be **DENIED** for all of the reasons discussed herein, including:

1. the Application fails to provide the requisite geological and hydrogeological characterizations in order to be able to develop a groundwater monitoring system that would ensure the protection of human health and the environment and be in compliance with the TCEQ rules (e.g. 30 TEX. ADMIN. CODE § 330.56 (d)(5)(B) and 330.231);

2. the Application fails to provide the requisite discussion and analyses to demonstrate that natural drainage patterns will not be significantly altered as a result of the development of the landfill expansion, particularly as a result of the dramatic 200% increase in runoff volume shown for Discharge Point E, in violation of TCEQ rules (e.g. 30 TAC 330.56(f)(4)(A)(iv) and 301.33), Regulatory Guidance and the Texas Water Code Section 11.086;

3. the Application fails to demonstrate that the site is not located in the 100-year floodplain of Mesquite Creek, in violation of TCEQ rules (e.g. 30 TAC 330.56(f)(4)(B) and 330.303);

4. the Application fails to demonstrate that the construction and operation of the landfill will be stable due to the lack of an acceptable minimum factor of safety as set by the U.S. Environmental Protection Agency and TCEQ policy;

5. the Application fails to demonstrate that the Site Operating Plan is protective of human health and the environment, especially as it relates to (1) the failure to include the TPWD recommendations to protect a rare species, and (2) the failure to include a site entrance design that complies with AASHTO safe design standards.

WHEREFORE, PREMISES CONSIDERED, TJFA respectfully requests that the Commission issue an order denying this Application.

Respectfully submitted,

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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 7th day of April, 2008.

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2008 APR -7 PM 4: 22
CHIEF CLERKS OFFICE

EXHIBIT A

PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

I. FLOODING

FINDINGS OF FACT

1. Mesquite Creek runs through the center of the landfill site, between landfill units 1 and 2.

2. The Applicant relied upon the FEMA floodplain map of the area to determine that the site is not within a 100-year floodplain of any creek or stream, including Mesquite Creek.

3. The Applicant failed to establish that FEMA actually studied any creeks flowing within or adjacent to the site, including Mesquite Creek, to determine if there are any floodplains located within the site.

4. The Applicant and the Executive Director acknowledged that Mesquite Creek does have a floodplain, but the Applicant failed to determine the floodplain of Mesquite Creek within the landfill site, including the failure to determine 100-year flood levels associated with such a floodplain.

5. The Applicant failed to determine if the landfill site is located within the 100-year floodplain of Mesquite Creek.

6. The Applicant failed to determine if suitable levees are provided to protect the landfill from flooding due to the 100-year flood.

CONCLUSIONS OF LAW

1. The Applicant failed to determine if the landfill site is located within the 100-year floodplain, which is not in compliance with 30 TAC 330.301 or 30 TAC 330.56(f)(4)(B)(i).

II. DRAINAGE

FINDINGS OF FACT

1. The Applicant developed a Drainage Plan for the landfill that would divert almost twice the natural drainage of the stormwater runoff leaving the site at Discharge Point E.

2. The Applicant developed a Drainage Plan for the landfill that would produce an almost doubling of the stormwater runoff volume leaving the site at Discharge Point E.

3. The Applicant failed to discuss or analyze the significance of this substantial increase in stormwater runoff volume on nearby properties located just downstream of Discharge Point E.

4. The Applicant is unaware how stormwater leaving the site at Discharge Point E would combine with stormwater along the watercourse flowing across adjacent properties.

5. The Applicant failed to provide any information regarding the design of Pond B, located adjacent to Unit 1.

6. The Applicant failed to provide complete information regarding the design of Pond A, located adjacent to Unit 1.

7. The Applicant relied upon Pond A for its Drainage Plan for handling stormwater runoff from the landfill.

CONCLUSIONS OF LAW

1. The Applicant has failed to provide a discussion and analysis to demonstrate that natural drainage patterns will not be significantly altered as a result of the landfill development, as required by 30 TAC 330.56(f)(4)(A)(iv).

2. The Applicant failed to provide sufficient information regarding Ponds A and B in order to demonstrate that these drainage structures can handle the design runoff, as required by 30 TAC 330.55(b)(4).

3. The Applicant has not provided a design of all drainage facilities within the site as required by 30 TAC 330.55(b)(5)(C).

III. GEOLOGY/HYDROGEOLOGY

FINDINGS OF FACT

1. The Applicant did not establish the limits of the uppermost aquifer beneath the site.

2. The Applicant did not establish the horizontal hydraulic conductivity/permeability of the stratum that will form the bottom and sides of the excavation of the landfill.

3. The Applicant failed to establish the bottom of the uppermost aquifer and the top of the underlying aquiclude.

4. The Applicant has not provided a thorough characterization of aquifer thickness, effect of site construction on ground water flow direction and rates, and the hydraulic characteristics of the saturated and unsaturated geologic units of the materials of the lower confining unit of the uppermost aquifer.

