Parkhill

July 31, 2023

Ms. Megan Henson, Manager
Municipal Solid Waste Permits Section, MC 124
Texas Commission on Environmental Quality
Building A, Room 122
12100 Park 35 Circle
Austin, Texas 78753-1808

Re: SouthWaste San Antonio Facility
TCEQ MSW Permit No. 2317
Request for Permit Amendment

Dear Ms. Henson:

SouthWaste LLC request a Limited Scope Permit Amendment, under 30 TAC §305.62(J)(2), to the permit for SouthWaste San Antonio Facility (MSW Permit No. 2317). The scope of this amendment is to revise the permit to reflect current and planned operations.

This submittal includes:

- TCEQ correspondence cover sheet (TCEQ-20714),
- Request for Permit Amendment Summary,
- Application for Compost Permit, Compost Form No. 3 (TCEQ-00653b),
- Plain Language Application Summary (TCEQ-20947),
- Core Data Form (TCEQ-10400),
- A redline strikeout version of the revised sections of the permit that are changing.

Please call me at 806.378.8673 should you have any questions or require additional information.

Sincerely,

PARKHILL

By _____
Spenser J. Harvey, PE
Civil Engineer

SJH

cc: Ben Camacho, Director of Permitting & Compliance, SouthWaste LLC
TCEQ Region 13, San Antonio

Texas Commission on Environmental Quality

Waste Permits Division Correspondence Cover Sheet

Date: 07/31/2023
Facility Name: SOUTHWASTE DISPOSAL SAN ANTONIO FACILITY
Permit or Registration No.: 2317

Nature of Correspondence:
☒ Initial/New
☐ Response/Revision to TCEQ Tracking No.: _____ (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
☐ New Notice of Intent	☐ Alternative Daily Cover Report
☐ Notice of Intent Revision	☐ Closure Report
☐ New Permit (including Subchapter T)	☐ Compost Report
☐ New Registration (including Subchapter T)	☐ Groundwater Alternate Source Demonstration
☐ Major Amendment	☐ Groundwater Corrective Action
☐ Minor Amendment	☐ Groundwater Monitoring Report
☒ Limited Scope Major Amendment	☐ Groundwater Background Evaluation
☐ Notice Modification	☐ Landfill Gas Corrective Action
☐ Non-Notice Modification	☐ Landfill Gas Monitoring
☐ Transfer/Name Change Modification	☐ Liner Evaluation Report
☐ Temporary Authorization	☐ Soil Boring Plan
☐ Voluntary Revocation	☐ Special Waste Request
☐ Subchapter T Disturbance Non-Enclosed Structure	☐ Other:
☐ Other:	

Table 2 - Industrial & Hazardous Waste Correspondence

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

1.0 REQUEST FOR PERMIT AMENDMENT SUMMARY

PURPOSE

SouthWaste LLC requests an Amendment to the SouthWaste San Antonio Facility (MSW Permit No. 2317) permit to reflect current and future operations at the facility.

Prior to submittal of this Amendment, SouthWaste LLC met with management in the TCEQ MSW Permit office to discuss the requirements of this revision. On May 5, 2023, Megan Henson, Section Manager of MSW Permit Section, provided SouthWaste LLC instruction by email that these revisions should be made under a Limited Scope Permit Amendment under 30 TAC §305.62(J)(2). A copy of this email is included with this Request for Amendment.

The scope of this Limited Scope Major Permit Amendment:

- Update Equipment Lists to Reflect Current Facility Equipment
- Update Energy and Mass Balance Calculations to Reflect Current Operations
- Update Closure and Post Closure Plan to Reflect Current Operations

REVISIONS TO PERMIT DOCUMENTS

List of revised pages:

- Pages 18, 19, 20, 21, 24, 35, 36, and 37
- Table 4, Energy and Mass Balance Calculations
- Table 6, Equipment List
- Facility Closure Plan: Pages 1 and 3
- Closure Cost calculations
- Figure 2 Site Layout Plan
- Appendix J: Property Owner Map and Information

From: Megan Henson <Megan.Henson@Tceq.Texas.Gov>
Sent: Friday, May 05, 2023 12:29 PM
To: Ben Camacho <bcamacho@wrmco.com>
Subject: RE: Proposed MSW 2317 Permit Amendment - Type V Composting Facility

Good morning Ben,
Thank you for hosting us at the Elmendorf site. It was a very informative tour!

The changes proposed will require a limited scope amendment under 30 TAC §305.62(J)(2). Southwaste will need to submit a correspondence cover sheet, Form TCEQ-00653b, Plain Language Application Summary, Core Data Form, and a redline strikeout version of the revised sections of the permit that are changing. The limited scope amendment will also require public notice in accordance with Chapter 39.

As far as timeframes: The total length for submitting to final approval varies depending on the application and public participation. This application type has an administrative review and technical review period. Both start when TCEQ receives the application. Typically, the administrative review takes around 10-14 days and the application will be administratively complete around 30 days. The first public notice is published at this time.
Technical staff have 54 days to complete their review, after which time you will receive any notice of deficiencies (NODs). You have 30 days to respond and can request an extension if necessary. TCEQ then has about 20 days to review and follow up with any remaining NODs. You'll then have 14 days to respond. This will continue until no deficiencies remain and the application is technically complete.
After the application is technically complete, the second notice is published and the public comment period begins. TCEQ will respond to public comments after the comment period closes. If there is significant public interest and public meeting requests, then a public meeting will be held. If there are no public comments or public meeting requests then the technically complete application will be approved.

Reach out if you have any questions while developing the application.

Sincerely,

Megan Henson
512-239-1165
Section Manager
Municipal Solid Waste Permits Section
Waste Permits Division

Plain Language Summary (English)

Texas Commission on Environmental Quality

Plain Language Summary of Municipal Solid Waste Permit or Permit Amendment Application

Applicants are required by public notice rules in Title 30 Texas Administrative Code, Chapter 39, Section 39.405(k)[1] to provide this summary of an application.

A. Purpose of the Proposed Facility

This facility processes waste products, such as grease trap waste, into beneficial reuse compost.

B. Information About the Applicant

Name: SOUTHWASTE DISPOSAL, LLC

Applicant Type: Compost Facility

Facility Name: SOUTHWASTE DISPOSAL SAN ANTONIO FACILITY

Permit Application Number: 2317

Customer Number (CN): 603436114

Regulated Entity Reference Number (RN): 603436114

C. Location of the Proposed Facility

Facility Address (or description of site location if no address):

20805 OLD LAMM RD
ELMENDORF, TX 78112

Link to Map of Facility Location (TCEQ Location Mapper[2]): https://arcg.is/1XfHjy1

D. Information about Facility Operation

What types of waste would be received?

Grease Trap Waste, Municipal Sewage Sludge, Septage, Meat, Dead Animal Carcasses, Fish, Oils and Greases, and Dairy/Food.

What geographical area would the wastes come from?

Counties Served: ATASCOSA, BASTROP, BELL, BEXAR, COMAL, WILLIAMSON, GUADALUPE, KERR, LAMPASAS, SAN SABA

[1] www.tceq.texas.gov/goto/view-30tac
[2] www.tceq.texas.gov/gis/hb-610-viewer

What days and hours would the facility operate?

Monday through Friday, 8:00 am to 5:00 pm

At what rate would wastes be accepted?

$0.14 per gallon

How would wastes be managed?

Waste is pumped into a sealed receiving tanks. Material such as chipped wood is stored on site. The chipped wood is used as a bulking material to form the compost windrow. Liquid waste is applied from the tanks directly to the windrow. The material is then turned using a machine specially designed to turn compost windrows. Turning the windrow reduces odor and promotes the composting process. The waste applied to the windrow breaks down with the wood and produces beneficial use compost.

E. Pollution Control Methods

What methods would the facility use for containing wastes and odors, and monitoring for releases?

Waste is pumped into receiving tanks after arriving at the facility. The tanks are sealed to prevent waste odors from being emitted. After waste is applied to the compost windrow, the windrow is turned using a machine specially designed to turn compost windrows. The turning minimizes odors and promotes the composting process.

What methods would the facility use or require for preventing litter or spills, and for cleanup of litter and spills?

Waste pumped into receiving tanks after arriving at the facility is done with a sealed hose to prevent the chance of a spill during transfer. Waste is applied to the compost windrow on a fully lined pad. This pad is designed to prevent potential spills or rainwater that has contacted the windrow from penetrating to ground water. A lined pond is included in the lined pad area. The lined pad is graded so that water flows to the lined pond. The lined pond is designed to capture storm water and let the water evaporate. The lined pond does not discharge water to the surrounding area.

Plain Language Summary (Spanish)

Comisión de Calidad Ambiental de Texas

Resumen en lenguaje sencillo de la solicitud de permiso municipal de residuos sólidos o de modificación del permiso

Los solicitantes están obligados por las normas de notificación pública del Título 30 del Código Administrativo de Texas, Capítulo 39, Sección 39.405(k)[1] a proporcionar este resumen de una solicitud.

A. Objetivo de la instalación propuesta

La planta procesa productos de desecho de trampa de grasa a compuestos de re-uso benéfico

B. Información sobre el solicitante

Nombre: SOUTHWASTE DIPOSAL, LLC

Tipo de solicitante: Planta de Compostaje

Nombre de la instalación: SOUTHWASTE DIPOSAL SAN ANTONIO FACILITY

Número de solicitud de permiso: 2317

Número de cliente (CN): 603436114

Número de referencia de la entidad regulada (RN): 603436114

C. Ubicación de la instalación propuesta

Dirección del establecimiento (o descripción de la ubicación del sitio si no hay dirección):

20805 OLD LAMM RD
ELMENDORF, TX 78112

Enlace al mapa de ubicación de las instalaciones en TCEQ Location Mapper[2]:

D. Información sobre el funcionamiento de las instalaciones

¿Qué tipos de residuos se recibirían?

Desecho de trampa de grasa, lodos de depuradora municipal, septicémicos, carne, cadáveres de animales, pescado, aceites, grasas y productos lácteos/ comestibles

¿De qué zona geográfica procederían los residuos?

De los siguientes condados: ATASCOSA, BASTROP, BELL, BEXAR, COMAL, WILLIAMSON, GUADALUPE, KERR, LAMPASAS, SAN SABA

[1] www.tceq.texas.gov/goto/view-30tac
[2] www.tceq.texas.gov/gis/hb-610-viewer

¿Qué días y horas funcionará la instalación?

De lunes a viernes, de 8:00 am a 5:00 pm

¿A qué ritmo se aceptarían los residuos?

$0.14 por galón

¿Cómo se gestionarían los residuos?

Los desechos serán bombeados a tanques herméticamente sellados. Madera triturada se guardará en el sitio de la planta. Los trozos de madera se utilizarán para formar segmentos de compostaje. Los desechos líquidos se aplicarán desde los tanques directamente a los segmentos de compostaje. El material es luego volteado usando una maquina diseñada especialmente para voltearlo; Esto reduce el olor y promueve el proceso de compostaje y al desintegrarse produce compuestos beneficos.

E. Métodos de control de la contaminación

¿Qué métodos utilizará la instalación para contener los residuos y los olores, y para controlar las emisiones?

Los desechos son bombeados a tanques receptores después de llegar a la planta. Los tanques están herméticamente sellados para prevenir que se emitan malos olores. Después que los desechos líquidos se aplican desde los tanques directamente a los segmentos de compostaje el material es luego volteado usando una máquina diseñada especialmente para voltear los segmentos de compostaje; Volteándolos minimiza el olor y promueve el proceso de compostaje.

¿Qué métodos utilizaría o exigiría la instalación para evitar la basura o los derrames, y para la limpieza de la basura y los derrames?

Los desechos son bombeados a tanques receptores después de llegar a la planta a través de una manguera sellada para prevenir fugas durante la transferencia. El desecho es aplicado a los segmentos de compostaje sobre una base impermeable y completamente forrada. Esta base forrada esta diseñada para prevenir derrames potenciales o agua de lluvia contaminada del compostaje al subsuelo. Una laguna impermeabilizada se incluye en esta base forrada. Esta base drena hacia la laguna impermeabilizada, que a su vez está diseñada para capturar la lluvia y mantenerla hasta que se evapore y no permite derrames de agua a áreas vecinas.

TCEQ Form 00653b
Application for Compost Permit
(Compost Form No. 3)

Texas Commission on Environmental Quality

Application for Compost Permit

(Compost Form No. 3)

Who Should Use This Form

Use this form to apply for a new permit, or to amend an existing permit for a composting operation that composts mixed municipal solid waste or grease trap waste.

This application is required by Title 30, Texas Administrative Code (30 TAC) Chapter 332, Subchapter D. In addition, in accordance with 30 TAC 332.42, you must provide certification by a registered professional engineer, establish ownership or control of the property, and have the facility inspected by the TCEQ before operations can begin.

Submit an original and two copies of all application documents including this form to the Municipal Solid Waste Permits Section MC-124, TCEQ, P.O. Box 13087, Austin, TX 78711-3087. If you have any questions about this form, contact us at (512) 239-2335.

Application Type

☐ New Facility ☒ Amendment for an Existing Facility

MSW Permit Number (for existing facility): 2317

Application Fee

Indicate how the application fee was paid, and attach a copy of the fee receipt.

☐ Paid by Check ☒ Paid Online

If you are paying by check please send checks directly to the TCEQ Cashier's Office MC-214, TCEQ, P.O. Box 13087, Austin, TX 78711-3087.

If paid online, provide e-Pay Confirmation Number: 582EA000562951

Facility Information (must match regulated entity information on Core Data Form)

Facility Name: SOUTHWASTE DISPOSAL SAN ANTONIO FACILITY

Physical Address: 20805 OLD LAMM RD Site Elevation: 532 Feet above msl.

City: ELMENDORF State: TX Zip code: 78112 County: Bexar

Facility Owner Information (must match customer information on Core Data Form)

Facility Owner Name: SouthWaste Disposal, LLC

Mailing Address: 16350 Park Ten Pl #215

City: Houston State: TX Zip code: 77084 County: Harris

Attach a complete Core Data Form for the facility owner. The Core Data Form and instructions are available at <www.tceq.texas.gov/goto/coredata>.

Property Owner Information (must match Customer information on Core Data Form)

☐ Check this box if property owner is different from facility owner. If the property owner is different from the facility owner, include a separate Core Data Form for the property owner, and have the property owner complete the Property Owner Affidavit section of this form.

Property Owner Name: SouthWaste Disposal, LLC

Mailing Address: 16350 Park Ten Pl #215

City: Houston State: TX Zip code: 77084 County: Harris

Applicant Contact Information

Person's Name: Ben Camacho Title: Director of Compliance

Company: SouthWaste Disposal, LLC

Mailing Address: 16350 Park Ten Pl #215

City: Houston State: TX Zip code: 77084

Phone: 713-413-9400 E-mail: BCamacho@WRMCo.Com

Consulting Engineer Information

Engineer's Name: Spenser J Harvey Firm Name: Parkhill

Mailing Address: 800 S. Polk Street Suite 200

City: Amarillo State: TX Zip code: 79101

Phone: 806-378-8673 E-mail: SHarvey@Parkhill.com

Publishing Information

Provide the URL address of the publicly accessible internet website where the application and all revisions will be posted:

http://parkhill.com/tceq-permits/

Party responsible for publishing notice:

☐ Applicant ☒ Consultant

Is an alternative language notice required for this application? Yes ☒ No ☐

(For determination, refer to Alternative Language Checklist on the Public Notice Verification Form TCEQ-20244-Waste.)

Name of the public place application is located: San Antonio Public Library

Physical Address: 600 Soledad St

City: San Antonio State: TX Zip Code: 78205

Phone: 210-207-2500

Feedstock Information

Indicate all feedstocks that will be composted at the facility:

☐ Mixed Municipal Solid Waste	☒ Grease Trap Waste	☐ Manure	☒ Grease
☒ Municipal Sewage Sludge	☐ Yard Trimmings	☐ Clean Wood	☐ Paper
☐ Positively-sorted Organic	☒ Dairy Materials	☒ Meat	☒ Oil
☐ Vegetative Material	☒ Animal Carcasses	☒ Fish	

☐ Disposable Diapers or paper products soiled by human excreta

☐ Paper Production Sludge (must comply with special requirements in 30 TAC 332.33(b))

☒ Other Feedstocks: Septage

Describe all bulking agents that will be used in the process: Chipped and shredded wood and vegetation.

General Requirements Statement

☒ By checking this box you will comply with the general requirements for this facility as described under 30 TAC 332.4(1)-(9) and (12).

Excluded Feedstocks Statement

The following wastes must be managed in accordance with 30 TAC Chapter 335 (relating to Industrial Solid Waste and Municipal Hazardous Waste):

- Any nonhazardous industrial solid wastes listed in 30 TAC 332.4(10) that are *not* managed in accordance with the requirements of Chapter 332.
- Any nonhazardous industrial solid wastes *not* listed in subsection 30 TAC 332.4(10).
- All hazardous wastes (30 TAC 332.4(11)).

☒ Check this box to indicate you will comply with these feedstock limitations.

