



**Parkhill**

# **MCKINNEY 380 C&D LANDFILL**

## **PERMIT MODIFICATION APPLICATION – WITH NOTICE NOD 1 RESPONSE**

TCEQ MSW Permit No. 2278A  
Collin County, Texas

Prepared For  
Frontier Waste Solutions  
2540 E University Dr  
McKinney, TX 75069

Prepared By  
Parkhill  
3000 Internet Boulevard, Suite 550  
Frisco, Texas 75034  
TBPE F-560

November | 2024

Parkhill Project # 016775.21



**Parkhill**

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# Texas Commission on Environmental Quality Waste Permits Division Correspondence Cover Sheet

Date: 11/22/24

Facility Name: McKinney 380 C&D Landfill

Permit or Registration No.: 2278A

Nature of Correspondence:

Initial/New

Response/Revision to TCEQ Tracking No.:  
30180759 (from subject line of TCEQ letter  
regarding initial submission)

Affix this cover sheet to the front of your submission to the Waste Permits Division. Check appropriate box for type of correspondence. Contact WPD at (512) 239-2335 if you have questions regarding this form.

**Table 1 - Municipal Solid Waste Correspondence**

Applications	Reports and Notifications
<input type="checkbox"/> New Notice of Intent	<input type="checkbox"/> Alternative Daily Cover Report
<input type="checkbox"/> Notice of Intent Revision	<input type="checkbox"/> Closure Report
<input type="checkbox"/> New Permit (including Subchapter T)	<input type="checkbox"/> Compost Report
<input type="checkbox"/> New Registration (including Subchapter T)	<input type="checkbox"/> Groundwater Alternate Source Demonstration
<input type="checkbox"/> Major Amendment	<input type="checkbox"/> Groundwater Corrective Action
<input type="checkbox"/> Minor Amendment	<input type="checkbox"/> Groundwater Monitoring Report
<input type="checkbox"/> Limited Scope Major Amendment	<input type="checkbox"/> Groundwater Background Evaluation
<input checked="" type="checkbox"/> Notice Modification	<input type="checkbox"/> Landfill Gas Corrective Action
<input type="checkbox"/> Non-Notice Modification	<input type="checkbox"/> Landfill Gas Monitoring
<input type="checkbox"/> Transfer/Name Change Modification	<input type="checkbox"/> Liner Evaluation Report
<input type="checkbox"/> Temporary Authorization	<input type="checkbox"/> Soil Boring Plan
<input type="checkbox"/> Voluntary Revocation	<input type="checkbox"/> Special Waste Request
<input type="checkbox"/> Subchapter T Disturbance Non-Enclosed Structure	<input type="checkbox"/> Other:
<input type="checkbox"/> Other:	

**Table 2 - Industrial & Hazardous Waste Correspondence**

Applications	Reports and Responses
<input type="checkbox"/> New	<input type="checkbox"/> Annual/Biennial Site Activity Report
<input type="checkbox"/> Renewal	<input type="checkbox"/> CPT Plan/Result
<input type="checkbox"/> Post-Closure Order	<input type="checkbox"/> Closure Certification/Report
<input type="checkbox"/> Major Amendment	<input type="checkbox"/> Construction Certification/Report
<input type="checkbox"/> Minor Amendment	<input type="checkbox"/> CPT Plan/Result
<input type="checkbox"/> CCR Registration	<input type="checkbox"/> Extension Request
<input type="checkbox"/> CCR Registration Major Amendment	<input type="checkbox"/> Groundwater Monitoring Report
<input type="checkbox"/> CCR Registration Minor Amendment	<input type="checkbox"/> Interim Status Change
<input type="checkbox"/> Class 3 Modification	<input type="checkbox"/> Interim Status Closure Plan
<input type="checkbox"/> Class 2 Modification	<input type="checkbox"/> Soil Core Monitoring Report
<input type="checkbox"/> Class 1 ED Modification	<input type="checkbox"/> Treatability Study
<input type="checkbox"/> Class 1 Modification	<input type="checkbox"/> Trial Burn Plan/Result
<input type="checkbox"/> Endorsement	<input type="checkbox"/> Unsaturated Zone Monitoring Report
<input type="checkbox"/> Temporary Authorization	<input type="checkbox"/> Waste Minimization Report
<input type="checkbox"/> Voluntary Revocation	<input type="checkbox"/> Other:
<input type="checkbox"/> 335.6 Notification	
<input type="checkbox"/> Other:	

November 22, 2024

Mr. Lyndon Poole, Project Manager  
Municipal Solid Waste Permits Section – MC 124  
Texas Commission on Environmental Quality (TCEQ)  
Building A, Room 122  
12100 Park 35 Circle  
Austin, Texas 78753-1808

Re: McKinney 380 C&D Landfill, Collin County  
MSW Permit No. 2278A  
Municipal Solid Waste (MSW) Permit Modification – With Notice  
Tracking Nos. 30180759, 30033754; RN110878030 | CN606244051

Dear Mr. Poole,

We received the Notice of Deficiency via email (NOD 1) dated October 31, 2024, for the above referenced application. As requested in NOD 1, each comment is listed below with Parkhill's response (referencing applicable revisions by part, section, and page number) immediately following the comment. Included in the enclosed submittal are all application pages that were revised or were requested to be included.

**Comment 1:** The electronic copy of your application attached with the October 2, 2024 email from your consultant (Parkhill) does not contain Page 1 of 8 of TCEQ Form 20650. Please ensure all pages of Form 20650 are included in the revised application in response to this NOD.

**Response:** *All pages of TCEQ Form 20650 (including page 1) have been included with both the electronic and printed copies of this NOD response, as requested.*

**Comment 2:** The October 1, 2024 cover letter and the October 1, 2024 email from your consultant are unclear as to whether a copy of the application was sent to the TCEQ Region 4 Office. Please ensure an unmarked copy of the application, as revised by your response to this NOD, is provided to the Region 4 Office.

