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Application for Permit to Store or Process
Industrial Nonhazardous Solid Waste

I. General Information

A. Applicant Information

Name of Applicant: **Fort Bend Regional Landfill , LP**
(individual, Corporation or Other Legal Entity Name – must match the Secretary of State's database records)

Previous or former names of the facility, if applicable: **Long Point Landfill**

Address: **14115 Davis Estates Road**

City: **Needville** State: **Texas** Zip Code: **77461**

Telephone Number: **979-793-4430**

Street Address (if available): **14115 Davis Estates Road**

TCEQ Registration No.: **96322** EPA I.D. No.: **TXR000084600**

Permit No. **96322** County: **Fort Bend**

Regulated Entity Name: **Fort Bend Regional Landfill, LP**

Regulated Entity Reference Number: **RN102803913**

Customer Name: **Fort Bend Regional Landfill, LP**

Customer Number: **CN602656373**

If the application is submitted on behalf of a corporation, please identify the Charter Number as recorded with the Office of Secretary of State for Texas.

0800328149
(Charter Number)

B. Facility Contact Information

1. List those persons or firms, to include a complete mailing address and telephone number, authorized to act for the applicant during the processing of the permit application.

Marcos Elizondo
GFL Environmental
2050 W. Sam Houston Parkway S., Suite #1950
Houston, TX 77042
713-292-2417
[redacted]

Jennifer Glowacki
GFL Environmental
2050 W. Sam Houston Parkway S., Suite #1950
Houston, TX 77042

[redacted]

2. If the application is submitted by a corporation or by a person residing out of state, the applicant must designate an Agent in Service or Agent of Service and provide a complete mailing address for the agent. The agent must be a Texas resident.

   Not Applicable

3. List the individual who will be responsible for causing notice to be published in the newspaper and his/her mailing address, telephone number and fax number. If e-mail is available, please provide an e-mail address.

   Jennifer Glowacki
   GFL Environmental
   2050 W. Sam Houston Parkway S., Suite #1950
   Houston, TX 77042
   346-482-8607
   [redacted]

C. Application Location Information

For applications for new permits, renewals, major amendments and class 3 modifications, a copy of the application must be made available at a public place in the county where the facility is, or will be located for review and copying by the public (30 TAC Section 39.405(g)). Identify the public place in the county (e.g., public library, county court house, city hall), including the address, where the application will be made available to the public for review and copying.

Albert George Branch Library
9230 Gene Street
Needville, Texas 77461
281-238-2850

D. Type of Permit for Which Application is Submitted:

1. Original _**X**_____ Permit Number ___96322_____
   (Will be Assigned by the Commission)

2. Amendment: Major _____ Minor _____

3. Modification: Class 1 _____ Class 1[1] _____ Class 2 _____ Class 3 _____

4. Renewal Permit: Yes _____ No __**X**__

5. Provide a brief description of the portion of the facility covered by this application, including the changes for which an amendment or modification is requested.

The portion of the facility that is covered by this application includes the proposed pre-injection unit, which consists of the following components:

- **A concrete secondary containment area with proposed tanks TK-1300, TK-1310, TK-1320, TK-1330, TK-1340, TK-1350, TK-1360, and TK-1370 and associated ancillary equipment.**
- **A separate concrete secondary containment area with proposed tank TK-1390 and associated ancillary equipment.**
- **A gravel truck unloading pad and associated ancillary equipment.**

These Tanks will serve as the UIC waste management area, which will collect and treat liquid wastes prior to disposal via nonhazardous Class I UIC injection well.

Permit Section	Brief Description of Proposed Change	Modification or Amendment Type	Supporting Regulatory Citation
N/A	N/A	N/A	N/A

N/A = Not applicable; this is a new permit and not a modification or an amendment.

6. Does the application contain confidential material? Yes _____ No __**X**__

   If yes, cross-reference the confidential material throughout the application to Section VIII: CONFIDENTIAL MATERIAL, and submit as a separate Section VIII document or binder conspicuously marked "CONFIDENTIAL".

E. List of Other Permits:

List any other permits, existing or pending, which pertain to pollution control activities conducted by this plant or at this location.

Indicate (by listing the permit number(s) in the right-hand column below) all existing or pending State and/or Federal permits or construction approvals which pertain to pollution control or industrial solid waste management activities conducted by your plant or at your location. Complete each blank by entering the permit number, or the date of application, or "none".

Government Relevant Program and/or Law	Permit No.	Agency*
1. Texas Solid Waste Disposal Act	MSW 2270	TCEQ
2. Wastewater disposal under the Texas Water Code	None	None
3. Underground injection under the Texas Water Code	WDW 488 WDW 489	TCEQ

Government Relevant Program and/or Law		Permit No.	Agency*
4.	Texas Clean Air Act	93892 2696	TCEQ
5.	Texas Uranium Surface Mining & Reclamation Act	None	None
6.	Texas Surface Coal Mining & Reclamation Act	None	None
7.	Hazardous Waste Management program under the Resource Conservation and Recovery Act	None	None
8.	UIC program under the Safe Drinking Water Act	WDW 488 WDW 489	TCEQ
9.	TPDES program under the Clean Water Act	TXR05R702	TCEQ
10.	PSD program under the Clean Air Act	None	None
11.	Nonattainment program under the Clean Air Act	None	None
12.	National Emission Standards for Hazardous Pollutants (NESHAP) Pre-construction approval under the Clean Air Act	None	None
13.	Ocean dumping permits under the Marine Protection Research and Sanctuaries Act	None	None
14.	Dredge or fill permits under section 404 of the Clean Water Act	None	None
15.	Other relevant environmental permits	None	None

*Use the following acronyms for each agency as shown below:

TCEQ = Texas Commission on Environmental Quality
TRC = Texas Railroad Commission
DSHS = Texas Department of State Health Services
TDA = Texas Department of Agriculture
EPA = U.S. Environmental Protection Agency
CORPS = U.S. Army Corps of Engineers

F. Facility Information:

1. Name and address of operator or person in charge of facility (if different from the applicant): **Same as Applicant.**

Name:_____

Address:_____

City: _____ Zip Code _____ Phone _____

2. Name and address of Owner of facility (if different from applicant): **Not applicable**

   Name:_____

   Address:_____

   City: _____ Zip Code _____ Phone _____

3. If facility is not owned by the applicant, a copy of the lease for use of said facility must accompany this application. (Note: The lease must address the duration and the land usage.)

   Not applicable

4. Provide a brief description of the facility (*i.e.*, the nature of the business) and the activities to be permitted. 30 TAC Sections 305.45(a)(4) and (a)(5)

   Applicant owns and operates a commercial municipal solid waste landfill facility where nonhazardous municipal and industrial solid waste is stored, processed, and disposed. Leachate generated in the landfill and non-hazardous liquid wastes from off-site sources will be stored, processed, and disposed in the proposed permitted tanks and subsequently disposed via UIC-permitted deep injection wells.

5. Ownership Status

Private		___**X**___
(1)	Corporation	___**X**___
(2)	Partnership	_____
(3)	Proprietorship	_____
(4)	Non-profit	_____
Public		_____
(1)	Federal	_____
(2)	Military	_____
(3)	Regional	_____
(4)	Municipal	_____

Other (specify) _____

If "Other", please specify _____

6. Are your waste management operations within the incorporated limits or extraterritorial jurisdiction of a municipality?

   ___**No**_____If so, what municipality? _____

7. Are your industrial solid waste processing or storage operations in an area in which the governing body of the county or municipality has prohibited the processing, storage or disposal of municipal hazardous waste or industrial solid waste. Yes_____ No__**X**__

   If "yes", provide a copy of the ordinance or order.

8. Is the facility located on Indian lands? Yes _____ No __**X**__

9. Is the facility within the Coastal Management Program boundary? Yes _____ No_**X**__

10. Give a description of the facility location with respect to known or easily identifiable landmarks.

    The facility is located approximately 40 miles southwest of the city of Houston in Needville, Fort Bend County, Texas. It is located 4.5 miles north of the intersection of TX-36 and Farm-to-Market (FM) 1994 Road on the corner of Davis Estate Road.

11. Coordinates of the Facility

    ___**29**_____° ____**23**____' ___**46**__" North Latitude

    ___**95**_____° ____**43**____' ___**29**__" West Longitude

12. Legal Description of Facility

    Submit a legal description(s) of the tract or tracts of land upon which the waste management operations referred to in this permit application occur or will occur. Although a legal description is required, a metes and bounds description is not necessary for urban sites with appropriate "lot" description(s). A survey plat or facility plan drawing which shows the specific points referenced in the survey should also be included.

    The permitted Tanks will be located within the UIC waste management area, which is located on the 2,660.268-acre tract comprising the entire property owned by Fort Bend Regional Landfill, as described by the metes and bounds survey provided in Attachment I.F.1. Attachment I.F.2 displays a 1,194.88-acre tract where the UIC waste management area is located that is located within the larger 2,660.268-acre area that is owned by the Fort Bend Regional Landfill.

13. Total acreage of the facility being permitted: **The proposed UIC waste management area is approximately 4.96 acres and will include the truck unloading area, pre-injection storage tanks, UIC well heads, ancillary equipment, and secondary**

containment.

14. Identify the name of the drainage basin and segment where the facility is located:
Brazos River, Segment 1202J (Big Creek)

G. List of Other Sites:

Provide a list of sites owned, operated, or controlled by the applicant in the State of Texas. 30 TAC Section 305.50(a)(2)

See Attachment I.G.

H. Wastewater and Stormwater Disposition:

If there will be a discharge of either process water or storm water, describe the effluent route to the nearest identifiable watercourse.

Neither process water nor stormwater from the secondary containment areas will be discharged to nearby surface water.

1. Is the disposal of any waste to be accomplished by a waste disposal well at this facility?

   Yes **X** No _____ (WDW Permit No(s).**WDW488, WDW 489**)

2. Will any point source discharge of effluent or rainfall runoff occur as a result of the proposed activities?

   Yes _____ No **X**

3. If YES, is this discharge regulated by a TPDES or TCEQ permit?

   Yes _____ Permit No._____(TCEQ) Permit No._____(TPDES)

   No _____ Date TCEQ discharge permit application filed _____

   Date TPDES discharge permit application filed_____

4. Is the facility subject to permitting requirements in 30 TAC Section 335.2(n) for commercial industrial solid waste facilities that receive industrial solid waste for discharge to a publicly owned treatment works? Yes _____ No **X**

   If yes, please identify the publicly owned treatment works facility(ies) authorized to receive discharges from the facility.
   _____
   _____

I. Waste Management Units:

Please complete Table I. (Waste Management Unit List) for each waste management unit to be permitted.

See Table I. – Waste Management Unit List

J. Date of Operation:

What estimated date will waste management operations begin; or if operations have begun, what date did waste management operations begin at the site described by this application?

Waste management operations for the proposed UIC waste management area (i.e., proposed tanks) will begin upon TCEQ-approval of this permit application and the UIC permits for deep injection wells WDW-488 and WDW-489. Upon approval of both permits, construction of the tanks and associated secondary containment will begin. Estimated start of operation is 2025.

K. Application Map:

Submit an application map which extends at least one mile beyond the facility boundaries. The map shall be on a scale of not less than one inch equals one mile and shall include the following information: 30 TAC Section 305.45(a)(6)

1. The approximate boundaries of the tract of land on which the waste management activity is or will be conducted;

2. The location of the areas of storage or processing;

3. The general character of the areas adjacent to the waste facility including public roads, towns and the nature of development of adjacent lands such as residential, commercial, agricultural, recreational, undeveloped, etc.;

4. The boundaries of all affected tracts of land within a reasonable distance from the area of storage, processing, or disposal; and

5. Each well, spring, and surface water body or other water in the state within the map area.

See Attachment I.K.

L. Information Required to Provide Public Notice

State Officials List

Provide the name and mailing address for the State Senator and State Representative in the district in which the facility is or will be located. Either local district addresses or capitol addresses are acceptable. **This list should not be included in the Adjacent Landowners List required below.** [30 TAC 39.103(b)]

Joan Huffman
Texas State Senator District 17
129 Circle Way, Suite 101
Lake Jackson, TX 77566
[redacted]

Gary Gates
Texas State Representative District 28
P.O. Box 2910
Austin, TX 78768
[redacted]

Local Officials List

Provide the name and mailing address of the mayor and health authority of the municipality in whose territorial limits or extraterritorial jurisdiction the facility is or will be located. In addition, please provide the county judge and health authority of the county in which the facility is located. **This list should not be included in the Adjacent Landowners List required below.** [30 TAC 39.103(c)]

Chad Nesvadba
Mayor
9022 Main Street
P.O. Box 527
Needville, TX 77461
[redacted]
979-793-4253

Judge KP George
Fort Bend County Judge
401 Jackson St.
Richmond, TX 77469
[redacted]
281-341-8606

Dr. Letosha Gale-Lowe
Fort Bend County Health and Human Services
4250 Reading Road, Suite A-100
Rosenberg, TX 77471
[redacted]
281-238-3233

Adjacent Landowners List

Submit a map indicating the boundaries of all adjacent parcels of land, and a list (see samples in the instructions) of the names and mailing addresses of all adjacent landowners and other nearby landowners who might consider themselves affected by the activities described by this application. Cross-reference this list to the map through the use of appropriate keying techniques. The map should be a USGS map, a city or county plat, or another map, sketch, or drawing with a scale adequate enough to show the cross-referenced affected landowners. **The list should be updated prior to any required public notice. It is the applicant's responsibility to ensure that the list is up-to-date for any required public notice.** For all applications (with the exception of Class 1 and Class 11 modifications) this mailing list should be submitted on:

1. a Compact Disk (CD) using software compatible with MS Word [30 TAC 39.5(b)]; or

2. four sets of printed labels.

If the adjacent landowners list is submitted on a compact disk (CD), please label the disk with the applicant's name and permit number. Within the file stored on the disk, type the permit number and applicant's name on the top line before typing the addresses. Names and addresses must be typed in the format indicated below. This format is required by the U.S. Postal Service for machine readability. Each letter in the name and address must be capitalized, contain no punctuation, and the appropriate two-character abbreviation must be used for the state. Each entity listed must be blocked and spaced consecutively as shown below. The list is to be 30 names, addresses, etc. (10 per column) per page (MS WORD Avery Standard 5160 – ADDRESS template).

Example:

Industrial Hazardous Waste Permit No. 50000, Texas Chemical Plant

TERRY M JENKINS
RR 1 BOX 34
WACO TX 76710

MR AND MRS EDWARD PEABODY
1405 MONTAGUE LN
WACO TX 76710-1234

A list submitted on compact disk (CD) should be the only item on that disk. Please do not submit a list on a disk that includes maps or other materials submitted with your application.

If you wish to provide the list on printed labels, please use sheets of labels that have 30 labels to a page (10 labels per column) (for example: Avery® Easy Peel® White Address Labels for Laser Printers 5160). Please provide four complete sets of labels of the adjacent landowners list.

The adjacent landowners list (and pre-printed mailing labels) and map are provided as Attachment I.L.1 and Attachment I.L.2, respectively.

Based on the questions in the Bilingual Notice Instructions for this form, are you required to make alternate (Bilingual) notice for this application?

_**X**_Yes _____No
Bilingual Language(s):_**Spanish**_____

M. Landowner List Information Source:

The names and mailing addresses of persons identified as affected parties, item L. above, were obtained from:

___**Fort Bend County Public Reference Map**_____

(Source, City, County, School or Water District Records or Abstract Co.)

N. TCEQ Core Data Form

The TCEQ requires that a Core Data Form (Form 10400) be submitted on all incoming applications unless a Regulated Entity and Customer Reference Number has been issued by the TCEQ and no core data information has changed. For more information regarding the Core Data Form, call (512) 239-5175 or go to the TCEQ Web site at

http://www.tceq.texas.gov/permitting/central_registry/guidance.html

Please label any attachments with name of applicant.

The Core Data Form is provided as Attachment I.N.

O. Plain Language Summary

Complete the following form(s) as applicable, and submit with any industrial hazardous waste, or industrial solid waste, permit application that is subject to 30 Texas Administrative Code §39.405(k) [applications for a Class 3 permit modification, permit amendment, permit renewals, and for a new permit]. For more information regarding the Plain Language Summary forms, call (512) 239-5175, follow the links below, or go to the TCEQ Web site at

https://www.tceq.texas.gov/permitting/waste_permits/ihw_permits/ihw_permit_forms.html

Plan Language Summary Form - Instructions

Plain Language Form Summary - English

Plain Language Form Summary - Spanish

See Attachments I.O for English and Spanish Plain Language Forms

Signature Page

I, Marcos Elizondo, Area Landfill Director
(Print or Type Name of Person Signing for Applicant) (Title)

I, _____, _____
(Print or Type Name of Owner if different from Applicant)

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: Marcos Elizondo Date: 7/18/2024
(Applicant)

Signature: _____ Date: _____
(Owner)

To be completed by the applicant when the above statement is signed by an agent for the applicant.

I, _____ hereby designate _____ as my agent
(Print or Type Name) (Print or Type Name)

and hereby authorize said agent to sign any application, submit additional information as may be requested by the Commission, and/or appear for me at any hearing or before the Texas Commission on Environmental Quality in conjunction with this request for a Texas Solid Waste Disposal Act permit. I further understand I am responsible for the contents of this application, for oral statement given by my agent in support of the application and for compliance with the terms and conditions of any permit which might be issued based upon this application.

_____
Printed or Typed Name of Applicant
or Chief Executive Officer

_____
Signature

(Note: Application Must Bear Signature & Seal of Notary Public)

Subscribe and Sworn to before me by the said
Marcos Elizondo on this 18th day of July, 20 24

My commission expires on the 6th day of December, 20 27

Andrea Allen Barnes
Notary Public in and for

ANDREA ALLEN BARNES
Notary Public, State of Texas
Comm. Expires 12-06-2027
Notary ID 132274625
(Seal)

Harris County, Texas

FORT BEND REGIONAL LANDFILL, L.P.

GENERAL PARTNER'S CERTIFICATE

The undersigned, Melissa Bachhuber, does hereby certify that she is a duly elected, qualified and serving officer of WCA Texas Management General, Inc., a Delaware corporation ("the Corporation"). The undersigned further certifies that:

1. The Corporation is the sole general partner of Fort Bend Regional Landfill, L.P., a Texas limited partnership ("the Partnership").

2. Mr. Marcos Elizondo has been duly appointed and qualified as the Area Landfill Director, with management responsibility for facilities having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars).

3. In accordance with procedures of the Corporation, authority has been assigned or delegated to Mr. Elizondo to negotiate, enter into, sign and execute, in the name and on behalf of the Partnership and the Corporation, as sole general partner of the Partnership, any permit application, permit amendment or modification application, response to regulatory notices, operating plans for permitted facilities, regulatory and any other agreements, documents, instruments, and certificates relating to permitted facilities that he deems or believes to be advisable and in the best interests of the Partnership and the Corporation. Any of the foregoing authorized actions taken by Mr. Elizondo on behalf of the Partnership and/or the Corporation are authorized actions of the Partnership and the Corporation.

IN WITNESS WHEREOF, I have hereunto set my hand, this 14th day of December, 2022.

By: 

Name: Melissa Bachhuber

Title: Assistant Secretary, WCA Texas Management General, Inc.

II. Facility Management

A. Security: Describe site access control, screening traffic control, and safety. 30 TAC Section 305.45(a)(8)(C)

The UIC waste management area will be located within the boundaries of the Fort Bend Regional Landfill, which implements site security measures to prevent inadvertent or unauthorized entry by persons or livestock to the facility. Site security is maintained by means of security fencing and access controls, as described below.

***Security Fencing*: The facility is surrounded by either a 6-foot high chain-link security fence or a barbed wire fence, with natural buffers (e.g., creek, thick brush, etc.). This fence minimizes the possibility for unauthorized entry of persons or livestock onto the active portion of the facility.**

***Access Controls:* Access to the facility is controlled by means of security fencing and locked gates. Gated openings in the security fence control entry onto the active portion of the facility. With the exception of the main gate, gates are locked at all times. The main gate is unlocked only during operating hours. The gate for receiving trucks is unlocked and opens upon the receipt of trucks during operating hours, and other gates are locked unless specifically in use. Security cameras monitor the facility. During non-operating hours, the main office building has a security system that alarms when there is an unauthorized entry. Cameras, locked doors, and locked fence gates provide 24-hour security during non-operating hours.**

***Communication*: On-site communications are conducted by telephones, two-way radios, and air horns. The air horns can be heard by personnel throughout the facility. Off-site communication is made via telephones. Facility personnel watch for and immediately report any unauthorized entry to facility management.**

B. Inspection and Maintenance:

1. Complete Table II. for all of the waste management units to be permitted. Please note that inspection criteria should be provided for each component of each permitted unit (*e.g.*, tank system, tank, secondary containment area, ancillary equipment). 30 TAC Section 305.45(a)(8)(C)

   See Table II.

2. Describe the inspection procedures for the units listed in Table II. 30 TAC Section 305.45(a)(8)(C)

   Inspection procedures provide a mechanism to prevent and detect system malfunctions, equipment deterioration, operator errors, and discharges which may be causing, or may lead to, releases of nonhazardous waste constituents to the environment or create a threat to human health.

   At a minimum, facility personnel, or other designated persons, will inspect units and equipment associated with waste management (i.e., secondary containment area, tanks, and ancillary equipment) at frequencies specified in Table II. Items for inspection and possible problems to evaluate during the

inspections are also summarized in Table II.

If deficiencies are identified during the inspections (e.g., deterioration or malfunction of equipment or structures), the facility will document these problems on inspection forms, and will remedy as appropriate, to ensure that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action will be taken immediately. The inspection program is implemented by qualified individuals who have the training and authority to: (1) implement the required inspections, (2) perform necessary evaluations and hazard assessments, and (3) recommend appropriate corrective or remedial actions. The Facility Manager is fully responsible for implementation of the Inspection Program.

The facility operates Monday through Saturday, and is not open on Sundays or major holidays. Inspections will occur as indicated in Table II on days that the facility is open and operating. On Sundays and major holidays, no inspections will occur and the main gate will be locked.

C. Personnel: Describe the staffing pattern and qualifications of all key operating personnel. 30 TAC Section 305.50(a)(2)

The facility is committed to providing facility personnel with the required training to ensure safe and efficient operation. Facility personnel will complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with Class 1 industrial solid waste requirements. The program must be directed by a person trained in waste management procedures, and must include instruction that teaches facility personnel waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed. At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including, where applicable:

- **Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;**
- **Communications or alarm systems;**
- **Response to fires or explosions;**
- **Response to ground-water contamination incidents; and**
- **Shutdown of operations.**

Facility personnel must successfully complete the training program within six months after the date of their employment or assignment to the facility, or to a new position at the facility, whichever is later. Employees must not work in unsupervised positions until they have completed the training requirements described above. Facility personnel must take part in an annual review of the initial training.

The owner or operator will maintain the following documents and records at the facility:

- **The job title for each position at the facility related to waste management, and the name of the employee filling each job;**

- **A written job description for each position at the facility related to waste management.**

- **This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications, and duties of employees assigned to each position;**

- **A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position at the facility related to waste management; and**

- **Records that document that the training or job experience required as described in this section has been given to, and completed by, facility personnel.**

Training records on current personnel must be kept until closure of the facility and training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

D. Equipment: Describe the types of equipment and minimum number of each type to be provided by the site operator in order to conduct the operation in conformance with the design and operational standards. 30 TAC Section 305.45(a)(8)(A)

Engineering Reports documenting the design and operation of the nine tanks proposed in this application are provided in Attachments IV.G.1 and IV.G.2 to this application. Additional engineering information is also provided in Section IV of this application.

E. Record keeping: Describe the record keeping practices. 30 TAC Section 305.45(a)(8)(C)

Facility personnel, or other designated persons, who conduct the inspections will record the inspections in the inspection report forms. Completed inspection reports are submitted to the Facility Manager or their designee who then takes action, as necessary. Each inspection report will include the date and time of the inspection, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

In cases where specialized outside contractors are appointed to perform testing or inspection services (e.g., ultrasonic wall thickness testing of tanks and fire extinguisher inspections), results of testing or inspection services are reported on the contractor's forms. These reports are made part of the operating records when received.

Completed reports and attachments are accumulated in the facility operating

records, which are retained at the facility for a minimum period of three years from the date of inspection.

F. Roads: Describe roads used for entry, exit and operations within the facility. 30 TAC Section 305.45(a)(8)(C)

A paved entrance road from Davis Estate Road to the scale house is present at the Fort Bend Regional Landfill facility, where the UIC waste management area will be located. All waste-hauling vehicles, operating personnel, and visitors use the paved entrance for entering the facility. An all-weather road will be installed and maintained to allow access to the injection wells and related facilities, including the secondary containment area where the proposed permitted tanks will be located (see Attachment II.F). This access road will be constructed from the scale house to the well pad and to the offloading area, which will be designed to bear fully laden permitted loads and all anticipated equipment required for well drilling and maintenance, with an additional safety factor. The paved entrance and access roads and the crushed stone surfaced internal roads will provide mud control for the waste hauling vehicles prior to exiting the site and returning to public access roads. The site entrance road, landfill haul road, and access roads will be maintained in a clean and safe condition. In addition, an alternate outbound/inbound road may also be constructed to allow more direct access to the UIC-area from Farm-to-Market (FM) 1994. When the alternate entrance is constructed a new gate, fencing, etc. will also be constructed to limit access to the area to authorized personnel only.

III. Waste Analysis Plan

A. Complete Table III.A. (Waste Management Information) for each waste, source, and volume of waste to be stored or processed in the facility units to be permitted. 30 TAC Section 305.45(a)(8)(C)

See Table III.A.

B. For inclusion into a permit, complete Table III.B. (Wastes Managed in Permitted Units) for each waste to be managed in a permitted unit. Guidelines for the Classification & Coding of Industrial Wastes and Hazardous Wastes, TCEQ publication RG-22, contains guidance for how to properly classify and code industrial waste in accordance with 30 TAC 335, Subchapter R. 30 TAC Section 305.45(a)(8)(C)

See Table III.B.

1. Applicants need not specify the complete 8-digit waste code formulas for their wastes but only the 3-digit form codes and 1-digit classification codes. This allows the applicant to specify major categories of wastes in an overall manner without having to list all the specific waste streams.

2. Are hazardous wastes defined in 30 TAC Section 335.1 managed or proposed to be managed in permitted units in accordance with 30 TAC Section 335.41(d)(8)?

   Yes _____ No _**X**__

   a. If yes, include the Environmental Protection Agency Waste Numbers as defined in 40 Code of Federal Regulations (CFR) Part 261 (e.g., D001, D002, D018, F039, etc.) for each hazardous waste to be managed in permitted units on Table III.B.

   b. If yes, provide documentation of compliance with 40 CFR Section 264.17(b) if management of hazardous wastes includes diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory as defined in 40 CFR Section 268.40) or reactive (D003) waste to remove the characteristic before land disposal. 30 TAC Section 335.41(d)(8).

C. For inclusion into a permit, complete Table III.C. for each waste listed in Table III.B. For each waste listed in the table, please include the sampling location, the sampling method, the sample frequency, the analytical parameters (*e.g.*, pH, density, viscosity), and the analytical method for each parameter. Please note that process knowledge may be used for difficult to sample and/or measure wastes or parameters. 30 TAC Section 305.45(a)(8)(C)

See Table III.C.

D. Submit a waste analysis plan which specifies procedures which will be used to inspect and if necessary, analyze each industrial solid waste received at the facility. The plan must describe methods which will be used to determine the identity of each waste managed at the facility. In addition, please specify methods for managing flammable and incompatible wastes. 30 TAC Section 305.45(a)(8)(C)

The Waste Analysis Plan is provided in Attachment III.D, which includes Appendices III.D.1, III.D.2, and III.D.3. Figure III.D.1 describes the waste profiling process for new waste streams.

IV. Engineering Report

The engineering report represents the conceptual basis for the storage or processing units at the industrial nonhazardous waste management facility. It should include calculations and other such engineering information as may be necessary to follow the logical development of the facility design. Plans and specifications are an integral part of the report. They should include construction procedures, materials specifications, dimensions, design capacities relative to the volume of wastes (as appropriate). Since these reports may be incorporated into any issued permit, the report should not include trade names, manufacturers, or vendors of specific materials, equipment, or services unless such information is critical to the technical adequacy of the material. Technical specifications and required performance standards are sufficient to conduct a technical review.

Submit a detailed engineering design report prepared and sealed by a professional engineer, with current license and designating the Registered Engineering Firm's name and Registration Number as required by the Texas Engineering Practice Act. Include in the report the following information shown below. 30 TAC Section 305.45(a)(8)

(Please note that in accordance with 30 TAC §305.50(a)(7), any engineering plans and specifications (*e.g.*, engineering drawings, engineering calculations) submitted as part of the permit application shall be sealed by a licensed professional engineer who is currently registered in the state of Texas).

A. Waste Management Unit Information: Complete Table IV. for each waste management unit to be permitted at the facility.

See Table IV.

B. Flow Diagram/Description

Submit a process flow diagram and step-by-step word descriptions of the process flow, depicting the handling, collection, storage, processing, and/or disposal of each waste listed in Table III.A.

The flow diagrams and/or descriptions should include the following information:

1. Originating point of each waste and waste classification code;
2. Means of conveyance utilized in every step of the process flow;
3. Name and function of each facility component through which the waste passes; and
4. The ultimate disposition of all wastes (if off-site, specify "off-site") and waste residues.

See Attachment IV.B.1 for a waste flow diagram and Attachment IV.B.2 for a piping and instrumentation diagram (P&ID) and layout of the tank area.

C. United States Geological Survey: Submit a 72-minute quadrangle map which shows the location of the facility and it uses a scale of not less than 1:24,000.

See Attachment IV.C for the topographic map.

D. Site Map: Submit a "site map" prepared by a registered surveyor. The map must show the approximate boundaries of the facility, denoting the areas where waste management activity is or will be conducted. The map shall also show (1) contours, using a contour interval of 5 feet if the slope is >5% and a contour interval of 2 feet if the slope is <5%, (2) plant facilities and other improvements such as fences, roads, pits, ponds, ditches, dikes, location of boreholes if applicable etc. The scale of this map should not be less than 1 inch = 200 feet.

The approximately 5-acre UIC waste management area, which includes the proposed permitted tanks and ancillary equipment, is located on a larger 2,660 acre property owned by Fort Bend Regional Landfill. The topographic map provided in Attachment IV.C demonstrates that the area where the UIC waste management area is located is relatively flat. In addition, maps prepared by a Professional Engineer registered in the State of Texas provide information on drainage features (see Attachment IV.D.1), including fences, roads, pits, ponds, ditches, dikes, and locations of monitoring wells. Attachment IV.C also shows major surface water features, including ponds to the south and Deer and Big Creek to the north. The UIC waste management area is located to the northeast of the commercial municipal solid waste landfill that is also located on the larger 2,660-acre property, and the UIC waste management area is relatively flat with minimal elevation changes. A wind rose is also provided (Attachment IV.D.2).

E. Aerial Photograph: For land-based storage or treatment units (such as surface impoundments and land treatment units) submit an aerial photograph approximately 9" x 9" with a scale within a range of 1" =1667' to 1" =3334' and showing the area within at least a one-mile radius of the site boundaries. The site boundaries and actual fill areas should be marked.

Not Applicable

Waste Management Units (30 TAC Section 305.45(a)(8)(A)):

F. Container Storage Areas

Not applicable, no container storage areas are proposed for this permit application.

1. Submit engineering plans and specifications which fully depict each container storage area (CSA) (*e.g.*, CSA, secondary containment system, ancillary equipment).

2. Provide an engineering description of each CSA. Please note that the engineering description should include a description of the materials of construction, run-on prevention, overflow prevention, and the container management practices for each CSA.

G. Tank Systems

See Appendix IV.G.1 (Tanks TK-1300, TK-1310, TK-1320, TK-1330, TK-1340, TK-1350, TK-1360, and TK-1370) and Appendix IV.G.2 (Tank TK-1390) for the Engineering Reports for the proposed waste storage and processing tanks. An Engineering Report was not prepared for the leachate pre-injection tank (Tank TK-1380), as discussed

with TCEQ in the pre-application meeting, since this tank will only handle nonhazardous leachate recovered from the on-site landfill.

1. Submit engineering plans and specifications which fully depict each tank system (*e.g.*, tank, secondary containment system, ancillary equipment).

2. Submit piping and instrumentation drawings (P&IDs) of each tank system.

3. Provide an engineering description of each tank system. Please note that the engineering description should include a description of the materials of construction, external corrosion protection, spill prevention controls, and overfill prevention controls for each tank system.

H. Containment Buildings

Not applicable, no container buildings are proposed for this permit application.

1. Submit engineering plans and specifications which fully depict each containment building.

2. Provide an engineering description of each containment building. Please note that the engineering description should include a description of the materials of construction and the waste management practices of each unit.

I. Drip Pads

Not applicable, no drip pads are proposed for this permit application.

1. Submit engineering plans and specifications which fully depict each drip pad. If there is a liner(s) (soil and/or artificial), leachate collection system, and/or leak detection monitoring system associated with a drip pad, include engineering drawings of these components as well.

2. Provide an engineering description of each drip pad including a description of any liner, leak detection system, leachate collection system, run-off prevention controls, and/or run-on control system that may be in place. Please note that the description should also describe the materials of construction for each component of each drip pad and the operating practices for each drip pad.

J. Waste Piles

Not applicable, no waste piles are proposed for this permit application.

1. Submit engineering plans and specifications which fully depict any liner(s) (soil and/or artificial), leachate collection, and/or leak detection monitoring system associated with each waste pile.

2. Provide an engineering description of any liner, leak detection system, leachate collection system, run-off prevention controls, and/or run-on control system that may be in place for each waste pile. Please note that the description should describe the materials of construction for each component of a waste pile and the operating practices for each waste pile.

K. Incinerators

Not applicable, no incinerators are proposed for this permit application.

1. Submit engineering plans and specifications which fully depict each incinerator and any associated air pollution control equipment.

2. Submit Piping &Instrumentation Drawings (P&ID) for each incinerator and any associated air pollution control equipment (APCE).

3. Provide an engineering description of each incineration system. Each description should include the name and model number of the unit, the type of unit, a description of any APCE associated with the unit, the materials of construction for each component of the system, the types of auxiliary fuels used, the operating ranges of key parameters (e.g., combustion chamber temperature, waste feed rates, air pollution control equipment parameters), and the types of stack gas monitoring equipment used (if any).

L. Miscellaneous Units

Not applicable, no miscellaneous units are proposed for this permit application.

1. Submit engineering plans and specifications which fully depict each miscellaneous unit. If there is a liner(s) (soil and/or artificial), leachate collection system, and/or leak detection monitoring system associated with a drip pad, please include engineering drawings of these components. If there is any APCE associated with a unit, please submit engineering drawings of that equipment as well.

2. Submit P&IDs for each miscellaneous unit, if applicable.

3. Provide an engineering description of each miscellaneous unit including a description of any APCE, liners, leak detection system, leachate collection system, run-off prevention controls, and/or run-on control system that may be associated with the unit. Please note that the description should also describe the materials of construction for each component of each miscellaneous unit and the operating practices for each unit.

M. Surface Impoundments

Not applicable, no surface impoundments are proposed for this permit application.

1. Submit engineering plans and specifications which fully depict each surface impoundment. The plans should include all significant features of the surface impoundment(s) and should indicate the 100-year flood zone. Cross-sectional drawing(s) detailing significant design features should be shown.

2. Describe liner specifications including type and thickness.

3. For in-place liners describe site preparation planned including scarification and compaction, and any other chemical or physical treatment to be effected.

4. For imported reworked soils, describe liner installation methodology including lift size, moisture content during compaction, compaction method, design density, and

determination of hydraulic conductivity.

5. For artificial liner materials provide pertinent specifications and a description of how liner/waste compatibility has been determined. Also describe installation method.

6. For all liners describe quality control measures to be followed during liner installation.

7. Provide an engineering description of any leak detection system, leachate collection, run-off prevention controls, and/or run-on control system that may be in place for each surface impoundment.

N. Land Treatment Units

Not applicable, no land treatment units are proposed for this permit application.

1. Submit engineering plans and specifications which fully depict each land treatment unit. The plan should include all significant features of the land treatment unit and should indicate the 100-year flood zone.

2. Submit a performance evaluation plan describing how the degradation of waste constituents will be monitored. The plan should include the depth below ground surface of the treatment zone and management methods to be utilized within the treatment zone.

3. Describe necessary site preparation including soil importation, preparation, chemical amendments, etc.

4. Describe waste application method(s), including depth of incorporation and frequency of cultivation, equipment to be used, etc.

5. Submit an application rate table indicating the application rate of waste constituents to be applied to the treatment zone.

6. Provide an engineering description of any leachate collection, run-off prevention controls, and/or run-on control system that may be in place for each land treatment unit.

V. Geology Report (30 TAC 305.45(a)(8)(C)

(This section is applicable only to those facilities utilizing land-based storage or treatment facilities such as surface impoundments, land treatment units and waste piles.)

No land-based storage or treatment facilities are proposed for this permit application; therefore, the geology report is not required.

A. Submit a Geology Report (prepared by a Texas licensed professional geoscientist) which describes the regional geology and hydrogeology in the vicinity of the solid waste management facility. The report should provide a discussion of stratigraphy, structural setting, topography, faulting, and land surface subsidence and any other active geologic processes in the vicinity of the facility. Include both geologic maps and cross-sections as necessary. The report should also identify regional aquifers and discuss the groundwater bearing and transmitting properties of subsurface units, and contain a water table contour or potentiometric surface map for the facility.

1. Indicate the location of all water-producing wells within one mile of the facility. A United States Geological Survey map may be used to show the wells. Provide uses of the water in these wells (for example: domestic, livestock watering, industrial, agricultural, etc.)

2. Provide an analysis of ground water at the waste management site.

B. Submit a Subsurface Soils Investigative Report which is sufficiently detailed to establish the soil conditions in the vicinity of the waste management facility. The applicant should consult TCEQ technical guidelines to determine the recommended number of borings, location and depth of borings, and frequency of engineering classification tests. Such investigation should be conducted in accordance with recognized subsurface soils investigation practices. The report should at a minimum contain the following information:

1. The logs of borings performed at the waste management area. All borings must be conducted in accordance with established field exploration methods. Investigation procedures should be discussed in the report. A sufficient number of borings should be performed to establish subsurface stratigraphy and to identify and allow assessment of potential pathways for pollution migration. Borings must be sufficiently deep to allow identification of the uppermost aquifer and underlying hydraulically interconnected aquifers. Boring logs should include a detailed description of materials encountered including any discontinuities such as fractures, fissures, slickensides, lenses or seams. The hollow stem auger boring method is recommended in those instances where an accurate determination of initial water levels is important. A key explaining both the symbols used on the boring logs and the classification terminology for soil type, consistency, and structure should be provided.

2. Complete Table V. and provide in the report data which describes the geotechnical properties of the subsurface soil materials. All laboratory and field tests must be performed in accordance with recognized procedures. A brief discussion of test procedures should be included. All major strata encountered during the field investigation phase should be characterized with regard to: Unified Soil Classification, moisture content, percent less than number 200 sieve, Atterberg limits (liquid limit, plastic limit, and plasticity index), and coefficient of

permeability. Field permeability tests should be used to determine the coefficient of permeability of sand or silt units and should also be used to supplement laboratory tests for more clay-rich soils. In addition, particle size distribution and relative density based upon penetration resistance should be determined for coarse-grained soils. For fine-grained soils the following parameters should also be determined: cohesive shear strength based upon either penetrometer or unconfined compression tests, dry unit weight, and degree of saturation(s). For the major soil strata encountered, the maximum, minimum, and average for each of these variables should be compiled.

3. Coefficient of permeability in units of cm/sec should be determined for any in-place or constructed soil liners to be used to control waste migration. Separate values shall be determined with ground water from the site and waste or leachate from waste as test fluids. A description of testing methods is required.

4. For land treatment units, provide a description of the surficial soils at the site which includes:

   (a) The name and description of the soil series at the site;

   (b) Important physical properties of the series such as depth, permeability, available water capacity, soil pH, and erosion factors;

   (c) Engineering properties and classifications such as USDA texture, Unified Soil Classification, size gradation, and Atterberg limits (liquid limit, plastic limit, and plasticity index); and

   (d) The cation exchange capacity (CEC) of the soil(s) expressed in units of meq/100g.

   Much of this information may be obtained by consulting the county soil survey published by the United States Department of Agriculture, Soil Conservation Service. If available, a copy of an aerial photograph showing soil series units on the land treatment area should be provided.

   If an aerial photograph is not available, include a soil series map as an attachment to this subsurface soils investigation report.

VI. Ground and Surface Water Protection (30 TAC 305.45(a)(8)(C))

A. Submit a ground and surface water protection plan drawn to scale consisting of a sheet reflecting locations and typical sections of levees, dikes, liners, drainage channels, culverts, curbs, holding ponds, storm sewers, leachate collections systems and all other units relating to protection of the site from contact with ground and surface water. Adequacy of provisions for safe passage of any internal or adjacent external floodwaters should be reflected here. Cross-sections of levees should be shown tied into contours.

The facility already takes measures to protect groundwater and surface water, since a commercial municipal solid waste landfill (MSW 2270) is also operated on the larger 2,660-acre property. As shown on Attachment VI.A, the facility has groundwater monitoring wells in-place as part of the facility's routine groundwater sampling program associated with the landfill, and the landfill has a leachate collection system. Additionally, the facility manages stormwater in accordance with the entire facility's Texas Pollutant Discharge Elimination System (TPDES) Permit No. TXR05R702, which prevents impacted stormwater from leaving the site (see Attachment IV.D.1).

The proposed UIC waste management area for the UIC-permitted deep wells will consist of tanks and ancillary equipment that will all be contained within concrete secondary containment. Concrete secondary containment will provide protection of both groundwater and surface water from any potential releases. All leaks, drips, spills, and stormwater runoff shall be collected for processing for injection.

B. Submit a subsurface monitoring plan including descriptions of the location, operation, construction and installation of each monitoring device, subsurface zone to be monitored, constituents to be analyzed, analytical method to be employed, frequency of sampling and how a release from the waste management unit will be determined. Include logs of borings performed.

1. Groundwater Monitoring (This section may apply only to those facilities utilizing land-based storage or treatment facilities such as surface impoundments, land treatment units and waste piles.)

No land-based storage or treatment facilities are proposed for this permit application; therefore, groundwater monitoring is not applicable.

(a) For inclusion into a permit, complete Table VI.A. for each unit to be monitored, to specify any proposed monitoring well system.

(b) For inclusion into a permit, for each unit to be monitored, complete Table VI.B. to specify the following:

(1) the suite of waste specific parameters (indicator parameters, waste constituents, or reaction products) which will be analyzed at each sampling event for each well or group of wells. These parameters must provide a reliable indication of the presence of hazardous constituents in the ground water;

(2) the sampling frequencies and calendar intervals (*e.g.*, monthly; quarterly within the second 30 days of each quarter; semiannually within the first 30 days of the 2nd and 4th quarters, etc.);

(3) the analytical method and the achievable detection limit of the sample preparation and analysis methods for the selected parameters. This detection limit will represent the capability of the sampling and analysis to reliably and accurately determine the presence of the selected parameters in the sample; and

(4) the concentration limit which will be the basis for determining whether a release has occurred from the waste management unit/area.

2. Unsaturated Zone Monitoring (This section may apply to facilities which contain land treatment units):

No land-based storage or treatment facilities are proposed for this permit application; therefore, unsaturated zone monitoring is not applicable.

(a) List all hazardous constituents that have been or will be monitored.

(1) Current parameters

(2) Proposed parameters

(b) Number of soil-pore liquid sampling points

(1) Depth of sampling points

(2) Equipment used for soil pore liquid monitoring

(c) Number of soil core sampling points

(1) Depth of soil core sampling points

(2) Indicate on a facility map locations of all sampling points.

C. Climate

1. Describe regional climatic conditions

The UIC waste management area is located on the larger 2,660-acre Fort Bend Regional Landfill property, which is located in Fort Bend County, near Needville, Texas. The area is located 40 miles from the coast and has a humid subtropical climate. For Rosenberg, approximately 11 miles to the north, average temperatures in the summer months are around 85°F and average temperatures in the winter are around 55°F. Average daily highs in the summer are around 92°F and daily lows in the winter are around 45°F. Rosenberg receives an annual average precipitation of 45.7 inches, with most precipitation during the summer. Historically, the area has been

impacted by hurricanes along the Gulf Coast.

2. Indicate the magnitudes, in inches, of the following storm events.

   (a) 100-yr./24-hr. **15.7 in**

   (b) 50-yr./24-hr. **13.1 in**

   (c) 25-yr./24-hr. **10.8 in**

3. Indicate the average monthly and annual rainfall for the area.

   The annual average rainfall is approximately 45.7 inches. Monthly average rainfall ranges from 3.0 inches in February to 4.3 inches in September.

4. Is the facility located within a 100-year flood zone?

   No

5. Is the facility located within a coastal surge zone?

   No

6. Indicate the average monthly and annual evaporation rate for the area.

   According to the Texas A&M Agrilife Extension, Houston, which is the nearest measured location approximately 30 miles northeast of Needville, has an average evapotranspiration rate of 54.9 inches per year. For monthly evapotranspiration rates, the maximum and minimum are generally observed in June (6.57 inches) and December (2.35 inches), respectively.

D. Explain how rainfall runoff and any other wastewaters within the boundary of the facility are controlled to prevent pollution of ground and surface waters in the area during construction and operation of the units.

The facility manages stormwater in accordance with Stormwater Permit No. TXR05R702. Stormwater will be managed in accordance with the facility's stormwater permit during construction and operation of the unit. Wastewaters are only associated with operation of the on-site landfill, and all leachate from the landfill will be collected and conveyed to the Tank system for eventual disposal via the UIC-permitted deep injection wells.

E. Is it possible for surface waters originating outside the facility to enter said facility? Give explanation of answer.

In the event of a 100-year flood, waters originating from outside the facility will enter the facility, as a result of the proximity to Big Creek, located approximately 2300 feet to the north and northeast (see Attachment IV.C). However, flood maps from the Federal Emergency Management Agency (FEMA) indicate that only undeveloped portions of the facility's property would be impacted from surface waters originating from outside the facility (see Attachment VI.E).

F. If an accidental discharge did occur, trace the route which the water would follow (for example: into an unnamed creek adjacent to the facility; thence into Red Creek; thence into the Trinity River).

Any accidental surface discharge would enter one of the unnamed intermittent streams exiting the facility; thence into Big Creek; thence into the Brazos River.

VII. Closure and Post-Closure Plans

The applicant must close the facility in a manner that minimizes need for further maintenance and controls, or eliminates, to the extent necessary to protect human health and the environment, the post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated rainfall, or waste decomposition products to the ground water, or surface waters, or to the atmosphere.

A. Closure

1. Complete Table VII.A. for each waste management unit to be permitted and list the possible methods of decontamination, and possible methods of disposal of wastes and waste residues, generated during unit closure. (30 TAC Section 335.8)

   See Table VII.A.

2. Submit a closure plan for the facility which includes each permitted waste management unit. The closure plan should describe in detail the procedures (*e.g.*, disposition of wastes, decontamination procedures, procedures for soil sampling and analysis) to be followed and the materials and manpower to be used in accomplishing final closure of the waste management facility. If the facility contains land based units (*e.g.*, land treatment units), please ensure the closure plan includes information on such items as: type, volume and source of cover material; dismantling/demolition of structures and other improvements; ultimate disposition of liquid wastes; final grading/contouring of the facility; topsoil, seed, fertilizer and irrigation necessary to establish cover, where applicable; equipment and manpower (man hours) to accomplish closure. Please include a schedule or timetable for closure of the facility. (30 TAC Section 335.8)

   See Attachment VII.A.

3. Complete Table VII.B. by providing an itemized closure cost estimate (*e.g.*, cost for any decontamination, costs for soil and/or rinsate sampling, cost for analyses) for each permitted waste management unit at the facility. (30 TAC Section 335.8). Closure cost estimates should be prepared on a "worst case" basis (cost of closure by a third party in the event of sudden or total abandonment of the management facility by the operator). The cost estimate must include the cost of closure at the point in the facilities operating life when the extent and manner of its operation would make closure the most expensive. Please consult TCEQ Technical Guideline No. 10, Closure and Post-Closure Cost Estimates, for details and assumptions in calculating closure costs.

   See Table VII.B. Contractor quotes used to develop the closure cost estimate are provided in Attachment VII.B. Note that these quotes were obtained either for the proposed permitted tanks or for analogous tank projects located within the facility, with unit costs assumed to be representative.

4. Complete Table VII.C. by providing a closure cost estimate, in current dollars, for final closure of each permitted unit at the facility. Please refer to 30 TAC Chapter 37, Subchapter P, for the financial assurance requirements for closure and provide a signed statement from an authorized signatory per 30 TAC 305.44 regarding how the owner or operator will comply with this provision.

   See Table VII.C

5. If the financial mechanism(s) has been obtained, please provide a copy of the mechanism(s) to the TCEQ.

   A copy of the financial mechanism will be provided to the TCEQ executive director after the Tanks have been constructed and at least 60 days prior to acceptance of waste.

6. Submit a contingent closure plan for each permitted unit in the case where a release from the unit to the environment has occurred. (30 TAC Chapter 350)

   See Attachment VII.A

B. Post-closure (This section may apply to land-based units such as surface impoundments and land treatment units). Provide a post-closure care plan that includes:

   No land-based storage or treatment facilities are proposed for this permit application; therefore, post-closure is not applicable.

   1. any maintenance or monitoring of waste containment systems;
   2. any monitoring or reporting of groundwater monitoring systems;
   3. any monitoring or reporting of unsaturated zone monitoring systems;
   4. any security measures; and/or
   5. a discussion of the future use of the land.

VIII. Confidential Material

Any information requested in the previous Sections I. through VII. of this application which is deemed confidential shall be provided in this section as a separate collective document and clearly labeled CONFIDENTIAL.

Not Applicable.

INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

TABLES

Table I. - Waste Management Unit List

Waste Management Unit	TCEQ N.O.R. Unit #	Function(s) of Unit (storage/processing)	Design Capacity[1]
TK-1300	001	storage	42,000 gallons
TK-1310	002	storage	42,000 gallons
TK-1320	003	storage	42,000 gallons
TK-1330	004	storage	42,000 gallons
TK-1340	005	storage	42,000 gallons
TK-1350	006	storage	42,000 gallons
TK-1360	007	storage	42,000 gallons
TK-1370	008	storage	42,000 gallons
TK-1390	009	storage	21,000 gallons

[1]Cubic yards, gallons, pounds, gallons/minute, pounds/hour, BTUs/hour, etc.

Table II. - Inspection Schedule

Facility Unit(s) and Basic Elements	Possible Error, Malfunction, or Deterioration	Frequency of Inspection
Tanks and Tank System TK-1300, TK-1310, TK-1320, TK-1330, TK-1340, TK-1350, TK-1360, TK-1370, and TK-1390	• *Above-Ground Portions of Tank Exterior:* Corrosion, leaks. • *Piping and Valves:* Damage, leaks. • *Data Gathered from Visual Monitoring and/or Leak Detection Equipment:* Standing liquid in the sump or secondary containment area. • *Tank Construction Materials and Area Immediately Surrounding Externally Accessible Portion of Tank System:* Corrosion, signs of release. • *Integrity of Secondary Containment:* Cracks, breaks, or signs of deterioration.	Daily, on all days of facility operation
	• *Overfill Control Equipment:* Malfunction of high-level alarms, if present, for systems equipped with such alarms.	Annually
Containment Areas, Dike Walls, Berms	• Evidence of spills or release • Cracks or gaps in coating • Accumulated precipitation	Daily, on all days of facility operation

Facility Unit(s) and Basic Elements	Possible Error, Malfunction, or Deterioration	Frequency of Inspection
Loading/Unloading Areas	• Evidence of spills or release • Accumulated precipitation • Integrity of containment system	Daily, on all days of facility operation
Emergency Equipment Eyewash, safety showers, fire extinguishers, spill control equipment	• Low or no flow • Blockage • High pressure • Missing pieces • System inoperability	Monthly
Security Fences, gates, warning signs	• Breach, damage, missing sections. • Not operating properly. • Deterioration, damage, missing, illegible writing.	Monthly

Table III.A. - Waste Management Information

Waste	Source	Volume (tons/year)
Leachate from GFL Facility	On-site	Up to 88,300,800 gal. in combination with the other on-site waste stream. Note that on-site and off-site waste streams will not exceed 353,203,200 gallons.
Leachate from other landfills	Various off-site sources	Up to 282,562,560 gal. in combination with the other off-site waste stream. Note that on-site and off-site waste streams will not exceed 353,203,200 gallons.
Wash water	Various off-site sources	Up to 282,562,560 gal. in combination with the other off-site waste stream. Note that on-site and off-site waste streams will not exceed 353,203,200 gallons.
Tank Washouts	Various off-site sources and on-site sources	Up to 282,562,560 gal. in combination with the other off-site waste stream. Note that on-site and off-site waste streams will not exceed 353,203,200 gallons.
Contaminated Stormwater from GFL Facility	On-site	Up to 88,300,800 gal. in combination with the other on-site waste stream. Note that on-site and off-site waste streams will not exceed 353,203,200 gallons.
Contaminated Stormwater	Various off-site sources	Up to 282,562,560 gal. in combination with the other off-site waste stream. Note that on-site and off-site waste streams will not exceed 353,203,200 gallons.
Other Aqueous Waste	Various off-site sources	Up to 282,562,560 gal. in combination with the other off-site waste stream. Note that on-site and off-site waste streams will not exceed 353,203,200 gallons.

Waste	Source	Volume (tons/year)
Scrubber Water	Various off-site sources	Up to 282,562,560 gal. in combination with the other off-site waste stream. Note that on-site and off-site waste streams will not exceed 353,203,200 gallons.
Other inorganic Liquids	Various off-site sources	Up to 282,562,560 gal. in combination with the other off-site waste stream. Note that on-site and off-site waste streams will not exceed 353,203,200 gallons.
Nonhazardous Brine	Various off-site sources	Up to 282,562,560 gal. in combination with the other off-site waste stream. Note that on-site and off-site waste streams will not exceed 353,203,200 gallons.

Table III.B. - Wastes Managed In Permitted Units

No.	Waste	Physical Form (e.g., solid, liquid, sludge)	TCEQ Waste Form Codes and Classification Codes	
1	Leachate from GFL Facility	Liquid	116	1, 2
2	Leachate from other landfills	Liquid	116	1,2
3	Wash water	Liquid	101-106, 109-110, 113-115, 119, 201, 203-205, 207, 219, 296	1, 2
4	Tank Washouts	Liquid	101-106, 109-110, 113-115, 119, 203-205, 207, 209-210, 219, 296	1, 2
5	Contaminated Stormwater from GFL Facility	Liquid	113-114, 119, 203-205, 207, 219, 296	1, 2
6	Contaminated Stormwater	Liquid	113-114, 119, 203-205, 207, 219, 296	1, 2
7	Other Aqueous Waste	Liquid	119, 219	1, 2
8	Scrubber Water	Liquid	115	1, 2
9	Other inorganic Liquids	Liquid	119, 198	1, 2
10	Nonhazardous Brine	Liquid	113, 199	1, 2

Table III.C. - Sampling and Analytical Methods

Waste No.[1]	Sampling Location	Sampling Method	Frequency	Parameter	Test Method
Composite 1, 2, 3, 4, 5, 6, 7, 8, 9 and/or 10	Before Injection Wellhead	Grab	Daily	pH	9040C or equivalent
Composite 1, 2, 3, 4, 5, 6, 7, 8, 9 and/or 10	Before Injection Wellhead	Grab	Daily	Specific Gravity	ASTM D4052 or equivalent
Composite 1, 2, 3, 4, 5, 6, 7, 8, 9 and/or 10	Before Injection Wellhead	Grab	Annually	Total Dissolved Solids, TDS	SM2540C or equivalent
Composite 1, 2, 3, 4, 5, 6, 7, 8, 9 and/or 10	Before Injection Wellhead	Grab	Annually	Total Suspended Solids, TSS	SM2540D or equivalent
Composite 1, 2, 3, 4, 5, 6, 7, 8, 9 and/or 10	Before Injection Wellhead	Grab	Annually	Waste Characterization Profile: Reactivity, Corrosivity, and Ignitability	EPA Methods 1110a, 9040c, 1010a, or equivalents
Composite 1, 2, 3, 4, 5, 6, 7, 8, 9 and/or 10	Before Injection Wellhead	Grab	Annually	Applicable TCLP metals, Semivolatile organics, volatile organics	Per 40 CFR 261 Appendix III
Composite 1, 2, 3, 4, 5, 6, 7, 8, 9 and/or 10	Before Injection Wellhead	Grab	Annually	Viscosity	D445-04e2 or equivalent

[1]from first column of Table III.B.

Table IV. - Waste Management Unit Information

Permit Unit No.	Waste Management Unit	TCEQ N.O.R. No.	Waste Nos.[1] Managed in Unit	Function(s) of Unit (storage/processing)	Rated Capacity of Unit
001	TK-1300	001	1 , 2, 3, 4, 5, 6, 7, 8, 9, and/or 10	Storage	42,000 gallons
002	TK-1310	002	1 , 2, 3, 4, 5, 6, 7, 8, 9, and/or 10	Storage	42,000 gallons
003	TK-1320	003	1 , 2, 3, 4, 5, 6, 7, 8, 9, and/or 10	Storage	42,000 gallons
004	TK-1330	004	1 , 2, 3, 4, 5, 6, 7, 8, 9, and/or 10	Storage	42,000 gallons
005	TK-1340	005	1 , 2, 3, 4, 5, 6, 7, 8, 9, and/or 10	Storage	42,000 gallons
006	TK-1350	006	1 , 2, 3, 4, 5, 6, 7, 8, 9, and/or 10	Storage	42,000 gallons
007	TK-1360	007	1 , 2, 3, 4, 5, 6, 7, 8, 9, and/or 10	Storage	42,000 gallons
008	TK-1370	008	1 , 2, 3, 4, 5, 6, 7, 8, 9, and/or 10	Storage	42,000 gallons
009	TK-1390	009	1 , 2, 3, 4, 5, 6, 7, 8, 9, and/or 10	Storage	21,000 gallons

[1]from first column of Table III.B.

Table V. - Waste Management Area Subsurface Conditions

Not applicable, no land-based storage or treatment facilities are proposed for this permit application.

