



August 7, 2009
Project No. 09-07-20

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 8, 2009, Camelot Landfill, MSW Permit No. 1312A, Denton County, Texas; WWC 11995256, 12447865; RN101479038/CN60123628

Dear Mr. Brown:

This letter is written to provide a response to the comments in a letter dated July 8, 2009, from the Texas Commission on Environmental Quality (TCEQ). The letter requested that the TCEQ comments be addressed within 30 days (August 7, 2009). The TCEQ's comment/questions are provided below in italics with our response immediately following.

Comment 1: *Section 8.1 Volatile Organic Compounds and Section 8.2 Heavy Metals references the analytical methods for measurement listed in Table 2. The Table 2 provided does not include analytical methods for measurement. Please review this and if necessary, make the appropriate changes.*

Response: Section 8 Analytical Methods has been removed from the GWSAP and revised pages are attached.

Comment 2: *Section 10.2 states "In the event of an initial SSI for any constituent listed in 30 TAC §330.419, verification resampling will be completed within 60 days of the notification of the initial SSI in accordance with 30 TAC §330.407(b)(2)". Please revise to state that "the results of resampling as appropriate for the statistical method being used will be submitted within 60 days of the determination of the SSI" to correctly reflect §330.407(b)(2).*

Response: Section 10.2 has been renamed Section 9.2 due to the previously discussed revision in response to comment 1. The requested change has been made to Section 9.2 and the revised pages are attached.

Comment 3: *Please revise the GWSAP to state that during the background data collection period, an interwell statistical analysis will be performed after each monitoring event on data from any new point of compliance monitor well. If significant statistical variation occurs due to natural spatial*

geologic variations the permittee may submit an alternate source demonstration.

Response: Currently there is only one (1) background well MW-1R, which is impacted by volatile organic compounds (VOCs) and is undergoing assessment monitoring. Two new background wells are proposed as part of a pending well spacing permit modification request, but they are to be installed in later stages of landfill development. Therefore, there are no background monitoring wells that can be used for the requested inter-well statistical analysis (assessment monitoring wells cannot be used to establish the detection monitoring statistical limits). As an alternative, the facility proposes to decommission existing wells that are not part of the new monitoring network after the new wells have been installed and background data has been established. Statistical analyses will continue for the dissolved metals in existing wells on an intra-well basis as new wells are installed and total metals background is established in accordance with the facility GWSAP. Statistical analyses for the future groundwater monitoring network will also be conducted on an intra-well basis.

Comment 4: *In the response to our request that section 10.1 be revised to require the facility provide information in the Laboratory Case Narrative (LCN) that cannot be completed by the laboratory, the NOD response noted that "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." The response, as well as the revised Section 10.1, goes on to state "The facility will 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". To clarify our comment, the information required in the LCN that the permittee may be required to complete is described in Section 11.1, pg 18 of the GWSAP. This is information regarding any field activities that effect or potentially effect laboratory analysis, including, but not limited too, identifying field blanks, trip blanks, equipment blanks, and sample duplicates that can only be completed by the permittee. Additionally, we believe that the term "technically feasible" is insufficiently concise and request that it be removed from Section 10.1. We request that Section 10.1 be revised to state "Any information required in the laboratory case narrative (LCN) that cannot be completed by the laboratory will be completed by the permittee".*

Response: Section 10.1 has been renamed Section 9.1 due to the previously discussed change in Comment 1. The term "technically feasible" has been removed from Section 9.1 and has been revised to state: "Any information required

in the LCN that cannot be completed by the laboratory will be completed by the permittee.” Revised pages are attached.

Comment 5: *The NOD response also included a discussion of the facility’s reasoning for not removing references to the expiration of Subchapter F from the GWSAP, as requested in the 1st NOD. The response stated “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 discussion further states “any GWSAP provisions based on Subchapter F terminate contemporaneously with Subchapter F’s expiration”. These statements indicate the facility believes that provisions in the GWSAP, including Section 11 Quality Assurance and Quality Control (QA/QC) are no longer applicable after the expiration of Subchapter F on January 1, 2009. To clarify our comment, NELAC establishes laboratory QA/QC standards and any laboratory QA/QC requirements made redundant by NELAC may be removed from the GWSAP. NELAC does not specify reporting requirements as outlined in Section 11.2 pg 17-18 and these remain permit conditions subsequent to the January 1, 2009 expiration date. Please revise Section 11.2 and elsewhere as appropriate to remove all references to 30 TAC, Chapter 330, Subchapter F.*

Response: Section 11.2 has been renamed Section 10.2 due to the previously discussed change in Comment 1. All reference to 30 TAC, Chapter 330, Subchapter F have been removed from Section 10.2, which is the only section that references Subchapter F. Revised pages are attached.

We trust this information meets your needs, please call Mr. Mark Meadows at (972) 434-2015 or me at (817) 337-0112 if you have any questions.

