



April 8, 2011
Project No. 11-03-36

Mr. Frank Zeng
Municipal Solid Waste Permits Section
Waste Permits Division
Texas Commission on Environmental Quality
P. O. Box 13087
Austin, Texas 78711-3087

Re: Response to TCEQ Notice of Deficiency Letter Dated March 8, 2011, Trinity Oaks Landfill, Groundwater Monitoring Well System Revision Permit Modification; MSW Permit No. 556, Dallas County, Texas; Tracking No. 14612180; RN100217942/CN601541469

Dear Mr. Zeng:

This letter is written on behalf of the Trinity Oaks Landfill in response to a Texas Commission on Environmental Quality (TCEQ) letter dated March 8, 2011. The TCEQ's comments are provided below in italics, with our response immediately following.

Comment 1: Please clearly verify whether all contents shown in Drawing 5.1 are consistent with the current permit conditions/authorizations (except for the proposed new wells). It was also noticed that Drawing 5.1, Monitoring Well Location Map, was revised to show landfill gas monitoring probes (GMPs) that were not shown in Drawing 5.1 in the original permit modification application. Inclusion of the GMPs has crowded the drawing and degraded the graphic delineations. Please provide a larger scale drawing or revise to improve readability (please ensure that the drawing shows by legends whether or not the GMPs are existing; and if not existing, please revise the application to include necessary discussions about the non-existing GMPs).

Response: All of the contents illustrated on Figure 5.1 are consistent with the current permit conditions/authorizations. The figure was revised, in accordance with Comment 4 contained in a TCEQ letter dated January 21, 2011. In that letter the TCEQ requested that we verify whether the contents shown in Figure 5.1 were consistent with the current permit conditions (except for the proposed new wells). It was further requested that any inconsistent contents be identified/explained/justified or the drawing was to be revised as necessary. The TCEQ also requested that the drawing be revised to show the approved waste footprint.

Figure 5.1 was modified, as requested, to include inconsistent contents (i.e. site features). These include seven (7) surface water let-down structures located on the side slopes of the landfill and 22 gas monitoring probes. Call outs (labels) for other site features previously illustrated but not specifically identified or labeled on the original drawing were also added. Call outs were added for the leachate storage tank, flare station, and maintenance/storage. A newer topographic map for the facility (December 27, 2006) was also used as the base map for Figure 5.1.

Edits have been made to Figure 5.1 to improve its readability, as requested, and a revised version is attached for inclusion into the permit.

Comment 2a: *Please clarify whether the permit boundary depicted in Drawing 5.1 is the currently approved permit boundary and clarify which proposed wells, in addition to the newly proposed MW-9, will be located outside of the permit boundary. Please revise the application to locate all the proposed wells within the permit boundary.*

Response: See response to Comment 2b.

Comment 2b: *Alternatively, please revise this application at relevant location(s) to include documents to demonstrate that the permittee owns or has long-term control over the property containing the off-site wells. We suggest that areas containing the offsite wells be incorporated as buffer to the current facility boundary or use a perpetual lease and provide documentation to that effect.*

Response: Existing wells MW-7A and MW-8 installed in August 1999 and July 1994 respectively, are located outside of the permit boundary illustrated on Figure 5.1. Additionally, proposed well MW-9 is located outside of the permit boundary.

As noted in Attachment 3 - Adjacent Landowners List and Landowners Map, of the original permit modification application dated December 2, 2010, the site operator, Mesquite Landfill TX LP, owns two (2) parcels of land adjacent to the landfill. The parcels are designated as parcel 37 and parcel 45. MW-8 is located on parcel 37 and MW-7A and proposed well MW-9 are located on map parcel 45. Hence, the original well spacing permit application contains documents that demonstrate that the permittee owns and has long-term control over the property containing the off-site wells. Additionally, tax records for the two (2) tracks of land are attached as additional documentation. The tax record for the parcel located at 11200 Ashwood Drive corresponds with parcel 37 on the Adjacent Landowners Map and the parcel at 2430 Jordan Valley Road corresponds with parcel 45 on the Adjacent Landowners Map.

