# Technical Summary and Executive Director's Preliminary Decision of the

# City of Victoria Landfill MSW Permit Amendment Application No. 1522B

Type I Municipal Solid Waste Facility Victoria County, Texas

Applicant: City of Victoria

Date Prepared: August 2023

By the Municipal Solid Waste (MSW) Permits Section Office of Waste, Waste Permits Division Texas Commission on Environmental Quality

This summary was prepared in accordance with 30 Texas Administrative Code Section 281.21(c). The information contained in this summary is based upon the permit application and has not been independently verified.

Technical Summary Facility Name – Permit No. 1522B Page 2 of 15

This page intentionally left blank.

## **Contents**

1.	Appl	icant Contact Information	5
2.	Gene	ral Information	5
	2.1	Permit Application	5
	2.2	Wastes to be Accepted	5
	2.3	Waste Acceptance Rate and Landfill Life	5
3.	Tech	nical Review	6
4.	Loca	tion and Size	6
	4.1	Location	6
	4.2	Elevation and Coordinates of Permanent Benchmark	6
	4.3	Size	6
5.	Facil	ity Design, Construction, and Operation	6
	5.1	Facilities Authorized	6
	5.2	Waste Placement	7
	5.3	Liner	7
	5.4	Final Cover System	7
	5.5	Leachate Collection System	8
6.	Land	Use	8
	6.1	Zoning	8
	6.2	Surrounding Land Uses	8
	6.3	Residences and Businesses	8
	6.4	Schools, Churches, and Historical Sites	9
	6.5	Growth Trends	9
7.	Loca	tion Restrictions	9
	7.1	Airport Safety	9
	7.2	Floodplains	9
	7.3	Wetlands	9
	7.4	Fault Areas and Seismic Impact Zones	9
	7.5	Unstable Areas	10
	7.6	Protection of Endangered Species	10
8.	Tran	sportation and Access	10
9.	Surfa	ace Water Protection	10
10.	Grou	ndwater Protection	11

## Technical Summary City of Victoria Landfill – Permit No. 1522B Page 4 of 15

	10.1 Groundwater Protection	.11
	10.2 Monitoring Wells	.11
11.	Landfill Gas Management	.11
12.	Site Development Plan and Site Operating Plan	.11
13.	Financial Assurance	.11
14.	Public Participation Process	.11
15.	Executive Director's Preliminary Decision	.13
16.	Additional Information	.13
Δtta	achment 1—Municipal Solid Waste Site Assessment Form	14

## 1. Applicant Contact Information

Name of Applicant: City of Victoria

700 Main Center, Suite 124 Victoria, Texas 77902

Name of Facility: City of Victoria Landfill

Contact Person: Darryl Lesak

700 Main Center, Suite 124 Victoria, Texas 77902 Phone No. 361-485-3381

Consulting Engineer: Tonya Koller, P.E.

**Burns & McDonnell Engineering** 

8911 N Capital of TX Hwy., Building. 3, Suite. 3100

Austin, Texas 78759 Phone No. 512-872-7130

#### 2. General Information

## 2.1 Permit Application

The applicant has submitted this application requesting authorization to the lateral and vertical expansion of an existing Type I municipal solid waste (MSW) landfill in Victoria County, Texas. The total permitted facility will include 454.52 acres of which approximately 359.7 acres will be used for waste disposal. The final elevation of the final cover material over the waste fill will be 187.8 feet above mean sea level (msl).

## 2.2 Wastes to be Accepted

Solid waste to be disposed of will consist of municipal solid waste, construction & demolition waste, brush, rubbish, used or scrap tires that have been processed, Class 2 nonhazardous industrial waste, and Class 3 nonhazardous industrial waste. This facility will also accept and dispose of certain Class 1 industrial nonhazardous solid wastes and special wastes as specified in the permit.

The landfill unit may not accept wastes that are expressly prohibited by Title 30 Texas Administrative Code (30 TAC) Chapter 330, and any waste that is not authorized for acceptance.

#### 2.3 Waste Acceptance Rate and Landfill Life

Authorized wastes may be accepted at an estimated maximum rate of 711 tons per day.

Technical Summary City of Victoria Landfill - Permit No. 1522B Page 6 of 15

The estimated remaining landfill life is approximately 138 years as of August 2022, based on anticipated waste acceptance rates of 627 tons per day.