Boring Number	Depth Below Grade	Stratum	USC Symbol	Liquid Limit	Plasticity Index	Percent Passing #200 Sieve	Permeability	Percent Porosity

Maximum depth:

_____feet below grade

_____feet above MSL

Table VI.A. - Unit Groundwater Detection Monitoring System

Not applicable, no land-based storage or treatment facilities are proposed for this permit application.

For each unit/area which requires groundwater monitoring, specify the number and type of wells which will comprise the groundwater monitoring system for the unit/area. Prepare additional tables as necessary.

Waste Management Unit/Area Name[1]

Well Number(s)						
Hydrogeologic Unit Monitored						
Type (e.g.,. point of compliance, background, observation, etc.)						
Up or Down Gradient						
Casing Diameter and Material						
Screen Diameter and Material						
Screen Slot Size (in.)						
Top of Casing Elevation (ft, MSL)						
Grade or Surface Elevation (ft, MSL)						
Well Depth (ft,)						
Screen Interval, From(ft) To(ft)						
Facility Coordinates (e.g., lat/long or company coordinates)						

[1]From Tables in Section V.

Table VI.B. - Groundwater Sample Analysis

Not applicable, no land-based storage or treatment facilities are proposed for this permit application.

For each well or group of wells, specify the suite of parameters for which groundwater samples will be analyzed.

Well No(s).

Parameter	Sampling Frequency	Analytical Method	Detection Limits	Concentration Limits[1]

[1] The concentration limit is the basis for determining whether a release has occurred from the waste management unit/area.

Table VII.A. - Unit Closure

For each unit to be permitted, list the facility components to be decontaminated, the possible methods of decontamination, and the possible methods of disposal of wastes and waste residues generated during unit closure:

Equipment of HWM Unit	Possible Methods of Decontamination[1]	Possible Methods of Disposal [1]
Tank TK-1300	Flush/detergent wash, steam cleaning, high pressure wash, or solvent wash	Deep well injection or off-site disposal at authorized facility
Tank TK-1310	Flush/detergent wash, steam cleaning, high pressure wash, or solvent wash	Deep well injection or off-site disposal at authorized facility
Tank TK-1320	Flush/detergent wash, steam cleaning, high pressure wash, or solvent wash	Deep well injection or off-site disposal at authorized facility
Tank TK-1330	Flush/detergent wash, steam cleaning, high pressure wash, or solvent wash	Deep well injection or off-site disposal at authorized facility
Tank TK-1340	Flush/detergent wash, steam cleaning, high pressure wash, or solvent wash	Deep well injection or off-site disposal at authorized facility
Tank TK-1350	Flush/detergent wash, steam cleaning, high pressure wash, or solvent wash	Deep well injection or off-site disposal at authorized facility
Tank TK-1360	Flush/detergent wash, steam cleaning, high pressure wash, or solvent wash	Deep well injection or off-site disposal at authorized facility
Tank TK-1370	Flush/detergent wash, steam cleaning, high pressure wash, or solvent wash	Deep well injection or off-site disposal at authorized facility
Tank TK-1390	Flush/detergent wash, steam cleaning, high pressure wash, or solvent wash	Deep well injection or off-site disposal at authorized facility

[1]Applicants may list more than one appropriate method.

Table VII.B. - Unit Closure Cost Estimate for Tank TK-1300

Task	Cost
Waste Transportation and Disposal	
Disposal of remaining liquid waste in tank (41,160 gallons [98% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$26,754
Removal and transport of remaining liquid waste in tank (Nine 5,000-gal. loads [98% of permitted tank capacity] x $1,800 transport cost per load[1])	$16,200
Disposal of tank bottom sludge (2.5 cubic yards [2% of permitted tank capacity or up to 500 gallons] x $672 cost per cubic yard[2])	$1,680
Removal and transport of tank bottom sludge (4 hours transport x $135 transport cost per hour[2])	$540
Decontamination of Tanks and Secondary Containment	
Contractor mobilization (lump sum[1])	$7,900
Contractor labor and equipment cost for decontamination (5 days equipment and labor at $4,100 per day[1] + 2 days supplied air at $5,600 per day[1])	$31,700
Dismantling tank, demolition of containment, excavation and backfill (bulldozer for 1 week at $3,179[3], excavator for 1 week at $3,721[3], pad foot roller for 1 week at $3,042[3], 2 cut off saws for 1 week at $1,235[3], cutting wheels at $704[3], 600 gallons fuel at $3,510[3])	$15,390
Pressure wash of secondary containment (1650 sq. ft. [25% of 60 ft x 110 ft secondary containment area] x $0.99 per sq. ft.[4])	$1,634
Disposal of rinsate from tanks and secondary containment (620 gallons [0.05 ft rinse water x 1,650 sq. ft. secondary containment] + 2,100 gallons [5% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$1,755
Transport of rinsate from tanks and secondary containment (One 5,000-gal. load [2,700 gallons rinsate] x $1,800 transport cost per load[1])	$1,800
Loading and transport of tank remnants (4 x Heavy Trucking line item at $5,200[3] and dump truck for 1 week at $5,850[3])	$11,050
Labor for rinsate sample collection (assume 8 hrs for 2 scientists[5])	$2,000
PPE and sampling equipment disposal[5]	$280
Sample analytical costs (analysis for pH, RCRA metals, VOCs, SVOCs, and TPH, plus additional fees)	$478
Closure Certification Report	
PE Closure Certification (lump sum)	$2,500
Administration Costs	
Project Administration (5% of cost)	$6,100
Total	$127,800
Contingency (10% minimum)	$12,800
Total Unit Closure Cost (rounded to the nearest 100)	**$140,600** (2023)

Notes:

1. Based on quote from CIMA Services, LP, dated 6 November 2023.
2. Based on quote from IKON Environmental Solutions, LP dated 27 October 2023. Sludge disposal cost assumes $112 per drum, and 6 drums per CY. Sludge transport cost assumes 4 hr for every 5 CY.
3. Based on quote from RL Doskocil, Inc. dated 5 October 2023. Assumes approximately equivalent equipment and material cost as two tanks in quote, for durations listed.

4. Based on cost estimate from RS Means data, 2023 Quarter 3, Wharton, Texas (Line Item 040120520300).
5. Internal engineering consultant costs based on similar projects.
6. Based on quote from Pace Analytical, dated 30 October 2023.

Table VII.B. - Unit Closure Cost Estimate for Tank TK-1310

Task	Cost
Waste Transportation and Disposal	
Disposal of remaining liquid waste in tank (41,160 gallons [98% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$26,754
Removal and transport of remaining liquid waste in tank (Nine 5,000-gal. loads [98% of permitted tank capacity] x $1,800 transport cost per load[1])	$16,200
Disposal of tank bottom sludge (2.5 cubic yards [2% of permitted tank capacity or up to 500 gallons] x $672 cost per cubic yard[2])	$1,680
Removal and transport of tank bottom sludge (4 hours transport x $135 transport cost per hour[2])	$540
Decontamination of Tanks and Secondary Containment	
Contractor mobilization (lump sum[1])	$7,900
Contractor labor and equipment cost for decontamination (5 days equipment and labor at $4,100 per day[1] + 2 days supplied air at $5,600 per day[1])	$31,700
Dismantling tank, demolition of containment, excavation and backfill (bulldozer for 1 week at $3,179[3], excavator for 1 week at $3,721[3], pad foot roller for 1 week at $3,042[3], 2 cut off saws for 1 week at $1,235[3], cutting wheels at $704[3], 600 gallons fuel at $3,510[3])	$15,390
Pressure wash of secondary containment (1650 sq. ft. [25% of 60 ft x 110 ft secondary containment area] x $0.99 per sq. ft.[4])	$1,634
Disposal of rinsate from tanks and secondary containment (620 gallons [0.05 ft rinse water x 1,650 sq. ft. secondary containment] + 2,100 gallons [5% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$1,755
Transport of rinsate from tanks and secondary containment (One 5,000-gal. load [2,700 gallons rinsate] x $1,800 transport cost per load[1])	$1,800
Loading and transport of tank remnants (4 x Heavy Trucking line item at $5,200[3] and dump truck for 1 week at $5,850[3])	$11,050
Labor for rinsate sample collection (assume 8 hrs for 2 scientists[5])	$2,000
PPE and sampling equipment disposal[5]	$280
Sample analytical costs (analysis for pH, RCRA metals, VOCs, SVOCs, and TPH, plus additional fees)	$478
Closure Certification Report	
PE Closure Certification (lump sum)	$2,500
Administration Costs	
Project Administration (5% of cost)	$6,100
Total	$127,800
Contingency (10% minimum)	$12,800
Total Unit Closure Cost (rounded to the nearest 100)	**$140,600** (2023)

Notes:

1. Based on quote from CIMA Services, LP, dated 6 November 2023.
2. Based on quote from IKON Environmental Solutions, LP dated 27 October 2023. Sludge disposal cost assumes $112 per drum, and 6 drums per CY. Sludge transport cost assumes 4 hr for every 5 CY.
3. Based on quote from RL Doskocil, Inc. dated 5 October 2023. Assumes approximately equivalent equipment and material cost as two tanks in quote, for durations listed.

4. Based on cost estimate from RS Means data, 2023 Quarter 3, Wharton, Texas (Line Item 040120520300).
5. Internal engineering consultant costs based on similar projects.
6. Based on quote from Pace Analytical, dated 30 October 2023.

Table VII.B. - Unit Closure Cost Estimate for Tank TK-1320

Task	Cost
Waste Transportation and Disposal	
Disposal of remaining liquid waste in tank (41,160 gallons [98% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$26,754
Removal and transport of remaining liquid waste in tank (Nine 5,000-gal. loads [98% of permitted tank capacity] x $1,800 transport cost per load[1])	$16,200
Disposal of tank bottom sludge (2.5 cubic yards [2% of permitted tank capacity or up to 500 gallons] x $672 cost per cubic yard[2])	$1,680
Removal and transport of tank bottom sludge (4 hours transport x $135 transport cost per hour[2])	$540
Decontamination of Tanks and Secondary Containment	
Contractor mobilization (lump sum[1])	$7,900
Contractor labor and equipment cost for decontamination (5 days equipment and labor at $4,100 per day[1] + 2 days supplied air at $5,600 per day[1])	$31,700
Dismantling tank, demolition of containment, excavation and backfill (bulldozer for 1 week at $3,179[3], excavator for 1 week at $3,721[3], pad foot roller for 1 week at $3,042[3], 2 cut off saws for 1 week at $1,235[3], cutting wheels at $704[3], 600 gallons fuel at $3,510[3])	$15,390
Pressure wash of secondary containment (1650 sq. ft. [25% of 60 ft x 110 ft secondary containment area] x $0.99 per sq. ft.[4])	$1,634
Disposal of rinsate from tanks and secondary containment (620 gallons [0.05 ft rinse water x 1,650 sq. ft. secondary containment] + 2,100 gallons [5% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$1,755
Transport of rinsate from tanks and secondary containment (One 5,000-gal. load [2,700 gallons rinsate] x $1,800 transport cost per load[1])	$1,800
Loading and transport of tank remnants (4 x Heavy Trucking line item at $5,200[3] and dump truck for 1 week at $5,850[3])	$11,050
Labor for rinsate sample collection (assume 8 hrs for 2 scientists[5])	$2,000
PPE and sampling equipment disposal[5]	$280
Sample analytical costs (analysis for pH, RCRA metals, VOCs, SVOCs, and TPH, plus additional fees)	$478
Closure Certification Report	
PE Closure Certification (lump sum)	$2,500
Administration Costs	
Project Administration (5% of cost)	$6,100
Total	$127,800
Contingency (10% minimum)	$12,800
Total Unit Closure Cost (rounded to the nearest 100)	**$140,600** (2023)

Notes:

1. Based on quote from CIMA Services, LP, dated 6 November 2023.
2. Based on quote from IKON Environmental Solutions, LP dated 27 October 2023. Sludge disposal cost assumes $112 per drum, and 6 drums per CY. Sludge transport cost assumes 4 hr for every 5 CY.
3. Based on quote from RL Doskocil, Inc. dated 5 October 2023. Assumes approximately equivalent equipment and material cost as two tanks in quote, for durations listed.

4. Based on cost estimate from RS Means data, 2023 Quarter 3, Wharton, Texas (Line Item 040120520300).
5. Internal engineering consultant costs based on similar projects.
6. Based on quote from Pace Analytical, dated 30 October 2023.

Table VII.B. - Unit Closure Cost Estimate for Tank TK-1330

Task	Cost
Waste Transportation and Disposal	
Disposal of remaining liquid waste in tank (41,160 gallons [98% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$26,754
Removal and transport of remaining liquid waste in tank (Nine 5,000-gal. loads [98% of permitted tank capacity] x $1,800 transport cost per load[1])	$16,200
Disposal of tank bottom sludge (2.5 cubic yards [2% of permitted tank capacity or up to 500 gallons] x $672 cost per cubic yard[2])	$1,680
Removal and transport of tank bottom sludge (4 hours transport x $135 transport cost per hour[2])	$540
Decontamination of Tanks and Secondary Containment	
Contractor mobilization (lump sum[1])	$7,900
Contractor labor and equipment cost for decontamination (5 days equipment and labor at $4,100 per day[1] + 2 days supplied air at $5,600 per day[1])	$31,700
Dismantling tank, demolition of containment, excavation and backfill (bulldozer for 1 week at $3,179[3], excavator for 1 week at $3,721[3], pad foot roller for 1 week at $3,042[3], 2 cut off saws for 1 week at $1,235[3], cutting wheels at $704[3], 600 gallons fuel at $3,510[3])	$15,390
Pressure wash of secondary containment (1650 sq. ft. [25% of 60 ft x 110 ft secondary containment area] x $0.99 per sq. ft.[4])	$1,634
Disposal of rinsate from tanks and secondary containment (620 gallons [0.05 ft rinse water x 1,650 sq. ft. secondary containment] + 2,100 gallons [5% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$1,755
Transport of rinsate from tanks and secondary containment (One 5,000-gal. load [2,700 gallons rinsate] x $1,800 transport cost per load[1])	$1,800
Loading and transport of tank remnants (4 x Heavy Trucking line item at $5,200[3] and dump truck for 1 week at $5,850[3])	$11,050
Labor for rinsate sample collection (assume 8 hrs for 2 scientists[5])	$2,000
PPE and sampling equipment disposal[5]	$280
Sample analytical costs (analysis for pH, RCRA metals, VOCs, SVOCs, and TPH, plus additional fees)	$478
Closure Certification Report	
PE Closure Certification (lump sum)	$2,500
Administration Costs	
Project Administration (5% of cost)	$6,100
Total	$127,800
Contingency (10% minimum)	$12,800
Total Unit Closure Cost (rounded to the nearest 100)	**$140,600** (2023)

Notes:

1. Based on quote from CIMA Services, LP, dated 6 November 2023.
2. Based on quote from IKON Environmental Solutions, LP dated 27 October 2023. Sludge disposal cost assumes $112 per drum, and 6 drums per CY. Sludge transport cost assumes 4 hr for every 5 CY.
3. Based on quote from RL Doskocil, Inc. dated 5 October 2023. Assumes approximately equivalent equipment and material cost as two tanks in quote, for durations listed.

4. Based on cost estimate from RS Means data, 2023 Quarter 3, Wharton, Texas (Line Item 040120520300).
5. Internal engineering consultant costs based on similar projects.
6. Based on quote from Pace Analytical, dated 30 October 2023.

Table VII.B. - Unit Closure Cost Estimate for Tank TK-1340

Task	Cost
Waste Transportation and Disposal	
Disposal of remaining liquid waste in tank (41,160 gallons [98% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$26,754
Removal and transport of remaining liquid waste in tank (Nine 5,000-gal. loads [98% of permitted tank capacity] x $1,800 transport cost per load[1])	$16,200
Disposal of tank bottom sludge (2.5 cubic yards [2% of permitted tank capacity or up to 500 gallons] x $672 cost per cubic yard[2])	$1,680
Removal and transport of tank bottom sludge (4 hours transport x $135 transport cost per hour[2])	$540
Decontamination of Tanks and Secondary Containment	
Contractor mobilization (lump sum[1])	$7,900
Contractor labor and equipment cost for decontamination (5 days equipment and labor at $4,100 per day[1] + 2 days supplied air at $5,600 per day[1])	$31,700
Dismantling tank, demolition of containment, excavation and backfill (bulldozer for 1 week at $3,179[3], excavator for 1 week at $3,721[3], pad foot roller for 1 week at $3,042[3], 2 cut off saws for 1 week at $1,235[3], cutting wheels at $704[3], 600 gallons fuel at $3,510[3])	$15,390
Pressure wash of secondary containment (1650 sq. ft. [25% of 60 ft x 110 ft secondary containment area] x $0.99 per sq. ft.[4])	$1,634
Disposal of rinsate from tanks and secondary containment (620 gallons [0.05 ft rinse water x 1,650 sq. ft. secondary containment] + 2,100 gallons [5% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$1,755
Transport of rinsate from tanks and secondary containment (One 5,000-gal. load [2,700 gallons rinsate] x $1,800 transport cost per load[1])	$1,800
Loading and transport of tank remnants (4 x Heavy Trucking line item at $5,200[3] and dump truck for 1 week at $5,850[3])	$11,050
Labor for rinsate sample collection (assume 8 hrs for 2 scientists[5])	$2,000
PPE and sampling equipment disposal[5]	$280
Sample analytical costs (analysis for pH, RCRA metals, VOCs, SVOCs, and TPH, plus additional fees)	$478
Closure Certification Report	
PE Closure Certification (lump sum)	$2,500
Administration Costs	
Project Administration (5% of cost)	$6,100
Total	$127,800
Contingency (10% minimum)	$12,800
Total Unit Closure Cost (rounded to the nearest 100)	**$140,600** (2023)

Notes:

1. Based on quote from CIMA Services, LP, dated 6 November 2023.
2. Based on quote from IKON Environmental Solutions, LP dated 27 October 2023. Sludge disposal cost assumes $112 per drum, and 6 drums per CY. Sludge transport cost assumes 4 hr for every 5 CY.
3. Based on quote from RL Doskocil, Inc. dated 5 October 2023. Assumes approximately equivalent equipment and material cost as two tanks in quote, for durations listed.

4. Based on cost estimate from RS Means data, 2023 Quarter 3, Wharton, Texas (Line Item 040120520300).
5. Internal engineering consultant costs based on similar projects.
6. Based on quote from Pace Analytical, dated 30 October 2023.

Table VII.B. - Unit Closure Cost Estimate for Tank TK-1350

Task	Cost
Waste Transportation and Disposal	
Disposal of remaining liquid waste in tank (41,160 gallons [98% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$26,754
Removal and transport of remaining liquid waste in tank (Nine 5,000-gal. loads [98% of permitted tank capacity] x $1,800 transport cost per load[1])	$16,200
Disposal of tank bottom sludge (2.5 cubic yards [2% of permitted tank capacity or up to 500 gallons] x $672 cost per cubic yard[2])	$1,680
Removal and transport of tank bottom sludge (4 hours transport x $135 transport cost per hour[2])	$540
Decontamination of Tanks and Secondary Containment	
Contractor mobilization (lump sum[1])	$7,900
Contractor labor and equipment cost for decontamination (5 days equipment and labor at $4,100 per day[1] + 2 days supplied air at $5,600 per day[1])	$31,700
Dismantling tank, demolition of containment, excavation and backfill (bulldozer for 1 week at $3,179[3], excavator for 1 week at $3,721[3], pad foot roller for 1 week at $3,042[3], 2 cut off saws for 1 week at $1,235[3], cutting wheels at $704[3], 600 gallons fuel at $3,510[3])	$15,390
Pressure wash of secondary containment (1650 sq. ft. [25% of 60 ft x 110 ft secondary containment area] x $0.99 per sq. ft.[4])	$1,634
Disposal of rinsate from tanks and secondary containment (620 gallons [0.05 ft rinse water x 1,650 sq. ft. secondary containment] + 2,100 gallons [5% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$1,755
Transport of rinsate from tanks and secondary containment (One 5,000-gal. load [2,700 gallons rinsate] x $1,800 transport cost per load[1])	$1,800
Loading and transport of tank remnants (4 x Heavy Trucking line item at $5,200[3] and dump truck for 1 week at $5,850[3])	$11,050
Labor for rinsate sample collection (assume 8 hrs for 2 scientists[5])	$2,000
PPE and sampling equipment disposal[5]	$280
Sample analytical costs (analysis for pH, RCRA metals, VOCs, SVOCs, and TPH, plus additional fees)	$478
Closure Certification Report	
PE Closure Certification (lump sum)	$2,500
Administration Costs	
Project Administration (5% of cost)	$6,100
Total	$127,800
Contingency (10% minimum)	$12,800
Total Unit Closure Cost (rounded to the nearest 100)	**$140,600** (2023)

Notes:

1. Based on quote from CIMA Services, LP, dated 6 November 2023.
2. Based on quote from IKON Environmental Solutions, LP dated 27 October 2023. Sludge disposal cost assumes $112 per drum, and 6 drums per CY. Sludge transport cost assumes 4 hr for every 5 CY.
3. Based on quote from RL Doskocil, Inc. dated 5 October 2023. Assumes approximately equivalent equipment and material cost as two tanks in quote, for durations listed.

4. Based on cost estimate from RS Means data, 2023 Quarter 3, Wharton, Texas (Line Item 040120520300).
5. Internal engineering consultant costs based on similar projects.
6. Based on quote from Pace Analytical, dated 30 October 2023.

Table VII.B. - Unit Closure Cost Estimate for Tank TK-1360

Task	Cost
Waste Transportation and Disposal	
Disposal of remaining liquid waste in tank (41,160 gallons [98% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$26,754
Removal and transport of remaining liquid waste in tank (Nine 5,000-gal. loads [98% of permitted tank capacity] x $1,800 transport cost per load[1])	$16,200
Disposal of tank bottom sludge (2.5 cubic yards [2% of permitted tank capacity or up to 500 gallons] x $672 cost per cubic yard[2])	$1,680
Removal and transport of tank bottom sludge (4 hours transport x $135 transport cost per hour[2])	$540
Decontamination of Tanks and Secondary Containment	
Contractor mobilization (lump sum[1])	$7,900
Contractor labor and equipment cost for decontamination (5 days equipment and labor at $4,100 per day[1] + 2 days supplied air at $5,600 per day[1])	$31,700
Dismantling tank, demolition of containment, excavation and backfill (bulldozer for 1 week at $3,179[3], excavator for 1 week at $3,721[3], pad foot roller for 1 week at $3,042[3], 2 cut off saws for 1 week at $1,235[3], cutting wheels at $704[3], 600 gallons fuel at $3,510[3])	$15,390
Pressure wash of secondary containment (1650 sq. ft. [25% of 60 ft x 110 ft secondary containment area] x $0.99 per sq. ft.[4])	$1,634
Disposal of rinsate from tanks and secondary containment (620 gallons [0.05 ft rinse water x 1,650 sq. ft. secondary containment] + 2,100 gallons [5% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$1,755
Transport of rinsate from tanks and secondary containment (One 5,000-gal. load [2,700 gallons rinsate] x $1,800 transport cost per load[1])	$1,800
Loading and transport of tank remnants (4 x Heavy Trucking line item at $5,200[3] and dump truck for 1 week at $5,850[3])	$11,050
Labor for rinsate sample collection (assume 8 hrs for 2 scientists[5])	$2,000
PPE and sampling equipment disposal[5]	$280
Sample analytical costs (analysis for pH, RCRA metals, VOCs, SVOCs, and TPH, plus additional fees)	$478
Closure Certification Report	
PE Closure Certification (lump sum)	$2,500
Administration Costs	
Project Administration (5% of cost)	$6,100
Total	$127,800
Contingency (10% minimum)	$12,800
Total Unit Closure Cost (rounded to the nearest 100)	**$140,600** (2023)

Notes:

1. Based on quote from CIMA Services, LP, dated 6 November 2023.
2. Based on quote from IKON Environmental Solutions, LP dated 27 October 2023. Sludge disposal cost assumes $112 per drum, and 6 drums per CY. Sludge transport cost assumes 4 hr for every 5 CY.
3. Based on quote from RL Doskocil, Inc. dated 5 October 2023. Assumes approximately equivalent equipment and material cost as two tanks in quote, for durations listed.

4. Based on cost estimate from RS Means data, 2023 Quarter 3, Wharton, Texas (Line Item 040120520300).
5. Internal engineering consultant costs based on similar projects.
6. Based on quote from Pace Analytical, dated 30 October 2023.

Table VII.B. - Unit Closure Cost Estimate for Tank TK-1370

Task	Cost
Waste Transportation and Disposal	
Disposal of remaining liquid waste in tank (41,160 gallons [98% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$26,754
Removal and transport of remaining liquid waste in tank (Nine 5,000-gal. loads [98% of permitted tank capacity] x $1,800 transport cost per load[1])	$16,200
Disposal of tank bottom sludge (2.5 cubic yards [2% of permitted tank capacity or up to 500 gallons] x $672 cost per cubic yard[2])	$1,680
Removal and transport of tank bottom sludge (4 hours transport x $135 transport cost per hour[2])	$540
Decontamination of Tanks and Secondary Containment	
Contractor mobilization (lump sum[1])	$7,900
Contractor labor and equipment cost for decontamination (5 days equipment and labor at $4,100 per day[1] + 2 days supplied air at $5,600 per day[1])	$31,700
Dismantling tank, demolition of containment, excavation and backfill (bulldozer for 1 week at $3,179[3], excavator for 1 week at $3,721[3], pad foot roller for 1 week at $3,042[3], 2 cut off saws for 1 week at $1,235[3], cutting wheels at $704[3], 600 gallons fuel at $3,510[3])	$15,390
Pressure wash of secondary containment (1650 sq. ft. [25% of 60 ft x 110 ft secondary containment area] x $0.99 per sq. ft.[4])	$1,634
Disposal of rinsate from tanks and secondary containment (620 gallons [0.05 ft rinse water x 1,650 sq. ft. secondary containment] + 2,100 gallons [5% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$1,755
Transport of rinsate from tanks and secondary containment (One 5,000-gal. load [2,700 gallons rinsate] x $1,800 transport cost per load[1])	$1,800
Loading and transport of tank remnants (4 x Heavy Trucking line item at $5,200[3] and dump truck for 1 week at $5,850[3])	$11,050
Labor for rinsate sample collection (assume 8 hrs for 2 scientists[5])	$2,000
PPE and sampling equipment disposal[5]	$280
Sample analytical costs (analysis for pH, RCRA metals, VOCs, SVOCs, and TPH, plus additional fees)	$478
Closure Certification Report	
PE Closure Certification (lump sum)	$2,500
Administration Costs	
Project Administration (5% of cost)	$6,100
Total	$127,800
Contingency (10% minimum)	$12,800
Total Unit Closure Cost (rounded to the nearest 100)	**$140,600** (2023)

Notes:

1. Based on quote from CIMA Services, LP, dated 6 November 2023.
2. Based on quote from IKON Environmental Solutions, LP dated 27 October 2023. Sludge disposal cost assumes $112 per drum, and 6 drums per CY. Sludge transport cost assumes 4 hr for every 5 CY.
3. Based on quote from RL Doskocil, Inc. dated 5 October 2023. Assumes approximately equivalent equipment and material cost as two tanks in quote, for durations listed.

4. Based on cost estimate from RS Means data, 2023 Quarter 3, Wharton, Texas (Line Item 040120520300).
5. Internal engineering consultant costs based on similar projects.
6. Based on quote from Pace Analytical, dated 30 October 2023.

Table VII.B. - Unit Closure Cost Estimate for Tank TK-1390

Task	Cost
Waste Transportation and Disposal	
Disposal of remaining liquid waste in tank (20,580 gallons [98% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$13,377
Removal and transport of remaining liquid waste in tank (Five 5,000-gal. loads [98% of permitted tank capacity] x $1,800 transport cost per load[1])	$9,000
Disposal of tank bottom sludge (2.1 cubic yards [2% of permitted tank capacity or up to 500 gallons] x $672 cost per cubic yard[2])	$1,397
Removal and transport of tank bottom sludge (4 hours transport x $135 transport cost per hour[2])	$540
Decontamination of Tanks and Secondary Containment	
Contractor mobilization (lump sum[1])	$7,900
Contractor labor and equipment cost for decontamination (5 days equipment and labor at $4,100 per day[1] + 2 days supplied air at $5,600 per day[1])	$31,700
Dismantling tank, demolition of containment, excavation and backfill (bulldozer for 1 week at $3,179[3], excavator for 1 week at $3,721[3], pad foot roller for 1 week at $3,042[3], 2 cut off saws for 1 week at $1,235[3], cutting wheels at $704[3], 600 gallons fuel at $3,510[3])	$15,390
Pressure wash of secondary containment (2400 sq. ft. [60 ft x 40 ft secondary containment area] x $0.99 per sq. ft.[4])	$2,376
Disposal of rinsate from tanks and secondary containment (900 gallons [0.05 ft rinse water x 2,400 sq. ft. secondary containment] + 1,000 gallons [5% of permitted tank capacity] x $0.65 disposal cost per gallon[1])	$1,235
Transport of rinsate from tanks and secondary containment (One 5,000-gal. load [1,400 gallons rinsate] x $1,800 transport cost per load[1])	$1,800
Loading and transport of tank remnants (4 x Heavy Trucking line item at $5,200[3] and dump truck for 1 week at $5,850[3])	$11,050
Labor for rinsate sample collection (assume 8 hrs for 2 scientists[5])	$2,000
PPE and sampling equipment disposal[5]	$280
Sample analytical costs (analysis for pH, RCRA metals, VOCs, SVOCs, and TPH, plus additional fees)	$478
Closure Certification Report	
PE Closure Certification (lump sum)	$2,500
Administration Costs	
Project Administration (5% of cost)	$5,100
Total	$106,200
Contingency (10% minimum)	$10,600
Total Unit Closure Cost (rounded to the nearest 100)	**$116,800** (2023)

Notes:

1. Based on quote from CIMA Services, LP, dated 6 November 2023.
2. Based on quote from IKON Environmental Solutions, LP dated 27 October 2023. Sludge disposal cost assumes $112 per drum, and 6 drums per CY. Sludge transport cost assumes 4 hr for every 5 CY.
3. Based on quote from RL Doskocil, Inc. dated 5 October 2023. Assumes approximately equivalent equipment and material cost as two tanks in quote, for durations listed.

4. Based on cost estimate from RS Means data, 2023 Quarter 3, Wharton, Texas (Line Item 040120520300).
5. Internal engineering consultant costs based on similar projects.
6. Based on quote from Pace Analytical, dated 30 October 2023.

Table VII.C. - Permitted Unit Closure Cost Summary

Existing Unit Closure Cost Estimate – Not applicable

Unit	Cost

Total Existing Unit Closure Cost Estimate **n/a** (2023) dollars

Proposed Unit Closure Cost Estimate

Unit	Cost
Tank TK-1300	$140,600
Tank TK-1310	$140,600
Tank TK-1320	$140,600
Tank TK-1330	$140,600
Tank TK-1340	$140,600
Tank TK-1350	$140,600
Tank TK-1360	$140,600
Tank TK-1370	$140,600
Tank TK-1390	$116,800

Total Proposed Unit Closure Cost Estimate ***$1,241,600 (2023) dollars***

GSI Job No: 6731

INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENTS – SECTION I

Attachment I.F.1	Legal Description of Facility
Attachment I.F.2	Property Survey
Attachment I.G	List of Other Sites Owned by GFL
Attachment I.K	Application Map
Attachment I.L.1	Adjacent Landowner List
Attachment I.L.2	Adjacent Landowner Map
Attachment I.N	Core Data Form
Attachment I.O.1	English Plain Language Form
Attachment I.O.2	Spanish Plain Language Form

GSI Job No: 6731

INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENT I.F.1

Legal Description of Facility

2007093778
Electronically Recorded
Official Public Records
2007 Jul 30 09:08 AM

Dianne Wilson, Ph.D., County Clerk
Fort Bend County Texas
Pages: 24 Fee: $ 101.00

CORRECTION SPECIAL WARRANTY DEED

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

THE STATE OF TEXAS §
§ KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF FORT BEND §

THIS CORRECTION SPECIAL WARRANTY DEED (this "Deed") is executed by LONG POINT PARTNERS, LP, a Texas limited partnership ("Grantor"), to FORT BEND REGIONAL LANDFILL LP, a Texas limited partnership, having an address of One Riverway, Suite 1400, Houston, Texas 77056 ("Grantee").

This Deed is made in place of and as a deed of correction of a Special Warranty Deed dated February 24, 2004, executed by Grantor in favor of Waste Services of Texas, Inc., a Delaware corporation, to whom Grantee is a successor by merger, filed for record on February 25, 2004 under Instrument No. 2004021722, in the Official Public Records of Fort Bend County, Texas (herein referred to as the "Original Deed"), wherein by error or mistake an incorrect description of a tract of land containing approximately 2,644.73 acres (the "2,644 Acre Tract") was attached to the Original Deed in that the pages comprising the property description for the 2,644 Acre Tract were not in the proper order, and this Deed is made by Grantor and accepted by Grantee in order to correct said mistake or error. In all other respects, the Original Deed is hereby confirmed and ratified and shall remain in full force and effect. All references herein to "the date hereof" and similar phrases shall refer to the date of the Original Deed.

The Original Deed was supplemented by that certain Special Warranty Deed dated as of February 24, 2004, executed by Grantor in favor of Grantee, filed for record on July 31, 2006 under Instrument No. 2006092081, in the Official Public Records of Fort Bend County, Texas (herein referred to as the "Supplemental Deed"), which Supplemental Deed contains a description of the 2,644 Acre Tract for purposes of reference only, which description was also incorrect in that the pages comprising such property description were not in the proper order. By execution hereof, the parties hereby amend the Supplemental Deed by replacing the incorrect description of the 2,644 Acre Tract with the description attached hereto as **Exhibit A**. The Supplemental Deed also contains descriptions of two additional tracts of land comprised of approximately 34.73 acres and 1.38 acres, respectively, which descriptions are unaffected hereby, and except as expressly provided herein the Supplemental Deed is hereby confirmed and ratified and shall remain in full force and effect.

Grantor, for and in consideration of the sum of Ten Dollars ($10.00) in hand paid to Grantor by Grantee, and other good and valuable consideration, the receipt and sufficiency of which consideration are hereby acknowledged, has GRANTED, SOLD and CONVEYED and by these presents does GRANT, SELL and CONVEY unto Grantee the real property described on

FILED BY
ALAMO TITLE COMPANY
GF#4010432 2-MTH

Exhibit A attached hereto and made a part hereof for all purposes, together with all improvements situated thereon (the "Property").

TO HAVE AND TO HOLD the Property, together with all and singular the rights and appurtenances thereto in anywise belonging, unto Grantee, its successors and assigns, forever, subject only to the matters described in **Exhibit B** attached hereto and made a part hereof for all purposes to the extent (but no further) that same are valid and subsisting as of the date hereof and affect title to the Property (the "Encumbrances"); and Grantor does hereby bind itself and its successors and assigns to WARRANT AND FOREVER DEFEND all and singular the Property, subject to the Encumbrances, unto Grantee, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, by, through or under Grantor, but not otherwise.

[END OF TEXT]

IN TESTIMONY WHEREOF, this instrument is executed as of the 26th day of July, 2007.

GRANTOR:

LONG POINT PARTNERS, LP, a Texas limited partnership

By: Ruffino Hills Development Corporation, a Texas corporation, its General Partner

By: _____
Name: Brian Kueker
Title: Vice Pres.

THE STATE OF TEXAS §
§
COUNTY OF Dallas §

This instrument was acknowledged before me on the 26th day of July, 2007, by Brian A. Kueker, Vice President of Ruffino Hills Development Corporation, a Texas corporation, General Partner of LONG POINT PARTNERS, LP, a Texas limited partnership, on behalf of said limited partnership.

Nancy McCullough
Notary Public, State of Texas
My Commission Expires:
September 6, 2010

_____
Notary Public in and for the State of Texas

My commission expires: Sept. 6 2010

EXHIBIT A

To Special Warranty Deed

[See Attached]

EXHIBIT "A"

All that certain parcel or tract of land containing 2644.73 acres of land, more or less, out of the Louis Wolf Survey, Abstract No. 540, R. Morris Survey, Abstract No. 654, O'Neill Channell Survey, Abstract No. 730, Fred P. Olcott Survey, Abstract No. 251, George Waters Survey, Abstract No. 346, T. F. Pinckney Survey, Abstract No. 655 and Philo Fairchild Survey, Abstract No. 24, all being in Fort Bend County, Texas, and being more particularly described by metes and bounds on Exhibit "B" attached hereto and made a part hereof.

CHARLIE KALKOMEY SURVEYING, INC.
1513 LONE AVENUE
ROSENBERG, TEXAS 77471
(713) 342-2033

CHARLIE KALKOMEY
REGISTERED PROFESSIONAL LAND SURVEYOR

CHARLES A. KALKOMEY
REGISTERED PROFESSIONAL LAND SURVE

FIELD NOTES FOR A 2,678.6741 ACRE TRACT OF LAND, 240.6444 ACRES IN THE LOUIS WC SURVEY, ABSTRACT 540, 79.6635 ACRES IN THE O'NEIL CHANNEL SURVEY, ABSTRACT 730, 311.2 ACRES IN THE FRED P. OLCOTT SURVEY, ABSTRACT 251, 35.3774 ACRES IN THE R. MOR SURVEY, ABSTRACT 654, 496.3785 ACRES IN THE GEORGE WATERS SURVEY, ABSTRACT 3 914.1283 ACRES IN THE PHILO FAIRCHILD SURVEY, ABSTRACT 24, 20.6376 ACRES IN THE T PINCKNEY SURVEY, ABSTRACT 655, BEING OF THE CERTAIN QUIT CLAIM DEED RECORDED VOLUME 525, PAGE 282, DEED RECORDS, AND 510.5842 ACRES IN THE T. F. PINCKNEY SURVI ABSTRACT 655, BEING THAT CERTAIN CAL "FIFTH TRACT" RECORDED IN VOLUME 116, PAGE 3 DEED RECORDS, FORT BEND COUNTY, TEXAS.

BEGINNING at a spindle set at the west most corner of the Louis Wolf Survey, Abstract 540, for the west n corner and Place of Beginning of the herein described 2,678.6741 acre tract, said point having coordin X=3,038,817.5728, Y=579,012.2319, said coordinates being derived from Station Fairchild having coordinates 3,029,726.72 and Y=590,553.40;

THENCE south 48 degrees 14 minutes 05 seconds East along a fence line as located on the southwest line of s Louis Wolf Survey, Abstract 540, at 50.00 feet pass a 1 inch iron pipe set on the southeast margin of F.M. High 1994 and continuing for a total distance of 3961.69 feet to a concrete monument with a brass cap found at the so most corner of said Louis Wolf Survey, Abstract 540, same being the west most corner of the O'Neil Channel Surv Abstract 730;

THENCE South 48 degrees 28 minutes 14 seconds East along the southwest line of said O'Neil Channel Surv Abstract 730, 1335.91 feet to a 1 inch iron pipe found on the northwest line of the D. J. Jones Survey, Abstract 5 same being the south corner of the O'Neil Channel Survey, Abstract 730, for corner;

THENCE North 41 degrees 08 minutes 07 seconds East along the common line of said O'Neil Channel Surv Abstract 730, and the D. J. Jones Survey, Abstract 581, 787.47 feet to a concrete monument found for a re-en corner to the herein described 2,678.6741 acre tract, same being the north corner of the aforementioned D.J. Jo Survey, Abstract 581, and the lower west corner of the Fred P. Olcott Survey, Abstract 251;

THENCE South 50 degrees 10 minutes 10 seconds east along the common line of the D.J. Jones Survey, Abst 581, and the Fred P. Olcott Survey, Abstract 251, 1962.61 feet to a concrete monument found at the south re corner of the Fred P. Olcott Survey, Abstract 251, for corner, same being on the northwest line of the H. & T. R.R. Company Survey, Section 111;

page 1 of 11

THENCE North 41 degrees 43 minutes 50 seconds East along the common line of the Fred P. Olcott Surv Abstract 251, and the H. & T. C. R.R. Company Survey, Section 111, 3668.58 feet to a concrete monument fou for corner, said point being the north corner of the aforementioned Section 111, same being the east most corner the Fred P. Olcott Survey, Abstract 251, and being on the southwest line of the T. F. Pinckney Survey, Abstract 6

THENCE South 48 degrees 28 minutes 26 seconds East along the common line of the T. F. Pinckney Surv Abstract 655, and the H. & T. C. R.R. Company Survey, Section 111, 5269.57 feet to a 1 inch iron pipe set for south most corner of the herein described 2,678.6741 acre tract, same being the south most corner of the T. Pinckney Survey, Abstract 655;

THENCE North 41 degrees 37 minutes 09 seconds East along the southeast line of the T. F. Pinckney Surv Abstract 655, 3015.65 feet to a 1 inch iron pipe set at a fence corner intersection for an angle point, same being south most corner of the aforementioned 20.6376 acre tract recorded in Quit Claim Deed, Volume 525, Page 2 Deed Records, Fort Bend County, Texas;

THENCE North 41 degrees 48 minutes 16 seconds East along the southeast line of said T. F. Pinckney Surv Abstract 655, 983.97 feet to a 1/2 inch iron pipe set at the east most corner of said T. F. Pinckney Survey, Abstr 655, 983.97 feet to a 1/2 inch iron pipe set at the east most corner of said 20.6376 acre tract for the southeast m corner of the herein described 2,678.6741 acre tract;

THENCE North 48 degrees 11 minutes 45 seconds West along a line establishing the northeast line of the her described tract, at 493.20 feet pass a 1 inch iron pipe set on the southerly line of Davis Estate Road and continu for a total distance of 539.60 feet to a spindle set in the centerline of said Davis Estate Road for corner;

THENCE South 82 degrees 50 minutes 16 seconds West along the center line of David Estate Road, 960.58 f to a 1/2 inch iron pipe set at an angle point in said road;

THENCE North 62 degrees 38 minutes 59 seconds West, 395.67 feet to a 1/2 inch iron pipe set in the center li of said Davis Estate road at the north most corner of said 20.6376 acre tract;

THENCE North 01 degree 58 minutes 42 seconds West, 40.15 feet to a Xah plate found at a fence corn intersection being on the common line of the T. F. Pinckney Survey, Abstract 655, and the Philo Fairchild Surve Abstract 24;

THENCE continuing North 01 degree 58 minutes 42 seconds West along a fence line, 2794.24 feet to a 1 inch ir pipe set at an angle point on said line;

THENCE North 01 degree 30 minutes 28 seconds West along a fence line, 2562.50 feet to a 1 inch iron pipe s at an angle point;

THENCE North 00 degrees 15 minutes 59 seconds East, 525.63 feet to a 1 inch iron pipe set at an angle point;

THENCE North 00 degrees 15 minutes 59 seconds East, 507.83 feet to a point on the southerly channel bank Big Creek for the east most corner of the herein described 2,678.6741 acre tract;

THENCE along the southerly channel bank of Big Creek with its meanders:

North 33 degrees 28 minutes 20 seconds West, 265.68 feet;
North 33 degrees 28 minutes 20 seconds West, 174.53 feet;
North 41 degrees 42 minutes 28 seconds West, 200.89 feet;
North 39 degrees 58 minutes 14 seconds West, 301.87 feet;
North 34 degrees 30 minutes 54 seconds West, 182.83 feet;
North 26 degrees 25 minutes 40 seconds West, 261.28 feet;
North 32 degrees 02 minutes 18 seconds West, 279.90 feet;
North 30 degrees 35 minutes 39 seconds West, 268.20 feet;
North 15 degrees 27 minutes 21 seconds West, 345.51 feet;
North 26 degrees 02 minutes 18 seconds West, 114.71 feet;
North 36 degrees 33 minutes 54 seconds West, 77.48 feet;
North 51 degrees 32 minutes 26 seconds West, 132.74 feet;
North 56 degrees 55 minutes 10 seconds West, 220.08 feet;
North 65 degrees 46 minutes 53 seconds West, 143.33 feet;
North 73 degrees 31 minutes 05 seconds West, 130.47 feet;
North 78 degrees 22 minutes 48 seconds West, 387.76 feet;
North 71 degrees 23 minutes 56 seconds West, 174.06 feet;
North 70 degrees 57 minutes 14 seconds West, 213.55 feet;
North 76 degrees 44 minutes 40 seconds West, 152.96 feet;
South 89 degrees 58 minutes 16 seconds West, 118.00 feet;
South 77 degrees 31 minutes 18 seconds West, 285.54 feet;
South 78 degrees 17 minutes 19 seconds West, 140.82 feet;
South 89 degrees 42 minutes 03 seconds West, 180.29 feet;
North 59 degrees 34 minutes 12 seconds West, 168.32 feet;
South 83 degrees 54 minutes 59 seconds West, 190.95 feet;
North 55 degrees 09 minutes 59 seconds West, 127.06 feet;
North 62 degrees 18 minutes 11 seconds West, 126.14 feet;
North 45 degrees 38 minutes 28 seconds West, 218.62 feet;
North 38 degrees 04 minutes 35 seconds West, 211.29 feet;
North 21 degrees 55 minutes 38 seconds West, 133.83 feet;
North 15 degrees 31 minutes 37 seconds West, 147.63 feet;
North 08 degrees 42 minutes 27 seconds West, 294.79 feet;
North 08 degrees 20 minutes 10 seconds West, 279.04 feet;
North 18 degrees 02 minutes 43 seconds East, 84.85 feet;
North 02 degrees 57 minutes 45 seconds East, 87.26 feet;
North 22 degrees 48 minutes 35 seconds East, 192.43 feet;
North 17 degrees 03 minutes 50 seconds East, 239.35 feet;
North 03 degrees 22 minutes 13 seconds East, 94.52 feet;
North 09 degrees 00 minutes 11 seconds West, 83.40 feet;
North 28 degrees 09 minutes 29 seconds West, 93.64 feet;
North 41 degrees 01 minute 25 seconds West, 140.79 feet;
North 50 degrees 53 minutes 56 seconds West, 264.23 feet; and
North 61 degrees 08 minutes 49 seconds West, 86.53 feet to a point on the southerly channel of Big Creek for the north most corner of the herein described 2,678,6741 acre tract, same being on the common line of the Philo Fairchild Survey, Abstract 24, and the P. Lippencott League, Abstract 51;

THENCE South 41 degrees 44 minutes 36 seconds West along the common line of the E. Lippencott Leag Abstract 51, and the Philo Fairchild Survey, Abstract 24, at 5277.78 feet pass the west corner of said Philo Fairch Survey, Abstract 24, at 5277.78 feet pass the west corner of said Philo Fairchild Survey, Abstract 24, same bei the north corner of the George Waters Survey, Abstract 346, same being the north corner of the R. Morris Surv Abstract 654, and continuing for a total distance of 10,415.89 feet to a spindle set for corner, said point being t west corner of the R. Morris Survey, Abstract 654, and being on the southeast line of the E. Lippencott Leag Abstract 51;

THENCE South 48 degrees 10 minutes 01 second East along the southwest line of the R. Morris Survey, Abstr 654, 277.50 feet to a 1 1/4 inch iron pipe set for a re-entry corner to the herein described 2,678.6741 acre tra same being the north corner of the Louis Wolf Survey, Abstract 540, and being on the southwest line of the Morris Survey, Abstract 654;

THENCE South 41 degrees 58 minutes 11 seconds West along the northwest line of said Louis Wolf Surv Abstract 540, as located in F.M. Highway 1994, 2643.66 feet to the Place of Beginning and containing 2,678.67 acres of land, more or less.

Charlie Kalkomey, R.P.L.S.
Texas Registration No. 1399
January 3, 1996

Job No. 2080-04-FB

SAVE AND EXCEPT THE FOLLOWING DESCRIBED TRACTS.

F.M. HIGHWAY 1994 NORTHEAST

FIELD NOTES FOR A 11.96 ACRE TRACT OF LAND BEING PART OF THE R. MORRIS SURVE ABSTRACT 654, AND THE GEORGE WATERS SURVEY, ABSTRACT 346, AND THE PHILCO FAIRCHIL SURVEY, ABSTRACT 24, FORT BEND COUNTY, TEXAS, SAID 11.96 ACRE TRACT BEING 50-FOC WIDE STRIP OF LAND SOUTHEAST OF THE CENTERLINE OF F.M. HIGHWAY 1994, SAID 50-FOC WIDE STRIP OF LAND BEING RECORDED IN VOLUME 344, PAGE 155, DEED RECORDS, FORT BEN COUNTY, TEXAS, WITH ALL BEARING AS SHOWN ARE GRID NORTH, BEARINGS AN COORDINATES HEREON ARE BASE UPON THE U.S.C.&G. MONUMENTATION AND THE TEXA PLAIN COORDINATES SYSTEMS NORTH AMERICAN LAMBERT PROJECTION SOUTH CENTRA ZONE, STATION FAIRCHILD, HAVING COORDINATES Y=590,551.40 X=3,029,726.78;

COMMENCING at a cotton picker spindle found at the south corner of the E. Lippencott League, Abstract 5 same being on the northeast line of the J. Mayer Survey, Abstract 559;

THENCE North 41 degrees 44 minutes 36 seconds East along the centerline of F.M. Highway 1994, 352.31 fe to a spindle set on said line for the west corner and Place of Beginning of the herein described 11.96 acre tract o land;

THENCE continuing North 41 degrees 44 minutes 36 seconds West along the Southeast line of the E. Lippenco League, Abstract 51, being the northwest line of the aforementioned R. Morris Survey, Abstract 654, the northwe line of the George Waters Survey, Abstract 346, and the northwest line of the Philco Fairchild Survey, Abstract 2 same being the northwest line of the Texas Gulf Sulfur Company, 2,678.6741 acre tract of land for a distance c 10,415.89 feet to a point on said line intersecting with the South Channel Bank of Big Creek for the north corn of the herein described 11.96 acre tract of land;

THENCE South 48 degrees 15 minutes 24 seconds East along a line establishing the northeast line of the herei described parcel of land, 50 feet to a point on the southeast right-of-way line of F.M. Highway 1994 for the ea corner of the herein described tract;

THENCE South 41 degrees 44 minutes 36 seconds West along the southeast right-of-way line of F.M. Highwa 1994 for a distance of 10,415.89 feet to a point on said line intersecting with lower northeast line of the J. Meye Survey, Abstract 559, for the south corner of the herein described tract;

THENCE North 48 degrees 15 minutes 24 seconds West establishing the southwest line of the herein describe tract, 50 feet to the Place of Beginning and containing an area of 11.96 acres, more or less.

For reference and further description see Survey Plat No. 2080-04-FB, prepared by the undersigned on same date

Charlie Kalloway, R.P.L.S.
Texas Registration No. 1399
January 3, 1996

Job No. 2080-04-FB

F.M. HIGHWAY 1994 SOUTHWEST

FIELD NOTES FOR A 2.69 ACRE TRACT OF LAND IN THE LOUIS WOLF SURVEY, ABSTRACT 540, FORT BEND COUNTY, TEXAS, SAID 2.69 ACRE TRACT BEING PART OF THE TEXAS GULF SULFUR COMPANY, 2,678.6741 ACRE TRACT OF LAND, ALSO BEING A PART OF THAT 240.64 ACRE TRACT, RECORDED ON VOLUME 118, PAGE 495, DEED RECORDS, FORT BEND COUNTY, TEXAS, AND BEING LOCATED WITHIN THE RIGHT-OF-WAY OF F.M. HIGHWAY 1994 (100-FOOT RIGHT-OF-WAY) WITH ALL BEARINGS AS SHOWN FOR GRID NORTH, BEARINGS AND COORDINATES SHOWN HEREON ARE BASED UPON THE U.S.C.&G. MONUMENTATION AND THE TEXAS PLAIN COORDINATES SYSTEM NORTH AMERICAN LAMBERT PROJECTION SOUTH CENTRAL ZONE, STATION FAIRCHILD HAVING COORDINATES Y=590,551.49 X=3,029,726.78;

BEGINNING at a corner picker spindle found at the west corner of the aforementioned Louis Wolf Survey, Abstract 540, for the west corner and the Place of Beginning of the herein described 2.69 acre tract of land, said point having coordinates X=3,038,817.5728 Y=579,012.2319, said point also being the south corner of the adjoining J. Meyer Survey, Abstract 559, and the north corner of the adjoining H.&T.C. Railroad Company Survey, Section 67, Abstract 238, also being the east corner of the W. Hatcher Survey, Abstract 73, said point also being the west corner of the Texas Gulf Sulfur Company, 2,678.6741 acre tract of land;

THENCE North 41 degrees 58 minutes 11 seconds East along the northwest line of the aforementioned Louis V Survey being a northwest line of the aforementioned 2,678.6741 acre tract and the southeast line of the J. M Survey, Abstract 559, for a distance of 2,342.59 feet to a point intersecting the northeast right-of-way line of F Highway 361, for the north corner of the herein described parcel of land;

THENCE South 48 degrees 01 minute 49 seconds East along the line establishing the northeast line of the he described tract, 50 feet to a point for the east corner of the herein described 2.69 acre tract;

THENCE South 41 degrees 58 minutes 11 seconds West along the line establishing the southeast line of the he described tract, 2,342.59 feet to a point intersecting with the southwest line of the Louis Wolf Survey, Abstract 5 for the south corner of the herein described tract;

THENCE North 48 degrees 01 minute 49 seconds West along the southwest line of the Louis Wolf Survey, 50 f to the Place of Beginning and containing 2.69 acres of land more or less.

For reference and further description see Survey Plat No. 2080-04-FB, prepared by the undersigned on same d

Charlie Kalkomey, R.P.L.S.
Texas Registration No. 1399
January, 3, 1996

Job No. 2080-04-FB

CANE BELT RAILROAD RIGHT-OF-WAY

FIELD NOTES FOR A 34.73 ACRE TRACT OF LAND PART OF BEING IN THE J. MEYER SURVI ABSTRACT 559, PART IN THE R. MURRAY SURVEY ABSTRACT 854, PART IN THE GEORGE WATEI SURVEY ABSTRACT 346, AND PART IN FILEDCO FAIRCHILD SURVEY ABSTRACT 24 FORT BEN COUNTY TEXAS, SAID 34.73 ACRE TRACT BEING A PART OF THE TEXAS GULF SULPHUR COMPAN 2678.6741 ACRE TRACT OF LAND AND BEING THAT CERTAIN TRACT TEXAS GULF SULPHU COMPANY ET AL, TO CANE BELT RAILROAD COMPANY ET AL DATED JANUARY 3, 194 RECORDED IN VOLUME 231, PAGE 387, AND THAT CERTAIN DEED TEXAS GULF SULPHU COMPANY ET AL TO CANE BELT RAILROAD COMPANY DATED MAY 19, 1930, RECORDED I VOLUME 131, PAGE 293, DEED RECORDS, FORT BEND COUNTY, TEXAS, WITH ALL BEARINGS A SHOWN ARE GRID NORTH, BEARINGS AND COORDINATES SHOWN HERE ON ARE BASED UPO THE U.S.C.&G MONUMENTATION OF THE TEXAS PLANE COORDINATES SYSTEM NORT AMERICAN LAMBERT PROJECTION SOUTH CENTRAL ZONE STATION FAIRCHILD HAVIN COORDINATES Y=59051.40 X=3,019,726.78.

COMMENCING at a cotton picker spindle found at the centerline intersection of FM Highway 361 (100 foot righ of-way) being the south corner of the E. Lippencott League, Abstract 51, same being on the northeast line of the Meyers survey, abstract 559, said spindle having coordinates Y=580,899.96 X=3,040,144.16;

THENCE North 41 degrees 44 minutes 36 seconds West along the southeast line of said R. Lippencott leag being the northwest line of the J. Meyer survey abstract 559 and being the centerline of FM Highway 1994 (100 f right-of-way) for a distance of 50 feet to a point on said line;

THENCE South 48 degrees 15 minutes 24 seconds West 203.55 feet to a point on the centerline of t aforementioned Cane Belt Railroad for the Place of Beginning of the herein described centerline description;

THENCE North 46 degrees 47 minutes 23 seconds East along the centerline of said railroad being 120 feet wi right-of-way for a distance of 2993.58 feet to a point on said line at which point said 120 foot right-of-way ends a a 160 foot right-of-way begins;

THENCE continuing North 46 degrees 47 minutes 23 seconds East along the centerline of said railroad the right- way being 160 wide 5979.01 feet to a point on said line at which point the 160 foot right-of-way ends and said righ of-way becomes 200 foot wide;

THENCE continuing North 46 degrees 47 minutes 23 seconds East along the centerline of said railroad with t right-of-way being 200 feet wide 985.23 feet to a point in the centerline of said railroad intersecting with the sou channel bank of Big Creek for the termination of the herein described centerline and containing an area of 34.73 acr of land, more or less.

For reference and further description see Survey Plat No. 2080-04-FB prepared by the undersigned on same dat

Charlie Kalkomey, R.P.L.S.
Texas Registration Number 1399
Date: January 3, 1996

Job Number 2080-04-FB

TEXAS GULF SULPHUR COMPANY AND GULF PRODUCTION COMPANY TO CANE BEL RAILROAD COMPANY (VOLUME 133, PAGE 511, DEED RECORDS, FORT BEND COUNTY, TEXAS

FIELD NOTES FOR A 1.38 ACRE TRACT OF LAND IN THE PHILCO FAIRCHILD SURVEY ABSTRAC 24, FORT BEND COUNTY, TEXAS, SAID 1.38 ACRE TRACT BEING THAT CERTAIN TRACT CONVEYE FROM TEXAS GULF SULPHUR COMPANY AND GULF PRODUCTION COMPANY TO CANE BEL RAILROAD IN DEED DATED DECEMBER 5, 1930, RECORDED IN VOLUME 133, PAGE 511, DEE RECORDS, FORT BEND COUNTY, TEXAS, WITH ALL BEARINGS AS SHOWN HERE ARE GRID NORTH BEARINGS AND COORDINATES SHOWN HERE ARE BASED UPON U.S.C. & G MONUMENTATION AND THE TEXAS PLANE COORDINATE SYSTEM NORTH AMERICAN LAMBERT PROJECTION SOUTH CENTRAL ZONE; STATION FAIRCHILD HAVING COORDINATED Y=590551.40 X=3,029,726.78.