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Comment 3: *In consideration with the response to Comment No. 8 and the response to Comment No. 6, please revise the application to extend the point of compliance (POC) to cover the spaces between MW-3 and MW-14, and MW-4 and MW-7A, respectively. Please also place new wells on the POC between MW-3 and MW-14, and MW-4 and MW-7A, respectively (the well spacing shall not exceed 600 feet.)*

Response: Additional monitor wells located between MW-3 and MW-14 and MW-4 and MW-7A would be redundant. Further, the section of the landfill between MW-3 and proposed well MW-14 does not meet the definition of a POC as stated in 30 TAC 330.3(106), as most of that section is greater than 500 feet from the hydraulically downgradient placement of waste. The portion that is within 500 feet of the downgradient placement of waste will be monitored by the proposed POC defined by wells MW-14 through MW-18 and MW-8. Similarly, the section of the landfill between MW-4 and MW-7A does not meet the definition of a POC as most of that section is also greater than 500 feet from the hydraulically downgradient placement of waste. That portion of the landfill within 500 feet of the downgradient placement of waste will be monitored by the proposed POC defined by wells MW-7A and MW-9. An attached demonstration document is provided in order to demonstrate how the proposed POC designed between MW-7A and MW-9 and proposed wells MW-14 and MW-18 meets the requirements of 30 TAC 330.3(106) and how additional POC segments between MW-4 and MW-7A and MW-3 and proposed well MW-14 are redundant and provide no added benefit to the groundwater monitoring activities at the site.

Comment 4: *Please clarify your response to Comment No. 13 to state whether the Groundwater Sampling and Analysis Plan referenced as Attachment 11 in Section 2-2 of this revised Attachment 5 includes appropriate provisions governing how new wells and replacement wells will be incorporated into the regular required monitoring/reporting activities (please ensure no gaps or lapse in the monitoring). Please revise Attachment 11 and this application as necessary. Please clarify that the provisions in Attachment 11 are applicable to the wells located outside of the permit boundary (this clarification request may be disregarded if all wells will be located within the permit boundary, which should be desired in light of the permittee's capacity in operation and potential liability).*

Response: The Groundwater Sampling and Analysis Plan (GWSAP) 5 does include appropriate provisions governing how new wells and replacement wells will be incorporated into the regular monitoring/reporting activities. Specifically, Section 4.2 of the GWSAP discusses background monitoring and specifically states that eight (8) independent samples from each background and each POC well shall be collected and analyzed for the metal constituents listed in Table 1 to establish background water quality.

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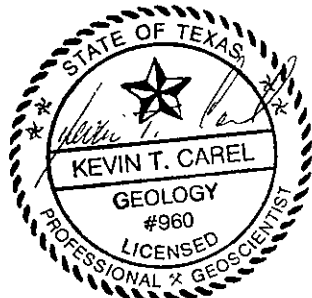
The GWSAP does not require background for VOCs be established for detection monitoring purposes.

Section 4.2.1 of the GWSAP states that after completion of the initial eight (8) quarterly background events, new quarterly or semi-annual data may be incorporated into background at a frequency of once every two (2) years.

Further, Section 4.3 of the GWSAP states that within six (6) months after completion of background, sampling and analysis for both background and POC monitor wells will be conducted on a semi-annual basis (approximately six (6) month intervals) for constituents listed in Table 1.

The provisions in Attachment 11 are applicable to the wells located outside of the permit boundary.

I trust this information meets your needs, please call Mr. Eduardo Choquis at (817) 317-2047 if you have any questions.



4-8-11

Sincerely,
THE CAREL CORPORATION

Kevin T. Carel, P.G.
President

Att: TCEQ Part 1 Application Page 1 and Signature Page
Revised Figure 5.1
Tax Records for Adjacent Properties owned by the site operator
Point of Compliance Demonstration

cc: TCEQ Region 4 Office
Mark Meadows – Trinity Oaks Landfill TX, LP
Eduardo Choquis – Trinity Oaks Landfill TX, LP
Mark Allendorf – Republic Services, Inc. (e-copy)

TCEQ Part 1 Application Page 1 and Signature Page



Texas Commission on Environmental Quality

Permit or Registration Application for Municipal Solid Waste Facility

Part I

A. General Information

Facility Name:	Trinity Oaks Landfill			
Physical or Street Address (if available):	11340 C F Hawn Freeway			
(City) (County)(State)(Zip Code):	Dallas	Dallas	TX	75253
(Area Code) Telephone Number:	972-436-4217			
Charter Number:				

If the application is submitted on behalf of a corporation, provide the Charter Number as recorded with the Office of the Secretary of State for Texas.

