



November 16, 2009
Project No. 09-10-28

Mr. Johnny Williamson
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 Letter Dated October 16, 2009, BFI McCarty Road Landfill, MSW Permit No. 261-A, Harris County, Texas; WWC Nos. 12813472, RN100213602/CN601559222

Dear Mr. Williamson:

On behalf of the BFI McCarty Road Landfill, this letter is written to provide a response to comments in a letter dated October 16, 2009, from the Texas Commission on Environmental Quality (TCEQ). The letter requested that comments be addressed within 30 days (November 15, 2009). The TCEQ's comments are provided below in italics and our response immediately follows.

Comment 1: *In order to draft the permit modification sheet should your application be found satisfactory, please provide a table containing a listing and location of all changes to the facility permit (cover pages, tables of content, figures, text pages, appendices, etc.) that are proposed in your application. Please be sure to include a notation for each change that describes whether the revision was a change to existing material, the addition of new material, or the deletion of existing material.*

Response: The List of Revisions has been prepared per your request and the list is attached.

Comment 2: *In the future, please be sure to include a completed, updated Core Data Form with all submittals containing a Part I Form for completeness. Please provide this form with your response to this letter. The form can be obtained electronically at the following webpage address:*

Response: A Core Data Form is attached.

Comment 3: *Please review the first sentence of Section 1.0 (Introduction) for missing text, and make revisions accordingly.*

Response: The referenced text was reviewed. There was no missing text; however, a typographical revision was performed correcting the word “or” to “for”. The change is visible in the underline/strikeout GWSAP included with this submittal.

Comment 4: *Section 2.3.5 of the proposed GWSAP addresses the use of low-flow purging procedures during the sampling of facility monitor wells. For completeness, please include a copy of the TCEQ letter authorizing the use of low-flow purging methods at the McCarty Road Landfill facility as an appendix to the GWSAP.*

Response: Low flow was proposed as the purging and sampling method in the Bioaugmentation Pilot Test Work Plan (Geosyntec Consultants, 2006¹) for wells sampled to determine the effectiveness of the bioaugmentation activities in the pilot test study area. The bioaugmentation study work plan was subsequently approved and incorporated into the facility Corrective Action Implementation and Effectiveness Monitoring Work Plan, which is part of the facility Permit. Low flow is utilized at selected observation wells associated with the pilot study. Low Flow has not been proposed or approved for the compliance monitoring network, and is currently not utilized at those wells. The low flow procedures have been retained in the GWSAP text as a potential option; however, a statement has been included that low flow will not be initiated unless a proper demonstration has been completed and approval obtained from the TCEQ. Some text redundant with prior section regarding purge equipment and procedures was also deleted from Section 2.3.5.

Comment 5: *Please remove the reference to “reporting limit” in Item 3 of page 18, and for any other occurrence of the term in your proposed GWSAP.*

Response: Use of the term “reporting limit” was removed from the referenced section and replaced with practical quantitation limit. No other occurrences were found in the GWSAP.

Comment 6: *Please review Item 5 on page 18, and make revisions accordingly.*

Response: Item 5 was reviewed. The spelling of the word “performed” was corrected from “preformed”. The change is visible in the underline/strikeout GWSAP included with this submittal. No revisions were necessary of the content.

¹ Geosyntec Consultants. 2006. Bioaugmentation Pilot Test Work Plan McCarty Road Landfill Houston, Texas.

Comment 7: *Please revise Section 4.0 of the proposed GWSAP to include the notification requirements of 30 TAC Section 330.407(b)(1) and 330.407(b)(3)(A) concerning the site operating record and alternate source demonstrations, respectively.*

Response: The reference notification requirements have been incorporated into Section 4.4 of the GWSAP. The change is visible in the underline/strikeout GWSAP included with this submittal.

Comment 8: *Section 4.2 (Background) states that "(m)ost VOCs are not naturally occurring in groundwater." Please revise this paragraph to include examples of volatile organic compounds that occur naturally in groundwater.*

Response: Review of published sources indicates some VOC compounds can occur naturally, such as benzene and other petroleum related compounds, acetone, chloroform, and others. However, occurrences are rare and a detailed discussion within GWSAP Section 4.2 is not necessarily appropriate to support the procedural information being conveyed. Section 4.2 has been revised to retain focus on the procedural information.