Variance Request

You may request a variance in accordance with 30 TAC 332.5. A variance may not be approved for procedural requirements. Indicate if you are requesting a variance. ☒ Yes ☐ No

If yes, attach your written variance request with this application.

Air Quality Requirements

General

Composting operations required to obtain a permit must meet the requirements in 30 TAC 332.8(e) to be covered under an air quality standard permit.

☒ Check this box to indicate you will comply with air quality requirements to be covered by an air quality standard permit. By not checking this box you are indicating you will apply for an air quality permit under 30 TAC Chapter 116.

Dust Suppression

Indicate dust suppression method(s) that will be used for all permanent in-plant roads and vehicle work areas:

☒ Watered

☐ Treated with dust-suppressant chemicals

☐ Paved and cleaned as necessary to achieve maximum dust control

Are all facility grinders located in an enclosed building? ☐ Yes ☒ No

If No, describe controls that will be used to suppress dust: The grinder will be equipped with low-velocity spray nozzles to minimize the generation of dust.

Are all facility conveyors located in an enclosed building? ☐ Yes ☒ No

If No, describe controls that will be used to suppress dust: Facility does not utilize Conveyors

Odor Control

Prior to receiving any material with a high odor potential such as dairy material, meat, fish, and oil and grease, the operator must ensure that there is an adequate volume of bulking agent to blend with or cover the material, and must begin processing the material in a manner that prevents nuisances.

☒ Check this box to indicate you will comply with requirements for managing high odor material at this facility in accordance with 30 TAC 332.8(e)(6).

General Location Description and Map Requirements

Enter description for the physical location: 0.8 miles southeast of the I37 and E Charles William Anderson Loop Intersection

In accordance with 30 TAC 305.45(a)(6), attach a map(s) which shows the facility and each of its intake and discharge structures and any other structure or location regarding the regulated facility and associated activities. Map(s) must depict the approximate boundary of the facility, be on a scale of not less than one inch equals one mile and extend at least one mile beyond the approximate boundaries.

Facility Legal Description

In accordance with TAC 332.47(8), attach a legal description of the facility. At minimum the legal description should include a metes and bounds description and drawing prepared and sealed by a registered surveyor.

Landowners List and Map

Attach a mailing list of landowner names and addresses within one-half mile of the facility and a map locating the property owned by these persons. In accordance with 30 TAC 39.5(b) mailing lists should be provided electronically or on mailing labels.

Coordination with Government Agencies

Provide information in accordance with 30 TAC 281.5(7) about government agencies representing the area where the facility will be located. Attach copies of letters demonstrating coordination with those agencies, and copies of received responses.

Texas Department of Transportation (TxDOT)

TxDOT District Name and Number: San Antonio District #15

District Engineer's Name: Gina E. Gallegos, P.E

Mailing Address: 4615 NW Loop 410

City: San Antonio State: TX Zip code: 78229 County: Bexar

Local Authority for road maintenance: Bexar County Public Works

U.S. Army Corps of Engineers (USACE)

Select the district the facility is located within:

☐ Albuquerque, NM ☒ Ft. Worth, TX ☐ Galveston, TX ☐ Tulsa, OK

Local Council of Governments (COG)

COG Name: Alamo Area Council of Governments

COG Representative's Name: Daine Rath

COG Representative's Title: Executive Director

Mailing Address: 2700 NE Loop 410 Suit 101

City: San Antonio State: TX Zip code: 78217 County: Bexar

River Basin Authority

River Basin Authority Name: San Antonio River Authority

Contact Person's Name: Derek Boese, JD, PMP

Watershed Sub-Basin Name: San Antonio River Basin

Mailing Address: 100 E. Guenther

City: San Antonio State: TX Zip code: 78204 County: Bexar

Federal Aviation Administration (FAA)

☒ Check this box if the facility will be located within six (6) miles of an airport. If this box is checked documentation of coordination with FAA must be included.

Texas Historical Commission (THC)

Attach correspondence with the THC.

Texas Parks and Wildlife Department (TPWD)

Attach correspondence with the TPWD.

State Elected Officials

Texas House District No. 118

Representative Name: John Lujan

District Office Address: [District office not listed on House.Texas.Gov]

City: _____ State: _____ Zip code: _____ County: _____

Phone: _____

Texas Senate District No. 21

Senator Name: Judith Zaffirini

District Office Address: 1407 Washington Street

City: Laredo State: TX Zip code: 78040 County: Webb

Phone: (956)722-2293

Local Government Jurisdiction and Ordinances

Provide information in accordance with 30 TAC 281.5(7) about local government jurisdiction.

Within the city limits of: Not within any city limits

Within extraterritorial jurisdiction of: San Antonio, Texas

Is the facility located in an area in which the governing body of the municipality or county has prohibited the storage or processing of municipal or industrial solid waste? ☐ Yes ☒ No

If yes, attach a copy of the ordinance or order.

Local Government Officials

City Mayor

Name: Ron Nirenberg

Office Address: 115 Josh Ln

City: San Antonio State: TX Zip code: 78205 County: Bexar

City Health Authority

Name: METROPOLITAN HEALTH DISTRICT

Office Address: 100 W. Houston St., 14th Floor

City: San Antonio State: TX Zip code: 78205 County: Bexar

County Judge

Name: Peter Sakai

Office Address: 101 W Nuevea 10th Floor

City: San Antonio State: TX Zip code: 78205 County: Bexar

County Health Authority

Name: N/A

Office Address: _____

City: _____ State: _____ Zip code: _____ County: _____

General Application Requirements

Application and Reporting

Permitted compost facilities are required to submit an annual report and monthly final product testing results in accordance with 30 TAC 332.43(2) and (3).

- Attach an engineer's appointment in accordance with 30 TAC 332.43(4).

Location Standards

- Attach a map indicating compliance with setback distances to surface water, public and private wells as described under 30 TAC 332.44(4) and (5).
- Depict on a map or drawing a minimum of a 50 foot setback is maintained between the facility boundary and receiving, processing and storage processes

  Indicate which map or drawing you used: Attachment _____
- The facility must not significantly alter existing draining patterns.
- The facility must not be located in wetlands
- Is the facility located in a 100-year floodplain? ☐ Yes ☒ No

If yes, you must submit additional documentation in accordance with 332.44(1).

- Is this facility located in an Edwards Aquifer Recharge Zone? ☐ Yes ☒ No

If yes, you must comply with requirements in 30 TAC Chapter 213.

Operational Requirements

Permitted compost facilities are required to comply with all requirements under 30 TAC 332.45.

Records Requirements

The operator must maintain at minimum the facility's operating permit, a log of abnormal events, final product testing results and copies of the annual report in accordance with 30 TAC 332.46(a) and (b).

☒ Check this box to indicate you will comply with Reporting, Location Standards, Operational, and Records requirements of a permit.

Land Use

In accordance with 30 TAC 332.47(4), attach descriptions and map(s) necessary to evaluate the impact of the facility on the surrounding area. At minimum the attachment should include:

- a description of the zoning at and within one mile of the facility;
- a description of the character of surrounding land uses within one mile of the facility;
- proximity to residences and other uses with an approximate number of residences and business within one mile and direction/distance to nearest residence and business;
- a discussion showing the compatibility of the facility with the surrounding land uses; and
- a land use map showing all listed facilities under 30 TAC 332.47(4)(E) within 500 feet of the facility.

Access

In accordance with 30 TAC 332.47(5), attach data, analysis and map(s) necessary to evaluate the impact of the facility on the surrounding area. At minimum the attachment should include:

- data on roadways, within one mile, used for facility access. The data should include dimensions, surfacing, general conditions, capacity and load limits;
- data on volume of traffic on roadways used for facility access, within one mile;
- existing and projected traffic during the life of the facility (for projected traffic include both traffic generated by the facility and anticipated increase without the facility);
- an analysis of the impact the facility will have on area roadways with discussion on mitigating measures; and
- an access roadway map showing all roadways within one mile of the facility.

Facility Development

In accordance with 30 TAC 332.47(6), to assist in evaluating the environmental impact of the facility, include the following items with this application:

Surface Water Protection Plan

Attach a Surface Water Protection Plan in accordance with 30 TAC 332.47(6)(A).

Geologic/Hydrogeologic Report

Attach a Geologic/Hydrogeologic Report in accordance with 30 TAC 332.47(6)(B).

Groundwater Protection Plan (GPP)

Attach a GPP in accordance with 30 TAC 332.47(6)(C).

Facility Plan and Layout

Attach a facility plan and layout prepared by a registered professional engineer. The drawings must clearly indicate all proposed facilities, structures and improvements. Minimum requirements for the facility plan and layout are described in 30 TAC 332.47(6)(D).

Process Description

Attach a process description material sourcing to product distribution. Minimum requirements for the process description are described in 30 TAC 332.47(6)(E).

Site Operating Plan

Attach a Site Operating Plan containing the information specified in 30 TAC 332.47(7).

Closure Plan and Cost Estimate

Prepare and attach a cost estimate and closure plan for closure of the facility in accordance with 30 TAC 332.47(9). Financial assurance mechanisms must be established and maintained in accordance with Chapter 37, Subchapter J, and Financial assurance must be submitted 60 days prior to receiving any material, or within 60 days of permit issuance.

Indicate the total closure cost estimate: $ $599,497

Source Separated Recycling and Household Hazardous Waste Collection

Will this facility accept waste from a governmental unit for composting purposes? ☐ Yes ☒ No

If yes, attach a plan to comply with 30 TAC 332 Subchapter E (source-separated recycling) and F (household hazardous waste collection)

Other Permit or Construction Approvals

List any permit or construction approvals listed under 30 TAC 305.45(a)(7)(A)-(K) that you have received or are pending. If more space is needed, attach a separate sheet and reference the sheet here.

Permit type: STORMWATER, TXR05BC61 Status: ACTIVE

Permit type: _____ Status: _____

Permit type: _____ Status: _____

Permit type: _____ Status: _____

Compost Facility Permit Application Attachments

The application for a compost facility permit is composed of the application form and attachments. The order of attachments is listed below. Check each box to indicate that the document is enclosed and provide the corresponding attachment number.

- ☒ Title Page
- ☒ Table of Contents
- ☒ Application for Compost Permit Form
- ☒ Fee Receipt — Attachment _____
- ☒ Core Data Form(s) — Attachment _____
- ☐ Legal Authority, provide verification of your legal status in accordance with 30 TAC §281.5(3). Normally, this is a one page certificate of incorporation issued by the Office of the Secretary of State. — Attachment _____
- ☒ Variance Request (*if applicable)* — Attachment Page iv
- ☐ General Location Map — Attachment _____
- ☐ Legal Description of the facility — Attachment _____
- ☒ Landowners List and Map — Attachment App. J
- ☐ Copies of Local Government Ordinance(s) (*if applicable*) — Attachment _____
- ☐ Notices of Coordination with Government Agencies — Attachment _____
- ☒ Notice of Engineer's Appointment — Attachment _____
- ☐ Water Well and Surface Water Setback Maps — Attachment _____
- ☐ Land Use Description, Discussion and Map — Attachment _____
- ☐ Access Data, Discussion and Map — Attachment _____
- ☐ Facility Development Plan — Attachment _____
  - ☐ Surface Water Protection Plan
  - ☐ Geologic/Hydrogeologic Report
  - ☐ Groundwater Protection Plan
  - ☐ Facility Layout and Plan
  - ☐ Process Description
- ☐ Site Operating Plan — Attachment _____
- ☐ Closure Plan and Cost Estimate — Attachment _____
- ☐ Source Separated Recycling Plan (*if applicable*) — Attachment _____
- ☐ Household Hazardous Waste Collection Plan (*if applicable*) — Attachment _____

Applicant's Certification

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.

Signature of Owner: _____ Date: 8-2-2023

Printed Name: Ben Camacho Title: Director of compliance

Notary Public's Certification:

Subscribed and sworn to before me, by the said Ben Camacho

On this 2nd day of Aug, 2023

My commission expires on the 12th day of Oct, 2025

_____

Notary Public in and for

Travis County, Texas.

MARY E. WITT
Notary Public, State of Texas
Comm. Expires 10-12-2025
Notary ID 7500778

Property Owner's Affidavit

The owner of the property must sign the following statement:

- I acknowledge that the State of Texas may hold the property owner of record either jointly or severally responsible for the operation, maintenance, and closure or post-closure care of the facility.
- I acknowledge that the facility owner or operator and the State of Texas shall have access to the property during the active life and post-closure care period, if required, after closure for the purpose of inspection and maintenance.

Signature of Owner: _____ Date: 8-2-2023

Printed Name: Ben Camacho

Your transaction is complete. Thank you for using TCEQ ePay.

Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt and the vouchers for your records. An email receipt has also been sent.

Transaction Information

Trace Number:	582EA000562951
Date:	08/03/2023 10:21 AM
Payment Method:	CC - Authorization 0000003005
ePay Actor:	SPENSER HARVEY
Actor Email:	sharvey@parkhill.com
IP:	138.199.118.230
TCEQ Amount:	$2,050.00
Texas.gov Price:	$2,096.38*

* This service is provided by Texas.gov, the official website of Texas. The price of this service includes funds that support the ongoing operations and enhancements of Texas.gov, which is provided by a third party in partnership with the State.

Payment Contact Information

Name:	SPENSER HARVEY
Company:	SPENSER HARVEY
Address:	7810 OAKVIEW DR, AMARILLO, TX 79119
Phone:	972-215-8773

Cart Items

Click on the voucher number to see the voucher details.

Voucher	Fee Description	AR Number	Amount
655270	NONHAZARDOUS WASTE PERMIT - NEW & AMENDMENTS (INCLUDING LIMITED SCOPE)		$2,000.00
655271	30 TAC 305.53B WASTE NOTIFICATION FEE		$50.00
		TCEQ Amount:	$2,050.00

ePay Again | Exit ePay

Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt for your records.

TCEQ Form 10400
TCEQ Core Data Form

TCEQ Use Only

TCEQ CORE DATA FORM

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

SECTION I: GENERAL INFORMATION

1. Reason for Submission *(If other is checked please describe in space provided.)*

☐ New Permit, Registration or Authorization *(Core Data Form should be submitted with the program application.)*

☒ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ Other

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN 603436114		RN 101478071

SECTION II: CUSTOMER INFORMATION

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy) 7/31/2023

☐ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* *If new Customer, enter previous Customer below:*

SOUTHWASTE DISPOSAL LLC

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
800553020	32018302813	20-3596390	

11. Type of Customer: ☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees ☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated? ☒ Yes ☐ No

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☐ Owner ☐ Operator ☒ Owner & Operator ☐ Other:
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant

15. Mailing Address: 16350 PARK TEN PL STE 215

City	Houston	State	TX	ZIP	77084	ZIP + 4	5053

16. Country Mailing Information *(if outside USA)*	17. E-Mail Address *(if applicable)*
	BCamacho@WRMCo.Com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(713) 413-9400		( ) -

SECTION III: REGULATED ENTITY INFORMATION

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ New Regulated Entity ☒ Update to Regulated Entity Name ☒ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

SOUTHWASTE DISPOSAL SAN ANTONIO FACILITY

23. Street Address of the Regulated Entity: *(No PO Boxes)*	20805 OLD LAMM RD							
	City	Elmendorf	**State**	TX	**ZIP**	78112	**ZIP + 4**	
24. County	Bexar							

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:					
26. Nearest City			**State**	**Nearest ZIP Code**	
San Antonio			TX	78112	

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:	29.20917		**28. Longitude (W) In Decimal:**	98.40361	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	12	33	98	24	13

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
4953			

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Waste Processing

34. Mailing Address:	**20805 OLD LAMM RD**							
	City	**Elmendorf**	**State**	**TX**	**ZIP**	**78112**	**ZIP + 4**	
35. E-Mail Address:	**BCamacho@WRMCo.Com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(713) 413-9400		( ) -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☒ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
2317				
☐ Sludge	☒ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
	TXR05BC61			
☐ Voluntary Cleanup	☐ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☒ Other:
				Petroleum Storage Tank 87042

SECTION IV: PREPARER INFORMATION

40. Name:	Spenser J Harvey, P.E.	**41. Title:**	Civil Engineer

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(806) 378-8673		( ) -	SHarvey@Parkhill.com

SECTION V: AUTHORIZED SIGNATURE

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	SOUTHWASTE DISPOSAL LLC	**Job Title:**	Director of Permitting & Compliance
Name *(In Print):*	Ben Camacho	**Phone:**	(713) 413- 9400
Signature:		**Date:**	8-2-2023

Red Line/ Strikeout Version

Site Development Plan
for
Wholearth Organic Composting

20805 Lamm Road

Bexar County

Elmendorf, Texas

TCEQ Permit Approval: January 13, 2006

Prepared for:

Wholearth Organic Composting
20805 Lamm Road
Elmendorf, Texas 78112

Original Application Prepared by:

Geomatrix Consultants, Inc.
5725 Hwy 290 West, Suite 200B
Austin, Texas 78735
Robin D. Cosgrove, P.E. and Jerry Wick, P.G.