#### 3. Technical Review

The application has been technically reviewed by the MSW Permits Section to determine its compliance with the applicable requirements in 30 TAC Chapters 305 and 330. Chapter 305 sets forth standards and requirements for applications; Chapter 330 contains the minimum regulatory criteria for MSW facilities. A site assessment pursuant to 30 TAC §330.73(c) was conducted on December 14, 2022. The results of the assessment are documented in Attachment 1 to this Technical Summary.

The information in the permit application demonstrates compliance with the Chapters 305 and 330 regulatory requirements. The application was declared technically complete and a draft permit has been prepared.

#### 4. Location and Size

#### 4.1 Location

The facility is located at 18545 FM 1686, Victoria, Texas 77905 in Victoria County at approximately 2.5 miles from the intersection of US-87 and FM 1686.

### 4.2 Elevation and Coordinates of Permanent Benchmark

Horizontal datum: NAVD 1983 (horizontal), NAVD 1988 (vertical)

Latitude: N 28° 41′ 36"

Longitude: W 96° 54′ 23″

Elevation: 64.97 feet above mean sea level (msl)

#### 4.3 Size

The total area within the permit boundary under the proposed permit is approximately 454.52 acres.

#### 5. Facility Design, Construction, and Operation

#### 5.1 Facilities Authorized

The permit will authorize the operation of a Type I MSW landfill with a total net disposal volume (waste and daily cover) of approximately 50.7 million cubic yards in addition to support structures and facilities as described in the permit application and subject to the limitations contained in the permit and commission rules. Of the 50.7 million cubic yards, 35 million cubic yards will be

added due to the lateral and vertical expansion proposed under this permit amendment.

The facility consists of a perimeter fence, a scale house, all-weather roads, borrow areas, soil stockpiles, landfill gas collection system, gas monitoring wells, landfill gas-to-energy system, groundwater monitoring wells, leachate collection and leachate storage tanks, solid waste disposal area, and stormwater controls. Within the proposed permit boundary is also an existing composting operation, authorized under a separate registration (Registration 42034).

#### 5.2 Waste Placement

The maximum elevation of waste placement will be approximately 185.4 feet above msl. The minimum elevation of waste placement will be approximately 35 feet above msl. The deepest excavation elevation for the liner and sumps is approximately 31 feet above msl.

#### 5.3 Liner

A liner system meeting the requirements of 30 TAC Chapter 330 Subchapter H will be constructed. It will consist of the following components (listed in order from top to bottom of liner system):

- 24-inch thick protective cover soil layer
- Double-sided drainage geocomposite
- 60-mil HDPE geomembrane
- (MSW only areas) 24 inches of re-compacted soil, with a hydraulic conductivity of no more than  $1x10^{-7}$  centimeter per second (cm/sec)
- (MSW plus below grade Class 1 areas) 36 inches of re-compacted soil, with a hydraulic conductivity of no more than 1x10<sup>-7</sup> cm/sec. There shall be a minimum of 18 inches of engineered subgrade (prepared to a maximum hydraulic conductivity of 1x10<sup>-8</sup> cm/sec) placed prior to placement of the compacted soil liner.

A geosynthetic clay liner (GCL) will be incorporated into the liner system underneath the leachate sumps. Liner system components for existing and future landfill areas are listed in Table 4-1 of Part III in Section XI of this permit.

The liner in the existing pre-Subtitle D areas is 24 inches of re-compacted soil, with a hydraulic conductivity of no more than  $1x10^{-7}$  cm/secs.

## 5.4 Final Cover System

The final cover system is designed to meet the requirements of 30 TAC Chapter 330 Subchapter K and will be placed over the waste. Each disposal unit will be covered with a composite final cover consisting of the following components (listed in order from top to bottom):

Technical Summary City of Victoria Landfill - Permit No. 1522B Page 8 of 15

- 12 inches of erosion layer capable of sustaining native plant growth
- 200-mil geocomposite drainage layer
- 40-mil LLDPE geomembrane
- 18-inch clay rich soil infiltration layer (permeability no greater than 1x10<sup>-5</sup> cm/sec)

For the pre-Subtitle D areas, the final cover consists of 6-inch protective soil layer over 18 inches of clay-rich soil with a hydraulic conductivity of no more than  $1 \times 10^{-7}$  cm/sec.

The existing installed final cover systems are described in Section 2.3.4 of Parts I/II in Section XI of this permit.

## 5.5 Leachate Collection System

For the existing Subtitle D areas and the proposed lateral expansion areas, the leachate collection system is designed to meet the requirements of 30 TAC §§330.331 and 330.333 and will be placed on top of the liner system. The leachate collection system consists of a drainage layer, collection trenches, pipes, sumps, risers, and pumps. Leachate re-circulation is proposed for this facility. The primary disposal for leachate is off-site through a publicly owned treatment works.