5. The Applicant has failed to thoroughly investigate the hydrogeologic and hydraulic characteristics of Stratum IV in the facility expansion area.

6. The Applicant has failed to consider changes in groundwater flow that are expected to result from construction of Cell 2 in Unit 1.

7. The Applicant has failed to establish the most likely pathway for pollutant migration.

CONCLUSIONS OF LAW

1. By failing to determine the uppermost aquifer, the Applicant has failed to comply with 30 TAC 330.231(a) that requires the installation of a ground water monitoring system that will yield representative samples from the uppermost aquifer.

2. By failing to determine the uppermost aquifer, the Applicant has failed to comply with 30 TAC 330.231(a)(2) that requires the installation of a ground water monitoring system that allows determination of the quality of ground water passing the relevant point of compliance and that ensures detection of contamination of the ground water in the uppermost aquifer.

3. The Applicant's failure to identify the bottom of the uppermost aquifer and the top of the underlying aquiclude is not in compliance with 30 TAC 330.56(d)(5)(A)(ii) and 30 TAC 330.56(e)(2).

4. The Applicant's failure to determine the horizontal permeability of all strata that will form the bottom and sides of the landfill excavation is not in compliance with 30 TAC 330.56(d)(5)(B)(i) and (ii).

5. All information and data required in 30 TAC 330.231(e)(1) has not been provided in the ground water investigation report. Specifically, there has not been a thorough characterization of aquifer thickness, effect of site construction on ground water flow direction and rates, and the hydraulic characteristics of the saturated and unsaturated geologic units of the materials of the lower confining unit of the uppermost aquifer.

6. Because of the Applicant's failure to thoroughly investigate the hydrogeologic and hydraulic characteristics of Stratum IV in the facility expansion area, and its failure to consider changes in groundwater flow that are expected to result from construction of Cell 2 in Unit 1, the analysis of the most likely pathway for pollutant migration is incomplete, inadequate, and fails to meet the requirements of 30 TAC 330.56(d)(5)(C)(*iv*).

IV. CONTAMINATED WATER

FINDINGS OF FACT

1. The Applicant failed to size containment berms that would be adequate to handle contaminated water over the working faces of sizes that would be expected to exist during the operation of the landfill.

2. The Applicant failed to provide a design and procedure that would prevent contaminated water from being mixed with leachate and/or landfill gas condensate.

3. The Applicant proposed to transport a mixture of contaminated water, leachate and gas condensate into leachate evaporation ponds adjacent to Unit 2.

4. The Applicant proposed to recirculate water from its leachate evaporation ponds onto Unit 2.

CONCLUSIONS OF LAW

1. The proposal by the Applicant to recirculate contaminated water is prohibited under 30 TAC 330.5(e)(6)(iii), as only leachate or gas condensate can be recirculated onto a landfill unit.

2. The Applicant has failed to design containment berms for contaminated water that will collect and control at least the runoff volume from a 24-hour, 25-year storm, as required by 30 TAC 330.55(b)(3).

V. OPERATING HOURS

FINDINGS OF FACT

1. The landfill has been operating for almost 30 years under normal operating hours as specified in the TCEQ rules.

2. The Applicant has not demonstrated the need to conduct waste operations on a 24/7 basis.

3. The Applicant has entered into a Settlement Agreement with Guadalupe County whereby the agreed to hours of operation are not 24/7, as requested by the Applicant in its permit application.

CONCLUSIONS OF LAW

1. The Applicant is not entitled to operating hours beyond those agreed to in its Settlement Agreement with Guadalupe County.

VI. FIRE PROTECTION

FINDINGS OF FACT

1. The Applicant proposes to only provide fire fighting equipment on-site that would be suitable for a working face of 200' by 200', half of the size of a typical working face.

2. The Applicant's proposal for on-site fire-fighting equipment fails to consider having two working faces or one having as much as 10 acres.

3. The Applicant proposes to have as many as two working faces, with each one being as much as 10 acres in size.

CONCLUSIONS OF LAW

1. The Applicant has failed to provide for an adequate amount of equipment on-site to provide fire protection as required by 30 TAC 330.115.

VII. TPWD RECOMMENDATIONS

FINDINGS OF FACT

1. The TPWD made four recommendations for providing protection of the environment.

2. The Applicant's expert on endangered species agreed with each one of these recommendations.

CONCLUSIONS OF LAW

1. The four recommendations made by the TPWD are for protection of the environment, as required under 30 TAC 330.5, and therefore by not being included in the Site Operating Plan, the Applicant is not in compliance with this rule.

VIII. SITE ENTRANCE

FINDINGS OF FACT

1. The new site entrance as presented in the application was not designed in accordance with generally accepted standards for ensuring the safety and welfare of the public.

CONCLUSIONS OF LAW

1. The design of the new site entrance, by not being designed in accordance with generally accepted safety standards, in not in compliance with 30 TAC 330.5(a)(3), requiring the design to not cause endangerment to human health or the environment.