Comment 9: *In accordance with 30 TAC Section 330.405(d), please revise Section 4.2 to include the stipulation that point of compliance groundwater data shall not be subtracting background groundwater data.*

Response: The referenced stipulation has been incorporated into GWSAP Section 4.2 text. The change is visible in the underline/strikeout GWSAP included with this submittal.

Comment 10: *Section 4.4 (Groundwater Analysis Result Submittals) references Appendix F, which does not exist in your proposed GWSAP. In addition, please revise this section to include the specification that one original and one copy of the groundwater monitoring reports will be sent to the MSW Section in Austin, and one copy directly to the appropriate TCEQ regional office. Finally, please add the requirements of 30 TAC Section 330.407(d) to this section of your proposed GWSAP for completeness.*

Response: The reference to Appendix F has been corrected to reference Appendix E Statistical Analysis Plan. Report submittal distribution specification has been incorporated into GWSAP Section 4.6. Requirements of 30 TAC Section 330.407(d) have been incorporated into GWSAP Section 4.4.

Comment 11: *Please revise the Section 5.0 (Statistical Methodology – Groundwater Data Analysis) introductory paragraph to specify that alternative statistical methods may be used provided the methods have received approval from the TCEQ. In addition, please add all of the requirements of 30 TAC Section 330.407(b)(3) and (4) to this section for completeness.*

Response: The requested text concerning alternative statistical methods has added to GWSAP Section 4.4. GWSAP Section 5 has been merged into GWSAP Section 4 to improve the document organization and remove redundancies created while incorporating the current revisions.

Comment 12: *Please revise Section 5.0 of the facility GWSAP to include a detailed description how the statistical evaluation of the groundwater data for any proposed/required new monitor wells will be undertaken to comply with recent revisions to Subchapter J of 30 TAC Chapter 330 concerning the spacing of facility point of compliance wells. We are recommending the following text narrative:*

Groundwater monitoring results from new wells at facilities where waste has already been placed shall be evaluated after each sampling event during the background data collection period for the new wells, for evidence of releases from the facility.

Response: We concur with the suggested text narrative and added the narrative to GWSAP Section 4.2 Background. GWSAP Section 5 has been merged into GWSAP Section 4 to improve the document organization and remove redundancies created while incorporating the current revisions.

Comment 13: *Please revise Section 5.0 of your proposed GWSAP by expanding it to include separate sections describing the procedures employed and actions taken to address the requirements of 30 TAC Sections 330.409 - 330.415 concerning assessment monitoring, assessment of corrective measures, selection of remedy, and so forth.*

Response: The referenced sections have been incorporated by reference into GWSAP Section 4.5. GWSAP Section 5 has been merged into GWSAP Section 4 to improve the document organization and remove redundancies created while incorporating the current revisions.

Comment 14: *Please revise the introduction to Appendix E (Statistical Analysis Plan) to include the statement that statistical analyses of groundwater monitoring results for the McCarty Road Landfill will be performed in accordance with 30 TAC Section 330.405.*

Mr. Johnny Williamson
November 16, 2009
Page 5

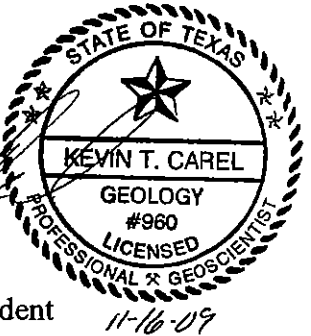
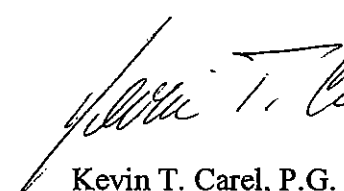
Response: The statement has been incorporated into the referenced section of Appendix E Statistical Analysis Plan.

We trust this information meets your needs, please call Mr. Burgess Stengl at (713) 671-1561 or me at (817) 337-0112 if you have any questions.

Sincerely,
THE CAREL CORPORATION



William D. Surratt
Geologist



Kevin T. Carel, P.G.
Executive Vice President

Att: TCEQ Part 1 Application Page 1 and Signature Page
Core Data Form
List of Revisions
GWSAP – Underlined/Strikeout Replacement Pages
GWSAP – Clean Replacement Pages

cc: Region 12 TCEQ Office
Burgess Stengl – Republic Services, Inc.
Mark Allendorf – Republic Services, Inc. (e-copy)
McCarty Road Landfill

TCEQ Part 1 Application Page 1 and Signature Page

Signature Page

I, Burgess Stengl, 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: Burgess Stengl Date: 11/9/09

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.