No leachate collection system was installed in the pre-Subtitle D areas. Leachate collection system is not required in pre-Subtitle D areas.

#### 6. Land Use

The application provides information about land use in the vicinity of the site in accordance with 30 TAC §330.61(h).

## 6.1 Zoning

The facility is located in Victoria County and outside of the extraterritorial limits of the City of Victoria. There is no zoning in the area of the facility.

## 6.2 Surrounding Land Uses

The land uses of the surrounding areas within one mile from the facility boundary are primarily cultivated crops and pasture/hay, and small areas of residential and commercial/industrial uses.

## 6.3 Residences and Businesses

Based on land use analysis and aerial imagery, there are an estimated 39 residences within one mile of the facility boundary. Within one mile from the facility, there are three commercial/industrial establishments.

### 6.4 Schools, Churches, Hospitals, Cemeteries, and Historical Sites

There are no known schools, churches, hospitals, cemeteries, historical structures and sites, archaeologically significant sites, or sites having exceptional aesthetic quality located within one mile of the permit boundary.

#### 6.5 Growth Trends

The City of Victoria is located approximately seven miles north-northwest of the landfill. The City of Victoria is the largest city in and the county seat of Victoria County. Based on estimates from the US Census Bureau, Victoria County is growing at a rate of 0.22 percent and the City of Victoria had a total population of 66,916 in 2019, with an average annual growth rate of 0.8 percent since the 2010 Decennial Census. This is significantly slower growth than for the total Texas population (approximately 10 percent) and the US population (approximately 4 percent) over similar time periods.

## 7. Location Restrictions

Location restrictions for municipal solid waste landfills are set forth in 30 TAC Chapter 330, Subchapter M.

#### 7.1 Airport Safety

The application indicates that there are no airports within six miles of the facility, and that the landfill is not located within 10,000 feet of any airport runway. The nearest public-use airport runway to the site is the Victoria Regional Airport, which is approximately 10 miles from the site. The facility is considered to be in compliance with 30 TAC §330.545.

## 7.2 Floodplains

The permit boundary is not located within a 100-year floodplain. The facility is considered to be in compliance with 30 TAC §330.547.

#### 7.3 Wetlands

There are no jurisdictional wetland areas within the permit boundary. The facility is considered to be in compliance with 30 TAC §330.553.

#### 7.4 Fault Areas and Seismic Impact Zones

There are no known faults within 200 feet of the facility, and the facility is not located within a seismic impact zone as defined in 30 TAC §330.557. The facility is considered to be in compliance with 30 TAC §330.555 and §330.557.

#### 7.5 Unstable Areas

No known unstable areas, as defined in 30 TAC §330.559, were found at the site. The facility is considered to be in compliance with 30 TAC §330.559.

## 7.6 Protection of Endangered Species

The U.S. Fish and Wildlife Service determined that the applicant complied with the federal rule. The Texas Parks and Wildlife Department indicated that the Wildlife Habitat Assessment Program does not anticipate significant adverse impacts to rare, threatened, or endangered species, or other fish and wildlife resources.

#### 8. Transportation and Access

All site traffic will enter from FM 1686 via Texas Highway 185 or U.S. Highway 87. Texas Highway 185, and U.S. Highway 87 have no weight loading restrictions, beyond the legal limit of 80,000 pounds per vehicle as prescribed by law. The current load rating of FM 1686 is 58,420 pounds, which is adequate to handle existing waste vehicles which have a gross weight of approximately 45,000 to 54,000 pounds. The existing paved entrance road will continue to provide access to the site from FM 1686.

Section 10.1 of Part I/II of the application states, "It is estimated that at peak filling rates, the maximum truck traffic will be approximately 100 vehicles per day. This maximum vehicle traffic rate remains unchanged since the 1997 permit, and traffic volumes have not materially changed in at least 20 years. The proposed expansion is designed to increase landfill life and is not anticipated to materially change traffic or waste volumes." Additionally, correspondence from TxDOT, dated May 21, 2021, is included in Appendix F, which states that the TxDOT Yoakum District has reviewed the proposed expansion and staff do not anticipate any adverse impacts as a result of the project.