COMMENCING at a cotton picker spindle found in the centerline intersection of FM Highway 361 (100 foot right of-way) and the centerline of FM Highway - 1994 being the south corner of the R. Lippencott League, Abstract 51, same point on the northeast line of the J. Meyer Survey, Abstract 559 said spindle having coordinates Y=580899.95 X=3,040,144.16;

THENCE North 41 degrees 44 minutes 36 seconds East along the southeast line of the aforementioned E. Lightcap League being the lower northeast line of the J. Meyer Survey abstract 559, the northwest line of the R. Monis Survey, abstract 559 the northwest line of the George Waters Survey abstract 346, 5490.42 feet to a point on said line being the north corner of the George Waters Survey abstract 348 and the west corner of the Philco Fairchild Survey abstract 24, said point having coordinates of Y=584496.50 X=3043799.65;

THENCE South 48 degrees 06 minutes 07 seconds East along the common line of the George Waters survey and the Philco Fairchild Survey 683.84 feet to a point on the centerline of the Cane Belt Railroad;

THENCE North 46 degrees 47 minutes 23 seconds East along the centerline of said Cane Belt Railroad having a width of 160 feet 347.8 feet to a point on said line;

THENCE North 43 degrees 12 minutes 37 seconds West 80 feet to a point on the northwest right-of-way line of said Cane Belt Railroad for the south corner and Place of Beginning of the herein described 1.38 acre tract of land

THENCE continuing North 43 degrees 12 minutes 37 seconds west 150 feet to a point for the west corner of the herein described tract;

THENCE North 46 degrees 47 minutes 23 seconds East along the line establishing the northwest line of the herein described parcel of land 400 feet to a point for the north corner of the herein described tract;

THENCE South 43 degrees 12 minutes 37 seconds East along a line establishing the northeast line of the herein described parcel of land 150 feet to a point on the northwest line of the aforementioned Cane Belt Railroad for the east corner of the herein described tract;

THENCE South 46 degrees 47 minutes 23 seconds West along the northwest line of said Cane Belt Railroad right of-way 400 feet to the Place of Beginning and containing 1.38 acres of land, more or less.

For reference and further description see Survey Plat No. 2080-04-FB prepared by the undersigned on same date

Charlie Kalkomey

Charlie Kalkomey, R.P.L.S.
Texas Registration Number 1399
Date: January 3, 1996

Job Number 2080-04-FB

COUNTY ROAD

FIELD NOTES FOR A 4.52 ACRE TRACT OF LAND BEING PART IN THE LEWIS WOLF SURVEY ABSTRACT 540, R.L. MORRIS SURVEY, ABSTRACT 654, AND THE GEORGE WATERS SURVEY ABSTRACT 346, FORT BEND COUNTY, TEXAS, SAID 4.52 ACRE TRACT BEING A PART OF THE TEXAS GULF SULFUR COMPANY, 2,678.6741 ACRE TRACT OF LAND AND BEING THAT CERTAIN CALLED 4.52 ACRE TRACT OF LAND CONVEYED BY TEXAS GULF SULFUR COMPANY TO FORT BEND COUNTY, RECORDED IN VOLUME 433, PAGE 520, DEED RECORDS, FORT BEND COUNTY, TEXAS WITH ALL BEARINGS AS SHOWN ARE GRID NORTH, BEARINGS AND COORDINATES SHOWN HEREON ARE BASED UPON THE U.S.C.&G. MONUMENT AND THE TEXAS PLAIN COORDINATE SYSTEM NORTH AMERICAN LAMBERT PROJECTION SOUTH CENTRAL ZONE, STATION FAIRCHILD HAVING COORDINATES Y=590,551.40 X=3,029,726.78;

COMMENCING at a cotton picker spindle found at the centerline intersection of F.M. Highway 361 (100-foot right-of-way) and a centerline of F.M. Highway 1994 being the south corner of the R. Lippencott League, Abstract 51, same being on the northeast line of the J. Meyer Survey, Abstract 559, said spindle having coordinate Y=580,899.96 X=3,040,144.16;

THENCE South 48 degrees 25 minutes 32 seconds East along the northeast line of the aforementioned adjoining J. Meyer Survey, Abstract 559, being the centerline of County Road 361, 276.11 feet to a point of intersection with a centerline at F.M. Highway 1994;

THENCE North 51 degrees 48 minutes 44 seconds East, 49.23 feet to a point of beginning of the herein describe centerline (being 30-foot each side of the herein described line), said point also being in a curve to the right;

THENCE around said curve to the right with a central angle of 14 degrees 48 minutes 37 seconds, a radius of 1,154.13 feet, a arc length of 298.33 feet, a tangent of 150.00 feet, and a chord bearing North 59 degrees 36 minutes 45 seconds East, 297.50 feet for a point of tangency of said curve;

THENCE North 67 degrees 01 minute 03 seconds East, 231.17 feet to a point at the beginning of a curve to the right;

THENCE around said curve to the right with a central angle of 38 degrees 14 minutes 17 seconds, a radius of 432.71 feet, an arc length of 288.78 feet, a tangent of 150.00 feet, and a chord bearing North 86 degrees 08 minutes 11 seconds East, 283.45 feet to the point of tangency of said curve;

THENCE South 74 degrees 44 minutes 38 seconds East, 109.29 feet to a point at the beginning of a curve to the right;

THENCE around said curve to the left of a central angle of 58 degrees 43 minutes 03 seconds, a radius of 479.93 feet, an arc length of 491.88 feet, a tangent of 270.00 feet, and a chord bearing North 75 degrees 53 minutes 51 seconds East, 470.64 feet to the point of tangency of said curve and the beginning of a curve to the left;

THENCE around said curve to the left with a central angle of 14 degrees 44 minutes 37 seconds, a radius of 1159.40 feet, a length 298.34 feet, a tangent of 150 feet and a chord bearing North 39 degrees 09 minutes 59 seconds East 297.52 feet to a point for the tangency of said curve;

THENCE North 31 degrees 47 minutes 39 seconds East, 386.72 feet to a point at a beginning of a curve to the right

THENCE around said curve to the right with a central angle of 33 degrees 09 minutes 06 seconds, a radius 671.92 feet, an arc length of 388.78 feet, a tangent of 200.00 feet, and a chord bearing North 48 degrees 22 minut 13 seconds East, 383.38 feet to the point of tangency of said curve;

THENCE North 64 degrees 56 minutes 46 seconds East along the centerline of the herein described descripti 789.88 feet to a point intersecting with the westerly right-of-way line of Davis Estate Road (60-feet wide) : determination of the herein described centerline and containing an area of 4.52 acres of land, more or less.

For reference and further description see survey Plat No. 2080-04-FB, prepared by the undersigned in same da

Charlie Kalkomey, R.P.L.S.
Texas Registration No. 1399
January 3, 1996

Job No. 2080-04-FB

DAVIS ESTATE ROAD

FIELD NOTES FOR A 16.95 ACRE TRACT OF LAND BEING PART IN THE GEORGE WATERS SURVE ABSTRACT 346, AND PART IN THE T.F. PICKENY, ABSTRACT 453, FORT BEND COUNTY, TEXA SAID 16.95 ACRE TRACT BEING A PART OF THE TEXAS GULF SULFUR COMPANY, 2,678.6741 AC TRACT OF LAND AND BEING THAT CERTAIN TRACT CONVEYED BY GULF PRODUCTI COMPANY, ET AL, TO FORT BEND COUNTY, DECEMBER 14, 1929, RECORDED IN VOLUME 129, PA 553, DEED RECORDS, FORT BEND COUNTY, TEXAS, WITH ALL BEARINGS AS SHOWN HEREON A GRID NORTH BEARINGS AND COORDINATES SHOWN HEREON ARE BASED UPON THE U.S.C.& MONUMENTATION AND THE TEXAS PLANE COORDINATES SYSTEM NORTH AMERICAN LAMBE PROJECTION SOUTH CENTRAL ZONE, STATION FAIRCHILD, HAVING COORDINATES Y=590,551. X=3,029,726.78;

COMMENCING at a cotton picker spindle found in the centerline of F.M. Highway 361 (100-foot right-of-w being the south corner of the E. Lippencott League, Abstract 51, same being on the northeast line of adjoini George Waters Survey, Abstract 346,

THENCE North 41 degrees 44 minutes 36 seconds East along the northwest line of the aforementioned 2,678.67 acre tract for a distance of 3,004.43 feet to a cotton picker spindle set on said line at the intersecting point of t centerline of Davis Estate Road;

THENCE South 47 degrees 55 minutes 19 seconds East along the extension of the centerline of Davis Estate Ro 50 feet to a point on the southeast right-of-way line of F.M. Highway 1949 for the Place of Beginning of the here described centerline description of a 60-foot wide strip of land;

THENCE South 47 degrees 55 minutes 19 seconds East along the centerline description of the herein describ 60-foot wide strip of land being 30-foot either side of the herein described centerline, 1,390.83 feet to a point on a line at the beginning of a curve to the right;

THENCE around said curve to the right with a central angle of 14 degrees 30 minutes 39 seconds, a radius 1,178.25 feet, an arc length of 298.41 feet, a tangent of 150.00 feet, and a chord bearing South 55 degrees 1 minutes 44 seconds East, 297.61 feet to the tangency of said curve;

THENCE South 62 degrees 26 minutes 02 seconds East along the centerline of the herein described description 9,795.90 feet to a ½ inch iron pipe set on said line at a cattle guard across said strip of land for an angle point;

THENCE South 62 degrees 38 minutes 59 seconds East along the centerline of the herein described description 395.67 feet to a ½ inch iron pipe set for an angle point on said line;

THENCE North 82 degrees 50 minutes 16 seconds East, 960.58 feet to a ½ inch iron pipe set on said line for the termination of the herein described centerline description.

For reference and further description see Survey Plat No. 2080-04-FB, prepared by the undersigned on same date

Charlie Kalkomey

Charlie Kalkomey, R.P.L.S.
Texas Registration No. 1399
January, 3, 1996

Job No. 2080-04

EXHIBIT B

To Special Warranty Deed

[See Attached]

EXHIBIT B

1. The following restrictive covenants of record itemized below

Fort Bend County Clerk's File No(s). 9681121 and 2001088254.

Deleting any unlawful discriminatory provisions based on race, color religion, sex, handicap, familial status or national origin.

2. Standby fees, taxes and assessments by any taxing authority for the year 2004, and subsequent years.

3 Right-of-way easement for the construction, maintenance and operations of railroad trackage along and across subject property, granted to The Cane Belt Railroad Company and Texas and New Orleans Railroad Company by instrument recorded in Volume 231, Page 387 of the Deed Records of Fort Bend County, Texas, with the exact location of said easement as shown on the map marked Exhibit "A" attached to said instrument.

4 Right-of-way easement 60 feet in width for ingress and egress traversing subject tract, granted to Fort Bend County, Texas by instrument recorded in Volume 129, page 553 of the Deed Records of Fort Bend County, Texas.

5 Right-of-way and easement 60 feet in width for ingress and egress along the westerly and northwesterly portion of subject tract, granted to Fort Bend County by instrument recorded in Volume 433, Page 520 of the Deed Records of Fort Bend County, Texas.

6 An easement and right-of-way for electric transmission and distribution line(s) together with the right of ingress and egress along the northwesterly portion of subject tract, granted to Houston Lighting & Power Company by instrument recorded in Volume 588, Page 628 of the Deed Records of Fort Bend County, Texas.

7 A right-of-way easement for the purpose of constructing one pipeline, not to exceed two inches located along the westerly side of subject tract, granted to Hamby Consultant, Inc., by instrument recorded in Volume 1041, Page 531 of the Deed Records of Fort Bend County, Texas.

8 A 25 foot by 30 foot surface easement located along the northerly portion of subject tract, granted to Houston pipe Line Company by instrument recorded in Volume 1876, Page 726 of the Official Records of Fort Bend County, Texas, and amended in Volume 1898, Page 309 of the Official Records of Fort Bend County, Texas.

9 Right-of-way easement 90 feet in width located along the northeasterly side of subject tract, granted to Fort Bend County Drainage District by instrument recorded in Volume 323, page 230 of the Deed Records of Fort Bend County, Texas.

10 An additional right-of-way easement 70 feet in width parallel and adjacent to the southwesterly side of the existing 90 foot easement, granted to Fort Bend County Drainage District by instrument recorded in Volume 2190, Page 1551 of the Official Records of Fort Bend County, Texas.

11 A 60 foot right-of-way along the north portion of subject tract granted to Fort Bend County, Texas by instrument recorded in Volume 72, Page 447 of the Deed Records of Fort Bend County, Texas, also as shown on the preliminary survey dated January 3, 1996, to be 50 feet in width, prepared by Charlie Kalkomey registered public surveyor No. 1399.

12 Pipe line right-of-way 20 feet in width located along the southerly portion of subject tract, granted to Houston Pipe Line Co. by instrument recorded in Volume 452, page 167 of the Deed Records of Fort Bend County, Texas.

13 Grantors reserve unto themselves the free and uninterrupted use for passage over and across the south 1/2 of the right-of-way said Davis Estate Road located along the southerly side of Subject tract as set forth in instrument recorded in Volume 525, Page 282 of the Deed Records of Fort Bend County, Texas.

14 1/16th of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 142, Page 31 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

15 A 1/32nd royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 142, Page 31, of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

16 A 1/24th royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 142, Page 31, of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

17 A 7/128th royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 118, Page 498, of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

18 A 1/16th royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 116, Page 337, of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

19 1/16th of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 108, Page 221 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

20 A 1/32nd royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 108, Page 221, of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

21 A 1/24th royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 108, Page 221, of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

22 1/4th of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 142, Page 34 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

23 An undivided 1/5th interest of an undivided 3/10th interest in to all the sulphur conveyed to Texas Gulf Sulphur Co. by instrument recorded in Volume 153, Page 63, of the Deed Records of Fort Bend County, Texas.

24 A 1/32nd royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 103, Page 363, of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

25 1/2 of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 103, Page 365 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

26 Undivided 3/40th sulphur fee and 1/32nd of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 1896, Page 1963 and Volume 2595, Page 1889 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

27 A 29.73 - 1/3% of 1/32nd royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 753, Page 511, Volume 754, Page 633 and Volume 754, Page 637, all of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

28 .2400% of 1/2 of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 760, Page 375 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

29 .1000% of 1/2 of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 782, Page 351 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

30 .2400% of 1/2 of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 883, Page 892 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

31 A 1/64th of 1/32nd royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 1160, Page 592, of the Official Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

32 1/2 of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 104, Page(s) 61 & 63 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

33 1/4th of 1/2 of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 108, Page 223 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

34 1/16th of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 114, Page 297 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

35 An undivided 3/10th interest in and to all of the sulphur conveyed to the Federal Royalty Co. by instrument recorded in Volume 114, Page 475 of the Deed Records of Fort Bend County, Texas.

36 An undivided 1/5th and an undivided 3/10th interest in and to all of the sulphur conveyed to the Freeport Sulphur Co. by instrument recorded in Volume 115, Page 327 of the Deed Records of Fort Bend County, Texas.

37 An undivided 1/20th interest in and to all the sulphur and 1/32nd of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 156, Page 498 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

38 An undivided 1/2 sulphur royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 275, Page 638, of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

39 1/20th in and to all of the sulphur royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 348, Page 548 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

40 Mineral Deed date March 1, 1985 as set forth in instrument recorded under Volume 1769, Page 318 of the Official Records of Fort Bend County, Texas. Title to said interest not checked subsequent to the aforesaid instrument.

41 Mineral Deed date January 1, 1987 as set forth in instrument recorded under Volume 1894, Page 1824 of the Official Records of Fort Bend County, Texas. Title to said interest not checked subsequent to the aforesaid instrument.

42 Mineral Deed date June 1, 1987 as set forth in instrument recorded under Volume 1956, Page 2097 of the Official Records of Fort Bend County, Texas. Title to said interest not checked subsequent to the aforesaid instrument.

Waiver of surface rights contained therein.

43 Mineral Deed date February 27, 1992 as set forth in instrument recorded under Volume 2384, Page 1968 of the Official Records of Fort Bend County, Texas. Title to said interest not checked subsequent to the aforesaid instrument.

44 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 99, Page 600 of the Deed Records of Fort Bend County, Texas.

45 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 103, Page 117 of the Deed Records of Fort Bend County, Texas.

46 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 104, Page 117 of the Deed Records of Fort Bend County, Texas.

47 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 922, Page 34 of the Deed Records of Fort Bend County, Texas.

48 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 907, Page 369 of the Deed Records of Fort Bend County, Texas.

49 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 998, Page 361 of the Deed Records of Fort Bend County, Texas.

50 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 917, Page 272 of the Deed Records of Fort Bend County, Texas.

51 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 1208, Page 401 of the Official Records of Fort Bend County, Texas.

52 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 1557, Page 73 of the Official Records of Fort Bend County, Texas.

53 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 1557, Page 78 of the Official Records of Fort Bend County, Texas.

54 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 1557, Page 83 of the Official Records of Fort Bend County, Texas.

55 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 1591, Page 157 of the Official Records of Fort Bend County, Texas.

56 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 1663, Page 144 of the Official Records of Fort Bend County, Texas.

57 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 1980, Page 2405 of the Official Records of Fort Bend County, Texas.

58 Subject to that particular Drill Site Designation Agreement as set out in instrument dated October 15, 1997, recorded under Fort Bend County Clerk's File No. 9771205.

59 A conveyance of railroad tracks located along the northwesterly portion of subject tract, granted to The Cane Belt Railroad Company by instrument recorded in Volume 131, Page 293 of the Deed Records of Fort Bend County, Texas, and conveyed to the Gulf Colorado and Santa Fe Railroad Company by Deed recorded in Volume 262, Page 68 of the Deed Records of Fort Bend County, Texas.

60 Rights of the Public in general in and to that portion of the subject property that lies within the boundaries of publically dedicated roadway, as set forth in instrument(s) recorded in Volume 344, Page(s) 153, 155, 158 and 160 of the Deed Records of Fort Bend County, Texas.

61 Terms, conditions and stipulations of that certain Industrial Solid Waste Disposal site across subject tract as set forth in instrument recorded in Volume 1158, Page 332 of the Official Records of Fort Bend County, Texas.

62 Terms, conditions and stipulations of that certain boundary agreement along the west side of subject tract as set forth in instrument recorded in Volume 271, Page 603 of the Deed Records of Fort Bend County, Texas.

63 Terms, conditions and stipulations of that certain solid waste disposal site as set forth in instrument recorded in Volume 731, Page 485 of the Deed Records of Fort Bend County, Texas.

64 Terms, conditions and stipulations of that certain Long Point Industrial Solid Waste Certification of Conditions as set forth in instrument recorded under Fort Bend County Clerk's File No. 9681121.

65 Rights of tenants in possession under unrecorded leases and/or rental agreements.

DEED 2006092081
26 PGS

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER

SPECIAL WARRANTY DEED

THE STATE OF TEXAS §
§ KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF FORT BEND §

WHEREAS, by Special Warranty Deed (hereinafter referred to as the "Original Deed"), dated as of February 24, 2004, recorded under Fort Bend County Clerk's File No. 2004021722, Long Point Partners, LP, a Texas limited partnership, sold and conveyed to Waste Services of Texas, Inc., a Delaware corporation (hereinafter referred to as "Waste Services"), that certain parcel or tract of land containing 2644.73 acres, more or less, in Fort Bend County, Texas, described in Exhibit A hereto, by reference made a part hereof (hereinafter referred to as the "Original Property"); and

WHEREAS, Ruffino Hills, LP, a Texas limited partnership (hereinafter sometimes referred to as "Ruffino"), is the successor by merger of Long Point; and

WHEREAS, Long Point Partners, LP, a Texas limited partnership (hereinafter sometimes referred to as "LPP"), is the successor by name change of Ruffino; and

WHEREAS, Fort Bend Regional Landfill LP, a Texas limited partnership (hereinafter sometimes referred to as "Fort Bend Regional"), is the successor by merger to Waste Services; and

WHEREAS, by error or mistake, the description of the Original Property in the Original Deed failed to include therein those certain 34.73 and 1.38 acre tracts of land located in Fort Bend County, Texas, described in Exhibit B hereto, by reference made a part hereof (hereinafter referred to as the "Omitted Tracts"); and

WHEREAS, LPP desires hereby to transfer and convey the Omitted Tracts to Fort Bend Regional, all as set forth below:

NOW, THEREFORE, in consideration of the premises, the sum of Ten Dollars ($10.00) cash and other good and valuable consideration paid to LPP, the receipt and sufficiency of which consideration are hereby acknowledged, LPP (hereinafter referred to as "Grantor") has GRANTED, BARGAINED, SOLD and CONVEYED, and by these presents does GRANT, BARGAIN, SELL and CONVEY unto Fort Bend Regional (hereinafter referred to as "Grantee") the Omitted Tracts, together with all improvements situated thereon (hereinafter referred to collectively as the "Property").

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Return To: at counter
James L. Read
BAKERBOTTS LLP
One Shell Plaza
910 Louisiana
Houston, Texas 77002

TO HAVE AND TO HOLD the Property, together with all and singular the rights and appurtenances thereto in anywise belonging, unto Grantee, its successors and assigns, forever, subject only to the matters described in Exhibit C attached hereto and made a part hereof to the extent (but no further) that the same are valid and subsisting as of the date hereof and affect title to the Property (hereinafter referred to collectively as the "Encumbrances"); and Grantor does hereby bind itself, its successors and assigns, to warrant and forever defend all and singular the Property, subject to the Encumbrances, unto Grantee, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, by, through or under Grantor, but not otherwise.

IN TESTIMONY WHEREOF, this instrument is executed as of the 24th day of February, 2004.

LONG POINT PARTNERS, LP, a Texas limited partnership (the successor by name change of Ruffino Hills, LP, the successor by merger of the original Long Point Partners, LP)

By: RUFFINO HILLS DEVELOPMENT CORPORATION, a Texas corporation, its General Partner

By: _____
Brian Kueker, Vice President

Mailing Address of Grantee:

Fort Bend Regional Landfill LP
1122 International Blvd., Suite 601
Burlington, Ontario L7L 6Z8
Canada

Attachments:

Exhibit A – Description of Original Property

Exhibit B -- Description of Omitted Tracts

Exhibit C -- Encumbrances

HOU03:1071982.2

AS PER ORIGINAL

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THE STATE OF TEXAS §
§
COUNTY OF HARRIS §

This instrument was acknowledged before me on July 26, 2006, by Brian Kueker, Vice President of Ruffino Hills Development Corporation, a Texas corporation, the General Partner of Long Point Partners, LP, a Texas limited partnership, on behalf of said corporation and limited partnership.

Nancy McCullough
Notary Public in and for the
State of Texas
Nancy McCullough
Typed or Printed Name of Notary

My Commission Expires:
Sept 6, 2006

NANCY MCCULLOUGH
NOTARY PUBLIC - TEXAS
COMMISSION EXPIRES:
SEPTEMBER 6, 2006

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EXHIBIT A

DESCRIPTION OF ORIGINAL PROPERTY

[Attached]

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EXHIBIT "A"

All that certain parcel or tract of land containing 2644.73 acres of land, more or less, out of the Louis Wolf Survey, Abstract No. 540, R. Morris Survey, Abstract No. 654, O'Neill Channell Survey, Abstract No. 730, Fred P. Olcott Survey, Abstract No. 251, George Waters Survey, Abstract No. 346, T. F. Pinckney Survey, Abstract No. 655 and Philo Fairchild Survey, Abstract No. 24, all being in Fort Bend County, Texas, and being more particularly described by metes and bounds on Exhibit "A" attached hereto and made a part hereof.

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CHARLIE KALKOMEY SURVEYING, INC.
1515 MONK AVENUE
ROSENBERG, TEXAS 77471
(713) 342-2033

CHARLIE KALKOMEY
REGISTERED PROFESSIONAL LAND SURVEYOR

CHARLES A. KALKOMEY
REGISTERED PROFESSIONAL LAND SURVE

FIELD NOTES FOR A 2,678.6741 ACRE TRACT OF LAND, 240.6444 ACRES IN THE LOUIS WC SURVEY, ABSTRACT 540, 79.6835 ACRES IN THE O'NEIL CHANNEL SURVEY, ABSTRACT 730, 311.2 ACRES IN THE FRED P. OLCOTT SURVEY, ABSTRACT 251, 35.3774 ACRES IN THE R. MOR SURVEY, ABSTRACT 654, 496.3785 ACRES IN THE GEORGE WATERS SURVEY, ABSTRACT 2 984.1783 ACRES IN THE PHILO FAIRCHILD SURVEY, ABSTRACT 24, 20.6376 ACRES IN THE T PINCKNEY SURVEY, ABSTRACT 655, BEING OF THE CERTAIN QUIT CLAIM DEED RECORDED VOLUME 525, PAGE 282, DEED RECORDS, AND 510.5882 ACRES IN THE T. F. PINCKNEY SURVI ABSTRACT 655, BEING THAT CERTAIN CAL "FIFTH TRACT" RECORDED IN VOLUME 116, PAGE 3 DEED RECORDS, FORT BEND COUNTY, TEXAS.

BEGINNING at a spindle set at the west most corner of the Louis Wolf Survey, Abstract 540, for the west n corner and Place of Beginning of the herein described 2,678.6741 acre tract, said point having coordin X=3,038,817.5728, Y=579,012.2319, said coordinates being derived from Station Fairchild having coordinates 3,029,726.78 and Y=590,551.40;

THENCE south 48 degrees 14 minutes 05 seconds East along a fence line as located on the southwest line of s Louis Wolf Survey, Abstract 540, at 50.00 feet pass a 1 inch iron pipe set on the southeast margin of F.M. Highw 1994 and continuing for a total distance of 3968.69 feet to a concrete monument with a brass cap found at the so most corner of said Louis Wolf Survey, Abstract 540, same being the west most corner of the O'Neil Channel Surv Abstract 730;

THENCE South 48 degrees 28 minutes 14 seconds East along the southwest line of said O'Neil Channel Surv Abstract 730, 1335.91 feet to a 1 inch iron pipe found on the northwest line of the D. J. Jones Survey, Abstract 5 same being the south corner of the O'Neil Channel Survey, Abstract 730, for corner;

THENCE North 41 degrees 08 minutes 07 seconds East along the common line of said O'Neil Channel Surv Abstract 730, and the D J. Jones Survey, Abstract 581, 787.47 feet to a concrete monument found for a re-en corner to the herein described 2,678.6741 acre tract, same being the north corner of the aforementioned D.J. Jo Survey, Abstract 581, and the lower west corner of the Fred P. Olcott Survey, Abstract 251;

THENCE South 50 degrees 10 minutes 10 seconds east along the common line of the D.J. Jones Survey, Abstr 581, and the Fred P. Olcott Survey, Abstract 251, 1962.61 feet to a concrete monument found at the south m corner of the Fred P. Olcott Survey, Abstract 251, for corner, same being on the northwest line of the H. & T. R.R. Company Survey, Section 111;

THENCE North 41 degrees 43 minutes 50 seconds East along the common line of the Fred P. Olcott Surv Abstract 251, and the H. & T. C. R.R. Company Survey, Section 111, 3668.58 feet to a concrete monument fou for corner, said point being the north corner of the aforementioned Section 111, same being the east most corner the Fred P. Olcott Survey, Abstract 251, and being on the southwest line of the T. F. Pinckney Survey, Abstract 6

THENCE South 48 degrees 28 minutes 26 seconds East along the common line of the T. F. Pinckney Surv Abstract 655, and the H. & T. C. R.R. Company Survey, Section 111, 5269.57 feet to a 1 inch iron pipe set for south most corner of the herein described 2,678.6741 acre tract, same being the south most corner of the T. Pinckney Survey, Abstract 655;

THENCE North 41 degrees 37 minutes 09 seconds East along the southeast line of the T. F. Pinckney Surv Abstract 655, 3015.65 feet to a 1 inch iron pipe set at a fence corner intersection for an angle point, same being south most corner of the aforementioned 20.6376 acre tract recorded in Quit Claim Deed, Volume 525, Page 2 Deed Records, Fort Bend County, Texas;

THENCE North 41 degrees 48 minutes 16 seconds East along the southeast line of said T. F. Pinckney Surv Abstract 655, 983.97 feet to a 1/2 inch iron pipe set at the east most corner of said T. F. Pinckney Survey, Abstr 655, 983.97 feet to a 1/2 inch iron pipe set at the east most corner of said 20.6376 acre tract for the southeast a corner of the herein described 2,678.6741 acre tract;

THENCE North 48 degrees 11 minutes 45 seconds West along a line establishing the northeast line of the here described tract, at 493.20 feet pass a 1 inch iron pipe set on the southerly line of Davis Estate Road and continu for a total distance of 539.60 feet to a spindle set in the centerline of said Davis Estate Road for corner;

THENCE South 82 degrees 50 minutes 16 seconds West along the center line of David Estate Road, 960.58 f to a 1/2 inch iron pipe set at an angle point in said road;

THENCE North 62 degrees 38 minutes 59 seconds West, 395.67 feet to a 1/2 inch iron pipe set in the center li of said Davis Estate road at the north most corner of said 20.6376 acre tract;

THENCE North 01 degree 58 minutes 42 seconds West, 40.15 feet to a fish plate found at a fence corn intersection being on the common line of the T. F. Pinckney Survey, Abstract 655, and the Philo Fairchild Surve Abstract 24;

THENCE continuing North 01 degree 58 minutes 42 seconds West along a fence line, 2794.24 feet to a 1 inch ir pipe set at an angle point on said line;

THENCE North 01 degree 30 minutes 28 seconds West along a fence line, 2562.50 feet to a 1 inch iron pipe s at an angle point;

THENCE North 00 degrees 15 minutes 59 seconds East, 525.63 feet to a 1 inch iron pipe set at an angle point;

THENCE North 00 degrees 15 minutes 59 seconds East, 507.83 feet to a point on the southerly channel bank Big Creek for the east most corner of the herein described 2,678.6741 acre tract;

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AS PER ORIGINAL

THENCE along the southerly channel bank of Big Creek with its meanders:

North 33 degrees 28 minutes 20 seconds West, 265.68 feet;
North 35 degrees 28 minutes 20 seconds West, 174.53 feet;
North 41 degrees 42 minutes 28 seconds West, 200.89 feet;
North 39 degrees 58 minutes 14 seconds West, 301.87 feet;
North 34 degrees 30 minutes 54 seconds West, 182.83 feet;
North 26 degrees 25 minutes 40 seconds West, 261.38 feet;
North 32 degrees 02 minutes 18 seconds West, 279.90 feet;
North 30 degrees 35 minutes 39 seconds West, 260.20 feet;
North 15 degrees 27 minutes 21 seconds West, 345.51 feet;
North 26 degrees 02 minutes 18 seconds West, 114.71 feet;
North 36 degrees 33 minutes 54 seconds West, 77.48 feet;
North 51 degrees 32 minutes 26 seconds West, 132.74 feet;
North 56 degrees 55 minutes 10 seconds West, 220.08 feet;
North 65 degrees 46 minutes 53 seconds West, 143.33 feet;
North 73 degrees 31 minutes 05 seconds West, 120.47 feet;
North 78 degrees 22 minutes 48 seconds West, 387.76 feet;
North 71 degrees 23 minutes 56 seconds West, 174.06 feet;
North 70 degrees 57 minutes 14 seconds West, 213.55 feet;
North 76 degrees 44 minutes 40 seconds West, 152.96 feet;
South 89 degrees 58 minutes 16 seconds West, 118.00 feet;
South 77 degrees 31 minutes 18 seconds West, 285.54 feet;
South 78 degrees 17 minutes 19 seconds West, 140.82 feet;
South 89 degrees 42 minutes 03 seconds West, 180.29 feet;
North 59 degrees 34 minutes 12 seconds West, 168.32 feet;
South 83 degrees 54 minutes 59 seconds West, 190.95 feet;
North 55 degrees 09 minutes 59 seconds West, 127.06 feet;
North 62 degrees 18 minutes 11 seconds West, 126.14 feet;
North 45 degrees 38 minutes 28 seconds West, 218.62 feet;
North 38 degrees 04 minutes 33 seconds West, 211.29 feet;
North 21 degrees 55 minutes 38 seconds West, 153.83 feet;
North 15 degrees 31 minutes 37 seconds West, 147.63 feet;
North 08 degrees 42 minutes 27 seconds West, 294.79 feet;
North 08 degrees 20 minutes 10 seconds West, 279.04 feet;
North 18 degrees 02 minutes 43 seconds East, 84.85 feet;
North 02 degrees 57 minutes 45 seconds East, 87.26 feet;
North 22 degrees 48 minutes 15 seconds East, 192.43 feet;
North 17 degrees 03 minutes 50 seconds East, 239.35 feet;
North 03 degrees 22 minutes 13 seconds East, 94.32 feet;
North 09 degrees 00 minutes 11 seconds West, 83.40 feet;
North 28 degrees 09 minutes 29 seconds West, 93.64 feet;
North 41 degrees 01 minute 25 seconds West, 140.79 feet;
North 50 degrees 53 minutes 56 seconds West, 264.23 feet; and
North 61 degrees 08 minutes 49 seconds West, 86.53 feet to a point on the southerly channel of Big Creek for the north most corner of the herein described 2,678,6741 acre tract, same being on the common line of the Philo Fairchild Survey, Abstract 24, and the E. Lippencott League, Abstract 51;

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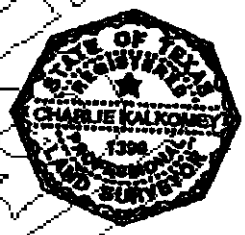
THENCE South 41 degrees 44 minutes 36 seconds West along the common line of the E. Lippencott Leag Abstract 51, and the Philo Fairchild Survey, Abstract 24, at 5277.78 feet pass the west corner of said Philo Fairch Survey, Abstract 24, at 5277.78 feet pass the west corner of said Philo Fairchild Survey, Abstract 24, same bei the north corner of the George Waters Survey, Abstract 346, same being the north corner of the R. Morris Surv Abstract 654, and continuing for a total distance of 10,415.89 feet to a spindle set for corner, said point being t west corner of the R. Morris Survey, Abstract 654, and being on the southeast line of the E. Lippencott Leag Abstract 51;

THENCE South 48 degrees 10 minutes 01 second East along the southwest line of the R. Morris Survey, Abstr 654, 277.50 feet to a 1 1/4 inch iron pipe set for a re-entry corner to the herein described 2,678.6741 acre tra same being the north corner of the Louis Wolf Survey, Abstract 540, and being on the southwest line of the Morris Survey, Abstract 654;

THENCE South 41 degrees 58 minutes 11 seconds West along the northwest line of said Louis Wolf Surv Abstract 540, as located in F.M. Highway 1994, 2643.66 feet to the Place of Beginning and containing 2,678.67 acres of land, more or less.



Charlie Kalkomey, R.P.L.S.
Texas Registration No. 1399
January 3, 1996

Job No. 2080-04-FB

SAVE AND EXCEPT THE FOLLOWING DESCRIBED TRACTS.

F.M. HIGHWAY 1994 NORTHEAST

FIELD NOTES FOR A 11.96 ACRE TRACT OF LAND BEING PART OF THE R. MORRIS SURVE ABSTRACT 854, AND THE GEORGE WATERS SURVEY, ABSTRACT 346, AND THE PHILCO FAIRCHIL SURVEY, ABSTRACT 24, FORT BEND COUNTY, TEXAS, SAID 11.96 ACRE TRACT BEING 50-FOC WIDE STRIP OF LAND SOUTHEAST OF THE CENTERLINE OF F.M. HIGHWAY 1994, SAID 50-FOC WIDE STRIP OF LAND BEING RECORDED IN VOLUME 344, PAGE 155, DEED RECORDS, FORT BEN COUNTY, TEXAS, WITH ALL BEARING AS SHOWN ARE GRID NORTH, BEARINGS AN COORDINATES HEREON ARE BASE UPON THE U.S.C.&G. MONUMENTATION AND THE TEXA PLAIN COORDINATES SYSTEMS NORTH AMERICAN LAMBERT PROJECTION SOUTH CENTRA ZONE, STATION FAIRCHILD, HAVING COORDINATES Y=590,551.40 X=3,029,726.78;

COMMENCING at a cotton picker spindle found at the south corner of the E. Lippencott League, Abstract 5 same being on the northeast line of the J. Meyer Survey, Abstract 559;

THENCE North 41 degrees 44 minutes 36 seconds East along the centerline of F.M. Highway 1994, 352.31 fe to n spindle set on said line for the west corner and Place of Beginning of the herein described 11.96 acre tract land;

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THENCE continuing North 41 degrees 44 minutes 36 seconds West along the Southeast line of the E. Lippsco League, Abstract 51, being the northwest line of the aforementioned R. Morris Survey, Abstract 654, the northwe line of the George Waters Survey, Abstract 346, and the northwest line of the Philco Fairchild Survey, Abstract 2 same being the northwest line of the Texas Gulf Sulfur Company, 2,678.6741 acre tract of land for a distance 10,415.89 feet to a point on said line intersecting with the South Channel Bank of Big Creek for the north corn of the herein described 11.96 acre tract of land;

THENCE South 48 degrees 15 minutes 24 seconds East along a line establishing the northeast line of the herei described parcel of land, 50 feet to a point on the southeast right-of-way line of F.M. Highway 1994 for the ea corner of the herein described tract;

THENCE South 41 degrees 44 minutes 36 seconds West along the southeast right-of-way line of F.M. Highwa 1994 for a distance of 10,415.89 feet to a point on said line intersecting with lower northeast line of the J. Meye Survey, Abstract 559, for the south corner of the herein described tract;

THENCE North 48 degrees 15 minutes 24 seconds West establishing the southwest line of the herein describe tract, 50 feet to the Place of Beginning and containing an area of 11.96 acres, more or less.

For reference and further description see Survey Plat No. 2080-04-FB, prepared by the undersigned on same date

Charlie Kalkomey, R.P.L.S.
Texas Registration No. 1399
January 3, 1996

Job No. 2080-04-FB

F.M. HIGHWAY 1994 SOUTHWEST

FIELD NOTES FOR A 2.69 ACRE TRACT OF LAND IN THE LOUIS WOLF SURVEY, ABSTRACT 540, FORT BEND COUNTY, TEXAS, SAID 2.69 ACRE TRACT BEING PART OF THE TEXAS GULF SULFUR COMPANY, 2,678.6741 ACRE TRACT OF LAND, ALSO BEING A PART OF THAT 240.64 ACRE TRACT, RECORDED ON VOLUME 118, PAGE 498, DEED RECORDS, FORT BEND COUNTY, TEXAS, AND BEING LOCATED WITHIN THE RIGHT-OF-WAY OF F.M. HIGHWAY 1994 (100-FOOT RIGHT-OF-WAY) WITH ALL BEARINGS AS SHOWN FOR GRID NORTH, BEARINGS AND COORDINATES SHOWN HEREON ARE BASED UPON THE U.S.C.&G. MONUMENTATION AND THE TEXAS PLAIN COORDINATES SYSTEM NORTH AMERICAN LAMBERT PROJECTION SOUTH CENTRAL ZONE, STATION FAIRCHILD HAVING COORDINATES Y= 590,551.40 X=3,029,726.78;

BEGINNING at a cotton picker spindle found at the west corner of the aforementioned Louis Wolf Survey, Abstract 540, for the west corner and the Place of Beginning of the herein described 2.69 acre tract of land, said point having coordinates X=3,038,817.5728 Y= 579,012.2319, said point also being the south corner of the adjoining J. Meyer Survey, Abstract 559, and the north corner of the adjoining H.&T.C. Railroad Company Survey, Section 67, Abstract 238, also being the east corner of the W. Hardcher Survey, Abstract 73, said point also being the west corner of the Texas Gulf Sulfur Company, 2,678.6741 acre tract of land;

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THENCE North 41 degrees 44 minutes 36 seconds West along the southeast line of said E. Lippencott leag being the northwest line of the J. Meyer survey abstract 559 and being the centerline of FM Highway 1994 (100 f right-of-way) for a distance of 50 feet to a point on said line;

THENCE South 48 degrees 15 minutes 24 seconds West 203.55 feet to a point on the centerline of t aforementioned Cane Belt Railroad for the Place of Beginning of the herein described centerline description;

THENCE North 46 degrees 47 minutes 23 seconds East along the centerline of said railroad being 120 foot wi right-of-way for a distance of 2993.58 feet to a point on said line at which point said 120 foot right-of-way ends a a 160 foot right-of-way begins;

THENCE continuing North 46 degrees 47 minutes 23 seconds East along the centerline of said railroad the right-o way being 160 wide 5979.01 feet to a point on said line at which point the 160 foot right-of-way ends and said righ of-way becomes 200 foot wide;

THENCE continuing North 46 degrees 47 minutes 23 seconds East along the centerline of said railroad with t right-of-way being 200 feet wide 985.23 feet to a point in the centerline of said railroad intersecting with the sou channel bank of Big Creek for the termination of the herein described centerline and containing an area of 34.73 acr of land, more or less.

For reference and further description see Survey Plat No. 2080-04-FB prepared by the undersigned on same dat

STATE OF TEXAS
REGISTERED
CHARLIE KALKOMEY
1399
PROFESSIONAL
LAND SURVEYOR

Charlie Kalkomey, R.P.L.S.
Texas Registration Number 1399
Date: January 3, 1996

Job Number 2080-04-FB

TEXAS GULF SULPHUR COMPANY AND GULF PRODUCTION COMPANY TO CANE BEL RAILROAD COMPANY (VOLUME 133, PAGE 511, DEED RECORDS, FORT BEND COUNTY, TEXAS

FIELD NOTES FOR A 1.38 ACRE TRACT OF LAND IN THE PHILCO FAIRCHILD SURVEY ABSTRAC 24, FORT BEND COUNTY, TEXAS, SAID 1.38 ACRE TRACT BEING THAT CERTAIN TRACT CONVEYE FROM TEXAS GULF SULPHUR COMPANY AND GULF PRODUCTION COMPANY TO CANE BEL RAILROAD IN DEED DATED DECEMBER 5, 1930, RECORDED IN VOLUME 133, PAGE 511, DEE RECORDS, FORT BEND COUNTY, TEXAS, WITH ALL BEARINGS AS SHOWN HERE ARE GRID NORTH BEARINGS AND COORDINATES SHOWN HERE ARE BASED UPON U.S.C. & G MONUMENTATION AND THE TEXAS PLANE COORDINATE SYSTEM NORTH AMERICAN LAMBERT PROJECTION SOUTH CENTRAL ZONE STATION FAIRCHILD HAVING COORDINATED Y=590551.40 X=3,029,726.78.

COMMENCING at a cotton picker spindle found in the centerline intersection of FM Highway 361 (100 foot right-of-way) and the centerline of FM Highway - 1994 being the south corner of the E. Lippencott League, Abstract 51, same being on the northeast line of the J. Meyer Survey, Abstract 559 said spindle having coordinates Y=580899.95 X=3,040,144.16;

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THENCE North 41 degrees 44 minutes 36 seconds East along the southeast line of the aforementioned E. Lipkincot League being the lower northeast line of the J. Meyer Survey abstract 559, the northwest line of the R. Morris Survey, abstract 559 the northwest line of the George Waters Survey abstract 346, 5490.42 feet to a point on said line being the north corner of the George Waters Survey abstract 348 and the west corner of the Philco Fairchild Survey abstract 24, said point having coordinates of Y=584496.50 X=3043799.65;

THENCE South 48 degrees 06 minutes 07 seconds East along the common line of the George Waters survey and the Philco Fairchild Survey 683.84 feet to a point on the centerline of the Cane Belt Railroad;

THENCE North 46 degrees 47 minutes 23 seconds East along the centerline of said Cane Belt Railroad having a width of 160 feet 347.8 feet to a point on said line;

THENCE North 43 degrees 12 minutes 37 seconds West 80 foot to a point on the northwest right-of-way line of said Cane Belt Railroad for the south corner and Place of Beginning of the herein described 1.38 acre tract of land

THENCE continuing North 43 degrees 12 minutes 37 seconds west 150 feet to a point for the west corner of the herein described tract;

THENCE North 46 degrees 47 minutes 23 seconds East along the line establishing the northwest line of the herein described parcel of land 400 feet to a point for the north corner of the herein described tract;

THENCE South 43 degrees 12 minutes 37 seconds East along a line establishing the northeast line of the herein described parcel of land 150 feet to a point on the northwest line of the aforementioned Cane Belt Railroad for the east corner of the herein described tract;

THENCE South 46 degrees 47 minutes 23 seconds West along the northwest line of said Cane Belt Railroad right of-way 400 feet to the Place of Beginning and containing 1.38 acres of land, more or less.

For reference and further description see Survey Plat No. 2080-04-FB prepared by the undersigned on same date

STATE OF TEXAS
REGISTERED
CHARLIE KALKOMEY
1399
INDEPENDENT
LAND SURVEYOR

Charlie Kalkomey

Charlie Kalkomey, R.P.L.S.
Texas Registration Number 1399
Date: January 3, 1996

Job Number 2080-04-FB

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THENCE North 41 degrees 58 minutes 11 seconds East along the northwest line of the aforementioned Louis W Survey being a northwest line of the aforementioned 2,678.6741 acre tract and the southeast line of the J. M Survey, Abstract 559, for a distance of 2,342.59 feet to a point intersecting the northeast right-of-way line of F Highway 361, for the north corner of the herein described parcel of land;

THENCE South 48 degrees 01 minute 49 seconds East along the line establishing the northeast line of the he described tract, 50 feet to a point for the east corner of the herein described 2.69 acre tract;

THENCE South 41 degrees 58 minutes 11 seconds West along the line establishing the southeast line of the he described tract, 2,342.59 feet to a point intersecting with the southwest line of the Louis Wolf Survey, Abstract 5 for the south corner of the herein described tract;

THENCE North 48 degrees 01 minute 49 seconds West along the southwest line of the Louis Wolf Survey, 50 to the Place of Beginning and containing 2.69 acres of land more or less.

For reference and further description see Survey Plat No. 2080-04-FB, prepared by the undersigned on same d

Charlie Kalkomey, R.P.L.S.
Texas Registration No. 1399
January, 3, 1996

Job No. 2080-04-FB

CANE BELT RAILROAD RIGHT-OF-WAY

FIELD NOTES FOR A 34.73 ACRE TRACT OF LAND PART OF BEING IN THE J. MEYER SURVE ABSTRACT 559, PART IN THE R. MURRAY SURVEY ABSTRACT 854, PART IN THE GEORGE WATE SURVEY ABSTRACT 346, AND PART IN FILEDCO FAIRCHILD SURVEY ABSTRACT 24 FORT BE COUNTY TEXAS, SAID 34.73 ACRE TRACT BEING A PART OF THE TEXAS GULF SULPHUR COMPA 2678.6741 ACRE TRACT OF LAND AND BEING THAT CERTAIN TRACT TEXAS GULF SULPH COMPANY ET AL, TO CANE BELT RAILROAD COMPANY ET AL DATED JANUARY 3, 19 RECORDED IN VOLUME 231, PAGE 387, AND THAT CERTAIN DEED TEXAS GULF SULPH COMPANY ET AL TO CANE BELT RAILROAD COMPANY DATED MAY 19, 1930, RECORDED VOLUME 131, PAGE 293, DEED RECORDS, FORT BEND COUNTY, TEXAS, WITH ALL BEARINGS SHOWN ARE GRID NORTH, BEARINGS AND COORDINATES SHOWN HERE ON ARE BASED UP THE U.S.C.&G MONUMENTATION OF THE TEXAS PLANE COORDINATES SYSTEM NOR AMERICAN LAMBERT PROJECTION SOUTH CENTRAL ZONE STATION FAIRCHILD HAVIN COORDINATES Y=59051.40 X=3,029,726.78.

COMMENCING at a cotton picker spindle found at the centerline intersection of FM Highway 361 (100 foot righ of-way) being the south corner of the E. Lippencott League, Abstract 51, same being on the northeast line of the Meyers survey, abstract 559, said spindle having coordinates Y=510,899.96 X=3,040,144.16;

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COUNTY ROAD

FIELD NOTES FOR A 4.52 ACRE TRACT OF LAND BEING PART IN THE LEWIS WOLF SURVEY ABSTRACT 540, R.L. MORRIS SURVEY, ABSTRACT 654, AND THE GEORGE WATERS SURVEY ABSTRACT 346, FORT BEND COUNTY, TEXAS, SAID 4.52 ACRE TRACT BEING A PART OF THE TEXAS GULF SULFUR COMPANY, 2,678.6741 ACRE TRACT OF LAND AND BEING THAT CERTAIN CALLED 4.62 ACRE TRACT OF LAND CONVEYED BY TEXAS GULF SULFUR COMPANY TO FORT BEND COUNTY, RECORDED IN VOLUME 433, PAGE 528, DEED RECORDS, FORT BEND COUNTY, TEXAS WITH ALL BEARINGS AS SHOWN ARE GRID NORTH, BEARINGS AND COORDINATES SHOWN HEREON ARE BASED UPON THE U.S.C.&G. MONUMENT AND THE TEXAS PLAIN COORDINATE SYSTEM NORTH AMERICAN LAMBERT PROJECTION SOUTH CENTRAL ZONE, STATION FAIRCHILD *HAVING COORDINATES Y=590,551.40 X=3,029,726.78*;

COMMENCING at a cotton picker spindle found at the centerline intersection of F.M. Highway 361 (100-foot right-of-way) and a centerline of F.M. Highway 1994 being the south corner of the E. Lippencott League, Abstract 51, same being on the northeast line of the J. Meyer Survey, Abstract 559, said spindle having coordinates Y=580,899.96 X=3,040,144.16;

THENCE South 48 degrees *25 minutes* 32 seconds East along the northeast line of the aforementioned adjoining J. Meyer Survey, Abstract 559, being the centerline of County Road 361, 276.11 feet to a point of intersection with a centerline at F.M. Highway 1994;

THENCE North 51 degrees 48 minutes 44 seconds East, 49.23 feet to a point of beginning of the herein described centerline (being 30-foot each side of the herein described line), said point also being in a curve to the right;

THENCE around said curve to the right with a central angle of 14 degrees 48 minutes 37 seconds, a radius of 1,154.13 feet, a arc length of 298.33 feet, a tangent of 150.00 feet, and a chord bearing North 59 degrees 36 minutes 45 seconds East, 297.50 feet for a point of tangency of said curve;

THENCE North 67 degrees 01 minute 03 seconds East, 231.17 feet to a point at the beginning of a curve to the right;

THENCE around said curve to the right with a central angle of 38 degrees 14 minutes 17 seconds, a radius of 432.71 feet, an arc length of 288.78 feet, a tangent of 150.00 feet, and a chord bearing North 86 degrees 08 minutes 11 seconds East, 283.45 feet to the point of tangency of said curve;

THENCE South 74 degrees 44 minutes 38 seconds East, 109.29 feet to a point at the beginning of a curve to the right;

THENCE around said curve to the left of a central angle of 58 degrees 43 minutes 03 seconds, a radius of 479.93 feet, an arc length of 491.88 feet, a tangent of 270.00 feet, and a chord bearing North 75 degrees 53 minutes 51 seconds East, 470.64 feet to the point of tangency of said curve and the beginning of a curve to the left;

THENCE around said curve to the left with a central angle of 14 degrees 44 minutes 37 seconds, a radius of 1159.40 feet, a length 298.34 feet, a tangent of 150 feet and a chord bearing North 39 degrees 09 minutes 59 seconds East 297.52 feet to a point for the tangency of said curve;

THENCE North 31 degrees 47 minutes 39 seconds East, 386.72 feet to a point at a beginning of a curve to the right

AS PER ORIGINAL

THENCE around said curve to the right with a central angle of 33 degrees 09 minutes 06 seconds, a radius 671.92 feet, an arc length of 388.78 feet, a tangent of 200.00 feet, and a chord bearing North 48 degrees 22 minut 13 seconds East, 383.38 feet to the point of tangency of said curve;

THENCE North 64 degrees 56 minutes 46 seconds East along the centerline of the herein described descriptic 789.88 feet to a point intersecting with the westerly right-of-way line of Davis Estate Road (60-feet wide) : determination of the herein described centerline and containing an area of 4.52 acres of land, more or less.

For reference and further description see survey Plat No. 2080-04-FB, prepared by the undersigned in same da

Charlie Kalkomey, R.P.L.S.
Texas Registration No. 1399
January 3, 1996

Job No. 2080-04-FB

DAVIS ESTATE ROAD

FIELD NOTES FOR A 16.95 ACRE TRACT OF LAND BEING PART IN THE GEORGE WATERS SURVE ABSTRACT 346, AND PART IN THE T.F. PICKENY, ABSTRACT 653, FORT BEND COUNTY, TEXA SAID 16.95 ACRE TRACT BEING A PART OF THE TEXAS GULF SULPUR COMPANY, 2,678.6741 AC TRACT OF LAND AND BEING THAT CERTAIN TRACT CONVEYED BY GULF PRODUCTI COMPANY, ET AL, TO FORT BEND COUNTY, DECEMBER 14, 1929, RECORDED IN VOLUME 129, PA 553, DEED RECORDS, FORT BEND COUNTY, TEXAS, WITH ALL BEARINGS AS SHOWN HEREON A GRID NORTH BEARINGS AND COORDINATES SHOWN HEREON ARE BASED UPON THE U.S.C.& MONUMENTATION AND THE TEXAS PLANE COORDINATES SYSTEM NORTH AMERICAN LAMBE PROJECTION SOUTH CENTRAL ZONE, STATION FAIRCHILD, HAVING COORDINATES Y=590,551. X=3,029,726.78;

COMMENCING at a cotton picker spindle found in the centerline of F.M. Highway 361 (100-foot right-of-w being the south corner of the R. Lippencott League, Abstract 51, same being on the northeast line of adjoini George Waters Survey, Abstract 346,

THENCE North 41 degrees 44 minutes 36 seconds East along the northwest line of the aforementioned 2,678.67 acre tract for a distance of 3,004.43 feet to a cotton picker spindle set on said line at the intersecting point of t centerline of Davis Estate Road;

THENCE South 47 degrees 55 minutes 19 seconds East along the extension of the centerline of Davis Estate Ro 50 feet to a point on the southeast right-of-way line of F.M. Highway 1949 for the Place of Beginning of the her described centerline description of a 60-foot wide strip of land;

THENCE South 47 degrees 55 minutes 19 seconds East along the centerline description of the herein descrit 60-foot wide strip of land being 30-foot either side of the herein described centerline, 1,390.83 feet to a point on s line at the beginning of a curve to the right;

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THENCE around said curve to the right with a central angle of 14 degrees 30 minutes 39 seconds, a radius o 1,178.25 feet, an arc length of 298.41 feet, a tangent of 150.00 feet, and a chord bearing South 55 degrees 1 minutes 44 seconds East, 297.61 feet to the tangency of said curve;

THENCE South 62 degrees 26 minutes 02 seconds East along the centerline of the herein described description 9,795.90 feet to a ½ inch iron pipe set on said line at a cattle guard across said strip of land for an angle point;

THENCE South 62 degrees 38 minutes 59 seconds East along the centerline of the herein described description 395.67 feet to a ½ inch iron pipe set for an angle point on said line;

THENCE North 82 degrees 50 minutes 16 seconds East, 960.58 feet to a ½ inch iron pipe set on said line for th termination of the herein described centerline description.

For reference and further description see Survey Plat No. 2080-04-FB, prepared by the undersigned on same dat

Charlie Kalkomey

Charlie Kalkomey, R.P.L.S.
Texas Registration No. 1399
January, 3, 1996

Job No. 2080-04

Unofficial Document

EXHIBIT B

DESCRIPTION OF OMITTED TRACTS

FIELD NOTES FOR A 34.73 ACRE TRACT OF LAND PART OF BEING IN THE J. MEYER SURVEY ABSTRACT 559, PART IN THE R. MURRAY SURVEY ABSTRACT 854, PART IN THE GEORGE WATERS SURVEY ABSTRACT 346, AND PART IN FILEDCO FAIRCHILD SURVEY ABSTRACT 24 FORT BEND COUNTY TEXAS, SAID 34.73 ACRE TRACT BEING A PART OF THE TEXAS GULF SULPHUR COMPANY 2678.6741 ACRE TRACT OF LAND AND BEING THAT CERTAIN TRACT TEXAS GULF SULPHUR COMPANY ET AL, TO CANE BELT RAILROAD COMPANY ET AL DATED JANUARY 3, 1945, RECORDED IN VOLUME 231, PAGE 387, AND THAT CERTAIN DEED TEXAS GULF SULPHUR COMPANY ET AL TO CANE BELT RAILROAD COMPANY DATED MAY 19, 1930, RECORDED IN VOLUME 131, PAGE 293, DEED RECORDS, FORT BEND COUNTY, TEXAS, WITH ALL BEARINGS AS SHOWN ARE GRID NORTH, BEARINGS AND COORDINATES SHOWN HEREON ARE BASED UPON THE U.S.C.&G MONUMENTATION OF THE TEXAS PLANE COORDINATES SYSTEM NORTH AMERICAN LAMBERT PROJECTION SOUTH CENTRAL ZONE STATION FAIRCHILD HAVING COORDINATES Y=59051.40 X=3,029,726.78.

COMMENCING at a cotton picker spindle found at the centerline intersection of FM Highway 361 (100 foot right-of-way) being the south corner of the E. Lippencott League, Abstract 51, same being on the northeast line of the J. Meyers survey, abstract 559, said spindle having coordinates Y=580,899.96 X=3,040,144.16:

THENCE North 41 degrees 44 minutes 36 seconds West along the southeast line of said E. Lippencott league being the northwest line of the J.Meyer survey abstract 559 and being the centerline of FM Highway 1994 (100 foot right-of-way) for a distance of 50 feet to a point on said line;

THENCE South 48 degrees 15 minutes 24 seconds West 203.55 feet to a point on the centerline of the aforementioned Cane Belt Railroad for the Place of Beginning of the herein described centerline description;

THENCE North 46 degrees 47 minutes 23 seconds East along the centerline of said railroad being 120 foot wide right-of-way for a distance of 2993.58 feet to a point on said line at which point said 120 foot right-of-way ends and a 160 foot right-of-way begins;

THENCE continuing North 46 degrees 47 minutes 23 seconds East along the centerline of said railroad the right-of-way being 160 wide 5979.01 feet to a point on said line at which point the 160 foot right-of-way ends and said right-of-way becomes 200 foot wide;

THENCE continuing North 46 degrees 47 minutes 23 seconds East along the centerline of said railroad with the right-of-way being 200 feet wide 985.23 feet to a point in the centerline of said railroad intersection with the south channel bank of Big Creek for the termination of the herein described centerline and containing an area of 34.73 acres of land, more or less.

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For reference and further description see Survey Plat No. 2080-04-FB prepared by Charlie Kalkomey on January 3, 1996.

TEXAS GULF SULPHUR COMPANY AND GULF PRODUCTION COMPANY TO CANE BELT RAILROAD COMPANY (VOLUME 133, PAGE 511, DEED RECORDS, FORT BEND COUNTY, TEXAS).