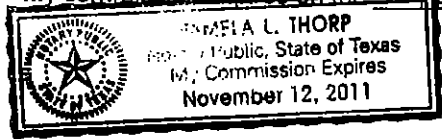
Printed or Typed Name of Operator or Principal Executive Officer

Signature

SUBSCRIBED AND SWORN to before me by the said Burgess Stengl

On this 9th day of November, 2009

My commission expires on the 10th day of November, 2011



Pamela L. Thorp
Notary Public in and for
Harris County, Texas

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

CORE DATA FORM



TCEQ Core Data Form

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission <i>(If other is checked please describe in space provided)</i>	
<input type="checkbox"/> New Permit, Registration or Authorization <i>(Core Data Form should be submitted with the program application)</i>	
<input type="checkbox"/> Renewal <i>(Core Data Form should be submitted with the renewal form)</i>	<input checked="" type="checkbox"/> Other Permit Modification
2. Attachments Describe Any Attachments: <i>(ex. Title V Application, Waste Transporter Application, etc.)</i>	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
3. Customer Reference Number <i>(if issued)</i>	4. Regulated Entity Reference Number <i>(if issued)</i>
CN 601559222	RN 100213602

SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy)	
6. Customer Role (Proposed or Actual) – as it relates to the <i>Regulated Entity</i> listed on this form. Please check only <u>one</u> of the following:	
<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
<input type="checkbox"/> Occupational Licensee	<input type="checkbox"/> Responsible Party
<input checked="" type="checkbox"/> Owner & Operator	<input type="checkbox"/> Voluntary Cleanup Applicant
<input type="checkbox"/> Other: _____	
7. General Customer Information:	
<input type="checkbox"/> New Customer	<input type="checkbox"/> Update to Customer Information
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State)	<input checked="" type="checkbox"/> No Change**
**If "No Change" and Section I is complete, skip to Section III – Regulated Entity Information.	
8. Type of Customer:	
<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual
<input type="checkbox"/> City Government	<input type="checkbox"/> County Government
<input type="checkbox"/> Other Government	<input type="checkbox"/> General Partnership
<input type="checkbox"/> Sole Proprietorship- D.B.A	<input type="checkbox"/> Federal Government
<input type="checkbox"/> State Government	<input type="checkbox"/> Limited Partnership
<input type="checkbox"/> Other: _____	
9. Customer Legal Name <i>(If an individual, print last name first: ex: Doe, John)</i>	
<i>If new Customer, enter previous Customer below.</i>	
<i>End Date:</i>	
10. Mailing Address:	
City	State
ZIP	ZIP + 4
11. Country Mailing Information <i>(if outside USA)</i>	
12. E-Mail Address <i>(if applicable)</i>	
13. Telephone Number	14. Extension or Code
() -	() -
15. Fax Number <i>(if applicable)</i>	
() -	
16. Federal Tax ID <i>(9 digits)</i>	17. TX State Franchise Tax ID <i>(11 digits)</i>
18. DUNS Number <i>(if applicable)</i>	19. TX SOS Filing Number <i>(if applicable)</i>
20. Number of Employees	21. Independently Owned and Operated?
<input type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher	<input type="checkbox"/> Yes <input type="checkbox"/> No

SECTION III: Regulated Entity Information

22. General Regulated Entity Information <i>(If 'New Regulated Entity' is selected below this form should be accompanied by a permit application)</i>	
<input type="checkbox"/> New Regulated Entity	<input type="checkbox"/> Update to Regulated Entity Name
<input type="checkbox"/> Update to Regulated Entity Information	<input checked="" type="checkbox"/> No Change** <i>(See below)</i>
**If "NO CHANGE" is checked and Section I is complete, skip to Section IV, Preparer Information.	
23. Regulated Entity Name <i>(name of the site where the regulated action is taking place)</i>	

24. Street Address of the Regulated Entity: (No P.O. Boxes)							
	City		State		ZIP		ZIP + 4
25. Mailing Address:							
	City		State		ZIP		ZIP + 4
26. E-Mail Address:							
27. Telephone Number	28. Extension or Code			29. Fax Number (if applicable)			
() -				() -			
30. Primary SIC Code (4 digits)	31. Secondary SIC Code (4 digits)	32. Primary NAICS Code (5 or 6 digits)		33. Secondary NAICS Code (5 or 6 digits)			
34. What is the Primary Business of this entity? (Please do not repeat the SIC or NAICS description.)							

