



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

Date: 12/31/2024

Facility Name: City of Stephenville Landfill

Permit or Registration No.: 664

Nature of Correspondence:

Initial/New

Response/Revision to TCEQ Tracking No.:  
28474610 (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 checked="" type="checkbox"/> Limited Scope Major Amendment	<input type="checkbox"/> Groundwater Background Evaluation
<input 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:	



**BIGGS & MATHEWS ENVIRONMENTAL, INC**  
TBPE No. F-256 TBPG No. 50222

December 31, 2024

Ms. Charly Fritz, Deputy Director  
Ms. Megan Henson, Manager  
Office of Waste, Waste Permits Division  
Texas Commission on Environmental Quality  
P. O. Box 13087  
Austin, Texas 78711-3087

Re: City of Stephenville – Erath County  
Municipal Solid Waste (MSW) – MSW Permit No. 664  
Type IV Permit Application – Addendum 2 to NOD 2 Response  
Communication Tracking No. 28474610, RN102214566/CN600627814

Dear Ms. Fritz and Henson:

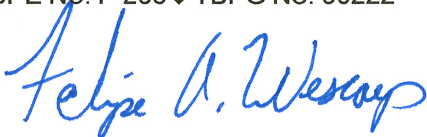
This Addendum 2 to the NOD 2 response dated May 8, 2024, is submitted on behalf of City of Stephenville for the Type IV Limited Scope Permit Amendment Application submitted March 31, 2023. Below is a list of changes included with this addendum.

- Page 6-1, Groundwater and Surface Water Protection Plan and Drainage Plan – Section 6.1 has been revised to state the following:
  - “Attachment 4 - Geology and Technical Report provides demonstrations that satisfy the requirements of 30 TAC 330.417(b)(1), including detailed analysis of regional geology, hydrogeology, and the relationship of the facility to drinking water intakes. Attachment 4B - Site Geology Report supplements this with historical site-specific geological data, including permeability testing results, piezometer measurements, and multiple subsurface investigations from 1972 through 1994 that document consistently low-permeability clay-dominated geology in the shallow subsurface. Together, these attachments demonstrate that approximately 200-300 feet of low-permeability Walnut Clay Formation exists between the base of the landfill and the uppermost aquifer, with area water wells predominantly screened at depths of approximately 300 feet below ground surface in deeper water-bearing units. Groundwater monitoring is not required based on the discussion and data presented in these attachments which demonstrate the natural protection against potential contaminant migration to groundwater resources by the Walnut Clay Formation.
- Table 8-1, 8-2, Page 8-1-4 and 8-2-2, Attachment 8 – Cost Estimate for Closure and Post Closure Care – LFG probes to be installed during final closure updated.

Ms. Fritz and Henson  
December 31, 2024  
Page 2

Sincerely,

BIGGS & MATHEWS ENVIRONMENTAL  
TBPE No. F-256 ♦ TBPG No. 50222



Felipe A. Wescoup, P.E.  
Senior Engineer

Attachments: City of Stephenville Limited Scope Permit Amendment – Addendum 3 to NOD 2

cc: Mr. Nick Williams, P.E., Director of Public Works, City of Stephenville  
Mr. Doug Svien, Mayor, City of Stephenville



**Texas Commission on Environmental Quality**  
**Part I Application Form for New Permit, Permit**  
**Amendment, or Registration for a**  
**Municipal Solid Waste Facility**

**Application Tracking Information**

Facility Name: City of Stephenville Landfill  
 Permittee or Registrant Name: City of Stephenville  
 MSW Authorization Number: 664  
 Initial Submission Date: 03/31/2023  
 Revision Date: 12/31/2024

Instructions for completing this Part I Application Form are provided in [TCEQ 00650-instr](#)<sup>1</sup>. Include a [Core Data Form \(TCEQ 10400\)](#)<sup>2</sup> with the application for the facility owner, and another Core Data Form for the operator if different from the owner. If you have questions, contact the Municipal Solid Waste Permits Section by email to [mswper@tceq.texas.gov](mailto:mswper@tceq.texas.gov), 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 type="checkbox"/> New Permit	
<input type="checkbox"/> Permit Major Amendment	<input checked="" type="checkbox"/> Permit Limited Scope Major Amendment
<input type="checkbox"/> New Registration	

<sup>1</sup> [www.tceq.texas.gov/downloads/permitting/waste-permits/msw/forms/00650-instr.pdf](http://www.tceq.texas.gov/downloads/permitting/waste-permits/msw/forms/00650-instr.pdf)

<sup>2</sup> [www.tceq.texas.gov/goto/coredata](http://www.tceq.texas.gov/goto/coredata)