**Response:** *An unmarked copy of the original permit modification application was mailed to the TCEQ Region 4. A copy of this NOD response, will also be mailed to the TCEQ Region 4 Office, to the attention of the Waste Section Manager, as requested.*

**Comment 3:** The Customer Reference Number (CN) in the October 1, 2024 cover letter and the TCEQ ePay documentation is indicated as CN604098007; however, the CN associated with this permit in the TCEQ Central Registry is CN606244051. Please ensure that all subsequent correspondence and application documents use the CN contained in the Central Registry.

**Response:** *This permit recently completed a transfer of ownership from the permittee with the CN number indicated on the TCEQ ePay Receipt to the permittee with the CN number currently indicated in the TCEQ Central Registry. Payment for the modification fee was made on 8/16/2024, prior to this transfer being completed on 8/29/2024, so the old permittee's CN number was effective and is shown on the TCEQ ePay Receipt.*

*This cover letter includes the current CN number, and all subsequent correspondence and application documents will use the current CN number moving forward.*

**Comment 4:** The provided land ownership map and landowner list do not clearly address mineral ownership under the facility. Revise the landownership map and list to include all mineral interest ownership under the facility or include a statement indicated that there is no mineral interest ownership, as applicable. [30 TAC §330.59(c)(3)]

**Response:** It is our understanding that *the referenced rule §330.59(c)(3) for the landownership map is for Part I of MSW permit applications and registrations, and not applicable for this proposed permit modification application with notice.*

*The landownership list was included in accordance with 30 TAC §305.70(i)(1)(A) as required for permit modification with notice, which does not require the landownership list to identify mineral interest ownership. Figure I-3.1 is not being revised with this proposed permit modification with notice.*

**Comment 5:** The provided landowner list (Attachment 2 of the application) indicated a link to each parcel identified on the landowner map; however, the list was not provided in a format compatible with the generation of mailing labels. As specified on page 11 of 16 within TCEQ Form 00650, provide mailing labels for the property owners in the adjacent and potentially affected landowners list included in the application, pursuant to 30 TAC §330.59(c)(3).

Provide the mailing labels in an electronic file in Avery 5160 format, with 30 labels to a page. The labels must contain only the name, mailing address, city, state, and zip code with no reference to the lot number or lot location. Each letter in the name and address must be capitalized, contain no punctuation, and must include the appropriate two-character abbreviation for the state. Each entity listed must be blocked and spaced consecutively.

**Response:** *An electronic file of the mailing labels, formatted as requested, has being emailed to the reviewer with this NOD response.*

**Comment 6:** Revise the title page of the application for the permit modification to include the engineer's seal as specified by 30 TAC §330.57(g)(2).

**Response:** *It is our understanding that the referenced rule §330.57(g)(2) is for MSW permit applications and registrations, and not applicable for this proposed permit modification application with notice. The engineer's seal is provided on all title pages and tables of content for portions of the MSW permit that have been revised with this modification.*

*However, the engineer's seal has been included on the title page of the permit modification application with this NOD response as requested.*

**Comment 7:** The revised Site Layout Plan (Figure III-4.5) indicates "All utility easements, including the sewer easement, are shown on Figure II-3.7 – Site Easements Map." The sanitary sewer easement indicated on the June 21, 2022 version of Figure II-3.7 appears to extend for at least 2,000 feet. Please explain how the proposed number, location, and spacing of the utility vents indicated on Figure III-4.5 dated October 1, 2024 will provide sufficient ventilation for the trench.

**Response:** *30 TAC §330.371(b)(1)(E) requires landfill units to implement a routine methane monitoring program to ensure that the concentration of methane gas does not exceed 5% by volume in monitoring points, probes, subsurface soils, or other matrices at the facility boundary as defined in the permit. Additionally, 30 TAC §330.371(f) mandates venting of any underground utility trenches that cross the landfill facility boundary.*

*While there is no explicit rule requirement specifying the location, number, or spacing of vents for underground utility trenches, it is standard industry practice to install vents at the points where underground utility trenches cross the landfill facility boundary. This approach facilitates venting within the landfill boundary and ensures compliance with 30 TAC §330.371(b)(1)(E). The proposed number and locations of vents in Figure III-4.5, are based on this standard practice and are designed to monitor and mitigate potential methane accumulation.*

*To address the concern about sufficient ventilation for the trench, if methane concentrations exceeding the regulatory limit are detected at the proposed utility vent locations, the owner/ operator shall follow §330.371(c) to ensure human health and notify the Texas Commission on Environmental Quality (TCEQ), as required. A permit modification application will also be submitted to include additional vents or other measures as necessary to ensure compliance with 30 TAC §330.371.*

**Comment 8:** Revised Section 4.0 of the LFGMP (Corrective Measures – Exceedance of Landfill Gas) proposes to eliminate “These measures include inspection and repair of the PVCS” (passive venting and control system) “or installation of an active gas extraction system.” Please explain how the elimination of the referenced corrective measures would result in a scenario that would be equally (or more) protective of human health and the environment.

**Response:** *The referenced change was not intended to “eliminate” options for corrective measures, but was made to re-organize the paragraph for clarity. The first referenced measure (inspection and repair of the PVCS) was moved to the bulleted list in the following paragraph (inspect and repair any installed LFG control features) along with newly proposed measures. Section 4.0 of the LFGMP has been revised to include installation of an active gas extraction system in this list.*

**Comment 9:** Revised Section 4.1 of the LFGMP (Protective Measures and Notifications) proposes to add new text to limit notice of “the adjacent land owners” to “the adjacent land owner(s) next to the landfill gas monitoring probe(s) where the exceedance above permissible limit is detected.” Please further define the scope of the proposed “next to” qualifier. Please also explain why this modification would not potentially reduce the number of landowners receiving notice of a methane exceedance and the intended protection of human health and safety.