PARKHILL SMITH & COOPER, INC. F-560
STATE OF TEXAS
SPENSER J. HARVEY
138737
LICENSED PROFESSIONAL ENGINEER

07/31/2023
For July 2023
Revision Only

Revision by:
Cook-Joyce, Inc.
812 W. 11th St.
Austin, Texas 78701

Revision history:
Revised July 31, 2023
September 26, 2006
Revised December 23, 2004
Revised December 20, 2004
Revised December 1, 2004
Revised August 8, 2004
Prepared January 22, 2004

STATE OF TEXAS
J. BRIAN DUDLEY
59831
REGISTERED PROFESSIONAL ENGINEER

9/26/06

REVISED
26 SEPTEMBER 2006
31 July 2023

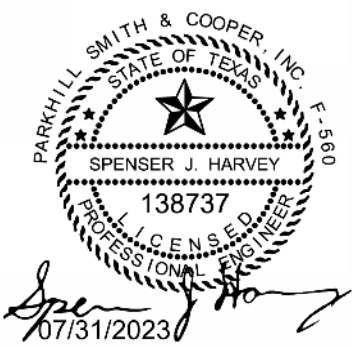
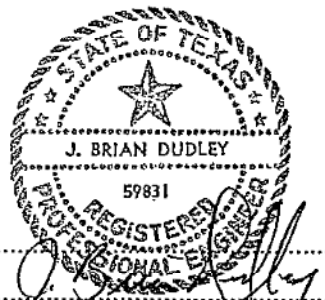


TABLE OF CONTENTS



For July 2023 Revision Only

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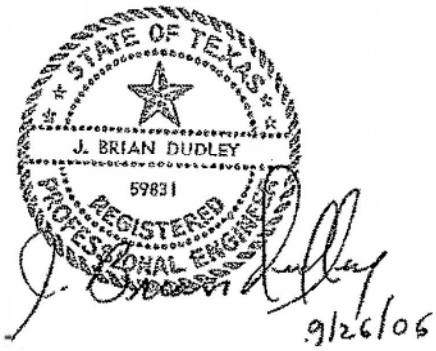
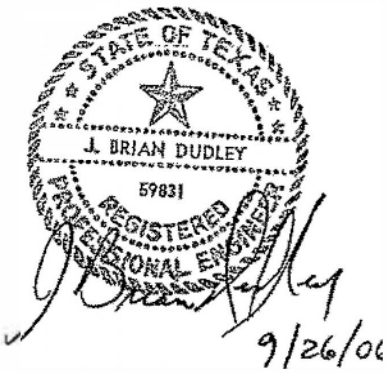


REQUESTED VARIANCES AND WAIVERS

Variance 1 Screening and storage of bulking material and finished compost outside the processing area composting pad as described in Section 3.5 [page 18]

Waiver 1 Deleting analysis for heavy metals from the groundwater monitoring program as described in Section 3.3.3 [page 16]

TABLES



FIGURES

APPENDIXES

screening and storage require significant space, to oblige WOC to perform these activities within the existing lined area would severely limit the facility's capacity for composting. The resulting business impact to WOC would clearly rise to the level of an unnecessary hardship.

In accordance with 30 TAC §332.5, we request that the Executive Director indicate the approval of this requested variance in writing.

3.5.1 Feedstock Identification

The anticipated feedstock is listed below. An estimated ~~36,400~~73,000 tons of feedstock will be composted annually. The largest portion of the incoming feedstock will be grease trap waste. The estimated quantity of grease trap waste to be received is approximately ~~125~~250 tons per day (~~2,500~~5,000 tons per month, assuming 20 operating days per month) or approximately ~~30,000~~67,000 gallons per operating day (assuming 7.44 lb/ gallon typical for grease trap waste). The other feedstocks accepted at the facility and their currently estimated amounts are:

- Municipal Sewage Sludge (~~250~~500 tons/month),
- Septage (~~250~~500 tons/month),
- Meat (~~1.6~~75 tons/month),
- Dead Animal Carcasses (~~4~~8 tons/month),
- Fish (~~1.6~~75 tons/month),
- Oils and Greases (~~8~~20 tons/month}, and
- Dairy/Food (~~1~~945 tons/month).

The bulking material used in the process will be chipped and shredded wood and vegetation. Bulking material will be either received already chipped and screened, or will be received in raw form and chipped on the property. An estimated ~~53~~104 tons of chipped bulking material may be placed on the processing area daily.

All materials entering the facility, both feedstock and bulking material, will be screened on entry for unauthorized materials as described in Section 4.3 below.

3.5.2 Tipping Process

Both pre-chipped and shredded bulking material and raw bulking material will be delivered by truck to the property. Raw bulking materials will be stored and then chipped and screened in an on-property area west and north of the processing area (Figure 2). A chipper/grinder will be brought to the property on an as-needed basis to chip and grind raw bulk material. The grinder

will be equipped with low-velocity spray nozzles to minimize the generation of dust during operation. The chipped and shredded bulking material will be placed on the processing areas in windrows using a front-end loader.

The liquid feedstock will be either pumped into one of ~~ten 18,000~~four 30,000-gallon above ground storage tanks for temporary storage, or may be pumped to the facility vacuum truck to be sprayed directly onto prepared windrows of bulking material located within the processing areas. ~~Liquid feedstocks will be typically stored in the above ground tanks for a maximum of ten days.~~ Typically, only one of the ~~ten 18,000~~four 30,000-gallon storage tank will contain feedstock. The storage capacity of the above ground tanks will allow the liquid feedstocks to be applied in a consistent manner and provide additional feedstock storage capacity that can be used during periods of rainfall that limit feedstock application. In any event, no feedstock will be accepted in excess of the available capacity of the storage tanks.

Due to the way the liquid feedstocks are handled, the potential for spillage outside the lined processing area will be small. In the event liquid feedstock was spilled outside the composting pad, the feedstock and affected surface soils will be promptly recovered using the front end loader and incorporated into the composting process. Any bulking materials that spill onto the ground will be promptly recovered with a front-end loader and returned to the windrows. The front-end loader and shovels will be used to maintain the tipping area and windrows daily.

3.5.3 Composting Process

Feedstocks will be applied to the windrows using a vacuum ~~truck equipped with a 3- or 4-inch hose~~. Once the feedstock is applied to a windrow, the windrow will be immediately turned, mixed, and rehomogenized using a self-propelled tiller to thoroughly mix feedstock and bulking material. This process allows the feedstocks to be evenly distributed through the windrows and prevents moisture or liquids from collecting at the base of the compost material.

Once tilled, the windrows will be monitored to ensure the moisture content and carbon to nitrogen ratio are consistent to maintaining adequate composting. Measurements of nitrogen and carbon ratios are monitored daily.

The desired initial moisture content of the compost is 40 to 60 percent by weight. Moisture content is evaluated and measured daily. Moisture content will be determined during the composting process using the "squeeze test." The squeeze test is performed by manually gathering and squeezing a handful of the compost material. If water drips out while the

compost is under hand pressure, the material is too wet. If the material crumbles apart when the pressure is released, it is too dry. Squeeze test samples will be collected from different depths and areas of the windrows to evaluate the moisture content throughout the windrow. High moisture contents will be corrected by adding additional bulking material and/or by additional tilling. Low moisture content will be corrected by adding potable water, liquids collected in the retention pond (for GSS composting only), or liquid feedstock, and then tilling.

Once a windrow is considered to have the appropriate moisture content and mixture of bulking material and feedstock, it will be monitored for 15 days. During the monitoring period, the windrow temperature will be measured regularly ~~using a bi-metal thermometer with a 4-foot probe~~. Temperature measurements will be collected every five to ten feet along the length of the windrow at a depth of approximately 1/3 of the windrow height. A temperature of at least 55 degrees centigrade will be maintained during the monitoring period. Temperature measurements will be recorded. During the 15-day monitoring period, the windrow will be turned a minimum of five times to maintain an even temperature throughout: this will aid in consistent thorough composting and the reduction of pathogens. The temperature will be measured and recorded each time the windrow is turned during the monitoring period. Once the 15-day monitoring period is completed, the composted material will enter the post-processing phase.

In order to avoid contaminating the final product, no feedstocks or retention pond liquids will be added to a windrow once it enters the monitoring period. In the event that additional feedstocks are inadvertently added to material during the monitoring period, the monitoring period for that material will be re-started.

3.5.4 Post-Processing

After the monitoring period, the final GSS product will be placed in a stockpile on the lined processing area for a curing period of at least 60 days. Each batch of final product will be placed in a separate stockpile and assigned a "Batch Number". Each batch will be physically separated to prevent co-mingling of different batches. Each batch will be tested for maturity and final product parameters as described in Section 4.7, and will then be assigned a final product grade as described in Section 4.7.2.

Batches that do not meet the maturity parameters will remain on the processing area and continue to be monitored until the maturity parameters are reached. Batches that meet the maturity parameters, but do not meet the final product parameters for either Grade 1 or Grade 2

compost (Waste Grade compost), will be disposed off site at an authorized municipal solid waste facility.

Cured compost meeting either Grade 1 or Grade 2 maturity parameters will be processed through a ½-inch screen to remove over-sized material in the Post-Processing area outside the lined composting pad. Over-sized material separated during screening will be returned to the windrows to be re-composted.

3.5.5 Product Distribution

Compost is currently sold only in bulk form. The facility may sell containerized compost, however, at some time in the future. Bulk product will be loaded into the purchaser's truck using a font-end loader. The facility anticipates producing approximately ~~24,750~~50,000 cubic yards of Grade 1 compost material annually at peak production (at ~~3034.34~~6,095 tons / month of feedstock). The facility does not currently plan to produce any Grade 2 compost, but may at some time in the future. Grade 1 and Grade 2 compost products will not be tracked. The batch number, the permit number of the disposal facility, dates and volumes disposed will be tracked for all batches of Waste Grade compost (i.e., compost to be disposed off site). The product parameters for each grade of compost are described in Section 4.7.2.

Labeling

All compost sold will be labeled in accordance with 30 TAC §332.74. Compost sold in bulk form will be labeled in the form of vouchers. A voucher will be provided to the buyer with each load of compost. If the facility elects to sell compost in containers, a label will be attached to each container. Each voucher and label will include the following information grouped together and printed in both English and Spanish:

I. General Statements:

- For Grade 1 Compost – "This product is considered Grade 1 Compost and meets the requirements and standards described in 30 Texas Administrative Code, §332.72 and has unrestricted use.

  It is recommended that compost be mixed into the top 6 inches (15 centimeters) of soil".

- For Grade 2 Compost – "This product is considered Grade 2 Compost and meets the requirements and standards described in 30 Texas Administrative Code, §332.72 and cannot be used at a residence or licensed child-care facility.

Bulking material before it is placed on the processing areas. The front-end loader will be used to build and maintain the stockpiles and windrows and to move compost materials within the processing area. The vacuum truck will be used to apply feedstock to the windrows. The self-propelled tiller will be used to mix the bulking material and feedstocks within the windrows. The mechanical screen will be brought to the facility on an as-needed basis to remove undesirable and oversized material from the mature compost.

4.2 SITE SECURITY AND SAFETY [§332.47(7)(C)]

The facility is enclosed with fencing and vehicle access will be controlled through a locked entry gate. The facility business hours are Monday through Friday, ~~7 am to 6 pm~~8:00 am to 5:00 pm. During these times, the facility is open to receive feedstock and/or sell compost. Composting operations are sometimes performed outside those hours as required by weather or other factors.

At end of each work day, and at all times when not attended, all gates and building doors will be locked and secured. After-hours access will be allowed only with prior arrangement with the facility manager. Security lighting is provided in the vicinity of the facility entrance and office trailers.

Security personnel will be present on site outside of operating hours. Security personnel will be made aware of the site hazards and will be provided the list of emergency contact information provided in Section 4.4. Facility personnel will coordinate with local law enforcement officials (i.e., police/sheriff, highway patrol, emergency medical corps units, fire department, and utility emergency teams) in the event of any emergency situation as described in Section 4.4.

Clearly posted signage at the facility entrance specifies a 10 mile per hour speed limit on the entrance road. The maximum speed allowed in the processing area is 5 miles per hour. Parking will be allowed only in designated areas.

4.3 CONTROL OF UNLOADING, UNAUTHORIZED MATERIALS [§332.47(7)(D)]

Only the designated feedstocks will be accepted at the facility. As required by 30 TAC §332.45(7), a sign will be placed at the property entrance that indicates the type of facility, permit number, hours of operation, and allowable feedstocks.

8.0 LANDOWNER LIST [§332.47(11)]

The following is a list of all landowners within ½ mile of the property boundaries. A map showing the location of each property and keyed to the table below is provided in Appendix J.

Map ID	Owner	Address	City	State	Zip
1	JKLB LLC	8118 DATAPOINT DR	SAN ANTONIO	TX	78229-3228
2	FLORES MARIA G	4581 S FLORES RD	ELMENDORF	TX	78112-9710
3	COMAL COUNTY METRO INV INC	PO BOX 1810	MCALLEN	TX	78505-1810
4	ENTERPRISE HYDROCARBONS LP	PO BOX 4018	HOUSTON	TX	77210-4018
5	THE SAN ANTONIO REFINERY LLC	1 BDA CROSSING STE 100	SAN ANTONIO	TX	78235
6	ELMENDORF METRO INVESTMENTS LLC	PO BOX 1810	MCALLEN	TX	78505-1810
7	BK METRO LAND COMPANY LTD	PO BOX 1810	MCALLEN	TX	78505-1810
8	VILLARREAL JOSE LUIS	112 CENTURY DR N	LAREDO	TX	78046-6001
9	LABUS PROPERTIES LLC	303 E ARMY TRAIL RD STE 205	BLOOMINGDALE	IL	60108-2143
10	MARKWARDT EDGAR K	109 CHEROKEE LN	SAN ANTONIO	TX	78232
11	CITY OF SAN ANTONIO/CITY PUBLIC SERVICE BOARD	145 NAVARRO ST	SAN ANTONIO	TX	78205-2934
12	TL REAL ESTATE HOLDINGS LLC	PO BOX 90504	SAN ANTONIO	TX	78209
13	RICHARDSON TIMOTHY G	20707 OLD LAMM RD	ELMENDORF	TX	78112-9627
14	SOUTHWASTE DISPOSAL LLC	16350 PARK TEN PL STE 215	HOUSTON	TX	77084-5053
15	RODRIGUEZ ROBERT	4271 S FLORES	ELMENDORF	TX	78112
16	ZAMORA LAWRENCE ALEXANDER	PO BOX 241390	SAN ANTONIO	TX	78224-8390
17	MENDEZ CARLOS JIL & MELENDEZ JOSE	5961 LABUS RD	ELMENDORF	TX	78112
18	MR W FIREWORKS INC	PO BOX 114	SOMERSET	TX	78069-114
19	BIG TEX TRAILER WORLD INC	950 INTERSTATE HIGHWAY 30 E	MT PLEASANT	TX	75455-7711
20	BOTA PARTNERS LLC	3707 N SAINT MARYS ST STE 201	SAN ANTONIO	TX	78212-3130
21	SERVISFLEET LEASING INC	1023 FERGUSON DR	HARLINGEN	TX	78550-9041
22	BOTA PARTNERS LLC	3707 N SAINT MARYS ST STE 201	SAN ANTONIO	TX	78212-3130
23	BOTA PARTNERS LLC	3707 N SAINT MARYS ST STE 201	SAN ANTONIO	TX	78212-3130
24	SERVISFLEET LEASING INC	1023 FERGUSON DR	HARLINGEN	TX	78550-9041
25	BOTA PARTNERS LLC	3707 N SAINT MARYS ST STE 201	SAN ANTONIO	TX	78212-3130
26	BEXAR COUNTY	233 N PECOS LA TRINIDAD STE 420	SAN ANTONIO	TX	78207-3188
27	ENTERPRISE HYDROCARBONS LP	PO BOX 4018	HOUSTON	TX	77210-4018
28	HALLER LONNIE	21155 INTERSTATE 37 S LOT 1	ELMENDORF	TX	78112-4750
29	BIG TEX TRAILER WORLD INC	950 INTERSTATE HIGHWAY 30 E	MT PLEASANT	TX	75455-7711
30	BOTA PARTNERS LLC	3707 N SAINT MARYS ST STE 201	SAN ANTONIO	TX	78212-3130
31	NAVISTAR INC	2701 NAVISTAR DR	LISLE	IL	60532-3637

