



September 11, 2008  
Project No. 08-08-18

Mr. Charles Brown  
MC 124  
Municipal Solid Waste Permits Section  
Texas Commission on Environmental Quality  
P. O. Box 13087  
Austin, Texas 78711-3087

**Re: Response to a TCEQ Notice of Deficiency Letter Dated July 28, 2008, Camelot Landfill, MSW Permit No. 1312A, Denton County, Texas; WWC 11995256; RN101479038/CN601253628.**

Dear Mr. Brown:

This letter is written to provide a response to the comments in a letter dated July 28, 2008, from the Texas Commission on Environmental Quality (TCEQ). The letter requested that the TCEQ comments be addressed within 45 days (September 11, 2008). The TCEQ's comment/questions are provided below in italics with our response immediately following.

Comment 1: *Procedures for field filtration of groundwater samples have been removed from Section 6.10 Sample Preservation. We request that the GWSAP include a statement in Section 6.10, or elsewhere as appropriate to the topic, that samples will not be filtered in the field or the laboratory.*

Response: The requested change has been made and the revised pages are attached.

Comment 2: *Please revise Section 7 Analytical Parameters to remove the statement that the PQL "will be less than the MCL or..." Please also revise the citation used to reference the requirement that the practical quantitation limit (PQL) for each constituent be as low as practically feasible to correctly reflect §330.405(f)(5).*

Response: The requested change has been made and the revised pages are attached.

Comment 3: *Section 8 Analytical Methods references Table 2 as summary of the analytical methods to be employed for detection monitoring. The Table 2 included as part of the GWSAP does not include a summary of analytical methods to be employed for detection monitoring. Please review this and if necessary, make the appropriate corrections.*

Response: The subsequent reference to Table 2 has been removed, and the revised pages are attached.

Comment 4: *Please revise the GWSAP to acknowledge in accordance with 30 TAC §330.407(a)(1), that upon completion of background monitoring and during background updates, the owner or operator will evaluate the data to ensure that they are representative of background groundwater constituent concentrations unaffected by waste management activities or other sources of contamination. Also acknowledge that the evaluation will be documented in a report and submitted to the executive director before the next subsequent groundwater monitoring event following the updated (or initial) background period.*

Response: The requested change has been made and the revised pages are attached.

Comment 5: *Section 10.1 Groundwater Analysis Result Submittals states that notice will be provided for any SSI in any point of compliance well. Please revise the GWSAP to provide for notification of an SSI in any constituent in any on-site well in accordance with §330.407(b).*

Response: The requested change has been made and the revised pages are attached.

Comment 6: *Please revise Section 10.1 to clarify the reporting requirements for data being submitted by the facility. It also will be necessary to reconcile this Section with Section 11 which contains reference to laboratory data and information being provided. In addition please remove all references to the January 2009 expiration of the QA/QC requirements. We request that Section 10.1 also include the following:*

- *The facility will submit a laboratory case narrative and a laboratory checklist with all analysis submitted to the TCEQ. In place of the laboratory checklist, the facility may submit a copy of the laboratory QA/QC and analytical data.*
- *Please state that the owner or operator will also provide laboratory analytical data as requested by the executive director. Analytical laboratory reports, if requested by the TCEQ, may be submitted either electronically or in hard copy form.*
- *The facility will explain any problems encountered in the laboratory analysis, either by adding additional explanations to the checklist or by extending the laboratory case narrative.*
- *Any information required in the laboratory case narrative that cannot be completed by the laboratory will be completed by the permittee.*

Response: The requested change has been made and the revised pages are attached. Regarding the request that the permittee complete any information

required in the laboratory case narrative (LCN) that cannot be completed by the laboratory, please note that the LCN is prepared by the laboratory performing the analyses, whereas, the facility performs waste disposal operations and is not necessarily knowledgeable about laboratory operations and therefore may not be able to provide information that cannot be provided by the laboratory. Nevertheless, the facility agrees to provide information required by the LCN that cannot be completed by the laboratory as long as it is technically feasible and is information the permittee is knowledgeable about.

The procedures discussed in Section 3 are based on Subchapter F, which expires on January 1, 2009. Accordingly, these procedures will be applicable only as long as the underlying regulations upon which they are based, i.e., Subchapter F, remain in effect. The phrase "[i]n complying with Subchapter F" establishes this point and is being retained. This approach has been approved by the TCEQ in previous permit modifications involving Subchapter F.