#### 9. Surface Water Protection

Water that has come into contact with waste, leachate, or gas condensate is contaminated water, as defined in 30 TAC §330.3. Stormwater that comes into contact with solid waste will be considered contaminated water. Temporary berms will be constructed to minimize the amount of surface water that comes into contact with the waste. Contaminated stormwater at the working face will be contained by berms. Contaminated surface water and groundwater will not be placed in or on the landfill. Contaminated water will be transported to an authorized facility for treatment and disposal.

#### 10. Groundwater Protection

#### 10.1 Groundwater Protection:

The liner system and leachate collection system will provide protection of groundwater from contamination.

#### 10.2 Monitoring Wells:

The groundwater monitoring system which will provide for detection of potential releases from the facility will consist of 22 monitor wells at the time of permit issuance. The groundwater monitor wells will be sampled, and the samples analyzed in accordance with the procedures in the Groundwater Sampling and Analysis Plan in Attachment 6 to Part III of the Permit Amendment Application.

## 11. Landfill Gas Management

A landfill gas monitoring system consists of 18 existing permanent landfill gas monitoring probes around the perimeter of the facility. Additional monitor probes will be installed around the landfill perimeter as scheduled in Attachment 8 of the application. The landfill gas monitoring system will be monitored quarterly to detect potential gas migration at the facility boundary.

Enclosed facility structures will also be monitored for methane gas with continuous gas monitor/alarms.

## 12. Site Development Plan and Site Operating Plan

The Site Development Plan (SDP) is Part III of the permit application and sets forth the engineering design and other technical aspects of the facility. The Site Operating Plan (SOP) is Part IV of the permit application. The SOP provides operating procedures for the site management and the site operating personnel for the daily operation of the facility to maintain the facility in compliance with the engineering design and applicable regulatory requirements. These documents become part of the permit.

### 13. Financial Assurance

Authorization to operate this facility is contingent upon the maintenance of financial assurance in accordance with 30 TAC Chapter 330, Subchapter L and Chapter 37 (Financial Assurance) for closure and post-closure care.

#### 14. Public Participation Process.

Technical review of the application has been completed, the application has been declared technically complete, and a draft permit and *Notice of Application and* 

*Preliminary Decision* (NAPD) have been prepared. Information about the application, the draft permit, the notice, and this technical summary will be filed in the TCEQ Office of the Chief Clerk for processing.

The public can participate in the final decision on the issuance of a permit as follows:

- 14.1 The TCEQ will hold a public meeting if the executive director determines that there is substantial public interest in the application or if requested by a local legislator. During a public meeting the commission accepts formal comments on an application and holds an informal question and answer period.
- 14.2 The NAPD will be sent to the applicant and published in a newspaper. The NAPD provides instructions for submitting comments, requesting a public meeting, or requesting a hearing on the application, and that all comments or requests must be submitted within 30 days from the date of newspaper publication of the notice.
- 14.3 After the comment period has ended, if comments are received a *Response to Comments* (RTC) will be prepared. The RTC will be sent to all persons who submitted comments or requested a public meeting or hearing on the application. Persons who receive the RTC will have an additional 30 days after the date the RTC is mailed in which to request a public hearing.
- 14.4 After the 30-day period to request a hearing has ended, if any requests have been received the matter will be placed on an agenda for a meeting of the TCEQ commissioners to determine whether to grant any of the hearing requests and refer the matter to the State Office of Administrative Hearings for a public hearing.
- 14.5 A public hearing is a formal process in front of an Administrative Law Judge (ALJ) who conducts the hearing. The applicant and protestant party(ies) present witnesses and testimony to support or dispute information contained in the application. When the hearing process is complete, the ALJ will issue a *Proposal for Decision* (PFD). The PFD will be placed on an agenda for a meeting of the TCEQ commissioners to consider whether to grant or deny the application.
- 14.6 After the commission has acted on an application, a motion for rehearing may be made by a party that does not agree with the decision. A motion for rehearing must be filed no later than 25 days after the party or the party's attorney of record is notified of the decision. The motion may be set on another agenda for consideration by the commission or allowed to expire by operation of law.

Technical Summary City of Victoria Landfill - Permit No. 1522B Page 13 of 15

14.7 Applications for which no one requests a contested case hearing, and which meet all other requirements in 30 TAC §50.133(a) are uncontested applications and will be acted on by the executive director. An uncontested application will be placed on the executive director's agenda and the permit will be issued. The TCEQ will then mail notice that the permit was issued. The notice will be mailed according to 30 TAC §50.133(b) to the applicant, to any person who requested to be on the mailing list for the application, any person who submitted comments during the public comment period, and any person who timely filed a request for a contested case hearing. The notice will include information about the opportunity to file a motion to overturn the executive director's decision. Any motion to overturn the executive director's decision must be submitted no later than 23 days after the date the agency mails notice of the issued permit.