Operator Name ¹ :	Mesquite Landfill TX, L.P.			
Mailing Address:	801 E. College Street			
(City) (County)(State)(Zip Code):	Lewisville	Denton	TX	75057
(Area Code) Telephone Number:	972-436-4217			
(Area Code) FAX Number:	972-436-8129			
Charter Number:				

If the permittee is the same as the operator, type "Same as Operator".

Permittee Name:	Same as Operator			
Physical or Street Address (if available):				
(City) (County)(State)(Zip Code):			TX	
(Area Code) Telephone Number:				
Charter Number:				

If the application is submitted by a corporation or by a person residing out of state, the applicant must register an Agent in Service or Agent of Service with the Texas Secretary of State's office and provide a complete mailing address for the agent. The agent must be a Texas resident.

Agent Name:	CT Corporation System			
Mailing Address:	1021 Main Street, Suite 1150			
(City) (County)(State)(Zip Code):	Houston	Harris	TX	77002
(Area Code) Telephone Number:	713-658-9486			
(Area Code) FAX Number:	713-658-9720			

Application Type:

<input type="checkbox"/> Permit	<input type="checkbox"/> Major Amendment	<input type="checkbox"/> Minor Amendment
<input type="checkbox"/> Registration	<input checked="" type="checkbox"/> Modification	<input type="checkbox"/> Temporary Authorization
	<input checked="" type="checkbox"/> w/Public Notice	
	<input type="checkbox"/> w/out Public Notice	<input type="checkbox"/> Notice of Deficiency Response

¹ The operator has the duty to submit an application if the facility is owned by one person and operated by another [30 TAC 305.43(b)]. The permit will specify the operator and the owner who is listed on this application [Section 361.087 Texas Health and Safety Code].

Signature Page

I, Mark Meadows, Environmental Manager
(Operator) (Title)

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: [Handwritten Signature] Date: 4-6-11

TO BE COMPLETED BY THE OPERATOR IF THE APPLICATION IS SIGNED BY AN AUTHORIZED REPRESENTATIVE FOR THE OPERATOR

I, _____, hereby designate _____
(Print or Type Operator Name) (Print or Type Representative Name)

as my representative and hereby authorize said representative to sign any application, submit additional information as may be requested by the Commission; and/or appear for me at any hearing or before the Texas Commission on Environmental Quality in conjunction with this request for a Texas Water Code or Texas Solid Waste Disposal Act permit. I further understand that I am responsible for the contents of this application, for oral statements given by my authorized representative in support of the application, and for compliance with the terms and conditions of any permit which might be issued based upon this application.

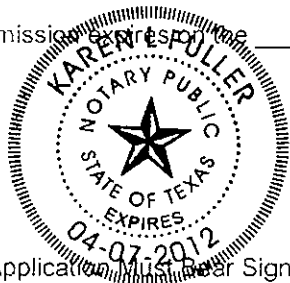
Printed or Typed Name of Operator or Principal Executive Officer

Signature

SUBSCRIBED AND SWORN to before me by the said Mark Meadows

On this 6 day of April, 2011

My commission expires on 7 day of April, 2012



Karen L. Fuller
Notary Public In and for

Hill County, Texas

(Note: Application must bear Signature & Seal of Notary Public)

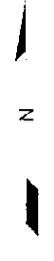
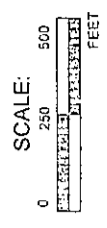
FIGURES



136 Pecan Street, Keller, TX 76248

LEGEND:

- APPROXIMATE PERMIT BOUNDARY
- - - SLURRY WALL
- - - LIMITS OF WASTE
- - - POINT OF COMPLIANCE (POC)
- EXISTING GROUNDWATER MONITOR WELL
- ⊙ PROPOSED GROUNDWATER MONITOR WELL
- ⊙ PROPOSED GROUNDWATER MONITOR WELL TO BE DECOMMISSIONED
- △ GAS MONITORING PROBE
- ⊕ EXISTING SURFACE CONTOUR
- ⊕ POC TURNING POINT