In adopting the Subchapter F rules, the Commission added a January 1, 2009 sunset provision in response to comments that the Subchapter was unnecessary due to the pending implementation of the TCEQ's laboratory accreditation program based on the National Environmental Laboratory Accreditation Conference ("NELAC") standards. The TCEQ's lab accreditation program became effective in July, 2008, and requires that all data and analyses submitted to the TCEQ must be provided by accredited laboratories. See 30 TAC section 25.1. The preamble to the 2006 Revisions to the MSW rules confirms Subchapter F's interim nature, stating that Subchapter F was developed "to aid and ease compliance with the upcoming NELAC requirements" and that Subchapter F establishes QA and QC measures "until NELAC standards are adopted." 31 Tex. Reg. 2570 (March 24, 2006).

Subchapter F's January 1, 2009 expiration date extends to the entire subchapter. It would be inappropriate and against reason for provisions in a regulatory document like the GWSAP to survive into the future when the Subchapter requiring those provisions in the first place has been abolished. For this reason, any GSWAP provisions based on Subchapter F terminate contemporaneously with Subchapter F's expiration.

Comment 7: *Please revise Section 10.2 to state the results of resampling as appropriate for the statistical method being used will be submitted within 60 days of the determination of the SSI as per §330.407(b)(2).*

Response: The requested change has been made and the revised pages are attached.

Comment 8: *Section 10.2 Statistically Significant Constituents and Verification Resampling states that assessment monitoring will be initiated "within approximately 180 days of the initial sampling date". Please revise this section to provide for assessment monitoring to be initiated in accordance with the timeframes specified in §330.407(b).*

Response: The requested change has been made and the revised pages are attached.

Comment 9: *Section 10.2 states that if an SSI is verified, assessment monitoring will be initiated for the well exhibiting the SSI and for the two immediately adjacent point of compliance wells. Please revise this to indicate that if an SSI is verified, assessment monitoring will be initiated at the well(s) exhibiting the SSI and at the immediately adjacent wells on each side of the well(s) exhibiting the SSI, unless an alternative subset of wells is designated by the executive director.*

Response: The requested change has been made and the revised pages are attached.

Comment 10: *We request that the GWSAP be revised to include performance criteria for the analysis of groundwater samples. Please revise Section 11.2 Laboratory QA/QC, or elsewhere as appropriate to include the following:...*

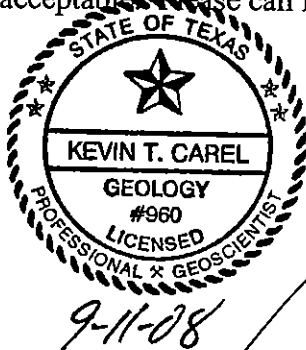
Response: The requested change has been made to Section 7 and the revised pages are attached.

Comment 11: *In Section 1.1.1.3 Updating Control Charts of the Statistical Analysis Plan, please remove the phrase "at a minimum of" from the sentence relating to the schedule for updating mean and variance, to be consistent with the provisions in 30 TAC §330.407(a)(1).*

Response: The requested change has been made and the revised pages are attached.

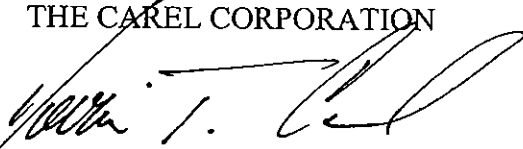
In response to previous written and oral communication I understand that the TCEQ now believes that modifications of this type do not require public notice. Therefore please process this permit modification request as a non-notice modification.

I trust this information is acceptable. Please call if you have any questions.