Map ID	Owner	Address	City	State	Zip
32	GAUTREAUX CAROL J EST OF	4460 S FLORES RD	ELMENDORF	TX	78112-9712
33	BRITO CELSA	1804 CYNTHIA LN	PALMHURST	TX	78573
34	BONANNO DOUGLAS MARK & RAELEE ERICA	4474 S FLORES	SAN ANTONIO	TX	78214
35	LUBRIZOL CORPORATION	29400 LAKELAND BLVD	WICKLIFFE	OH	44092-2298
36	WEST TEXAS GAS INC	211 N COLORADO ST	MIDLAND	TX	79701-4607
37	JOHNSON ROBERT KENNETH & BERNA E	4126 LAKECLIFF DR	HARKER HEIGHTS	TX	76548-8609
38	LA IGLESIA VEN A CRISTO	4475 S FLORES RD	ELMENDORF	TX	78112-9762
39	LOPEZ RAY	4475 S FLORES RD	ELMENDORF	TX	78112-9762
40	WHITE CLAW CRUDE LLC	5151 BELT LINE RD STE 715	DALLAS	TX	75254
41	SALINAS CELESTINO &	14439 BOXER BAY	LIVE OAK	TX	78233-7227
42	MCDONALD JIMMY D	4130 S LOOP 1604 E	SAN ANTONIO	TX	78264-9567
43	QT SOUTH LLC	4705 S 129TH EAST AVE	TULSA	OK	74134-7008
44	KORUS ERNEST R & MAGDALEN REVOCABLE TRUST	PO BOX 1092	PLEASANTON	TX	78064
45	DIAMOND ENVIRONMENTAL MGMNT LP	2900 NACOGDOCHES RD	SAN ANTONIO	TX	78217-5019
46	DIAMOND ENVIRONMENTAL MGMNT LP	2900 NACOGDOCHES RD	SAN ANTONIO	TX	78217-5019
47	CAMACHO GERONIMO S &	20927 LAMM RD	ELMENDORF	TX	78112-9629
48	CAMACHO GERONIMO S &	20927 LAMM RD	ELMENDORF	TX	78112-9629
49	LAMM & 37 DEVELOPMENT PARTNERS LTD	100 NE LOOP 410 STE 775	SAN ANTONIO	TX	78216
50	LAMM & 37 DEVELOPMENT PARTNERS LTD	100 NE LOOP 410 STE 775	SAN ANTONIO	TX	78216
51	LAMM & 37 DEVELOPMENT PARTNERS LTD	100 NE LOOP 410 STE 775	SAN ANTONIO	TX	78216
52	RAMIREZ MATTHEW	20934 LAMM ROAD	ELMENDORF	TX	78112
53	HETSKO EDWARD	804 MORNING DOVE LN	FRIENDSWOOD	TX	77546-3556
54	GONZALEZ ERNESTO	21022 LAMM RD	ELMENDORF	TX	78112-1100
55	BEXAR COUNTY	PO BOX 839950	SAN ANTONIO	TX	78283-3950
56	VILLARREAL ROBERTO	5563 LARKDALE DR	SAN ANTONIO	TX	78233-5079
57	JOHNSON ROBERT KENNETH & BERNA E	4126 LAKECLIFF DR	HARKER HEIGHTS	TX	76548-8609
58	GUAJARDO JOE A	212 NORTHCREST DR	SAN ANTONIO	TX	78213-2234
59	ENTERPRISE HYDROCARBONS LP	PO BOX 4018	HOUSTON	TX	77210-4018
60	TREVINO JUAN J	PO BOX 10773	SAN ANTONIO	TX	78210-773
61	LUBRIZOL CORPORATION	29400 LAKELAND BLVD	WICKLIFFE	OH	44092-2298
62	LUBRIZOL CORPORATION	29400 LAKELAND BLVD	WICKLIFFE	OH	44092-2298
63	MARTINEZ ROGELIO IRACHETA & IRACHETA JOE LUIS	8502 AHERN DR APT 216	SAN ANTONIO	TX	78216-5754
64	ALLSTATE PROPERTIES MGMT LLC - SERIES 2	7243 HIDDEN HLS N	SAN ANTONIO	TX	78244-1512
65	CLAKLEY DANNY T	4431 S FLORES RD	ELMENDORF	TX	78112-9762
66	RODRIGUEZ LUIS T & PEREZ ANNETTE	4521 S FLORES RD	ELMENDORF	TX	78112
67	LOPEZ REYNALDO & VIRGINIA	4475 S FLORES RD	ELMENDORF	TX	78112-9762

Map ID	Owner	Address	City	State	Zip
68	GONZALES HENRY M & TRACY L	4465 S FLORES RD	ELMENDORF	TX	78112-9762
69	LOPEZ REYNALDO	4475 S FLORES RD	ELMENDORF	TX	78112-9762
70	SANCHEZ DAVID BONILLA	34 MCLENNAN OAK	SAN ANTONIO	TX	78240
71	TYLAR REVOCABLE TRUST	1317 S CROCKETT DR	ABILENE	TX	79605-3637
72	ARREGUIN VINCENT	3024 CENIZO	SAN ANTONIO	TX	78264-9504
73	BLACKSTOCK RILEY JR	22706 RED MOUNTAIN DR	ELMENDORF	TX	78112
74	LOKA KRISHNA R	4204 ENGADINA PASS	ROUND ROCK	TX	78665-1270
75	MENDEZ CARLOS JIL & MELENDEZ JOSE	5961 LABUS RD	ELMENDORF	TX	78112
76	TEXAS UNITED LAND LLC	PO BOX 6760	PAHRUMP	NV	89041-6760
77	TYLAR REVOCABLE TRUST	1317 S CROCKETT DR	ABILENE	TX	79605-3637
78	MENDEZ CARLOS JIL & MELENDEZ JOSE	5961 LABUS RD	ELMENDORF	TX	78112
79	TEXAS UNITED LAND LLC	PO BOX 6760	PAHRUMP	NV	89041-6760
80	TEXAS UNITED LAND LLC	PO BOX 6760	PAHRUMP	NV	89041-6760
81	BARTLEY DAVID RUSSELL & HAILEY RUTH GUERRERO	4520 S LOOP 1604 E	ELMENDORF	TX	78112-9697
82	RICHARDSON TRACY	2909 MINERAL SPRINGS RD	LOCKHART	TX	78644-3989

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Table 4

Energy and Mass Balance Calculations

Revision 1, 9-13-06

Input Information	Calculations
Bulking Material Calculations:	
2250 cy wood chips in ea windrow x 8 windrows	17,992 cy of chips on pad (=2250 cy chips per windrow * 8 number of windrows)
Process requires ~ 90 calendar days to mature	200 cy chips used / calendar day (=17992 cy / 90 calendar days)
Facility brings in 4500 Tons chips ea 90 days	75 tons chips / operating day (=4500 tons / 3 months / 20 operating days per month)
	1,500 tons chips / month (=4500 tons / 3 months)
	4,500 tons chips / 90 days (=1500 tons * 3 months)
	750 lb chips/ cy (=43 tons / 116 cy per day * 2000 lb per ton)
Feedstock Calculations:	
58,130 gal of feedstock / work day applied to windrows	4,325 tons per month of feed stock coming in (=58130 gal * 7.44 lb per gal / 2000 lb per ton *20 op days per month)
	12,975 tons of feed stock coming in / 90 days (=4325 tons per month * 3 months)
	51,898 tons per year of feed stock coming in (=4325 tons per month * 12 months)
	54 tons per work day of feed stock coming in (=4325 tons per month / 4 weeks per month / 20 op days per week)
	1,162,600 gal / month of feed stock (=58130 gal * 20 op days per month)
Product Calculations:	
~ 30% reduction in volume during composting process	17,992 cy of chips on pad in 90 days
~ 30% further reduction in volume when screened	12,594 cy of compost / 90 days after 30% reduction for maturation
	4,198 cy of compost / month after 30% reduction for maturation
	50,378 cy of compost / year after 30% reduction for maturation
	35,264 cy of finished compost / year after additional 30% reduction for screening
	52,896,480 lb of finished compost / year
	26,448 Tons of finished compost / year
	73 Tons of finished compost / calendar day

Assumptions:	
7.44	lb / gallon of feedstock
1,500	lb / cy compost
20	Operating Days / month
30	Calendar Days / month

Conversion Factors:	
2,000	lb / ton
7.48	gal / cf

RED-LINE VERSION

STATE OF TEXAS
J. BRIAN DUDLEY
59831
REGISTERED PROFESSIONAL ENGINEER
9/13/06

Table 4

Energy and Mass Balance Calculations

Assumed Windrow Size

Knowns and Assumptions		
Width =	20	ft
Height =	8	ft
Linear Density* =	2.96	CY/ft
Length =	440	ft

*Linear density of Windrow based on recommendation by manufacturer of windrow turner.

Bulking Material Calculations

Knowns and Assumptions		
Assumed windrow quantity =	13	Windrows
Maturation Period =	60	Days
Maturation Period =	2	Months
Bulking Material Desnisty =	750	lb/CY

Volume of Bulking Material on Pad:	
16,931	CY/ 60 days

Volume of Bulking Material Per Month:	
8,466	CY/ month

Tonnage of Bulking Material Per Month:	
3,175	Ton/month

Volume of Bulking Material Per Year:	
101,587	CY/ year

Tonnage of Bulking Material Per Year:	
38,095	Ton/year

Feedstock Calculations

Knowns and Assumptions		
Feedstock Density =	7.44	lb/gal
Working Days Per Month =	20	days
Ratio by Weight, Feedstock to Bulking Material =	1.92	ton/ton

Tonnage of Feedstock per month:	
6,095	ton/month

Tonnage of Feedstock per year:	
73,143	ton/year

Volume of Feedstock Applied Per Working Day:	
81,925	gal/day

Table 4

Energy and Mass Balance Calculations

Product Calculations

Knowns and Assumptions		
Desnity of Mature Compost =	1,500	lb/CY
Maturation Volume Reduction =	30	%
Screening Volume Reduction =	30	%

Volume of Mature Compost per year:	
71,111	CY/ year

Volume of Screened Final Product per year:	
49,778	CY/year

Tons of Finished Product per year:	
37,333	ton/year

Tons of Finished Product per calendar day:	
102	tons/day

Table 6
Equipment List

Equipment Type	Number Normally On-Site	Minimum Number Required to Operate
Front End Loader	1	1
Self-Propelled Tiller (a.k.a. windrow turner)	1	1
Shredder / Grinder	0, Materials processed/ground before arriving at facility, or at adjacent area on property	0
Storage Tanks	~~10~~4, (~~18,000~~30,000 gal each)	1
Vacuum Truck w/ pressure hose	1	1

7/31/2023

COOK-JOYCE INC.
ENGINEERING AND CONSULTING
812 WEST ELEVENTH
AUSTIN, TEXAS 78701-2000
(512) 474-9097 FAX (512) 474-8463

Facility Closure Plan

for

Wholearth Organic Composting
Elmendorf, Texas

Prepared for

Wholearth Organic Composting
20805 Lamm Road
Elmendorf, Texas 78112

Prepared by

Geomatrix Consultants, Inc.
5725 Highway 290 West, Suite 200B
Austin, Texas 78735

PARKHILL SMITH & COOPER, INC. F-560
STATE OF TEXAS
SPENSER J. HARVEY
138737
LICENSED PROFESSIONAL ENGINEER
07/31/2023
For July 2023
Revision Only

Revised by:

Cook-Joyce, Inc.
812 W. 11th St.
Austin, TX 78701

Revision History
Revised July 31, 2023
Revised September26, 2006
Revised December 1, 2004
Revised August8, 2004
Prepared January 22, 2004

STATE OF TEXAS
J. BRIAN DUDLEY
59831
REGISTERED PROFESSIONAL ENGINEER
9/26/06

Revised July 31, 2023
Revised September 26, 2006

Table of Contents

Attachments

PARKHILL SMITH & COOPER, INC. F-560
STATE OF TEXAS
SPENSER J. HARVEY
138737
LICENSED PROFESSIONAL ENGINEER
07/31/2023
For July 2023
Revision Only

STATE OF TEXAS
J. BRIAN DUDLEY
59831
REGISTERED PROFESSIONAL ENGINEER
9/26/06

I. INTRODUCTION

Wholearth Organic Composting is filing a permit application with the Texas Commission on Environmental Quality (TCEQ) for operation of a composting facility located in Elmendorf, Bexar County, Texas. The TCEQ require s that facility closure information be submitted to obtain an operating permit for the facility.

This closure plan was prepared to address the TCEQ requirements regarding facility closure. The cost estimate was prepared pursuant to the financial assurance requirements in Title 30 of the Texas Administrative Code (30 TAC) §332.47 (9). The cost estimate is based on the assumption that the facility is in compliance with the terms of its permit at the time of closure.

II. CURRENT SITE CONDITIONS

The Figure 2 of the permit application indicates the layout of the facility. Cross sectional views of the processing area are shown in Appendix A of the permit application. The facility consists of a bulk material chipping and storage areas, a lined grease trap waste/septic/sewage sludge (GSS)a processing area (composting pad), separate composting areas for other approved wastes, retention pond, post-processing area, above-ground feedstock storage tanks, and office areas within a 28.6-acre property. 6.5 acres of the facility are lined with a synthetic liner. The synthetic liner is continuous across the Processing Area and the retention pond. The liner is covered by a two-foot thick layer of protective soil.

During normal operations the processing area contains ~~approximately eight~~multiple rows of compost in various stages of maturity. The volume of this immature compost is anticipated to be approximately ~~8,840~~16,900 cubic yards, or approximately ~~4,860~~6,350 tons.

During normal operations, there is typically ~~800~~3,000 cubic yard s of mature compost stockpiled for sale in the post processing area.

The processing area retention pond has a capacity of 2,060,284 gallons. The retention pond collects any runoff from the processing area. 1be perimeter of the processing area is bermed to minimize the potential for both runon and runoff.

Feedstock is stored in above-ground storage tanks.

III. PROPOSED CLOSURE ACTIVITIES

The following activities will be conducted during facility closure:

1. The TCEQ will be notified at least 60 days prior to the commencement of any closure activities.

- Material from the Processing Area berms will be used to backfill the retention pond. The Processing Area will be regraded to prevent ponding.

The closure cost estimate included as Attachment B was prepared under the direction of a qualified professional engineer licensed in the State of Texas who has affixed the Professional Engineer's Seal to the cost estimate. The current cost of the anticipated closure is estimated to be ~~$356,621~~$599,497.

FACILITY CONDITIONS AT CLOSURE & CLOSURE ASSUMPTIONS
The facility is in compliance with the conditions of its permit.
Retention pond is assumed to be full.
Processing Area is assumed to contain the operating capacity of compost material. Compost material is assumed to be immature.
Mature compost in Post Processing Area will be used as mulch on the facility at the conclusion of closure activities.
All exposed liner material, miscellaneous wastes, and surface equipment will be removed and properly disposed at an authorized facility.
None of the facility operator's equipment, personnel, or facilities will be available for use in the closure activities.
No soil that requires remediation is on-site.
Processing Area earthen berms will be used as backfill.
Retention pond will be backfilled and Processing Area will be regraded to prevent ponding.
No salvage value has been assessed for any material or equipment at the site.
Facility will be seeded as necessary.

CLOSURE COST SUMMARY	
Oversight:	$12,000
Closure Activities, Processing Area and Retention Pond:	$26,980
Transportation & Disposal:	$315,635
Revegetation:	$2,006
TOTAL CLOSURE COST	**$356,621**

Engineer's Seal and Certification

I, J. Brian Dudley, P.E., certify that this Closure Cost Estimate for the Wholearth Organic Composting facility located in Elmendorf, Bexar County, TX was prepared by me and by others under my direct supervision using the attached assumptions.

J. Brian Dudley, P.E.
COOK-JOYCE, INC.

Date 9/26/06

LABOR, EQUIPMENT, MATERIAL LOADING, HANDLING, AND BACKFILLING

	Units	Quantity	Unit Price	Subtotal
Oversight:				
Closure Work Supervision (Consultant)	days	15	$800	$12,000
Closure Activities, Processing Area and Retention Pond:				
Technician	days	9	$560	$5,040
Laborers, 2	days	9	$640	$5,760
Mob/Demob Heavy Equipment	rnd trip	2	$325	$650
Grader	days	3	$718	$2,154
Front-end Loader/ Backhoe	days	12	$978	$11,736
Roll-Off Box Delivery/Pickup	box	2	$170	$340
Roll-Off Box Rental	days	10	$55	$550
Misc Materials & Supplies	lmp sum	1	$750	$750
Transportation & Disposal:				
Transportation of Roll off to Disposal Facility (Liner and Misc Debris)	trip	2	$150	$300
Disposal at Municipal Landfill (Liner and Misc Debris)	cy	40	$6.25	$250
Transportation of Curing and Green Compost to Authorized Disposal Facility	hr	298	$78.00	$23,244
Disposal of Curing and Green Compost at Authorized Disposal Facility	ton	5,901	$30.00	$177,030
Transportation and Disposal of Retention Pond Water	gal	2,000,284	$0.04	$82,411
Transportation and Disposal of Storage Tanks (10 tanks @ 18,000 gallon capacity each) Contents	gal	180,000	$0.18	$32,400
Revegetation:				
Seeding	1000 sy	68	$29.50	$2,006
TOTAL				$356,621

NOTES:

1) The Operator is the Property Owner and will allow the liner to remain in place.

2) All vendors and disposal facilities (other than other authorized Composting Facility) are within 40 miles of the site, and total round trip, loading, and unloading time is approximately 3 hours.