MONITORING WELL LOCATION MAP

TRINITY OAKS LANDFILL
Dallas County, Texas

DATE DRAFTED: March 17, 2011 REV. NO.: 2

FILENAME: J:\TEXAS\Trinity Oaks\Permit Mod NOD\Fig 5.1.dwg

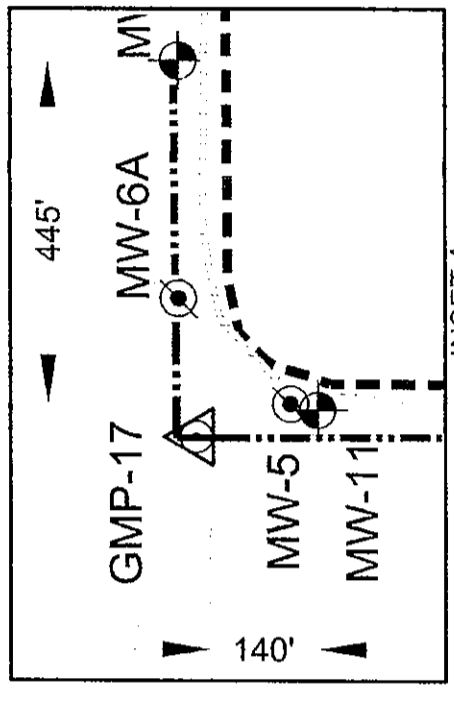
DESIGNED BY: SJW FIGURE

DRAWN BY: SMG

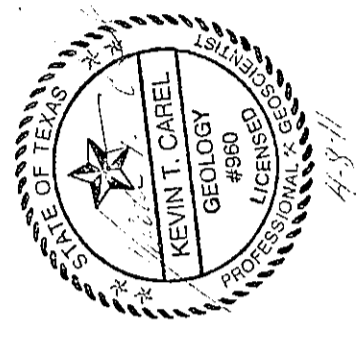
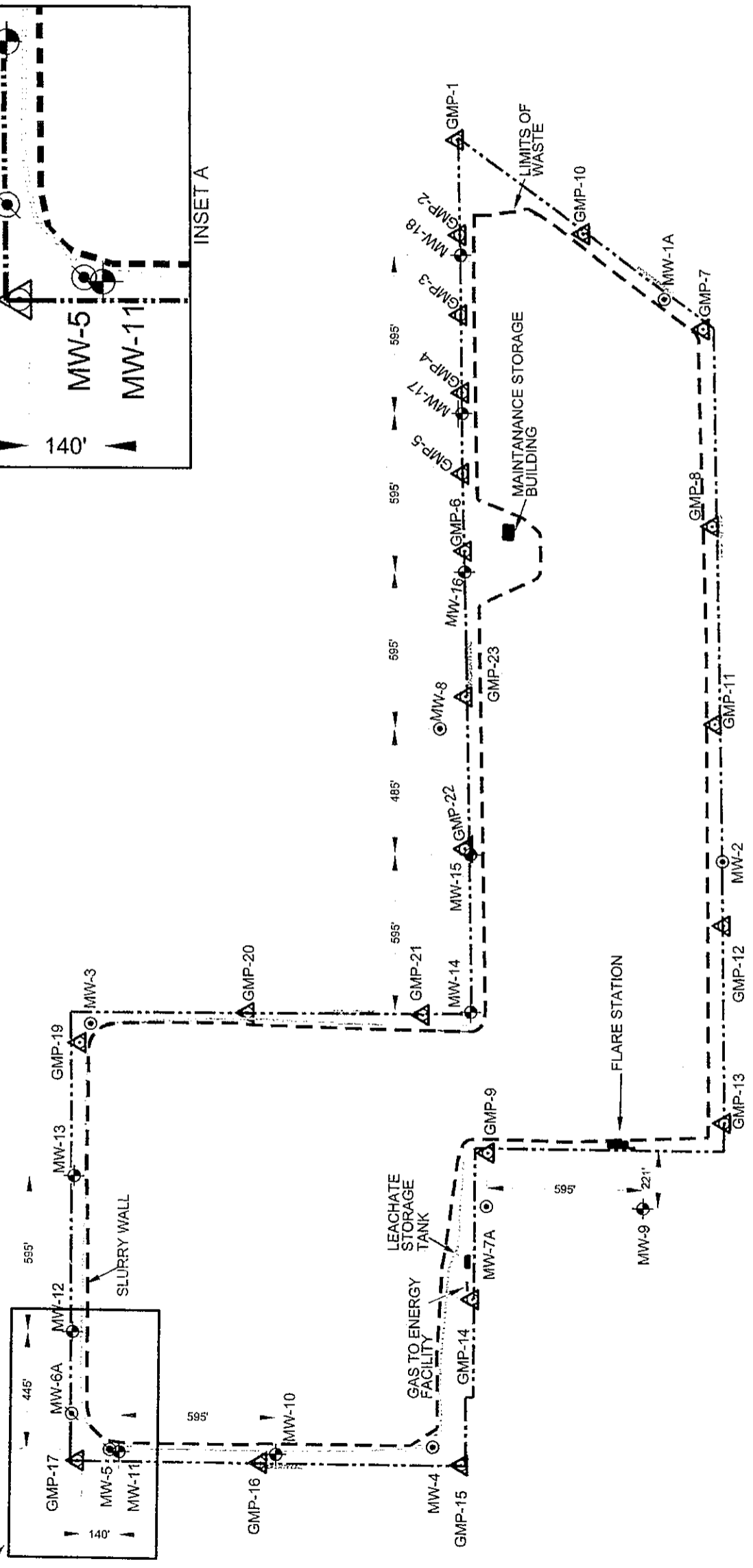
CHECKED BY: KTC