### 15. Executive Director's Preliminary Decision

The executive director has made the preliminary decision that this proposed permit, if issued, meets all statutory and regulatory requirements.

#### 16. Additional Information

For information concerning the regulations covering this application, contact the Municipal Solid Waste Permits Section:

Mr. Frank Zeng
Municipal Solid Waste Permits Section, MC 124
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711
Email: Frank.Zeng@tceq.texas.gov

For more detailed technical information concerning any aspect of this application or to request a copy of the SDP or SOP, please contact the consulting engineer or the applicant at the address provided at the beginning of this summary.

The application can be viewed on the internet at https://www.tceq.texas.gov/goto/mswapps

For information concerning the legal aspects of the hearing process, agency rules, and submitting public comments, please contact the Texas Commission on Environmental Quality's Office of the Public Interest Counsel at (512) 239-6363.

## Attachment Municipal Solid Waste Site Assessment Form



#### **Texas Commission on Environmental Quality**

## **Municipal Solid Waste Site Assessment Form**

#### **Facility Information**

Regulated Entity Name: CITY OF VICTO	RN: RN100212968			
Customer Name: CITY OF VICTORIA	CN: CN600243257			
Permit Number: 1522B	Application Type: New Permit 🗸 Amendment			
Facility Type (check all that apply): 🗹 Type I 🗌 Type IV 🔲 Arid Exempt				
Physical Address: 18545 FM 1686, VICTORIA				

#### **Facility Representative**

Present (check all that apply):   ✓ Applicant   Consultant  ✓ Other:			
Name: Darryl Lesak (applicant)			
Email: dlesak@victoriatx.gov	Phone: 361-485-3381		
Additional Names (if applicable): Scott Trebus (Operator)			

#### **TCEQ Reviewer**

Name:	Name: Frank Zeng/Jason Baiocchi Date of Site Assessment: 12/14/2022		Site Assessment: 12/14/2022
Email:	frank.zeng@tceq.texas.gov	Phone:	512-239-1132
Is the location consistent with physical address? ✓ Yes ☐ No			
If No, provide location description:			

#### **Consistency with Application**

Check **Yes** or **No** if an item is present or has been constructed, and if it is consistent with the application. If an item is not consistent with the application, explain briefly why in the *Comments* column. If an item is not applicable, skip to the *Comments* column and indicate **NA**. Use the Additional Comments section at end of this form for more comment space.

Item	Constructed?	Consistent?	Comments
Application Notice Signs	☐ Yes ☑ No	□ Yes □ No	Sign for the amendment application not posted. Applicant will post the sign and send picture.
Facility Access Controls	☑ Yes □ No	✓ Yes  □ No	
Facility Entrance Roads	☑ Yes □ No	☑ Yes □ No	
Facility Buildings	☑ Yes □ No	✓ Yes  □ No	
Landfill Gas Monitoring Wells	☑ Yes ☐ No	☑ Yes ☐ No	

Item	Constructed?	Consistent?	Comments
Groundwater Monitoring Wells	☑ Yes □ No	☑ Yes ☐ No	
Existing or Abandoned Water Wells	✓ Yes  No	✓ Yes  No	Two non-potable water wells to be abandoned before landfill development.
Existing or Abandoned Oil, Gas, or RRC Wells	☐ Yes ☑ No	☑ Yes ☐ No	
Surface Water Features	☑ Yes □ No	✓ Yes	
Permanent Benchmark	☑ Yes □ No	☑ Yes □ No	Permittee plans for future relocation of the benchmark to higher ground via a MOD.
Permit Boundary Markers	☑ Yes □ No	✓ Yes  No	
Buffer Zone Markers	☑ Yes □ No	✓ Yes  No	
Easement Markers	☑ Yes □ No	☑ Yes ☐ No	
Floodplain Markers	☐ Yes ☑ No	✓ Yes  □ No	Outside of current permit boundary.
Property Boundary	✓ Yes  □ No	☑ Yes □ No	
Easements Within or Adjacent to Permit Boundary	☑ Yes ☐ No	☑ Yes ☐ No	Overhead power line to be relocated for future landfill development.
Existing Structures Within 500 feet of Permit Boundary	□ Yes ☑ No	☑ Yes ☐ No	

## **Additional Comments:**

(Jason) Some groundwater monitoring wells located outside boundary for ASD (Arsenic).		