Sincerely,

THE CAREL CORPORATION

Michael Hull, P.G.
Geologist



8-7-09
Michael Hull

Mr. Charles Brown
August 7, 2009
Page 4

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 – Republic Services, Inc.
Mark Allendorf – Republic Services, Inc. (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 ¹ :	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	

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 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: 8/4/09

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

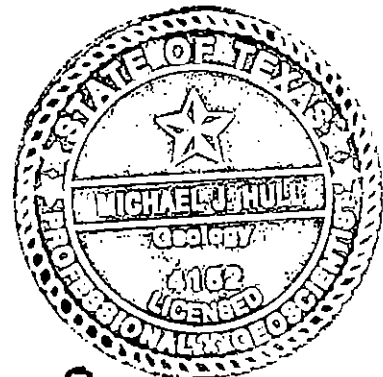
~~Revised September 2008~~

Revised August 2009

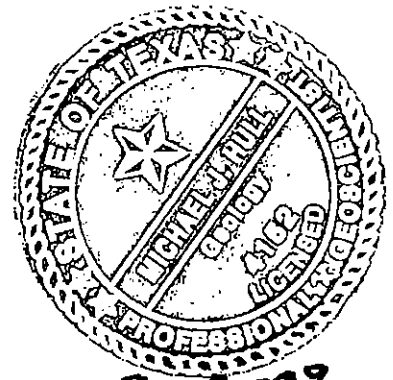
Prepared by:



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



8-3-09
Michael J. Hull



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8-3-09
Michael J. Heff

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~~8 ANALYTICAL METHODS~~

~~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.~~

98 BACKGROUND SAMPLES

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.

109 DETECTION MONITORING

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.

10.19.1 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 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

include information determined since the previously submitted annual report (30 TAC §330.409(k)). The annual detection and assessment reports will also include all other information required in §330.407(c)(1-6) and §330.409(k)(1-6), respectively.

The facility will submit a laboratory case narrative (LCN) 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. The facility 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. Attempts to explain any problems encountered in the laboratory analysis, will either be done by adding additional explanations to the checklist or by extending the LCN. ~~The facility will 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.~~ Any information required in the LCN that cannot be completed by the laboratory will be completed by the permittee.

10.29.2 Statistically Significant Constituents and Verification Resampling

Statistical analysis of metal constituents in Table 2 (i.e. 30 TAC §330.419) will commence within six (6) months after completion of the eight (8) quarterly background events. Statistical analysis will be performed in accordance with Appendix C. Statistical analysis of VOCs in Table 2 (i.e. 30 TAC §330.419) will commence upon the first sampling event. An initial Statistical Significant Increase (SSI) will be based on any compound detected in any on-site monitor well at a concentration above the specific constituent's statistical limit. If an initial SSI of any constituent is indicated at any on-site monitoring well, a notice will be made to the Executive Director (ED) within fourteen (14) days of the determination of the SSI.

In the event of an initial SSI for any constituent listed in 30 TAC §330.419, ~~verification~~ the results of resampling as appropriate for the statistical method being used will be completed-submitted within 60 days of the notification of the initial SSI in accordance with 30 TAC §330.407(b)(2).

In the event that one or more constituents listed in 30 TAC §330.419 are confirmed through verification resampling as an SSI in any on-site monitor well and no source other than the MSWLF, error, or natural variation is demonstrated per 30 TAC §330.407(b)(4), then within the timeframes specified in §330.407(b) assessment monitoring will be initiated at the well(s) exhibiting the SSI, and within 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.

11.10 QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC)

Quality Assurance, as it relates to field operations, will be achieved through the adherence to the procedures discussed in Sections 4 Water Level Measurements, 5 Well Purging, and 6 Sample Collection, Preservation, and Shipment. In addition to these procedures, QC field samples will be collected and submitted for analysis along with the monitor well samples.

11.110.1 Field QA/QC

The Quality Control samples will typically consist of Trip Blanks, Field Blanks, and Field Duplicates. Additional QC samples may include Equipment Blanks and Field Splits.

Trip blanks will be prepared by the laboratory and consist of laboratory-grade deionized water in clean VOA vials that are transported to and from the site in the same manner as the sample containers used for well sampling. The trip blanks will not be opened between filling and sealing in the laboratory and their return to the laboratory. Trip blanks will be analyzed to identify any contamination inherent in the methods of container handling in the laboratory or field, including storage, transportation, and site conditions.

Field Blanks will be prepared in the field by pouring deionized water (same as that used in the decontamination procedures) into clean VOA vials opened in the field. The field blank samples will be submitted for analysis along with the monitor well samples. They will be used to check sampling procedures, airborne contaminants, quality of decontamination water, and sampling device cleanliness.

Field Duplicates are used to check the precision of the laboratory techniques. Field duplicates will consist of two samples taken from the same well, but labeled in such a way that the laboratory is unaware that the two samples are duplicates.

Equipment Blanks will be prepared by filling clean VOA vials with deionized water that has been flushed through the sampling bailers, if employed, after they have been

decontaminated. They will be used to verify adequate decontamination procedures have been used with the sampling equipment.

Split Duplicates are used to check the accuracy of the laboratory techniques. Split duplicates will consist of two samples taken from the same well and handled identically. One sample will be analyzed by the principal laboratory while the other sample will be analyzed by another independent laboratory.