APPROVED BY: *KTC*

5.1



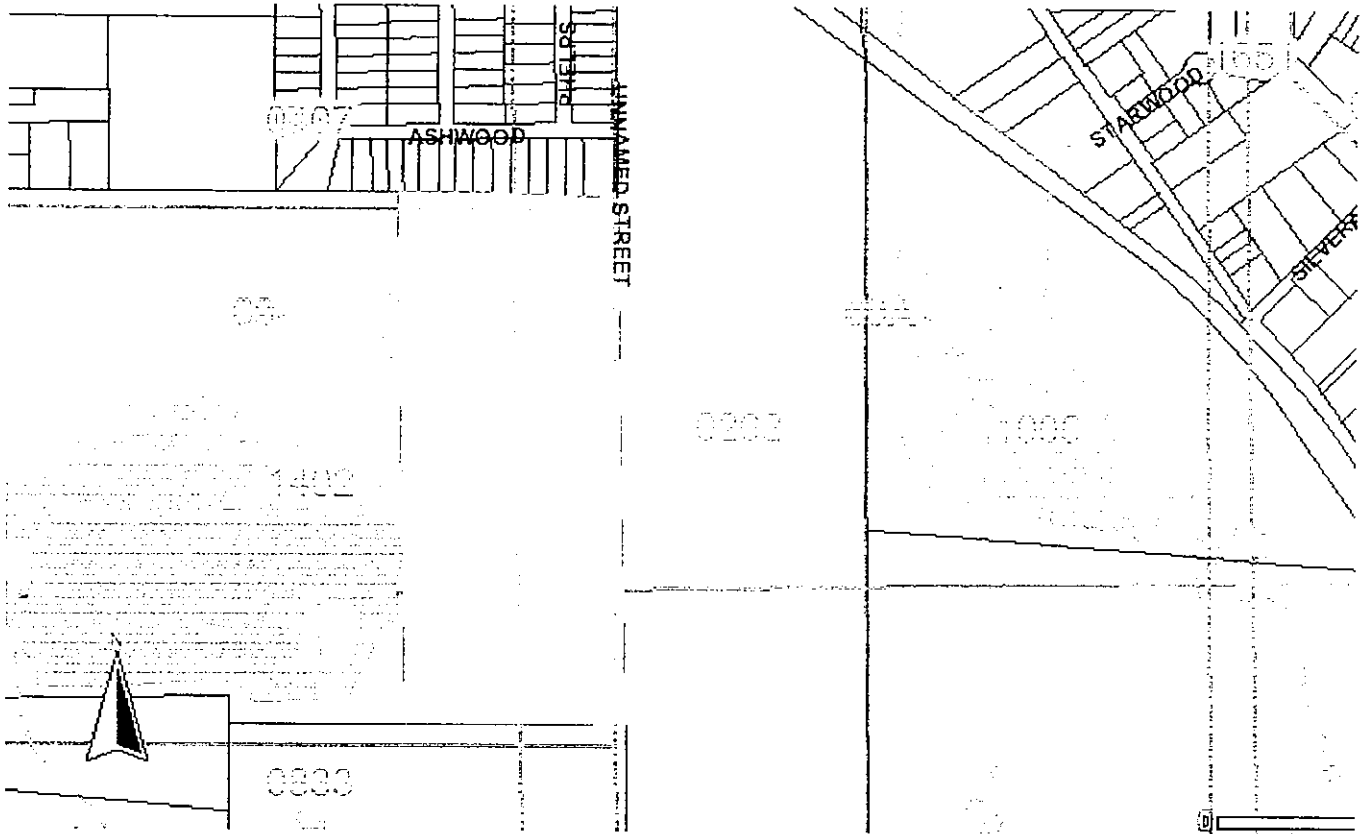
SEE INSET A



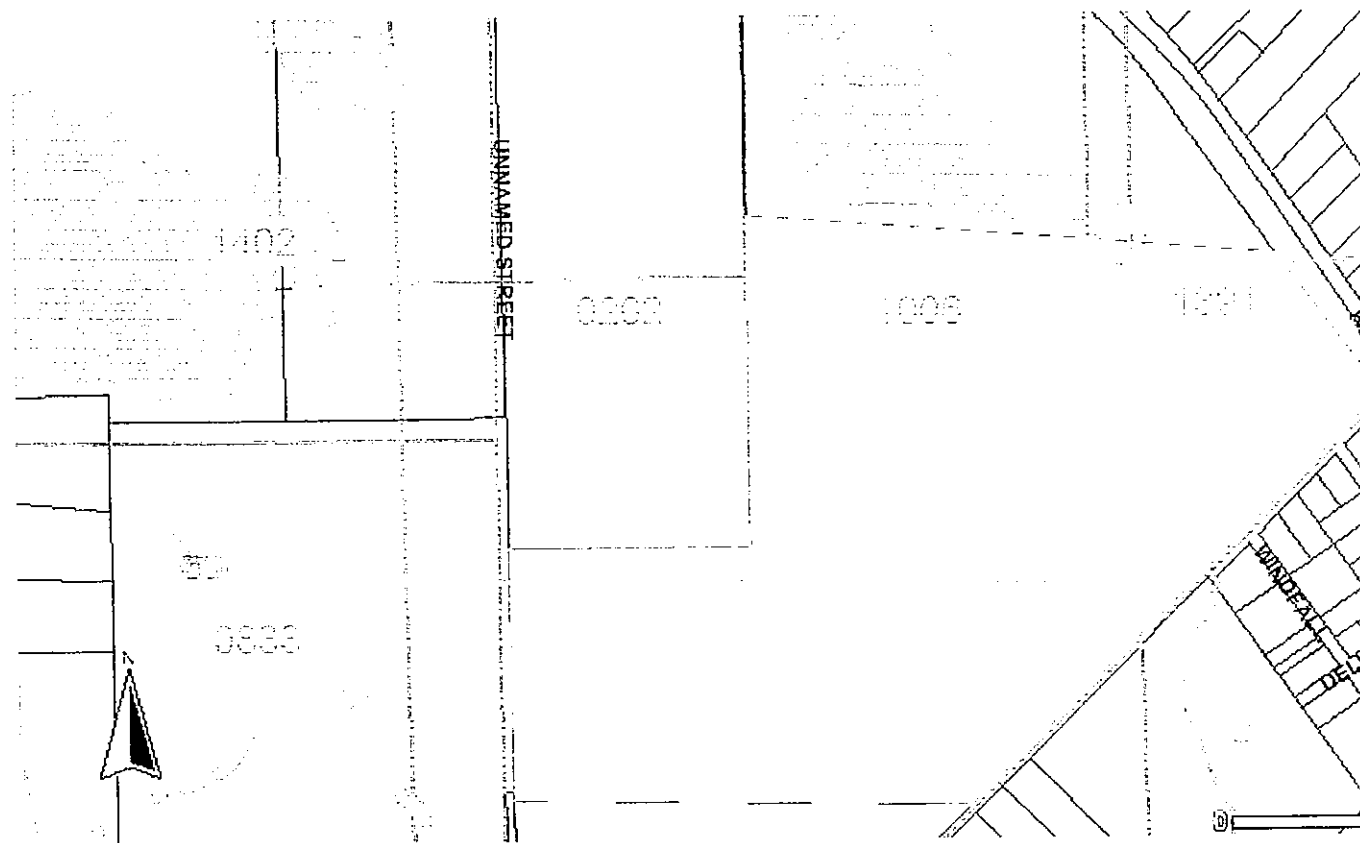
- NOTES:
1. COMPILED FROM AERIAL PHOTOGRAPHY, DECEMBER 27, 2006. METROPOLITAN AERIAL SURVEYS FORT WORTH, TEXAS.
 2. GAS PROBE LOCATIONS AND LIMITS OF WASTE COMPILED FROM WEAVER BOOS FORT WORTH, TEXAS. BALLAST EVALUATION REPORT EXCAVATION PLAN, NOVEMBER, 2009.