**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: Nick Williams, P.E. Title: Director of Public Works

Email Address: nwilliams@stephenvilletx.gov

Signature: [Handwritten Signature] Date: 12/31/2024

**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 Nick Williams

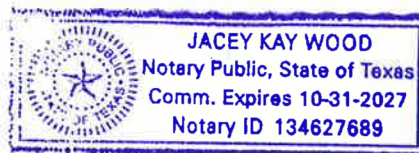
On this 31 day of December, 2024

My commission expires on the 31 day of October, 2027

Jacey Kay Wood

Notary Public in and for

Eratu County, Texas



Note: Application Must Bear Signature & Seal of Notary Public

**STEPHENVILLE TYPE IV LANDFILL  
ERATH COUNTY, TEXAS  
TCEQ PERMIT NO. MSW-664**

**ATTACHMENT 6  
GROUNDWATER AND SURFACE WATER PROTECTION PLAN  
AND  
DRAINAGE PLAN**

Prepared for

**City of Stephenville**

March 2023

Revised August 2023

Revised May 2024

Revised December 2024



Biggs & Mathews Environmental, Inc.  
Firm Registration No. F-256

Prepared by

**BIGGS & MATHEWS ENVIRONMENTAL**

1700 Robert Road, Suite 100 ♦ Mansfield, Texas 76063 ♦ 817-563-1144

TEXAS BOARD OF PROFESSIONAL ENGINEERS  
FIRM REGISTRATION NO. F-256

TEXAS BOARD OF PROFESSIONAL GEOSCIENTISTS  
FIRM REGISTRATION NO. 50222



Biggs & Mathews Environmental, Inc.  
Firm Registration No. F-256

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## 6.0 Groundwater and Surface Water Protection Plan and Drainage Plan

### 6.1 Groundwater Protection Plan

In order to mitigate leachate migration from the Subtitle D Type IV landfilled area, a constructed soil liner of permeability equal to or less than  $1 \times 10^{-7}$  cm/sec has been constructed throughout the Subtitle D Type IV development area. The liner is a minimum of 36 inches in thickness and constructed of clay materials with an additional 12-inch depth protective soil cover in accordance with the requirements of 30 TAC 330.339. Appropriately colored landfill markers are installed to delineate the limits of the Subtitle D Type IV lined area. All soils testing and evaluation of the constructed soil liner were performed in accordance with the approved Soil and Liner Quality Control Plan (SLQCP) (See Attachment 10). Because the constructed soil liner is designed and installed well above the level of groundwater, 30 TAC 330.337, Special Liner Design Constraints does not apply.

The Pre-Subtitle D landfilled areas have a final cover with a minimum of 24 inches in thickness constructed of clay materials in accordance with the requirements of 30 TAC 251-253, which were the rules in effect at the time of conversion. In addition to the final cover, the Pre-Subtitle D landfilled areas have either a constructed soil liner or an existing in situ clay liner. The existing final cover and existing soil liners will mitigate leachate from Type IV disposal over Pre-Subtitle D landfilled areas. Appropriately colored landfill markers will be installed to delineate the limits of Type IV disposal over Pre-Subtitle D landfilled areas.

Attachment 4 - Geology and Technical Report provides demonstrations that satisfy the requirements of 30 TAC 330.417(b)(1), including detailed analysis of regional geology, hydrogeology, and the relationship of the facility to drinking water intakes. Attachment 4B - Site Geology Report supplements this with historical site-specific geological data, including permeability testing results, piezometer measurements, and multiple subsurface investigations from 1972 through 1994 that document consistently low-permeability clay-dominated geology in the shallow subsurface. Together, these attachments demonstrate that approximately 200-300 feet of low-permeability Walnut Clay Formation exists between the base of the landfill and the uppermost aquifer, with area water wells predominantly screened at depths of approximately 300 feet below ground surface in deeper water-bearing units. Groundwater monitoring is not required based on the discussion and data presented in these attachments which demonstrate the natural protection against potential contaminant migration to groundwater resources by the Walnut Clay Formation.

### 6.2 Surface Water Protection Plan

This facility is designed to prevent:

- 1 A discharge of solid wastes or pollutants adjacent to or into the water in the state, including wetlands, that is in violation of the requirements of Section 26.121, Texas Water Code;
- 2 A discharge of pollutants into waters of the United States, including wetlands, that is in violation of the requirements of the Clean Water Act including but not limited to the Texas Pollutant Discharge Elimination System (TPDES) requirements;
- 3 A discharge of dredged or fill material to waters of the United States, including wetlands, that is in violation of the requirements under Section 404 of the Federal



Clean Water Act, as amended; and

- 4 A discharge of a nonpoint source pollution of waters of the United States, including wetlands, that violates any requirements of an areawide or statewide water quality management plan that has been approved under Section 208 of the Federal Clean Water Act, as amended.