Sincerely,

THE CAREL CORPORATION

  
Kevin T. Carel, P.G.  
President

Mr. Charles Brown  
September 11, 2008  
Page 5

Att: TCEQ Part 1 Application Page 1 and Signature Page  
GWSAP – Underlined/Strikeout Replacement Pages  
GWSAP – Clean Replacement Pages

cc: TCEQ Region 4 Office  
Mark Meadows – Allied Waste Industries  
Mark Allendorf - Allied Waste Industries (e-copy)  
Larry Bressman – Camelot Landfill  
Shane Davis – City of Farmer’s Branch

**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:	Camelot Landfill			
Physical or Street Address (if available):	580 Huffines Blvd.			
(City) (County)( State)( Zip Code):	Lewisville	Denton	TX	75056
(Area Code) Telephone Number:	972-492-3888			
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 <sup>1</sup> :	Camelot Landfill TX, LP			
Mailing Address:	580 Huffines Blvd.			
(City) (County)( State)( Zip Code):	Lewisville	Denton	TX	75056
(Area Code) Telephone Number:	972-492-3888			
(Area Code) FAX Number:	972-492-4943			
Charter Number:				

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

Permittee Name:	City of Farmers Branch			
Physical or Street Address (if available):	13000 Wm. Dodson Pkwy.			
(City) (County)( State)( Zip Code):	Frmrs Branch	Denton	TX	75234
(Area Code) Telephone Number:	972-919-2597			
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:	350 N. St. Paul Street			
(City) (County)( State)( Zip Code):	Dallas	Dallas	TX	75201
(Area Code) Telephone Number:	214-979-1172			
(Area Code) FAX Number:	214-754-0921			

#### 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 type="checkbox"/> w/Public Notice		
	<input checked="" type="checkbox"/> w/out Public Notice	<input checked="" type="checkbox"/> Notice of Deficiency Response	

<sup>1</sup> 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 Pavageaux, Director, Public Works Dept.  
(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: Mark Pavageaux Date: 9/3/08

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 \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_

My commission expires on the \_\_\_\_\_ day of \_\_\_\_\_

\_\_\_\_\_  
Notary Public in and for

\_\_\_\_\_  
County, Texas

(Note: Application Must Bear Signature & Seal of Notary Public)

## **GWSAP – Underlined/Strikeout Replacement Pages**

**CAMELOT LANDFILL  
TCEQ PERMIT NO. 1312-A  
DENTON COUNTY, TEXAS**

**ATTACHMENT 11  
GROUNDWATER SAMPLING AND  
ANLYSIS PLAN (GWSAP)**

Prepared for:

Camelot Landfill TX, L.P.

and

The City of Farmers Branch, Texas

February 2000

Revised December 2006

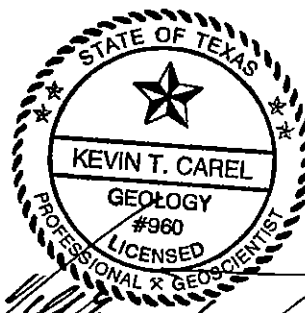
~~Revised March 2008~~

Revised September 2008

Prepared by:



136 Pecan Street  
Keller, Texas 76248  
(817) 337-0112



*Kevin T. Carel*  
9-8-08

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# 1 INTRODUCTION

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This groundwater sampling and analysis plan (GWSAP) addresses the groundwater monitoring and sampling program to be implemented at the City of Farmers Branch, Camelot Municipal Solid Waste Landfill. The GWSAP is required by the Texas Commission on Environmental Quality (TCEQ) Municipal Solid Waste Regulations (MSWR). This GWSAP will meet the requirements of the Federal US EPA Regulations under Subtitle D of the Resource Conservation and Recovery Act (RCRA) and 30 TAC 330.405.

A groundwater monitoring system will be installed/upgraded by the facility that consists of a sufficient number of ~~upgradient-background~~ and ~~downgradient-point of compliance~~ monitoring wells, installed at appropriate location and depths, to yield representative groundwater samples from the uppermost aquifer. The groundwater monitoring system, including the number, spacing, and depth of monitoring wells, has been preliminarily designed in accordance with the Geology Report in Attachment 4 and the Groundwater Characterization Report in Attachment 5.

The following sampling program will be followed when fulfilling the requirements of the GWSAP. The program consists of procedures and techniques designed to ensure monitoring results that accurately represent the groundwater quality at ~~upgradient background and downgradient-point of compliance~~ monitor wells. These procedures include techniques for well inspection, measurement of groundwater elevation and characteristics, well purging, order of sampling, sample collection, preservation and shipment, chain-of custody controls, analytical procedures, analytical methods, quality assurance, and quality control. Additionally, this program includes requirements for documentation, statistical analysis and data reporting. This document is modified from Reed Engineering (1995).