**Tax Records for Adjacent Properties Owned by the
Site Operator**

Account	
GIS Id: 00879000000080100	
Number: 00879000000080100	
Account Type: COMMERCIAL	
Location	
Address: 11200 ASHWOOD DR	
Neighborhood: 3DSI02	
Mapsco: 69A-J (DALLAS)	
Owner	
MESQUITE LANDFILL TX LP	
%REPUBLIC SERVICES PPTY TAX	
DEPT	
PO BOX 29246	
PHOENIX, ARIZONA 850389246	
2010 Certified Values	
Improvement:	\$0
Land:	+
Market Value:	\$36,000
	=\$36,000
Tax Agent: RYAN & COMPANY/EL PASO	
Revaluation Year:	2010
Previous Revaluation Year:	2009
More Details	



Account	
GIS Id: 00000899727200000	
Number: 00000899727200000	
Account Type: COMMERCIAL	
Location	
Address: 2430 JORDAN VALLEY RD	
Neighborhood: 3DSI02	
Mapsco: 69A-N (DALLAS)	
Owner	
MESQUITE LANDFILL TX LP %REPUBLIC SERVICES PPTY TAX DEPT PO BOX 29246 PHOENIX, ARIZONA 850389246	
2010 Certified Values	
Improvement:	\$0
Land:	+
Market Value:	\$102,830
	=\$102,830
Tax Agent: RYAN & COMPANY/EL PASO	
Revaluation Year:	2010
Previous Revaluation Year:	2009
More Details	



Point of Compliance Demonstration

Point of Compliance Demonstration Trinity Oaks Landfill

Introduction

The point of compliance (POC) is defined as “*A vertical surface located no more than 500 feet from the hydraulically downgradient limit of the waste management unit boundary, extending down through the uppermost aquifer underlying the regulated units, and located on land owned by the owner of the facility.*” This document has been prepared to demonstrate that the proposed POC designed between MW-7A and MW-9 and proposed wells MW-14 and MW-18 meet the requirements of 30 TAC 330.3(106) and that additional POC segments between MW-4 and MW-7A and MW-3 and proposed well MW-14 are redundant and provide no added benefit to the groundwater monitoring activities at the site.

Site Geology

The Trinity Oaks Landfill is excavated into Quaternary age alluvium. The alluvium comprises the uppermost water-bearing zone under the waste management unit. It consists of interbedded gravel, sand, silt, and clay. The thickness of the alluvium ranges from approximately 11 to 41 feet. The thicker areas are reported to be in the northern portion of the facility. The alluvium exhibits a fining upward sequence, beginning with a basal gravel transitioning upward into finer grained sediments. However, strata thickness and transitions are not generally uniform or continuous. All monitor wells are completed in the uppermost water-bearing zone. Underlying the alluvium are shales of the Taylor Marl, which act as an aquitard to vertical groundwater movement.

Groundwater Flow Direction

In general, groundwater in the alluvium flows south-southwest towards the Trinity River. The northern portion of the facility is hydraulically upgradient, whereas the southern and western boundaries of the facility are hydraulically downgradient. Monitor wells MW-1A and MW-2 are positioned upgradient, while MW-3, MW-5, MW-6A, MW-7A, and MW-8 are downgradient. Monitor well MW-4 is located hydraulically cross-gradient from the facility.

Figure 1 provides the groundwater contours for the uppermost water-bearing zone for September 2007. Contours of the water levels were constructed from the groundwater elevations measured in the monitor wells during this monitoring event. Based on this southwesterly groundwater flow direction, a groundwater monitoring network containing an appropriate POC was designed. The groundwater monitoring network and POC is illustrated on Figure 5.1 of the permit modification application.