Field QC samples will be collected at the following frequency:

Trip Blanks	1 per sampling event
Field Blanks	1 per sampling day
Field Duplicates	1 per sampling event
Equipment Blanks	1 per sampling event only if non-dedicated purging equipment is employed.
Split Duplicates	as requested by the Commission

11.210.2 Laboratory QA/QC

~~Laboratory data and analyses will be performed and submitted in accordance with Chapter 330, Subchapter F, Analytical Quality Assurance and Quality Control, until its expiration on January 1, 2009, at which time~~ The facility will submit laboratory data and analyses prepared by a TCEQ-accredited environmental testing laboratory and in accordance with acceptable accreditation standards (e.g. NELAC).

~~In complying with Subchapter F,~~ The owner or operator shall review all analytical data submitted under the requirements of this permit to ensure compliance with data quality objectives, prior to submittal of the data to the commission for review. This data review must include examination of the quality control results and other supporting data, including any data review by the laboratory and must identify any potential impacts such as bias on the quality of the data using qualifiers in the test reports tied to explanations in footnotes and in any laboratory case narrative which is required.

It is the responsibility of the owner or operator to ensure that the laboratory documents and reports all problems and anomalies observed that are associated with the analysis. If the analysis of the data indicates that it failed to meet the quality control goals for the laboratory's analytical data analysis program, it does not necessarily mean that the data is unusable. The owner and/or operator may still report the analytical data but must report any and all problems and corrective action that the laboratory identified during the analysis.

A Laboratory Case Narrative (LCN) report for all problems and anomalies observed must be submitted by the owner and/or operator. The LCN will report the following information:

1. State the exact number of samples, testing parameters and sample matrix.
2. The name of the laboratory involved in the analysis. If more than one laboratory is used, all laboratories shall be identified in the case narrative.
3. State the test objective regarding samples.
4. Explain each failed precision and accuracy measurement determined to be outside of the laboratory and/or method control limits
5. Explain if the effect of the failed precision and accuracy measurements on the results induces a positive or negative bias.
6. Identify and explain problems associated with the sample results, along with the limitations these problems have on data usability.
7. A statement on the estimated uncertainty of analytical results of the samples when appropriate and/or when requested.
8. A statement of compliance and/or noncompliance with the requirements and specifications. Exceedance of holding times and identification of matrix interferences must be identified. Dilutions shall be identified and if dilutions are necessary, they must be done to the smallest dilution possible to effectively minimize matrix interferences and bring the sample into control for analysis.
9. Identify any and all applicable quality assurance and quality control samples that will require special attention by the reviewer.
10. A statement on the quality control of the analytical method of the permit and the analytical recoveries information shall be provided when appropriate and/or when requested.

In addition to the LCN, the following information must be submitted for all analytical data:

1. A Table identifying the field sample name with the sample identification in the laboratory report.
2. Chain of custody must be provided.
3. Analytical Report that documents the results and methods for each sample and analyte to be included for every analytical testing event. These test reports must document the reporting limit/method detection limit the laboratory used.
4. A release statement must be submitted from the laboratory. This statement must state "I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data."
 - a. If it is an in-house laboratory, it must have the following statement: This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.
5. If the data is from soil and/or sediment samples, it must be reported on a dry weight basis with the percent solids and the percent moisture reported so that any back calculations of the wet analysis may be preformed.
6. A Laboratory checklist is included in Appendix D. For every response of "No, NA, or NR" that is reported on the checklist, the permittee will ensure the laboratory provides a detailed description of the "exception report" in the LCN. The laboratory will use the checklist and perform the equivalent of an EPA Level 3 review regarding quality control analysis.

12.111 STATISTICAL EVALUATION OF GROUNDWATER ANALYTICAL DATA

The groundwater chemistry data will be evaluated to determine statistically significant increases from background values for each of the constituents monitored. The statistical analyses will be performed in accordance with Appendix C and 30 TAC 330.405. The selection of an appropriate statistical method is dependant upon the data derived from background samples. A sufficient number of samples is therefore required in order to establish the appropriate method. A minimum of eight statistically independent samples shall be collected from each monitor well during the background monitoring period. Statistical analyses will be performed using Sanitas®, (IDT, 1999) a commercial software program developed by Intelligent Decision Technologies, Inc. or another comparable computer program.

The following statistical analysis procedures have been prepared using generally accepted statistical analysis principles and practices. However, it is not possible to predict all of the potential future circumstances. Therefore, alternative methods may be used that are more appropriate for the data distribution of the constituents being evaluated.

12.111.1 Independent Samples

The proper statistical evaluation of groundwater samples require the samples be statistically independent. Verification of sample independence is dependent on the time required for groundwater to pass through the complete monitoring well diameter. The time necessary for sample independence is determined by dividing the monitor well diameter by the horizontal component of the average linear velocity of groundwater flow.

$$v_h = K_h * \frac{1}{N_e}$$

Where:

v_h = the average linear velocity of groundwater flow;

K_h = the horizontal hydraulic conductivity;

i = the hydraulic gradient; and

N_e = the effective porosity