FIELD NOTES FOR A 1.38 ACRE TRACT OF LAND IN THE PHILCO FAIRCHILD SURVEY ABSTRACT 24, FORT BEND COUNTY, TEXAS, SAID 1.38 ACRE TRACT BEING THAT CERTAIN TRACT CONVEYED FROM TEXAS GULF SULPHUR COMPANY AND GULF PRODUCTION COMPANY TO CANE BELT RAILROAD IN DEED DATED DECEMBER 5, 1930, RECORDED IN VOLUME 133, ,PAGE 511, DEED RECORDS, FORT BEND COUNTY, TEXAS, WITH ALL BEARINGS AS SHOWN HERE ARE GRID NORTH BEARINGS AND COORDINATES SHOWN HERE ARE BASED UPON U.S.C. & G MONUMENTATION AND THE TEXAS PLANE COORDINATES SYSTEM NORTH AMERICAN LAMBERT PROJECTION SOUTH CENTRAL ZONE STATION FAIRCHILD HAVING COORDINATED Y=590551.40 X=3,029,726.78.

COMMENCING at a cotton picker spindle found in the centerline Intersection of FM Highway 361 (100 foot right-of-way) and the centerline of FM Highway 1994 being the south corner of the E. Lippencott League, Abstract 51, same being on the northeast line of the J. Meyer Survey, Abstract 559 said spindle having coordinates Y=580899.95 X=3,040,144.16;

THENCE North 41 degrees 44 minutes 36 seconds East along the southeast line of the aforementioned E. Lipkincot League being the lower northeast line of the J. Meyer Survey abstract 559, the northwest line of the R. Morris Survey, abstract 559 the northwest line of the George Waters Survey abstract 346 5490.42 feet to a point on said line being the north corner of the George Waters Survey abstract 348 and the west corner of the Philco Fairchild Survey abstract 24, said point having coordinates of Y=584496.50 X=3043799.65;

THENCE South 48 degrees 06 minutes 07 seconds East along the common line of the George Waters survey and the Philco Fairchild Survey 683.84 feet to a point on the centerline of the Cane Belt Railroad;

THENCE North 46 degrees 47 minutes 23 seconds East along the centerline of said Cane Belt Railroad having a width of 160 feet 347.8 feet to a point on said line;

THENCE North 43 degrees 12 minutes 27 seconds West 80 foot to a point on the northwest right-of-way line of said Cane Belt Railroad for the south corner and Place of Beginning of the herein described 1.38 acre tract of land;

THENCE continuing North 43 degrees 12 minutes 37 seconds west 150 feet to a point for the west corner of the herein described tract;

THENCE North 46 degrees 27 minutes 23 seconds East along the line establishing the northwest line of the herein described parcel of land 400 feet to a point for the north corner of the herein described tract;

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THENCE South 43 degrees 12 minutes 37 seconds East along a line establishing the northeast line of the herein described parcel of land 150 feet to a point on the northwest line of the aforementioned Cane Belt Railroad for the east corner of the herein described tract;

THENCE South 46 degrees 47 minutes 23 seconds West along the northwest line of said Cane Belt Railroad right-of-way 400 feet to the Place of Beginning and containing 1.38 acres of land, more or less.

For reference and further description see Survey Plat No. 2080-04-FB prepared by Charlie Kalkomey, R.P.L.S. on January 3, 1996.

Unofficial Document

EXHIBIT B

1. The following restrictive covenants of record itemized below

Fort Bend County Clerk's File No(s). 9681121 and 2001088254.

Deleting any unlawful discriminatory provisions based on race, color religion, sex, handicap, familial status or national origin.

2. Standby fees, taxes and assessments by any taxing authority for the year 2004, and subsequent years.

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3 Right-of-way easement for the construction, maintenance and operations of railroad trackage, along and across subject property, granted to The Cane Belt Railroad Company and Texas and New Orleans Railroad Company by instrument recorded in Volume 231, Page 387 of the Deed Records of Fort Bend County, Texas, with the exact location of said easement as shown on the map marked Exhibit "A" attached to said instrument.

4 Right-of-way easement 60 feet in width for ingress and egress traversing subject tract, granted to Fort Bend County, Texas by instrument recorded in Volume 129, page 553 of the Deed Records of Fort Bend County, Texas.

5 Right-of-way and easement 60 feet in width for ingress and egress along the westerly and northwesterly portion of subject tract, granted to Fort Bend County by instrument recorded in Volume 433, Page 520 of the Deed Records of Fort Bend County, Texas.

6 An easement and right-of-way for electric transmission and distribution line(s) together with the right of ingress and egress along the northwesterly portion of subject tract, granted to Houston Lighting & Power Company by instrument recorded in Volume 588, Page 628 of the Deed Records of Fort Bend County, Texas.

7 A right-of-way easement for the purpose of constructing one pipeline, not to exceed two inches located along the westerly side of subject tract, granted to Hamby Consultant, Inc., by instrument recorded in Volume 1041, Page 531 of the Deed Records of Fort Bend County, Texas.

8 A 25 foot by 30 foot surface easement located along the northerly portion of subject tract, granted to Houston pipe Line Company by instrument recorded in Volume 1876, Page 726 of the Official Records of Fort Bend County, Texas, and amended in Volume 1898, Page 309 of the Official Records of Fort Bend County, Texas.

9 Right-of-way easement 90 feet in width located along the northeasterly side of subject tract, granted to Fort Bend County Drainage District by instrument recorded in Volume 323, page 230 of the Deed Records of Fort Bend County, Texas.

10 An additional right-of-way easement 70 feet in width parallel and adjacent to the southwesterly side of the existing 90 foot easement, granted to Fort Bend County Drainage District by instrument recorded in Volume 2190, Page 1551 of the Official Records of Fort Bend County, Texas.

11 A 60 foot right-of-way along the north portion of subject tract granted to Fort Bend County, Texas by instrument recorded in Volume 72, Page 447 of the Deed Records of Fort Bend County, Texas, also as shown on the preliminary survey dated January 3, 1996, to be 50 feet in width, prepared by Charlie Kalkomey registered public surveyor No. 1399.

12 Pipe line right-of-way 20 feet in width located along the southerly portion of subject tract, granted to Houston Pipe Line Co. by instrument recorded in Volume 452, page 167 of the Deed Records of Fort Bend County, Texas.

13 Grantors reserve unto themselves the free and uninterrupted use for passage over and across the south 1/2 of the right-of-way said Davis Estate Road located along the southerly side of Subject tract as set forth in instrument recorded in Volume 525, Page 282 of the Deed Records of Fort Bend County, Texas.

14 1/16th of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 142, Page 31 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

15 A 1/32nd royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 142, Page 31, of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

16 A 1/24th royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 142, Page 31, of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

17 A 7/128th royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 118, Page 498, of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

18 A 1/16th royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 116, Page 337, of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

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19 1/16th of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 108, Page 221 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

20 A 1/32nd royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 108, Page 221, of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

21 A 1/24th royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 108, Page 221, of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

22 1/4th of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 142, Page 34 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

23 An undivided 1/5th interest of an undivided 3/10th interest in to all the sulphur conveyed to Texas Gulf Sulphur Co. by instrument recorded in Volume 153, Page 63, of the Deed Records of Fort Bend County, Texas.

24 A 1/32nd royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 103, Page 363, of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

25 1/2 of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 103, Page 365, of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

26 Undivided 3/40th sulphur fee and 1/32nd of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 1896, Page 1963 and Volume 2595, Page 1889 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

27 A 29.73 - 1/3% of 1/32nd royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 753, Page 511, Volume 754, Page 633 and Volume 754, Page 637, all of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

28 .2400% of 1/2 of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 760, Page 375 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

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29 .1000% of 1/2 of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 782, Page 351 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

30 .2400% of 1/2 of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 883, Page 892 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

31 A 1/64th of 1/32nd royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 1160, Page 592, of the Official Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

32 1/2 of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 104, Page(s) 61 & 63 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

33 1/4th of 1/2 of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 108, Page 223 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

34 1/16th of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 114, Page 297 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

35 An undivided 3/10th interest in and to all of the sulphur conveyed to the Federal Royalty Co. by instrument recorded in Volume 114, Page 475 of the Deed Records of Fort Bend County, Texas.

36 An undivided 1/5th and an undivided 3/10th interest in and to all of the sulphur conveyed to the Freeport Sulphur Co. by instrument recorded in Volume 115, Page 327 of the Deed Records of Fort Bend County, Texas.

37 An undivided 1/20th interest in and to all the sulphur and 1/32nd of all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 156, Page 498 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

38 An undivided 1/2 sulphur royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 275, Page 638, of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

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39 1/20th in and to all of the sulphur royalty interest in all oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same are excepted herefrom as set forth in instrument recorded in Volume 348, Page 548 of the Deed Records of Fort Bend County, Texas. Title to said interest not checked subsequent to date of aforesaid instrument.

40 Mineral Deed date March 1, 1985 as set forth in instrument recorded under Volume 1769, Page 318 of the Official Records of Fort Bend County, Texas. Title to said interest not checked subsequent to the aforesaid instrument.

41 Mineral Deed date January 1, 1987 as set forth in instrument recorded under Volume 1894, Page 1824 of the Official Records of Fort Bend County, Texas. Title to said interest not checked subsequent to the aforesaid instrument.

42 Mineral Deed date June 1, 1987 as set forth in instrument recorded under Volume 1956, Page 2097 of the Official Records of Fort Bend County, Texas. Title to said interest not checked subsequent to the aforesaid instrument.

Waiver of surface rights contained therein.

43 Mineral Deed date February 27, 1992 as set forth in instrument recorded under Volume 2384, Page 1968 of the Official Records of Fort Bend County, Texas. Title to said interest not checked subsequent to the aforesaid instrument.

44 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 99, Page 600 of the Deed Records of Fort Bend County, Texas.

45 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 103, Page 117 of the Deed Records of Fort Bend County, Texas.

46 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 104, Page 117 of the Deed Records of Fort Bend County, Texas.

47 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 922, Page 34 of the Deed Records of Fort Bend County, Texas.

48 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 907, Page 369 of the Deed Records of Fort Bend County, Texas.

49 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 998, Page 361 of the Deed Records of Fort Bend County, Texas.

50 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 917, Page 272 of the Deed Records of Fort Bend County, Texas.

51 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 1208, Page 401 of the Official Records of Fort Bend County, Texas.

52 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 1557, Page 73 of the Official Records of Fort Bend County, Texas.

53 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 1557, Page 78 of the Official Records of Fort Bend County, Texas.

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54 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 1557, Page 83 of the Official Records of Fort Bend County, Texas.

55 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 1591, Page 157 of the Official Records of Fort Bend County, Texas.

56 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 1663, Page 144 of the Official Records of Fort Bend County, Texas.

57 Terms, conditions and stipulations contained in Oil, Gas and Mineral Lease recorded in Volume 1980, Page 2405 of the Official Records of Fort Bend County, Texas.

58 Subject to that particular Drill Site Designation Agreement as set out in instrument dated October 15, 1997, recorded under Fort Bend County Clerk's File No. 9771205.

59 A conveyance of railroad tracks located along the northwesterly portion of subject tract, granted to The Cane Belt Railroad Company by instrument recorded in Volume 131, Page 293 of the Deed Records of Fort Bend County, Texas, and conveyed to the Gulf Colorado and Santa Fe Railroad Company by Deed recorded in Volume 262, Page 68 of the Deed Records of Fort Bend County, Texas.

60 Rights of the Public in general in and to that portion of the subject property that lies within the boundaries of publically dedicated roadway, as set forth in instrument(s) recorded in Volume 344, Page(s) 153, 155, 158 and 160 of the Deed Records of Fort Bend County, Texas.

61 Terms, conditions and stipulations of that certain Industrial Solid Waste Disposal site across subject tract as set forth in instrument recorded in Volume 1158, Page 332 of the Official Records of Fort Bend County, Texas.

62 Terms, conditions and stipulations of that certain boundary agreement along the west side of subject tract as set forth in instrument recorded in Volume 271, Page 603 of the Deed Records of Fort Bend County, Texas.

63 Terms, conditions and stipulations of that certain solid waste disposal site as set forth in instrument recorded in Volume 731, Page 485 of the Deed Records of Fort Bend County, Texas.

64 Terms, conditions and stipulations of that certain Long Point Industrial Solid Waste Certification of Conditions as set forth in instrument recorded under Fort Bend County Clerk's File No. 9681121.

65 Rights of tenants in possession under unrecorded leases and/or rental agreements.

FILED AND RECORDED

OFFICIAL PUBLIC RECORDS

Dr. Dianne Wilson

2006 Jul 31 02:42 PM 2006092081

KW $109.00

Dianne Wilson, Ph.D. COUNTY CLERK

FT BEND COUNTY TEXAS

UNOFFICIAL DOCUMENT

AS PER ORIGINAL

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Official Public Records
12/31/2012 4:25 PM

Dianne Wilson, County Clerk
Fort Bend County Texas
Pages: 7 Fee: $ 39.00

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

1912725708

SPECIAL WARRANTY DEED

THE STATE OF TEXAS §
§ KNOW ALL MEN BY THESE PRESENTS THAT:
COUNTY OF FORT BEND §

FORT BEND REGIONAL LANDFILL, L.P., a Texas limited partnership (hereinafter called "**Grantor**"), for and in consideration of the sum of Ten Dollars ($10.00) and other valuable consideration paid to Grantor by **WILLIAM E. SUTTON**, an individual (hereinafter called "**Grantee**"), the receipt and sufficiency of which are hereby acknowledged, does hereby GRANT, SELL, CONVEY, ASSIGN and DELIVER to Grantee the real property described in Exhibit A attached hereto and made a part hereof, together with Grantor's right, title and interest, if any, to: (i) all improvements, fixtures and appurtenances situated thereon; and (ii) any adjacent streets, alleys and rights-of-way (collectively, the "**Property**").

This Special Warranty Deed and the conveyance hereinabove set forth is executed by Grantor and accepted by Grantee subject to (i) all easements, restrictions, reservations and covenants now of record, (ii) all matters that a current, accurate survey of the Property would show, (iii) the matters described in Exhibit B hereto and incorporated herein by this reference, to the extent the same are validly existing and applicable to the Property, (iv) the Pipeline Easement (defined below), and (iv) the covenant, running with the Property, that the Property shall never be used as, or in connection with, a landfill, transfer station, recycling or other waste services business (hereinafter referred to collectively as the "**Permitted Exceptions**").

Grantor hereby reserves and excludes from the conveyance hereunder for the benefit of Grantor and Grantor's successors and assigns forever all of the oil, gas and other minerals in, on, under and that may be produced from the Property including the right to pool or unitize the Property or portions thereof with other lands for the purpose of exploration, production and development of oil, gas and other minerals.

Grantor further hereby reserves for the benefit of Grantor and Grantor's successors and assigns forever a right of way and easement (the "**Pipeline Easement**") on, over and under the Property, for the purposes and on the terms set forth in that certain Pipeline Easement Agreement of even date herewith, by and between Grantee and Grantor, said Pipeline Easement being more particularly identified and described in Exhibit C attached hereto and made a part hereof.

Grantee acknowledges that it has independently and personally inspected the Property. **NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED IN THIS SPECIAL WARRANTY DEED, IT IS UNDERSTOOD AND AGREED BY GRANTEE BY ITS ACCEPTANCE OF THIS SPECIAL WARRANTY DEED THAT THE PROPERTY IS BEING SOLD AND CONVEYED HEREUNDER "AS IS" WITH ANY**

THIS DOCUMENT HAS BEEN ELECTRONICALLY RECORDED

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

1912725708

SPECIAL WARRANTY DEED

THE STATE OF TEXAS §
§ KNOW ALL MEN BY THESE PRESENTS THAT:
COUNTY OF FORT BEND §

FORT BEND REGIONAL LANDFILL, L.P., a Texas limited partnership (hereinafter called "**Grantor**"), for and in consideration of the sum of Ten Dollars ($10.00) and other valuable consideration paid to Grantor by **WILLIAM E. SUTTON**, an individual (hereinafter called "**Grantee**"), the receipt and sufficiency of which are hereby acknowledged, does hereby GRANT, SELL, CONVEY, ASSIGN and DELIVER to Grantee the real property described in Exhibit A attached hereto and made a part hereof, together with Grantor's right, title and interest, if any, to: (i) all improvements, fixtures and appurtenances situated thereon; and (ii) any adjacent streets, alleys and rights-of-way (collectively, the "**Property**").

This Special Warranty Deed and the conveyance hereinabove set forth is executed by Grantor and accepted by Grantee subject to (i) all easements, restrictions, reservations and covenants now of record, (ii) all matters that a current, accurate survey of the Property would show, (iii) the matters described in Exhibit B hereto and incorporated herein by this reference, to the extent the same are validly existing and applicable to the Property, (iv) the Pipeline Easement (defined below), and (iv) the covenant, running with the Property, that the Property shall never be used as, or in connection with, a landfill, transfer station, recycling or other waste services business (hereinafter referred to collectively as the "**Permitted Exceptions**").

Grantor hereby reserves and excludes from the conveyance hereunder for the benefit of Grantor and Grantor's successors and assigns forever all of the oil, gas and other minerals in, on, under and that may be produced from the Property including the right to pool or unitize the Property or portions thereof with other lands for the purpose of exploration, production and development of oil, gas and other minerals.

Grantor further hereby reserves for the benefit of Grantor and Grantor's successors and assigns forever a right of way and easement (the "**Pipeline Easement**") on, over and under the Property, for the purposes and on the terms set forth in that certain Pipeline Easement Agreement of even date herewith, by and between Grantee and Grantor, said Pipeline Easement being more particularly identified and described in Exhibit C attached hereto and made a part hereof.

Grantee acknowledges that it has independently and personally inspected the Property. **NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED IN THIS SPECIAL WARRANTY DEED, IT IS UNDERSTOOD AND AGREED BY GRANTEE BY ITS ACCEPTANCE OF THIS SPECIAL WARRANTY DEED THAT THE PROPERTY IS BEING SOLD AND CONVEYED HEREUNDER "AS IS" WITH ANY**

AND ALL FAULTS AND LATENT AND PATENT DEFECTS, WITHOUT ANY EXPRESS OR IMPLIED REPRESENTATION OR WARRANTY EXCEPT AS EXPRESSLY SET FORTH HEREIN AND IN THAT EXCHANGE AGREEMENT DATED SEPTEMBER 14, 2012, BY AND BETWEEN GRANTOR AND GRANTEE (THE "CONTRACT"). GRANTOR HAS NOT MADE AND DOES NOT HEREBY MAKE AND HEREBY SPECIFICALLY DISCLAIMS (EXCEPT AS EXPRESSLY SET FORTH IN THE CONTRACT) ANY REPRESENTATIONS OR WARRANTIES OF ANY KIND OR CHARACTER WHATSOEVER, EXPRESS OR IMPLIED, WITH RESPECT TO THE PROPERTY (OTHER THAN AS CONTAINED HEREIN), ITS CONDITION (INCLUDING WITHOUT LIMITATION ANY REPRESENTATION OR WARRANTY REGARDING QUALITY OF CONSTRUCTION, STATE OF REPAIR, WORKMANSHIP, MERCHANTABILITY, SUITABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE), ITS COMPLIANCE WITH ENVIRONMENTAL LAWS OR OTHER LAWS, AVAILABILITY OF ACCESS, INGRESS OR EGRESS, INCOME TO BE DERIVED THEREFROM OR EXPENSES TO BE INCURRED WITH RESPECT THERETO, THE OBLIGATIONS, RESPONSIBILITIES OR LIABILITIES OF THE OWNER THEREOF, OR ANY OTHER MATTER OR THING RELATING TO OR AFFECTING THE PROPERTY, AND GRANTOR HEREBY DISCLAIMS AND RENOUNCES ANY OTHER REPRESENTATION OR WARRANTY.

TO HAVE AND TO HOLD the Property, together with all and singular the rights and appurtenances thereunto in anywise belonging, unto Grantee, its successors and assigns, forever, and Grantor does hereby bind itself and its successors and assigns to warrant and forever defend all and singular the Property unto Grantee, its successors and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof by, through or under Grantor, but not otherwise, subject to the Permitted Encumbrances.

Grantee hereby assumes the payment of current ad valorem taxes on the herein described Property and for subsequent years. Grantee's address is: 16317 Davis Estate Road, Needville, Texas 77461.

[Remainder of page intentionally left blank]

William E. Sutton
16317 Davis Estate Road
Needville, Tx 77461

IN WITNESS WHEREOF, this Special Warranty Deed is executed by Grantor as of the 26th day of December, 2012.

GRANTOR:

FORT BEND REGIONAL LANDFILL, L.P., a Texas limited partnership
By: WCA Texas Management General, Inc., a Delaware corporation, its general partner

By: _____
Michael A. Roy, Vice President

THE STATE OF TEXAS §
§
COUNTY OF HARRIS §

This instrument was acknowledged before me on the 26th day of December, 2012, by Michael A. Roy, Vice President of WCA Texas Management General, Inc., a Delaware corporation and the general partner of Fort Bend Regional Landfill, L.P., a Texas limited partnership, on behalf of said corporation and limited partnership.

_____
NOTARY PUBLIC, State of Texas

CHRISTY CAVANAUGH WILLIAMS
Notary Public, State of Texas
My Commission Expires
October 27, 2015

EXHIBIT A

Description of the Property

Being a 20.572 acre tract in the T.F. Pinckney Survey, A-655, Fort Bend County, Texas and comprising part of that 2,678.6741 acre tract conveyed by Long Point Partners, LP to Waste Services of Texas, Inc. and recorded in Fort Bend County Official Public Records 2004021722 (Waste Services of Texas, Inc. as per merger agreement (FBCOPR 200481536) is known as Fort Bend Regional Landfill, LP). The 20.572 acre tract more particularly described by metes and bounds description as follows;

COMMENCING at a one inch iron pipe found on the Southerly line of the T. F. Pinckney Survey, A-665 at the most Northerly corner of the H. Boeck Survey, A-699 and the most Westerly corner of the Christian Schwartz Survey, A-632.

Thence N 40°40'21" E along the common line of the Pinckney and Schwartz Surveys a distance of 270.61 feet to a one inch iron pipe (N 13,699,752.19 E 3,021,587.50) found for the most Southerly corner of this 20.572 acre tract and the POINT OF BEGINNING and from which a 6" wood post bears 0.3' S and 1.0' W.

Thence N 43°06'04" W along a barb wire fence a distance of 1535.36 feet to a 5/8 inch iron rod with cap set for a point for corner.

Thence N 01°57'51" W a distance of 34.42 feet to a PK nail set for a point for corner in the centerline of Davis Estate Road and from which a 1/2 inch iron pipe bears N 01°57'51" W – 40.30'.

Thence S 62°38'08" E (Call S 62°38'59" E) along the centerline of Davis Estate Road a distance of 395.67 feet to a bent 1/2 inch iron pipe found for a point for corner.

Thence N 82°51'07" E (Call N 82°50'16" E) along the centerline of Davis Estate Road a distance of 960.60 feet (Call 960.58') to a 1/2 inch iron pipe found for a point for corner.

Thence S 48°10'28" E (Call S 48°11'45" E); along a Northeasterly line of said 2,678.6741 acre tract; passing at 38.5 feet a 5/8 inch iron rod found on line, passing at 46.35 feet a 1/2 inch iron pipe found on line; for a total distance of 539.58 feet (Call 539.60') to a one inch iron pipe found for the most easterly corner of this 20.572 acre tract and from which a 6" wood post bears 0.9' S & 1.0' W.

Thence S 41°49'51" W (Call S 41°48'16" W) along the common lines of the Pinckney and Schwartz Surveys a distance of 984.11 feet (Call 983.97') to the POINT OF BEGINNING.

BEARINGS AND COORDINATES BASED ON TEXAS COORDINATE SYSTEM – NAD 83 CORS96 (EPOCH 2002.0000)

EXHIBIT B

Permitted Exceptions

1. Taxes and assessments for the year 2012 and subsequent years.

2. Restrictive covenants filed for record under Fort Bend County Clerk's File No. 9681121 and 2001088254.

3. Right-of-way easement 60 feet in width for ingress and egress traversing subject property as granted to Fort Bend County, Texas set forth in instrument recorded in Volume 129, Page 553, of the Deed Records of Fort Bend County, Texas.

4. Grantor's reserve unto themselves the free and uninterrupted use for passage over and across the south 1/2 of the right-of-way said Davis Estate Road located along the southerly side of subject tract set forth in instrument recorded in Volume 525, Page 282, of the Deed Records of Fort Bend County, Texas.

5. Pipe line right-of-way 20 feet in width located along the southerly portion of subject property granted to Houston Pipe Line Co. by instrument recorded in Volume 452, Page 167, of the Deed Records of Fort Bend County, Texas.

6. Terms, conditions and stipulations of that certain Industrial Solid Waste Disposal Site across subject tract as set forth in instrument recorded in Volume 1158, Page 332, of the Official Records of Fort Bend County, Texas.

7. Terms, conditions and stipulations of that certain Lone Point Industrial Solid Waste Certification of Conditions as set forth in instrument recorded under Fort Bend County Clerk's File No. 9681121.

8. A 1/16th royalty interest in and to all of the oil, gas, and other minerals in, on, under or that may be produced from the subject property, as set forth in an instrument of record in Volume 116, Page 337, of the Deed Records of Fort Bend County, Texas.

9. A 29.73% of 1/3% of l/32nd royalty interest in and to all of the oil, gas, and other minerals in, on, under or that may be produced from the subject property, as set forth in an instrument of record in Volume 753, Page 511, of the Deed Records of Fort Bend County, Texas.

10. l/64th of the oil, gas and other minerals, the royalties, bonuses, rentals, and all other rights in connection with the same, as the same are set forth in an instrument recorded in Volume 1160, Page 592, of the Deed Records of Fort Bend County, Texas.

11. Conveyance of oil, gas and mineral interests and related rights and properties, set forth in an instrument filed for record in Volume 1956, Page 2097 of the Official Records of Fort Bend County, Texas.

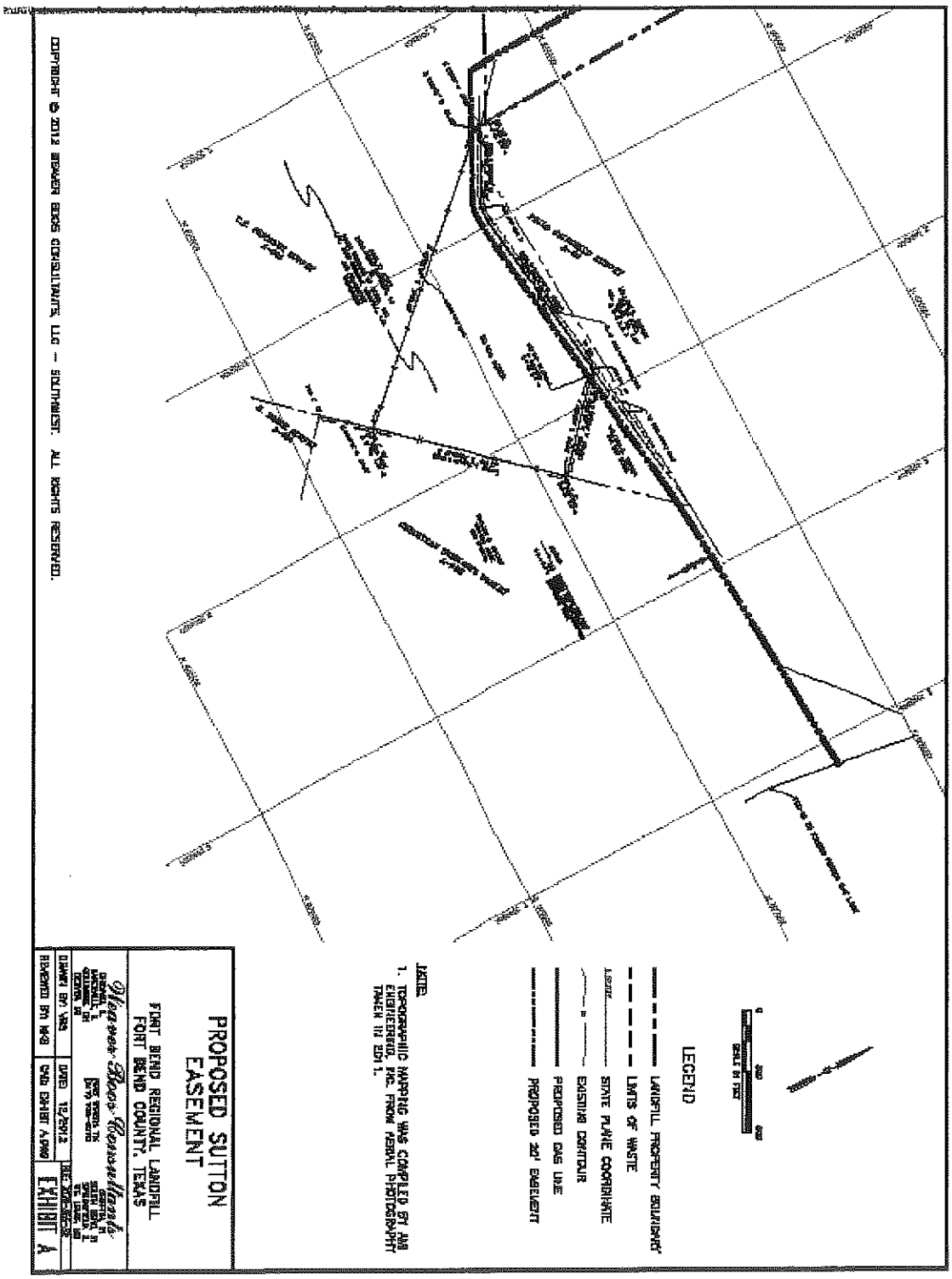
12. Terms, conditions and stipulations contained in that certain Oil & Gas Lease dated November 21, 1923, between Geo. Hamman et al, Lessor and Pathfinder Oil Co., Lessee recorded in Volume 90, Page 600, Deed Records of Fort Bend County, Texas. By instrument recorded in Volume 103, Page 208 of the Deed Records of Fort Bend County, Texas, Pathfinder Oil Co. assigned said lease to Gulf Production Company. Subject to terms and conditions contained in those certain Agreements recorded in recorded in Volume 130, Page 200 and Volume 131, Page 77, of the Deed Records of Fort Bend County, Texas. Subject to the terms and conditions contained in Contract recorded in Volume 282, Page 272 of the Deed Records of Fort Bend County, Texas.

13. Terms, conditions and stipulations contained in that certain Oil & Gas Lease dated February 4, 1980, between Gulf Oil Corporation, Lessor and Petro-Lewis Corporation Lessee recorded in Volume 885, Page 826, Deed Records of Fort Bend County, Texas. Said lease amended by instruments recorded in Volume 898, Page 92 and Volume 930, Page 814 of the Deed Records of Fort Bend County, Texas.

14. Terms, conditions and stipulations as to that certain Drill Site Designation Agreement set forth in instrument filed for record under Fort Bend County Clerk's File No. 9771205.

EXHIBIT C

Description of Pipeline Easement



GSI Job No: 6731

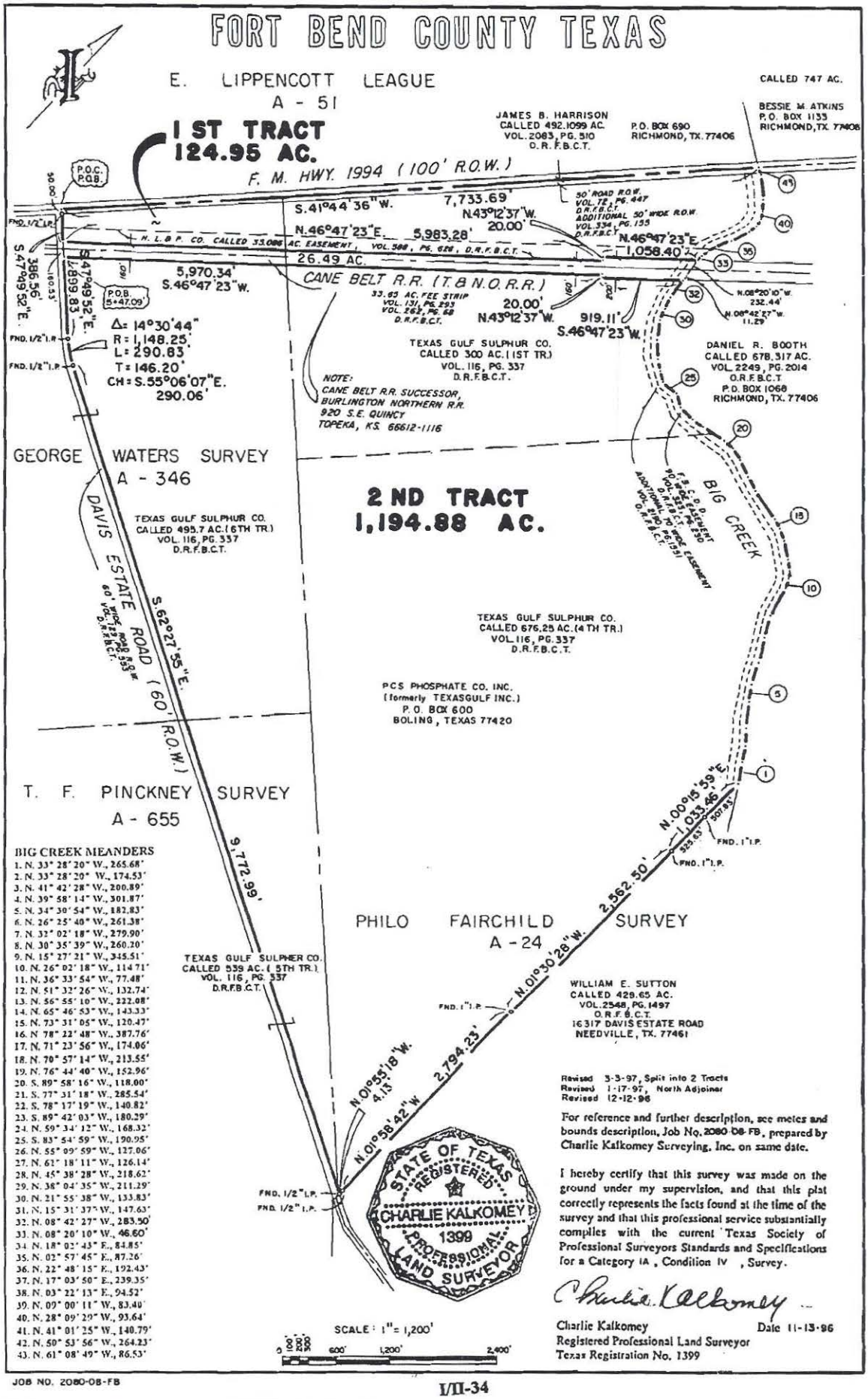
INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENT I.F.2

Property Survey



BIG CREEK MEANDERS

1. N. 33° 28' 20" W., 265.68'
2. N. 33° 28' 20" W., 174.53'
3. N. 41° 42' 28" W., 200.89'
4. N. 39° 58' 14" W., 301.87'
5. N. 34° 30' 54" W., 182.83'
6. N. 26° 25' 40" W., 261.38'
7. N. 32° 02' 18" W., 279.90'
8. N. 30° 35' 39" W., 260.20'
9. N. 15° 27' 21" W., 345.51'
10. N. 26° 02' 18" W., 114.71'
11. N. 36° 33' 54" W., 77.48'
12. N. 51° 32' 26" W., 132.74'
13. N. 56° 55' 10" W., 222.08'
14. N. 65° 46' 53" W., 143.33'
15. N. 73° 31' 05" W., 120.47'
16. N. 78° 22' 48" W., 387.76'
17. N. 71° 23' 56" W., 174.06'
18. N. 70° 57' 14" W., 213.55'
19. N. 76° 44' 40" W., 152.96'
20. S. 89° 58' 16" W., 118.00'
21. S. 77° 31' 18" W., 285.54'
22. S. 78° 17' 19" W., 140.82'
23. S. 89° 42' 03" W., 180.29'
24. N. 59° 34' 12" W., 168.32'
25. S. 83° 54' 59" W., 190.95'
26. N. 55° 09' 59" W., 127.06'
27. N. 61° 18' 11" W., 126.14'
28. N. 45° 38' 28" W., 218.62'
29. N. 36° 04' 35" W., 211.29'
30. N. 21° 55' 38" W., 133.83'
31. N. 15° 31' 37" W., 147.63'
32. N. 08° 42' 27" W., 283.50'
33. N. 08° 20' 10" W., 46.60'
34. N. 18° 02' 43" E., 84.85'
35. N. 02° 57' 45" E., 87.26'
36. N. 22° 48' 15" E., 192.43'
37. N. 17° 03' 50" E., 239.35'
38. N. 03° 22' 13" E., 94.52'
39. N. 09° 00' 11" W., 83.40'
40. N. 28° 09' 29" W., 93.64'
41. N. 41° 01' 25" W., 140.79'
42. N. 50° 53' 56" W., 264.23'
43. N. 61° 08' 49" W., 86.53'

Revised 3-3-97, Split into 2 Tracts
Revised 1-17-97, North Adjoiner
Revised 12-12-96

For reference and further description, see metes and bounds description, Job No. 2080-08-FB, prepared by Charlie Kalkomey Surveying, Inc. on same date.

I hereby certify that this survey was made on the ground under my supervision, and that this plat correctly represents the facts found at the time of the survey and that this professional service substantially complies with the current Texas Society of Professional Surveyors Standards and Specifications for a Category 1A, Condition IV, Survey.

Charlie Kalkomey — Date 11-13-96
Registered Professional Land Surveyor
Texas Registration No. 1399

JOB NO. 2080-08-FB

GSI Job No: 6731

INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENT I.G

List of Other Sites Owned by GFL

GSI ENVIRONMENTAL

ATTACHMENT I.G
SITES OWNED, OPERATED, OR CONTROLLED BY GFL, INC. IN TEXAS

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP, Needville, Texas

BU#	Business Unit	Address	City, State
973	Bellfort Landfill	16011 W. Bellfort	Sugar Land, TX 77498
974	Freeport Hauling	3310 FM 523	Freeeport, TX 77541
975	East Houston Hauling	2201 Lee Dr.	Baytown, TX 77520
975	East Houston Hauling	10020 Old Galveston Road	Houston, TX 77034
976	Houston Transfer Station	1548 Mesquite St.	Houston, TX 77093
977	Montgomery Hauling	17851 HWY 105 E.	Conroe, TX 77306
978	Conroe Landfill	17851 HWY 105 E.	Conroe, TX 77306
979	Montgomery Compost	17851 HWY 105 E.	Conroe, TX 77306
980	Northside Treatment Facility	1820 Candle Ridge Park	Houston, TX 77073
981	Port Arthur Hauling	1000 S. Business Dr.	Port Arthur, TX 77640
982	Texas City Hauling	1004 4th Ave. South	Texas City, TX 77590
983	Sugar Land Hauling	16011 W. Bellfort	Sugar Land, TX 77498
984	Corpus Christi Hauling	2199 N. HWY 77	Robstown, TX 78380
985	Port Arthur Transfer Station	1000 S. Business Dr.	Port Arthur, TX 77640
848	Fort Bend Regional Landfill	14115 Davis Estate Rd	Needville, TX 88461
849	Hardy Road Landfill	18710 East Hardy Rd	Houston, TX 77073
854	Ralston Road Landfill	6632 John Ralston Rd	Houston, TX 77049
855	Greenbelt Landfill	550 Old Genoa Red Bluff Road	Houston, TX 77034
856	Houston South Hauling	8515 Highway 6 South	Houston, TX 77083
857	Ruffino Hills Transfer Station	9720 Ruffino Rd	Houston, TX 77031
859	Bay City Hauling	700 Avenue F	Bay City, TX 77414
865	East Mount Houston Hauling	7213 East Mount Houston Rd	Houston, TX 77050
866	East Mount Houston MRF	7213 East Mount Houston Rd	Houston, TX 77050

GSI Job No: 6731

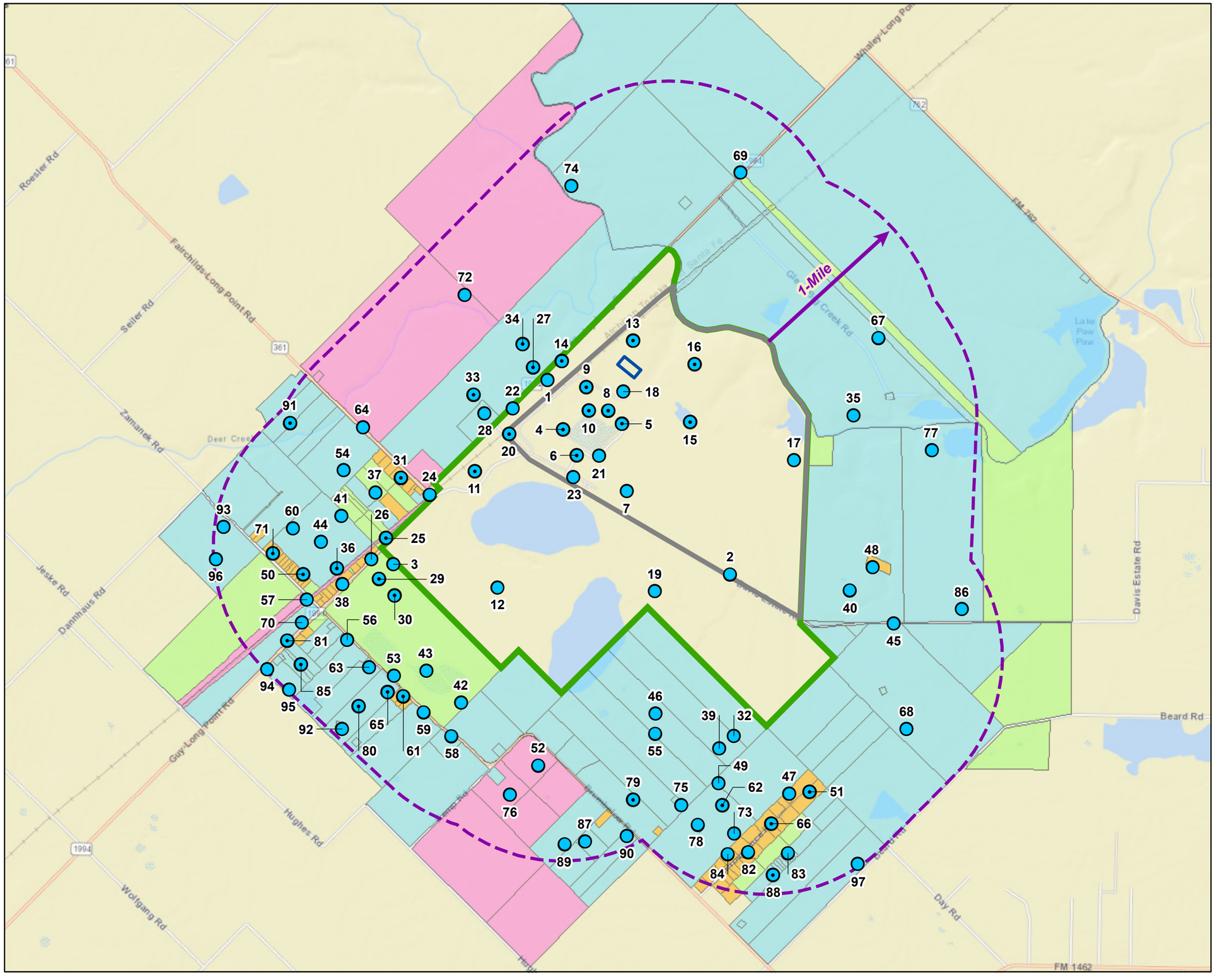
INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENT I.K

Application Map



LEGEND

- Water Well
- Water Well Cluster
- UIC Waste Management
- Municipal Solid Waste Landfill
- Fort Bend Regional Landfill Property Boundary
- 1-mile Buffer

Adjacent Property Tracts

- Agricultural
- Residential
- Commercial
- Undeveloped

Notes

1. Water well supply wells were identified by a records search conducted by The Banks Group.
2. Property boundaries from Fort Bend Central Appraisal District property parcel map.
3. Background Imagery: ESRI World Street Map: Sources: Esri, (c) OpenStreetMap contributors, the GIS User Community, et al.

Feet
0 1,500 3,000

Projected Coordinate System
Datum: NAD 1983
UTM: Zone 15N

GSI ENVIRONMENTAL

APPLICATION MAP

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP
Needville, Texas

GSI Job No.	6731	Drawn By:	CDM
Issued:	20-Feb-2024	Chk'd By:	LMR/JSC
Map ID:	**001_01**	Appv'd By:	JMM

ATTACHMENT I.K

GSI Job No: 6731

INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENT I.L.1 AND I.L2

Adjacent Landowner List and Map

FORT BEND REGIONAL LANDFILL
6632 JOHN RALSTON RD
HOUSTON, TX 77049-3306

SARAH BOOTH GST EXEMPT TRUST
9115 FM 2759 RD
RICHMOND TX 77469-9372

WILLIAM E SUTTON
16317 DAVIS ESTATE RD
NEEDVILLE TX 77461-9466

DAVID R BEARD ET AL
12223 LEVEL RUN ST
MEADOWS PLACE TX 77477-1616

CHARLES W AND SHERRY ANN ROEHLING
17009 BRUMBELOW RD
NEEDVILLE TX 77461-9410

RAYMOND BRUMBELOW
C/O C R GUY-EFIMOFF
2101 N HOLLAND RD
MANSFIELD TX 76063-5505

VICKI POLAK
121 HUCKLEBERRY DR
LAKE JACKSON TX 77566-4412

MELISSA BERRY JOHNSTON ET AL
C/O DAN BERRY
2 RICHLAND CIR
ANGLETON TX 77515-4118

GEORGE DUTY III
4805 SAWMILL RD
NEEDVILLE TX 77461-9519

NEIL YELDERMAN AND OSCAR BANFIELD ET AL
PO BOX 203
DAMON TX 77430-0203

LANDGRANT RESOURCES LLC C/O KEVIN DASCH
104 W 32ND ST
AUSTIN TX 78705-2302

NATIVIDAD HERNANDEZ
9440 FM 1994 RD
NEEDVILLE TX 77461-8589

CORA LEA ZWAHR
9240 FM 1994 RD
NEEDVILLE TX 77461-9312

MARIE E AND GEORGE E ZWAHR
13918 FM 361 RD
NEEDVILLE TX 77461-9315

WIL FREDIS AND ARCELIA FLORES
10910 COLDWATER BRIDGE CT
SUGAR LAND TX 77498-0945

ALBERTO A AND AMANDA N RUIZ
2122 INDIAN CLEARING TRL
ROSENBERG TX 77471-9277

CENTERPOINT ENERGY
ATTN: PROPERTY TAX DEPARTMENT
PO BOX 1475
HOUSTON, TX 77251-1475

ZWAHR AUGUST P ESTATE
9240 FM 1994 RD
NEEDVILLE TX 77461-9312

CENTERPOINT ENERGY HOUSTON ELECTRIC LLC
PO BOX 1700
HOUSTON, TX 77251-1700

JAMES B HARRISON FOUNDATION
C/O FRANKLIN BARRETT DAVIS JR
PO BOX 376
RICHMOND TX 77406-0010

CHERYL MOORE BOROWSKI AND BRENDA FAYE MARTIN HAAS TRUST
PO BOX 1133
RICHMOND TX 77406-0029

LEGEND

- 1 — Property Owner *(see Attachment I.L.1)*
- UIC Waste Management Area
- Fort Bend Regional Landfill Property Boundary
- Adjacent Property Tracts
- Roadway

Notes

1. Property boundaries from Fort Bend Central Appraisal District property parcel map.
2. Background Imagery: ESRI World Street Map: Sources: Esri, (c) OpenStreetMap contributors, the GIS User Community, et al.

Feet
0 1,000 2,000

Projected Coordinate System
Datum: NAD 1983
UTM: Zone 15N

GSI ENVIRONMENTAL

ADJACENT LANDOWNERS MAP

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP
Needville, Texas

GSI Job No.	6731	Drawn By:	CDM
Issued:	20-Feb-2024	Chk'd By:	LMR/JSC
Map ID:	**001_02**	Appv'd By:	JMM

ATTACHMENT I.L.2

GSI Job No: 6731

INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENT I.N

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 602656373		**RN 102803913**

SECTION II: Customer Information

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

☐ 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:*

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

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
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:							
	City		**State**		**ZIP**		**ZIP + 4**	

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

18. Telephone Number	**19. Extension or Code**	**20. Fax Number** *(if applicable)*

( ) -		( ) -

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.)*

Fort Bend Regional Landfill

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	14115 Davis Estate Road							
	City	Needville	**State**	TX	**ZIP**	77461	**ZIP + 4**	
24. County	Fort Bend							

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

25. Description to Physical Location:					
26. Nearest City			**State**		**Nearest ZIP Code**
Needville			TX		77461

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:			**28. Longitude (W) In Decimal:**		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	23	46	-95	43	29

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		562212	562219

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

Municipal solid waste landfill operation

34. Mailing Address:	**14115 Davis Estate Rd**							
	(979) 793-4430							
	City	**Needville**	**State**	**TX**	**ZIP**	**77461**	**ZIP + 4**	
35. E-Mail Address:	[redacted]							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(979) 793-4430		( ) -

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
			FGA001A	SWR #96322
☒ Municipal Solid Waste	☒ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
MSW 2270	93892			
☐ Sludge	☒ Storm Water	☒ Title V Air	☐ Tires	☐ Used Oil
	TXR05R702	2696		
☐ Voluntary Cleanup	☐ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☒ Other: UIC
				WDW 488 and 489

SECTION IV: Preparer Information

40. Name:	Jennifer Glowacki	41. Title:	Region Field Engineer

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(346) 482-8607		( ) -	[redacted]

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:	Fort Bend Regional Landfill, LP	Job Title:	Area Landfill Director
Name *(In Print)*:	Marcos Elizondo	Phone:	(713) 292- 2417
Signature:	Marcos Elizondo	Date:	2/15/2024

GSI Job No: 6731

INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENT I.O.1 AND I.O.2

English and Spanish Plain Language Forms

Texas Commission on Environmental Quality

Plain Language Summary

Industrial and Hazardous Waste Permit Applications

Instructions: Complete this form and submit with any industrial hazardous waste, or industrial solid waste, permit application that is subject to 30 Texas Administrative Code §39.405(k) [applications for a Class 3 permit modification, permit amendment, permit renewals, and for a new permit]. Please be concise.

Application Information

Purpose of application: ☒New ☐Renewal ☐Modification/Amendment	
Date Submitted to TCEQ: 20 February 2024	
Customer Name: GFL Environmental, Inc.	
Facility Name: Fort Bend Regional Landfill	
CN: CN602656373	**RN:** 102803913
Permit Number:	**Solid Waste Registration Number:** 96322
Facility Street Address: 14115 DAVIS ESTATE RD, NEEDVILLE TX 77461 2705	
Weblink to Street Address: https://www.google.com/maps/@29.3959741,-95.7252877,17z?entry=ttu	

Facility Information *(check all that apply)*

What is the primary type of business?	☐Chemical manufacturing ☐ Oil refinery ☒ Treatment, storage or disposal facility plant ☐Other **If other, enter description:**
What does the facility produce?	☐Chemicals ☐Fuels / lubricants ☒No products ☐Other **If other, enter description:**

Waste Management Information *(check all that apply)*

What types of wastes are managed?	☒Nonhazardous industrial ☐Hazardous ☐Other **If other, enter description:**
Where does the waste come from?	☒Off-site source ☒On-site source
How is the waste managed?	☒Storage ☒Process / Treatment ☒Disposal ☐Other **If other, enter description:**
What type of units manage the waste?	☒Active ☐Post-Closure **Type and count:** Nine (9) tanks
What happens to waste managed at the facility?	☐Transported off-site ☒Disposed on-site ☐Other **If other, enter description:**

Pollution Control Methods *(check all that apply)*	
How will the facility prevent spills, leaks, and releases?	☒Routine inspections ☒Engineered liner systems ☒Spill containment ☒Proper waste handling ☐Operations in enclosed buildings ☒Groundwater monitoring ☐Other **If other, enter description:**
How will the facility clean up spills, leaks, and releases?	☒Spill clean-up supplies ☒Decontamination equipment ☐Other **If other, enter description:**
How will the facility prevent / minimize air emissions?	☐Air monitoring / control systems ☐Filters / scrubbers ☐Routine inspections ☒Proper waste handling ☐Operations in enclosed buildings ☐Other **If other, enter description:**

Description of Update *(for Class 3 Modifications and Amendments only)*

List and explain any changes this modification or amendment would make to the two sections above—**Waste Management Information** and **Pollution Control Methods**.

Clear Form

Comisión de Calidad Ambiental de Texas

Resumen en Lenguaje Sencillo

Solicitudes de Permisos de Desechos Industriales y Peligrosos

Instrucciones

Complete este formulario y envíe con cualquier solicitud de permiso de desechos industriales peligrosos, o desechos sólidos industriales, que esté sujeta al Código Administrativo de Texas 30 §39.405 (k) [es decir, solicitudes para una modificación de permiso de Clase 3, enmienda de permiso, renovaciones de permisos y para un nuevo permiso].

Sea conciso: toda la información debe caber en dos páginas.

Información de la Solicitud

Propósito de la solicitud:	☒Nuevo	☐Renovación	☐Modificación/Enmienda

Sometido a TCEQ: Febrero 2024

Nombre del Cliente: GFL Environmental, Inc.

Nombre de la Instalación: Fort Bend Regional Landfill

CN: CN602656373	**RN:**102803913
Número de Permiso: Introduzca Número de 5 dígitos	**Número de Registro de Desechos Sólidos:** 96322

Dirección de la Instalación: 14115 DAVIS ESTATE RD, NEEDVILLE TX 77461 2705

Enlace Web a la Dirección Postal: https://www.google.com/maps/@29.3959741,-95.7252877,17z?entry=ttu

Información de la Instalación *(marque todas lo que correspondan)*

¿Cuál es el tipo principal de negocio?	☐Planta de manufactura química	☐Refinería de aceite	☒ Instalación de tratamiento, almacenamiento o eliminación
	☐Otro **Si es otro, introduzca la descripción:** Introduzca la descripción		
¿Qué produce la instalación?	☐Químicos	☐Combustibles / lubricantes	☒Sin productos
	☐Otro **Si es otro, introduzca la descripción:** Introduzca la descripción		

Información sobre la Gestión de Desechos *(marque todas las que correspondan)*

¿Qué tipos de desechos se gestionan?	☒Industrial no peligroso	☐Peligroso	
	☐Otro **Si es otro, introduzca la descripción:** Introduzca la descripción		
¿De dónde provienen los desechos?	☒Fuente externa	☐Fuente interna	
¿Cómo se gestionan los desechos?	☒Almacenar	☐Procesar / Tratar	☒Eliminación
	☐Otro **Si es otro, introduzca la descripción:** Introduzca la descripción		

¿Qué tipo de unidades gestionan los desechos?	☒ Activo ☐ Postcierre **Teclee y cuente:** Nueve (9) tanques
¿Qué sucede con los desechos gestionados en la instalación?	☐Transportados fuera del sitio ☒Eliminado en el sitio ☐Otro **Si es otro, introduzca la descripción:** Introduzca la descripción

Métodos de Control de la Contaminación *(marque todos los que correspondan)*			
¿Cómo evitará la instalación derrames, fugas y liberaciones?	☒Inspecciones de Rutina	☒Sistemas de revestimiento de ingeniería	☒Contención de derrames
	☒Manejo adecuado de desechos	☐Operaciones en edificios cerrados	☒Monitoreo de aguas subterráneas
	☐Otro **Si es otro, introduzca la descripción:** Introduzca la descripción		
¿Cómo limpiará la instalación los derrames, fugas y liberaciones?	☒Suministros de limpieza de derrames	☒Equipos de descontaminación	
	☐Otro **Si es otro, introduzca la descripción:** Introduzca la descripción		
¿Cómo evitará / minimizará la instalación las emisiones atmosféricas?	☐Sistemas de monitoreo / control de aire	☐Filtros / depuradores	☐Inspecciones de rutina
	☒Manejo adecuado de desechos	☐Operaciones en edificios cerrados	
	☐Otro **Si es otro, introduzca la descripción:** Introduzca la descripción		

Descripción de la Actualización (*solo para Modificaciones y Enmiendas de Clase 3)*

Liste y explique cualquier cambio que esta modificación o enmienda haría a las dos secciones anteriores: **Información de Gestión de Desechos** y **Métodos de Control de la Contaminación**.

Introduzca una descripción concisa

GSI Job No: 6731

INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENT – SECTION II

Attachment II.F Facility Road Map

LEGEND

- Well location
- Entrance gate location
- UIC Waste Management Area
- Public road
- Facility road
- Proposed alternate road and pad access gate

Note

Background Imagery: Fort Bend Landfill 2023 8-1.jpg.

Feet
0 400 800

Projected Coordinate System
Datum: NAD 1927
STP: Texas South Central, 4204 (ft)

GSI ENVIRONMENTAL

FACILITY ACCESS AND ROADS

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP
Needville, Texas

GSI Job No.	6731	Drawn By:	CDM
Issued:	20-Feb-2024	Chk'd By:	JSC
Map ID:	**004_01**	Appv'd By:	JMM

ATTACHMENT II.F

GSI Job No: 6731

INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENT – SECTION III

Attachment III.D Waste Analysis Plan

GSI Job No. 6731

ATTACHMENT III.D
WASTE ANALYSIS PLAN

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP, Needville, Texas

ATTACHMENT VII.A
WASTE ANALYSIS PLAN

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP, Needville, Texas

TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 Scope of WAP

This Waste Analysis Plan (WAP) describes how the Fort Bend Regional Landfill (FBRL) facility analyzes wastes to be managed in permitted nonhazardous waste management units, which will include tanks used for storage and processing of liquids prior to disposal via UIC-permitted deep injection wells. The plan addresses waste verification for wastes received from off-site sources, and characterization of wastes (i.e., landfill leachate) generated at FBRL.

This WAP has been prepared using the provisions of 40 CFR 264.13 (adopted by the Texas Commission on Environmental Quality (TCEQ) in 30 TAC 335.152(a)(1)) as a general guideline. As noted in Section 1.2 of this WAP, the FBRL is not authorized to accept, handle, and/or manage hazardous wastes, but as discussed with the TCEQ, FBRL will use provisions in 40 CFR 264 as a general guide. The WAP is employed to obtain information needed to treat, store, or dispose of wastes in accordance with applicable state and federal requirements and permit provisions. The WAP also addresses important safety considerations. Certain wastes when mixed with others may produce hazardous situations through heat generation, fires, explosions, or release of toxic substances. Proper waste analysis, characterization, and handling allow for safe waste management and facility operations.