Point of Compliance Demonstration

A drawing denoted as Figure 1 has been prepared to illustrate the detection of hypothetical releases from the Pre-Subtitle D Sections of the Trinity Oaks Landfill. Figure 1 was constructed by combining the proposed groundwater monitoring network with a historical groundwater contour map of the site (September 2007) and two (2) hypothetical releases and the flow paths of those releases based on groundwater contours. The locations of the releases were strategically located for this illustration to demonstrate that the point of compliance is sufficient and that additional POC segments between MW-4 and MW-7A and MW-3 and proposed well MW-14 are redundant and provide no benefit to the groundwater monitoring activities at the site. However, other locations of potential releases within the Pre-Subtitle D area would yield similar results.

Figure 1 illustrates two (2) hypothetical releases from the facility one (1) located near the southeast corner of the Pre-Subtitle D portion of the facility and the other in the north central portion of the Pre-Subtitle D area. At some time, denoted as T_0 a hypothetical release occurs and the contaminants would begin to flow southwesterly in the direction of groundwater flow.

At time T_1 , the potential contaminants will be detected by either MW-7A or MW-15. At this time the appropriate response actions (verification resampling, assessment monitoring, etc) would occur in accordance with 30 TAC 330.407. If concentrations of any of the potential contaminants exceed groundwater protection standards, an investigation into the nature and extent of the release would be implemented as would an Assessment of Corrective Measures and remedial action, in order to attain groundwater concentrations below the groundwater protection standards at the POC.

Assuming no corrective action is required and the hypothetical contaminants are allowed to continue to flow downgradient past MW-15 without significant dispersion, dilution or attenuation, they could be detected again by a hypothetical monitor well located between MW-3 and MW-14. However, this re-detection would result after the hypothetical contaminants had migrated past the permit boundary and POC and flow back onto the landfill site. Any necessary response actions associated with this release would have already occurred at MW-15.

Similarly, assuming no corrective action is required and the hypothetical contaminants detected at MW-7A are allowed to continue to flow downgradient past the proposed POC without significant dispersion, dilution or attenuation, they could be detected again by a hypothetical monitor well located between MW-4 and MW-7A. However, this re-detection would result after the hypothetical contaminants had migrated past the proposed POC and flow back onto the landfill site. Any necessary response actions associated with this release would have already occurred by the initial detection at MW-7A.

Additionally, the section of the landfill between MW-3 and proposed well MW-14 does not meet the definition of a POC as stated in 30 TAC 330.3(106), as most of that section is greater than 500 feet from the hydraulically downgradient placement of waste. That

portion that is within 500 feet of the downgradient placement of waste will be monitored by the proposed POC defined by wells MW-14 through MW-18 and MW-8. Similarly, the section of the landfill between MW- 4 and MW-7A does not meet the definition of a POC as most of that section is also greater than 500 feet from the hydraulically downgradient placement of waste. That portion of the landfill within 500 feet of the downgradient placement of waste will be monitored by the proposed POC defined by wells MW-7A and MW-9.

Summary

Regulation 30 TAC 330.3(106) defines the POC as *"A vertical surface located no more than 500 feet from the hydraulically downgradient limit of the waste management unit boundary, extending down through the uppermost aquifer underlying the regulated units, and located on land owned by the owner of the facility."* The proposed POC segments between MW-7A and proposed MW-9 and MW-14 and proposed MW-18 are within 500 feet from the hydraulically downgradient limit of the waste management unit boundary and meet the requirements of 30 TAC 330.3(106). Most of requested POC segments between MW-4 and proposed MW-7A and MW-3 and proposed MW-14 are greater than 500 feet from the hydraulically downgradient limit of the waste management unit boundary and do not meet the requirements of 30 TAC 330.3(106).

Any potential release emanating from the Pre-Subtitle D portion of the facility would be detected by the POC well located along the proposed POC segments defined by MW-7A and proposed MW-9 or between proposed MW-14 and proposed MW-18. Any monitoring wells located between MW-4 and proposed MW-7A and/or MW-3 and proposed MW-14 would be redundant and would serve no benefit to the groundwater monitoring network at the site.

