

# Texas Commission on Environmental Quality



## Permit for a Municipal Solid Waste (MSW) Management Facility

Issued under provisions of Texas  
Health & Safety Code  
Chapter 361

MSW Permit No.: 2400

Name of Site Operator/Permittee: City of Waco

Operator: City of Waco

Property Owner: City of Waco

Facility Name: City of Waco Landfill

Facility Address: 4730 TK Parkway, Axtell, TX

Facility Classification: Type I Municipal Solid Waste Management Facility

The permittee is authorized to store, process, and dispose of wastes in accordance with the limitations, requirements, and other conditions set forth herein. This permit is granted subject to the rules and orders of the Commission and laws of the State of Texas and it replaces any previously issued permit. Nothing in this permit exempts the permittee from compliance with other applicable rules and regulations of the Texas Commission on Environmental Quality. This permit will be valid until canceled, amended, or revoked by the Commission.

*Approved, Issued and Effective* in accordance with Title 30, Texas Administrative Code (30 TAC), Chapter 330.

Issued Date: [EA inserts date]

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For the Commission

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**I. Facility Location and Size**

A. Facility Physical Location

4730 TK Parkway (approximately 0.4 miles south of the intersection of TK Parkway and State Highway 31) Axtell, McLennan and Limestone Counties, Texas

B. Facility Permanent Benchmark

Latitude: 31° 41' 54.23" N

Longitude: 96° 55' 43.89" W

Elevation: 541.15 feet above mean sea level

C. Facility Legal Description

The legal description is contained in Section 13 in Part I/II in Attachment A of this permit.

D. Facility Size

Approximately 502.5 acres

**II. Hours of Waste Acceptance and Operation**

A. The waste acceptance hours at this facility shall be Monday thru Saturday, 7 am to 7 pm. The operating hours at this landfill which include the use of heavy equipment shall be Monday through Saturday from 5:00 a.m. to 9:00 p.m.

B. The operator shall post the actual hours and days of operation on the site sign in accordance with 30 TAC §330.137.

C. In accordance with 30 TAC §§330.135(c) and (d), the TCEQ Regional Office may allow additional temporary operating hours to address disaster or other emergency situations, or other unforeseen circumstances that could result in the disruption of waste management services in the area. The facility must record, in the site operating record, the dates, times, and duration when any alternative operating hours are utilized.

**III. Authorized Waste Streams, Waste Acceptance Rate, and Landfill Disposal Capacity**

A. Authorized Waste Streams

The permittee is authorized to dispose of household waste, yard waste, commercial waste, construction-demolition waste, special waste, Class 2 non-hazardous industrial wastes, and Class 3 non-hazardous industrial wastes which includes rock, brick, glass, dirt, and certain plastics and rubber, and other waste as approved by the executive director. The acceptance of the special wastes is contingent upon such waste being handled in accordance with 30 TAC §330.171, and in accordance with the listed and described procedures in Part IV in Attachment A of this permit.

**B. Prohibited Waste Streams**

The permittee shall not accept or knowingly dispose of the wastes listed in 30 TAC §330.15(e), subject to the provisions therein. The permittee shall not accept or knowingly dispose of any other waste not identified in Section III.A. of this permit.

**C. Waste Acceptance Rate**

Solid waste may be accepted for disposal at this facility at the initial rate of approximately 305,000 tons per year [approximately 1,070 tons per day based on 286 days-per-year of operation] and increasing over time to a maximum acceptance rate of approximately 454,000 tons per year [approximately 1,590 tons per day based on 286 days per year of operation]. The actual yearly waste disposal acceptance rate is a rolling quantity based on the sum of the previous four quarters of waste acceptance. In accordance with 30 TAC 330.125(h), if the annual waste acceptance rate exceeds the rate estimated in the landfill permit application and the waste increase is not due to a temporary occurrence, the owner or operator shall file an application to modify the permit application, including the revised estimated waste acceptance rate, in accordance with 30 TAC §305.70(k), within 90 days of the exceedance as established by the sum of the previous four quarterly summary reports. The application must propose any needed changes in the site operating plan to manage the increased waste acceptance rate to protect public health and the environment. The increased waste acceptance rate may justify requiring permit conditions that are different from or absent in the existing permit. This provision is not intended to make an estimated waste acceptance rate a limiting parameter of a landfill permit.

**D. Landfill Disposal Capacity**

The total waste disposal capacity of the landfill (including waste and daily and intermediate cover) is approximately 25 million cubic yards.