1.2 Facility Overview

Currently, FBRL is a RCRA Subtitle D solid waste landfill that accepts municipal solid waste, construction and demolition debris, non-hazardous industrial waste, and special wastes. Special wastes are required to be profiled and reviewed by FBRL personnel or its designee prior to disposal in accordance with the facility's TCEQ-approved Special Waste Acceptance Plan. In addition, the facility has TCEQ approval to solidify liquid waste and sludges.

As noted previously, FBRL is permitting two Class I UIC Injection Wells, and FBRL will offer storage and disposal services to generators of nonhazardous wastewater via the deep injection wells, as well as the leachate that is generated by FRBL from operation of the on-site municipal solid waste landfill. It is estimated that at full operation, the majority of the wastes managed in the pre-injection unit tanks and disposed via the UIC Class I injection wells will be off-site generated waste (i.e., commercial), while the remainder will come from on-site wastes (i.e., non-commercial). These waste streams are non-continuous, and the maximum volume that can be injected annually is 353,203,200 gallons.

1.3 Waste Stream Summary

Table III.A provides a list of the nonhazardous wastes managed and disposed on-site via the UIC Class I injection wells, and a summary is provided below:

- Leachate from FBRL facility;
- Leachate from other landfills;
- Wash water;

- Tank washouts;
- Contaminated stormwater from the FRBL facility;
- Contaminated stormwater;
- Other aqueous waste;
- Scrubber water;
- Other inorganic liquids; and
- Nonhazardous brine.

Note that the volume of individual waste streams will vary annually based on industry trends. The waste streams listed above will be comingled and neutralized in the UIC pre-injection unit (i.e., Tanks TK-1300, TK-1310, TK-1320, TK-1330, TK-1340, TK-1350, TK-1360, TK-1370, and TK-1390), including elementary neutralization prior to injection in the Class I Injection Wells. Table III.B provides additional details on the liquid wastes that will be managed in the pre-injection unit, including the TCEQ waste classification for each industrial waste stream.

FBRL is **not** authorized to manage the following wastes:

- *Hazardous wastes*, including characteristically hazardous wastes (D-code wastes per 40 CFR 261.21, 261.22, 261.23, and 261.24); hazardous wastes from non-specific sources (F-code wastes per 40 CFR 261.31); hazardous wastes from specific sources (K-code wastes per 40 CFR 261.32); and discarded and off-specification commercial chemical products (P- and U-code wastes per 40 CFR 261.33);
- *Polychlorinated biphenyls (PCBs) ≥50 ppm*, as defined by the EPA in regulations issued pursuant to the Toxic Substances Control Act (40 CFR Part 761), unless FBRL is compliant with the federal requirements for PCB storage specified in 40 CFR Part 761;
- *Radioactive wastes,* unless FBRL becomes authorized to store, process and dispose of radioactive wastes in compliance with specific licensing and permitting requirements under Chapter 401 of the Texas Health and Safety Code and any other rules of state or federal authorities;
- *Explosive material,* as defined by the Department of Transportation (DOT) under 49 CFR Part 173;
- *Special Waste* from Health Care Related Facilities subject to 25 TAC Chapter 1 or 30 TAC Chapter 330.

2.0 WASTE STREAM CHEMICAL AND PHYSICAL CHARACTERISTICS

Waste streams accepted at the facility will consist of liquids generated from various non-industrial and industrial facilities, and only include a blend of Class I and Class II nonhazardous wastes. The waste acceptance procedures to ensure that only nonhazardous wastes are received are described in Section 3.0.

An example analytical of the onsite leachate waste stream (Waste No. 1 on Table III.A and III.B) is included in Appendix III.D.1. Summarized waste profiles of the typical offsite waste streams from waste streams 3 through 10 listed on Tables III.A. and III.B are presented in Appendix III.D.2. The examples presented in Appendices III.D.1 and III.D.2 represent the physical and chemical characteristics of each type of liquid waste stream to be accepted at the facility.

The waste streams to be accepted at the facility will include materials with a pH range greater than or equal to 2.5 and less than 12.5. The accepted waste streams will have a specific gravity range greater than or equal to 0.9 and less than or equal to 1.50 referenced to 68˚F and 1 atmosphere. The waste properties presented in Appendices III.D.1 and III.D.2 include samples of materials which exemplify the waste streams identified in Tables III.A and III.B.

3.0 OFF-SITE GENERATED WASTES

3.1 Waste Evaluation (Profiling) for New Waste Streams

The purpose of a waste evaluation is to characterize non-hazardous waste liquids generated off-site that are designated for comingling and injection into the Class I injection wells. Characterization of the off-site wastes will determine whether a waste received from off-site is acceptable (i.e., allowable under the permit) and to ensure safe and proper handling practices are used during storage and processing. This waste evaluation (profiling) process applies to new waste streams and is summarized in Figure III.D.1.

3.1.1 Pre-Approval Process

It will be the responsibility of the waste generator to characterize each waste stream to be disposed in the proposed Class I injection wells. Each waste stream will need a completed profile (GFL Special Waste Profile in Appendix III.D.3) and required documents for acceptance. All off-site waste will have a hazardous waste determination completed that may include analytical test results, safety data sheets (SDS), generator knowledge, etc. The generator will be required to demonstrate the absence of listed or characteristic hazardous waste as part of the approval process.

A transmittal and waste profile sheet will accompany each off-site waste stream shipment. An example of a typical form is presented at the end of this section. The form (or suitable equivalent) will be required for each incoming load. Additionally, the waste fluid generator or FBRL will perform a compatibility evaluation of the injectate with the disposal formation and confining zone strata. The evaluation must be suited to the physical and chemical characteristics of the injectate and geology, geochemistry, and operational conditions of the Class I injection wells.

It is the responsibility of the waste generator to notify FBRL of any waste stream changes and to furnish the appropriate revised waste characteristics report. Waste streams will be characterized initially, annually thereafter through recertification, and upon any notification of a waste stream change.

3.1.2 FBRL Review

FBRL reviews the waste profile form and any supporting documents (e.g., laboratory analyses, safety data sheets, etc.) for technical adequacy. The review addresses the following: i) environmental/permit compliance; ii) treatability/handling; and iii) health and safety issues. Errors or omissions discovered during the review process are resolved through contact with the customer by phone, letter, or other means. Waste profiles are re-evaluated whenever the generator has notified FBRL of a change in the waste or FBRL has reason to think that the waste has changed.

3.1.3 Off-Site Waste Fluid Arrivals

After the waste profile and supporting information is accepted by FBRL, the customer may schedule shipments. All unloaded waste fluids will be placed initially in a pre-mix settling tank and/or filtered so suspended solids can be removed before disposal. The pre-mix batch tanks will also be used to treat any incoming waste fluids to meet permit requirements.

3.1.4 Waste Fluids Unloading and Volume Monitoring

A trained operator will be present during offloading of waste fluids. A waste fluid logbook will be maintained documenting incoming waste stream volumes. At a minimum, waste fluid logbook entries will include:

- Operator name,
- Date/time,
- Generator identification,
- Approximate volume, and
- Approved waste fluid source from Table III.A.

Additionally, injection pressure, annulus pressure, flow rate, and total cumulative volumes will be continuously monitored and provided to the TCEQ per applicable permit requirements. Records of the daily on-site generated leachate and daily volume accepted from offsite sources will be kept in the waste fluid logbook and a total monthly volume of off-site waste fluid will be calculated based on records maintained in the offsite logbook and reported in the monthly well reports to the TCEQ. As part of the FBRL waste acceptance and verification procedure, (a.k.a., Fingerprinting) each load that arrives at the FBRL facility will be checked for:

- Visual/ physical examination for color, odor, and presence of foreign material such as oil,
- Conductivity,
- pH,
- Fluid density/ fluid temperature, and
- Additional waste specific parameters, as necessary.

Waste fluids are to be approved in accordance with this Waste Analysis Plan to verify the non-hazardous nature of the waste fluid prior to acceptance. Prior to commingling with other waste fluids for disposal into the proposed well (additional Fingerprinting), the following analysis will be performed:

- Conductivity,
- pH,
- Total suspended solids,
- Total dissolved solids,
- Specific gravity, and
- Presence of oil and grease.

4.0 WASTE SAMPLING AND ANALYSIS

4.1 Sampling Methods

FBRL or contracted TCEQ NELAC-certified analytical laboratory personnel will collect necessary waste stream samples on a daily or annual frequency, as required. All sampling procedures will be conducted at the direction of the selected, certified analytical laboratory, and in accordance with acceptable USEPA procedures. FBRL will document the sampler's name, sampling point, waste source identification number, and date sampled, and this documentation will be included on the chain-of-custody paperwork. Samples will be collected using the grab or sample composite method. Table III.C summarizes the analytical method for typical parameters to be included in the waste fluid sampling.

4.2 Analytical/Testing Procedures and Parameters

4.2.1 Laboratory Guidelines

Laboratory analyses may be used to aid in waste verification and/or characterization and determine appropriate management methods. The analyses follow guidelines, including quality assurance/quality control (QA/QC) measures, from published method specifications such as:

- Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, USEPA Publication SW846, 1987, as revised;
- Standard Methods for the Evaluation of Wastes and Waste Water, 18th edition, 1992, as revised;
- Methods for Chemical Analysis of Water and Wastes, USEPA Publication 600/4-79-020, 1979;
- ASTM Standard Test Methods (e.g., Flash Point by Penske-Martens Closed Tester, American Society for Testing and Materials, Philadelphia);
- HAZCAT Chemical Identification System; or
- Other: Alternate standard methods generally accepted by the industry may also be employed for laboratory analyses.

4.2.2 QA/QC

QA is the process for ensuring that all analytical data is technically sound, statistically valid, and properly documented. QC procedures are the tools employed to measure the degree to which quality assurance objectives are fulfilled.

General Sampling and Analytical Information

The sampling protocol will be followed by properly trained personnel conducting the sample collection and analysis. Approved sample preservation techniques from 40 CFR 136: Analysis of Pollutants will be followed as appropriate. These will include preservation in plastic or glass sample containers provided by the laboratory and placement in a sample container for shipment to the laboratory. FBRL will require all waste samples be analyzed by a TCEQ approved laboratory.

Standard chain of custody protocols will be followed for sample collection, transport, and analysis. Below are summaries of the minimum sampling and analysis protocols which will be followed for each characterization parameter.

Labeling

1. Sample ID including code or name, waste source ID# (if previously approved), date and time.
2. Name and company of sample collector.
3. Sample collection method (e.g., grab or composite).

Reporting

1. Sample preservation technique, as appropriate.
2. Analytical method for parameter detection/quantification.
3. Analytical method accuracy and quantification limits.
4. Field documentation of sampling.

Sampling Controls

The following are QA/QC parameters which will be followed to ensure the adequacy of the sampling and analytical techniques for onsite sampling and analysis described in this plan.

Equipment Blanks

If possible, samples will be obtained directly from the sample tap and not be transferred to any secondary container or device before being stored in the sample container to be shipped to the laboratory. In this case, no equipment cleaning blanks will be required. If not, equipment blanks will be taken as deemed appropriate by FBRL for the purpose of detecting potential cross contamination due to improper decontamination of sampling equipment. After sampling, the sampling equipment will be decontaminated according to the sampling plan protocol. The sampling device will then be rinsed with deionized water and the rinsate collected in a sample container for transport to the laboratory for analysis of, at a minimum, the same parameters chosen in the sampling plan above.

Trip Blanks

In the case of suspect analysis from any laboratory, trip blanks will be used and will be sample containers filled with Type II reagent grade water at the laboratory, sealed at the laboratory, which accompany the sample containers used throughout the sampling event. The sample containers shall be handled in the same manner as the samples. The trip blank(s) will be sent to the laboratory for analysis of, at a minimum, the same parameters chosen in the sampling plan above. A minimum of one trip blank per sampling event will be used, if trip blanks are utilized.

Sample Duplicates

On advance written notification by the TCEQ, duplicate samples will be taken to assess the QA/QC of the laboratory conducting the analysis. Such samples will be drawn from the same site from which primary samples are taken. Any duplicate samples will be split from the original sample in a matter to emphasize sample representativeness. The duplicate will be labeled with a sample number which will not conflict with the other samples but will be discernible to the laboratory as a duplicate sample.

Sample Chain-of Custody Protocol

Sample chain-of-custody will be always followed during the sampling and subsequent analysis. Chain-of-custody will be used to document the handling and control necessary to identify and trace a sample from collection to final analytical results.

Analytical Controls

Equipment Calibration

FBRL will require that selected laboratories maintain QA/QC data regarding the frequency and type of instrument calibration performed at the laboratory and in the field. Any calibration of thermometers, gauges, chromatographs. Spectrometers and other meters will be conducted according to appropriate instrument manufacturer specifications and manufacturer recommended frequencies or as dictated by applicable laboratory Q/A plans.

Data Reduction

The process of transcription of the raw data into the reportable units will be conducted by the laboratory in accordance with that laboratory's Q/A plan. Data reduction utilized in the analysis and reporting process will be presented in the reports to the TCEQ for each sampling event and parameter tested by a specific laboratory used at the time. Data are typically recorded on handwritten sheets which include identification data, sample data and all data required for calculations or on computer print-outs accompanied by operator notes and summaries.

Data Verification

Data verification will be conducted after each sampling event by assigned laboratory personnel review of chain-of-custody forms, equipment calibration records and data completeness. Spot checks of raw data versus reported data will be performed to review math accuracy, significant numbers and reporting units. In addition, certified laboratory standard quality assurance/quality control checklists will be utilized for individual test methods such as blanks, standards, and comparisons of internal lab test duplicate results. Problems with any of these items will be indicated in the report to the agency.

Internal Quality Control

Certified quality control samples will be run periodically with sample batches obtained from appropriate commercial sources, or the TCEQ. Internal quality control will be addressed by disclosure of the laboratory's use of blanks, blind standards, matrix spikes and matrix spike duplicates, preparation of reagents, and laboratory duplicate or replicate analyses.

Corrective actions will be implemented by laboratories if the analytical or sampling method does not achieve plan objectives. Actions may entail re-sampling the waste stream and/or re-analyzing the fluid for a particular parameter, re-calibrating the analytical device, or other appropriate actions. Action levels will be taken in accordance with USEPA SW-846: Hazardous Waste Test Methods or other approved TCEQ methods.

5.0 RECORD KEEPING

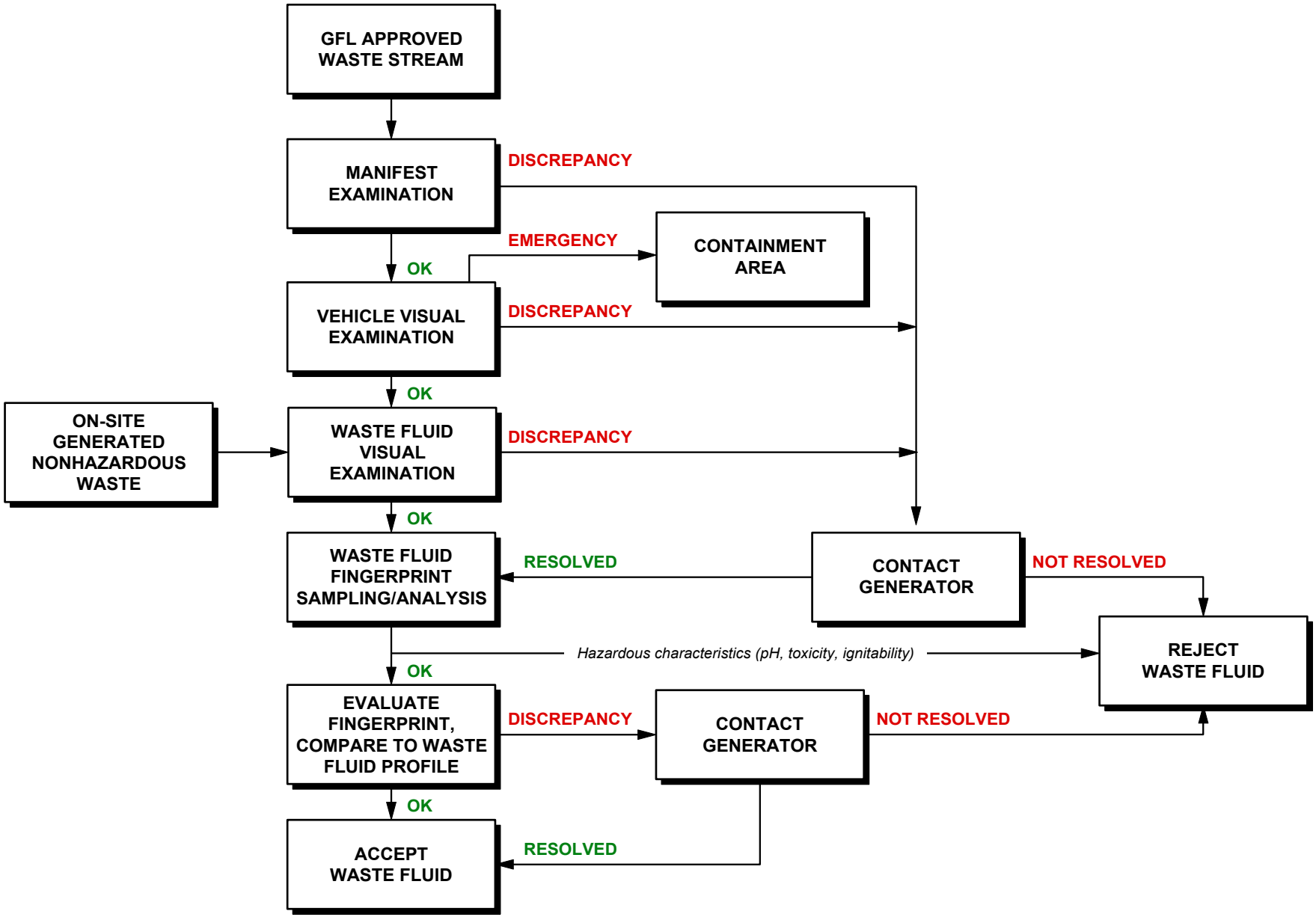
FBRL maintains documentation such as waste profiles and manifests in the facility operating record. This documentation may be maintained in an electronic format. FBRL also maintains an electronic database which tracks waste movement in the facility. All records received from off-site generated waste are kept in accordance with the applicable regulations.

ATTACHMENT III.D: WASTE ANALYSIS PLAN

Fort Bend Regional Landfill, LP

Needville, Texas

FIGURES



GSI ENVIRONMENTAL
Texas Registration Number: F-1198

GSI Job No.	6731	Drawn By:	CDM
Map ID:	002_05	Chk'd By:	JMM
Issued:	20-Feb-2024	Aprv'd By:	JMM
Scale:	Not Shown	**FIGURE III.D.1**	

FLOW CHART OF WASTE FLUID ACCEPTANCE AND VERIFICATION PROCEDURES

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, Needville, Texas

ATTACHMENT III.D: WASTE ANALYSIS PLAN

Fort Bend Regional Landfill, LP

Needville, Texas

APPENDICES

Appendix III.D.1 Analytical Laboratory Report of On-Site Landfill Leachate

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

REVIEWED
Kathryn Horton , 05/19/22, 6:57:09 AM

May 17, 2022

Mark Meadows
WCA
14115 Davis Estate Road
Needville, TX 77461

Profile: 0311213297BH
EQAI ID: 652549
2022 Renewal Submittal

Work Order: **HS22040998**

Laboratory Results for: **FBRFL Leachate**

Dear Mark Meadows,

ALS Environmental received 2 sample(s) on Apr 20, 2022 for the analysis presented in the following report.

This is a REVISED REPORT. Please see the Case Narrative for discussion concerning this revision.

Regards,

Generated By: RAGENP.GIGA

Ragen Giga
Project Manager

Client: WCA
Project: FBRFL Leachate
Work Order: HS22040998

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS22040998-01	Leachate-489949	Water		20-Apr-2022 11:35	20-Apr-2022 15:43	☐
HS22040998-02	Trip Blank	Water	CG-020822-730	20-Apr-2022 00:00	20-Apr-2022 15:43	☑

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA **CASE NARRATIVE**
Project: FBRFL Leachate
Work Order: HS22040998

Work Order Comments

• Report Revised at the Client s request, updated select list, report to include "pyridine"

Work Order Comments

• Sample received outside method holding time for pH. pH is an immediate test. Sample results are flagged with an "H" qualifier.

The temperature at the time of pH is reported. Please note that all pH results are already normalized to a temperature of 25 °C.

Work Order Comments

• All bottles have varied times.
Logged in with earliest.
Ammonia pH >2 (7).
Pres`d with 1ml H2SO4 (Lot 310060245-17)
4/20/2022 @ 16:10. Final pH (6)
Trip Blank logged in on hold

ECD Organics by Method SW8081

Batch ID: 177913

Sample ID: LCS-177913

• The multi-response compounds toxaphene and chlordane were not included in the spiking solution for the LCS/LCSD.

Sample ID: MBLK-177913

• Insufficient sample received to perform MS/MSD. LCS/LCSD provided as batch quality control.

ECD Organics by Method SW8151

Batch ID: 177912

Sample ID: MBLK-177912

• Insufficient sample received to perform MS/MSD. LCS/LCSD provided as batch quality control.

GCMS Semivolatiles by Method SW8270

Batch ID: 177915

Sample ID: Leachate-489949 (HS22040998-01)

• One or more base/neutral surrogate recoveries were below the lower control limits. The base/neutral sample results may be biased low.

GCMS Volatiles by Method SW8260

Batch ID: R407112

Sample ID: HS22040980-02MS

• MS and MSD are for an unrelated sample

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA **CASE NARRATIVE**
Project: FBRFL Leachate
Work Order: HS22040998

Metals by Method SW7470A

Batch ID: 177940

Sample ID: HS22040830-01MS

• MS and MSD are for an unrelated sample

Metals by Method SW1311/6020

Batch ID: 177991

Sample ID: Leachate-489949 (HS22040998-01)

• Sample ran at a 2X dilution due to sample matrix.

WetChemistry by Method SM4500H+ B

Batch ID: R407189

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SW7.3.3.2

Batch ID: R407166

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SW7.3.4.2

Batch ID: R407168

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SW1010

Batch ID: R407060

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SM4500 NH3-B-F

Batch ID: 178013

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
Sample ID: Leachate-489949
Collection Date: 20-Apr-2022 11:35

ANALYTICAL REPORT
WorkOrder:HS22040998
Lab ID:HS22040998-01
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C	**Method:SW8260**						Analyst: AKP
1,1,1-Trichloroethane	< 20		20	100	ug/L	100	21-Apr-2022 17:02
1,1,2,2-Tetrachloroethane	< 50		50	100	ug/L	100	21-Apr-2022 17:02
1,1,2-Trichlor-1,2,2-trifluoroethane	< 50		50	100	ug/L	100	21-Apr-2022 17:02
1,1,2-Trichloroethane	< 30		30	100	ug/L	100	21-Apr-2022 17:02
1,1-Dichloroethane	< 20		20	100	ug/L	100	21-Apr-2022 17:02
1,1-Dichloroethene	< 20		20	100	ug/L	100	21-Apr-2022 17:02
1,2,4-Trichlorobenzene	< 50		50	100	ug/L	100	21-Apr-2022 17:02
1,2-Dibromo-3-chloropropane	< 100		100	100	ug/L	100	21-Apr-2022 17:02
1,2-Dibromoethane	< 20		20	100	ug/L	100	21-Apr-2022 17:02
1,2-Dichlorobenzene	< 50		50	100	ug/L	100	21-Apr-2022 17:02
1,2-Dichloroethane	< 20		20	100	ug/L	100	21-Apr-2022 17:02
1,2-Dichloropropane	< 50		50	100	ug/L	100	21-Apr-2022 17:02
1,3-Dichlorobenzene	< 40		40	100	ug/L	100	21-Apr-2022 17:02
1,4-Dichlorobenzene	< 40		40	100	ug/L	100	21-Apr-2022 17:02
2-Butanone	< 50		50	200	ug/L	100	21-Apr-2022 17:02
2-Hexanone	< 100		100	200	ug/L	100	21-Apr-2022 17:02
4-Methyl-2-pentanone	< 70		70	200	ug/L	100	21-Apr-2022 17:02
Acetone	< 200		200	200	ug/L	100	21-Apr-2022 17:02
Benzene	< 20		20	100	ug/L	100	21-Apr-2022 17:02
Bromodichloromethane	< 20		20	100	ug/L	100	21-Apr-2022 17:02
Bromoform	< 40		40	100	ug/L	100	21-Apr-2022 17:02
Bromomethane	< 40		40	100	ug/L	100	21-Apr-2022 17:02
Carbon disulfide	< 60		60	200	ug/L	100	21-Apr-2022 17:02
Carbon tetrachloride	< 50		50	100	ug/L	100	21-Apr-2022 17:02
Chlorobenzene	< 30		30	100	ug/L	100	21-Apr-2022 17:02
Chloroethane	< 30		30	100	ug/L	100	21-Apr-2022 17:02
Chloroform	< 20		20	100	ug/L	100	21-Apr-2022 17:02
Chloromethane	< 20		20	100	ug/L	100	21-Apr-2022 17:02
cis-1,2-Dichloroethene	< 20		20	100	ug/L	100	21-Apr-2022 17:02
cis-1,3-Dichloropropene	< 10		10	100	ug/L	100	21-Apr-2022 17:02
Cyclohexane	< 30	n	30	100	ug/L	100	21-Apr-2022 17:02
Dibromochloromethane	< 30		30	100	ug/L	100	21-Apr-2022 17:02
Dichlorodifluoromethane	< 30		30	100	ug/L	100	21-Apr-2022 17:02
Ethylbenzene	< 30		30	100	ug/L	100	21-Apr-2022 17:02
Isopropylbenzene	< 30		30	100	ug/L	100	21-Apr-2022 17:02
m,p-Xylene	< 50		50	200	ug/L	100	21-Apr-2022 17:02
Methyl acetate	< 100		100	100	ug/L	100	21-Apr-2022 17:02
Methyl tert-butyl ether	< 20		20	100	ug/L	100	21-Apr-2022 17:02
Methylcyclohexane	< 30		30	100	ug/L	100	21-Apr-2022 17:02

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

PRELIMINARY

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
Sample ID: Leachate-489949
Collection Date: 20-Apr-2022 11:35

ANALYTICAL REPORT
WorkOrder:HS22040998
Lab ID:HS22040998-01
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C	**Method:SW8260**						Analyst: AKP
Methylene chloride	< 100		100	200	ug/L	100	21-Apr-2022 17:02
o-Xylene	< 30		30	100	ug/L	100	21-Apr-2022 17:02
Styrene	< 30		30	100	ug/L	100	21-Apr-2022 17:02
Tetrachloroethene	< 30		30	100	ug/L	100	21-Apr-2022 17:02
Toluene	< 20		20	100	ug/L	100	21-Apr-2022 17:02
trans-1,2-Dichloroethene	< 20		20	100	ug/L	100	21-Apr-2022 17:02
trans-1,3-Dichloropropene	< 20		20	100	ug/L	100	21-Apr-2022 17:02
Trichloroethene	< 20		20	100	ug/L	100	21-Apr-2022 17:02
Trichlorofluoromethane	< 30		30	100	ug/L	100	21-Apr-2022 17:02
Vinyl chloride	< 20		20	100	ug/L	100	21-Apr-2022 17:02
Xylenes, Total	< 30		30	100	ug/L	100	21-Apr-2022 17:02
Surr: 1,2-Dichloroethane-d4	*87.5*			*70-126*	*%REC*	*100*	*21-Apr-2022 17:02*
Surr: 4-Bromofluorobenzene	*90.8*			*77-113*	*%REC*	*100*	*21-Apr-2022 17:02*
Surr: Dibromofluoromethane	*91.8*			*77-123*	*%REC*	*100*	*21-Apr-2022 17:02*
Surr: Toluene-d8	*102*			*82-127*	*%REC*	*100*	*21-Apr-2022 17:02*

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Revision: 1

PRELIMINARY

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
Sample ID: Leachate-489949
Collection Date: 20-Apr-2022 11:35

ANALYTICAL REPORT
WorkOrder:HS22040998
Lab ID:HS22040998-01
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW-LEVEL SEMIVOLATILES BY 8270D	**Method:SW8270**				Prep:SW3510 / 21-Apr-2022		Analyst: EM
1,1´-Biphenyl	< 0.024		0.024	0.20	ug/L	1	27-Apr-2022 12:42
2,4,5-Trichlorophenol	< 0.057		0.057	0.20	ug/L	1	27-Apr-2022 12:42
2,4,6-Trichlorophenol	< 0.048		0.048	0.20	ug/L	1	27-Apr-2022 12:42
2,4-Dichlorophenol	< 0.043		0.043	0.20	ug/L	1	27-Apr-2022 12:42
2,4-Dimethylphenol	< 0.040		0.040	0.20	ug/L	1	27-Apr-2022 12:42
2,4-Dinitrophenol	< 0.10		0.10	1.0	ug/L	1	27-Apr-2022 12:42
2,4-Dinitrotoluene	**2.2**		**0.058**	**0.20**	**ug/L**	1	27-Apr-2022 12:42
2,6-Dinitrotoluene	< 0.042		0.042	0.20	ug/L	1	27-Apr-2022 12:42
2-Chloronaphthalene	< 0.021		0.021	0.20	ug/L	1	27-Apr-2022 12:42
2-Chlorophenol	< 0.036		0.036	0.20	ug/L	1	27-Apr-2022 12:42
2-Methylnaphthalene	< 0.019		0.019	0.10	ug/L	1	27-Apr-2022 12:42
2-Methylphenol	< 0.045		0.045	0.20	ug/L	1	27-Apr-2022 12:42
2-Nitroaniline	< 0.041		0.041	0.20	ug/L	1	27-Apr-2022 12:42
2-Nitrophenol	< 0.034		0.034	0.20	ug/L	1	27-Apr-2022 12:42
3&4-Methylphenol	< 0.036		0.036	0.20	ug/L	1	27-Apr-2022 12:42
3,3´-Dichlorobenzidine	< 0.044		0.044	0.20	ug/L	1	27-Apr-2022 12:42
3-Nitroaniline	< 0.049		0.049	0.20	ug/L	1	27-Apr-2022 12:42
4,6-Dinitro-2-methylphenol	< 0.020		0.020	0.20	ug/L	1	27-Apr-2022 12:42
4-Bromophenyl phenyl ether	< 0.051		0.051	0.20	ug/L	1	27-Apr-2022 12:42
4-Chloro-3-methylphenol	< 0.032		0.032	0.20	ug/L	1	27-Apr-2022 12:42
4-Chloroaniline	**5.1**		**0.039**	**0.20**	**ug/L**	1	27-Apr-2022 12:42
4-Chlorophenyl phenyl ether	< 0.044		0.044	0.20	ug/L	1	27-Apr-2022 12:42
4-Nitroaniline	< 0.035		0.035	0.20	ug/L	1	27-Apr-2022 12:42
4-Nitrophenol	< 0.047		0.047	1.0	ug/L	1	27-Apr-2022 12:42
Acenaphthene	< 0.027		0.027	0.10	ug/L	1	27-Apr-2022 12:42
Acenaphthylene	< 0.015		0.015	0.10	ug/L	1	27-Apr-2022 12:42
Acetophenone	**3.4**		**0.024**	**0.20**	**ug/L**	1	27-Apr-2022 12:42
Anthracene	< 0.014		0.014	0.10	ug/L	1	27-Apr-2022 12:42
Atrazine	< 0.033		0.033	0.20	ug/L	1	27-Apr-2022 12:42
Benz(a)anthracene	< 0.050		0.050	0.10	ug/L	1	27-Apr-2022 12:42
Benzaldehyde	< 0.030	n	0.030	0.20	ug/L	1	27-Apr-2022 12:42
Benzo(a)pyrene	< 0.020		0.020	0.10	ug/L	1	27-Apr-2022 12:42
Benzo(b)fluoranthene	< 0.023		0.023	0.10	ug/L	1	27-Apr-2022 12:42
Benzo(g,h,i)perylene	< 0.014		0.014	0.10	ug/L	1	27-Apr-2022 12:42
Benzo(k)fluoranthene	< 0.019		0.019	0.10	ug/L	1	27-Apr-2022 12:42
Bis(2-chloroethoxy)methane	< 0.030		0.030	0.20	ug/L	1	27-Apr-2022 12:42
Bis(2-chloroethyl)ether	**1.8**		**0.026**	**0.20**	**ug/L**	1	27-Apr-2022 12:42
Bis(2-chloroisopropyl)ether	< 0.070		0.070	0.20	ug/L	1	27-Apr-2022 12:42
Bis(2-ethylhexyl)phthalate	**3.2**		**0.037**	**0.20**	**ug/L**	1	27-Apr-2022 12:42

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

PRELIMINARY

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
Sample ID: Leachate-489949
Collection Date: 20-Apr-2022 11:35

ANALYTICAL REPORT
WorkOrder:HS22040998
Lab ID:HS22040998-01
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW-LEVEL SEMIVOLATILES BY 8270D	**Method:SW8270**				Prep:SW3510 / 21-Apr-2022		Analyst: EM
Butyl benzyl phthalate	< 0.019		0.019	0.20	ug/L	1	27-Apr-2022 12:42
Caprolactam	< 0.045		0.045	0.20	ug/L	1	27-Apr-2022 12:42
Carbazole	< 0.025		0.025	0.20	ug/L	1	27-Apr-2022 12:42
Chrysene	< 0.021		0.021	0.10	ug/L	1	27-Apr-2022 12:42
Di-n-butyl phthalate	< 0.020		0.020	0.20	ug/L	1	27-Apr-2022 12:42
Di-n-octyl phthalate	< 0.020		0.020	0.20	ug/L	1	27-Apr-2022 12:42
Dibenz(a,h)anthracene	< 0.024		0.024	0.10	ug/L	1	27-Apr-2022 12:42
Dibenzofuran	< 0.020		0.020	0.10	ug/L	1	27-Apr-2022 12:42
Diethyl phthalate	< 0.030		0.030	0.20	ug/L	1	27-Apr-2022 12:42
Dimethyl phthalate	< 0.041		0.041	0.20	ug/L	1	27-Apr-2022 12:42
Fluoranthene	**0.62**		**0.010**	**0.10**	**ug/L**	1	27-Apr-2022 12:42
Fluorene	< 0.030		0.030	0.10	ug/L	1	27-Apr-2022 12:42
Hexachlorobenzene	< 0.044		0.044	0.20	ug/L	1	27-Apr-2022 12:42
Hexachlorobutadiene	< 0.030		0.030	0.20	ug/L	1	27-Apr-2022 12:42
Hexachlorocyclopentadiene	< 0.030		0.030	0.20	ug/L	1	27-Apr-2022 12:42
Hexachloroethane	< 0.059		0.059	0.20	ug/L	1	27-Apr-2022 12:42
Indeno(1,2,3-cd)pyrene	< 0.022		0.022	0.10	ug/L	1	27-Apr-2022 12:42
Isophorone	< 0.025		0.025	0.20	ug/L	1	27-Apr-2022 12:42
N-Nitrosodi-n-propylamine	**0.66**		**0.032**	**0.20**	**ug/L**	1	27-Apr-2022 12:42
N-Nitrosodiphenylamine	< 0.025		0.025	0.20	ug/L	1	27-Apr-2022 12:42
Naphthalene	< 0.020		0.020	0.10	ug/L	1	27-Apr-2022 12:42
Nitrobenzene	< 0.024		0.024	0.20	ug/L	1	27-Apr-2022 12:42
Pentachlorophenol	< 0.079		0.079	0.20	ug/L	1	27-Apr-2022 12:42
Phenanthrene	**0.38**		**0.021**	**0.10**	**ug/L**	1	27-Apr-2022 12:42
Phenol	< 0.035		0.035	0.20	ug/L	1	27-Apr-2022 12:42
Pyrene	**0.35**		**0.019**	**0.10**	**ug/L**	1	27-Apr-2022 12:42
Pyridine	< 0.030		0.030	1.0	ug/L	1	27-Apr-2022 12:42
Surr: 2,4,6-Tribromophenol	*94.7*			*34-129*	*%REC*	*1*	*27-Apr-2022 12:42*
Surr: 2-Fluorobiphenyl	*51.9*			*40-125*	*%REC*	*1*	*27-Apr-2022 12:42*
Surr: 2-Fluorophenol	*53.0*			*20-120*	*%REC*	*1*	*27-Apr-2022 12:42*
Surr: 4-Terphenyl-d14	*25.6*	*S*		*40-135*	*%REC*	*1*	*27-Apr-2022 12:42*
Surr: Nitrobenzene-d5	*46.6*			*41-120*	*%REC*	*1*	*27-Apr-2022 12:42*
Surr: Phenol-d6	*66.4*			*20-120*	*%REC*	*1*	*27-Apr-2022 12:42*

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

PRELIMINARY

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
Sample ID: Leachate-489949
Collection Date: 20-Apr-2022 11:35

ANALYTICAL REPORT
WorkOrder:HS22040998
Lab ID:HS22040998-01
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ORGANOCHLORINE PESTICIDES BY SW8081B	**Method:SW8081**				Prep:SW3510C / 21-Apr-2022		Analyst: JBA
4,4´-DDD	< 0.0000080		0.0000080	0.00010	mg/L	1	25-Apr-2022 17:17
4,4´-DDE	**0.0000060**	J	**0.0000040**	**0.00010**	**mg/L**	1	25-Apr-2022 17:17
4,4´-DDT	< 0.0000070		0.0000070	0.00010	mg/L	1	25-Apr-2022 17:17
Aldrin	< 0.000010		0.000010	0.000050	mg/L	1	25-Apr-2022 17:17
alpha-BHC	**0.000026**	J	**0.000010**	**0.000050**	**mg/L**	1	25-Apr-2022 17:17
alpha-Chlordane	< 0.000020		0.000020	0.000050	mg/L	1	25-Apr-2022 17:17
beta-BHC	< 0.000010		0.000010	0.000050	mg/L	1	25-Apr-2022 17:17
delta-BHC	< 0.000010		0.000010	0.000050	mg/L	1	25-Apr-2022 17:17
Dieldrin	**0.000020**	J	**0.000010**	**0.00010**	**mg/L**	1	25-Apr-2022 17:17
Endosulfan I	**0.00026**		**0.000010**	**0.000050**	**mg/L**	1	25-Apr-2022 17:17
Endosulfan II	< 0.000020		0.000020	0.00010	mg/L	1	25-Apr-2022 17:17
Endosulfan sulfate	< 0.000030		0.000030	0.00010	mg/L	1	25-Apr-2022 17:17
Endrin	< 0.000030		0.000030	0.00010	mg/L	1	25-Apr-2022 17:17
Endrin aldehyde	< 0.000030		0.000030	0.00010	mg/L	1	25-Apr-2022 17:17
Endrin ketone	< 0.000030		0.000030	0.00010	mg/L	1	25-Apr-2022 17:17
gamma-BHC	**0.000091**		**0.000010**	**0.000050**	**mg/L**	1	25-Apr-2022 17:17
gamma-Chlordane	**0.000041**	J	**0.000020**	**0.000050**	**mg/L**	1	25-Apr-2022 17:17
Heptachlor	**0.000034**	J	**0.000010**	**0.000050**	**mg/L**	1	25-Apr-2022 17:17
Heptachlor epoxide	< 0.000010		0.000010	0.000050	mg/L	1	25-Apr-2022 17:17
Methoxychlor	< 0.00015		0.00015	0.00050	mg/L	1	25-Apr-2022 17:17
Toxaphene	< 0.00019		0.00019	0.00050	mg/L	1	25-Apr-2022 17:17
Surr: Decachlorobiphenyl	*83.3*			*54.9-145*	*%REC*	*1*	*25-Apr-2022 17:17*
Surr: Tetrachloro-m-xylene	*94.8*			*51.5-142*	*%REC*	*1*	*25-Apr-2022 17:17*
CHLORINATED HERBICIDES BY SW8151A	**Method:SW8151**				Prep:SW8151 / 21-Apr-2022		Analyst: JBA
2,4,5-T	< 0.0000500		0.0000500	0.000200	mg/L	1	25-Apr-2022 20:20
2,4,5-TP (Silvex)	**0.0000597**	J	**0.0000500**	**0.000200**	**mg/L**	1	25-Apr-2022 20:20
2,4-D	**0.000210**	P	**0.0000600**	**0.000200**	**mg/L**	1	25-Apr-2022 20:20
2,4-DB	< 0.0000800		0.0000800	0.000400	mg/L	1	25-Apr-2022 20:20
Dalapon	< 0.0000700		0.0000700	0.000200	mg/L	1	25-Apr-2022 20:20
Dicamba	< 0.0000500		0.0000500	0.000200	mg/L	1	25-Apr-2022 20:20
Dichlorprop	**0.000390**	J	**0.0000800**	**0.000400**	**mg/L**	1	25-Apr-2022 20:20
Dinoseb	< 0.0000500		0.0000500	0.000300	mg/L	1	25-Apr-2022 20:20
MCPA	**0.0141**	J	**0.00810**	**0.0300**	**mg/L**	1	25-Apr-2022 20:20
MCPP	< 0.00810		0.00810	0.0300	mg/L	1	25-Apr-2022 20:20
Surr: DCAA	*115*			*50-130*	*%REC*	*1*	*25-Apr-2022 20:20*

Note: See Qualifiers Page for a list of qualifiers and their explanation.

PRELIMINARY

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
Sample ID: Leachate-489949
Collection Date: 20-Apr-2022 11:35

ANALYTICAL REPORT
WorkOrder:HS22040998
Lab ID:HS22040998-01
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP METALS BY SW6020A	**Method:SW1311/6020**			Leache:SW1311 / 20-Apr-2022	Prep:SW3010A / 22-Apr-2022		Analyst: JC
Arsenic	**0.509**		**0.00800**	**0.100**	**mg/L**	2	23-Apr-2022 12:04
Barium	**0.813**		**0.0380**	**0.400**	**mg/L**	2	23-Apr-2022 12:04
Cadmium	< 0.00400		0.00400	0.100	mg/L	2	23-Apr-2022 12:04
Chromium	**1.37**		**0.00800**	**0.100**	**mg/L**	2	23-Apr-2022 12:04
Lead	< 0.0120		0.0120	0.100	mg/L	2	23-Apr-2022 12:04
Selenium	< 0.0220		0.0220	0.100	mg/L	2	23-Apr-2022 12:04
Silver	< 0.00400		0.00400	0.100	mg/L	2	23-Apr-2022 12:04
TCLP MERCURY BY SW7470A	**Method:SW7470A**			Leache:SW1311 / 20-Apr-2022	Prep:SW7470A / 21-Apr-2022		Analyst: MSC
Mercury	< 0.000300		0.000300	0.00200	mg/L	1	21-Apr-2022 16:25
AMMONIA AS N BY SM4500 NH3-B-F-2011	**Method:SM4500 NH3-B-F**				Prep:M4500-NH3 B / 22-Apr-2022		Analyst: AP
Nitrogen, Ammonia (as N)	**5,100**		**250**	**500**	**mg/L**	1	22-Apr-2022 15:52
PH BY SM4500H+ B-2011	**Method:SM4500H+ B**						Analyst: JAC
pH	**8.58**	H	**0.100**	**0.100**	**pH Units**	1	22-Apr-2022 16:28
Temp Deg C @pH	**22.8**	H	**0**	**0**	**°C**	1	22-Apr-2022 16:28
FLASH POINT BY PENSKY-MARTENS SW1010A	**Method:SW1010**						Analyst: TH
Ignitability	> 212		70.0	70.0	°F	1	21-Apr-2022 13:00
REACTIVE CYANIDE	**Method:SW7.3.3.2**						Analyst: JHD
Reactive Cyanide	< 100	n	100	100	mg/Kg	1	22-Apr-2022 14:30
REACTIVE SULFIDE	**Method:SW7.3.4.2**						Analyst: JHD
Reactive Sulfide	< 100	n	100	100	mg/Kg	1	22-Apr-2022 15:10

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

PRELIMINARY

RIGHT SOLUTIONS | RIGHT PARTNER

Weight / Prep Log

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

Batch ID: 177902 **Start Date:** 20 Apr 2022 13:00 **End Date:** 20 Apr 2022 19:00
Method: TCLP MERCURY EXTRACTION BY SW1311 **Prep Code:** 1311LHG EXT

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22040998-01		100 (grams)	2000 (mL)	20	250 mL plastic, Neat

Batch ID: 177903 **Start Date:** 20 Apr 2022 13:00 **End Date:** 20 Apr 2022 19:00
Method: TCLP METALS EXTRACTION BY SW1311 **Prep Code:** 1311LM EXT

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22040998-01		100 (grams)	2000 (mL)	20	250 mL plastic, Neat

Batch ID: 177912 **Start Date:** 21 Apr 2022 06:30 **End Date:** 21 Apr 2022 15:00
Method: HERBICIDE AQ SEP FUN EXTRACT-SW8151 **Prep Code:** 3510_H

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22040998-01	1	1000 (mL)	10 (mL)	0.01	1-liter amber glass, Neat

Batch ID: 177913 **Start Date:** 21 Apr 2022 07:00 **End Date:** 21 Apr 2022 13:00
Method: PEST AQ SEP FUN EXTRACT-SW3510C **Prep Code:** 3510_P

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22040998-01	1	1000 (mL)	10 (mL)	0.01	1-liter amber glass, Neat

Batch ID: 177915 **Start Date:** 21 Apr 2022 10:32 **End Date:** 21 Apr 2022 14:00
Method: SV AQ SEP FUN EXTRACT-LOWLEV - 3510C **Prep Code:** 3510_B_LOW

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22040998-01	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat

Batch ID: 177940 **Start Date:** 21 Apr 2022 12:00 **End Date:** 21 Apr 2022 15:00
Method: MERCURY TCLP PREP BY SW7470A **Prep Code:** 1311_HGPR

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22040998-01		1 (mL)	10 (mL)	10	250 mL plastic, Neat

Batch ID: 177991 **Start Date:** 22 Apr 2022 14:00 **End Date:** 22 Apr 2022 18:00
Method: TCLP LEACHATE DIGESTION BY SW3010A **Prep Code:** 3010A_TCLP

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22040998-01		1 (mL)	10 (mL)	10	250 mL plastic, Neat

Batch ID: 178013 **Start Date:** 22 Apr 2022 10:50 **End Date:** 22 Apr 2022 12:05
Method: NITROGEN AMMONIA - WATER - PREP **Prep Code:** NIT_AMM_W_PR

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22040998-01		0.0025 (mL)	25 (mL)	10000	250 mL plastic, H2SO4 to pH <2

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 177912 (0)	**Test Name :** CHLORINATED HERBICIDES BY SW8151A				**Matrix:** Water	
HS22040998-01	Leachate-489949	20 Apr 2022 11:35		21 Apr 2022 10:30	25 Apr 2022 20:20	1
Batch ID: 177913 (0)	**Test Name :** ORGANOCHLORINE PESTICIDES BY SW8081B				**Matrix:** Water	
HS22040998-01	Leachate-489949	20 Apr 2022 11:35		21 Apr 2022 10:31	25 Apr 2022 17:17	1
Batch ID: 177915 (0)	**Test Name :** LOW-LEVEL SEMIVOLATILES BY 8270D				**Matrix:** Water	
HS22040998-01	Leachate-489949	20 Apr 2022 11:35		21 Apr 2022 10:32	27 Apr 2022 12:42	1
Batch ID: 177940 (0)	**Test Name :** TCLP MERCURY BY SW7470A				**Matrix:** Water	
HS22040998-01	Leachate-489949	20 Apr 2022 11:35	20 Apr 2022 19:00	21 Apr 2022 12:00	21 Apr 2022 16:25	1
Batch ID: 177991 (0)	**Test Name :** TCLP METALS BY SW6020A				**Matrix:** Water	
HS22040998-01	Leachate-489949	20 Apr 2022 11:35	20 Apr 2022 19:00	22 Apr 2022 14:00	23 Apr 2022 12:04	2
Batch ID: 178013 (0)	**Test Name :** AMMONIA AS N BY SM4500 NH3-B-F-2011				**Matrix:** Water	
HS22040998-01	Leachate-489949	20 Apr 2022 11:35		22 Apr 2022 10:50	22 Apr 2022 15:52	1
Batch ID: R407060 (0)	**Test Name :** FLASH POINT BY PENSKY-MARTENS SW1010A				**Matrix:** Water	
HS22040998-01	Leachate-489949	20 Apr 2022 11:35			21 Apr 2022 13:00	1
Batch ID: R407112 (0)	**Test Name :** LOW LEVEL VOLATILES BY SW8260C				**Matrix:** Water	
HS22040998-01	Leachate-489949	20 Apr 2022 11:35			21 Apr 2022 17:02	100
Batch ID: R407166 (0)	**Test Name :** REACTIVE CYANIDE				**Matrix:** Water	
HS22040998-01	Leachate-489949	20 Apr 2022 11:35			22 Apr 2022 14:30	1
Batch ID: R407168 (0)	**Test Name :** REACTIVE SULFIDE				**Matrix:** Water	
HS22040998-01	Leachate-489949	20 Apr 2022 11:35			22 Apr 2022 15:10	1
Batch ID: R407189 (0)	**Test Name :** PH BY SM4500H+ B-2011				**Matrix:** Water	
HS22040998-01	Leachate-489949	20 Apr 2022 11:35			22 Apr 2022 16:28	1

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177912 (0) **Instrument: ECD_15** **Method: CHLORINATED HERBICIDES BY SW8151A**

MBLK Sample ID: **MBLK-177912** Units: **ug/L** Analysis Date: **25-Apr-2022 20:55**
Client ID: Run ID: **ECD_15_407328** SeqNo: **6617812** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-T	< 0.0500	0.200								
2,4,5-TP (Silvex)	< 0.0500	0.200								
2,4-D	< 0.0600	0.200								
2,4-DB	< 0.0800	0.400								
Dalapon	< 0.0700	0.200								
Dicamba	< 0.0500	0.200								
Dichlorprop	< 0.0800	0.400								
Dinoseb	< 0.0500	0.300								
MCPA	< 8.10	30.0								
MCPP	< 8.10	30.0								
Surr: DCAA	*4.307*	*0*	*5*	*0*	*86.1*	*50 - 130*				

LCS Sample ID: **LCS-177912** Units: **ug/L** Analysis Date: **25-Apr-2022 20:38**
Client ID: Run ID: **ECD_15_407328** SeqNo: **6617811** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-T	2.688	0.200	2.5	0	108	44 - 122				
2,4,5-TP (Silvex)	2.87	0.200	2.5	0	115	49 - 126				
2,4-D	2.86	0.200	2.5	0	114	39 - 120				
2,4-DB	2.802	0.400	2.5	0	112	44 - 120				
Dalapon	2.545	0.200	2.5	0	102	40 - 120				
Dicamba	2.667	0.200	2.5	0	107	60 - 120				
Dichlorprop	2.847	0.400	2.5	0	114	68 - 122				
Dinoseb	2.726	0.300	2.5	0	109	28 - 115				
MCPA	232.5	30.0	250	0	93.0	62 - 144				
MCPP	309.3	30.0	250	0	124	60 - 133				
Surr: DCAA	*5.077*	*0*	*5*	*0*	*102*	*50 - 130*				

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177912 (0) **Instrument: ECD_15** **Method: CHLORINATED HERBICIDES BY SW8151A**

LCSD Sample ID: **LCSD-177912** Units: **ug/L** Analysis Date: **25-Apr-2022 21:13**
Client ID: Run ID: **ECD_15_407328** SeqNo: **6617813** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
2,4,5-T	2.934	0.200	2.5	0	117	44 - 122	2.688	8.73	30	
2,4,5-TP (Silvex)	2.85	0.200	2.5	0	114	49 - 126	2.87	0.703	30	
2,4-D	2.759	0.200	2.5	0	110	39 - 120	2.86	3.59	30	
2,4-DB	2.888	0.400	2.5	0	116	44 - 120	2.802	3.03	30	
Dalapon	2.737	0.200	2.5	0	109	40 - 120	2.545	7.26	30	
Dicamba	2.636	0.200	2.5	0	105	60 - 120	2.667	1.16	30	
Dichlorprop	2.826	0.400	2.5	0	113	68 - 122	2.847	0.751	30	
Dinoseb	2.727	0.300	2.5	0	109	28 - 115	2.726	0.0466	30	
MCPA	219	30.0	250	0	87.6	62 - 144	232.5	5.99	30	
MCPP	315.4	30.0	250	0	126	60 - 133	309.3	1.94	30	
Surr: DCAA	*4.978*	*0*	*5*	*0*	*99.6*	*50 - 130*	*5.077*	*1.96*	*30*	

The following samples were analyzed in this batch: HS22040998-01

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177913 (0) **Instrument: ECD_11** **Method: ORGANOCHLORINE PESTICIDES BY SW8081B**

MBLK Sample ID: **MBLK-177913** Units: **ug/L** Analysis Date: **25-Apr-2022 18:23**
Client ID: Run ID: **ECD_11_407312** SeqNo: **6617396** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
4,4´-DDD	< 0.0080	0.10								
4,4´-DDE	< 0.0040	0.10								
4,4´-DDT	< 0.0070	0.10								
Aldrin	< 0.010	0.050								
alpha-BHC	< 0.010	0.050								
alpha-Chlordane	< 0.020	0.050								
beta-BHC	< 0.010	0.050								
delta-BHC	< 0.010	0.050								
Dieldrin	< 0.010	0.10								
Endosulfan I	< 0.010	0.050								
Endosulfan II	< 0.020	0.10								
Endosulfan sulfate	< 0.030	0.10								
Endrin	< 0.030	0.10								
Endrin aldehyde	< 0.030	0.10								
Endrin ketone	< 0.030	0.10								
gamma-BHC	< 0.010	0.050								
gamma-Chlordane	< 0.020	0.050								
Heptachlor	< 0.010	0.050								
Heptachlor epoxide	< 0.010	0.050								
Methoxychlor	< 0.15	0.50								
Toxaphene	< 0.19	0.50								
Surr: Decachlorobiphenyl	*0.1838*	*0*	*0.2*	*0*	*91.9*	*54.9 - 145*				
Surr: Tetrachloro-m-xylene	*0.2034*	*0*	*0.2*	*0*	*102*	*51.5 - 142*				

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177913 (0) **Instrument: ECD_11** **Method: ORGANOCHLORINE PESTICIDES BY SW8081B**

LCS Sample ID: **LCS-177913** Units: **ug/L** Analysis Date: **25-Apr-2022 17:39**
Client ID: Run ID: **ECD_11_407312** SeqNo: **6617394** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
4,4´-DDD	0.5389	0.10	0.5	0	108	53 - 144				
4,4´-DDE	0.5138	0.10	0.5	0	103	55 - 144				
4,4´-DDT	0.497	0.10	0.5	0	99.4	53 - 149				
Aldrin	0.2516	0.050	0.25	0	101	47 - 141				
alpha-BHC	0.259	0.050	0.25	0	104	51 - 141				
alpha-Chlordane	0.244	0.050	0.25	0	97.6	55 - 141				
beta-BHC	0.2613	0.050	0.25	0	105	58 - 144				
delta-BHC	0.2522	0.050	0.25	0	101	48 - 146				
Dieldrin	0.4992	0.10	0.5	0	99.8	56 - 144				
Endosulfan I	0.2305	0.050	0.25	0	92.2	55 - 141				
Endosulfan II	0.4882	0.10	0.5	0	97.6	57 - 144				
Endosulfan sulfate	0.5082	0.10	0.5	0	102	58 - 145				
Endrin	0.5025	0.10	0.5	0	100	60 - 163				
Endrin aldehyde	0.4974	0.10	0.5	0	99.5	59 - 158				
Endrin ketone	0.552	0.10	0.5	0	110	59 - 154				
gamma-BHC	0.25	0.050	0.25	0	100	53 - 142				
gamma-Chlordane	0.2548	0.050	0.25	0	102	55 - 137				
Heptachlor	0.2476	0.050	0.25	0	99.0	51 - 144				
Heptachlor epoxide	0.2508	0.050	0.25	0	100	55 - 142				
Methoxychlor	2.21	0.50	2.5	0	88.4	59 - 150				
Surr: Decachlorobiphenyl	*0.1724*	*0*	*0.2*	*0*	*86.2*	*54.9 - 145*				
Surr: Tetrachloro-m-xylene	*0.1938*	*0*	*0.2*	*0*	*96.9*	*51.5 - 142*				

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177913 (0) **Instrument: ECD_11** **Method: ORGANOCHLORINE PESTICIDES BY SW8081B**

LCSD Sample ID: **LCSD-177913** Units: **ug/L** Analysis Date: **25-Apr-2022 18:01**
Client ID: Run ID: **ECD_11_407312** SeqNo: **6617395** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
4,4´-DDD	0.5775	0.10	0.5	0	116	53 - 144	0.5389	6.92	20	
4,4´-DDE	0.5378	0.10	0.5	0	108	55 - 144	0.5138	4.55	20	
4,4´-DDT	0.5208	0.10	0.5	0	104	53 - 149	0.497	4.68	20	
Aldrin	0.2641	0.050	0.25	0	106	47 - 141	0.2516	4.84	20	
alpha-BHC	0.2703	0.050	0.25	0	108	51 - 141	0.259	4.28	20	
alpha-Chlordane	0.2582	0.050	0.25	0	103	55 - 141	0.244	5.64	20	
beta-BHC	0.2597	0.050	0.25	0	104	58 - 144	0.2613	0.603	20	
delta-BHC	0.2578	0.050	0.25	0	103	48 - 146	0.2522	2.23	20	
Dieldrin	0.539	0.10	0.5	0	108	56 - 144	0.4992	7.68	20	
Endosulfan I	0.2348	0.050	0.25	0	93.9	55 - 141	0.2305	1.87	20	
Endosulfan II	0.5066	0.10	0.5	0	101	57 - 144	0.4882	3.7	20	
Endosulfan sulfate	0.5376	0.10	0.5	0	108	58 - 145	0.5082	5.63	20	
Endrin	0.5416	0.10	0.5	0	108	60 - 163	0.5025	7.5	20	
Endrin aldehyde	0.5166	0.10	0.5	0	103	59 - 158	0.4974	3.79	20	
Endrin ketone	0.5837	0.10	0.5	0	117	59 - 154	0.552	5.59	20	
gamma-BHC	0.2622	0.050	0.25	0	105	53 - 142	0.25	4.75	20	
gamma-Chlordane	0.2569	0.050	0.25	0	103	55 - 137	0.2548	0.817	20	
Heptachlor	0.2518	0.050	0.25	0	101	51 - 144	0.2476	1.69	20	
Heptachlor epoxide	0.2552	0.050	0.25	0	102	55 - 142	0.2508	1.74	20	
Methoxychlor	2.38	0.50	2.5	0	95.2	59 - 150	2.21	7.41	20	
Surr: Decachlorobiphenyl	*0.1815*	*0*	*0.2*	*0*	*90.8*	*54.9 - 145*	*0.1724*	*5.15*	*20*	
Surr: Tetrachloro-m-xylene	*0.1972*	*0*	*0.2*	*0*	*98.6*	*51.5 - 142*	*0.1938*	*1.76*	*20*	