**Response:** *The currently approved permit text states that “adjacent land owners” will be notified in the event of a detection of methane concentration above permissible limits, without any further clarification of the extent of adjacent land owners to be notified. The proposed revision aims to clarify the definition of “adjacent land owners” to ensure proper notification in the event of any future exceedance.*

*Section 4.1 of the LFGMP has been further revised with this NOD response to clarify that all owners of adjacent land within a 685 foot radius of the exceedance location must be notified. This notification radius is equal to the average distance between the permitted monitoring probes for this facility, and would notify owner(s) of all land adjacent to the area represented by any permitted monitoring probe. The revision proposed with this NOD response expands the scope of this statement to include owners of nearby properties, not just owners of property directly adjacent to an exceedance. This proposed revision does not reduce protection of human health or the environment.*

**Comment 10:** Revised Section 10.0 of the LFGMP (Landfill Gas Monitoring in Site Structures) indicates that “All on-site buildings and structures... will be monitored quarterly (at a minimum) with a portable combustible gas indicator or a continuous LFG monitor/alarm (capable of providing an audible alarm if methane concentration exceeds 1.25% by volume).” Please clarify whether the landfill gas monitoring within buildings and structures is conducted on a continuous basis, and not merely once per quarter. If monitoring within buildings and structures is less frequent than continuous, please explain how less frequent monitoring within buildings/structures is sufficiently protective of affected personnel.

**Response:** *Monitoring of on-site structures is conducted at a minimum frequency of quarterly, in accordance with 30 TAC §330.371(i) (requiring monitoring of on-site structures) and §330.371(b)(2) (requiring monitoring frequency of quarterly at a minimum). This monitoring complies with regulatory requirements and the approved Landfill Gas Management Plan (LFGMP).*

*Currently, the scalehouse is the only building on-site. The scalehouse is located approximately 850 feet northeast of GM-6 where the exceedance was observed. As reported in the Landfill Gas Exceedance Remediation Plan letter (dated 8/14/24 and previously submitted to the TCEQ), no methane was detected at the scalehouse and bar probes 12 and 14 (installed between GM6 and the scalehouse). These bar probes 12 and 14 were also monitored for 5 weeks following the exceedance, and no measurable concentration of methane was observed in either probe. This indicates that methane was not migrating in the direction of the scalehouse. Due to the distance of the scalehouse from the methane exceedance and the evidence that methane was not migrating in the direction of the scalehouse, more frequent monitoring of the scalehouse was not implemented in response to the exceedance in GM-6.*

In addition to the revisions noted in the responses above, the following revisions have also been completed.

- Revised Figure III-11.1 to remove references to excavation contours and depth from notes. Excavation contours are not shown on this figure.

- Revised Figure III-11.1 to add note 5 stating that vent locations are approximate and maybe adjusted as necessary.

The original version of the NOD 1 response with one (1) copy of the unmarked version of the revised sheets are enclosed, along with one (1) marked copy (in redline/strikeout format to denote changes) of the revised sheets.

In addition, one (1) unmarked copy of the revised sheets has been sent directly to the TCEQ Region 4 Office.

If you have comments, questions, or need further information, please contact me directly at [REDACTED] or 469-200-7369.

Sincerely,

PARKHILL

By   
\_\_\_\_\_  
Sonia Samir, PE, PhD  
Civil Project Manager

SS/amf

Enclosure: MSW Permit Modification Application, NOD 1 Response

Cc: John Gustafson, Frontier Waste Solutions  
Grant Gregg, Frontier Waste Solutions  
Pedro Garcia, Frontier Waste Solutions  
Monica Sowards, Frontier Waste Solutions  
Troy Leitschuh, Frontier Waste Solutions  
Frank Pugsley, PE, Sector Director, Parkhill  
Erin Gorman, Waste Section Manager, TCEQ Region 4 Office



# Texas Commission on Environmental Quality

## Application Form for Municipal Solid Waste Permit or Registration Modification or Temporary Authorization

### Application Tracking Information

Facility Name: McKinney 380 C&D Landfill

Permittee or Registrant Name: Frontier 380, LLC

MSW Authorization Number: 2278A

Initial Submission Date: 10/01/2024

Revision Date: 11/22/2024

Instructions for completing this form are provided in [form TCEQ-20650-instr](#)<sup>1</sup>. If you have questions, contact the Municipal Solid Waste Permits Section by email to [REDACTED] or by phone at 512-239-2335.

### Application Data

<b>1. Submission Type</b>
<input type="checkbox"/> Initial Submission <input checked="" type="checkbox"/> Notice of Deficiency (NOD) Response
<b>2. Authorization Type</b>
<input checked="" type="checkbox"/> Permit <input type="checkbox"/> Registration
<b>3. Application Type</b>
<input checked="" type="checkbox"/> Modification with Public Notice <input type="checkbox"/> Modification without Public Notice <input type="checkbox"/> Temporary Authorization (TA) <input type="checkbox"/> Modification for Name Change or Transfer
<b>4. Application Fee</b>
<p><b>Amount</b></p> <p>The application fee for a modification or temporary authorization is \$150.</p> <p><b>Payment Method</b></p> <input type="checkbox"/> Check <input checked="" type="checkbox"/> Online through ePay portal <a href="http://www3.tceq.texas.gov/epay/">www3.tceq.texas.gov/epay/</a> If paid online, enter ePay Trace Number: <span style="background-color: black; color: black;">[REDACTED]</span>

<sup>1</sup> [www.tceq.texas.gov/downloads/permitting/waste-permits/msw/forms/20650-instr.pdf](http://www.tceq.texas.gov/downloads/permitting/waste-permits/msw/forms/20650-instr.pdf)

## 5. Electronic Versions of Application

For modifications that require notice (other than those for arid exempt landfills), TCEQ will publish electronic versions of the application online. Applicants must provide a clean copy of the administratively complete application and technically complete application. TCEQ will also publish electronic versions of NOD responses online.

## 6. Party Responsible for Mailing Notice

For modifications that require notice, indicate who will be responsible for mailing notice:

Applicant  Agent in Service  Consultant

Contact Name: Monica Sowards

Title: Operations Manager

Email Address: [REDACTED]

## 7. Confidential Documents

Does the application contain confidential documents?

Yes  No

If "Yes", reference the confidential documents in the application, but submit the confidential documents as an attachment in a separate binder marked "CONFIDENTIAL."

## 8. Facility General Information

Facility Name: McKinney 380 C&D Landfill

Contact Name: Pedro Garcia Title: NTX Post Collections Gen. Mgr.