Questions 34 – 37 address geographic location. Please refer to the instructions for applicability.

35. Description to Physical Location:							
36. Nearest City	County			State		Nearest ZIP Code	
37. Latitude (N) In Decimal:		38. Longitude (W) In Decimal:					
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds		

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form or the updates may not be made. If your Program is not listed, check other and write it in. See the Core Data Form instructions for additional guidance.

<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Industrial Hazardous Waste	<input type="checkbox"/> Municipal Solid Waste
<input type="checkbox"/> New Source Review – Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS	<input type="checkbox"/> Sludge
<input type="checkbox"/> Stormwater	<input type="checkbox"/> Title V – Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil	<input type="checkbox"/> Utilities
<input type="checkbox"/> Voluntary Cleanup	<input type="checkbox"/> Waste Water	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

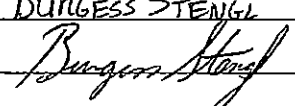
SECTION IV: Preparer Information

40. Name:	Burgess Stengl	41. Title:	Environmental Manager
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(713) 671-1561		(713) 675-3660	bstengl@republicservices.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 9 and/or as required for the updates to the ID numbers identified in field 39.

(See the Core Data Form instructions for more information on who should sign this form.)

Company:		Job Title:	Environmental Manager
Name (In Print):	BURGESS STENGL	Phone:	(713) 671 - 1561
Signature:		Date:	11/11/09

LIST OF REVISIONS

LIST OF REVISIONS

The following table summarizes the proposed replacement pages for the Permit Modification Request to Revise the Groundwater Sampling and Analysis Plan at the McCarty Road Landfill prepared by The Carel Corporation and submitted to the Texas Commission on Environmental Quality on November 16, 2009. See the August 2009 and November 2009 underline/strikeout copies for specific text additions, revisions, and deletions.

Attachment 11, Groundwater Sampling and Analysis Plan Revision Summary

Revision	Explanation
Global	Revised TNRCC to TCEQ, revised Permit Number from 261A to 261B, revised facility name by deletion of BFI, references to downgradient wells replaced with point of compliance and upgradient wells with background where appropriate, revised regulatory citations to fit new 30 TAC Subchapter J numbering, replaced "reporting limit" with "practical quantitation limit, and revised typos where found in both the original August 2009 submittal and the November 2009 NOD response submittal.
Table of Contents	Revised to reflect updated section titles and reorganization. (Underline/strikeout in August 2009 submittal)
Section 2.2.3 – Sample Container Preparation	Added details to sample container preparation in accordance with EPA protocol. (Underline/strikeout in August 2009 submittal)
Section 2.2.5 – Field QA/QC Samples	Added text regarding Equipment Blanks procedures. (Underline/strikeout in August 2009 submittal)
Section 2.3.2 – Water Level Measurement	Procedure revised. (Underline/strikeout in August 2009 submittal)
Section 2.3.3 – Purge Equipment	Procedure revised. (Underline/strikeout in August 2009 submittal)
Section 2.3.4.1 – Dedicated Equipment	Procedures revised with additional detail. . (Underline/strikeout in August 2009 submittal)
Section 2.3.4.2 – Non-Dedicated Equipment	Procedure revised. (Underline/strikeout in August 2009 submittal)
Section 2.3.5 – Purge Volume	Low-flow procedures added. (Underline/strikeout in August 2009 submittal). A stipulation that a low-flow demonstration and TCEQ approval are required to implement added. Information redundant with Section 2.3.3 deleted. (Underline/strikeout in November 2009 submittal)
Section 2.4.3.2 – Non-Dedicated Equipment	Procedures revised with additional detail. . (Underline/strikeout in August 2009 submittal)
Section 2.4.4 – Sample Filtration	30 TAC §330.405(c) concerning field filtering of groundwater samples added. (Underline/strikeout in August 2009 submittal)
Section 2.4.4 – VOC Sample Collection	Section has been renumbered to 2.4.5 due to addition of Section 2.4.4 - Sample Filtration. (Underline/strikeout in August 2009 submittal)
Section 2.4.5 – Sample Preservation	Section has been renumbered to 2.4.6 due to addition of Section 2.4.4 - Sample Filtration. (Underline/strikeout in August 2009 submittal)
Section 2.4.6 – Field Measurements	Section has been renumbered to 2.4.7 due to addition of Section 2.4.4 - Sample Filtration. Corrected a sample reference. (Underline/strikeout in August 2009 submittal)
Section 2.5.2 – Chain-of-Custody/Sample Container Labels	Text "initials" revised to "name". (Underline/strikeout in August 2009 submittal)
Section 3 – Laboratory Procedures/Performances Standards	Procedures revised to comply with new TCEQ requirements and suggested text." (Underline/strikeout in August 2009 submittal)
Section 4.1 – Analyzed Constituents	TCEQ recommended Practical Quantitation Limit text added. (Underline/strikeout in August 2009 submittal), Section 4 renamed Monitoring Programs. (Underline/strikeout in November 2009 submittal)
Section 4.1 – Background	Section renumbered to Section 4.2 due to addition of Section 4.1 – Analyzed Constituents. Procedures and regulations revised and added to comply with