The following samples were analyzed in this batch: HS22040998-01

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177940 (0) **Instrument: HG03** **Method: TCLP MERCURY BY SW7470A**

MBLK Sample ID: **MBLKT2-177940** Units: **mg/L** Analysis Date: **21-Apr-2022 16:13**
Client ID: Run ID: **HG03_407081** SeqNo: **6612250** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	< 0.0000300	0.000200								

MBLK Sample ID: **MBLKT4-177940** Units: **mg/L** Analysis Date: **21-Apr-2022 16:17**
Client ID: Run ID: **HG03_407081** SeqNo: **6612252** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	< 0.0000300	0.000200								

MBLK Sample ID: **MBLKT3-177940** Units: **mg/L** Analysis Date: **21-Apr-2022 16:15**
Client ID: Run ID: **HG03_407081** SeqNo: **6612251** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	< 0.0000300	0.000200								

MBLK Sample ID: **MBLKT1-177940** Units: **mg/L** Analysis Date: **21-Apr-2022 16:06**
Client ID: Run ID: **HG03_407081** SeqNo: **6612247** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	< 0.0000300	0.000200								

MBLK Sample ID: **MBLK-177940** Units: **mg/L** Analysis Date: **21-Apr-2022 16:05**
Client ID: Run ID: **HG03_407081** SeqNo: **6612246** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	< 0.0000300	0.000200								

LCS Sample ID: **LCS-177940** Units: **mg/L** Analysis Date: **21-Apr-2022 16:19**
Client ID: Run ID: **HG03_407081** SeqNo: **6612253** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00472	0.000200	0.005	0	94.4	80 - 120				

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177940 (0) **Instrument: HG03** **Method: TCLP MERCURY BY SW7470A**

MS Sample ID: **HS22040830-01MS** Units: **mg/L** Analysis Date: **21-Apr-2022 16:22**
Client ID: Run ID: **HG03_407081** SeqNo: **6612255** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.0064	0.000200	0.005	-0.000018	128	75 - 125				S

MSD Sample ID: **HS22040830-01MSD** Units: **mg/L** Analysis Date: **21-Apr-2022 16:24**
Client ID: Run ID: **HG03_407081** SeqNo: **6612256** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00629	0.000200	0.005	-0.000018	126	75 - 125	0.0064	1.73	20	S

The following samples were analyzed in this batch: HS22040998-01

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177991 (0) **Instrument: ICPMS06** **Method: TCLP METALS BY SW6020A**

MBLK Sample ID: **MBLKT2-177991** Units: **mg/L** Analysis Date: **22-Apr-2022 21:27**
Client ID: Run ID: **ICPMS06_407149** SeqNo: **6614977** PrepDate: **22-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	< 0.00400	0.0500								
Barium	< 0.0190	0.200								
Cadmium	< 0.00200	0.0500								
Chromium	< 0.00400	0.0500								
Lead	< 0.00600	0.0500								
Selenium	< 0.0110	0.0500								
Silver	< 0.00200	0.0500								

MBLK Sample ID: **MBLKT4-177991** Units: **mg/L** Analysis Date: **22-Apr-2022 21:31**
Client ID: Run ID: **ICPMS06_407149** SeqNo: **6614979** PrepDate: **22-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	< 0.00400	0.0500								
Barium	< 0.0190	0.200								
Cadmium	< 0.00200	0.0500								
Chromium	< 0.00400	0.0500								
Lead	< 0.00600	0.0500								
Selenium	< 0.0110	0.0500								
Silver	< 0.00200	0.0500								

MBLK Sample ID: **MBLKT6-177991** Units: **mg/L** Analysis Date: **22-Apr-2022 21:35**
Client ID: Run ID: **ICPMS06_407149** SeqNo: **6614981** PrepDate: **22-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	< 0.00400	0.0500								
Barium	< 0.0190	0.200								
Cadmium	< 0.00200	0.0500								
Chromium	< 0.00400	0.0500								
Lead	< 0.00600	0.0500								
Selenium	< 0.0110	0.0500								
Silver	< 0.00200	0.0500								

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177991 (0) **Instrument: ICPMS06** **Method: TCLP METALS BY SW6020A**

MBLK Sample ID: **MBLKT7-177991** Units: **mg/L** Analysis Date: **22-Apr-2022 21:37**
Client ID: Run ID: **ICPMS06_407149** SeqNo: **6614982** PrepDate: **22-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	< 0.00400	0.0500								
Barium	< 0.0190	0.200								
Cadmium	< 0.00200	0.0500								
Chromium	< 0.00400	0.0500								
Lead	< 0.00600	0.0500								
Selenium	< 0.0110	0.0500								
Silver	< 0.00200	0.0500								

MBLK Sample ID: **MBLKT5-177991** Units: **mg/L** Analysis Date: **22-Apr-2022 21:33**
Client ID: Run ID: **ICPMS06_407149** SeqNo: **6614980** PrepDate: **22-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	< 0.00400	0.0500								
Barium	< 0.0190	0.200								
Cadmium	< 0.00200	0.0500								
Chromium	< 0.00400	0.0500								
Lead	< 0.00600	0.0500								
Selenium	< 0.0110	0.0500								
Silver	< 0.00200	0.0500								

MBLK Sample ID: **MBLKT3-177991** Units: **mg/L** Analysis Date: **22-Apr-2022 21:29**
Client ID: Run ID: **ICPMS06_407149** SeqNo: **6614978** PrepDate: **22-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	< 0.00400	0.0500								
Barium	< 0.0190	0.200								
Cadmium	< 0.00200	0.0500								
Chromium	< 0.00400	0.0500								
Lead	< 0.00600	0.0500								
Selenium	< 0.0110	0.0500								
Silver	< 0.00200	0.0500								

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177991 (0) **Instrument: ICPMS06** **Method: TCLP METALS BY SW6020A**

MBLK Sample ID: **MBLKT1-177991** Units: **mg/L** Analysis Date: **22-Apr-2022 21:25**
Client ID: Run ID: **ICPMS06_407149** SeqNo: **6614976** PrepDate: **22-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	< 0.00400	0.0500								
Barium	< 0.0190	0.200								
Cadmium	< 0.00200	0.0500								
Chromium	< 0.00400	0.0500								
Lead	< 0.00600	0.0500								
Selenium	< 0.0110	0.0500								
Silver	< 0.00200	0.0500								

MBLK Sample ID: **MBLK-177991** Units: **mg/L** Analysis Date: **22-Apr-2022 21:23**
Client ID: Run ID: **ICPMS06_407149** SeqNo: **6614975** PrepDate: **22-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	< 0.000400	0.00500								
Barium	< 0.00190	0.0200								
Cadmium	< 0.000200	0.00500								
Chromium	< 0.000400	0.00500								
Lead	< 0.000600	0.00500								
Selenium	< 0.00110	0.00500								
Silver	< 0.000200	0.00500								

LCS Sample ID: **LCS-177991** Units: **mg/L** Analysis Date: **22-Apr-2022 21:39**
Client ID: Run ID: **ICPMS06_407149** SeqNo: **6614983** PrepDate: **22-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.0524	0.00500	0.05	0	105	80 - 120				
Barium	0.04916	0.0200	0.05	0	98.3	80 - 120				
Cadmium	0.05229	0.00500	0.05	0	105	80 - 120				
Chromium	0.05005	0.00500	0.05	0	100	80 - 120				
Lead	0.05011	0.00500	0.05	0	100	80 - 120				
Selenium	0.05672	0.00500	0.05	0	113	80 - 120				
Silver	0.05121	0.00500	0.05	0	102	80 - 120				

Revision: 1

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Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177991 (0) **Instrument: ICPMS06** **Method: TCLP METALS BY SW6020A**

MS Sample ID: **HS22040499-01MS** Units: **mg/L** Analysis Date: **22-Apr-2022 21:48**
Client ID: Run ID: **ICPMS06_407149** SeqNo: **6614988** PrepDate: **22-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.5414	0.0500	0.5	0.00138	108	80 - 120				
Barium	1.428	0.200	0.5	0.9092	104	80 - 120				
Cadmium	0.5196	0.0500	0.5	0.00078	104	80 - 120				
Chromium	0.503	0.0500	0.5	0.00104	100	80 - 120				
Lead	0.5373	0.0500	0.5	0.02133	103	80 - 120				
Selenium	0.5699	0.0500	0.5	-0.00034	114	80 - 120				
Silver	0.4964	0.0500	0.5	0.00009	99.3	80 - 120				

MSD Sample ID: **HS22040499-01MSD** Units: **mg/L** Analysis Date: **22-Apr-2022 21:50**
Client ID: Run ID: **ICPMS06_407149** SeqNo: **6614989** PrepDate: **22-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.5477	0.0500	0.5	0.00138	109	80 - 120	0.5414	1.17	20	
Barium	1.457	0.200	0.5	0.9092	110	80 - 120	1.428	1.97	20	
Cadmium	0.5172	0.0500	0.5	0.00078	103	80 - 120	0.5196	0.469	20	
Chromium	0.5166	0.0500	0.5	0.00104	103	80 - 120	0.503	2.65	20	
Lead	0.5497	0.0500	0.5	0.02133	106	80 - 120	0.5373	2.28	20	
Selenium	0.5779	0.0500	0.5	-0.00034	116	80 - 120	0.5699	1.39	20	
Silver	0.5009	0.0500	0.5	0.00009	100	80 - 120	0.4964	0.9	20	

PDS Sample ID: **HS22040499-01PDS** Units: **mg/L** Analysis Date: **22-Apr-2022 21:52**
Client ID: Run ID: **ICPMS06_407149** SeqNo: **6614990** PrepDate: **22-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	1.116	0.0500	1	0.00138	111	75 - 125				
Barium	1.981	0.200	1	0.9092	107	75 - 125				
Cadmium	1.054	0.0500	1	0.00078	105	75 - 125				
Chromium	1.03	0.0500	1	0.00104	103	75 - 125				
Lead	1.081	0.0500	1	0.02133	106	75 - 125				
Selenium	1.181	0.0500	1	-0.00034	118	75 - 125				
Silver	1.029	0.0500	1	0.00009	103	75 - 125				

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177991 (0) **Instrument: ICPMS06** **Method: TCLP METALS BY SW6020A**

SD Sample ID: **HS22040499-01SD** Units: **mg/L** Analysis Date: **22-Apr-2022 21:46**
Client ID: Run ID: **ICPMS06_407149** SeqNo: **6614987** PrepDate: **22-Apr-2022** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Arsenic	< 0.0200	0.250					0.00138	0	10	
Barium	0.8769	1.00					0.9092	0	10	J
Cadmium	< 0.0100	0.250					0.00078	0	10	
Chromium	< 0.0200	0.250					0.00104	0	10	
Lead	< 0.0300	0.250					0.02133	0	10	
Selenium	< 0.0550	0.250					-0.00034	0	10	
Silver	< 0.0100	0.250					0.00009	0	10	

The following samples were analyzed in this batch: HS22040998-01

Revision: 1

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Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177915 (0) **Instrument: SV-8** **Method: LOW-LEVEL SEMIVOLATILES BY 8270D**

MBLK Sample ID: **MBLK-177915** Units: **ug/L** Analysis Date: **27-Apr-2022 09:38**
Client ID: Run ID: **SV-8_407465** SeqNo: **6621065** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1´-Biphenyl	< 0.024	0.20								
2,4,5-Trichlorophenol	< 0.057	0.20								
2,4,6-Trichlorophenol	< 0.048	0.20								
2,4-Dichlorophenol	< 0.043	0.20								
2,4-Dimethylphenol	< 0.040	0.20								
2,4-Dinitrophenol	< 0.10	1.0								
2,4-Dinitrotoluene	< 0.058	0.20								
2,6-Dinitrotoluene	< 0.042	0.20								
2-Chloronaphthalene	< 0.021	0.20								
2-Chlorophenol	< 0.036	0.20								
2-Methylnaphthalene	< 0.019	0.10								
2-Methylphenol	< 0.045	0.20								
2-Nitroaniline	< 0.041	0.20								
2-Nitrophenol	< 0.034	0.20								
3&4-Methylphenol	< 0.036	0.20								
3,3´-Dichlorobenzidine	< 0.044	0.20								
3-Nitroaniline	< 0.049	0.20								
4,6-Dinitro-2-methylphenol	< 0.020	0.20								
4-Bromophenyl phenyl ether	< 0.051	0.20								
4-Chloro-3-methylphenol	< 0.032	0.20								
4-Chloroaniline	< 0.039	0.20								
4-Chlorophenyl phenyl ether	< 0.044	0.20								
4-Nitroaniline	< 0.035	0.20								
4-Nitrophenol	< 0.047	1.0								
Acenaphthene	< 0.027	0.10								
Acenaphthylene	< 0.015	0.10								
Acetophenone	< 0.024	0.20								
Anthracene	< 0.014	0.10								
Atrazine	< 0.033	0.20								
Benz(a)anthracene	< 0.050	0.10								
Benzaldehyde	< 0.030	0.20								
Benzo(a)pyrene	< 0.020	0.10								
Benzo(b)fluoranthene	< 0.023	0.10								
Benzo(g,h,i)perylene	< 0.014	0.10								

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177915 (0) **Instrument: SV-8** **Method: LOW-LEVEL SEMIVOLATILES BY 8270D**

MBLK Sample ID: **MBLK-177915** Units: **ug/L** Analysis Date: **27-Apr-2022 09:38**
Client ID: Run ID: **SV-8_407465** SeqNo: **6621065** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(k)fluoranthene	< 0.019	0.10								
Bis(2-chloroethoxy)methane	< 0.030	0.20								
Bis(2-chloroethyl)ether	< 0.026	0.20								
Bis(2-chloroisopropyl)ether	< 0.070	0.20								
Bis(2-ethylhexyl)phthalate	< 0.037	0.20								
Butyl benzyl phthalate	< 0.019	0.20								
Caprolactam	< 0.045	0.20								
Carbazole	< 0.025	0.20								
Chrysene	< 0.021	0.10								
Dibenz(a,h)anthracene	< 0.024	0.10								
Dibenzofuran	< 0.020	0.10								
Diethyl phthalate	< 0.030	0.20								
Dimethyl phthalate	< 0.041	0.20								
Di-n-butyl phthalate	< 0.020	0.20								
Di-n-octyl phthalate	< 0.020	0.20								
Fluoranthene	< 0.010	0.10								
Fluorene	< 0.030	0.10								
Hexachlorobenzene	< 0.044	0.20								
Hexachlorobutadiene	< 0.030	0.20								
Hexachlorocyclopentadiene	< 0.030	0.20								
Hexachloroethane	< 0.059	0.20								
Indeno(1,2,3-cd)pyrene	< 0.022	0.10								
Isophorone	< 0.025	0.20								
Naphthalene	< 0.020	0.10								
Nitrobenzene	< 0.024	0.20								
N-Nitrosodi-n-propylamine	< 0.032	0.20								
N-Nitrosodiphenylamine	< 0.025	0.20								
Pentachlorophenol	< 0.079	0.20								
Phenanthrene	< 0.021	0.10								
Phenol	< 0.035	0.20								
Pyrene	< 0.019	0.10								
Pyridine	< 0.030	1.0								
Surr: 2,4,6-Tribromophenol	*4.599*	*0.20*	*5*	*0*	*92.0*	*34 - 129*				
Surr: 2-Fluorobiphenyl	*3.642*	*0.20*	*5*	*0*	*72.8*	*40 - 125*				

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177915 (0) **Instrument: SV-8** **Method: LOW-LEVEL SEMIVOLATILES BY 8270D**

MBLK Sample ID: **MBLK-177915** Units: **ug/L** Analysis Date: **27-Apr-2022 09:38**
Client ID: Run ID: **SV-8_407465** SeqNo: **6621065** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Surr: 2-Fluorophenol	*3.489*	*0.20*	*5*	*0*	*69.8*	*20 - 120*				
Surr: 4-Terphenyl-d14	*4.543*	*0.20*	*5*	*0*	*90.9*	*40 - 135*				
Surr: Nitrobenzene-d5	*3.312*	*0.20*	*5*	*0*	*66.2*	*41 - 120*				
Surr: Phenol-d6	*3.296*	*0.20*	*5*	*0*	*65.9*	*20 - 120*				

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177915 (0) **Instrument: SV-8** **Method: LOW-LEVEL SEMIVOLATILES BY 8270D**

LCS Sample ID: **LCS-177915** Units: **ug/L** Analysis Date: **27-Apr-2022 09:57**
Client ID: Run ID: **SV-8_407465** SeqNo: **6621066** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1´-Biphenyl	3.736	0.20	5	0	74.7	45 - 125				
2,4,5-Trichlorophenol	4.324	0.20	5	0	86.5	46 - 120				
2,4,6-Trichlorophenol	4.169	0.20	5	0	83.4	42 - 120				
2,4-Dichlorophenol	4.123	0.20	5	0	82.5	49 - 120				
2,4-Dimethylphenol	3.774	0.20	5	0	75.5	35 - 120				
2,4-Dinitrophenol	5.815	1.0	5	0	116	15 - 120				
2,4-Dinitrotoluene	4.329	0.20	5	0	86.6	50 - 122				
2,6-Dinitrotoluene	4.329	0.20	5	0	86.6	50 - 120				
2-Chloronaphthalene	4.123	0.20	5	0	82.5	50 - 120				
2-Chlorophenol	3.82	0.20	5	0	76.4	40 - 120				
2-Methylnaphthalene	3.909	0.10	5	0	78.2	50 - 120				
2-Methylphenol	3.749	0.20	5	0	75.0	45 - 120				
2-Nitroaniline	4.272	0.20	5	0	85.4	28 - 139				
2-Nitrophenol	3.997	0.20	5	0	79.9	40 - 120				
3&4-Methylphenol	3.88	0.20	5	0	77.6	35 - 120				
3,3´-Dichlorobenzidine	5.147	0.20	5	0	103	15 - 120				
3-Nitroaniline	4.054	0.20	5	0	81.1	30 - 120				
4,6-Dinitro-2-methylphenol	4.928	0.20	5	0	98.6	25 - 121				
4-Bromophenyl phenyl ether	3.973	0.20	5	0	79.5	45 - 120				
4-Chloro-3-methylphenol	4.064	0.20	5	0	81.3	47 - 120				
4-Chloroaniline	4.024	0.20	5	0	80.5	20 - 120				
4-Chlorophenyl phenyl ether	4.121	0.20	5	0	82.4	50 - 120				
4-Nitroaniline	4.171	0.20	5	0	83.4	30 - 133				
4-Nitrophenol	4.432	1.0	5	0	88.6	30 - 130				
Acenaphthene	3.594	0.10	5	0	71.9	45 - 120				
Acenaphthylene	3.97	0.10	5	0	79.4	47 - 120				
Acetophenone	3.315	0.20	5	0	66.3	40 - 120				
Anthracene	4.021	0.10	5	0	80.4	45 - 120				
Atrazine	4.218	0.20	5	0	84.4	40 - 130				
Benz(a)anthracene	4.449	0.10	5	0	89.0	40 - 120				
Benzaldehyde	1.151	0.20	5	0	23.0	15 - 120				
Benzo(a)pyrene	4.967	0.10	5	0	99.3	45 - 120				
Benzo(b)fluoranthene	5.351	0.10	5	0	107	50 - 120				
Benzo(g,h,i)perylene	5.044	0.10	5	0	101	42 - 127				

Revision: 1

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Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177915 (0) **Instrument: SV-8** **Method: LOW-LEVEL SEMIVOLATILES BY 8270D**

LCS Sample ID: **LCS-177915** Units: **ug/L** Analysis Date: **27-Apr-2022 09:57**
Client ID: Run ID: **SV-8_407465** SeqNo: **6621066** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(k)fluoranthene	4.064	0.10	5	0	81.3	45 - 127				
Bis(2-chloroethoxy)methane	3.532	0.20	5	0	70.6	45 - 120				
Bis(2-chloroethyl)ether	3.264	0.20	5	0	65.3	37 - 121				
Bis(2-chloroisopropyl)ether	3.03	0.20	5	0	60.6	40 - 120				
Bis(2-ethylhexyl)phthalate	5.413	0.20	5	0	108	40 - 139				
Butyl benzyl phthalate	5.629	0.20	5	0	113	47 - 123				
Caprolactam	3.449	0.20	5	0	69.0	35 - 134				
Carbazole	4.115	0.20	5	0	82.3	42 - 128				
Chrysene	4.157	0.10	5	0	83.1	43 - 120				
Dibenz(a,h)anthracene	4.954	0.10	5	0	99.1	45 - 125				
Dibenzofuran	4.066	0.10	5	0	81.3	50 - 120				
Diethyl phthalate	4.254	0.20	5	0	85.1	41 - 120				
Dimethyl phthalate	4.08	0.20	5	0	81.6	40 - 122				
Di-n-butyl phthalate	4.47	0.20	5	0	89.4	45 - 123				
Di-n-octyl phthalate	5.826	0.20	5	0	117	45 - 129				
Fluoranthene	4.463	0.10	5	0	89.3	45 - 125				
Fluorene	4.109	0.10	5	0	82.2	49 - 120				
Hexachlorobenzene	4.118	0.20	5	0	82.4	48 - 120				
Hexachlorobutadiene	4.047	0.20	5	0	80.9	40 - 120				
Hexachlorocyclopentadiene	3.464	0.20	5	0	69.3	34 - 136				
Hexachloroethane	3.443	0.20	5	0	68.9	40 - 120				
Indeno(1,2,3-cd)pyrene	5.125	0.10	5	0	102	41 - 128				
Isophorone	3.38	0.20	5	0	67.6	40 - 121				
Naphthalene	3.762	0.10	5	0	75.2	45 - 120				
Nitrobenzene	3.314	0.20	5	0	66.3	44 - 120				
N-Nitrosodi-n-propylamine	3.448	0.20	5	0	69.0	40 - 120				
N-Nitrosodiphenylamine	3.756	0.20	5	0	75.1	40 - 125				
Pentachlorophenol	4.734	0.20	5	0	94.7	19 - 121				
Phenanthrene	3.876	0.10	5	0	77.5	45 - 121				
Phenol	4.159	0.20	5	0	83.2	20 - 124				
Pyrene	3.873	0.10	5	0	77.5	40 - 130				
Pyridine	2.516	1.0	5	0	50.3	15 - 120				
Surr: 2,4,6-Tribromophenol	*4.551*	*0.20*	*5*	*0*	*91.0*	*34 - 129*				
Surr: 2-Fluorobiphenyl	*3.696*	*0.20*	*5*	*0*	*73.9*	*40 - 125*				

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177915 (0) **Instrument: SV-8** **Method: LOW-LEVEL SEMIVOLATILES BY 8270D**

LCS Sample ID: **LCS-177915** Units: **ug/L** Analysis Date: **27-Apr-2022 09:57**
Client ID: Run ID: **SV-8_407465** SeqNo: **6621066** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Surr: 2-Fluorophenol	*3.387*	*0.20*	*5*	*0*	*67.7*	*20 - 120*				
Surr: 4-Terphenyl-d14	*4.2*	*0.20*	*5*	*0*	*84.0*	*40 - 135*				
Surr: Nitrobenzene-d5	*3.273*	*0.20*	*5*	*0*	*65.5*	*41 - 120*				
Surr: Phenol-d6	*3.259*	*0.20*	*5*	*0*	*65.2*	*20 - 120*				

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177915 (0) **Instrument: SV-8** **Method: LOW-LEVEL SEMIVOLATILES BY 8270D**

LCSD Sample ID: **LCSD-177915** Units: **ug/L** Analysis Date: **27-Apr-2022 10:16**
Client ID: Run ID: **SV-8_407465** SeqNo: **6621067** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
1,1´-Biphenyl	3.748	0.20	5	0	75.0	45 - 125	3.736	0.312	20	
2,4,5-Trichlorophenol	4.283	0.20	5	0	85.7	46 - 120	4.324	0.968	20	
2,4,6-Trichlorophenol	4.199	0.20	5	0	84.0	42 - 120	4.169	0.707	20	
2,4-Dichlorophenol	4.161	0.20	5	0	83.2	49 - 120	4.123	0.922	20	
2,4-Dimethylphenol	3.659	0.20	5	0	73.2	35 - 120	3.774	3.09	20	
2,4-Dinitrophenol	5.891	1.0	5	0	118	15 - 120	5.815	1.29	50	
2,4-Dinitrotoluene	4.334	0.20	5	0	86.7	50 - 122	4.329	0.0985	20	
2,6-Dinitrotoluene	4.334	0.20	5	0	86.7	50 - 120	4.329	0.0985	20	
2-Chloronaphthalene	4.119	0.20	5	0	82.4	50 - 120	4.123	0.0841	20	
2-Chlorophenol	3.829	0.20	5	0	76.6	40 - 120	3.82	0.258	20	
2-Methylnaphthalene	3.874	0.10	5	0	77.5	50 - 120	3.909	0.905	20	
2-Methylphenol	3.758	0.20	5	0	75.2	45 - 120	3.749	0.232	20	
2-Nitroaniline	4.345	0.20	5	0	86.9	28 - 139	4.272	1.7	20	
2-Nitrophenol	3.969	0.20	5	0	79.4	40 - 120	3.997	0.717	20	
3&4-Methylphenol	3.877	0.20	5	0	77.5	35 - 120	3.88	0.0798	20	
3,3´-Dichlorobenzidine	5.076	0.20	5	0	102	15 - 120	5.147	1.4	20	
3-Nitroaniline	4.085	0.20	5	0	81.7	30 - 120	4.054	0.753	20	
4,6-Dinitro-2-methylphenol	4.722	0.20	5	0	94.4	25 - 121	4.928	4.25	30	
4-Bromophenyl phenyl ether	3.914	0.20	5	0	78.3	45 - 120	3.973	1.51	20	
4-Chloro-3-methylphenol	4.139	0.20	5	0	82.8	47 - 120	4.064	1.83	20	
4-Chloroaniline	4.014	0.20	5	0	80.3	20 - 120	4.024	0.258	20	
4-Chlorophenyl phenyl ether	4.136	0.20	5	0	82.7	50 - 120	4.121	0.355	20	
4-Nitroaniline	4.269	0.20	5	0	85.4	30 - 133	4.171	2.32	20	
4-Nitrophenol	4.606	1.0	5	0	92.1	30 - 130	4.432	3.86	20	
Acenaphthene	3.613	0.10	5	0	72.3	45 - 120	3.594	0.527	20	
Acenaphthylene	3.896	0.10	5	0	77.9	47 - 120	3.97	1.87	20	
Acetophenone	3.354	0.20	5	0	67.1	40 - 120	3.315	1.17	20	
Anthracene	4.018	0.10	5	0	80.4	45 - 120	4.021	0.0839	20	
Atrazine	4.29	0.20	5	0	85.8	40 - 130	4.218	1.68	20	
Benz(a)anthracene	4.461	0.10	5	0	89.2	40 - 120	4.449	0.283	20	
Benzaldehyde	1.141	0.20	5	0	22.8	15 - 120	1.151	0.826	30	
Benzo(a)pyrene	4.756	0.10	5	0	95.1	45 - 120	4.967	4.34	20	
Benzo(b)fluoranthene	5.379	0.10	5	0	108	50 - 120	5.351	0.516	20	
Benzo(g,h,i)perylene	5.042	0.10	5	0	101	42 - 127	5.044	0.0484	20	

Revision: 1

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Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177915 (0) **Instrument: SV-8** **Method: LOW-LEVEL SEMIVOLATILES BY 8270D**

LCSD Sample ID: **LCSD-177915** Units: **ug/L** Analysis Date: **27-Apr-2022 10:16**
Client ID: Run ID: **SV-8_407465** SeqNo: **6621067** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Benzo(k)fluoranthene	4.209	0.10	5	0	84.2	45 - 127	4.064	3.51	20	
Bis(2-chloroethoxy)methane	3.505	0.20	5	0	70.1	45 - 120	3.532	0.754	20	
Bis(2-chloroethyl)ether	3.364	0.20	5	0	67.3	37 - 121	3.264	3.04	20	
Bis(2-chloroisopropyl)ether	3.095	0.20	5	0	61.9	40 - 120	3.03	2.13	20	
Bis(2-ethylhexyl)phthalate	5.464	0.20	5	0	109	40 - 139	5.413	0.934	20	
Butyl benzyl phthalate	5.656	0.20	5	0	113	47 - 123	5.629	0.478	20	
Caprolactam	3.686	0.20	5	0	73.7	35 - 134	3.449	6.66	20	
Carbazole	4.088	0.20	5	0	81.8	42 - 128	4.115	0.647	20	
Chrysene	4.122	0.10	5	0	82.4	43 - 120	4.157	0.849	20	
Dibenz(a,h)anthracene	5.292	0.10	5	0	106	45 - 125	4.954	6.59	20	
Dibenzofuran	4.072	0.10	5	0	81.4	50 - 120	4.066	0.143	20	
Diethyl phthalate	4.36	0.20	5	0	87.2	41 - 120	4.254	2.46	20	
Dimethyl phthalate	4.168	0.20	5	0	83.4	40 - 122	4.08	2.14	20	
Di-n-butyl phthalate	4.476	0.20	5	0	89.5	45 - 123	4.47	0.128	20	
Di-n-octyl phthalate	5.883	0.20	5	0	118	45 - 129	5.826	0.984	20	
Fluoranthene	4.47	0.10	5	0	89.4	45 - 125	4.463	0.157	20	
Fluorene	4.163	0.10	5	0	83.3	49 - 120	4.109	1.32	20	
Hexachlorobenzene	4.085	0.20	5	0	81.7	48 - 120	4.118	0.814	20	
Hexachlorobutadiene	4.017	0.20	5	0	80.3	40 - 120	4.047	0.759	20	
Hexachlorocyclopentadiene	3.381	0.20	5	0	67.6	34 - 136	3.464	2.43	20	
Hexachloroethane	3.513	0.20	5	0	70.3	40 - 120	3.443	2	20	
Indeno(1,2,3-cd)pyrene	5.092	0.10	5	0	102	41 - 128	5.125	0.628	20	
Isophorone	3.378	0.20	5	0	67.6	40 - 121	3.38	0.0577	20	
Naphthalene	3.816	0.10	5	0	76.3	45 - 120	3.762	1.41	20	
Nitrobenzene	3.327	0.20	5	0	66.5	44 - 120	3.314	0.421	20	
N-Nitrosodi-n-propylamine	3.465	0.20	5	0	69.3	40 - 120	3.448	0.469	20	
N-Nitrosodiphenylamine	3.723	0.20	5	0	74.5	40 - 125	3.756	0.905	20	
Pentachlorophenol	4.667	0.20	5	0	93.3	19 - 121	4.734	1.42	20	
Phenanthrene	3.88	0.10	5	0	77.6	45 - 121	3.876	0.0968	20	
Phenol	4.172	0.20	5	0	83.4	20 - 124	4.159	0.32	20	
Pyrene	3.883	0.10	5	0	77.7	40 - 130	3.873	0.268	20	
Pyridine	2.636	1.0	5	0	52.7	15 - 120	2.516	4.64	20	
Surr: 2,4,6-Tribromophenol	*4.573*	*0.20*	*5*	*0*	*91.5*	*34 - 129*	*4.551*	*0.503*	*20*	
Surr: 2-Fluorobiphenyl	*3.669*	*0.20*	*5*	*0*	*73.4*	*40 - 125*	*3.696*	*0.744*	*20*	

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 177915 (0) **Instrument: SV-8** **Method: LOW-LEVEL SEMIVOLATILES BY 8270D**

LCSD Sample ID: **LCSD-177915** Units: **ug/L** Analysis Date: **27-Apr-2022 10:16**
Client ID: Run ID: **SV-8_407465** SeqNo: **6621067** PrepDate: **21-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Surr: 2-Fluorophenol	*3.345*	*0.20*	*5*	*0*	*66.9*	*20 - 120*	*3.387*	*1.23*	*20*	
Surr: 4-Terphenyl-d14	*4.161*	*0.20*	*5*	*0*	*83.2*	*40 - 135*	*4.2*	*0.928*	*20*	
Surr: Nitrobenzene-d5	*3.271*	*0.20*	*5*	*0*	*65.4*	*41 - 120*	*3.273*	*0.0636*	*20*	
Surr: Phenol-d6	*3.272*	*0.20*	*5*	*0*	*65.4*	*20 - 120*	*3.259*	*0.397*	*20*	

The following samples were analyzed in this batch: HS22040998-01

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: R407112 (0) **Instrument: VOA4** **Method: LOW LEVEL VOLATILES BY SW8260C**

MBLK Sample ID: **VBLKW-220421** Units: **ug/L** Analysis Date: **21-Apr-2022 10:36**
Client ID: Run ID: **VOA4_407112** SeqNo: **6613111** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	< 0.20	1.0								
1,1,2,2-Tetrachloroethane	< 0.50	1.0								
1,1,2-Trichlor-1,2,2-trifluoroethane	< 0.50	1.0								
1,1,2-Trichloroethane	< 0.30	1.0								
1,1-Dichloroethane	< 0.20	1.0								
1,1-Dichloroethene	< 0.20	1.0								
1,2,4-Trichlorobenzene	< 0.50	1.0								
1,2-Dibromo-3-chloropropane	< 1.0	1.0								
1,2-Dibromoethane	< 0.20	1.0								
1,2-Dichlorobenzene	< 0.50	1.0								
1,2-Dichloroethane	< 0.20	1.0								
1,2-Dichloropropane	< 0.50	1.0								
1,3-Dichlorobenzene	< 0.40	1.0								
1,4-Dichlorobenzene	< 0.40	1.0								
2-Butanone	< 0.50	2.0								
2-Hexanone	< 1.0	2.0								
4-Methyl-2-pentanone	< 0.70	2.0								
Acetone	< 2.0	2.0								
Benzene	< 0.20	1.0								
Bromodichloromethane	< 0.20	1.0								
Bromoform	< 0.40	1.0								
Bromomethane	< 0.40	1.0								
Carbon disulfide	< 0.60	2.0								
Carbon tetrachloride	< 0.50	1.0								
Chlorobenzene	< 0.30	1.0								
Chloroethane	< 0.30	1.0								
Chloroform	< 0.20	1.0								
Chloromethane	< 0.20	1.0								
cis-1,2-Dichloroethene	< 0.20	1.0								
cis-1,3-Dichloropropene	< 0.10	1.0								
Cyclohexane	< 0.30	1.0								
Dibromochloromethane	< 0.30	1.0								
Dichlorodifluoromethane	< 0.30	1.0								
Ethylbenzene	< 0.30	1.0								

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: R407112 (0) **Instrument: VOA4** **Method: LOW LEVEL VOLATILES BY SW8260C**

MBLK Sample ID: **VBLKW-220421** Units: **ug/L** Analysis Date: **21-Apr-2022 10:36**
Client ID: Run ID: **VOA4_407112** SeqNo: **6613111** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Isopropylbenzene	< 0.30	1.0								
m,p-Xylene	< 0.50	2.0								
Methyl acetate	< 1.0	1.0								
Methyl tert-butyl ether	< 0.20	1.0								
Methylcyclohexane	< 0.30	1.0								
Methylene chloride	< 1.0	2.0								
o-Xylene	< 0.30	1.0								
Styrene	< 0.30	1.0								
Tetrachloroethene	< 0.30	1.0								
Toluene	< 0.20	1.0								
trans-1,2-Dichloroethene	< 0.20	1.0								
trans-1,3-Dichloropropene	< 0.20	1.0								
Trichloroethene	< 0.20	1.0								
Trichlorofluoromethane	< 0.30	1.0								
Vinyl chloride	< 0.20	1.0								
Xylenes, Total	< 0.30	1.0								
Surr: 1,2-Dichloroethane-d4	*44.81*	*1.0*	*50*	*0*	*89.6*	*70 - 123*				
Surr: 4-Bromofluorobenzene	*45.36*	*1.0*	*50*	*0*	*90.7*	*77 - 113*				
Surr: Dibromofluoromethane	*45.99*	*1.0*	*50*	*0*	*92.0*	*73 - 126*				
Surr: Toluene-d8	*49.41*	*1.0*	*50*	*0*	*98.8*	*81 - 120*				

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: R407112 (0) **Instrument: VOA4** **Method: LOW LEVEL VOLATILES BY SW8260C**

LCS Sample ID: **VLCSW-220421** Units: **ug/L** Analysis Date: **21-Apr-2022 09:53**
Client ID: Run ID: **VOA4_407112** SeqNo: **6613110** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	17.03	1.0	20	0	85.1	70 - 130				
1,1,2,2-Tetrachloroethane	18.74	1.0	20	0	93.7	70 - 120				
1,1,2-Trichlor-1,2,2-trifluoroethane	19.26	1.0	20	0	96.3	70 - 130				
1,1,2-Trichloroethane	17.1	1.0	20	0	85.5	77 - 113				
1,1-Dichloroethane	16.9	1.0	20	0	84.5	71 - 122				
1,1-Dichloroethene	16.94	1.0	20	0	84.7	70 - 130				
1,2,4-Trichlorobenzene	18.47	1.0	20	0	92.4	77 - 126				
1,2-Dibromo-3-chloropropane	17.18	1.0	20	0	85.9	70 - 130				
1,2-Dibromoethane	18.02	1.0	20	0	90.1	76 - 123				
1,2-Dichlorobenzene	18.74	1.0	20	0	93.7	77 - 113				
1,2-Dichloroethane	18.15	1.0	20	0	90.7	70 - 124				
1,2-Dichloropropane	16.16	1.0	20	0	80.8	72 - 119				
1,3-Dichlorobenzene	18.16	1.0	20	0	90.8	78 - 118				
1,4-Dichlorobenzene	18.08	1.0	20	0	90.4	79 - 113				
2-Butanone	28.59	2.0	40	0	71.5	70 - 130				
2-Hexanone	33.81	2.0	40	0	84.5	70 - 130				
4-Methyl-2-pentanone	33.63	2.0	40	0	84.1	70 - 130				
Acetone	29.78	2.0	40	0	74.4	70 - 130				
Benzene	17.32	1.0	20	0	86.6	74 - 120				
Bromodichloromethane	16.52	1.0	20	0	82.6	74 - 122				
Bromoform	17.71	1.0	20	0	88.5	73 - 128				
Bromomethane	18.89	1.0	20	0	94.5	70 - 130				
Carbon disulfide	33.07	2.0	40	0	82.7	70 - 130				
Carbon tetrachloride	18.51	1.0	20	0	92.5	71 - 125				
Chlorobenzene	17.59	1.0	20	0	87.9	76 - 113				
Chloroethane	15.57	1.0	20	0	77.8	70 - 130				
Chloroform	16.49	1.0	20	0	82.4	71 - 121				
Chloromethane	17.47	1.0	20	0	87.4	70 - 129				
cis-1,2-Dichloroethene	15.92	1.0	20	0	79.6	75 - 122				
cis-1,3-Dichloropropene	16.93	1.0	20	0	84.7	73 - 127				
Cyclohexane	16.3	1.0	20	0	81.5	70 - 130				
Dibromochloromethane	17.64	1.0	20	0	88.2	77 - 122				
Dichlorodifluoromethane	16.83	1.0	20	0	84.1	70 - 130				
Ethylbenzene	18.11	1.0	20	0	90.6	77 - 117				

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: R407112 (0) **Instrument: VOA4** **Method: LOW LEVEL VOLATILES BY SW8260C**

LCS Sample ID: **VLCSW-220421** Units: **ug/L** Analysis Date: **21-Apr-2022 09:53**
Client ID: Run ID: **VOA4_407112** SeqNo: **6613110** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Isopropylbenzene	19.37	1.0	20	0	96.8	73 - 127				
m,p-Xylene	38.76	2.0	40	0	96.9	77 - 122				
Methyl acetate	16.61	1.0	20	0	83.0	76 - 122				
Methyl tert-butyl ether	14.69	1.0	20	0	73.4	70 - 130				
Methylcyclohexane	19.93	1.0	20	0	99.6	61 - 157				
Methylene chloride	17.12	2.0	20	0	85.6	70 - 127				
o-Xylene	18.79	1.0	20	0	93.9	75 - 119				
Styrene	19.17	1.0	20	0	95.9	72 - 126				
Tetrachloroethene	19.45	1.0	20	0	97.2	76 - 119				
Toluene	17.28	1.0	20	0	86.4	77 - 118				
trans-1,2-Dichloroethene	16.26	1.0	20	0	81.3	72 - 127				
trans-1,3-Dichloropropene	16.97	1.0	20	0	84.8	77 - 119				
Trichloroethene	18.67	1.0	20	0	93.4	77 - 121				
Trichlorofluoromethane	18.31	1.0	20	0	91.5	70 - 130				
Vinyl chloride	14.72	1.0	20	0	73.6	70 - 130				
Xylenes, Total	57.55	1.0	60	0	95.9	75 - 122				
Surr: 1,2-Dichloroethane-d4	*44.86*	*1.0*	*50*	*0*	*89.7*	*70 - 123*				
Surr: 4-Bromofluorobenzene	*48.49*	*1.0*	*50*	*0*	*97.0*	*77 - 113*				
Surr: Dibromofluoromethane	*47.91*	*1.0*	*50*	*0*	*95.8*	*73 - 126*				
Surr: Toluene-d8	*49.7*	*1.0*	*50*	*0*	*99.4*	*81 - 120*				

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: R407112 (0) **Instrument: VOA4** **Method: LOW LEVEL VOLATILES BY SW8260C**

MS Sample ID: **HS22040980-02MS** Units: **ug/L** Analysis Date: **21-Apr-2022 12:45**
Client ID: Run ID: **VOA4_407112** SeqNo: **6613117** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	17.26	1.0	20	0	86.3	70 - 130				
1,1,2,2-Tetrachloroethane	15.46	1.0	20	0	77.3	70 - 123				
1,1,2-Trichlor-1,2,2-trifluoroethane	19.98	1.0	20	0	99.9	70 - 130				
1,1,2-Trichloroethane	15.49	1.0	20	0	77.4	70 - 117				
1,1-Dichloroethane	16.42	1.0	20	0	82.1	70 - 127				
1,1-Dichloroethene	17.47	1.0	20	0	87.3	70 - 130				
1,2,4-Trichlorobenzene	18.08	1.0	20	0	90.4	70 - 125				
1,2-Dibromo-3-chloropropane	15.53	1.0	20	0	77.6	70 - 130				
1,2-Dibromoethane	15.87	1.0	20	0	79.4	70 - 124				
1,2-Dichlorobenzene	17.26	1.0	20	0	86.3	70 - 115				
1,2-Dichloroethane	17.27	1.0	20	0	86.3	70 - 127				
1,2-Dichloropropane	15.6	1.0	20	0	78.0	70 - 122				
1,3-Dichlorobenzene	17.28	1.0	20	0	86.4	70 - 119				
1,4-Dichlorobenzene	17.27	1.0	20	0	86.4	70 - 114				
2-Butanone	24.37	2.0	40	0	60.9	70 - 130				S
2-Hexanone	29.73	2.0	40	0	74.3	70 - 130				
4-Methyl-2-pentanone	31.7	2.0	40	0	79.2	70 - 130				
Acetone	27.18	2.0	40	0	67.9	70 - 130				S
Benzene	16.81	1.0	20	0	84.0	70 - 127				
Bromodichloromethane	15.58	1.0	20	0	77.9	70 - 124				
Bromoform	15.03	1.0	20	0	75.2	70 - 129				
Bromomethane	13.76	1.0	20	0	68.8	70 - 130				S
Carbon disulfide	34.8	2.0	40	0	87.0	70 - 130				
Carbon tetrachloride	19.3	1.0	20	0	96.5	70 - 130				
Chlorobenzene	17.37	1.0	20	0	86.9	70 - 114				
Chloroethane	21.3	1.0	20	0	107	70 - 130				
Chloroform	16.02	1.0	20	0	80.1	70 - 125				
Chloromethane	20.54	1.0	20	0	103	70 - 130				
cis-1,2-Dichloroethene	15.84	1.0	20	0	79.2	70 - 128				
cis-1,3-Dichloropropene	15.08	1.0	20	0	75.4	70 - 125				
Cyclohexane	16.86	1.0	20	0	84.3	70 - 130				
Dibromochloromethane	16.06	1.0	20	0	80.3	70 - 124				
Dichlorodifluoromethane	14.98	1.0	20	0	74.9	70 - 130				
Ethylbenzene	18.06	1.0	20	0	90.3	70 - 124				

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: R407112 (0) **Instrument: VOA4** **Method: LOW LEVEL VOLATILES BY SW8260C**

MS Sample ID: **HS22040980-02MS** Units: **ug/L** Analysis Date: **21-Apr-2022 12:45**
Client ID: Run ID: **VOA4_407112** SeqNo: **6613117** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Isopropylbenzene	19.61	1.0	20	0	98.1	70 - 130				
m,p-Xylene	37.54	2.0	40	0	93.9	70 - 130				
Methyl acetate	12.3	1.0	20	0	61.5	76 - 122				S
Methyl tert-butyl ether	13.54	1.0	20	0	67.7	70 - 130				S
Methylcyclohexane	19.68	1.0	20	0	98.4	61 - 158				
Methylene chloride	16.45	2.0	20	0	82.3	70 - 128				
o-Xylene	18.37	1.0	20	0	91.9	70 - 124				
Styrene	17.78	1.0	20	0	88.9	70 - 130				
Tetrachloroethene	20.17	1.0	20	0	101	70 - 130				
Toluene	17.08	1.0	20	0	85.4	70 - 123				
trans-1,2-Dichloroethene	16.05	1.0	20	0	80.3	70 - 130				
trans-1,3-Dichloropropene	14.08	1.0	20	0	70.4	70 - 121				
Trichloroethene	18.19	1.0	20	0	90.9	70 - 129				
Trichlorofluoromethane	19.23	1.0	20	0	96.2	70 - 130				
Vinyl chloride	16.3	1.0	20	0	81.5	70 - 130				
Xylenes, Total	55.91	1.0	60	0	93.2	70 - 130				
Surr: 1,2-Dichloroethane-d4	*44.45*	*1.0*	*50*	*0*	*88.9*	*70 - 126*				
Surr: 4-Bromofluorobenzene	*48.26*	*1.0*	*50*	*0*	*96.5*	*77 - 113*				
Surr: Dibromofluoromethane	*47.15*	*1.0*	*50*	*0*	*94.3*	*77 - 123*				
Surr: Toluene-d8	*50.02*	*1.0*	*50*	*0*	*100*	*82 - 127*				

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: R407112 (0) **Instrument: VOA4** **Method: LOW LEVEL VOLATILES BY SW8260C**

MSD Sample ID: **HS22040980-02MSD** Units: **ug/L** Analysis Date: **21-Apr-2022 13:07**
Client ID: Run ID: **VOA4_407112** SeqNo: **6613118** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
1,1,1-Trichloroethane	17.23	1.0	20	0	86.1	70 - 130	17.26	0.16	20	
1,1,2,2-Tetrachloroethane	16.07	1.0	20	0	80.3	70 - 123	15.46	3.83	20	
1,1,2-Trichlor-1,2,2-trifluoroethane	19.94	1.0	20	0	99.7	70 - 130	19.98	0.158	20	
1,1,2-Trichloroethane	15.45	1.0	20	0	77.3	70 - 117	15.49	0.253	20	
1,1-Dichloroethane	16.36	1.0	20	0	81.8	70 - 127	16.42	0.374	20	
1,1-Dichloroethene	17.8	1.0	20	0	89.0	70 - 130	17.47	1.88	20	
1,2,4-Trichlorobenzene	19.3	1.0	20	0	96.5	70 - 125	18.08	6.53	20	
1,2-Dibromo-3-chloropropane	16.13	1.0	20	0	80.6	70 - 130	15.53	3.81	20	
1,2-Dibromoethane	16.4	1.0	20	0	82.0	70 - 124	15.87	3.3	20	
1,2-Dichlorobenzene	17.75	1.0	20	0	88.7	70 - 115	17.26	2.77	20	
1,2-Dichloroethane	16.53	1.0	20	0	82.7	70 - 127	17.27	4.34	20	
1,2-Dichloropropane	15.13	1.0	20	0	75.6	70 - 122	15.6	3.04	20	
1,3-Dichlorobenzene	17.12	1.0	20	0	85.6	70 - 119	17.28	0.948	20	
1,4-Dichlorobenzene	17.01	1.0	20	0	85.0	70 - 114	17.27	1.55	20	
2-Butanone	26.29	2.0	40	0	65.7	70 - 130	24.37	7.58	20	S
2-Hexanone	33.18	2.0	40	0	83.0	70 - 130	29.73	11	20	
4-Methyl-2-pentanone	31.62	2.0	40	0	79.1	70 - 130	31.7	0.23	20	
Acetone	26.06	2.0	40	0	65.2	70 - 130	27.18	4.2	20	S
Benzene	16.69	1.0	20	0	83.4	70 - 127	16.81	0.731	20	
Bromodichloromethane	15.57	1.0	20	0	77.8	70 - 124	15.58	0.117	20	
Bromoform	15.36	1.0	20	0	76.8	70 - 129	15.03	2.17	20	
Bromomethane	13.58	1.0	20	0	67.9	70 - 130	13.76	1.3	20	S
Carbon disulfide	34.49	2.0	40	0	86.2	70 - 130	34.8	0.911	20	
Carbon tetrachloride	18.76	1.0	20	0	93.8	70 - 130	19.3	2.89	20	
Chlorobenzene	16.99	1.0	20	0	84.9	70 - 114	17.37	2.26	20	
Chloroethane	22.15	1.0	20	0	111	70 - 130	21.3	3.9	20	
Chloroform	15.89	1.0	20	0	79.4	70 - 125	16.02	0.832	20	
Chloromethane	19.08	1.0	20	0	95.4	70 - 130	20.54	7.34	20	
cis-1,2-Dichloroethene	15.92	1.0	20	0	79.6	70 - 128	15.84	0.491	20	
cis-1,3-Dichloropropene	15.38	1.0	20	0	76.9	70 - 125	15.08	1.97	20	
Cyclohexane	16.68	1.0	20	0	83.4	70 - 130	16.86	1.11	20	
Dibromochloromethane	16.24	1.0	20	0	81.2	70 - 124	16.06	1.12	20	
Dichlorodifluoromethane	15.28	1.0	20	0	76.4	70 - 130	14.98	1.96	20	
Ethylbenzene	17.75	1.0	20	0	88.8	70 - 124	18.06	1.69	20	

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: R407112 (0) **Instrument: VOA4** **Method: LOW LEVEL VOLATILES BY SW8260C**

MSD Sample ID: **HS22040980-02MSD** Units: **ug/L** Analysis Date: **21-Apr-2022 13:07**
Client ID: Run ID: **VOA4_407112** SeqNo: **6613118** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Isopropylbenzene	19.32	1.0	20	0	96.6	70 - 130	19.61	1.5	20	
m,p-Xylene	37.75	2.0	40	0	94.4	70 - 130	37.54	0.557	20	
Methyl acetate	13.05	1.0	20	0	65.3	76 - 122	12.3	5.97	20	S
Methyl tert-butyl ether	16.57	1.0	20	0	82.8	70 - 130	13.54	20.1	20	R
Methylcyclohexane	19.89	1.0	20	0	99.4	61 - 158	19.68	1.04	20	
Methylene chloride	15.83	2.0	20	0	79.1	70 - 128	16.45	3.86	20	
o-Xylene	18.07	1.0	20	0	90.3	70 - 124	18.37	1.67	20	
Styrene	17.57	1.0	20	0	87.9	70 - 130	17.78	1.17	20	
Tetrachloroethene	19.59	1.0	20	0	97.9	70 - 130	20.17	2.93	20	
Toluene	17.16	1.0	20	0	85.8	70 - 123	17.08	0.459	20	
trans-1,2-Dichloroethene	16.07	1.0	20	0	80.3	70 - 130	16.05	0.0812	20	
trans-1,3-Dichloropropene	15.28	1.0	20	0	76.4	70 - 121	14.08	8.21	20	
Trichloroethene	18.04	1.0	20	0	90.2	70 - 129	18.19	0.833	20	
Trichlorofluoromethane	19.4	1.0	20	0	97.0	70 - 130	19.23	0.842	20	
Vinyl chloride	15.64	1.0	20	0	78.2	70 - 130	16.3	4.14	20	
Xylenes, Total	55.82	1.0	60	0	93.0	70 - 130	55.91	0.17	20	
Surr: 1,2-Dichloroethane-d4	*45.14*	*1.0*	*50*	*0*	*90.3*	*70 - 126*	*44.45*	*1.56*	*20*	
Surr: 4-Bromofluorobenzene	*49.18*	*1.0*	*50*	*0*	*98.4*	*77 - 113*	*48.26*	*1.88*	*20*	
Surr: Dibromofluoromethane	*47.62*	*1.0*	*50*	*0*	*95.2*	*77 - 123*	*47.15*	*1*	*20*	
Surr: Toluene-d8	*49.44*	*1.0*	*50*	*0*	*98.9*	*82 - 127*	*50.02*	*1.16*	*20*	

The following samples were analyzed in this batch: HS22040998-01

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: 178013 (0) **Instrument: UV-2450** **Method: AMMONIA AS N BY SM4500 NH3-B-F-2011**

MBLK Sample ID: **MBLK-178013** Units: **mg/L** Analysis Date: **22-Apr-2022 15:52**
Client ID: Run ID: **UV-2450_407190** SeqNo: **6614716** PrepDate: **22-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Ammonia (as N)	< 0.025	0.050								

LCS Sample ID: **LCS-178013** Units: **mg/L** Analysis Date: **22-Apr-2022 15:52**
Client ID: Run ID: **UV-2450_407190** SeqNo: **6614715** PrepDate: **22-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Ammonia (as N)	0.49	0.050	0.5	0	98.0	85 - 115				

MS Sample ID: **HS22041005-01MS** Units: **mg/L** Analysis Date: **22-Apr-2022 15:52**
Client ID: Run ID: **UV-2450_407190** SeqNo: **6614713** PrepDate: **22-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Ammonia (as N)	0.851	0.050	0.5	0.409	88.4	80 - 120				

MSD Sample ID: **HS22041005-01MSD** Units: **mg/L** Analysis Date: **22-Apr-2022 15:52**
Client ID: Run ID: **UV-2450_407190** SeqNo: **6614714** PrepDate: **22-Apr-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Ammonia (as N)	0.838	0.050	0.5	0.409	85.8	80 - 120	0.851	1.54	20	

The following samples were analyzed in this batch: HS22040998-01

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: R407060 (0) **Instrument:** WetChem_HS **Method:** FLASH POINT BY PENSKY-MARTENS SW1010A

LCS Sample ID: **LCS-R407060** Units: **°F** Analysis Date: **21-Apr-2022 13:00**
Client ID: Run ID: **WetChem_HS_407060** SeqNo: **6611636** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ignitability	80.14	70.0	81	0	98.9	95 - 105				

DUP Sample ID: **HS22040975-01DUP** Units: **°F** Analysis Date: **21-Apr-2022 13:00**
Client ID: Run ID: **WetChem_HS_407060** SeqNo: **6611637** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ignitability	> 212	70.0					0	0	20	

The following samples were analyzed in this batch: HS22040998-01

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: R407166 (0) **Instrument: UV-2450** **Method: REACTIVE CYANIDE**

MBLK Sample ID: **MBLK-R407166** Units: **mg/L** Analysis Date: **22-Apr-2022 14:30**
Client ID: Run ID: **UV-2450_407166** SeqNo: **6614228** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Reactive Cyanide	< 100	100								

LCS Sample ID: **LCS-R407166** Units: **mg/L** Analysis Date: **22-Apr-2022 14:30**
Client ID: Run ID: **UV-2450_407166** SeqNo: **6614227** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Reactive Cyanide	0.61	100	10	0	6.10	5 - 100				J

MS Sample ID: **HS22040812-01MS** Units: **mg/L** Analysis Date: **22-Apr-2022 14:30**
Client ID: Run ID: **UV-2450_407166** SeqNo: **6614229** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Reactive Cyanide	0.58	100	10	0	5.80	5 - 100				J

The following samples were analyzed in this batch: HS22040998-01

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: R407168 (0) **Instrument: WetChem_HS** **Method: REACTIVE SULFIDE**

MBLK Sample ID: **MBLK-R407168** Units: **mg/L** Analysis Date: **22-Apr-2022 15:10**
Client ID: Run ID: **WetChem_HS_407168** SeqNo: **6614294** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Reactive Sulfide	< 100	100								

LCS Sample ID: **LCS-R407168** Units: **mg/L** Analysis Date: **22-Apr-2022 15:10**
Client ID: Run ID: **WetChem_HS_407168** SeqNo: **6614293** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Reactive Sulfide	68	100	100	0	68.0	20 - 120				J

MS Sample ID: **HS22040812-01MS** Units: **mg/L** Analysis Date: **22-Apr-2022 15:10**
Client ID: Run ID: **WetChem_HS_407168** SeqNo: **6614295** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Reactive Sulfide	60	100	100	0	60.0	20 - 120				J

The following samples were analyzed in this batch: HS22040998-01

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: HS22040998

QC BATCH REPORT

Batch ID: R407189 (0) **Instrument:** WetChem_HS **Method:** PH BY SM4500H+ B-2011

DUP Sample ID: **HS22040704-08DUP** Units: **pH Units** Analysis Date: **22-Apr-2022 16:28**
Client ID: Run ID: **WetChem_HS_407189** SeqNo: **6614566** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.4	0.100					6.41	0.156	10	
Temp Deg C @pH	22.5	0					22.6	0.443	10	

The following samples were analyzed in this batch: HS22040998-01

Revision: 1

RIGHT SOLUTIONS | RIGHT PARTNER

Client: WCA
Project: FBRFL Leachate
WorkOrder: **HS22040998**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
°F	Farenheit degrees
Date	
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
pH Units	

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CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-34	30-Jun-2022
Illinois	2000322022-9	09-May-2023
Kansas	E-10352 2021-2022	31-Jul-2022
Louisiana	03087, 2021-2022	30-Jun-2022
North Carolina	624-2022	31-Dec-2022
Texas	T104704231-22-29	30-Apr-2023

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Sample Receipt Checklist

Work Order ID: HS22040998 **Date/Time Received:** **20-Apr-2022 15:43**

Client Name: WCA - HOU **Received by:** **Paresh M. Giga**

Completed By: */S/ Paresh M. Giga* (eSignature) 20-Apr-2022 17:23 (Date/Time) **Reviewed by:** */S/ Ragen Giga* (eSignature) 21-Apr-2022 21:37 (Date/Time)

Matrices: **Water** Carrier name: **Client**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	COC IDs:48950
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	1.0C/1.5C U/c	IR31
Cooler(s)/Kit(s):	47442	
Date/Time sample(s) sent to storage:	4/20/2022 17:30	

Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☑	N/A ☐
pH adjusted?	Yes ☑	No ☐	N/A ☐
pH adjusted by:	Desmond Wacasey		

Login Notes:
All bottles have varied times.
Logged in with earliest.
Ammonia pH >2 (7).
Pres'd with 1ml H2SO4 (Lot 310060245-17)
4/20/2022 @ 16:10. Final pH (6)
Trip Blank logged in on hold

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

RIGHT SOLUTIONS | RIGHT PARTNER

Cincinnati, OH +1 513 733 5336
Fort Collins, CO +1 970 490 1511
Everett, WA +1 425 356 2600
Holland, MI +1 616 399 6070

Chain of Custody Form

Page ____ of ____

COC ID: 48950

HS22040998

WCA

FBRFL Leachate

ALS Project Manager:

Customer Information		Project Information	
Purchase Order	8480001701	Project Name	FBRLF Leachate
Work Order		Project Number	
Company Name	WCA - Fort Bend Regional LF	Bill To Company	WCA - Fort Bend Regional LF
Send Report To	Mark Meadows	Invoice Attn	Cynd. Hernandez
Address	14115 Davis Estate Rd	Address	14115 Davis Estate Rd
City/State/Zip	Needville, TX 77461	City/State/Zip	Needville, TX 77461
Phone	713-859-7845	Phone	832-920-9663
Fax		Fax	
e-Mail Address	[redacted]	e-Mail Address	[redacted]

A Volatiles
B Semi-Volatiles
C Pesticides
D Herbacides
E Ammonia (as Nitrogen)
F TCLP Metals
G I/C/R - (24hr Turn)*
H
I

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	VOC's - Leachate - [illegible]	4/20/22	11:35	Water	1	3	X										
2	Semi - VOC's - Leachate	4/20/22	11:37	Water	8	2		X									
3	Pesticide - Leachate	4/20/22	11:40	Water	8	2			X								
4	Herbacide - Leachate	4/20/22	11:42	Water	8	2				X							
5	Ammonia - Leachate	4/20/22	11:45	Water	3	1					X						
6	Metals - Leachate	4/20/22	11:48	Water	8	1						X					
7	I/C/R - Leachate	4/20/22	11:50	Water	8	1							X				
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Mark Meadows

Shipment Method: Hand Delivered

Turnaround Time in Business Days (BD): ☐ 10 BD ☒ 5 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD ☒ Other 24hr I/C/R

Results Due Date:

Relinquished by: Date: 4/20/22 Time: 15:43

Received by:

Relinquished by: Date: Time:

Received by (Laboratory): 4/20/2022 15:43

Logged by (Laboratory): Date: Time:

Checked by (Laboratory):

Notes:

Cooler ID	Cooler Temp
47442	0.5
	1.0
	4.3
	ambient

QC Package: (Check One Box Below)
☐ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note:
1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

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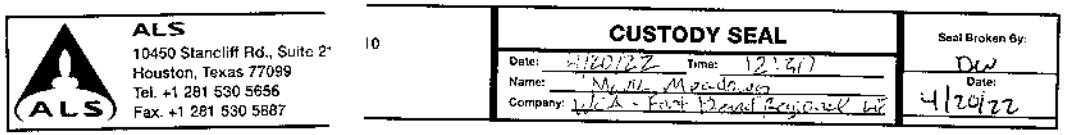
RIGHT SOLUTIONS | RIGHT PARTNER

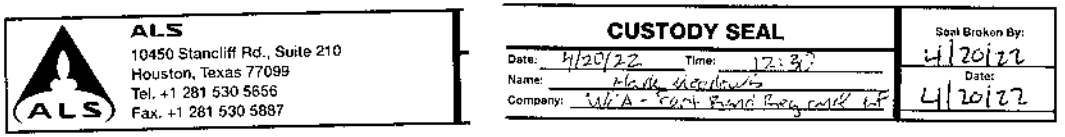


ALS
10450 Stancliff Rd., Suite 2
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

10

CUSTODY SEAL
Date: 4/20/22 Time: 12:37
Name: Molly Meadows
Company: WA - Fort Brand Regional LF

Seal Broken By: DW
Date: 4/20/22



ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

CUSTODY SEAL
Date: 4/20/22 Time: 12:37
Name: Molly Meadows
Company: WA - Fort Brand Regional LF

Seal Broken By: 4/20/22
Date: 4/20/22

RIGHT SOLUTIONS | RIGHT PARTNER

ATTACHMENT III.D: WASTE ANALYSIS PLAN

Fort Bend Regional Landfill, LP

Needville, Texas

APPENDICES

GSI ENVIRONMENTAL

ATTACHMENT III.D.2
SUMMARY WASTE PROFILES OF TYPICAL OFF-SITE WASTE STREAMS
Industrial Non-Hazardous Waste Permit Application
Fort Bend Regional Landfill, LP, Needville, Texas

Waste Name	Source	Class	Characteristic Components				Color	Odor	Does Waste Contain Free Liquids?	Solid %	pH	Flash Point
3. Wash Water	Industrial	Class 1	5% Alimet	95% Water			Tan	Mild	Yes	0%	3-11	>200°F
4. Tank Washouts	Industrial	Class 1	90-100% Water	0-20% Crude Base Oil and Water Emulsion	0-5% Unused Crude Oil	2-5% Dirt and Grit	Yellow to Black	Strong	Yes	5%	4-8	>200°F
4. Tank Washouts	Special Waste / Non-Industrial	Class 2 Like	100% Tank Water				Brown	No	Yes	0%	6.3	>200°F
6. Contaminated Stormwater	Industrial	Class 2	50% Natures Edge	50% Water			Clear to Green	Mild	Yes	1%	7-8	>200°F
7. Other Inorganic Liquids	Industrial	Class 2	100% Food Dye				Pale Blue	No	Yes	1%	4-10	>200°F
7. Other Aqueous Waste	Special Waste / Non-Industrial	Class 2 Like	100% Lint Water				Black	No	Yes	10%	7	NA
8. Scrubber Water	Industrial	Class 2	91-95% Water	0-9% CLP-1305	0-9% CCl		Clear / Amber	No	Yes	0%	5-9	>200°F
10. Nonhazardous Brine	Special Waste / Non-Industrial	Class 2 Like	5-20% Salt Water	80-95% Water			Clear	No	Yes	10%	5-10	>200°F
10. Nonhazardous Brine	Industrial	Class 2	100% Brine Water				Clear	No	Yes	0%	7.5	>150°F

ATTACHMENT III.D: WASTE ANALYSIS PLAN

Fort Bend Regional Landfill, LP

Needville, Texas

APPENDICES

Appendix III.D.3 GFL Special Waste Profile

SPECIAL WASTE PROFILE

Requested Disposal Facility: _____

Waste Profile #
Sales Rep #.