3) Abbreviations:
- cy - cubic yards
- rnd - round
- sy - square yards

Assumptions Used in Determining Veh Trip Numbers:	
	20 cy / roll off box
	36 cy / truck for compost

GMX rate * 8 hr days

QUANTITY CALCULATIONS	Length (ft)	Width (ft)	Depth (ft)	Cu. Ft.	Gals.	Bbls.	Cu. Yds.	Tons	Sq. Yd.	Acre
Processing & Retention Pond Surface Area	7[illegible]	519							45,614	9.4
Post-Processing Area									22,748	4.7
Berm Volumes (3' tall, 4' wide at top, 3/1 side slopes)	2,620	[illegible]9 sf (x-sectional area)	3	102,180			3,784			
Retention Pond (6/1 side slopes)	360	198	5	275,460	2,060,284	49,054	10[illegible]02		7,920	1.6
Green Compost (1,100 lb/cy)							3,577	1,967		
Curing Compost (1,100 lb/cy)							7,153	3,934		

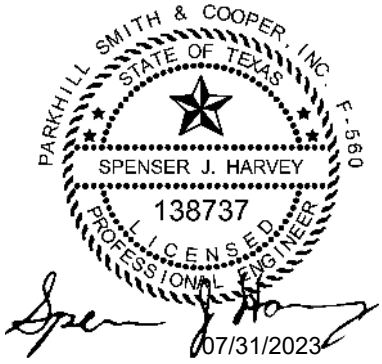
TIME AND EQUIPMENT ESTIMATES		
Equipment & Labor Needs	Time to Perform Task	
tech & laborers, loader	5	days to load immature compost and retention pond water
loader	2	days to backfill pond with berms
backhoe w/ hoe ram attachment	1	day to punch holes in Processing Area liner
grader	3	days to regrade
tech & laborers, loader	4	days to revegetate & mulch
	15	Total Days

FACILITY CONDITIONS AT CLOSURE & CLOSURE ASSUMPTIONS
The facility is in compliane with the conditions of its permit.
Retention pond is assumed to be full.
Processing area is assumed to contian the operating capacity of compost material. Compost material is assumed to be immature.
Mature compost in Post Processing area will be used as mulch on the faiclity at the conclusion of closure activities.
All exposed liner material, miscellaneous wastes, and surface equipment will be removed and properly disposed at an authorized facility.
None of the facility operator's equipment, personnel, or facillities will be available for use in the closure acitivies.
No soil that requires remediate is on-site
Processing Area earthen berms will be used as backfill.
Retention pond will be backfilled and Processing Area will be regarded to prevent ponding.
No salvage value has been assessed for any material or equipment at the site.
Facility will be seeded as necessary.

CLOSURE COST SUMMARY	
Oversight:	$ 18,000
Closure activies, Processing Area and Retention Pond:	$ 56,100
Transportation & Disposal:	$ 522,677
Revegetation:	$ 2,720
TOTAL CLOSURE COST	$ 599,497

Engineer's Seal and Certification

I Spenser J. Harvey, P.E., certify that this Closure Cost Estimate for the SouthWaste San Antonio Facility located in Elmendorf, Bexar County, TX was prepared by me and by others under my direct supervision using the attached assumptions.



07/31/2023
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LABOR, EQUIPMENT, MATERIAL LOADING, HANDLING, AND BACKFILLING				
	Unit	**Quantity**	**Unit Price**	**Subtotal**
Oversight:				
Clsoure Work Supervision (Consultant)	days	15	$ 1,200	$ 18,000
Closure activies, Processing Area and Retention Pond:				
Technician	days	9	$ 1,200	$ 10,800
Laborers, (2)	days	9	$ 1,300	$ 11,700
Mob/ Demob Heavy Equipment	rnd trip	2	$ 800	$ 1,600
Grader	days	3	$ 1,500	$ 4,500
Front-end Loader/ Backhoe	days	12	$ 2,000	$ 24,000
Roll-Off Box Delivery/ Pickup	box	2	$ 250	$ 500
Roll-Off Box Rental	days	10	$ 100	$ 1,000
Misc Materials & Supplies	lump sum	1	$ 2,000	$ 2,000
Transportation & Disposal:				
Transportation of Roll off to Disposal Facility (Liner and Misc Debris)	trip	2	$ 400	$ 800
Disposal at Municpal Landfill (Liner and Misc Debris)	CY	40	$ 15	$ 600
Transportation of Curing and Green Compost to Authorized Disposal Facility	hr	298	$ 120	$ 35,760
Disposal of Curing and Green Compost at Authorized Disposal Facility	ton	6,350	$ 50	$ 317,500
Transportation and Disposal of Retention Pond Water	gal	2,060,284	$ 0.06	$ 123,617
Transportation and Disposal of Storage Tanks (4 tanks @ 30,000 gallon capacity each) Contents	gal	120,000	$ 0.37	$ 44,400
Revegetation:				
Seeding	1000 sy	68	$ 40	$ 2,720
TOTAL CLOSURE COST				$ 599,497

NOTES:

1) Values are in 2023 dollars.

2) All tanks are assumed to be full.

3) The Operator is the Property Owner and will allow the liner to remain in place.

4) All vendors and disposal facilities (other than other authroized Composting Facility) are within 40 miles of the site, and total round trip, loading, and unloading time is approximately 3 hours.

5) Abreviations:

cy- cubic yards

rnd - round

sy - square yards

GMX rate * 8 hr day

Quantity Calculations	Length (ft)	Width (ft)	Depth (ft)	Cu. Ft.	Gals.	Bbls.	Cu. Yds.	Tons	Sq. Yd.	Acre
Processing & Retention Pond Surface Area	791	519							45,614	9.4
Post-Processing Area									22,748	47.0
Berm Volumes (3' tall, 4' wide at top, 3/1 side slopes)	2,620	39	3	102,180			3,784			
Retention Pond (6/1 side slopes)	360	198	5	275,460	2,060,284	49,054	10,202		7,920	1.6
Green Compost (1,100 lb/cy)							3,577	1,967		
Curing Compost (1,100 lb/cy)							7,153	3,934		

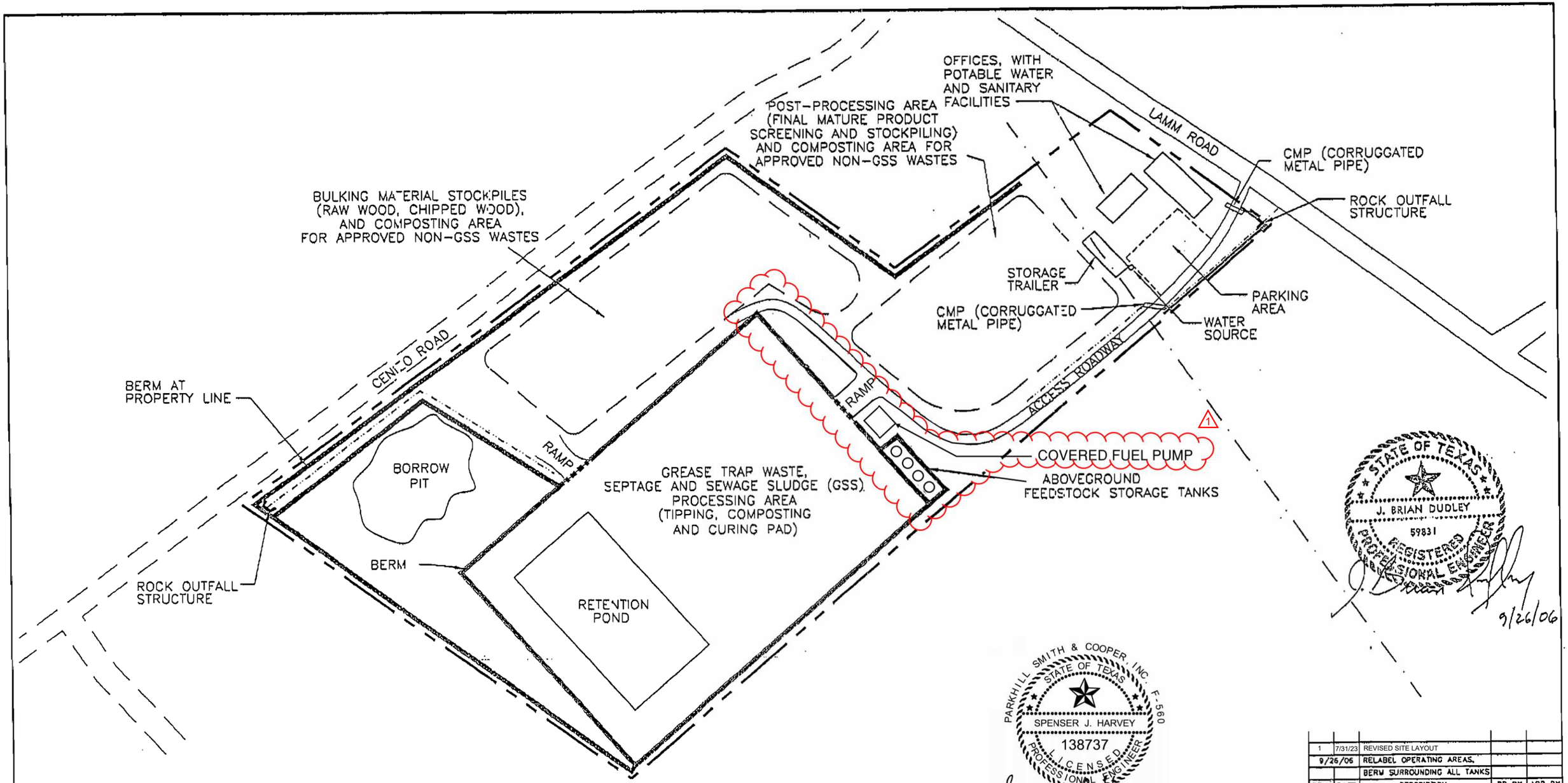
TIME AND EQUIPMENT ESTIMATES		
Equipment & Labor Needs	Time to Perform Tasks	
tech & Laborers, loader	5	days to load immature compost and retention pond water
loader	2	days to backfill pond with berms
backhoe w/ hoe ram attachment	1	days to punch holes in processing area liner
grader	3	days to regrade
tech & Laborers, loader	4	days to revegetate and mulch
	15	Total days

Prepared January 22, 2004
Revised August 8, 2004
Revised 12/1/2004
Revised July 31, 2023

Appendix A
Construction Drawings and Cross-Sections

The construction drawings and cross-sections are included to provide the following information:

- the design of berms, composting pad, and retention pond as components of the contaminated water collection system and the drainage system as required by §332.47(6)(A),
- details and sections as required by §332.47(6)(D).



NOTES:

1. NO SEPARATE TIPPING AREA, BULKING MATERIALS AND FEEDSTOCK ARE PLACED IN WINDROWS WITHIN PROCESSING AND COMPOSTING AREAS.
2. GSS FEEDSTOCK AND RETENTION POND WATER TO BE USED ONLY IN GSS PROCESSING AREA.
3. BASE MAP AND ORIGINAL LAYOUT BY ROBIN D. COSGROVE, P.E., GEOMATRIX, AUSTIN, TEXAS DECEMBER 4, 2004

STATE OF TEXAS
J. BRIAN DUDLEY
59831
REGISTERED PROFESSIONAL ENGINEER
9/26/06

PARKHILL SMITH & COOPER, INC. F-560
STATE OF TEXAS
SPENSER J. HARVEY
138737
LICENSED PROFESSIONAL ENGINEER
07/31/2023
For July 2023 Revision Only

REV.	DATE	DESCRIPTION	DR BY	APP BY
		BERM SURROUNDING ALL TANKS		
	9/26/06	RELABEL OPERATING AREAS.		
1	7/31/23	REVISED SITE LAYOUT		

COOK-JOYCE INC.
ENGINEERING AND CONSULTING
812 WEST ELEVENTH 512-474-9097
AUSTIN, TEXAS 78701

PROJECT:
WHOLEARTH ORGANIC COMPOSTING
ELMENDORF, TEXAS

SHEET TITLE:
FACILITY PLAN AND LAYOUT

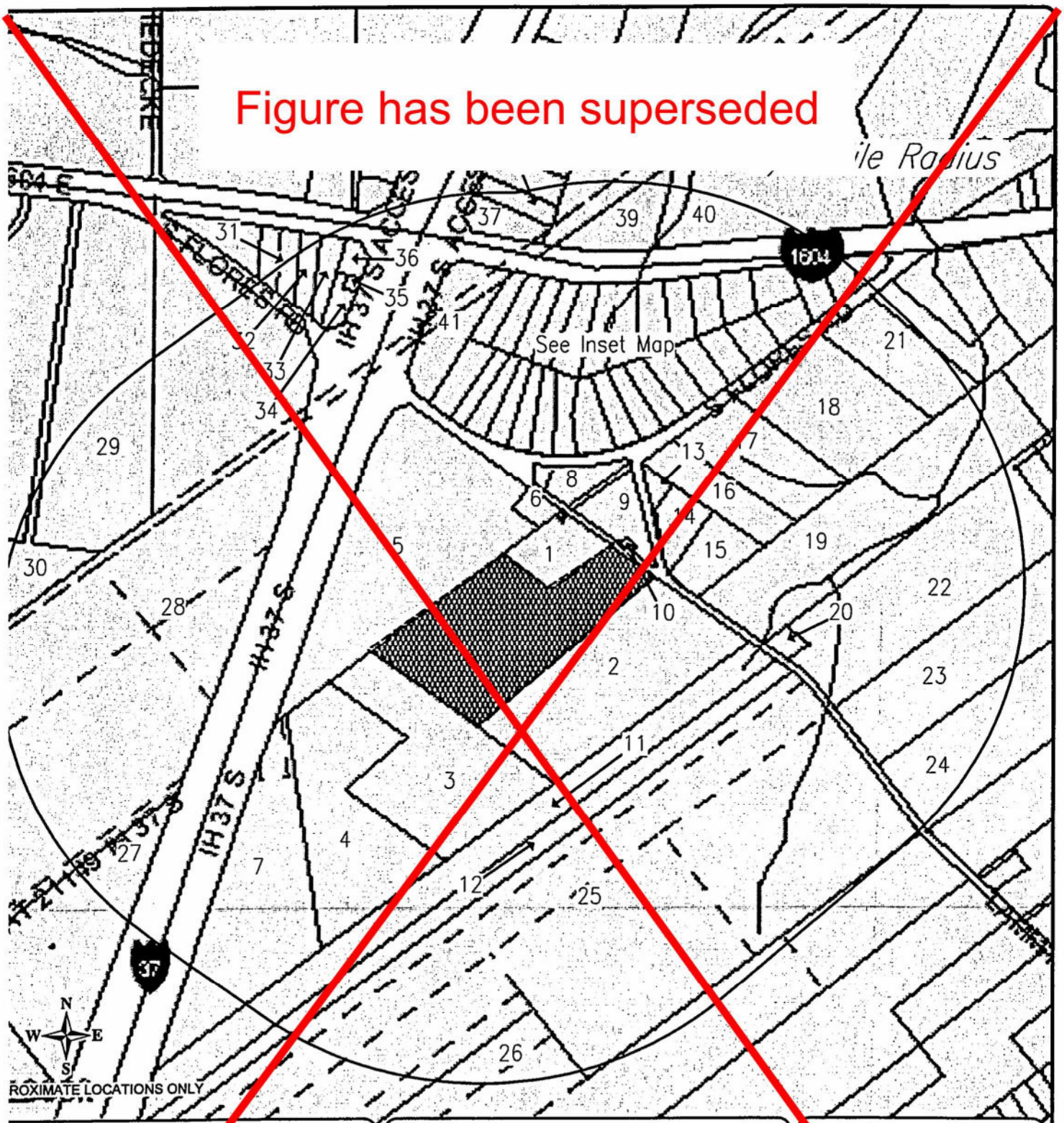
DES BY			SCALE: SEE BAR SCALE
DR BY	SDB		PROJECT NO. 06060
CHK BY	CA		C.J. NO. 06060003R5
APP BY	JBD		SHEET 1 OF 1 SHEETS
DATE ISSUED: 09-26-2006			FIGURE NO. 2
PURPOSE: PERMIT MOD.			