MSW Authorization Number (if existing): 2278A

Regulated Entity Reference Number: **RN** 110878030

Physical or Street Address: 2540 E University Dr

City: McKinney County: Collin State: TX Zip Code: 75069

Phone Number: (469) 591-1380

Latitude (Degrees, Minutes, Seconds): N 33° 11' 49"

Longitude (Degrees, Minutes, Seconds): W 96° 34' 18"

## 9. Facility Types

Type I  Type IV  Type V  
 Type IAE  Type IVAE  Type VI

## 10. Description of the Revisions to the Facility

Provide a brief description of revisions to permit or registration conditions and supporting documents referred to by the permit or registration, and a reference to the specific provisions under which the modification or temporary authorization application is being made. Also, provide an explanation of why the modification or temporary authorization is needed:

This permit modification is requested in accordance with 30 TAC §305.70(k)(3) for changes to the Part III Attachment 11 Landfill Gas Management Plan (LGMP). The proposed changes to the LGMP are to include additional corrective measures for any future landfill gas exceedance remediation at the Landfill, and to include three passive utility vents for a sanitary sewer line that crosses the landfill permit boundary.

## 11. Facility Contact Information

### Site Operator (Permittee or Registrant)

Name: Frontier 380, LLC

Customer Reference Number: **CN** 606244051

Contact Name: John Gustafson Title: President & CEO

Mailing Address: 2323 Bryan Street Suite 2620

City: Dallas County: Dallas State: TX Zip Code: 75201

Phone Number: 888-854-2905

Email Address: [REDACTED]

Texas Secretary of State (SOS) Filing Number: 805469349

### Operator (if different from Site Operator)

Name: Same

Customer Reference Number: **CN**

Contact Name:  Title:

Mailing Address:

City:  County:  State:  Zip Code:

Phone Number:

Email Address:

Texas Secretary of State (SOS) Filing Number:

**Consultant (if applicable)**

Firm Name: Parkhill  
Consultant Name: Sonia Samir, PE, PhD  
Texas Board of Professional Engineers Firm Registration Number: 560  
Contact Name: Sonia Samir, PE, PhD Title: Civil Project Manager  
Mailing Address: 3000 Internet Blvd, Suite 550  
City: Frisco County: Collin State: TX Zip Code: 75034  
Phone Number: (469) 200-7369  
Email Address: [REDACTED]

**Agent in Service (required for out-of-state applicants)**

Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_ County: \_\_\_\_\_ State: TX Zip Code: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Email Address: \_\_\_\_\_

**12. Ownership Status of the Facility**

Is this a modification that changes the legal description, the property owner, or the Site Operator (Permittee or Registrant)?

Yes  No

If the answer is "No", skip this section.

Does the Site Operator (Permittee or Registrant) own all the facility units and all the facility property?

Yes  No

If "No", provide the following information for other owners.

Owner Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_ County: \_\_\_\_\_ State: TX Zip Code: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Email Address: \_\_\_\_\_

# Signature Page

## Site Operator or Authorized Signatory

I 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.

Name: John Gustafson Title: President + CEO

Email Address: [REDACTED]

Signature: [Handwritten Signature] Date: 11/25/2024

## Operator or Principal Executive Officer Designation of Authorized Signatory

To be completed by the operator if the application is signed by an authorized representative for the operator.

I hereby designate \_\_\_\_\_ 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.

Operator or Principal Executive Officer Name: \_\_\_\_\_

Email Address: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Notary

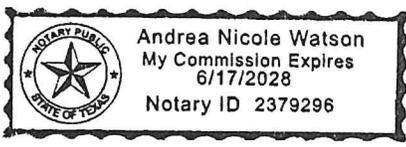
SUBSCRIBED AND SWORN to before me by the said John Gustafson

On this 25<sup>th</sup> day of November, 2024

My commission expires on the 17<sup>th</sup> day of June, 2028

Andrea Watson, Notary Public

Notary Public in and for  
Dallas County, Texas



Note: Application Must Bear Signature and Seal of Notary Public

## Attachments for Permit or Registration Modification with Public Notice

Refer to instruction document **200650-instr** for professional engineer seal requirements.

### **Attachments Table 1. Required attachments.**

<b>Required Attachments</b>	<b>Attachment Number</b>
Land Ownership Map	2
Landowners List	2
Marked (Redline/Strikeout) Pages	3
Unmarked Revised Pages	4

### **Attachments Table 2. Additional attachments as applicable.**

<b>Additional Attachments as Applicable (select all that apply and add others as needed)</b>	<b>Attachment Number</b>
<input type="checkbox"/> TCEQ Core Data Form(s)	
<input type="checkbox"/> Signatory Authority Delegation	
<input checked="" type="checkbox"/> Fee Payment Receipt	1
<input type="checkbox"/> Confidential Documents	

## Attachments for Permit or Registration Modification without Public Notice, or Temporary Authorization

Refer to instruction document **200650-instr** for professional engineer seal requirements.

### ***Attachments Table 3. Required attachments for modifications.***

<b>Required Attachments for Modification</b>	<b>Attachment Number</b>
Marked (Redline/Strikeout) Pages	
Unmarked Revised Pages	

### ***Attachments Table 4. Additional attachments for modifications and temporary authorizations, as applicable.***

<b>Additional Attachments as Applicable (select all that apply and add others as needed)</b>	<b>Attachment Number</b>
<input type="checkbox"/> TCEQ Core Data Form(s)	
<input type="checkbox"/> Signatory Authority Delegation	
<input type="checkbox"/> Fee Payment Receipt	
<input type="checkbox"/> Confidential Documents	

## Attachments for Permit or Registration Name Change or Transfer Modification

Refer to instruction document **200650-instr** for professional engineer seal requirements.