**IV. Facility Design, Construction, Operation, and Maintenance**

**A. General Facility Requirements**

1. Facility design, construction, operation and maintenance must comply with the provisions of this permit; commission rules, including but not limited to 30 TAC Chapter 330; special provisions contained in this permit; Parts I through IV of the permit application incorporated by reference in Attachment A of this permit; and, amendments, corrections, and modifications incorporated by reference in Attachment B of this permit. The facility construction and operation shall be conducted in a manner that is protective of human health and the environment.
2. The facility shall be designed, constructed, operated, and maintained to prevent the release and migration of any waste, contaminant, or pollutant beyond the point of compliance defined in 30 TAC §330.3, and to prevent inundation or discharge from the areas surrounding the facility components. Each receiving, storage, processing, and disposal area shall have a containment system that will collect spills and incidental precipitation in such a manner that prevents:
  - a. The release of any contaminated runoff, spills, or precipitation;

- b. Washout of any waste by a 100-year frequency flood; and
  - c. Run-on into the disposal areas from off-site areas.
3. The site shall be designed and operated so as not to cause a violation of:
- a. The requirements of §26.121 of the Texas Water Code;
  - b. Any requirements of the Federal Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements of §402, as amended, and/or the Texas Pollutant Discharge Elimination System (TPDES), as amended;
  - c. The requirements under §404 of the Federal Clean Water Act, as amended; and
  - d. Any requirement of an area wide or statewide water quality management plan that has been approved under §208 or §319 of the Federal Clean Water Act, as amended.

B. Authorized Waste Management Units

1. The permittee is authorized to operate a Type I municipal solid waste landfill consisting of a total area within the permit boundary of approximately 502.5 acres and two waste disposal footprints totaling approximately 173.8 acres. The permittee is also authorized to operate a citizen collection station within the permit boundary.
2. All waste disposal activities authorized by this permit are to be confined to the Type I landfill which shall include access roads, scales, gatehouse, dikes, berms and temporary drainage channels, permanent drainage structures, detention ponds, landfill gas management system, contaminated water management system, leachate management system, landfill liner and final cover systems, groundwater monitoring system, and other components.

C. Liner and Leachate Collection Systems

1. A liner and leachate collection system in accordance with 30 TAC §330.331 must be installed in all cells. The liner and leachate collection systems shall be designed and constructed in accordance with the rules and the specifications in Part III in Attachment A of this permit, and must consist of, from top to bottom, a 24-inch thick protective cover soil layer, geocomposite leachate collection layer, a 60-mil thick HDPE geomembrane layer, and a 24-inch thick layer of re-compacted clay with a hydraulic conductivity of no more than  $1 \times 10^{-7}$  centimeters per second (cm/s).
2. The liner system shall be installed over the entire bottom and sidewalls of the landfill.
3. The elevation of deepest excavation at the landfill disposal area is 505 feet above msl, and is located at the leachate collection sump within Sector 8 of the landfill.

4. The elevations of the bottom of the excavations within the waste disposal areas shall be as shown in Drawing 1.2 in Part III, Attachment 1 in Attachment A of this permit.

D. Elevations of Waste Placement

1. The lowest elevation of waste placement will be 507 feet above mean sea level (msl).
2. The maximum final elevation of waste placement will be 694.2 feet above msl.

E. Management of Leachate and Gas Condensate

1. Any leachate collection and removal system required by this permit shall be operated, and maintained in accordance with 30 TAC §§330.331(a)(2) and 330.333 and Parts III and IV in Attachment A of this permit.
2. Any leachate and/or gas condensate shall be handled, stored, treated, recirculated, and disposed of in accordance with Part IV in Attachment A of this permit.

F. Management of Contaminated Water

All contaminated surface water and groundwater shall be handled, stored, treated, and disposed of in accordance with 30 TAC § 330.207 and Part IV in Attachment A of this permit.

G. Final Cover System

1. The final cover system shall be constructed over all waste placed in landfill cells in accordance with 30 TAC §330.457 and Part III in Attachment A of this permit, and must consist of, from top to bottom, vegetation, 24 inches of erosion layer with the top 6 inch layer capable of sustaining native plant growth, geocomposite, 60-mil thick HDPE (or a 40-mil thick LLDPE) geomembrane layer, and an 18-inch thick compacted clay with a coefficient of permeability no greater than  $1 \times 10^{-5}$  cm/s.
2. The maximum elevation of the final cover shall not exceed 697.7 feet above msl.
3. Best management practices for temporary erosion and sedimentation control shall remain in place until vegetative cover has been established to design percentage vegetative cover for control and mitigation of erosion.