Saveable fill in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

Generator Name:			
Generator Site Address:			
City:	County:	State:	Zip:
State ID/Reg No:	State Approval/Waste Code: (if applicable)		NAICS # :
Generator Mailing Address (if different):			
City:	County:	State:	Zip:
Generator Contact Name:		Email:	
Phone Number:	Ext:	Fax Number:	

IIa. Transporter Information

Transporter Name:		Contact Name:	
Transporter Address:			
City:	County:	State:	Zip:
Phone Number:	Fax Number:	State Transportation Number:	

IIb. Billing Information

Bill To:		Contact Name:	
Billing Address:		Email:	
City:	State:	Zip:	Phone:

III. Waste Stream Information

Name of Waste:

Process Generating Waste:

RESULTS	
☐ pH	
☐ TSS	
☐ TDS	
☐ SPECIFIC GRAVITY	
☐ TEMERATURE	

Physical State: ☐ SOLID ☐ SEMI-SOLID ☐ POWDER ☐ LIQUID

Method of Shipment: ☐ BULK ☐ DRUM ☐ BAGGED ☐ OTHER:

Estimated Annual Volume: _____ -Select-

Frequency: ☐ ONE TIME ☐ ANNUAL

Disposal Consideration: ☐ LANDFILL ☐ SOLIDIFICATION ☐ INJECTION

IV. Representative Sample Certification

☐ NO SAMPLE TAKEN

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☐ YES or ☐ NO
Sample Date:	Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE
Sample ID Numbers:	
Samplers Name:	Samplers Signature:

GREEN FOR LIFE environmental

SPECIAL WASTE PROFILE (continued)

Waste Profile #

V. Physical Characteristics of Waste

Characteristic Components	% by Weight (range)
1.	
2.	
3.	
4.	
5.	

Color	Odor (describe)	Does Waste Contain Free Liquids? ☐ Yes or ☐ No	% Solids	pH:	Flash Point °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Chain of Custody and Required Parameters Provided for this Profile

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and it epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	☐ Yes or ☐ No
Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm) [reference 40 CFR 261.23(a)(5)]?	☐ Yes or ☐ No
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	☐ Yes or ☐ No
Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	☐ Yes or ☐ No
Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations?	☐ Yes or ☐ No
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCCD), or any other dioxin as defined in 40 CFR 261.31?	☐ Yes or ☐ No
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	☐ Yes or ☐ No
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	☐ Yes or ☐ No
Is this waste a reactive or heat generating waste?	☐ Yes or ☐ No
Does the waste contain sulfur or sulfur by-products?	☐ Yes or ☐ No
Is this waste generated at a Federal Superfund Clean Up Site?	☐ Yes or ☐ No
Is this waste from a TSD facility, TSD-like facility or waste consolidator?	☐ Yes or ☐ No

VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither I nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I further certify that the company has not altered the form or content of this profile sheet as provided by Waste Corporation of Texas, L.P. DBA GFL Environmental

Authorized Representative Name/Title	Company Name
Date	

VII. Waste Approval Decision

Approved Rejected Expiration: _____

Conditions:

Name, Title	Signature	Date

INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENTS – SECTION IV

Attachment IV.B.1	Non-Hazardous Waste Flow Diagram
Attachment IV.B.2	Piping and Instrumentation Diagram
Attachment IV.C	USGS Topographic Map
Attachment IV.D.1	Site Map
Attachment IV.D.2	Wind Rose for Needville, Texas
Attachment IV.G.1	Engineering Report for Tanks TK-1300, TK-1310, TK-1320, TK-1330, TK-1340, TK-1350, TK-1360, and TK-1370
Attachment IV.G.2	Engineering Report for Tank TK-1390

GSI Job No: 6731

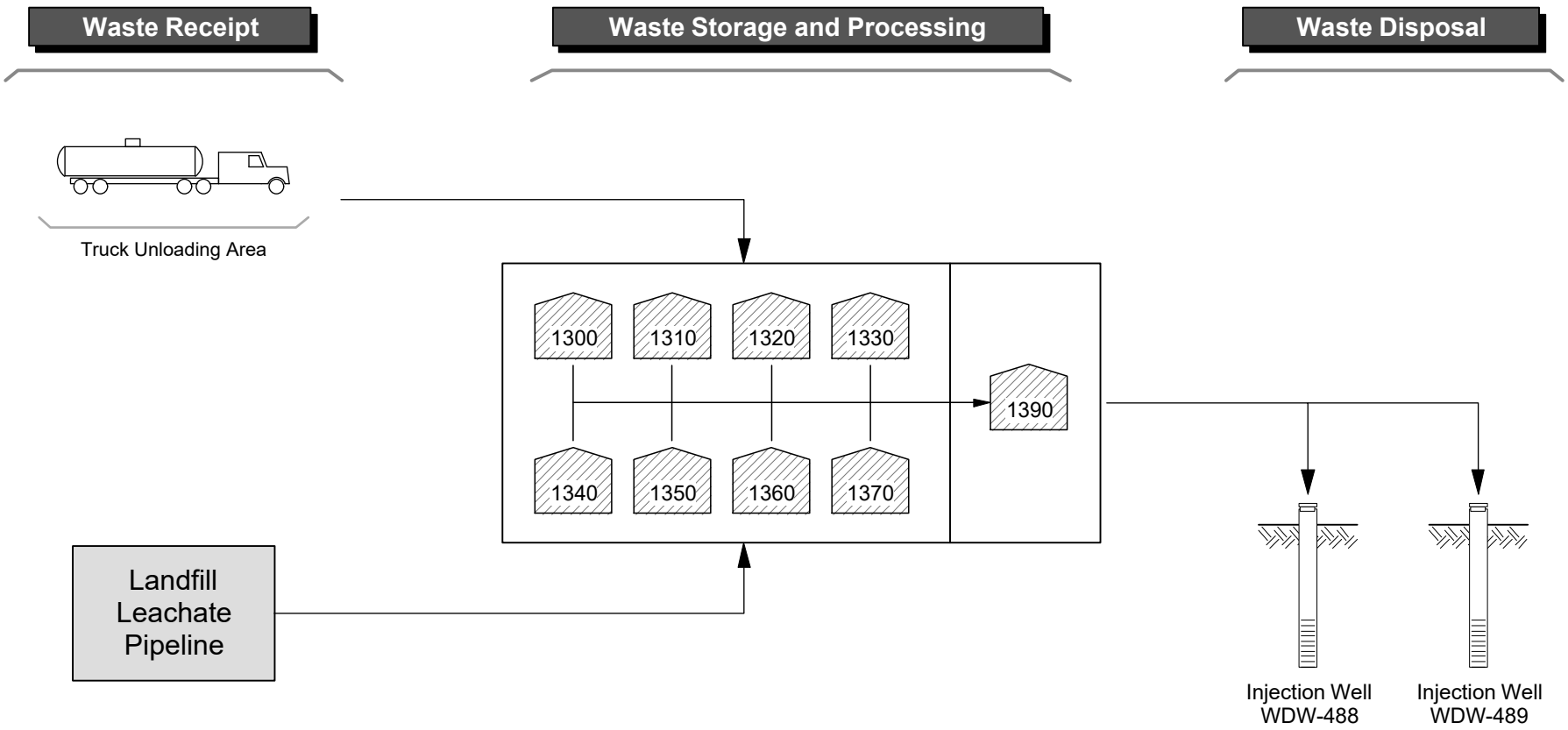
INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENT IV.B.1

Non-Hazardous Waste Flow Diagram



LEGEND

1300 Tank, proposed

Notes:

1. A detailed P&ID drawing is provided in Attachment IV.B.2.
2. Tank TK-1390 is in a separate secondary containment area from the other tanks.

GSI ENVIRONMENTAL
Texas Registration Number: F-1198

GSI Job No.	6731	Drawn By:	CDM
Map ID:	003_01	Chk'd By:	JMM
Issued:	20-Feb-2024	Aprv'd By:	JMM
Scale:	Not Shown	**Attachment IV.B.1**	

NON-HAZARDOUS WASTE FLOW DIAGRAM

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, Needville, Texas

GSI Job No: 6731

INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENT IV.B.2

Piping and Instrumentation Diagram

ADVANTEK WMS

NON-HAZARDOUS DISPOSAL WELL

COVER PAGE & DRAWING INDEX

PIPING

DRAWING INDEX		
DRAWING NO	DRAWING DESCRIPTION	REV NO
ADV003JTAM-ME-00-001	COVER PAGE AND DRAWING INDEX	–
ADV003JTAM-ME-30-001	LEGEND AND SYMBOLS	A
ADV003JTAM-ME-30-002	LEGEND AND SYMBOLS	A
ADV003JTAM-ME-30-100	OFFLOAD AREA & STORAGE TANKS PFD	C
ADV003JTAM-ME-30-101	PUMP & SURFACE EQUIPMENT PFD	C
ADV003JTAM-ME-30-102	BLOCK FLOW DIAGRAM	C

STATE OF TEXAS
OSCAR ALEJANDRO ALDAMA
69993
LICENSED
PROFESSIONAL ENGINEER
1-8-2024

FORT BEND COUNTY, TEXAS

J|TAM ENGINEERING

JANUARY 2024

ISSUED FOR PERMITTING

IDENTIFICATION LETTERS
(INSIDE INSTRUMENT BALLOONS)

AC	ANALYSIS CONTROLLER
AE	ANALYSIS ELEMENT
AI	ANALYSIS INDICATOR
AIC	ANALYSIS INDICATING CONTROLLER
AP	ANALYSIS POINT
BI	BTU INDICATOR
DE	DENSITY (OR SPECIFIC GRAVITY) ELEMENT
DR	DENSITY (OR SPECIFIC GRAVITY) RECORDER
DT	DENSITY (OR SPECIFIC GRAVITY) TRANSMITTER
EA	ELECTRICAL LOSS OF LOAD
FA•	FLOW ALARM
FC	FLOW CONDITIONER
FCD	FLOW CONTROLLER
FCV	FLOW CONTROL VALVE (SELF-CONTAINED)
FE	FLOW ELEMENT
FG	SIGHT GLASS FLOW INDICATOR
FI	FLOW INDICATOR
FIC	FLOW INDICATING CONTROLLER
FIS	FLOW INDICATING SWITCH
FIT	FLOW INDICATING TRANSMITTER
FHC	FLOW MANUAL CONTROL
FQ	FLOW TOTALIZER
FQI	FLOW TOTALIZING INDICATOR
FQR	FLOW TOTALIZING RECORDER
FR	FLOW RECORDER
FRC	FLOW RECORDING CONTROLLER
FS•	FLOW SWITCH
FT	FLOW TRANSMITTER (NOT PdT)
FV	FLOW CONTROL VALVE
FY	FLOW COMPUTER OR RELAY
GT	DENSITY-GRAVITY INSTRUMENT
HC	HAND CONTROL
HCV	HAND CONTROL VALVE
HIC	HAND INDICATING CONTROLLER
HS	HAND SWITCH
HSC	HAND SWITCH CLOSE
HSO	HAND SWITCH OPEN
HV	HAND VALVE
LA•	LEVEL ALARM
LC	LEVEL CONTROLLER
LCV	LEVEL CONTROL VALVE (SELF-CONTAINED)
LG	LEVEL GAUGE GLASS
LHC	LEVEL MANUAL CONTROL
LI	LEVEL INDICATOR (OTHER THAN LG)
LIC	LEVEL INDICATING CONTROLLER
LR	LEVEL RECORDER
LS•	LEVEL SWITCH
LT	LEVEL TRANSMITTER
LV	LEVEL CONTROL VALVE
LY	LEVEL RELAY
MA•	MOISTURE ALARM
ME	MOISTURE ELEMENT
MC	MOISTURE CONTROLLER
MNT	MOISTURE ANALYZER / TRANSMITTER
MOV	MOTOR OPERATED VALVE
MR	MOISTURE RECORDER
MS•	MOISTURE SWITCH
MT	MOISTURE TRANSMITTER
PA•	PRESSURE ALARM
PC	PRESSURE CONTROLLER
PCV	PRESSURE CONTROL VALVE (SELF-CONTAINED)
PDI	PRESSURE DIFFERENTIAL INDICATOR
PDIC	PRESSURE DIFFERENTIAL INDICATING CONTROLLER
PDR	PRESSURE DIFFERENTIAL RECORDER
PDIS	PRESSURE DIFFERENTIAL INDICATING SWITCH
PDIT	PRESSURE DIFFERENTIAL INDICATING TRANSMITTER
PDS•	PRESSURE DIFFERENTIAL SWITCH
PDT	PRESSURE DIFFERENTIAL TRANSMITTER
PHC	PRESSURE MANUAL CONTROL
PI	PRESSURE INDICATOR
PIC	PRESSURE INDICATING CONTROLLER
PIT	PRESSURE INDICATING TRANSMITTER
PR	PRESSURE RECORDER
PRC	PRESSURE RECORDING CONTROLLER
PS•	PRESSURE SWITCH
PSE	RUPTURE DISK
PSV	PRESSURE SAFETY / RELIEF VALVE
PT	PRESSURE TRANSMITTER
PV	PRESSURE CONTROL VALVE
PY	PRESSURE RELAY
RO	RESTRICTION ORIFICE
SC	SPEED CONTROL
SI	TACHOMETER
SIC	SPEED INDICATING CONTROLLER
SS•	SPEED SWITCH
ST	SPEED TRANSMITTER
SY	SPEED RELAY
TA•	TEMPERATURE ALARM
TC	TEMPERATURE CONTROLLER
TCV	TEMPERATURE CONTROL VALVE (SELF-CONTAINED)
TE	TEMPERATURE ELEMENT (W/THERMOWELL)
THC	TEMPERATURE MANUAL CONTROL
TI	TEMPERATURE INDICATOR
TIC	TEMPERATURE INDICATING CONTROLLER
TIT	TEMPERATURE INDICATING TRANSMITTER
TR	TEMPERATURE RECORDER
TS•	TEMPERATURE SWITCH
TT	TEMPERATURE TRANSMITTER
TV	TEMPERATURE CONTROL VALVE OR LOUVER
TW	THERMOWELL
UE	ULTRAVIOLET ELEMENT
UIC	ANTI-SURGE INDICATING CONTROLLER
VA•	VIBRATION ALARM
VS	VIBRATION SWITCH
XA•	ANNUNCIATOR POINT
XI	PIG PASSAGE INDICATOR
XIS	PIG PASSAGE INDICATING SWITCH
ZIC	POSITION INDICATOR (CLOSED)
ZIO	POSITION INDICATOR (OPEN)
ZLC	POSITION INDICATOR LAMP (CLOSED)
ZLO	POSITION INDICATOR LAMP (OPEN)
ZSC	POSITION INDICATOR SWITCH (CLOSED)
ZSO	POSITION INDICATOR SWITCH (OPEN)
ZT	POSITION TRANSMITTER

• ALARMS, SWITCHES, AND ANNUNCIATORS MAY HAVE SUFFIX LETTERS AS FOLLOWS:

L	LOW	DENOTES ALARM ONLY
LL	LOW LOW	DENOTES SHUTDOWN
H	HIGH	DENOTES ALARM ONLY
HH	HIGH HIGH	DENOTES SHUTDOWN

NOTE: UNLESS SPECIFICALLY INDICATED OTHERWISE, SOLENOID VALVES, SPRING RETURN SERVO VALVES, AND SIMILAR DEVICES ARE SHOWN IN THE "SHELF" OR NON-ENERGIZED CONDITION. DIRECTION OF SOLENOID ARROW SHOWS DE-ENERGIZED PORT-PORT PATH.

NOTE: IDENTIFICATION OF INSTRUMENTS NOT COVERED IN THE LISTINGS ABOVE SHALL CONFORM TO ANSI/ISA S5.1 "INSTRUMENTATION SYMBOLS AND IDENTIFICATION".

INSTRUMENT SIGNAL LINES

- INSTRUMENT SUPPLY OR PROCESS CONNECTION
- PNEUMATIC SIGNAL
- ELECTRICAL SIGNAL
- HYDRAULIC SIGNAL
- CAPILLARY TUBE
- FIBER OPTIC
- "DATA LINK" COMMUNICATION
- FIELDBUS
- PROCESS (MAJOR)
- SECONDARY (MINOR)
- FUTURE
- EXIST
- TO/FROM XXX / DWG NO / SERVICE — CONTINUATION LEADER
- SKID BOUNDARY

INSTRUMENT BALLOONS

- LOCAL INSTRUMENT
- INSTRUMENT MOUNTED ON EQUIPMENT CONTROL PANEL
- INSTRUMENT MOUNTED BEHIND STATION CONTROL PANEL
- INSTRUMENT MOUNTED BEHIND EQUIPMENT CONTROL PANEL
- INSTRUMENT FOR TWO FUNCTIONS OR TWO MEASURED VARIABLES
- N — UNIT PLC FUNCTION (NUMBER INDICATES WHICH UNIT)
- STATION PLC FUNCTION
- SHARED DISPLAY, SHARED DCS CONTROL
- INTERLOCK AT PLC

RELAY FUNCTION DESIGNATIONS

- Σ — TOTALIZE
- DEV — DEVICE
- < — LOW SIGNAL SELECT
- Σ/n — AVERAGE
- > — HIGH SIGNAL SELECT
- SEL — SELECT

VALVE SYMBOLS

- GATE VALVE
- BALL VALVE
- PLUG VALVE
- GLOBE VALVE
- BUTTERFLY VALVE
- NEEDLE VALVE
- CHOKE VALVE
- ANGLE CHOKE VALVE
- GAUGE VALVE
- 4-WAY VALVE
- 3-WAY VALVE
- ANGLE VALVE
- CHECK VALVE (SWING CHECK TYPE)
- CHECK VALVE (PISTON TYPE)
- CHECK VALVE (SAFETY)
- SOLENOID VALVE
- SOLENOID VALVE W/MANUAL RESET
- PRESSURE REGULATOR (SELF-CONTAINED)
- PRESSURE SAFETY/RELIEF VALVE
- PRESSURE/VACUUM RELIEF VALVE

VALVE ACTUATORS

- DIAPHRAGM
- DOUBLE DIAPHRAGM CYLINDER
- CYLINDER OPERATED VALVE
- S — SOLENOID
- PRESSURE BALANCED
- M — MOTOR OPERATED VALVE
- E/H — ELECTRO HYDRAULIC

IN-LINE INSTRUMENTS

- FLOW ORIFICE (VALVES INFERRED)
- VENTURI TUBE OR FLOW NOZZLE
- TURBINE OR PROPELLER TYPE
- CLAMP-ON ULTRASONIC FLOW METER
- ULTRASONIC FLOW METER
- CORIOLIS METER
- POSITIVE DISPLACEMENT METER
- INLINE FLOW METER OTHER THAN ROTAMETER
- ROTAMETER
- M — MAGNETIC FLOW METER
- P — INSTRUMENT PURGE

PIPING SYMBOLS

- ECCENTRIC REDUCER
- CONCENTRIC REDUCER
- SWAGE REDUCER
- SPECTACLE BLIND (OPEN)
- SPECTACLE BLIND (CLOSED)
- PADDLE BLIND (OPEN)
- PADDLE BLIND (CLOSED)
- PADDLE SPACER
- WELD CAP
- THREADED OR SOCKET WELD CAP
- THREADED PLUG
- BLIND FLANGE
- S OR — Y - TYPE STRAINER
- HOSE CONNECTION
- FLEXIBLE HOSE
- EXPANSION JOINT
- OPEN DRAIN
- C — CLOSED DRAIN
- STARTUP CONE STRAINER
- BARRED TEE

PIPING SYMBOLS

- FLAT STRAINER
- PIPE UNION
- FLANGE CONNECTION
- IG — FLANGE INSULATING KIT
- DUPLEX STRAINER
- T — STEAM TRAP
- FLAME ARRESTOR
- INLET AIR FILTER
- RAIN CAP
- VENT TO ATMOSPHERE
- BLEED RING
- BASKET STRAINER/FILTER
- FLOW CONDITIONER
- ET — INSULATION

MISCELLANEOUS PIPING SYMBOLS

- SP — SPECIALTY ITEM
- 150 | 600 — SPEC BREAK
- TP — TIE-POINT
- PULSATION DAMPENER

VALVE TAG IDENTIFICATION

6" A 2 R F

- 6" — VALVE SIZE / PIPING CLASS
- A — VALVE TYPE
- 2 — VALVE END TYPE
- R — SPECIAL VALVE TYPE
- F

VALVE TYPES

1	GATE	6	NEEDLE
2	BALL	7	BUTTERFLY
3	PLUG	8	MULTIPORT
4	GLOBE	9	GAUGE
5	CHECK		

VALVE END TYPES

F	FLAT FACE	U	UNION
G	GRAYLOC	V	VICTUALIC COUPLING
J	RING TYPE JOINT	W	WELDED
R	RAISED FACE	X	SPECIAL
S	SCREWED	Z	SOCKET WELD

SPECIAL VALVE TYPES

F	FULL PORT	S	SHORT PATTERN
N	NACE	V	VENTURI
P	PISTON	W	WAFER
R	REDUCED PORT	X	SPECIAL, e.g. 3-WAY

LINE IDENTIFICATION

4"-CR-1000-A1-1 1/2" ET

- 4" — LINE SIZE
- CR — LINE SERVICE DESIGNATION
- 1000 — UNIQUE LINE NUMBER
- A1 — PIPING SPECIFICATION
- 1 1/2" — THICKNESS
- ET — INSULATION CLASSIFICATION

PIPING CLASS

A1 – ANSI 150	D1 – ANSI 600
B1 – ANSI 300	E1 – ANSI 900

LINE SERVICE DESIGNATIONS

A	PROCESS AIR	HF	HYDROFLOURIC ACID
AG	ACID GAS	HO	HEAVY OIL
AM	AMINE	HS	H2S
BF	BOILER FEED WATER	IA	INSTRUMENT AIR
BIT	BITUMEN	JF	JET FUEL
BRD	BRINE DISPOSAL	K	KEROSENE
BRR	BRINE RETURN	LO	LUBE OIL
BRS	BRINE SUPPLY	LP	LIQUID PETROL
BS	BOTTOM SLURRY	MS	SULFUR
BU	BUTANE	N	NITROGEN
C	CONDENSATE	NA	NAPHTHA
CA	CAUSTIC	OS	OILY WATER SEWER
CL	CHLORIDE	PP	PROPANE
CR	CRUDE OIL	PV	PROCESS VAPOR
CT	CATALYST	PW	POTABLE WATER
CW	COOLING WATER	RF	REFORMATE
D	DIESEL	RW	RAW WATER
DC	CLOSED DRAIN	SG	SOUR GAS
DO	OPEN DRAIN	SL	STEAM (50#, LOW PRESS)
FG	FUEL GAS	SM	STEAM (150#, MED PRESS)
FL	FLARE	SO	SEAL OIL
FO	FUEL OIL	SR	SLURRY
FW	FIRE WATER	SS	STORM WATER SEWER
GA	GASOLINE	SW	SOUR WATER
GO	GAS OIL	UA	UTILITY AIR
H	HYDROGEN	WO	WASTE OIL/SLOP OIL
HC	GENERAL HYDROCARBON	WW	WELL WATER

PIPING ABREVIATIONS

AG	ABOVE GROUND	QD	QUICK DISCONNECT
CSO	CAR SEAL OPEN	SCS	SITE COLLECTION SYSTEM
CSC	CAR SEAL CLOSED	SC	SAMPLE CONNECTION
CO	CLEAN OUT	SO	STEAM OUT
FC	FAIL CLOSED	TSO	TIGHT SHUT OFF
FL	FAIL IN LAST POSITION	UG	UNDER GROUND
FO	FAIL OPEN	WCV	WAFER CHECK VALVE
NO	NORMALLY OPEN	OWS	OILY WATER SEWER
NC	NORMALLY CLOSED	WS	CLEAN WATER SEWER
LO	LOCK OPEN		

INSULATION CLASSIFICATION

ST – STEAM TRACED	PP – PERSONNEL PROTECTION
ET – ELECTRIC TRACED	CC – COLD CONSERVATION
HC – HEAT CONSERVATION	

STATE OF TEXAS
OSCAR ALEJANDRO ALDAMA
69993
LICENSED
PROFESSIONAL ENGINEER

ISSUED FOR PERMITTING

REFERENCE DRAWINGS

NUMBER	TITLE

REVISIONS

NO.	DESCRIPTION	BY	CKD	DATE
A	ISSUED FOR PERMITTING	RS	OA	12/08/23

DRAWN BY	RS	DATE 12/08/23
CHECKED BY	HV	DATE 12/08/23
ENGR. APPD.	OA	DATE 12/08/23
PROJ. MGR. APPD.	OA	DATE 12/08/23
CLIENT APPD.		DATE

J|TAM ENGINEERING
TEXAS FIRM: F-18825

ADVANTEK WMS

LEGEND AND SYMBOLS

FORT BEND COUNTY — TEXAS

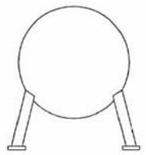
SCALE	DRAWING NUMBER	REV.
NONE	ADV003JTAM-ME-30-001	A

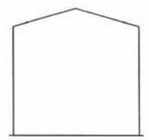
EQUIPMENT IDENTIFICATION

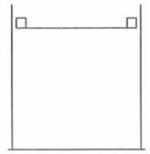
EQUIPMENT CODE

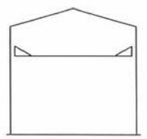
B – STEAM BOILER
MS – METER SKID
MX – MIXER
P – PUMP
PRV – PROVER SKID
S – SUMP TANK
ST – STRAINER
SRS – SURGE RELIEF SKID
TK – TANK

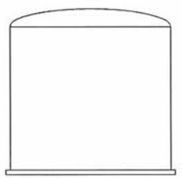
STORAGE TANKS


SPHERICAL TANK

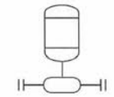

CONICAL ROOF TANK

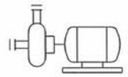

EXTERNAL FLOATING ROOF TANK


INTERNAL FLOATING ROOF TANK

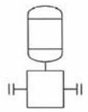

DOME ROOF TANK

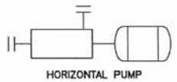
ROTATING EQUIPMENT


VERTICAL INLINE PUMP

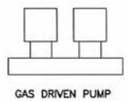

CENTRIFUGAL PUMP

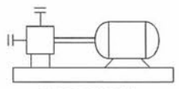

GEAR PUMP

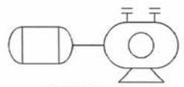

POSITIVE DISPLACEMENT PUMP

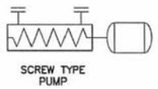

HORIZONTAL PUMP

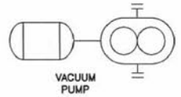

PUMP–C

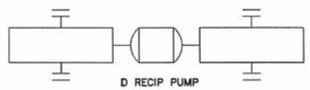

GAS DRIVEN PUMP

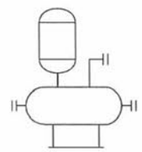

SLIDE VANE PUMP

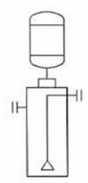

LRV PUMP


SCREW TYPE PUMP

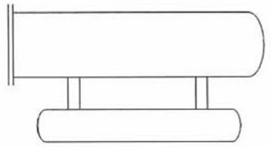

VACUUM PUMP

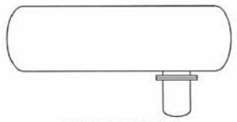

D RECIP PUMP


VERTICAL CENTRIFUGAL PUMP

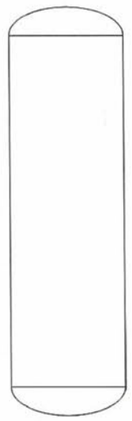

VERTICAL CAN PUMP

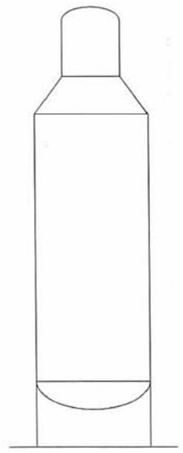
VESSELS


FILTER SEPARATOR

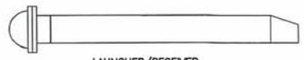

KNOCKOUT SCRUBBER

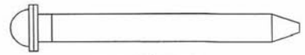

HORIZONAL VESSEL


VERTICAL VESSEL

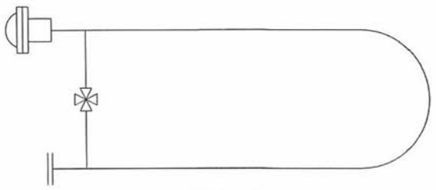

COLUMN

PIG TRAPS


LAUNCHER/RECEIVER ECCENTRIC


LAUNCHER/RECEIVER CONCENTRIC

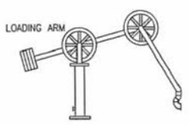
PROVERS


U–SHAPED PROVER


STRAIGHT PROVER


SMALL VOLUME PROVER

MISCELLANEOUS



ISSUED FOR PERMITTING

REFERENCE DRAWINGS

NUMBER	TITLE

REVISIONS

NO.	DESCRIPTION	BY	CKD.	DATE
A	ISSUED FOR PERMITTING	RS	OA	12/08/23

DRAWN BY: RS	DATE: 12/08/23
CHECKED BY: HV	DATE: 12/08/23
ENGR. APPD.: OA	DATE: 12/08/23
PROJ. MGR. APPD.: OA	DATE: 12/08/23
CLIENT APPD.	DATE

J|TAM ENGINEERING
TEXAS FIRM: F-18825

ADVANTEK WMS

LEGEND AND SYMBOLS

FORT BEND COUNTY TEXAS

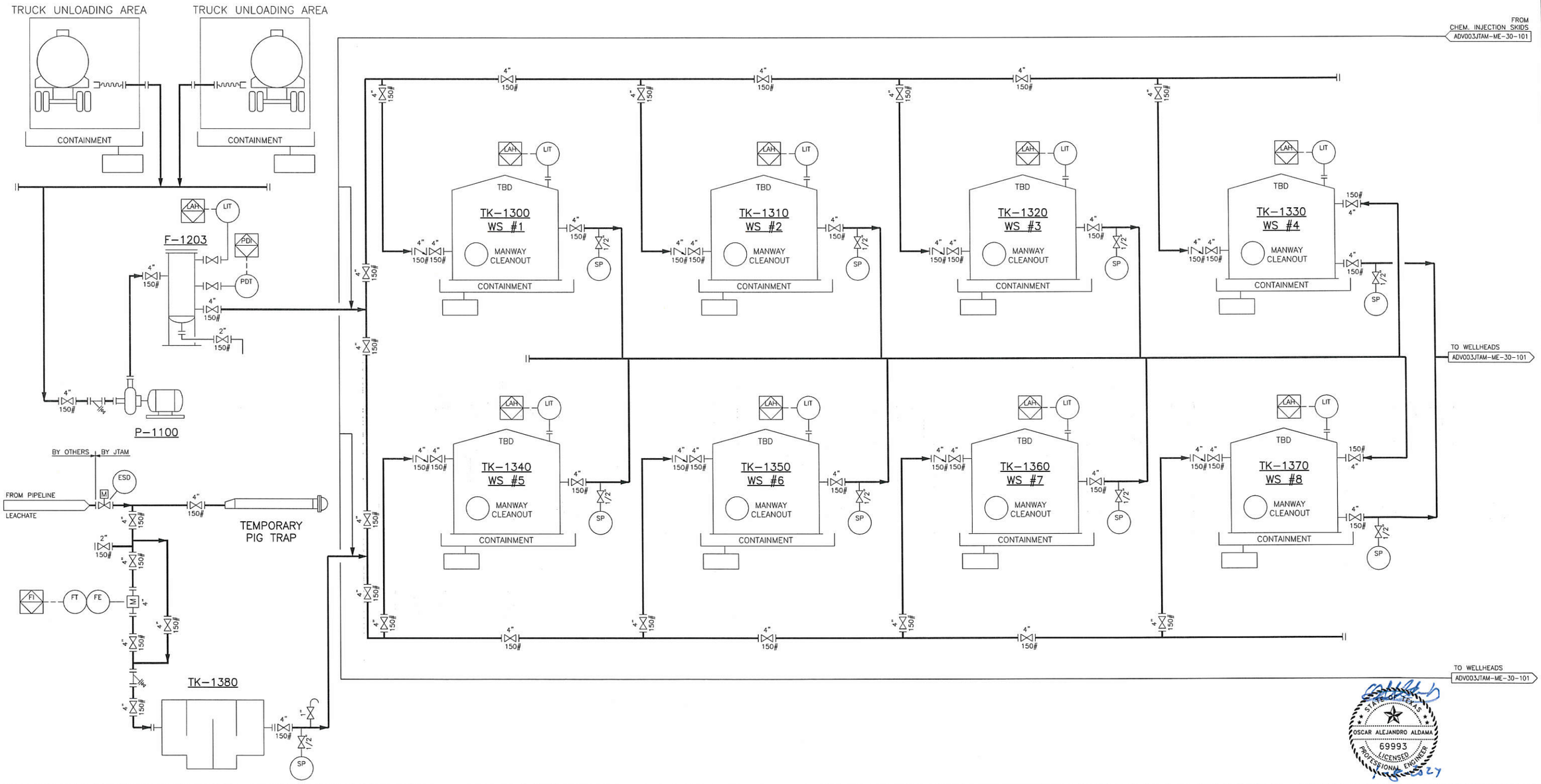
SCALE	DRAWING NUMBER	REV.
NONE	ADV003JTAM–ME–30–002	A

P-1100
UNLOADING PUMP
SERVICE: TBD
PUMP TYPE: CENTRIFUGAL
SIZE: 4" X 4"
FLOW: 400 GPM
MOTOR SIZE: 30 HP

F-1203
FILTER
CAPACITY: 350 GPM

TK-1300/1310/1320/1330/1340/1350/1360/1370
WS #1,2,3,4,5,6,7,8
STORAGE TANKS
CAPACITY: 1000 BBLS (EA.)
8000 BBLS (TOTAL)

TK-1380
WEIR TANK
CAPACITY: 500 BBLS



NOTES:
1. DIMENSIONS AND PLACEMENT AS PROVIDED BY ADVANTEK FOR REFERENCE ONLY, SUBJECT TO CLIENT APPROVAL.
2. TANKS TO HAVE A 10'-0" SPACING.
3. CONTAINMENT WALL HEIGHT OF 3'-2" TO 3'-4".

ISSUED FOR PERMITTING

REFERENCE DRAWINGS

NUMBER	TITLE

REVISIONS

NO.	DESCRIPTION	BY	CKD.	DATE
C	ISSUED FOR PERMITTING	RS	OA	01/08/24
B	ISSUED FOR APPROVAL	RS	HV	12/20/23
A	ISSUED FOR REVIEW	RS	DD	12/06/23

		DATE
DRAWN BY	RS	12/06/23
CHECKED BY	DD	12/06/23
ENGR. APPD.	HV	12/06/23
PROJ. MGR. APPD.	OA	12/06/23
CLIENT APPD.		DATE

J|TAM ENGINEERING
TEXAS FIRM: F-18825

STATE OF TEXAS
OSCAR ALEJANDRO ALDAMA
69993
LICENSED PROFESSIONAL ENGINEER

ADVANTEK WMS
PROCESS FLOW DIAGRAM
PRE-INJECTION UNIT
NON-HAZARDOUS DISPOSAL WELL
OFFLOAD AREA & STORAGE TANKS

FORT BEND COUNTY | TEXAS
SCALE: NONE
DRAWING NUMBER: ADV003JTAM-ME-30-100
REV: C

P-1110
CHARGE PUMP
SERVICE: TBD
PUMP TYPE: TBD
SIZE: 6" X 5"
FLOW: 360 GPM
MOTOR SIZE: 40 HP

P-1120
CHARGE PUMP
SERVICE: TBD
PUMP TYPE: TBD
SIZE: 4" X 4"
FLOW: 400 GPM
MOTOR SIZE: 40 HP

P-1121
CHARGE PUMP
SERVICE: TBD
PUMP TYPE: TBD
SIZE: 4" X 4"
FLOW: 400 GPM
MOTOR SIZE: 40 HP

P-1122
CHEMICAL PUMP
SERVICE: TBD
PUMP TYPE: TBD
SIZE: 3" X 3"
FLOW: 400 GPM
MOTOR SIZE: 20 HP

P-1130
HIGH PRESSURE INJECTION PUMP
SERVICE: TBD
PUMP TYPE: PZ-7
SIZE: 5" X 5"
FLOW: 336 GPM
MOTOR SIZE: 500 HP

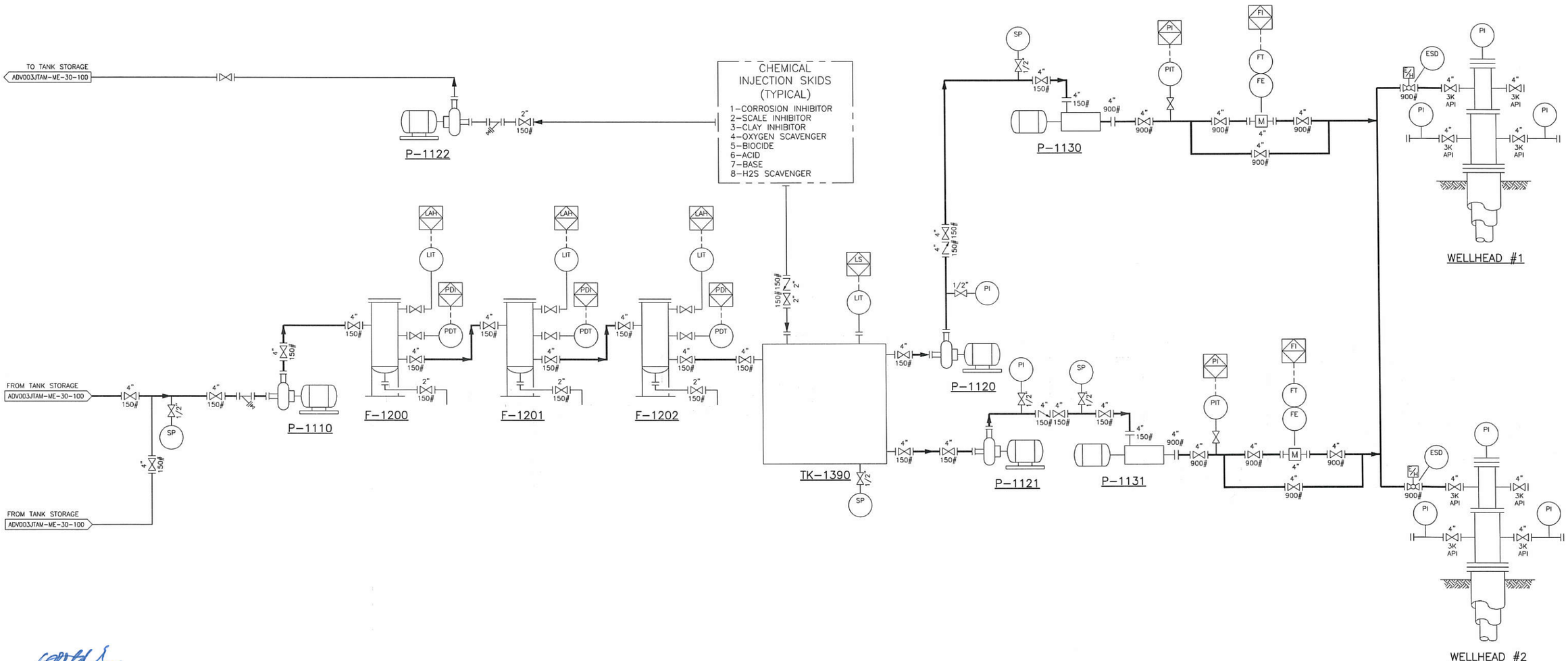
P-1131
HIGH PRESSURE INJECTION PUMP
SERVICE: TBD
PUMP TYPE: PZ-7
SIZE: 5" X 5"
FLOW: 336 GPM
MOTOR SIZE: 500 HP

F-1200
FILTER
CAPACITY: 700 GPM

F-1201
FILTER
CAPACITY: 700 GPM

F-1202
FILTER
CAPACITY: 700 GPM

TK-1390
PRE-INJECTION TANK
CAPACITY: 500 BBLS



NOTES:
1. DIMENSIONS AND PLACEMENT AS PROVIDED BY ADVANTEK FOR REFERENCE ONLY, SUBJECT TO CLIENT APPROVAL.

ISSUED FOR PERMITTING

STATE OF TEXAS
OSCAR ALEJANDRO ALDAMA
69993
LICENSED
PROFESSIONAL ENGINEER

REFERENCE DRAWINGS	
NUMBER	TITLE

REVISIONS				
NO.	DESCRIPTION	BY	CKD.	DATE
C	ISSUED FOR PERMITTING	RS	OA	01/08/24
B	ISSUED FOR APPROVAL	RS	HV	12/20/23
A	ISSUED FOR REVIEW	RS	DD	12/06/23

DRAWN BY	DATE
RS	12/06/23
CHECKED BY	DATE
DD	12/06/23
ENGR. APPD.	DATE
HV	12/06/23
PROJ. MGR. APPD.	DATE
OA	12/06/23
CLIENT APPD.	DATE

J|TAM ENGINEERING
TEXAS FIRM: F-18825

ADVANTEK WMS
PROCESS FLOW DIAGRAM
PRE-INJECTION UNIT
NON-HAZARDOUS DISPOSAL WELL
PUMP & SURFACE EQUIPMENT
FORT BEND COUNTY TEXAS

SCALE	DRAWING NUMBER	REV
NONE	ADV003JTAM-ME-30-101	C

P-1100
UNLOADING PUMP
SERVICE: TBD
PUMP TYPE: CENTRIFUGAL
SIZE: 4" X 4"
FLOW: 400 GPM
MOTOR SIZE: 30 HP

P-1110
CHARGE PUMP
SERVICE: TBD
PUMP TYPE: TBD
SIZE: 6" X 5"
FLOW: 360 GPM
MOTOR SIZE: 40 HP

F-1203
FILTER
CAPACITY: 350 GPM

P-1120
CHARGE PUMP
SERVICE: TBD
PUMP TYPE: TBD
SIZE: 4" X 4"
FLOW: 400 GPM
MOTOR SIZE: 40 HP

P-1121
CHARGE PUMP
SERVICE: TBD
PUMP TYPE: TBD
SIZE: 4" X 4"
FLOW: 400 GPM
MOTOR SIZE: 40 HP

P-1122
CHEMICAL PUMP
SERVICE: TBD
PUMP TYPE: TBD
SIZE: 3" X 3"
FLOW: 400 GPM
MOTOR SIZE: 20 HP

P-1130
HIGH PRESSURE INJECTION PUMP
SERVICE: TBD
PUMP TYPE: PZ-7
SIZE: 5" X 5"
FLOW: 336 GPM
MOTOR SIZE: 500 HP

TK-1300/1310/1320/1330/1340/1350/1360/1370
WS #1,2,3,4,5,6,7,8
STORAGE TANKS
CAPACITY: 1000 BBLS (EA.)
8000 BBLS (TOTAL)

P-1131
HIGH PRESSURE INJECTION PUMP
SERVICE: TBD
PUMP TYPE: PZ-7
SIZE: 5" X 5"
FLOW: 336 GPM
MOTOR SIZE: 500 HP

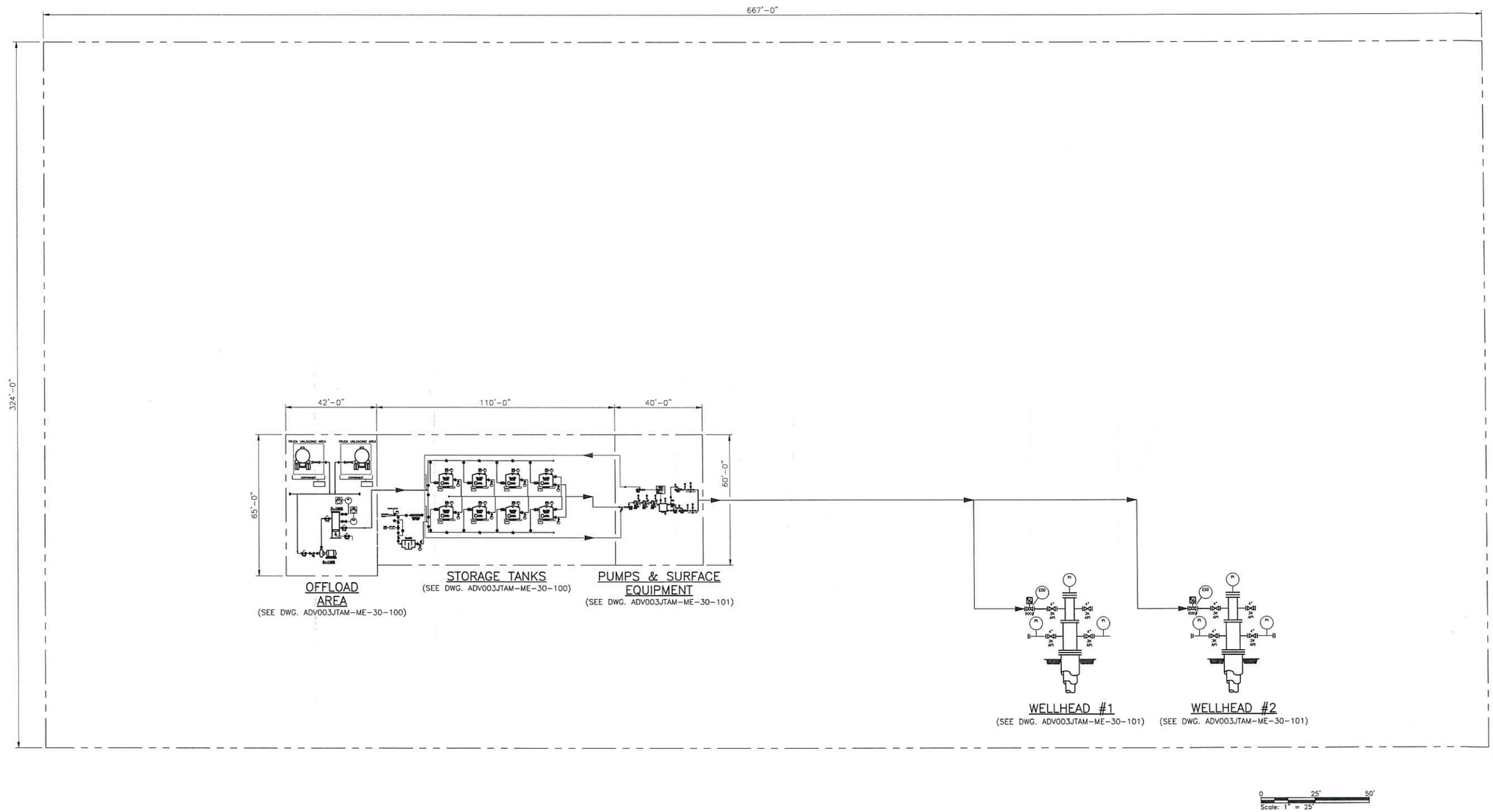
F-1200
FILTER
CAPACITY: 700 GPM

F-1201
FILTER
CAPACITY: 700 GPM

F-1202
FILTER
CAPACITY: 700 GPM

TK-1380
WEIR TANK
CAPACITY: 500 BBLS

TK-1390
PRE-INJECTION TANK
CAPACITY: 500 BBLS



Scale: 1" = 25'

STATE OF TEXAS
OSCAR ALEJANDRO ALDAMA
69993
LICENSED
PROFESSIONAL ENGINEER
7/8/2024

NOTES:
1. DIMENSIONS AND PLACEMENT AS PROVIDED BY ADVANTEK FOR REFERENCE ONLY, SUBJECT TO CLIENT APPROVAL.
2. TANKS TO HAVE A 10'-0" SPACING.
3. CONTAINMENT WALL HEIGHT OF 3'-2" TO 3'-4".
4. ONLY BOUNDARY AREAS TO SCALE ALL EQUIPMENT, PIPING, AND WELLHEADS ARE NOT.

ISSUED FOR PERMITTING

REFERENCE DRAWINGS

NUMBER	TITLE

NO.	DESCRIPTION	BY	CKD.	DATE
C	ISSUED FOR PERMITTING	RS	OA	01/08/24
B	ISSUED FOR APPROVAL	RS	HV	12/19/23
A	ISSUED FOR REVIEW	RS	DD	12/07/23

		DATE
DRAWN BY:	RS	12/07/23
CHECKED BY:	DD	12/07/23
ENGR. APPD.:	HV	12/07/23
PROJ. MGR. APPD.:	OA	12/07/23
CLIENT APPD.:		DATE

J|TAM ENGINEERING
TEXAS FIRM: F-18825

ADVANTEK WMS
BLOCK FLOW DIAGRAM
PRE-INJECTION UNIT
NON-HAZARDOUS DISPOSAL WELL
FORT BEND COUNTY — TEXAS
SCALE: 1" = 25'
DRAWING NUMBER: ADV003JTAM-ME-30-102
REV.: C

GSI Job No: 6731

INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENT IV.C

USGS Topographic Map

Smithers Lake, Texas Quadrangle Location

Big Creek
Deer Creek
Deer Cr
FM 762
GLESS BIG CREEK RD
FM 1994
LONG POINT RD
FM 361
Long Point
DAVIS ESTATE RD
ZAMANEK RD
BRUMBELOW RD
Flying C Ranch Airport
50
100
150

LEGEND

- UIC Waste Management
- Municipal Solid Waste Landfill
- Fort Bend Regional Landfill Property Boundary

ROAD CLASSIFICATION

Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD

Interstate Route · US Route · State Route

Notes

Background Imagery: Smithers Lake Quadrangle, Texas - Fort Bend County, 7.5-minute Series, United States Geological Survey (USGS) paper topographic (2022).