Prepared January 22, 2004
Revised August 8, 2004
Revised 12/1/2004
Revised July 31, 2023

Appendix J

Property Owner Map and Information

Figure has been superseded



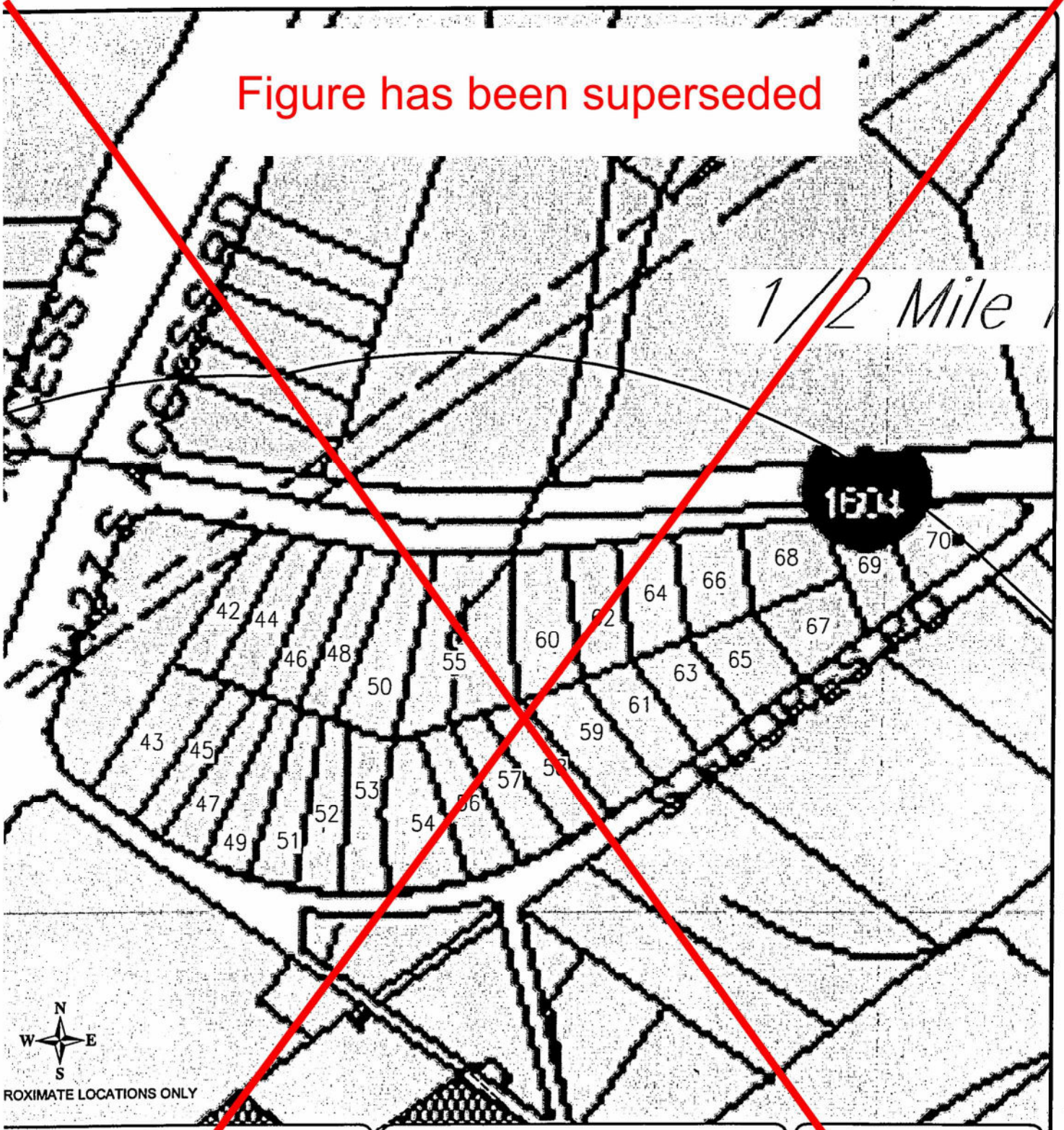
PARCEL LOCATION MAP
Source: City of San Antonio (2003)

Wholearth Organic Composting
Elmendorf, TX
Project #: 9302

0' 500' 1000' 1500'
SCALE: 1" = 1000'

GeoSearch
2705 Bee Caves Rd, Suite 330
Austin, Texas 78746
866-396-0042

Figure has been superseded



ROXIMATE LOCATIONS ONLY

PROPERTY BOUNDARY

PARCEL LOCATION MAP- INSET MAP

Source: City of San Antonio (2003)

Wholearth Organic Composting
Elmendorf, TX
Project #: 9302

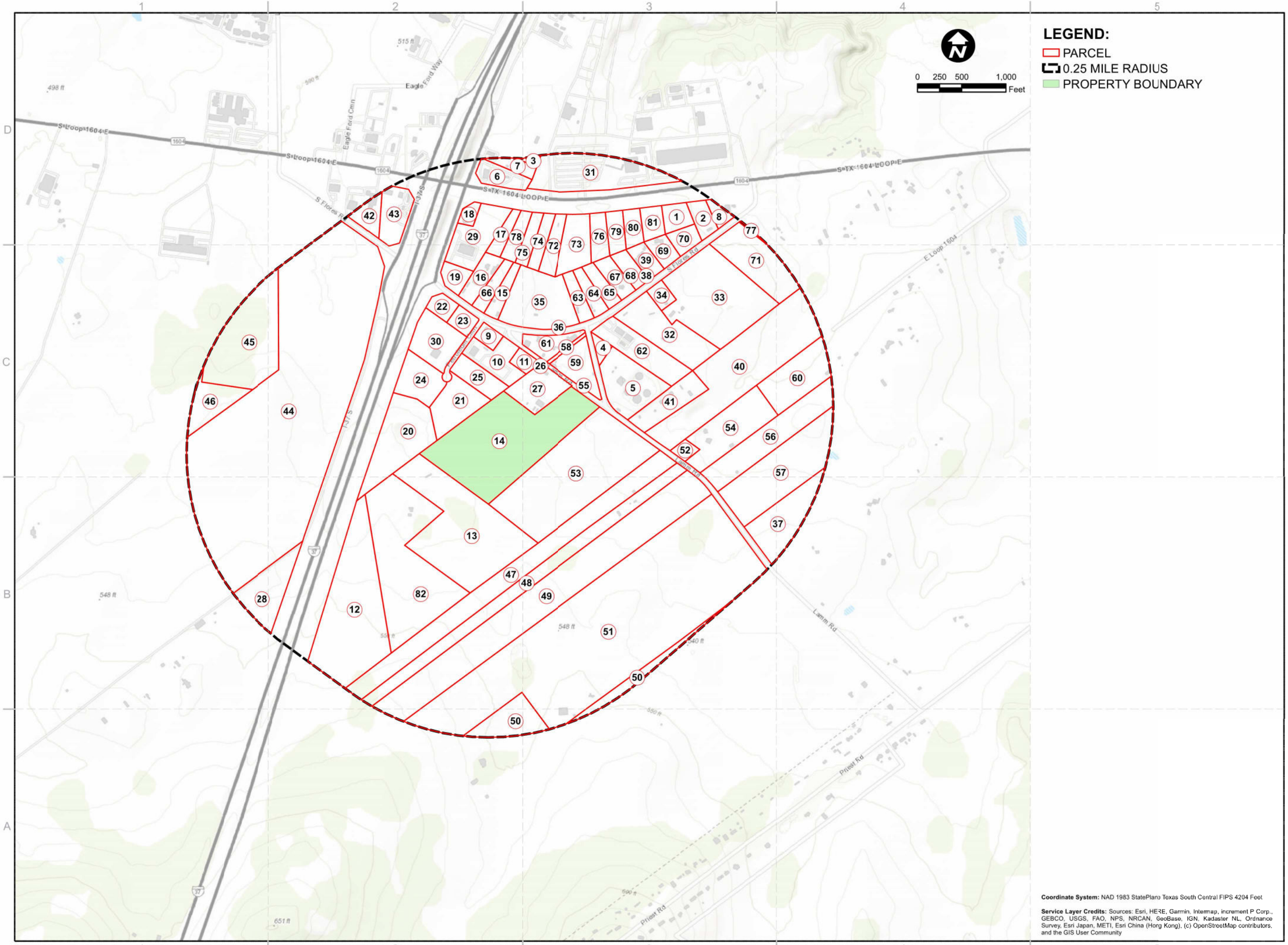
0' 250' 500' 750'

SCALE: 1" = 500'

GeoSearch

2705 Bee Caves Rd, Suite 330
Austin, Texas 78746
866-396-0042

7034 / DATE: 07/20/2004
I:\9302\Permit-Response to 1st Tech NOD\GeoSearch Property Owner Info.pdf



Parkhill

PARKHILL SMITH & COOPER, INC. F-560
STATE OF TEXAS
SPENSER J. HARVEY
138737
LICENSED PROFESSIONAL ENGINEER
07/31/2023

ISSUED FOR PERMITTING ONLY

SOUTHWASTE DISPOSAL SAN ANTONIO FACILITY

TCEQ MSW PERMIT NO. 2317A

SouthWaste Disposal LLC
A WRM Company

CLIENT

SOUTHWASTE DISPOSAL LLC
20805 OLD LAMM RD
Elmendorf, TX 78112

PROJECT NO.
9454.21

#	DATE	DESCRIPTION

Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

LAND OWNERSHIP MAP

FIG.J.1

FILE NAME: A:\2021\9454.21\03_DSGN\01_DWG\050_CIVIL\04_Compost\Adjacent_Property_Owner.mxd LAYOUT NAME: Layers PRINTED: Tuesday, July 18, 2023 - 11:41:14 AM USER: SHarvey

Final Version

Site Development Plan
for
Wholearth Organic Composting

20805 Lamm Road

Bexar County

Elmendorf, Texas

TCEQ Permit Approval: January 13, 2006

Prepared for:

Wholearth Organic Composting
20805 Lamm Road
Elmendorf, Texas 78112

Original Application Prepared by:

Geomatrix Consultants, Inc.
5725 Hwy 290 West, Suite 200B
Austin, Texas 78735
Robin D. Cosgrove, P.E. and Jerry Wick, P.G.

Revision by:
Cook-Joyce, Inc.
812 W. 11th St.
Austin, Texas 78701

Revision history:
Revised July 31, 2023
September 26, 2006
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Revised December 1, 2004
Revised August 8, 2004
Prepared January 22, 2004

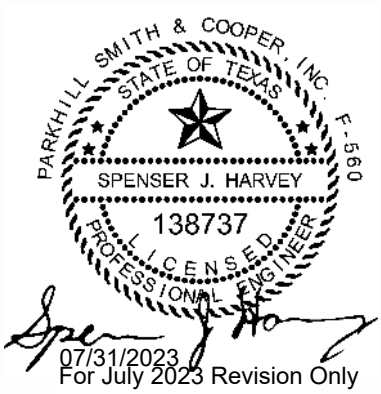
PARKHILL SMITH & COOPER, INC. F-560
STATE OF TEXAS
SPENSER J. HARVEY
138737
LICENSED PROFESSIONAL ENGINEER

07/31/2023
For July 2023
Revisions Only

STATE OF TEXAS
J. BRIAN DUDLEY
59831
REGISTERED PROFESSIONAL ENGINEER

9/26/06

REVISED
26 SEPTEMBER 2006
31 July 2023



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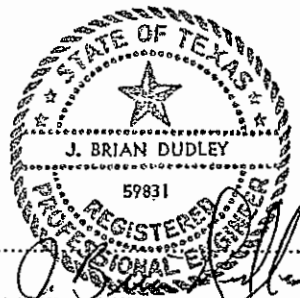

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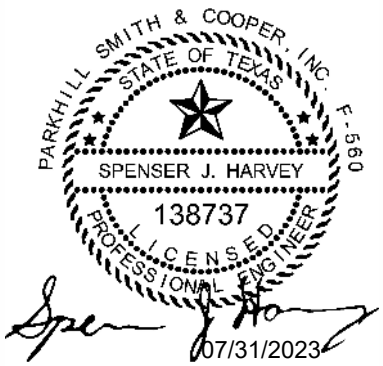


REQUESTED VARIANCES AND WAIVERS

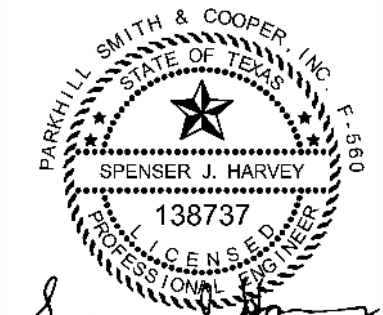
Variance 1 Screening and storage of bulking material and finished compost outside the processing area composting pad as described in Section 3.5 [page 18]

Waiver 1 Deleting analysis for heavy metals from the groundwater monitoring program as described in Section 3.3.3 [page 16]

TABLES

FIGURES

APPENDIXES



screening and storage require significant space, to oblige WOC to perform these activities within the existing lined area would severely limit the facility's capacity for composting. The resulting business impact to WOC would clearly rise to the level of an unnecessary hardship.

In accordance with 30 TAC §332.5, we request that the Executive Director indicate the approval of this requested variance in writing.

3.5.l Feedstock Identification

The anticipated feedstock is listed below. An estimated 73,000 tons of feedstock will be composted annually. The largest portion of the incoming feedstock will be grease trap waste. The estimated quantity of grease trap waste to be received is approximately 250 tons per day (5,000 tons per month, assuming 20 operating days per month) or approximately 67,000 gallons per operating day (assuming 7.44 lb/ gallon typical for grease trap waste). The other feedstocks accepted at the facility and their currently estimated amounts are:

- Municipal Sewage Sludge (500 tons/month),
- Septage (500 tons/month),
- Meat (5 tons/month),
- Dead Animal Carcasses (8 tons/month),
- Fish (5 tons/month),
- Oils and Greases (20 tons/month}, and
- Dairy/Food (45 tons/month).

The bulking material used in the process will be chipped and shredded wood and vegetation. Bulking material will be either received already chipped and screened, or will be received in raw form and chipped on the property. An estimated 104 tons of chipped bulking material may be placed on the processing area daily.

All materials entering the facility, both feedstock and bulking material, will be screened on entry for unauthorized materials as described in Section 4.3 below.

3.5.2 Tipping Process

Both pre-chipped and shredded bulking material and raw bulking material will be delivered by truck to the property. Raw bulking materials will be stored and then chipped and screened in an on-property area west and north of the processing area (Figure 2). A chipper/grinder will be brought to the property on an as-needed basis to chip and grind raw bulk material. The grinder

will be equipped with low-velocity spray nozzles to minimize the generation of dust during operation. The chipped and shredded bulking material will be placed on the processing areas in windrows using a front-end loader.

The liquid feedstock will be either pumped into one of four 30,000-gallon above ground storage tanks for temporary storage, or may be pumped to the facility vacuum truck to be sprayed directly onto prepared windrows of bulking material located within the processing areas. Typically, only one of the four 30,000-gallon storage tank will contain feedstock. The storage capacity of the above ground tanks will allow the liquid feedstocks to be applied in a consistent manner and provide additional feedstock storage capacity that can be used during periods of rainfall that limit feedstock application. In any event, no feedstock will be accepted in excess of the available capacity of the storage tanks.

Due to the way the liquid feedstocks are handled, the potential for spillage outside the lined processing area will be small. In the event liquid feedstock was spilled outside the composting pad, the feedstock and affected surface soils will be promptly recovered using the front end loader and incorporated into the composting process. Any bulking materials that spill onto the ground will be promptly recovered with a front-end loader and returned to the windrows. The front-end loader and shovels will be used to maintain the tipping area and windrows daily.

3.5.3 Composting Process

Feedstocks will be applied to the windrows using a vacuum. Once the feedstock is applied to a windrow, the windrow will be immediately turned, mixed, and rehomogenized using a self-propelled tiller to thoroughly mix feedstock and bulking material. This process allows the feedstocks to be evenly distributed through the windrows and prevents moisture or liquids from collecting at the base of the compost material.

Once tilled, the windrows will be monitored to ensure the moisture content and carbon to nitrogen ratio are consistent to maintaining adequate composting. Measurements of nitrogen and carbon ratios are monitored daily.

The desired initial moisture content of the compost is 40 to 60 percent by weight. Moisture content is evaluated and measured daily. Moisture content will be determined during the composting process using the "squeeze test." The squeeze test is performed by manually gathering and squeezing a handful of the compost material. If water drips out while the

compost is under hand pressure, the material is too wet. If the material crumbles apart when the pressure is released, it is too dry. Squeeze test samples will be collected from different depths and areas of the windrows to evaluate the moisture content throughout the windrow. High moisture contents will be corrected by adding additional bulking material and/or by additional tilling. Low moisture content will be corrected by adding potable water, liquids collected in the retention pond (for GSS composting only), or liquid feedstock, and then tilling.

Once a windrow is considered to have the appropriate moisture content and mixture of bulking material and feedstock, it will be monitored for 15 days. During the monitoring period, the windrow temperature will be measured regularly. Temperature measurements will be collected every five to ten feet along the length of the windrow at a depth of approximately 1/3 of the windrow height. A temperature of at least 55 degrees centigrade will be maintained during the monitoring period. Temperature measurements will be recorded. During the 15-day monitoring period, the windrow will be turned a minimum of five times to maintain an even temperature throughout: this will aid in consistent thorough composting and the reduction of pathogens. The temperature will be measured and recorded each time the windrow is turned during the monitoring period. Once the 15-day monitoring period is completed, the composted material will enter the post-processing phase.

In order to avoid contaminating the final product, no feedstocks or retention pond liquids will be added to a windrow once it enters the monitoring period. In the event that additional feedstocks are inadvertently added to material during the monitoring period, the monitoring period for that material will be re-started.

3.5.4 Post-Processing

After the monitoring period, the final GSS product will be placed in a stockpile on the lined processing area for a curing period of at least 60 days. Each batch of final product will be placed in a separate stockpile and assigned a "Batch Number". Each batch will be physically separated to prevent co-mingling of different batches. Each batch will be tested for maturity and final product parameters as described in Section 4.7, and will then be assigned a final product grade as described in Section 4.7.2.

Batches that do not meet the maturity parameters will remain on the processing area and continue to be monitored until the maturity parameters are reached. Batches that meet the maturity parameters, but do not meet the final product parameters for either Grade 1 or Grade 2

compost (Waste Grade compost), will be disposed off site at an authorized municipal solid waste facility.