H. Landfill Gas Management

1. A landfill gas management system, consisting of landfill gas monitoring probes and gas monitoring equipment for enclosed structures, shall be designed, installed, operated, and maintained in accordance with Part III, Attachment 11 in Attachment A of this permit and 30 TAC Chapter 330, Subchapter I. At a minimum, landfill gas monitoring shall be conducted quarterly.
2. The landfill gas management system shall ensure that the concentration of methane gas generated by the facility does not exceed 5% by volume in

monitoring points, probes, subsurface soils, or other matrices at the facility boundary defined by the legal description in the permit, and does not exceed 1.25% by volume in facility enclosed structures (excluding gas control or recovery system components). If methane gas levels exceeding these limits are detected, the owner or operator shall follow and implement the response procedures required in 30 TAC §330.371(c) to ensure protection of human health and the environment.

I. Groundwater Monitoring System

1. The groundwater monitoring system for the facility shall be designed, installed, and maintained in accordance with 30 TAC Chapter 330, Subchapter J, and Part III, Attachment 7 in Attachment A of this permit.
2. Groundwater from monitoring wells shall be sampled, samples analyzed, and results reported to the executive director in accordance with 30 TAC §§330.405, and Part III, Attachment 7 in Attachment A of this permit.
3. In the event a statistically significant increase over background for one or more of the constituents listed in 30 TAC §330.419 is determined, assessment monitoring shall be performed in accordance with 30 TAC §330.409 and Part III, Attachment 7 in Attachment A of this permit.
4. In the event that assessment monitoring identifies any of the 40 Code of Federal Regulations Part 258, Appendix II constituents at a statistically significant level above the groundwater protection standards defined in 30 TAC §330.409(h), (i), or (j), the permittee shall perform an assessment of corrective measures, selection of remedy, and groundwater corrective action in accordance with 30 TAC §§330.411, 330.413, and 330.415.

J. Surface Water and Stormwater Management and Control

Surface water and stormwater that has not come in contact with waste or leachate shall be managed and controlled with conveyance structures, berms, and levees that have been designed and constructed in accordance with 30 TAC §§330.63(c), 330.301 through 330.307, and Part III in Attachment A to this permit.

K. Vector Control

The facility shall be operated in a manner that vectors such as rodents, flies, and mosquitoes will be minimized through daily site operations, including the application of daily cover. The facility shall also minimize the extent of the working face to control vectors. If necessary, a licensed professional shall apply pesticides for control of vectors.

L. Facility Sign Requirements

The permittee shall conspicuously display at all entrances to the facility through which wastes are received, a sign measuring at least four feet by four feet with letters at least three inches in height stating the facility name; type of facility; the hours and days of operation; an emergency 24-hour contact phone number(s) that reaches an individual with the authority to obligate the facility at all times that the facility is closed; the local emergency fire department phone number; and the permit number.

M. Landfill Markers

Landfill markers shall be installed and maintained in accordance with 30 TAC §330.143 and Part IV, Section 4.7, in Attachment A of this permit.

N. Facility Personnel

The permittee shall comply with 30 TAC §330.59(f)(3) regarding employment of a licensed solid waste facility supervisor. The permittee shall ensure that landfill personnel are familiar with safety procedures, contingency plans, the requirements of the Commission's rules and this permit, commensurate with their levels and positions of responsibility as specified in Part IV, Section 2 in Attachment A of this permit. All facility employees and other persons involved in facility operations must obtain and maintain the level of training or certification as required by applicable regulations.

**V. Financial Assurance**

- A. Authorization to operate the facility is contingent upon compliance with this permit and maintenance of financial assurance in accordance with 30 TAC Chapter 330 Subchapter L and 30 TAC Chapter 37.
- B. At least 60 days before the initial receipt of waste, the permittee shall provide to the executive director financial assurance instrument(s) for demonstration of closure in an amount not less than \$2,454,380 (2020 dollars). The mechanism must be in effect before the initial receipt of waste. The permittee shall maintain continuous financial assurance coverage for closure until all requirements for facility closure have been completed and the facility is officially placed under the post-closure maintenance period, as evidenced in writing by the executive director in accordance with 30 TAC §330.503(b).
- C. At least 60 days before the initial receipt of waste, the permittee shall provide financial assurance instrument(s) for demonstration of post-closure care of the landfill in an amount not less than \$2,493,420 (2020 dollars). The mechanism must be in effect before the initial receipt of waste. The permittee shall maintain continuous financial assurance coverage for post-closure care until the facility is officially released in writing by the executive director from the post-closure care period in accordance with 30 TAC §330.507(b).
- D. The permittee shall annually adjust the closure and post-closure care cost estimates for inflation within 60 days prior to the anniversary date of the establishment of the financial assurance instrument in accordance with 30 TAC §37.131.
- E. If the facility's closure or post-closure care plan is modified, the permittee shall provide new cost estimates in current dollars in accordance with 30 TAC §§330.503 and 330.507. The amount of the facility's financial assurance mechanism shall be adjusted within 60 days after the modification is approved. Adjustments to the cost estimates or the financial assurance instrument to comply with any financial assurance regulation that is adopted by the TCEQ subsequent to the issuance of this permit shall be initiated as a modification within 30 days after the effective date of the new regulation.