## 4 WATER LEVEL MEASUREMENTS

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Prior to purging or sampling, the depth to the top of water in the well will be measured. All measurements will be recorded from a permanent, easily identified, survey reference point on the top of the protective pipe. The depths will be measured and recorded to the nearest hundredth of a foot using an electronic measuring device. The elevation of the water will be calculated relative to mean sea level. Water level measurements will be confirmed by sounding the water surface two or three times. Water levels will be measured from ~~upgradient-background~~ to ~~downgradient~~ point of compliance water wells, unless target constituents are detected. If target constituents are detected, then water level measurements will be collected from least to greatest impacted well. Water level measurements collected from each monitoring event will be recorded on a Field Data Sheet, similar to one presented in Appendix A. Prior to collecting water level measurements, the electronic measuring device will be decontaminated as per Section 6.4 to avoid cross contamination of wells.

## **6 SAMPLE COLLECTION, PRESERVATION, AND SHIPMENT**

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### **6.1 Timing and Order of Sampling**

Sampling shall occur as soon as practicable after purging. The monitor wells will be sampled from ~~upgradient-background~~ to ~~downgradient-point of compliance~~ water wells, unless target constituents are detected. If target constituents are detected, then the wells will be sampled from least to greatest impacted well.

Sampling should take place as soon as purging is complete in moderate to high yield wells. For wells purged dry, sampling generally will take place within 24 hours once the well has sufficient recharge, typically the following day. The time interval between the completion of well purge and sample collection normally should not exceed twenty-four hours. However, longer times not exceeding six (6) or seven (7) days may be allowed for slow recharging wells with prior approval from the TCEQ.

### **6.2 Sample Collection**

Samples will be collected by means of a dedicated bladder pump discharging directly into each of the required containers. In the event of a non-operative dedicated pump the well will be sampled by means of either a disposable bailer or a portable pump.

### **6.3 Field Measurements**

Temperature, specific conductance, pH, and turbidity will be measured in the field. The temperature, specific conductivity, pH, and turbidity device/s will be calibrated daily prior to use, per the manufacturer's instructions. Temperature will be measured, immediately followed by pH, then conductivity, then turbidity. Field measurements will be recorded on the field data sheet. The water used for these field measurements will be placed with the purge water.

## **6.7 Sample Storage and Transport**

Filled sample bottles will be placed immediately into an ice chest, and packed with sufficient ice to keep them at 4°C. Warm samples will cause the ice to melt rapidly, especially if a large number of samples are placed in an ice chest, therefore, adequate ice will be kept in the ice chest to keep samples cold in the field until transported to the laboratory. When possible the containers holding the samples will be delivered to the laboratory by the samplers, the operator, or their representative. If not possible they will be shipped via a shipping service.

## **6.8 Chain-of-Custody Documentation**

Once the samples have been properly labeled and sealed, they will be entered into a Chain-of-Custody (COC), signed and dated by the sampling personnel. The COC will accompany the samples at all times and at every step from field to laboratory and must be signed by all parties handling the samples. A typical Chain-of-Custody is presented in Appendix B.

## **6.9 Documentation of Sampling**

Information relating to the sampling event will be recorded on a field data sheet. All entries will be made in indelible ink. Entry errors will be crossed out with a single line and initialed by the person making the corrections.

## **6.10 Sample Filtration**

In accordance with 30 TAC 330.405 9(c), groundwater samples will not be field-filtered prior to laboratory analysis.

## 7 ANALYTICAL PARAMETERS

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The detection monitoring constituents at the facility will be as specified in 30 TAC 330.419 and 40 Code of Federal Regulations (CFR) 258 Appendix I (see Table 1 of this GWSAP). However, contrary to the previously approved GWSAP, the metals will be analyzed as total rather than dissolved. The practical quantitation limit (PQL) for each constituent will be ~~less than the MCL or as low as practically feasible per 30 TAC 330.407 (b) for each of the constituents.~~ the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility, per 30 TAC 330.405(f)(5).