Cured compost meeting either Grade 1 or Grade 2 maturity parameters will be processed through a ½-inch screen to remove over-sized material in the Post-Processing area outside the lined composting pad. Over-sized material separated during screening will be returned to the windrows to be re-composted.

3.5.5 Product Distribution

Compost is currently sold only in bulk form. The facility may sell containerized compost, however, at some time in the future. Bulk product will be loaded into the purchaser's truck using a font-end loader. The facility anticipates producing approximately 50,000 cubic yards of Grade 1 compost material annually at peak production (at 6,095 tons / month of feedstock). The facility does not currently plan to produce any Grade 2 compost, but may at some time in the future. Grade 1 and Grade 2 compost products will not be tracked. The batch number, the permit number of the disposal facility, dates and volumes disposed will be tracked for all batches of Waste Grade compost (i.e., compost to be disposed off site). The product parameters for each grade of compost are described in Section 4.7.2.

Labeling

All compost sold will be labeled in accordance with 30 TAC §332.74. Compost sold in bulk form will be labeled in the form of vouchers. A voucher will be provided to the buyer with each load of compost. If the facility elects to sell compost in containers, a label will be attached to each container. Each voucher and label will include the following information grouped together and printed in both English and Spanish:

I. General Statements:

- For Grade 1 Compost – "This product is considered Grade 1 Compost and meets the requirements and standards described in 30 Texas Administrative Code, §332.72 and has unrestricted use.

  It is recommended that compost be mixed into the top 6 inches (15 centimeters) of soil".

- For Grade 2 Compost – "This product is considered Grade 2 Compost and meets the requirements and standards described in 30 Texas Administrative Code, §332.72 and cannot be used at a residence or licensed child-care facility.

Bulking material before it is placed on the processing areas. The front-end loader will be used to build and maintain the stockpiles and windrows and to move compost materials within the processing area. The vacuum truck will be used to apply feedstock to the windrows. The self-propelled tiller will be used to mix the bulking material and feedstocks within the windrows. The mechanical screen will be brought to the facility on an as-needed basis to remove undesirable and oversized material from the mature compost.

4.2 SITE SECURITY AND SAFETY [§332.47(7)(C)]

The facility is enclosed with fencing and vehicle access will be controlled through a locked entry gate. The facility business hours are Monday through Friday, 8:00 am to 5:00 pm. During these times, the facility is open to receive feedstock and/or sell compost. Composting operations are sometimes performed outside those hours as required by weather or other factors.

At end of each work day, and at all times when not attended, all gates and building doors will be locked and secured. After-hours access will be allowed only with prior arrangement with the facility manager. Security lighting is provided in the vicinity of the facility entrance and office trailers.

Security personnel will be present on site outside of operating hours. Security personnel will be made aware of the site hazards and will be provided the list of emergency contact information provided in Section 4.4. Facility personnel will coordinate with local law enforcement officials (i.e., police/sheriff, highway patrol, emergency medical corps units, fire department, and utility emergency teams) in the event of any emergency situation as described in Section 4.4.

Clearly posted signage at the facility entrance specifies a 10 mile per hour speed limit on the entrance road. The maximum speed allowed in the processing area is 5 miles per hour. Parking will be allowed only in designated areas.

4.3 CONTROL OF UNLOADING, UNAUTHORIZED MATERIALS [§332.47(7)(D)]

Only the designated feedstocks will be accepted at the facility. As required by 30 TAC §332.45(7), a sign will be placed at the property entrance that indicates the type of facility, permit number, hours of operation, and allowable feedstocks.

8.0 LANDOWNER LIST [§332.47(11)]

The following is a list of all landowners within ½ mile of the property boundaries. A map showing the location of each property and keyed to the table below is provided in Appendix J.

Map ID	Owner	Address	City	State	Zip
1	JKLB LLC	8118 DATAPOINT DR	SAN ANTONIO	TX	78229-3228
2	FLORES MARIA G	4581 S FLORES RD	ELMENDORF	TX	78112-9710
3	COMAL COUNTY METRO INV INC	PO BOX 1810	MCALLEN	TX	78505-1810
4	ENTERPRISE HYDROCARBONS LP	PO BOX 4018	HOUSTON	TX	77210-4018
5	THE SAN ANTONIO REFINERY LLC	1 BDA CROSSING STE 100	SAN ANTONIO	TX	78235
6	ELMENDORF METRO INVESTMENTS LLC	PO BOX 1810	MCALLEN	TX	78505-1810
7	BK METRO LAND COMPANY LTD	PO BOX 1810	MCALLEN	TX	78505-1810
8	VILLARREAL JOSE LUIS	112 CENTURY DR N	LAREDO	TX	78046-6001
9	LABUS PROPERTIES LLC	303 E ARMY TRAIL RD STE 205	BLOOMINGDALE	IL	60108-2143
10	MARKWARDT EDGAR K	109 CHEROKEE LN	SAN ANTONIO	TX	78232
11	CITY OF SAN ANTONIO/CITY PUBLIC SERVICE BOARD	145 NAVARRO ST	SAN ANTONIO	TX	78205-2934
12	TL REAL ESTATE HOLDINGS LLC	PO BOX 90504	SAN ANTONIO	TX	78209
13	RICHARDSON TIMOTHY G	20707 OLD LAMM RD	ELMENDORF	TX	78112-9627
14	SOUTHWASTE DISPOSAL LLC	16350 PARK TEN PL STE 215	HOUSTON	TX	77084-5053
15	RODRIGUEZ ROBERT	4271 S FLORES	ELMENDORF	TX	78112
16	ZAMORA LAWRENCE ALEXANDER	PO BOX 241390	SAN ANTONIO	TX	78224-8390
17	MENDEZ CARLOS JIL & MELENDEZ JOSE	5961 LABUS RD	ELMENDORF	TX	78112
18	MR W FIREWORKS INC	PO BOX 114	SOMERSET	TX	78069-114
19	BIG TEX TRAILER WORLD INC	950 INTERSTATE HIGHWAY 30 E	MT PLEASANT	TX	75455-7711
20	BOTA PARTNERS LLC	3707 N SAINT MARYS ST STE 201	SAN ANTONIO	TX	78212-3130
21	SERVISFLEET LEASING INC	1023 FERGUSON DR	HARLINGEN	TX	78550-9041
22	BOTA PARTNERS LLC	3707 N SAINT MARYS ST STE 201	SAN ANTONIO	TX	78212-3130
23	BOTA PARTNERS LLC	3707 N SAINT MARYS ST STE 201	SAN ANTONIO	TX	78212-3130
24	SERVISFLEET LEASING INC	1023 FERGUSON DR	HARLINGEN	TX	78550-9041
25	BOTA PARTNERS LLC	3707 N SAINT MARYS ST STE 201	SAN ANTONIO	TX	78212-3130
26	BEXAR COUNTY	233 N PECOS LA TRINIDAD STE 420	SAN ANTONIO	TX	78207-3188
27	ENTERPRISE HYDROCARBONS LP	PO BOX 4018	HOUSTON	TX	77210-4018
28	HALLER LONNIE	21155 INTERSTATE 37 S LOT 1	ELMENDORF	TX	78112-4750
29	BIG TEX TRAILER WORLD INC	950 INTERSTATE HIGHWAY 30 E	MT PLEASANT	TX	75455-7711
30	BOTA PARTNERS LLC	3707 N SAINT MARYS ST STE 201	SAN ANTONIO	TX	78212-3130
31	NAVISTAR INC	2701 NAVISTAR DR	LISLE	IL	60532-3637

Map ID	Owner	Address	City	State	Zip
32	GAUTREAUX CAROL J EST OF	4460 S FLORES RD	ELMENDORF	TX	78112-9712
33	BRITO CELSA	1804 CYNTHIA LN	PALMHURST	TX	78573
34	BONANNO DOUGLAS MARK & RAELEE ERICA	4474 S FLORES	SAN ANTONIO	TX	78214
35	LUBRIZOL CORPORATION	29400 LAKELAND BLVD	WICKLIFFE	OH	44092-2298
36	WEST TEXAS GAS INC	211 N COLORADO ST	MIDLAND	TX	79701-4607
37	JOHNSON ROBERT KENNETH & BERNA E	4126 LAKECLIFF DR	HARKER HEIGHTS	TX	76548-8609
38	LA IGLESIA VEN A CRISTO	4475 S FLORES RD	ELMENDORF	TX	78112-9762
39	LOPEZ RAY	4475 S FLORES RD	ELMENDORF	TX	78112-9762
40	WHITE CLAW CRUDE LLC	5151 BELT LINE RD STE 715	DALLAS	TX	75254
41	SALINAS CELESTINO &	14439 BOXER BAY	LIVE OAK	TX	78233-7227
42	MCDONALD JIMMY D	4130 S LOOP 1604 E	SAN ANTONIO	TX	78264-9567
43	QT SOUTH LLC	4705 S 129TH EAST AVE	TULSA	OK	74134-7008
44	KORUS ERNEST R & MAGDALEN REVOCABLE TRUST	PO BOX 1092	PLEASANTON	TX	78064
45	DIAMOND ENVIRONMENTAL MGMNT LP	2900 NACOGDOCHES RD	SAN ANTONIO	TX	78217-5019
46	DIAMOND ENVIRONMENTAL MGMNT LP	2900 NACOGDOCHES RD	SAN ANTONIO	TX	78217-5019
47	CAMACHO GERONIMO S &	20927 LAMM RD	ELMENDORF	TX	78112-9629
48	CAMACHO GERONIMO S &	20927 LAMM RD	ELMENDORF	TX	78112-9629
49	LAMM & 37 DEVELOPMENT PARTNERS LTD	100 NE LOOP 410 STE 775	SAN ANTONIO	TX	78216
50	LAMM & 37 DEVELOPMENT PARTNERS LTD	100 NE LOOP 410 STE 775	SAN ANTONIO	TX	78216
51	LAMM & 37 DEVELOPMENT PARTNERS LTD	100 NE LOOP 410 STE 775	SAN ANTONIO	TX	78216
52	RAMIREZ MATTHEW	20934 LAMM ROAD	ELMENDORF	TX	78112
53	HETSKO EDWARD	804 MORNING DOVE LN	FRIENDSWOOD	TX	77546-3556
54	GONZALEZ ERNESTO	21022 LAMM RD	ELMENDORF	TX	78112-1100
55	BEXAR COUNTY	PO BOX 839950	SAN ANTONIO	TX	78283-3950
56	VILLARREAL ROBERTO	5563 LARKDALE DR	SAN ANTONIO	TX	78233-5079
57	JOHNSON ROBERT KENNETH & BERNA E	4126 LAKECLIFF DR	HARKER HEIGHTS	TX	76548-8609
58	GUAJARDO JOE A	212 NORTHCREST DR	SAN ANTONIO	TX	78213-2234
59	ENTERPRISE HYDROCARBONS LP	PO BOX 4018	HOUSTON	TX	77210-4018
60	TREVINO JUAN J	PO BOX 10773	SAN ANTONIO	TX	78210-773
61	LUBRIZOL CORPORATION	29400 LAKELAND BLVD	WICKLIFFE	OH	44092-2298
62	LUBRIZOL CORPORATION	29400 LAKELAND BLVD	WICKLIFFE	OH	44092-2298
63	MARTINEZ ROGELIO IRACHETA & IRACHETA JOE LUIS	8502 AHERN DR APT 216	SAN ANTONIO	TX	78216-5754
64	ALLSTATE PROPERTIES MGMT LLC - SERIES 2	7243 HIDDEN HLS N	SAN ANTONIO	TX	78244-1512
65	CLAKLEY DANNY T	4431 S FLORES RD	ELMENDORF	TX	78112-9762
66	RODRIGUEZ LUIS T & PEREZ ANNETTE	4521 S FLORES RD	ELMENDORF	TX	78112
67	LOPEZ REYNALDO & VIRGINIA	4475 S FLORES RD	ELMENDORF	TX	78112-9762

Map ID	Owner	Address	City	State	Zip
68	GONZALES HENRY M & TRACY L	4465 S FLORES RD	ELMENDORF	TX	78112-9762
69	LOPEZ REYNALDO	4475 S FLORES RD	ELMENDORF	TX	78112-9762
70	SANCHEZ DAVID BONILLA	34 MCLENNAN OAK	SAN ANTONIO	TX	78240
71	TYLAR REVOCABLE TRUST	1317 S CROCKETT DR	ABILENE	TX	79605-3637
72	ARREGUIN VINCENT	3024 CENIZO	SAN ANTONIO	TX	78264-9504
73	BLACKSTOCK RILEY JR	22706 RED MOUNTAIN DR	ELMENDORF	TX	78112
74	LOKA KRISHNA R	4204 ENGADINA PASS	ROUND ROCK	TX	78665-1270
75	MENDEZ CARLOS JIL & MELENDEZ JOSE	5961 LABUS RD	ELMENDORF	TX	78112
76	TEXAS UNITED LAND LLC	PO BOX 6760	PAHRUMP	NV	89041-6760
77	TYLAR REVOCABLE TRUST	1317 S CROCKETT DR	ABILENE	TX	79605-3637
78	MENDEZ CARLOS JIL & MELENDEZ JOSE	5961 LABUS RD	ELMENDORF	TX	78112
79	TEXAS UNITED LAND LLC	PO BOX 6760	PAHRUMP	NV	89041-6760
80	TEXAS UNITED LAND LLC	PO BOX 6760	PAHRUMP	NV	89041-6760
81	BARTLEY DAVID RUSSELL & HAILEY RUTH GUERRERO	4520 S LOOP 1604 E	ELMENDORF	TX	78112-9697
82	RICHARDSON TRACY	2909 MINERAL SPRINGS RD	LOCKHART	TX	78644-3989

Table 4

Energy and Mass Balance Calculations

Assumed Windrow Size

Knowns and Assumptions		
Width =	20	ft
Height =	8	ft
Linear Density* =	2.96	CY/ft
Length =	440	ft

*Linear density of Windrow based on recommendation by manufacturer of windrow turner.

Bulking Material Calculations

Knowns and Assumptions		
Assumed windrow quantity =	13	Windrows
Maturation Period =	60	Days
Maturation Period =	2	Months
Bulking Material Desnisty =	750	lb/CY

Volume of Bulking Material on Pad:	
16,931	CY/ 60 days

Volume of Bulking Material Per Month:	
8,466	CY/ month

Tonnage of Bulking Material Per Month:	
3,175	Ton/month

Volume of Bulking Material Per Year:	
101,587	CY/ year

Tonnage of Bulking Material Per Year:	
38,095	Ton/year

Feedstock Calculations

Knowns and Assumptions		
Feedstock Density =	7.44	lb/gal
Working Days Per Month =	20	days
Ratio by Weight, Feedstock to Bulking Material =	1.92	ton/ton

Tonnage of Feedstock per month:	
6,095	ton/month

Tonnage of Feedstock per year:	
73,143	ton/year

Volume of Feedstock Applied Per Working Day:	
81,925	gal/day

Table 4

Energy and Mass Balance Calculations

Product Calculations

Knowns and Assumptions		
Desnity of Mature Compost =	1,500	lb/CY
Maturation Volume Reduction =	30	%
Screening Volume Reduction =	30	%

Volume of Mature Compost per year:	
71,111	CY/ year

Volume of Screened Final Product per year:	
49,778	CY/year

Tons of Finished Product per year:	
37,333	ton/year

Tons of Finished Product per calendar day:	
102	tons/day

Table 6
Equipment List

Equipment Type	Number Normally On-Site	Minimum Number Required to Operate
Front End Loader	1	1
Self-Propelled Tiller (a.k.a. windrow turner)	1	1
Shredder / Grinder	0, Materials processed/ground before arriving at facility, or at adjacent area on property	0
Storage Tanks	4, (30,000 gal each)	1
Vacuum Truck w/ pressure hose	1	1

7/31/2023

COOK-JOYCE INC.
ENGINEERING AND CONSULTING
812 WEST ELEVENTH
AUSTIN, TEXAS 78701-2000
(512) 474-9097 FAX (512) 474-8463

Facility Closure Plan

for

Wholearth Organic Composting
Elmendorf, Texas

Prepared for

Wholearth Organic Composting
20805 Lamm Road
Elmendorf, Texas 78112

Prepared by

Geomatrix Consultants, Inc.
5725 Highway 290 West, Suite 200B
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Attachments

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I. INTRODUCTION

Wholearth Organic Composting is filing a permit application with the Texas Commission on Environmental Quality (TCEQ) for operation of a composting facility located in Elmendorf, Bexar County, Texas. The TCEQ require s that facility closure information be submitted to obtain an operating permit for the facility.

This closure plan was prepared to address the TCEQ requirements regarding facility closure. The cost estimate was prepared pursuant to the financial assurance requirements in Title 30 of the Texas Administrative Code (30 TAC) §332.47 (9). The cost estimate is based on the assumption that the facility is in compliance with the terms of its permit at the time of closure.