## **VI. Facility Closure**

### **A. Closure of the facility must commence:**

1. Upon the landfill being filled to its permitted waste disposal capacity or upon the landfill reaching its permitted maximum waste elevations as depicted on drawings in Part III in Attachment A of this permit;
2. Upon direction by the executive director of the TCEQ for failure by the permittee to comply with the terms and conditions of this permit or violation of State or Federal regulations. The executive director is authorized to issue emergency orders to the permittee in accordance with §§5.501 and 5.512 of the Water Code regarding this matter after considering whether an emergency requiring immediate action to protect the public health and safety exists;
3. Upon abandonment of the site by the permittee;
4. Upon direction by the executive director for failure by the permittee to secure and maintain an adequate bond or other acceptable financial assurance instrument as required; or
5. Upon the permittee's notification to the TCEQ that the landfill will cease to accept waste and no longer operate.

### **B. Closure Completion Requirements:**

Facility closure shall be performed and completed in accordance with 30 TAC §§330.21, 330.451, 330.457, 330.459, and 330.461 and Part III, Attachment 9 in Attachment A of this permit.

## **VII. Facility Post-Closure Care**

- A. Upon completion and closure of the landfill, post-closure care shall be conducted in accordance with 30 TAC §330.463 and Part III, Attachment 9 in Attachment A of this permit for a period of 30 years following written acceptance of the certification of final closure by the executive director.
- B. Throughout the post-closure care period the vegetation on the final cover must be monitored and necessary actions taken to establish and maintain the percentage vegetative cover specified in Part III, Attachment 9 in Attachment A of this permit.
- C. Following completion of the post-closure care period, the owner or operator shall submit to the executive director for review and approval a documented certification prepared by an independent professional engineer licensed in the State of Texas in accordance with 30 TAC §330.465.
- D. Upon written acceptance of the certification of completion of post closure care by the executive director, the permittee shall submit to the executive director a request for voluntary revocation of this permit.

### VIII. Standard Permit Conditions

- A. This permit is based on and the permittee shall follow the permit application dated August 7, 2018 and received August 8, 2018 and revisions dated January 8, 2019, March 7, 2019, May 21, 2020, October 7, 2020, December 18, 2020, February 12, 2021, April 20, 2021, and June 7, 2021. These application submittals are hereby approved subject to the terms of this permit, the rules and regulations, and any orders of the TCEQ, and are incorporated into this permit by reference in Attachment A as if fully set out herein. Any and all revisions to these application submittals shall become conditions of this permit upon the date of approval by the Commission. The permittee shall maintain the application and all revisions and supporting documentation at the facility and make them available for inspection by TCEQ personnel.
- B. Attachment B of this permit shall consist of all duly executed amendments, modifications, and corrections to this permit.
- C. The permittee has a duty to comply with all conditions of this permit. Failure to comply with any permit condition is a violation of the permit and statutes under which it was issued and is grounds for enforcement action, for permit amendment, revocation or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- D. A pre-construction conference shall be held pursuant to 30 TAC §330.73(d) prior to beginning physical construction of the facility to ensure that all aspects of this permit, construction activities, and inspections are met. Additional pre-construction conferences may be held prior to the opening of the facility.
- E. A pre-opening inspection shall be held pursuant to 30 TAC §330.73(f). The facility shall not accept solid waste until the executive director has confirmed in writing that all applicable submissions required by the permit and applicable rules have been received and found to be acceptable and that construction is in compliance with the permit and the approved site development plan.
- F. The permittee shall maintain the on-site access road and speed bumps/mud control devices in such a manner as to minimize the buildup of mud on the access road and to maintain a safe road surface. The roads within the facility shall be designed so as to minimize the tracking of mud onto the public access road.
- G. Prior to disposal of waste, the permittee shall record in the deed records of McLennan and Limestone Counties, a metes and bounds description of all portions within the permit boundary on which disposal of solid waste has or will take place, and shall provide a certified copy of the recorded document(s) to the executive director in accordance with 30 TAC §330.19.
- H. Daily cover of the waste fill areas shall be performed with well-compacted clean earthen material that has not been in contact with garbage, rubbish, or other solid waste, or with an alternate daily cover which has been approved in accordance with 30 TAC §§330.165(d) and 305.70(k). Intermediate cover, run-on control berms, and run-off control berms shall not be constructed from soil that has been used as daily cover or which contains waste or chemical contaminants.
- I. During construction and operation of the facility, measures shall be taken to control runoff, erosion, and sedimentation from disturbed areas and constructed stormwater systems. Erosion and sedimentation control measures shall be inspected and