	new 30 TAC Subchapter J regulations. (Underline/strikeout in August and November 2009 submittals)
Section 4.1.1 – Updating Background Data	Section has been renumbered to Section 4.2.1 due to addition of Section 4.1 – Analyzed Constituents. Procedures have been revised. (Underline/strikeout in August 2009 submittal)
Section 4.2 – Detection Monitoring Events	Original Section 4.2 renumbered to Section 4.4 due to addition of Section 4.1 and 4.3 – Statistical Evaluations. New Section 4.3 includes information from deleted Section 5. (Underline/strikeout in November 2009 submittal)
Section 4.3 – Groundwater Analysis Result Submittals	Original Section 4.3 renumber to Section 4.6. Procedures and regulations added and revised to comply with new 30 TAC Subchapter J regulations. (Underline/strikeout in November 2009 submittal)
Section 4.4 – Detection Monitoring Events	Former Section 5 requirements moved to new Section 4.4. Procedures and regulations added and revised to comply with new 30 TAC Subchapter J regulations. (Underline/strikeout in November 2009 submittal)
Section 4.5 Assessment Monitoring	Section and requirements added to incorporate new Subchapter J rules including 30 TAC 330.409 through 415. (Underline/strikeout in November 2009 submittal)
Section 4.6 Groundwater Analysis Results Submittals	Former Section 4.4 revised and updated to comply with new 30 TAC Subchapter J regulations. (Underline/strikeout in November 2009 submittal)
Section 5 – Statistical Methodology – Groundwater Data Analysis	Section 5 deleted and relevant information merged into Section 4 with the November 2009 submittal. (Underline/strikeout in November 2009 submittal)
Section 6 – References	Changed to Section 5. (Underline/strikeout in November 2009 submittal)
Table 1	Table 1 – Background/Detection Monitoring Parameters has been replaced with Table 1 – List of Analytical Parameters. Note to Table 1 has been removed. (Underline/strikeout in August 2009 submittal)
Appendix D – Statistical Analysis Plan	Appendix D – Statistical Analysis Plan has been renamed Laboratory Checklist and the Laboratory Checklist has been added. Statistical Analysis Plan changed to Appendix E. (Underline/strikeout in August 2009 submittal)
Appendix E – Statistical Analysis Plan	Table of Contents pages numbers have been revised. (Underline/strikeout in August 2009 submittal), references to Section 5 revised to Section 4. (Underline/strikeout in November 2009 submittal)
Section 2.1 – Statistical Analysis for Volatile Organic Constituents and PCBs	The term “SSC” has been replaced with “SSI”, and procedures have been revised. (Underline/strikeout in August 2009 submittal)
Section 2.2 – Statistical Analysis for Heavy Metals	Procedures have been revised and regulations have been revised to comply with new 30 TAC Subchapter J regulations. (Underline/strikeout in August 2009 submittal)
Section 2.2.1.2 – Minimum Background	Procedures and regulations have been revised to comply with new 30 TAC Subchapter J regulations. (Underline/strikeout in August 2009 submittal)

GWSAP – Underlined/Strikeout Replacement Pages

**MCCARTY ROAD LANDFILL
CITY OF HOUSTON, HARRIS COUNTY, TEXAS
TCEQ PERMIT NO. 261-B**

**SITE DEVELOPMENT PLAN
ATTACHMENT 11
GROUNDWATER SAMPLING AND
ANALYSIS PLAN (GWSAP)**

Prepared for:

McCarty Road Landfill Texas, LP

March 2004

Revised June 2004

~~Revised August 2009~~

Revised November 2009

Prepared by:



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

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TABLES

Tables

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1 INTRODUCTION

This Ground Water Sampling and Analysis Plan (GWSAP) has been prepared ~~or~~ for the McCarty Road Landfill site (Texas Commission on Environmental Quality [TCEQ] Permit No. 261-B). The McCarty Road Landfill is a Type I Municipal Solid Waste Disposal Facility located adjacent ~~to~~ and on the north side of U.S. Highway 90, south of Ley Road, and approximately 0.9 miles east of FM Highway 527, in Harris County, Texas.