II. CURRENT SITE CONDITIONS

The Figure 2 of the permit application indicates the layout of the facility. Cross sectional views of the processing area are shown in Appendix A of the permit application. The facility consists of a bulk material chipping and storage areas, a lined grease trap waste/septic/sewage sludge (GSS)a processing area (composting pad), separate composting areas for other approved wastes, retention pond, post-processing area, above-ground feedstock storage tanks, and office areas within a 28.6-acre property. 6.5 acres of the facility are lined with a synthetic liner. The synthetic liner is continuous across the Processing Area and the retention pond. The liner is covered by a two-foot thick layer of protective soil.

During normal operations the processing area contains multiple rows of compost in various stages of maturity. The volume of this immature compost is anticipated to be approximately 16,900 cubic yards, or approximately 6,350 tons.

During normal operations, there is typically 3,000 cubic yard s of mature compost stockpiled for sale in the post processing area.

The processing area retention pond has a capacity of 2,060,284 gallons. The retention pond collects any runoff from the processing area. 1be perimeter of the processing area is bermed to minimize the potential for both runon and runoff.

Feedstock is stored in above-ground storage tanks.

III. PROPOSED CLOSURE ACTIVITIES

The following activities will be conducted during facility closure:

1. The TCEQ will be notified at least 60 days prior to the commencement of any closure activities.

- Material from the Processing Area berms will be used to backfill the retention pond. The Processing Area will be regraded to prevent ponding.

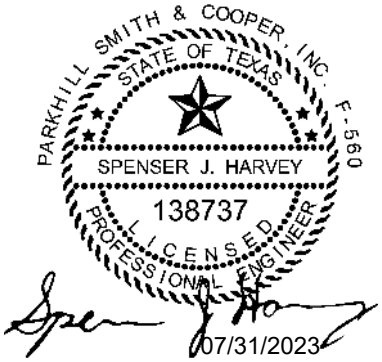
The closure cost estimate included as Attachment B was prepared under the direction of a qualified professional engineer licensed in the State of Texas who has affixed the Professional Engineer's Seal to the cost estimate. The current cost of the anticipated closure is estimated to be $599,497.

FACILITY CONDITIONS AT CLOSURE & CLOSURE ASSUMPTIONS
The facility is in compliane with the conditions of its permit.
Retention pond is assumed to be full.
Processing area is assumed to contian the operating capacity of compost material. Compost material is assumed to be immature.
Mature compost in Post Processing area will be used as mulch on the faiclity at the conclusion of closure activities.
All exposed liner material, miscellaneous wastes, and surface equipment will be removed and properly disposed at an authorized facility.
None of the facility operator's equipment, personnel, or facillities will be available for use in the closure acitivies.
No soil that requires remediate is on-site
Processing Area earthen berms will be used as backfill.
Retention pond will be backfilled and Processing Area will be regarded to prevent ponding.
No salvage value has been assessed for any material or equipment at the site.
Facility will be seeded as necessary.

CLOSURE COST SUMMARY	
Oversight:	$ 18,000
Closure activies, Processing Area and Retention Pond:	$ 56,100
Transportation & Disposal:	$ 522,677
Revegetation:	$ 2,720
TOTAL CLOSURE COST	$ 599,497

Engineer's Seal and Certification

I Spenser J. Harvey, P.E., certify that this Closure Cost Estimate for the SouthWaste San Antonio Facility located in Elmendorf, Bexar County, TX was prepared by me and by others under my direct supervision using the attached assumptions.



07/31/2023
For July 2023
Revisions Only

LABOR, EQUIPMENT, MATERIAL LOADING, HANDLING, AND BACKFILLING				
	Unit	**Quantity**	**Unit Price**	**Subtotal**
Oversight:				
Clsoure Work Supervision (Consultant)	days	15	$ 1,200	$ 18,000
Closure activies, Processing Area and Retention Pond:				
Technician	days	9	$ 1,200	$ 10,800
Laborers, (2)	days	9	$ 1,300	$ 11,700
Mob/ Demob Heavy Equipment	rnd trip	2	$ 800	$ 1,600
Grader	days	3	$ 1,500	$ 4,500
Front-end Loader/ Backhoe	days	12	$ 2,000	$ 24,000
Roll-Off Box Delivery/ Pickup	box	2	$ 250	$ 500
Roll-Off Box Rental	days	10	$ 100	$ 1,000
Misc Materials & Supplies	lump sum	1	$ 2,000	$ 2,000
Transportation & Disposal:				
Transportation of Roll off to Disposal Facility (Liner and Misc Debris)	trip	2	$ 400	$ 800
Disposal at Municpal Landfill (Liner and Misc Debris)	CY	40	$ 15	$ 600
Transportation of Curing and Green Compost to Authorized Disposal Facility	hr	298	$ 120	$ 35,760
Disposal of Curing and Green Compost at Authorized Disposal Facility	ton	6,350	$ 50	$ 317,500
Transportation and Disposal of Retention Pond Water	gal	2,060,284	$ 0.06	$ 123,617
Transportation and Disposal of Storage Tanks (4 tanks @ 30,000 gallon capacity each) Contents	gal	120,000	$ 0.37	$ 44,400
Revegetation:				
Seeding	1000 sy	68	$ 40	$ 2,720
TOTAL CLOSURE COST				$ 599,497

NOTES:

1) Values are in 2023 dollars.

2) All tanks are assumed to be full.

3) The Operator is the Property Owner and will allow the liner to remain in place.

4) All vendors and disposal facilities (other than other authroized Composting Facility) are within 40 miles of the site, and total round trip, loading, and unloading time is approximately 3 hours.

5) Abreviations:

cy- cubic yards

rnd - round

sy - square yards

GMX rate * 8 hr day

Quantity Calculations	Length (ft)	Width (ft)	Depth (ft)	Cu. Ft.	Gals.	Bbls.	Cu. Yds.	Tons	Sq. Yd.	Acre
Processing & Retention Pond Surface Area	791	519							45,614	9.4
Post-Processing Area									22,748	47.0
Berm Volumes (3' tall, 4' wide at top, 3/1 side slopes)	2,620	39	3	102,180			3,784			
Retention Pond (6/1 side slopes)	360	198	5	275,460	2,060,284	49,054	10,202		7,920	1.6
Green Compost (1,100 lb/cy)							3,577	1,967		
Curing Compost (1,100 lb/cy)							7,153	3,934		

TIME AND EQUIPMENT ESTIMATES		
Equipment & Labor Needs	Time to Perform Tasks	
tech & Laborers, loader	5	days to load immature compost and retention pond water
loader	2	days to backfill pond with berms
backhoe w/ hoe ram attachment	1	days to punch holes in processing area liner
grader	3	days to regrade
tech & Laborers, loader	4	days to revegetate and mulch
	15	Total days

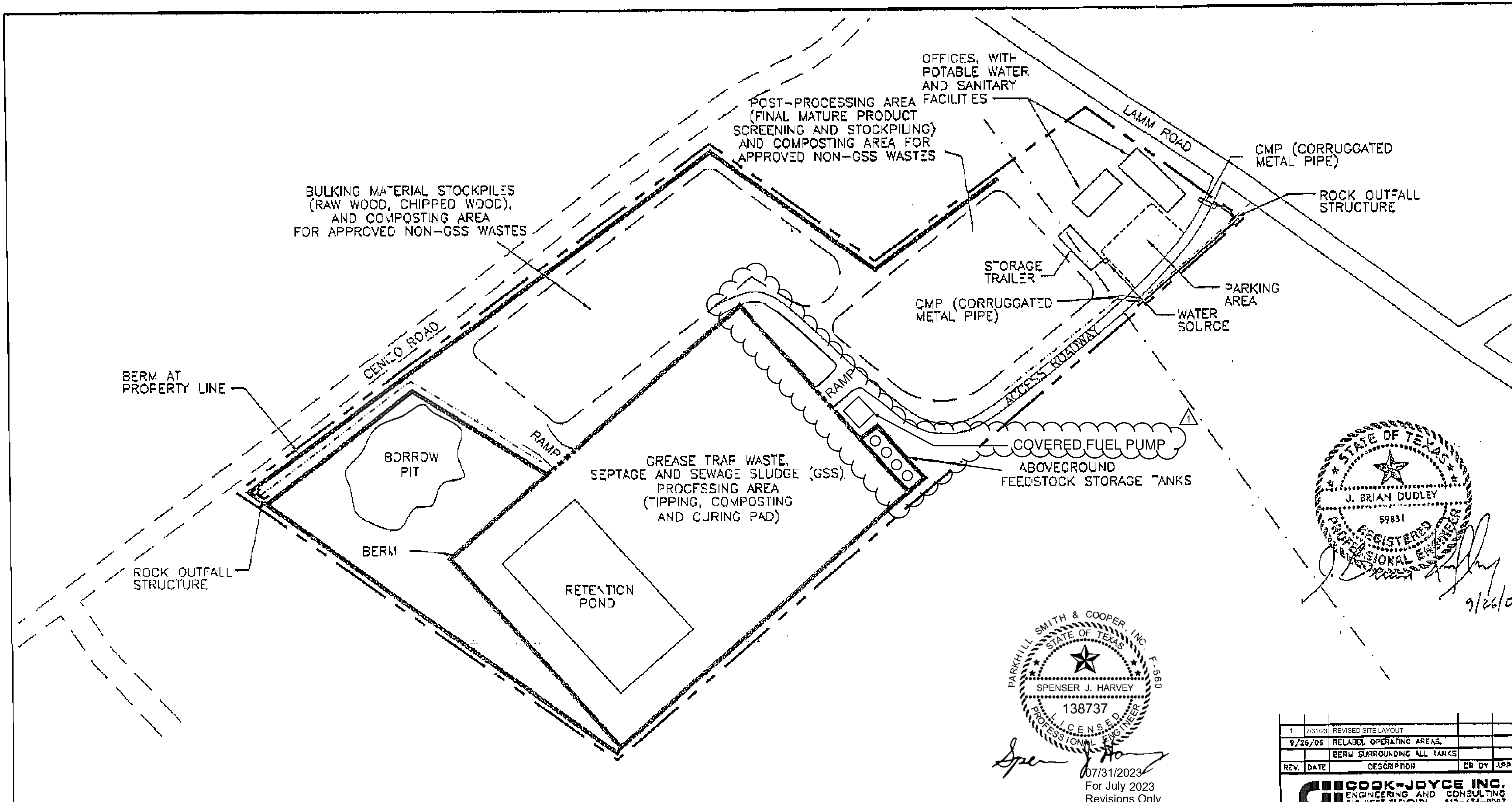
Prepared January 22, 2004
Revised August 8, 2004
Revised 12/1/2004
Revised July 31, 2023

Appendix A

Construction Drawings and Cross-Sections

The construction drawings and cross-sections are included to provide the following information:

- the design of berms, composting pad, and retention pond as components of the contaminated water collection system and the drainage system as required by §332.47(6)(A),
- details and sections as required by §332.47(6)(D).



EXPLANATION

- UNDERGROUND PIPELINES
- PROPERTY AND FENCE LINE
- STORMWATER COLLECTION DITCH
- BERMS

NOTES:

1. NO SEPARATE TIPPING AREA, BULKING MATERIALS AND FEEDSTOCK ARE PLACED IN WINDROWS WITHIN PROCESSING AND COMPOSTING AREAS.
2. GSS FEEDSTOCK AND RETENTION POND WATER TO BE USED ONLY IN GSS PROCESSING AREA.
3. BASE MAP AND ORIGINAL LAYOUT BY ROBIN D. COSGROVE, P.E. GEOMATRIX, AUSTIN, TEXAS DECEMBER 4, 2004

REV.	DATE	DESCRIPTION	DR BY	APP BY
1	7/31/23	REVISED SITE LAYOUT		
	9/26/06	RELABEL OPERATING AREAS.		
		BERM SURROUNDING ALL TANKS		

COOK-JOYCE INC.
ENGINEERING AND CONSULTING
812 WEST ELEVENTH 512-474-9097
AUSTIN, TEXAS 78701

PROJECT:
WHOLEARTH ORGANIC COMPOSTING
ELMENDORF, TEXAS

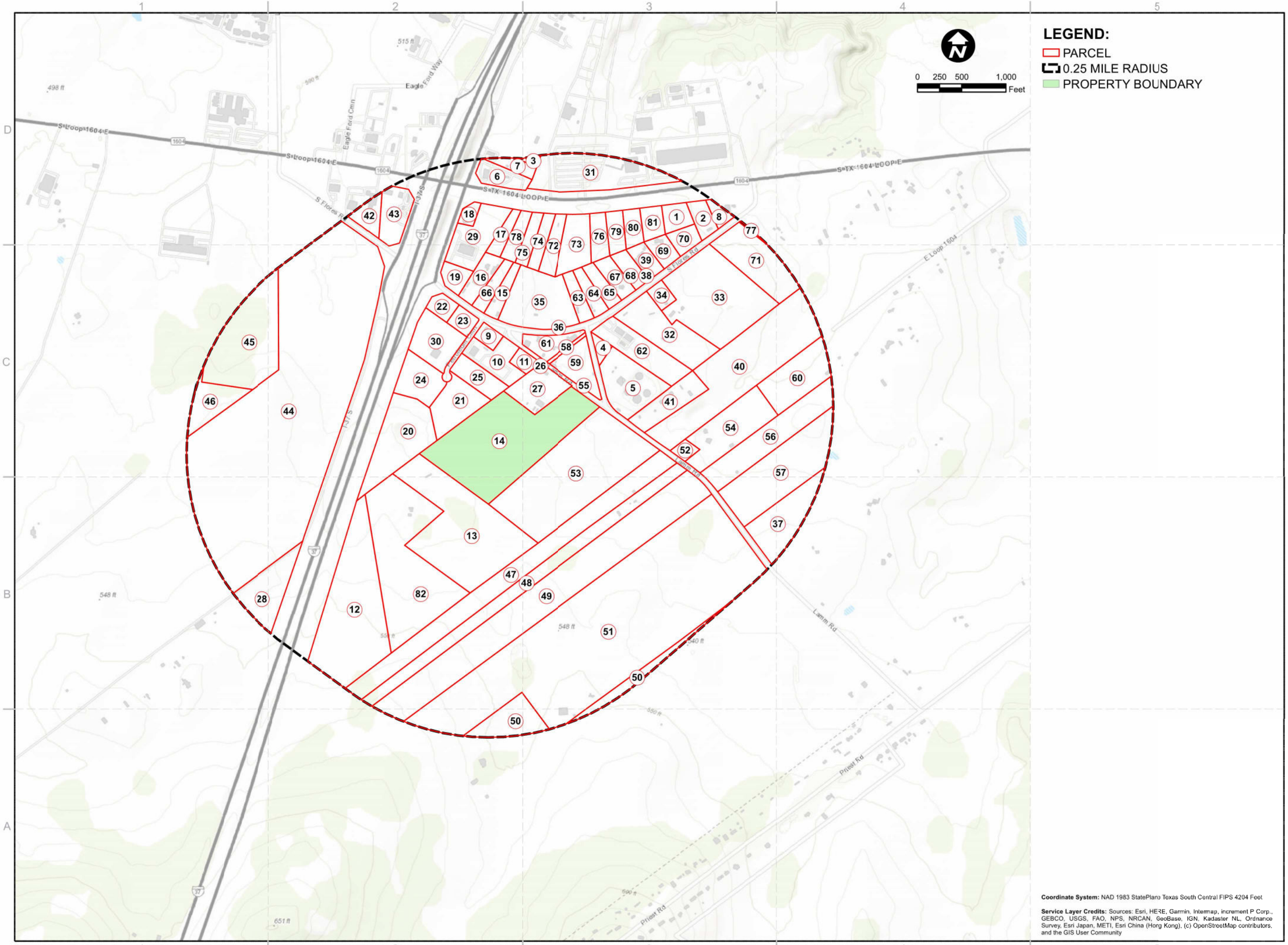
SHEET TITLE:
FACILITY PLAN AND LAYOUT

DES BY			SCALE: SEE BAR SCALE
DR BY	SDB		PROJECT NO. 06060
CHK BY	CA		CJ NO. 0606000385
APP BY	JBD		SHEET 1 OF 1 SHEETS
DATE ISSUED: 09-26-2006			FIGURE NO. 2
PURPOSE: PERMIT MOD.			

Prepared January 22, 2004
Revised August 8, 2004
Revised 12/1/2004
Revised July 31, 2023

Appendix J

Property Owner Map and Information



Parkhill

PARKHILL SMITH & COOPER, INC. F-569
STATE OF TEXAS
SPENSER J. HARVEY
138737
LICENSED
PROFESSIONAL ENGINEER
07/31/2023

ISSUED FOR PERMITTING ONLY

SOUTHWASTE DISPOSAL SAN ANTONIO FACILITY

TCEQ MSW PERMIT NO. 2317A

SouthWaste Disposal LLC
A WRM Company

CLIENT

SOUTHWASTE DISPOSAL LLC
20805 OLD LAMM RD
Elmendorf, TX 78112

PROJECT NO.
9454.21

#	DATE	DESCRIPTION

Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

LAND OWNERSHIP MAP

FIG.J.1

FILE NAME: A:\2021\9454.21\03_DSGN\01_DWG\050_CIVIL\04_Compost\Adjacent_Property_Owner.mxd LAYOUT NAME: Layers PRINTED: Tuesday, July 18, 2023 - 11:41:14 AM USER: SHarvey