### **Attachments Table 5. Required attachments.**

<b>Required Attachments</b>	<b>Attachment Number</b>
TCEQ Core Data Form(s)	
Property Legal Description	
Property Metes and Bounds Description	
Metes and Bounds Drawings	
On-Site Easements Drawing	
Land Ownership Map	
Land Ownership List	
Property Owner Affidavit	
Verification of Legal Status	
Evidence of Competency	

### **Attachments Table 6. Additional attachments as applicable.**

<b>Additional Attachments as Applicable (select all that apply and add others as needed)</b>	<b>Attachment Number</b>
<input type="checkbox"/> Signatory Authority Delegation	
<input type="checkbox"/> Fee Payment Receipt	
<input type="checkbox"/> Confidential Documents	
<input type="checkbox"/> Final Plat Record of Property	
<input type="checkbox"/> Assumed Name Certificate	

**ATTACHMENT 3: MARKED COPY**

---

# CRWC TYPE IV LANDFILL

TCEQ MSW Permit No. 2278A

Collin County, Texas

## Attachment III-11 – Landfill Gas Management Plan

Prepared for:

Construction Recycling and Waste Corporation

September 2021

Rev. 01: November 2022

Rev. 02: June 2022

Rev.03: October 2022

Rev. ~~October~~November 2024

Revised by:

Parkhill  
3000 Internet Blvd, Suite 550  
Frisco, Texas 75034  
TBPE F-560

Parkhill Project No.: 016048.21

---

**CRWC TYPE IV LANDFILL  
MCKINNEY, COLLIN COUNTY, TEXAS  
TCEQ PERMIT NO. MSW-2278A**

**PART III**

**ATTACHMENT III-11  
LANDFILL GAS MANAGEMENT PLAN**

Prepared by:

TECHNICO Environmental, Inc.

*S. Kourosh*  
Sohrab Kourosh, Ph.D., J.D., P.E.



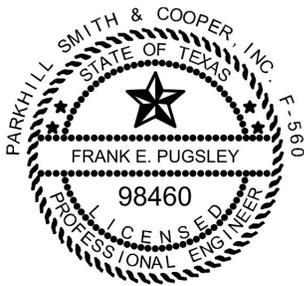
*6-3-99*  
Date

Revised by:

**Parkhill**

Parkhill, Inc.  
3000 Internet Boulevard, Suite 550  
Frisco, Texas 75034  
TBPE F-560

Revised September 2021,  
June 2022, October 2022,  
~~October~~ November 2024



10/20/2022

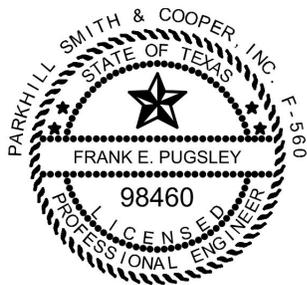
*Frank E. Pugsley, P.E.*

For May 2021, September 2021,  
June 2022, & October 2022  
Revisions Only



*for June 2013 Revisions Only*

**INTENDED FOR PERMITTING  
PURPOSES ONLY**



## ATTACHMENT III-11

10/20/2022

### LANDFILL GAS MANAGEMENT PLAN

*Frank E. Pugsley, P.E.*

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June 2022, & October 2022  
Revisions Only

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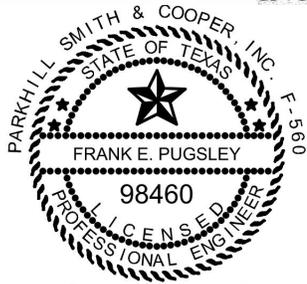
September 2021  
Rev. 01 November 2021  
Rev. 02 June 2022  
Rev. 03 October 2022  
Rev. ~~October~~ November 2024  
Revised by Parkhill

III-11-i



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Registration Number F-2578



(V) **LOCATION OF UTILITY LINES & PIPELINES  
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8.0 **LANDFILL GAS - MANAGEMENT AND CONTROL  
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10.0 **LANDFILL GAS MONITORING IN SITE  
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11.0 **SAMPLING REQUIREMENTS FOR LANDFILL GAS  
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*for June 2013  
Revisions Only*

*Frank E Pugsley, P.E.*

For May 2021, September 2021,  
June 2022, & October 2022  
Revisions Only

**REDLINE**



4194

*6-3-99*

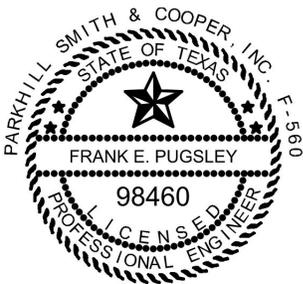
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**ATTACHMENTS:**

**ATTACHMENT III-11A - GAS PROBE INSTALLATION REPORT**

REDLINE



10/20/2022

*Frank E. Pugsley, P.E.*

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June 2022, & October 2022  
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III-11-iii

September 2021  
Rev. 01 November 2021  
Rev. 02 June 2022  
Rev.03 October 2022  
Rev. ~~October~~November 2024

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### 3.2 MINIMUM MONITORING FREQUENCY-QUARTERLY MONITORING §330.371(b)(2) &

#### §330.371(k)

Due to the exclusion of putrescible materials, the intensity and magnitude of landfill gas generation in Type IV landfills are generally lower than the Type I landfills. Considering the site conditions as reflected in the above factors, the proper gas monitoring frequency for the proposed landfill will be quarterly. This will be the minimum monitoring frequency.

### 4.0 CORRECTIVE MEASURES -EXCEEDENCE OF LANDFILL GAS (§330.371(c))

Methane gas concentration will not be allowed to exceed 5% by volume at the facility boundary and 1.25% by volume in the facility structures in accordance with §330.371(a). If these limits are exceeded, then immediate actions will be taken by The Landfill owner or operator to assure that the landfill facility is in compliance with the regulations.

Should a methane concentration in excess of 5% by volume be detected at any of the gas monitoring probes shown in Figure III-11.1, the landfill will implement appropriate remediation actions, place a copy of the remediation plan in the operating record, notify the TCEQ that the remediation plan has been implemented, and provide a copy of the remediation plan to the TCEQ. These actions may include, but are not limited to:

- Removing accumulated sediment from the landfill perimeter ditch to provide passive venting from subsurface soil and rock material.
- Inspecting and repairing any installed LFG control features.
- Installing and monitoring temporary bar probes to determine the extent of the migration,
- Installing LFG control features such as passive vents, ~~and/or~~ interceptor trenches, and/or an active gas collection system.