The following plan covers the procedures for collecting representative samples from groundwater monitoring wells and the basic laboratory requirements for obtaining valid, defensible data. The plan is limited to sampling and analysis requirements and does not include monitor well placement, design and construction, or well development procedures.

This GWSAP is, and will be followed, in accordance with 30 TAC §330.401 - §330.421. Groundwater monitoring will be conducted at the site through the active life and post-closure care period of the landfill, pursuant to 30 TAC §330.401(f).

2 FIELD PROCEDURES

2.1 Health and Safety Plan

A health and safety plan is required for all groundwater sampling events at the McCarty Road Landfill. Prior to monitoring well purging and sampling, the sampling contractor's Groundwater Sampling Health and Safety Plan must be in place. Designing the site Groundwater Sampling Health and Safety Plan will be the duty of the party performing the actual work.

In addition, each laboratory facility should have their own standard laboratory health and safety plan as required by current OSHA regulations.

2.2 Sample Event Preparation and QA/QC

2.2.1 General Event Preparation

The laboratory performing the groundwater analysis shall supply all necessary coolers, pre-cleaned containers, trip blanks, chemical preservatives, labels, custody seals, and chain-of-custody forms. All field data shall be entered on a Field Data Sheet (see example provided in Appendix A) or an equivalent form. Any changes to the monitoring plan and/or procedures need to be given to the laboratory prior to the field sampling personnel arriving on the site. A specific contact person should be established at both the facility and contract laboratory for communication between the two (2) parties.

2.2.2 Sample Container Selection

Each sample container needs to be constructed of a material compatible and non-reactive with the material it is to contain. Consult Appendix B, *Containerization and Preservation of Samples*, to determine the number, type, and volume of appropriate containers. As noted in Section 2.2.1, the contract laboratory performing the analysis shall supply all the required containers. In circumstances when the facility must obtain its own containers, these containers will be purchased from local container distributors with the exception of septum vials and PTFE (e.g. Teflon[®]) lined caps required for organic analyses, which are available from laboratory supply companies. Metal lids shall not be utilized for any sample containers.

2.2.3 Sample Container Preparation

Sample containers will be purchased as a pre-cleaned product, or cleaned in the laboratory in a manner consistent with EPA protocol. An example protocol is as follows:

- Bottles, vials, cubitainers, liners and caps hand washed in a laboratory-grade, non-phosphate detergent.
- Rinse three (3) times with distilled water.
- Rinse with a chemically pure or reagent grade 10% nitric acid solution.
- Rinse three (3) times with organic-free water.
- Oven-dried (air-dried for high-density polyethylene containers and caps).

After containers and caps are cool and dry, cap each container and store in a clean and dry environment.

2.2.4 Equipment Preparation Prior to Site Arrival

Dedicated pump purge and sample devices for the McCarty Road Landfill are described in detail in Sections 2.3.3 and 2.4.3. This section outlines the equipment preparation prior to site arrival for a specific monitoring event. This equipment preparation includes, at a minimum, decontamination procedures for water level indicator(s), and field parameter (temperature, pH, specific conductivity, turbidity) measurement device(s). Operation and calibration of field instruments will be performed per the manufacturer's instructions.

- Water Level Indicator(s) – Water level indicator(s) will be decontaminated prior to initial site arrival by hand washing the sensor probe and entire length of tape in a laboratory grade non-phosphate detergent followed by rinsing with organic-free water. While the tape is reeled back onto the carrying spool, the tape and probe will be wiped down with a clean, dry paper towel.
- Field Parameter (Temperature, pH, Specific Conductivity, Turbidity) Measuring Device(s) – Field parameter measuring device(s) will be decontaminated by hand washing the sample cells in a laboratory grade non-phosphate detergent followed by rinsing with organic-free water. Meters will then be checked for proper calibration and operation as per the manufacturer's instructions. Any malfunctioning meters will be replaced prior to packing.

In the case of equipment failure, it is recommended that back-up instruments be in the sample crew's possession. If a back-up instrument is not available, then sampling should not proceed until the proper equipment is made available.