The practical quantitation limit (PQL) is defined as the lowest concentration reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions and is analogous to the limit of quantitation (LOQ) definition in the most recent available NELAC Standard (National Environmental Laboratory Accreditation Conference). The PQL is method, instrument, and analyte specific and may be updated as more data becomes available. The PQL must be below the groundwater protection standard established for that analyte as defined by 30 Texas Administrative Code Section 330.409(h) unless approved otherwise by the TCEQ. The precision and accuracy of the PQL shall be initially determined from the PQLs reported over the course of a minimum of eight groundwater monitoring events. The results obtained from these events shall be used to demonstrate that the PQLs meet the specified precision and accuracy as shown in the table below. The PQL will be supported by analysis of a PQL check sample, which is a laboratory reagent grade sample matrix spiked with chemicals of concern at concentrations equal to or less than the PQL. At a minimum, a PQL check sample will be performed quarterly during the calendar year to demonstrate that the PQL continues to meet the specified limits for precision and accuracy as defined in the table below.

**QC Specification Limits for the PQL and Lower Limit of Quantitation Check Samples**

<u>COC</u>	<u>Precision (% RSD)</u>	<u>Accuracy (% Recovery)</u>
<u>Metals</u>	<u>10</u>	<u>70-130</u>
<u>Volatiles</u>	<u>20</u>	<u>50-150</u>
<u>Semi-Volatiles</u>	<u>30</u>	<u>50-150</u>

For analytes that the established PQL cannot meet the precision and accuracy requirements in the table above, the owner/operator will ensure the laboratory will submit sufficient documentation and information to the TCEQ for alternate precision and accuracy limits on a case by case basis. Non-detected results will be reported as less than the established PQL limit that meets these precision and accuracy requirements.

## 8 ANALYTICAL METHODS

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~~Table 2 summarizes the analytical methods to be employed for detection monitoring.~~ For all analytical methods, the practical quantification limit (PQL) will be less than the maximum contaminant level (MCL) of each constituent.

### 8.1 Volatile Organic Compounds

The analytical methods for measurement of VOCs are listed in Table 2

### 8.2 Heavy Metals

The analytical methods for measurement of heavy metal constituents are listed in Table 2.

## 9 BACKGROUND SAMPLES

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As specified in the TCEQ (30 TAC 330.407) regulations, background data for the Detection Monitoring Constituents must be established. Establishing background data will consist of collecting independent samples from each monitor well at least once a quarter for a period of two years. If additional samples are needed for the statistical analysis, they will be collected no closer than 30 days apart. The quarterly sampling will provide data representative of each of the four seasons of the year. The analytical parameters to be tested include those metal constituents presented in Table 2. Upon completion of background monitoring and during background updates, the facility will evaluate the data to ensure that they are representative of background groundwater constituent concentrations unaffected by waste management activities or other sources of contamination. The evaluation will be documented in a report and submitted to the executive director before the next subsequent groundwater monitoring event following the updated (or initial) background period.

## 10 DETECTION MONITORING

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Pursuant to 30 TAC 330.407, after completion of background sampling, all the monitor wells will be sampled on a semi-annual basis starting six months after completion of the last background sampling event. Sampling is expected to continue for the life of the site and the post-closure period. If a Statistically Significant Increase (SSI) occurs or the site conditions change, or if the Executive Director deems it necessary, sampling frequencies may change.

The objective of detection monitoring is to identify specific constituents that may be leaking from the site, therefore a sample of the leachate will be analyzed on an annual basis for the detection monitor parameters. The leachate analysis may be useful in establishing the actual constituents likely to be found in water samples, thereby supporting a reduction in the number of parameters monitored in the monitor wells.

### 10.1 Ground Water Analysis Result Submittals

Statistical analysis will be performed in accordance with Appendix C no later than 60 days after each semi-annual sampling event. In the event that statistical analysis of the groundwater analytical results indicates an initial statistically significant increase (SSI) from background of any tested constituent at any ~~point of compliance~~ on-site well, a notice in writing to the Executive Director will be submitted within fourteen (14) days of the determination of the SSI (30 TAC §330.407(b)).

Three (3) copies (triplicate) of an annual detection monitoring report describing groundwater sampling and analysis results will be completed on state reporting forms (e.g. TCEQ-0312 or subsequent versions) and will be submitted to the TCEQ no later than ninety (90) days after the facility's last groundwater sampling event in a calendar year and will include information determined since the previously submitted annual report (30 TAC §330.407(c)). In the event the facility is in assessment monitoring, three (3) copies (triplicate) of an annual assessment monitoring report describing groundwater sampling and analyses results will be completed on state reporting forms (e.g. TCEQ-0312 or subsequent versions) and will be submitted to the TCEQ no later than sixty (60) days after the facility's last groundwater sampling event in a calendar year and will