The location, installation, and nature of the remediation will depend on the location and occurrence of the gas exceedance at the perimeter gas monitoring probe. Typical details for passive vents, interceptor trenches, and bar probes are shown on Figures III-11.2 and III-11.3. Installation of any new LFG control feature for the corrective measures discussed above will be accompanied by a non-notice permit modification in accordance with 30 TAC §305.70(j) to indicate the location of the feature. If corrective actions for landfill gas remediation are implemented and are not already part of the facility permit, a permit modification should be submitted to the TCEQ pursuant to 30 TAC §330.70 to include the implemented actions.

#### 4.1 PROTECTIVE MEASURES AND NOTIFICATIONS §330.371(c)(1)

If methane is detected at concentrations higher than the abovementioned levels, protective measures such as evacuation or ventilation of buildings will be taken. Landfill owner or operator will notify the following and implement the most appropriate corrective measures mentioned above to reduce the methane gas concentration to levels below the specified levels:

- the TCEQ Executive Director,
- TCEQ Region 4,
- City of McKinney Mayor and/or City Manager,
- Collin County Judge,
- Collin County Commissioner,
- City's Fire Chief and/or Fire Marshall, and
- the adjacent land owner(s) ~~next to the landfill gas monitoring probe(s) where the exceedance above permissible limit is detected~~ within a 685' radius of the exceedance location.

#### 4.2 ACTION WITHIN SEVEN DAYS OF DETECTION §330.371(c)(2)

Within seven days of detection of methane gas concentration exceeding the above specified levels, Landfill owner or operator will record the methane gas levels and place them in the MSW site operating record and describe the steps to be taken to protect the human health; and

#### 4.3 ACTION WITHIN 60 DAYS OF DETECTION §330.371(c)(3)

Within 60 days of detection of methane gas above the regulatory level, and after an assessment, Landfill owner or operator will implement a methane gas remediation plan for the methane gas releases, place a copy of the remediation plan in the operating record, provide a copy to the Executive Director and notify the Executive Director that the Remediation Plan has been implemented. The Remediation Plan (RP) will describe the nature and the extent of the issue and the proposed remedy, and will be submitted to the Executive Director for review, comments, and suggestions for additional remedial measures as necessary, or approval.

#### 5.0 ALTERNATE SCHEDULE FOR COMPLIANCE §330.371(d)

The Executive Director may establish alternative schedules to for demonstrating compliance with subsections (b) or (c) of 30 TAC §330.371. If gas is detected in the Landfill perimeter probes above the limits in §330.371(a), more frequent monitoring will be implemented (weekly or monthly) during

**MCKINNEY 380 C&D LANDFILL  
TCEQ MSW PERMIT NO. 2278A**  
COLLIN COUNTY, TEXAS



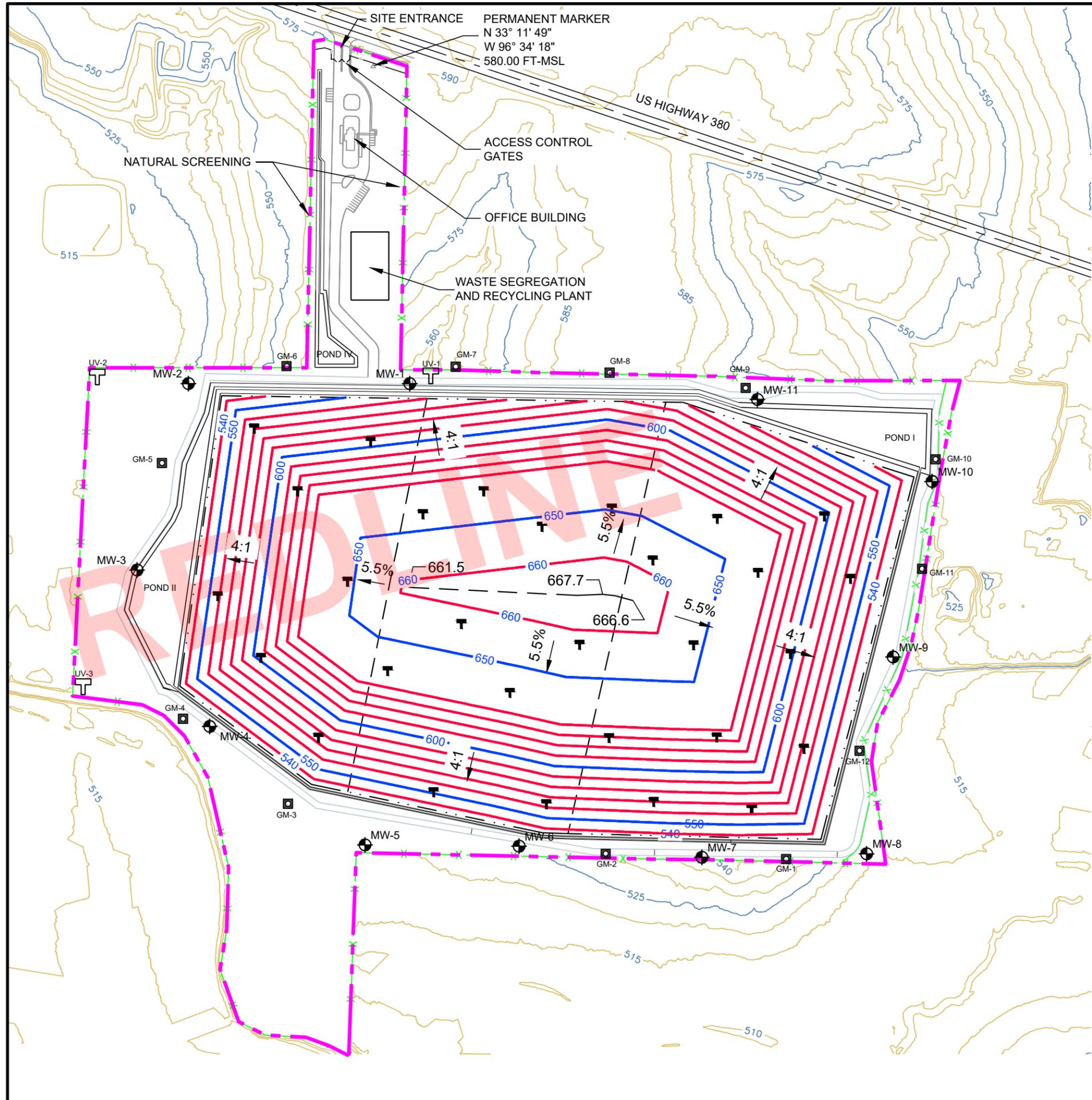
**CLIENT**  
Frontier Waste Solutions  
McKinney 380 C&D Landfill  
2540 E University Dr  
McKinney, TX 75069