The following is a discussion of the measures which will be implemented to meet these requirements. Discharges are computed using the methods described in the TxDOT Hydraulic Design Manual, Revised May 2014. (The Hydraulic Design Manual, Revised September 2019 uses a different equation to calculate rainfall intensity which is inconsistent with NOAA Atlas 14.)

**CITY OF STEPHENVILLE LANDFILL  
ERATH COUNTY, TEXAS  
TCEQ PERMIT NO. MSW 664**

**LIMITED SCOPE PERMIT AMENDMENT APPLICATION**

**PART III – SITE DEVELOPMENT PLAN  
ATTACHMENT 8  
COST ESTIMATE FOR CLOSURE AND POST CLOSURE CARE**

Prepared for

**CITY OF STEPHENVILLE**

March 2023  
Revised August 2023  
Revised December 2024



Biggs & Mathews Environmental, Inc.  
Firm Registration No. F-256

Prepared by

**BIGGS & MATHEWS ENVIRONMENTAL**

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**APPENDIX 8-1**  
Closure Cost Estimate Calculations

**APPENDIX 8-2**  
Post Closure Care Cost Estimate Calculations

**APPENDIX 8-3**  
Evidence of Financial Assurance



Biggs & Mathews Environmental, Inc.  
Firm Registration No. F-256

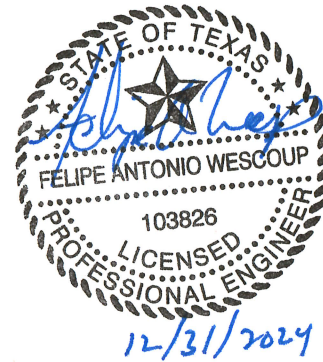
**Table 8-1  
Closure Cost Estimate**

No.	ITEM	COST
<b>1.0</b>	<b>Engineering Costs</b>	
1.1	Topographic Survey	\$ 4,858.00
1.2	Boundary Survey	\$ 3,470.00
1.3	Site Evaluation	\$ 3,470.00
1.4	Development of Plans	\$ 14,574.00
1.5	Administration	\$ 13,880.00
1.6	Closure Inspection and Testing	\$ 29,148.00
1.7	Permit Compliance Package	\$ 6,940.00
	Engineering Total	\$ 76,340.00
<b>2.0</b>	<b>Construction Costs</b>	
2.1	Final Cover System	
2.1.1	Infiltration Layer	\$ 206,465.00
2.1.2	Erosion Layer	\$ 60,725.00
2.2	Vegetation	\$ 38,864.00
2.3	Site Grading and Drainage	\$ 24,290.00
2.4	Site Fencing and Security	-
2.5	Landfill Gas Probe Installation	\$ 70,000.00
	Construction Total	\$ 400,344.00
	Engineering and Construction Total	\$ 476,684.00
	10 % Contingency	\$ 47,668.40
<b>3.0</b>	<b>Administrative Costs</b>	
3.1	Contract Performance Bond	\$ 9,533.68
3.2	TCEQ Contract Administration/Legal Fees	\$ 4,766.84
	Total	\$ 538,652.92

**Table 8-2  
Postclosure Care Cost Estimate**

No.	ITEM	ANNUAL COST
1.0	Engineering Costs	\$ 12,754.85
2.0	Construction / Maintenance Costs	\$ 11,364.25
	Subtotal	\$ 24,119.10
	10% Contingency	\$ 2,411.91
3.0	Administration	\$ 2,411.91
	<b>Annual Postclosure Costs</b>	<b>\$ 28,942.92</b>
	<b>Total Postclosure Costs</b>	<b>\$ 144,714.60</b>

**CITY OF STEPHENVILLE LANDFILL**  
**APPENDIX 8-1**  
**CLOSURE COST ESTIMATE CALCULATIONS**



Includes pages 8-1-1 through 8-1-4

## City of Stephenville Landfill CLOSURE COST ESTIMATE

**Required:** Estimate the cost to hire a third party to conduct final closure activities.

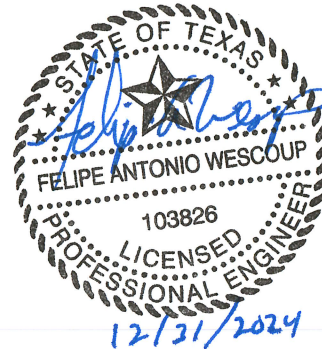
- References:**
- 1 Texas Natural Resources Conservation Commission, *Cost Estimate Handbook for Closure and Postclosure Care*, Version 1, August 1993.
  - 2 2012 RS Means Heavy Construction Cost Data, 26th Annual Edition.
  - 3 Construction costs from recent similar construction projects and cost estimates from heavy construction contractors.