maintained consistent with Part III, Attachment 6A, Section 6.7 in Attachment A. Erosion and sedimentation controls shall remain functional until disturbed areas are stabilized with established permanent revegetation.

- J. Erosion stability measures shall be maintained on top dome surfaces and external embankment side slopes during all phases of landfill operation, closure, and post-closure care in accordance with 30 TAC §330.305(d) and Part III in Attachment A of this permit.
- K. In compliance with the requirements of 30 TAC §330.145, the permittee shall consult with the local District Office of the Texas Department of Transportation or other authority responsible for road maintenance, as applicable, to determine standards for litter and mud cleanup on state, county, or city maintained roads serving the site. Documentation of this consultation shall be placed in the site operating record prior to receipt of waste at the facility.
- L. The permittee shall retain the right of entry onto the site until the end of the post-closure care period as required by 30 TAC §330.67(b).
- M. The permittee shall retain the right of entry onto the site in accordance with 30 TAC §330.67(b), and shall allow entry onto the site by TCEQ personnel for inspection purposes during the site operating life and until the end of the post-closure care period in accordance with §361.032 of the Texas Health and Safety Code.
- N. The provisions of this permit are severable. If any permit provision or the application of any permit provision to any circumstance is held invalid, the remainder of this permit shall not be affected.
- O. Regardless of the specific design contained in the application or adopted by reference in Attachments A and B of this permit, the permittee shall be required to meet all performance standards required by the permit, the Texas Administrative Code, and local, state, and federal laws or ordinances.
- P. The permittee shall comply with the requirements of the air permit exemption in 30 TAC §106.534, if applicable, and the applicable requirements of 30 TAC Chapters 106 and 116 and 30 TAC Chapter 330, Subchapter U.
- Q. All discharge of storm water must be in accordance with the U.S. Environmental Protection Agency NPDES requirements and the State of Texas TPDES requirements, as applicable.
- R. The permittee shall furnish to the executive director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit, and copies of records required to be kept by the permit.
- S. The permittee shall report any noncompliance to the executive director which may endanger human health and safety, or the environment in accordance with 30 TAC §305.125(9).
- T. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application, or in any report to the executive director, it shall promptly submit such facts or information.

- U. The permittee shall notify the executive director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy in accordance with 30 TAC §305.125(22).
- V. Any proposed facility changes, additions, or expansions must be authorized in accordance with the rules in 30 TAC Chapters 305 and 330.

**IX. Incorporated Regulatory Requirements**

- A. The permittee shall comply with all applicable federal, state, and local regulations and shall obtain any and all other required permits prior to the beginning of any on-site improvements or construction approved by this permit.
- B. To the extent applicable, the requirements of 30 TAC Chapters 37, 281, 305, and 330 are adopted by reference and are hereby made provisions and conditions of this permit.

**X. Special Provisions**

The permittee will implement the approved mitigation plan associated with the Approved Jurisdictional Determinations (AJDs) under Section 404 of the Clean Water Act prior to commencing any ground-disturbing activity within waters of the United States, and will submit to the U.S. Army Corps of Engineers (USACE) and TCEQ the permit compliance certification that the work, including any proposed mitigation, was completed in compliance with the nationwide permit within 30 days of the completion of work. Following completion of this certification, it will be placed and maintained in the Site Operating Record of the landfill. The permittee will complete the mitigation bank transaction required under the AJDs and provide documentation to the USACE that the transaction has occurred prior to commencing any ground-disturbing activity within waters of the United States. This transaction documentation will also be submitted by the permittee to TCEQ prior to TCEQ's authorizing waste acceptance at the landfill.

**Attachment A**

Parts I through IV of the permit application.

**Attachment B**

Amendments, corrections, and modifications issued for MSW Permit No. 2400.