**PROJECT NO.**  
6775.21

#	DATE	DESCRIPTION
5	NOV 2024	UPDATED NOTES
4	SEP 2024	ADDED UTILITY VENTS
3	OCT 2022	TECHNICAL NOD #2
2	JUNE 2022	TECHNICAL NOD #1

**Landfill Gas  
Monitoring System**

**FIG.III-11.1**



- NOTES / REFERENCE**
1. SITE LAYOUT AND RECREATED BY PARKHILL BASED ON MAY 13, 2003 DRAWINGS.
  2. THE INTERNAL ROADS WILL BE CONSTRUCTED AT THE OPERATOR'S DISCRETION TO BEST FIT THE OPERATIONS.
  3. THE LANDFILL WILL BE DEVELOPED SEQUENTIALLY BASED ON THE PHASE NUMBERS SHOWN. APPENDIX II-4.A DISCUSSES LANDFILL CONSTRUCTION SEQUENCE AND DEVELOPMENT IN DETAIL.
  4. MAXIMUM FINAL COVER ELEVATION 667.7 FT-MSL.
  5. VENT LOCATIONS SHOWN ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY

- LEGEND**
- PERMIT BOUNDARY
  - X-X- FENCE
  - - - PHASE LIMITS
  - PERIMETER ROAD
  - 530 EXISTING TOPOGRAPHIC CONTOURS
  - 510 FINAL COVER CONTOURS
  - MW-1 MONITORING WELLS
  - GM-3 GAS MONITORING WELLS
  - T PASSIVE GAS VENT
  - T UTILITY VENTS

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**ATTACHMENT 4: UNMARKED COPY**

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# CRWC TYPE IV LANDFILL

TCEQ MSW Permit No. 2278A

Collin County, Texas

## Attachment III-11 – Landfill Gas Management Plan

Prepared for:

Construction Recycling and Waste Corporation

September 2021

Rev. 01: November 2022

Rev. 02: June 2022

Rev.03: October 2022

Rev. November 2024

Revised by:

Parkhill  
3000 Internet Blvd, Suite 550  
Frisco, Texas 75034  
TBPE F-560

Parkhill Project No.: 016048.21

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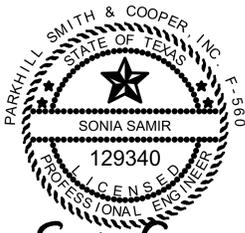
**CRWC TYPE IV LANDFILL  
MCKINNEY, COLLIN COUNTY, TEXAS  
TCEQ PERMIT NO. MSW-2278A**

**PART III**

**ATTACHMENT III-11  
LANDFILL GAS MANAGEMENT PLAN**

Prepared by:

**TECHNICO Environmental, Inc.**



*Sonia Samir*  
11/22/2024

For Oct/ Nov 2024 Revisions  
Only



*S. Kourosh*  
Sohrab Kourosh, Ph.D., J.D., P.E.

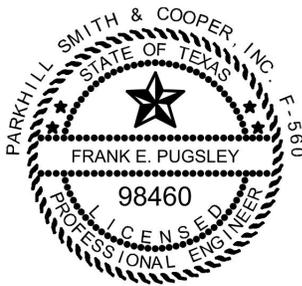
*6-3-99*  
Date

Revised by:

**Parkhill**

Parkhill, Inc.  
3000 Internet Boulevard, Suite 550  
Frisco, Texas 75034  
TBPE F-560

Revised September 2021,  
June 2022, October 2022,  
November 2024



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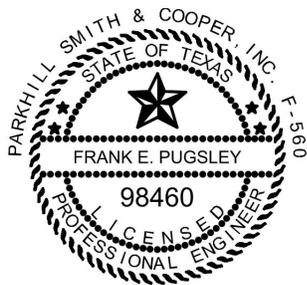
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For May 2021, September 2021,  
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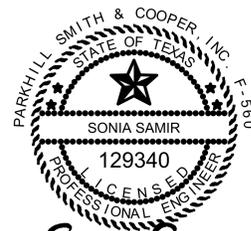
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*Sonia Samir*

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# ATTACHMENT III-11

## LANDFILL GAS MANAGEMENT PLAN

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Rev. 03 October 2022  
Rev. November 2024  
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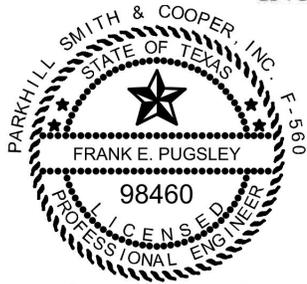
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**GOLDER ASSOCIATES INC.**  
Professional Engineering Firm  
Registration Number F-2578



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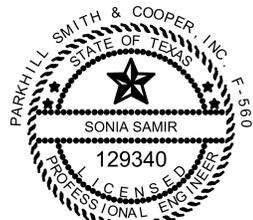
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*Sonia Samir*  
11/22/2024

For Oct/ Nov 2024 Revisions Only

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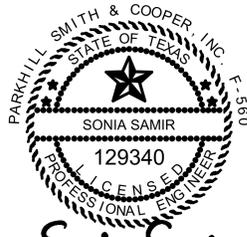
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Rev.03 October 2022  
Rev. November 2024

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**ATTACHMENTS:**

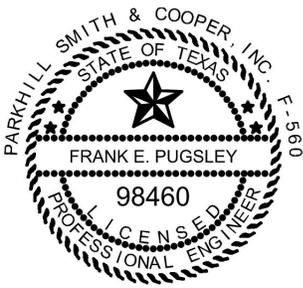
**ATTACHMENT III-11A - GAS PROBE INSTALLATION REPORT**