**Solution:**

Final closure will require construction of final cover over	17.50 acres
Final closure will require closure of	100.00 acres
Final closure will require installation of LFG probes	14.00 ea

No.	ITEM	QTY	UNIT	UNIT COST	TOTAL COST
<b>1.0</b>	<b>Engineering Costs</b>				
1.1	Topographic Survey	100.00	ac	\$ 48.58	\$ 4,858.00
1.2	Boundary Survey	100.00	ac	\$ 34.70	\$ 3,470.00
1.3	Site Evaluation	100.00	ac	\$ 34.70	\$ 3,470.00
1.4	Development of Plans	17.50	ac	\$ 832.80	\$ 14,574.00
1.5	Administration	1	LS	\$ 13,880.00	\$ 13,880.00
1.6	Closure Inspection and Testing	17.50	ac	\$ 1,665.60	\$ 29,148.00
1.7	Permit Compliance Package	1	LS	\$ 6,940.00	\$ 6,940.00
<b>Engineering Total</b>					<b>\$ 76,340.00</b>
<b>2.0</b>	<b>Construction Costs</b>				
2.1	Final Cover System				
2.1.1	Infiltration Layer	17.50	ac	\$ 11,798.00	\$ 206,465.00
2.1.2	Erosion Layer	17.50	ac	\$ 3,470.00	\$ 60,725.00
2.2	Vegetation	17.50	ac	\$ 2,220.80	\$ 38,864.00
2.3	Site Grading and Drainage	17.50	ac	\$ 1,388.00	\$ 24,290.00
2.4	Site Fencing and Security	-	ac	-	-
2.5	Landfill Gas Probe Installation	14	ea	\$ 5,000.00	\$ 70,000.00
<b>Construction Total</b>					<b>\$ 400,344.00</b>
<b>Engineering and Construction Total</b>					<b>\$ 476,684.00</b>
	Contingency	10	%		\$ 47,668.40
<b>3.0</b>	<b>Administrative Costs</b>				
3.1	Contract Performance Bond	2.0	%		\$ 9,533.68
3.2	TCEQ Contract Administration/Legal Fees	1.0	%		\$ 4,766.84
<b>Total</b>					<b>\$ 538,652.92</b>

\*This closure cost estimate was developed in 2023 dollars.



**CITY OF STEPHENVILLE LANDFILL**

**APPENDIX 8-2**

**POSTCLOSURE CARE COST ESTIMATE CALCULATIONS**



Includes pages 8-2-1 through 8-2-2



## City of Stephenville Landfill POSTCLOSURE COST ESTIMATE

**Required:** Estimate the cost to hire a third party to conduct postclosure care activities.

**References:** 1. Texas Natural Resources Conservation Commission, *Cost Estimate Handbook for Closure and Postclosure Care*, Version 1, August 1993.

**Solution:**

Postclosure care period =	5 years
Permit area =	100 acres
Waste footprint <sup>1</sup> =	65.5 acres
Number of gas probes	14 probes

No.	ITEM	ANNUAL QTY	UNIT	UNIT COST	TOTAL COST
<b>1.0</b>	<b>Engineering Costs</b>				
1.1	Postclosure Plan	1	LS	\$ 694.00	\$ 694.00
1.2	Site Inspections	100	ac	\$ 13.88	\$ 1,388.00
1.3	Correctional Plans and Specifications	65.5	ac	\$ 34.70	\$ 2,272.85
1.4	Site Monitoring	56	event	\$ 150.00	\$ 8,400.00
<b>2.0</b>	<b>Construction / Maintenance Costs</b>	65.5	ac	\$ 173.50	\$ 11,364.25
	Subtotal				\$ 24,119.10
	Contingency	10	%		\$ 2,411.91
<b>3.0</b>	<b>Administration</b>	10	%		\$ 2,411.91
	Annual Postclosure Cost				\$ 28,942.92
	<b>Total Postclosure Cost</b>				<b>\$ 144,714.60</b>

\*This postclosure cost estimate was developed in 2023 dollars.

<sup>1</sup>The waste footprint includes the largest area requiring final cover of 17.5 acres and in-place final cover of 48 acres totalling 65.5 acres.