*Sonia Samir*

11/22/2024

For Oct/ Nov 2024 Revisions  
Only



10/20/2022

*Frank E Pugsley, P.E.*

For May 2021, September 2021,  
June 2022, & October 2022  
Revisions Only

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September 2021  
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**Sonia Samir**  
 11/22/2024  
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**MCKINNEY 380 C&D LANDFILL  
 TCEQ MSW PERMIT NO. 2278A  
 COLLIN COUNTY, TEXAS**



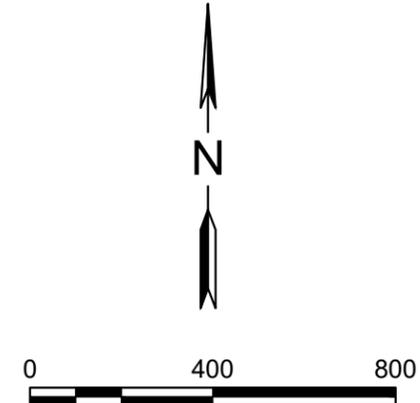
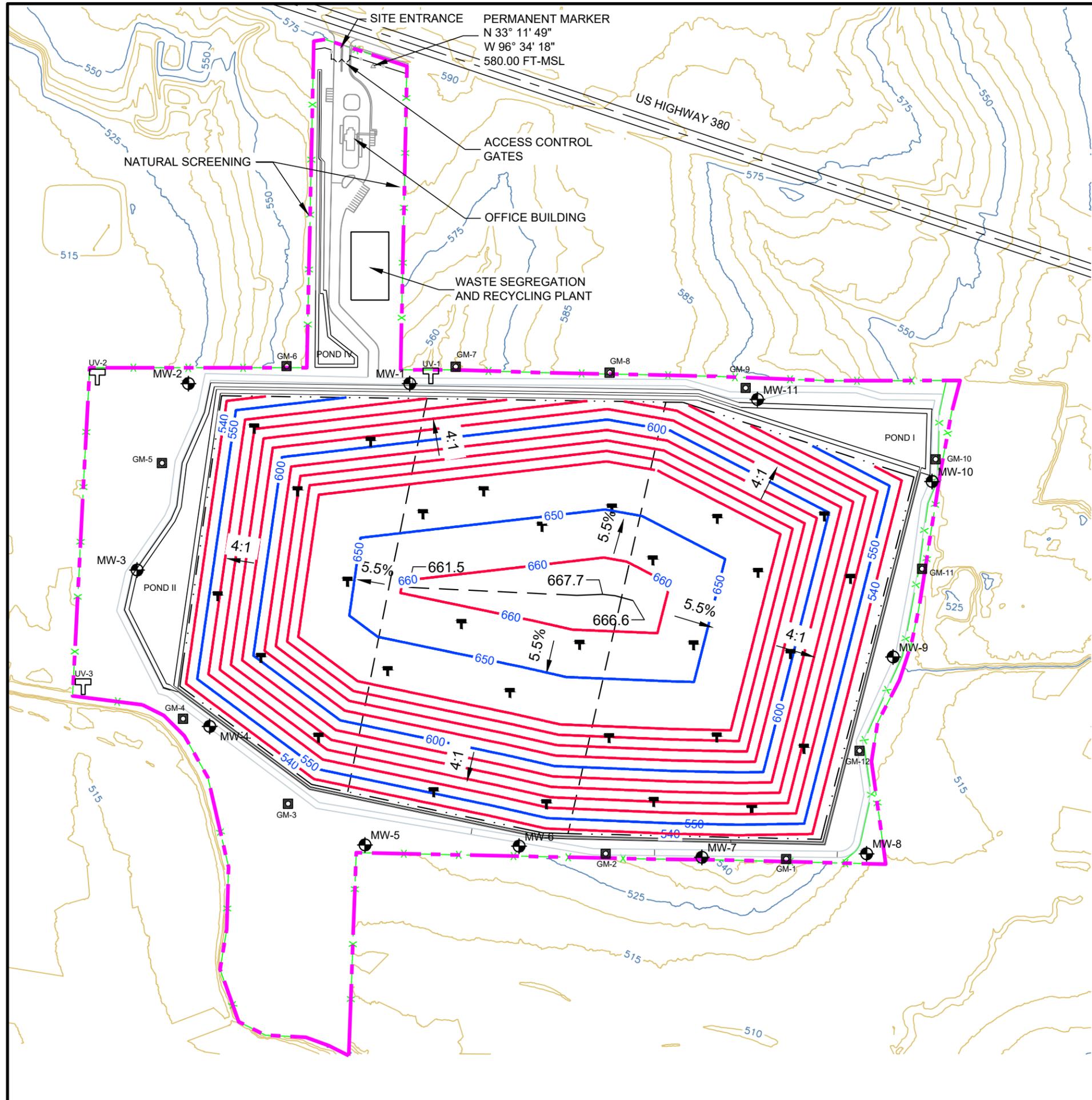
**CLIENT**  
 Frontier Waste Solutions  
 McKinney 380 C&D Landfill  
 2540 E University Dr  
 McKinney, TX 75069

**PROJECT NO.**  
 6775.21

#	DATE	DESCRIPTION
5	NOV 2024	UPDATED NOTES
4	SEP 2024	ADDED UTILITY VENTS
3	OCT 2022	TECHNICAL NOD #2
2	JUNE 2022	TECHNICAL NOD #1

**Landfill Gas  
 Monitoring System**

**FIG.III-11.1**



**NOTES / REFERENCE**

1. SITE LAYOUT AND RECREATED BY PARKHILL BASED ON MAY 13, 2003 DRAWINGS.
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5. VENT LOCATIONS SHOWN ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY

**LEGEND**

- PERMIT BOUNDARY
- x-x FENCE
- PHASE LIMITS
- PERIMETER ROAD
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- 510 FINAL COVER CONTOURS
- MW-1 MONITORING WELLS
- GM-3 GAS MONITORING WELLS
- T PASSIVE GAS VENT
- T UTILITY VENTS

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