Feet
0 1,000 2,000

Projected Coordinate System
WGS 1984 Web Mercator
(auxiliary sphere)

GSI ENVIRONMENTAL

USGS TOPOGRAPHIC MAP

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP
Needville, Texas

GSI Job No.	6731	Drawn By:	CDM
Issued:	20-Feb-2024	Chk'd By:	JMM
Map ID:	**001_04**	Appv'd By:	JMM

ATTACHMENT IV.C

GSI Job No: 6731

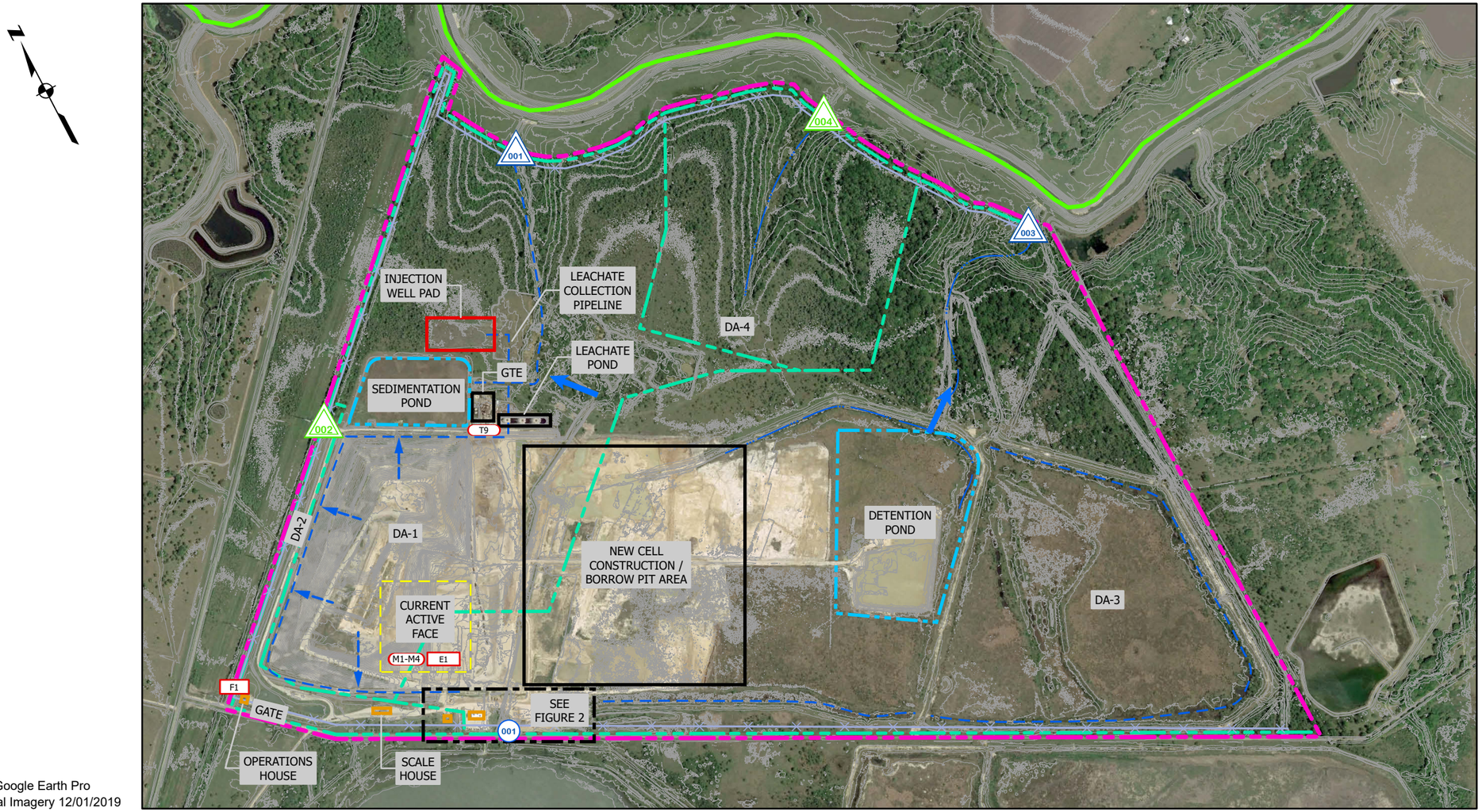
INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENT IV.D.1

Site Map

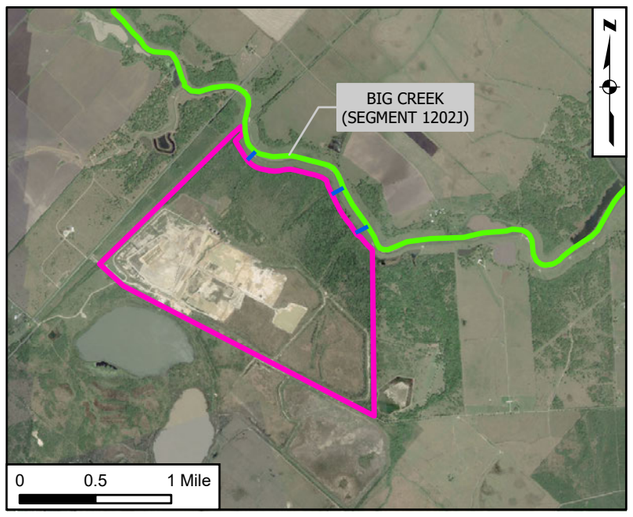


Aerial: Google Earth Pro
Historical Imagery 12/01/2019

0 500 1,000 2,000 FT

LEGEND

- PROPERTY BOUNDARY
- DRAINAGE BOUNDARY
- DETENTION / SEDIMENTATION POND
- DISCHARGE ROUTE
- RECEIVING WATERBODY
- FENCE
- DITCH / CREEK / SWALE
- DRAINAGE STRUCTURES (PIPES, CULVERTS, LET DOWNS)
- FLOW DIRECTION
- DA-# — DRAINAGE AREA
- LD / ULD — LOADING / UNLOADING
- 000 — OUTFALL (TO BE SAMPLED)
- 000 — OUTFALL (NOT SAMPLED)
- # — INFALL
- TR — TIRE STORAGE
- P — PORT-O-LETS
- STRUCTURE
- SECONDARY CONTAINMENT
- S — SPILL KIT
- DRAIN CONTAINMENT FOR OUTPUT PIC 6
- SCRAP METAL ROLLOFF/HOPPER
- T# — AST (ABOVE GROUND STORAGE TANK) #
- M# — MOBILE TANK #
- E# — OIL FILLED EQUIPMENT #
- D — DRUMS / TOTES / #
- F# — TRANSFORMER #
- TOPOGRAPHIC CONTOURS



NOTES:

1. THE FIRST NAMED RECEIVING WATERBODY IS: BIG CREEK (SEGMENT 1202J), WHICH IS LISTED AS A 303(d) IMPAIRED WATER BODY BY THE TCEQ FOR BACTERIA (RECREATION USE).
2. THE FACILITY DOES NOT DISCHARGE TO A MS4.
3. THE APPROXIMATE LOCATION OF THE ENTRANCE TO THE FACILITY IS: 29.395630°N / -95.715506°W.
4. PROPERTY IS COMPRISED OF APPROXIMATELY 1,150 ACRES.
5. SCALE BAR ONLY APPLIES TO THE LARGE SITE MAP, AND NOT THE INSERT.
6. NORTH ARROW APPLIES TO ONLY THE LARGE SITE MAP AND NOT THE INSERT.
7. INFALL 001 REPRESENTS WHERE WATER FROM DITCHES ON THE OTHER SIDE OF DAVIS ESTATE RD. ENTERS THE PROPERTY.
8. ACTIVE FACE LOCATION SHOWN IS TYPICAL AND WILL VARY DEPENDING ON LANDFILL OPERATIONS. ACTIVE FACE IS ESTABLISHED WITH DIVERSION AND CONTAINMENT BERMS IN ACCORDANCE WITH SITE OPERATING PLAN.
9. FOR LOCATION AND INFORMATION REGARDING LEACHATE COLLECTION AND TREATMENT SYSTEMS REFER TO SEPARATE LEACHATE SITE PLAN.
10. REFERENCE LEACHATE COLLECTION SYSTEM FIGURES FOR DETAILED INFORMATION.
11. THIRD PARTY POWER PLANT (FORT BEND POWER PRODUCERS) OPERATES ON FACILITY GROUNDS.

OUTFALL / SAMPLE POINT COORDINATES:

OF 001: 29.405993°N / -95.709308°W
OF 002: 29.401752°N / -95.719212°W
OF 003: 29.397316°N / -95.696417°W
OF 004: 29.402728°N / -95.700289°W

TANKS

T9	CONDENSATE	2 –106,000 GALLON TANKS

MOBILE TANKS

M1	DIESEL	1 –1,000 GALLON TANK ON MOBILE REFUELER
M2	USED OIL	1 –200 GALLON TANK ON MOBILE REFUELER
M3	MOTOR OIL	1 –180 GALLON TANK ONMOBILE REFUELER
M3	ANTIFREEZE	1 –60 GALLON TANK ONMOBILE REFUELER

OIL FILLED EQUIPMENT

F1	MINERAL OIL	2 –51 GALLON TRANSFORMERS
E1	HYDRAULIC OIL	1 –250 GALLON TANK ON TIPPER

GSI ENVIRONMENTAL

Figure modified 1-June-2024

Permit Application Figure IV.D.1

RABA KISTNER
1011 W. Lewis Street
Conroe, TX 77301
281-210-0084 : www.rkci.com

Fort Bend Landfill
14115 Davis Estate Rd.
Needville, TX 77461

SWPPP / SPCC SITE PLAN

FIGURE: 1

JOB#: AWF1808411 | Rev # 0 | APPR: AH | DSN: JC | SCALE: MAP SCALE | DATE: 10-31-2021

GFL

GSI Job No: 6731

INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

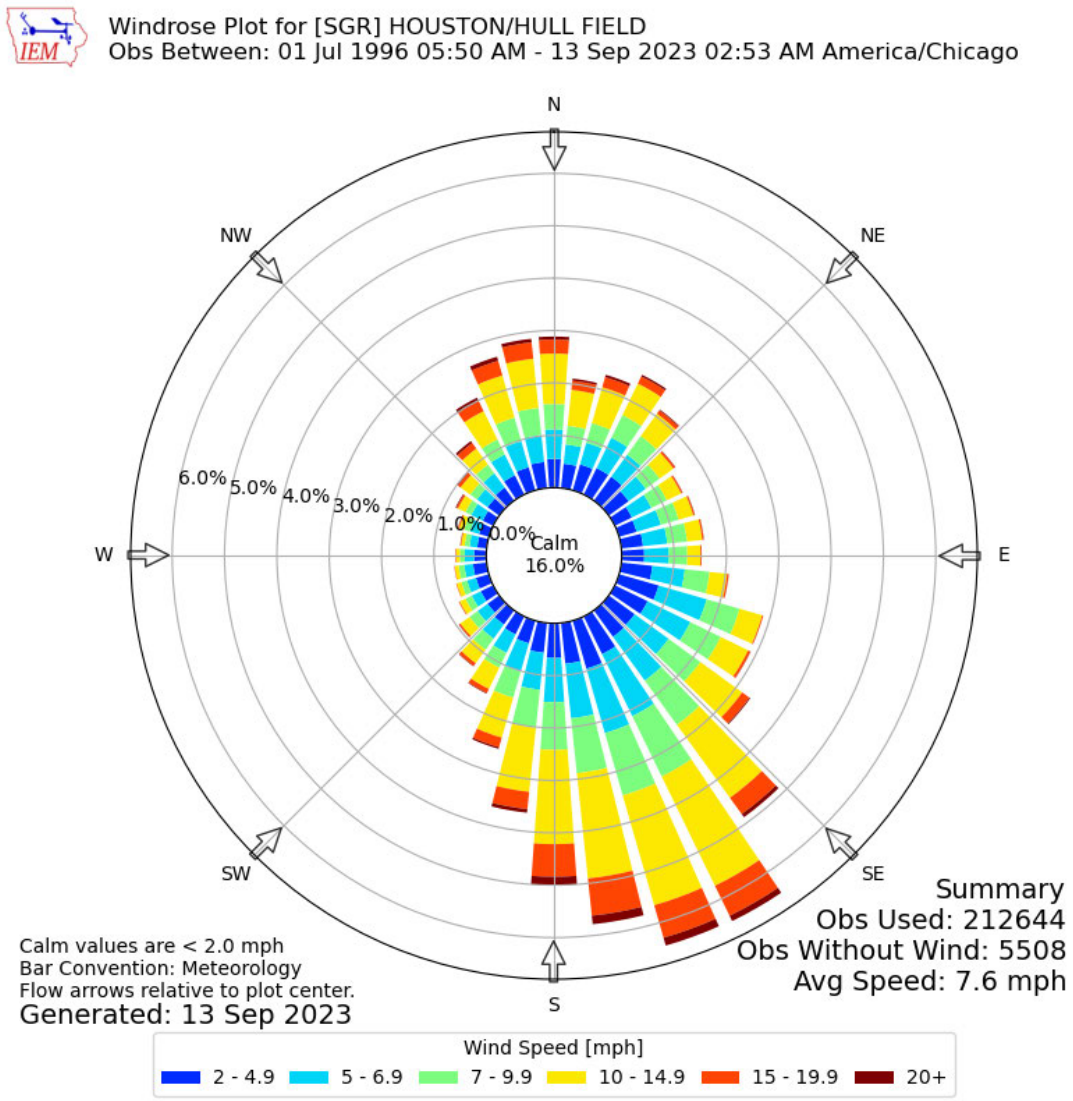
Needville, Texas

ATTACHMENT IV.D.2

Wind Rose for Needville, Texas

ATTACHMENT IV.D.2
WIND ROSE FOR NEEDVILLE, TEXAS

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP, Needville, Texas



Note: The wind rose was obtained from the Iowa State University Environmental Mesonet website for Needville, Texas. The wind measurements were obtained from 2009 to 2023 at Sugar Land Regional Airport, located approximately 16 miles north of the Fort Bend Regional Landfill, LP facility.

Website:
https://mesonet.agron.iastate.edu/sites/windrose.phtml?station=ARM&network=TX_ASOS

GSI Job No: 6731

INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENT IV.G.1

Engineering Report for Tanks TK-1300, TK-1310, TK-1320, TK-1330, TK-1340, TK-1350, TK-1360, and TK-1370

GSI Job No. 6731

ATTACHMENT IV.G.1
ENGINEERING REPORT FOR TANKS TK-1300 THROUGH TK-1370

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP, Needville, Texas

I, James M. McDade, a registered professional engineer in the State of Texas, certify that the Engineering Report issued 20 February 2024 and revised 4 June 2024 for Tanks TK-1300, TK-1310, TK-1320, TK-1330, TK-1340, TK-1350, TK-1360, and TK-1370 (Notice of Registration Unit Nos. 001 through 008) located on the Fort Bend Regional Landfill in Needville, Texas, has been developed in general accordance with good engineering practices and requirements of 30 TAC 305.45(a)(8)(A).

4 June 2024

James M. McDade, P.E.
State of Texas Registration No. 115868
GSI Environmental Inc.
Texas Registration No. F-1198

1.0 INTRODUCTION

This section summarizes the engineering aspects of the proposed permitted nonhazardous waste tanks TK-1300, TK-1310, TK-1320, TK-1330, TK-1340, TK-1350, TK-1360, and TK-1370 (collectively referred to as Tanks), located on the Fort Bend Regional Landfill (FBRL) facility. The location of the Tanks is shown on the facility plans (see Attachment IV.C). General information on the tanks, including capacity and wastes managed, is summarized on Table IV of this permit application. A figure showing a general diagram of the Tanks is provided in Figure IV.G.1.1 and additional detailed design of the secondary containment area is provided on Figure IV.G.1.2.

1.1 Basis for the Engineering Report

The Tanks will be located in the northern portion of the FBRL facility in Fort Bend County, near Needville, Texas (see Attachment IV.C). This engineering report has been prepared to certify that the design for the tanks meets applicable standards as specified in 30 TAC 305.45(a)(8). After approval of this permit application, the tanks will be installed and tested to certify conformance with this engineering report, applicable regulations, and nonhazardous waste permit provisions. A tank installation certification report will be prepared and submitted to TCEQ prior to placing the new Tanks into service.

1.2 Wastes to be Managed in the Tanks

Wastes 1 through 10 listed on Table III.B of this permit application will be managed in the Tanks (see Table III.B of this permit application). These wastes may be segregated based on chemical properties, including pH. Chemical agents, such as neutralization agents, corrosion inhibitors, and biocides may be added to each tank via an injection skid with diaphragm pumps as necessary to achieve the desired fluid properties. The Tanks will store the wastes before passing through filter bag modules to the Pre-Injection Tank, TK-1390.

2.0 DESIGN AND INSTALLATION OF THE TANKS

2.1 Design of the Tanks

The Tanks will be designed in general accordance with API Specification 12P for Fiberglass Reinforced Plastic Tanks or an equivalent standard. The Tanks will be constructed of fiberglass and oriented vertically, with an approximate height of 30 ft and an approximate diameter of 15 ft, corresponding to a maximum design capacity of 42,000 gallons (see Figure IV.G.1.1). Although not required, the foundation, structural support, seams, and connections of the Tanks have been designed and materials selected in accordance with 40 CFR 264.192 in order to: i) possess sufficient structural strength, ii) be compatible with the non-hazardous materials managed, and iii) prevent corrosion so that the Tanks will be protected from collapse, rupture, or failure. The Tanks will be installed within secondary containment in the northern portion of the FBRL facility (see Attachment IV.C).

The foundation for the Tanks will be constructed of reinforced concrete capable of maintaining the load of the Tanks when filled. The foundation of the Tanks will be resistant to pressure gradients above and below the system and is capable of preventing failure due to settlement, compression, and/or uplifts. The Tanks will not be in contact with soil or water, will be located aboveground, and will not be subject to frost heave.

2.2 Installation of the Tanks

The Tanks and ancillary equipment will be installed in accordance with standard engineering practices for quality control and testing. The Tanks will be handled in a manner to prevent damage during installation. Ancillary piping will be constructed of polybutylene, high-density polypropylene, or equivalent with welded, flanged connections, and tie-downs designed to accommodate possible expansion and contraction. Following installation of the Tanks, a professional engineer registered in the State of Texas will review information regarding installation of the tanks, ancillary equipment, and piping for evidence of potential weld breaks, punctures, scrapes, cracks, corrosion, or other structural damage, and an Installation Certification Report will be submitted to the TCEQ.

3.0 CONTAINMENT AREA

Potential releases to the environment will be prevented by locating the Tanks and ancillary equipment associated with the tank systems (i.e., piping, pumps, valves, etc.) within a concrete secondary containment area. The concrete secondary containment area may also include a chemically resistant sealant. As shown on Figure IV.G.1.2, the Tanks will be located within the secondary containment area, which will have a containment volume of 108,577 gallons (see Table IV.G.1.1). This volume accounts for displacement of equipment within the secondary containment area, and that includes the volume of the tanks below the height of the dike wall, concrete pads that the tanks will be placed atop, plus an assumed additional 10% of the containment volume for miscellaneous pump bases, footers, piping, etc. The containment volume is sufficient to contain 110% of the volume of the Tank.

The base of the secondary containment will be sloped so that fluid flows to a trench sump. The tanks will be connected in series so that overflow in any one tank will be routed to the next tank or to the drainage sump. Precipitation, wash water, overflow, and/or potential leaks from the tanks will be removed from the sump by FBRL using various methods (pumps, vacuum truck, or equivalent) within 24 hours, or if FBRL demonstrates that it is not possible within 24-hrs, at the earliest practicable time.

4.0 OPERATION OF THE TANKS

4.1 General Operating Requirements

The Tanks will be operated in such a manner as to: i) not place waste or treatment reagents into the tank system that have the potential to rupture, leak, corrode, or otherwise cause failure of the Tanks, their ancillary equipment, or the containment system, ii) provide spill prevention and overfill prevention controls in case of potential leaks, and iii) follow

applicable provisions in the event of a spill or release in order to protect human health and the environment.

Inspections

The Tanks will have sight glass level indicator and a high-level alarm, which will be subject to regular inspections. Readings from this indicator will be continuously monitored. All Tanks will be monitored routinely by operators at least once per day. The inspection schedule is provided in Table II.

Spill Response

Response activities will be conducted in the event of a release from the Tanks. In the event of a release from any one of the Tanks, FBRL will implement the following applicable procedures:

- *Flow Cessation*: Upon notification of a release, FBRL will immediately discontinue the flow of waste to the tank and into the secondary containment area.

- *Waste Removal*: Within 24 hours of release, FBRL will remove spilled waste from the secondary containment system to be either disposed of on-site or stored in another permitted tank. If removal of waste cannot be completed in 24 hours (i.e., because of force majeure), FBRL will complete waste removal at the earliest possible time to prevent harm to human health or the environment.

- *Notifications*: All notifications regarding a release to the environment will be completed in accordance with the TCEQ's spills and discharges regulations.

- *Return to Service*: If the integrity of any one of the Tanks was not damaged, the tank will be returned to service upon completion of necessary repairs, removal of waste, and adherence to applicable provisions. If the integrity of the tank was damaged, the tank will be repaired accordingly, and re-certified by a registered professional engineer in the State of Texas prior to returning to service in accordance with applicable provisions.

ATTACHMENT IV.G.1
ENGINEERING REPORT FOR TANKS TK-1300 THROUGH TK-1370

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP, Needville, Texas

TABLE

GSI ENVIRONMENTAL

TABLE IV.G.1.1
CALCULATION OF SECONDARY CONTAINMENT VOLUME: MAIN TANK AREA
Fort Bend Regional Landfill, LP, Needville, Texas
Industrial Nonhazardous Waste Permit Application

Item	Length (ft)	Width or Diameter (ft)	Area (sq ft)	Average Height (ft)	Volume (cu ft)	Conversion from cu ft to Gallons	Volume (gallons)	Notes
Area and Volume within Dike Walls								
Containment Area	60.00	110.00	6,600	3.25	21,450	7.48	160,446	The volume for the secondary containment area was calculated based on dimensions specified in site layout plan.
						Volume within Dike Walls	***160,446***	
Volume Displaced by Tanks and Equipment								
Tanks								
TK-1300	--	15.00	177	2.25	398	7.48	2,974	Assumes each tank is placed atop of 1-ft thick concrete pad or base (see below).
TK-1310	--	15.00	177	2.25	398	7.48	2,974	Assumes each tank is placed atop of 1-ft thick concrete pad or base (see below).
TK-1320	--	15.00	177	2.25	398	7.48	2,974	Assumes each tank is placed atop of 1-ft thick concrete pad or base (see below).
TK-1330	--	15.00	177	2.25	398	7.48	2,974	Assumes each tank is placed atop of 1-ft thick concrete pad or base (see below).
TK-1340	--	15.00	177	2.25	398	7.48	2,974	Assumes each tank is placed atop of 1-ft thick concrete pad or base (see below).
TK-1350	--	15.00	177	2.25	398	7.48	2,974	Assumes each tank is placed atop of 1-ft thick concrete pad or base (see below).
TK-1360	--	15.00	177	2.25	398	7.48	2,974	Assumes each tank is placed atop of 1-ft thick concrete pad or base (see below).
TK-1370	--	15.00	177	2.25	398	7.48	2,974	Assumes each tank is placed atop of 1-ft thick concrete pad or base (see below).
Pads and Curbing								
TK-1300 Pad	--	16.00	201	1.00	201	7.48	1,504	Assumes circular pad with 1 ft height.
TK-1310 Pad	--	16.00	201	1.00	201	7.48	1,504	Assumes circular pad with 1 ft height.
TK-1320 Pad	--	16.00	201	1.00	201	7.48	1,504	Assumes circular pad with 1 ft height.
TK-1330 Pad	--	16.00	201	1.00	201	7.48	1,504	Assumes circular pad with 1 ft height.
TK-1340 Pad	--	16.00	201	1.00	201	7.48	1,504	Assumes circular pad with 1 ft height.
TK-1350 Pad	--	16.00	201	1.00	201	7.48	1,504	Assumes circular pad with 1 ft height.
TK-1360 Pad	--	16.00	201	1.00	201	7.48	1,504	Assumes circular pad with 1 ft height.
TK-1370 Pad	--	16.00	201	1.00	201	7.48	1,504	Assumes circular pad with 1 ft height.
Other Ancillary Equipment (estimated)								
Other ancillary equipment (piping, footers, pump bases)	--	--	--	--	--	--	16,045	Conservatively assumes 10% of the volume within the dike wall.
						Volume Displaced by Tanks and Equipment	***51,869***	
Volume Available for Containment								
Volume within Dike Walls							160,446	Equal to volume within dike walls.
Less Displacement Volume							51,869	Equal to volume displaced by tanks and equipment.
						Volume Available for Containment	***108,577***	Volume within dike walls minus volume displaced by tanks and equipment.
Volume to be Contained								
110% of Largest Tank Volume							46,200	All eight tanks in the secondary containment area will have an operational volume of 42,000 gallons.
						Volume to be Contained	***46,200***	
Net Volume Over/(Under)								
Volume Available for Containment							108,577	Equal to available volume for containment.
Volume to be Contained							46,200	Equal to volume to be contained.
						Net Volume Over/(Under)	***62,377***	Conclusion: Sufficient containment volume available.

Notes:
1. Numerical rounding accounts for small differences in certain totals.

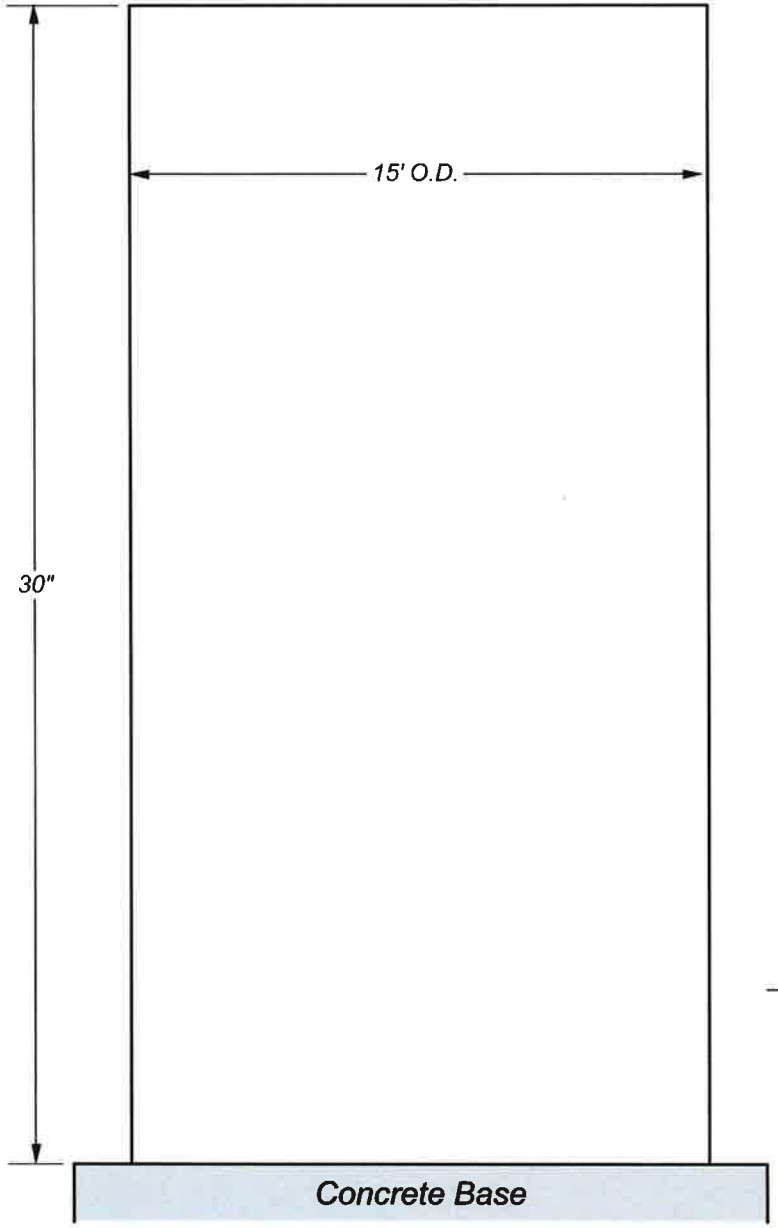
2/20/24

ATTACHMENT IV.G.1
ENGINEERING REPORT FOR TANKS TK-1300 THROUGH TK-1370

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP, Needville, Texas

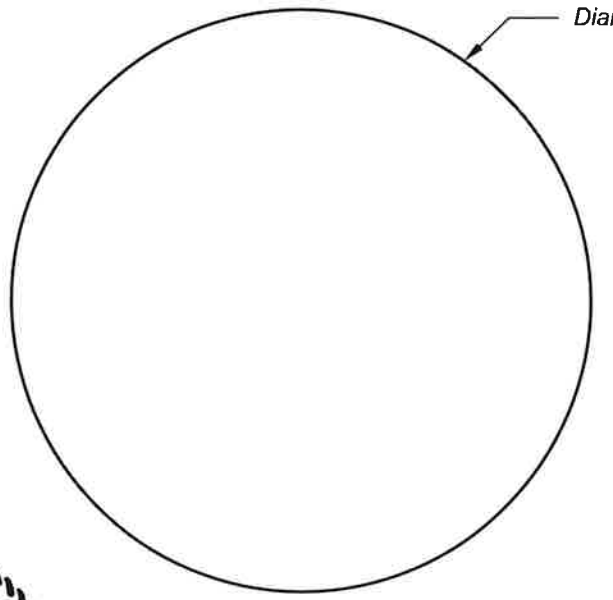
FIGURES

FOR PERMITTING PURPOSES ONLY



PLAN VIEW

Scale: 1" = 5'



TOP ELEVATION

Scale: 1" = 5'

STATE OF TEXAS
JAMES M. McDADE
115868
LICENSED
PROFESSIONAL ENGINEER

2/20/24

DESIGN CRITERIA

Construction Procedures / Design Standards: API 12P or equivalent
Operating Volume: 42,000 gallons (1000 barrels)
Pressure: 2.5 PSI
Temperature: Ambient
Material: Fiberglass
Compatible with Permitted Waste: Yes

Notes:

1. Nozzle configuration on the top and sides of the tank will be noted in the Certification Report.
2. All dimensions are approximate. Final dimensions will be provided in the Certification Report.

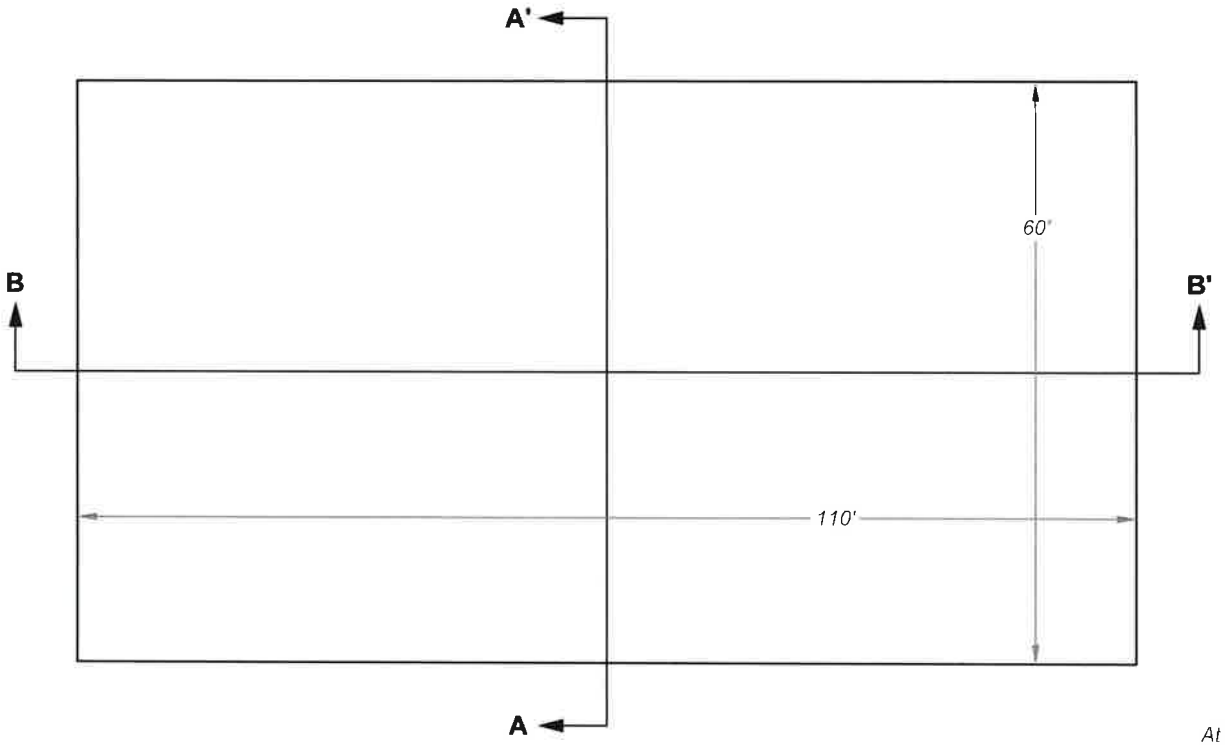
GSI ENVIRONMENTAL
Texas Registration Number: F-1198

GSI Job No.	6731	Drawn By:	CDM
Map ID:	002_01	Chk'd By:	JMM
Issued:	20-Feb-2024	Aprv'd By:	JMM
Scale:	As Shown	FIGURE IV.G.1.1	

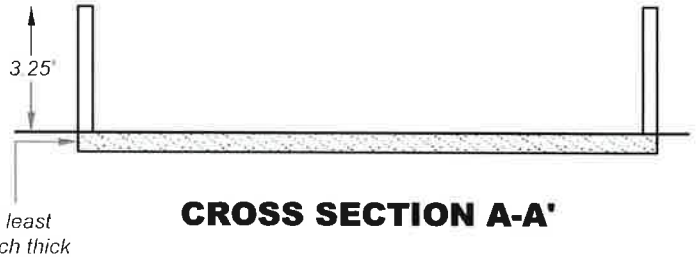
TANK DESIGN SUMMARY: TK-1300 THROUGH TK-1370

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP, Needville, Texas

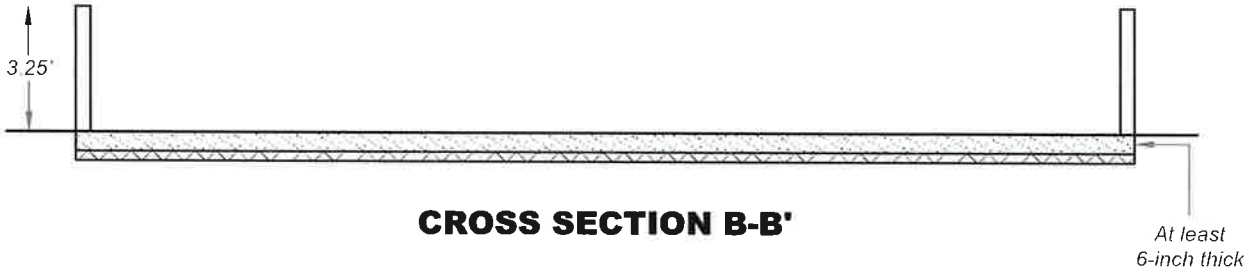
FOR PERMITTING PURPOSES ONLY



PLAN VIEW



CROSS SECTION A-A'



CROSS SECTION B-B'

LEGEND

- Reinforced concrete
- Native soils, leveled and compacted, as needed

Note:

All dimensions are approximate. Final dimensions and locations of Tanks will be provided in the Certification Report.

STATE OF TEXAS
JAMES M. McDADE
115868
LICENSED
PROFESSIONAL ENGINEER

2/20/24

SCALE (ft.)
0 10 20
Vertical scale exaggerated 4X

GSI ENVIRONMENTAL
Texas Registration Number F-1198

GSI Job No.	6731	Drawn By:	CDM
Map ID:	002_02	Chk'd By:	JMM
Issued:	20-Feb-2024	Aprv'd By:	JMM
Scale:	As Shown	FIGURE IV.G.1.2	

PROPOSED SECONDARY CONTAINMENT AREA FOR TANKS TK-1300 THROUGH TK-1370

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP, Needville, Texas

GSI Job No: 6731

INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENT IV.G.2

Engineering Report for Tank TK-1390

ATTACHMENT IV.G.2
ENGINEERING REPORT FOR TANK TK-1390

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP, Needville, Texas

I, James M. McDade, a registered professional engineer in the State of Texas, certify that the Engineering Report issued 20 February 2024 and revised 4 June 2024 for Tank TK-1390 (Notice of Registration Unit No. 9) located on the Fort Bend Regional Landfill in Needville, Texas, has been developed in general accordance with good engineering practices and requirements of 30 TAC 305.45(a)(8)(A).

4 June 2024

James M. McDade, P.E.
State of Texas Registration No. 115868
GSI Environmental Inc.
Texas Registration No. F-1198

1.0 INTRODUCTION

This section summarizes the engineering aspects of the proposed permitted nonhazardous waste tank TK-1390 (referred to as the Tank), located on the Fort Bend Regional Landfill (FBRL) facility. The location of the Tank is shown on the facility plans (see Attachment IV.C). General information on the tank, including capacity and wastes managed, is summarized on Table IV of this permit application. A figure showing a general diagram of the Tank is provided in Figure IV.G.2.1 and additional detailed design of the secondary containment area is provided on Figure IV.G.2.2.

1.1 Basis for the Engineering Report

The Tank will be located in the northern portion of the FBRL facility in Fort Bend County, near Needville, Texas (see Attachment IV.C). This engineering report has been prepared to certify that the design for the tank meets applicable standards as specified in 30 TAC 305.45(a)(8). After approval of this permit application, the tank will be installed and tested to certify conformance with this engineering report, applicable regulations, and hazardous waste permit provisions. A tank installation certification report will be prepared and submitted to TCEQ prior to placing the new Tank into service.

1.2 Wastes to be Managed in the Tank

Wastes 1 through 10 listed on Table III.B of this permit application will be managed in the Tanks (see Table III.B of this permit application). These waste streams will be co-mingled, neutralized, and chemically adjusted in the eight sediment and elementary neutralization unit tanks (TK-1300 through TK-1370), before they are pumped through a series of filter bag units into TK-1390. The Tank will provide a working volume for charging the injection booster pump (P-1120) to prevent cavitation of the injection pump (P-1130) during injection into the UIC.

2.0 DESIGN AND INSTALLATION OF THE TANK

2.1 Design of the Tank

The Tank is designed in accordance with API Specification 12P for Fiberglass Reinforced Plastic Tanks or an equivalent standard. The Tank will be constructed of fiberglass and oriented vertically with an approximate height of 25 ft and an approximate diameter of 12 ft, corresponding to a maximum design capacity of 21,000 gallons (see Figure IV.G.2.1). Although not required, the foundation, structural support, seams, and connections of the Tank have been designed and materials selected in accordance with 40 CFR 264.192 in order to: i) possess sufficient structural strength, ii) be compatible with the non-hazardous materials managed, and iii) prevent corrosion so that the Tanks will be protected from collapse, rupture, or failure. The Tanks will be installed within secondary containment in the north portion of the FBRL facility (see Attachment IV.C).

The foundation for the Tank will be constructed of reinforced concrete capable of maintaining the load of the Tanks when filled. The foundation of the Tank will be resistant to pressure gradients above and below the system and is capable of preventing failure

due to settlement, compression, and/or uplifts. The Tank will not be in contact with soil or water, will be located aboveground, and will not be subject to frost heave.

2.2 Installation of the Tank

The Tank and ancillary equipment will be installed in accordance with standard engineering practices for quality control and testing. The Tanks will be handled in a manner to prevent damage during installation. Ancillary piping will be constructed of polybutylene, high-density polypropylene, or equivalent with welded, flanged connections, and tie-downs designed to accommodate possible expansion and contraction. Following installation of the Tanks, a professional engineer registered in the State of Texas will review information regarding installation of the tanks, ancillary equipment, and piping for evidence of potential weld breaks, punctures, scrapes, cracks, corrosion, or other structural damage, and an Installation Certification Report will be submitted to the TCEQ.

3.0 CONTAINMENT AREA

Potential releases to the environment will be prevented by locating the Tank and ancillary equipment associated with the tank systems (i.e., piping, pumps, valves, etc.) within a concrete secondary containment area. The concrete secondary containment area may also include a chemically resistant sealant. As shown on Figure IV.G.2.2, the Tank will be located within the secondary containment area, which will have a containment volume of 49,613 gallons (see Table IV.G.2.1). This volume accounts for displacement of equipment within the secondary containment area, and that includes the volume of the tank below the height of the dike wall, concrete pad that the tank will be placed atop, plus an assumed additional 10% of the containment volume for miscellaneous pump bases, footers, piping, etc. The containment volume is sufficient to contain 110% of the volume of the Tank.

The base of the secondary containment will be sloped so that fluid flows to a trench sump. The tanks will be connected in series so that overflow in any one tank will be routed to the next tank or to the drainage sump. Precipitation, wash water, overflow, and/or potential leaks from the tanks will be removed from the sump by FBRL using various methods (pumps, vacuum truck, or equivalent) within 24 hours, or if FBRL demonstrates that it is not possible within 24-hrs, at the earliest practicable time.

4.0 OPERATION OF THE TANK

4.1 General Operating Requirements

The Tank will be operated in such a manner as to: i) not place waste or treatment reagents into the tank system that have the potential to rupture, leak, corrode, or otherwise cause failure of the Tank, their ancillary equipment, or the containment system, ii) provide spill prevention and overfill prevention controls in case of potential leaks, and iii) follow applicable provisions in the event of a spill or release in order to protect human health and the environment.

Inspections

The Tanks will have sight glass level indicator and a high-level alarm, which will be subject to regular inspections. Readings from this indicator will be continuously monitored. All Tanks will be monitored routinely by operators at least once per day. The inspection schedule is provided in Table II.

Spill Response

Response activities will be conducted in the event of a release from the Tanks. In the event of a release from the Tank, FBRL will implement the following applicable procedures:

- *Flow Cessation*: Upon notification of a release, FBRL will immediately discontinue the flow of waste into the secondary containment area.

- *Waste Removal*: Within 24 hours of release, FBRL will remove spilled waste from the secondary containment system to be either disposed of on-site or stored in another permitted tank. If removal of waste cannot be completed in 24 hours (i.e., because of force majeure), FBRL will complete waste removal at the earliest possible time to prevent harm to human health or the environment.

- *Notifications*: All notifications regarding a release to the environment will be completed in accordance with the TCEQ's spills and discharges regulations.

- *Return to Service*: If the integrity of the Tank was not damaged, the Tank will be returned to service upon completion of necessary repairs, removal of waste, and adherence to applicable provisions. If the integrity of the tank was damaged, the tank will be repaired accordingly, and re-certified by a registered professional engineer in the State of Texas prior to returning to service in accordance with applicable provisions.

ATTACHMENT IV.G.2
ENGINEERING REPORT FOR TANK TK-1390

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP, Needville, Texas

TABLE

GSI ENVIRONMENTAL

TABLE IV.G.2.1
CALCULATION OF SECONDARY CONTAINMENT VOLUME: PRE-INJECTION TANK AREA
Fort Bend Regional Landfill, LP, Needville, Texas
Industrial Nonhazardous Waste Permit Application

Item	Length (ft)	Width or Diameter (ft)	Area (sq ft)	Average Height (ft)	Volume (cu ft)	Conversion from cu ft to Gallons	Volume (gallons)	Notes
Area and Volume within Dike Walls								
Containment Area	40.00	60.00	2,400	3.25	7,800	7.48	58,344	The volume for the secondary containment area was calculated based on dimensions specified in site layout plan.
						Volume within Dike Walls	***58,344***	
Volume Displaced by Tanks and Equipment								
Tanks								
TK-1390	--	12.00	113	2.25	254	7.48	1,903	Assumes the tank is placed atop of 1-ft thick concrete pad or base (see below).
Pads and Curbing								
DW-1 Pad	--	13.00	133	1.00	133	7.48	993	Assumes circular pad with 1 ft height.
Ancillary Equipment								
Other ancillary equipment (piping, footers, pump bases)	--	--	--	--	--	--	5,834	Conservatively assumes 10% of the volume within the dike wall.
						Volume Displaced by Tanks and Equipment	***8,731***	
Volume Available for Containment								
Volume within Dike Walls							58,344	Equal to volume within dike walls.
Less Displacement Volume							8,731	Equal to volume displaced by tanks and equipment.
						Volume Available for Containment	***49,613***	Volume within dike walls minus volume displaced by tanks and equipment.
Volume to be Contained								
110% of Largest Tank Volume							23,100	Tank TK-1390 is the only tank in the pre-injection secondary containment area, and will have an operational volume of 21,000 gallons.
						Volume to be Contained	***23,100***	
Net Volume Over/(Under)								
Volume Available for Containment							49,613	Equal to available volume for containment.
Volume to be Contained							23,100	Equal to volume to be contained.
						Net Volume Over/(Under)	***26,513***	Conclusion: Sufficient containment volume available.

Notes:
1. Numerical rounding accounts for small differences in certain totals.

STATE OF TEXAS
JAMES M. McDADE
115868
LICENSED
PROFESSIONAL ENGINEER

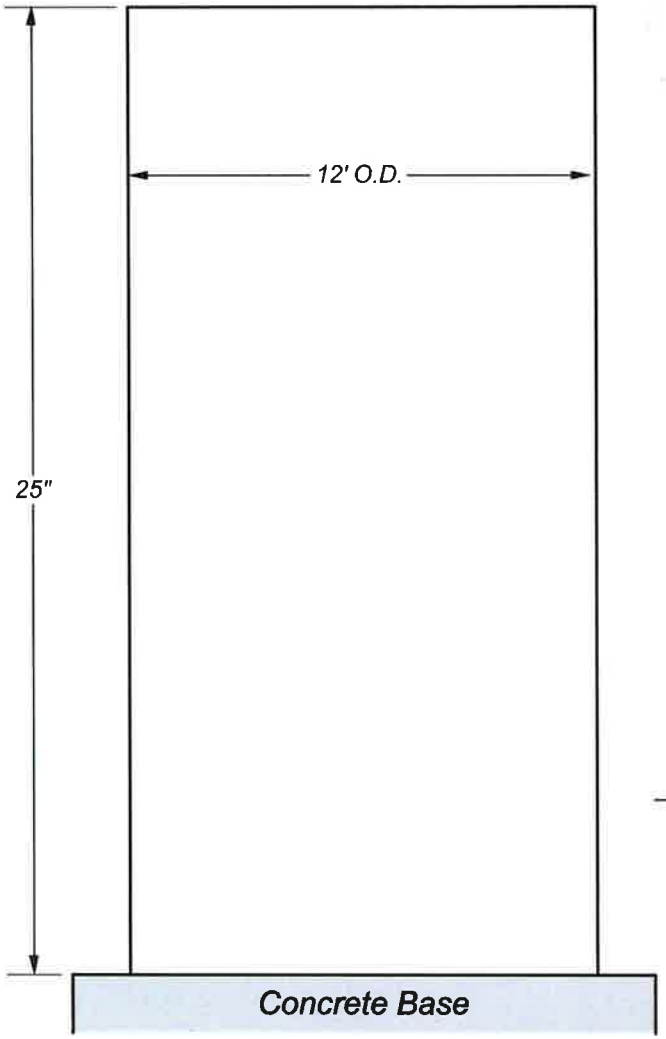
2/20/24

ATTACHMENT IV.G.2
ENGINEERING REPORT FOR TANK TK-1390

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP, Needville, Texas

FIGURES

FOR PERMITTING PURPOSES ONLY

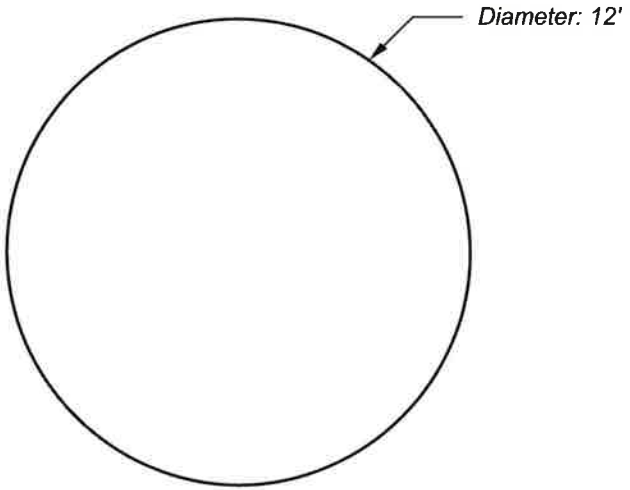


PLAN VIEW

Scale: 1" = 5'

STATE OF TEXAS
JAMES M. McDADE
115868
LICENSED
PROFESSIONAL ENGINEER

2/20/24



TOP ELEVATION

Scale: 1" = 5'

DESIGN CRITERIA

Construction Procedures / Design Standards: API 12P or equivalent
Operating Volume: 21,000 gallons (500 barrels)
Pressure: 2.5 PSI
Temperature: Ambient
Material: Fiberglass
Compatible with Permitted Waste: Yes

Notes:

1. Nozzle configuration on the top and sides of the tank will be noted in the Certification Report.
2. All dimensions are approximate. Final dimensions will be provided in the Certification Report.

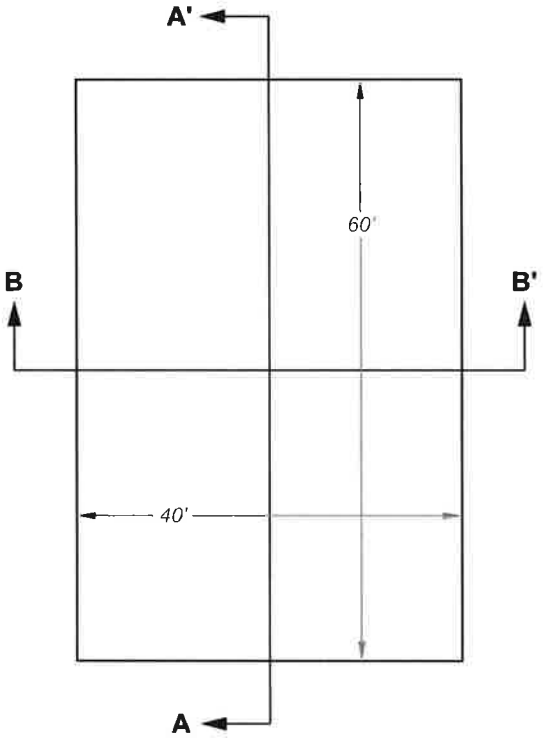
GSI ENVIRONMENTAL
Texas Registration Number: F-1198

GSI Job No.	6731	Drawn By:	CDM
Map ID:	002_03	Chk'd By:	JMM
Issued:	20-Feb-2024	Aprv'd By:	JMM
Scale:	As Shown	FIGURE IV.G.2.1	

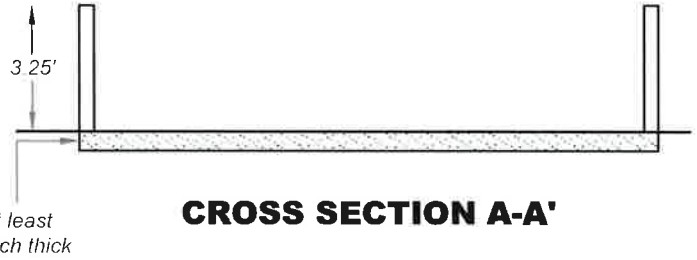
TANK DESIGN SUMMARY: TK-1390

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP, Needville, Texas

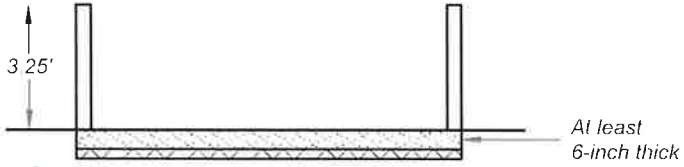
FOR PERMITTING PURPOSES ONLY



PLAN VIEW



CROSS SECTION A-A'



CROSS SECTION B-B'

STATE OF TEXAS
JAMES M. McDADE
115868
LICENSED
PROFESSIONAL ENGINEER

2/20/24

LEGEND

- Reinforced concrete
- Native soils, leveled and compacted, as needed

Note:

All dimensions are approximate. Final dimensions and locations of Tanks will be provided in the Certification Report.

SCALE (ft.)
0 10 20
Vertical scale exaggerated 4X

GSI ENVIRONMENTAL
Texas Registration Number F-1198

GSI Job No.	6731	Drawn By:	CDM
Map ID:	002_04	Chk'd By:	JMM
Issued:	20-Feb-2024	Aprv'd By:	JMM
Scale:	As Shown	FIGURE IV.G.2.2	

PROPOSED SECONDARY CONTAINMENT AREA FOR TANK TK-1390

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP, Needville, Texas

GSI Job No: 6731

INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

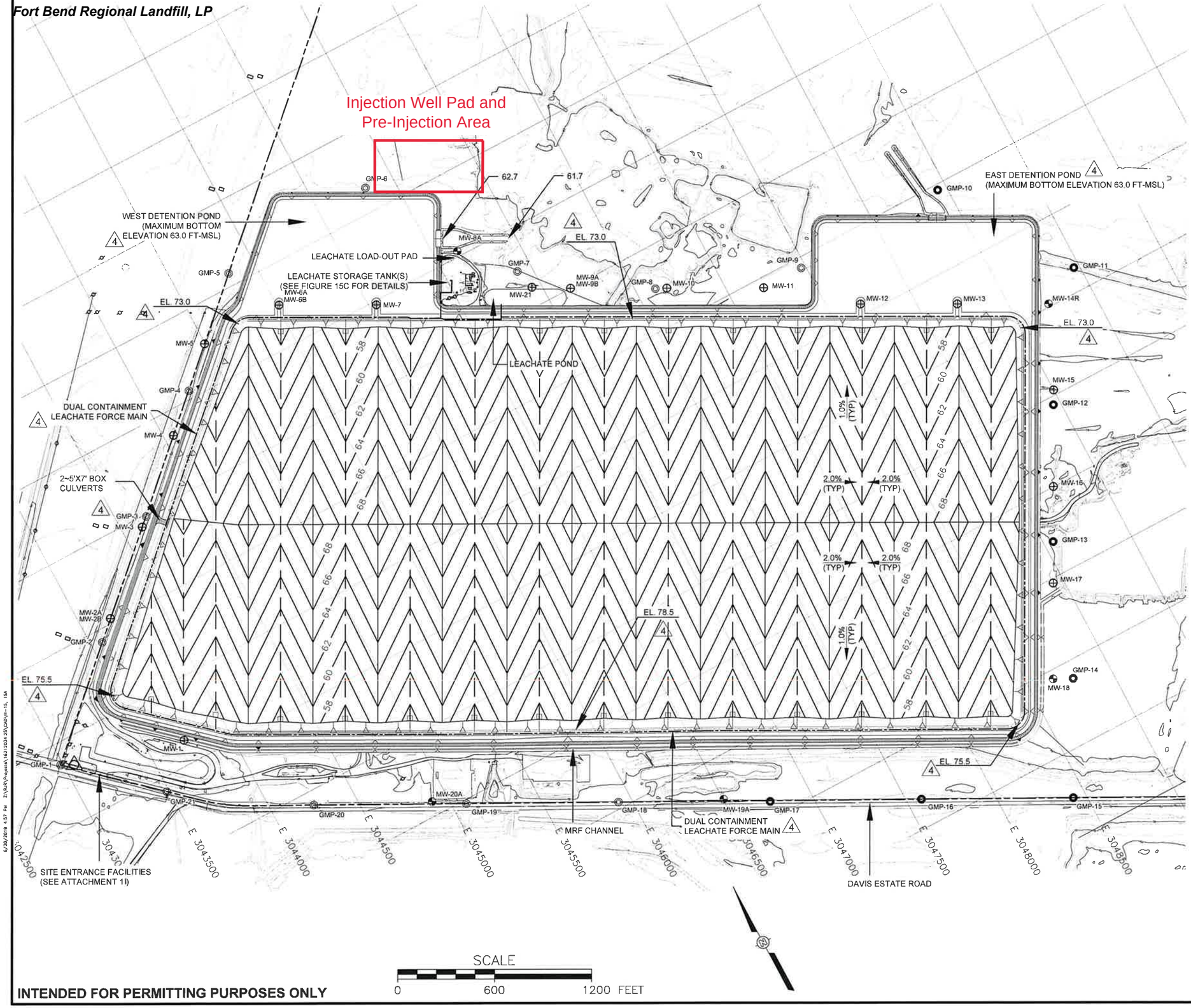
Needville, Texas

ATTACHMENTS – SECTION VI

Attachment VI.A	Groundwater Monitoring System
Attachment VI.E	FEMA Flood Hazard Information Map

Fort Bend Regional Landfill, LP

Attachment VI.A



SCALE
0 600 1200 FEET

INTENDED FOR PERMITTING PURPOSES ONLY

LEGEND

- CURRENT CONTOUR (65)
- STATE PLANE COORDINATE SYSTEM GRID-LINE (N 582000)
- PERMIT BOUNDARY (SEE NOTES 2 AND 3)
- BASE GRADE CONTOUR WITH ELEVATION (64) 4
- PROPOSED GROUNDWATER MONITORING WELL (SEE NOTE 9) 4
- PROPOSED GAS MONITORING PROBE (SEE NOTE 10)
- EXISTING GROUNDWATER WELL
- EXISTING GAS MONITORING PROBE
- SITE BENCHMARK (SEE NOTE 4)
- DUAL CONTAINMENT LEACHATE FORCE MAIN 4

NOTES

1. CURRENT CONTOURS FROM AERIAL SURVEY PERFORMED BY TechMap INC., JANUARY 23, 2018.
2. PROPERTY LINE AND EASEMENT INFORMATION PROVIDED BY CHARLIE KALKOMEY SURVEYING, INC., 11-13-96 AND 1-17-97.
3. PROPERTY BOUNDARY AND PERMIT BOUNDARY COINCIDE UNLESS OTHERWISE INDICATED.
4. SITE BENCH MARK INFORMATION:
   NORTHING - 582831.62
   EASTING - 3043059.34
   ELEVATION - 70.55 FT-MSL
5. BASE GRADE SIDE SLOPES ARE 3H:1V. 4
6. MINIMUM TOP OF BASE GRADE AT LCS SUMPS IS 52.0 FT. MSL. 4
7. LINER AND LEACHATE COLLECTION SYSTEM DETAILS ARE PROVIDED IN ATTACHMENT 6C-LINER, LEACHATE COLLECTION, AND FINAL COVER SYSTEM DETAILS.
8. SEQUENCE OF SITE DEVELOPMENT IS PROVIDED ON ATTACHMENTS 1B THROUGH 1G. 4
9. PROPOSED GROUNDWATER MONITORING WELLS TO BE CONSTRUCTED IN ACCORDANCE WITH PART III, ATTACHMENT 5.
10. PROPOSED GAS PROBES TO BE CONSTRUCTED IN ACCORDANCE WITH PART III, ATTACHMENT 14.
11. CONTOURS SHOWN REPRESENT THE TOP OF BASE GRADES (I.E. ELEVATION OF LINER GEOSYNTHETICS). ADDITIONAL EXCAVATION WILL BE REQUIRED FOR CLAY LINER INSTALLATION FOR MSW SECTORS THAT WILL HAVE LEACHATE RECIRCULATION AND/OR CLASS 1 WASTE. 4

STATE OF TEXAS
RYAN L. DERONG
117130
LICENSED
PROFESSIONAL ENGINEER
Ryan Derong
6/24/19

For June 2019 Revisions Only

REV	DATE	DESCRIPTION	BY
0	03/2001	PERMIT ISSUED	KJM
1	01/2011	PERMIT MODIFICATION - ADDED LEACHATE PONDS	LAL
2	07/2011	PERMIT MODIFICATION - ADDED LEACHATE PONDS, UPDATED MONITORING WELLS AND GAS PROBES.	LAL
3	08/2012	PERMIT MODIFICATION - UPDATED GROUNDWATER MONITORING WELLS, GAS PROBES, AND LEACHATE FORCE MAIN ROUTING	LAL
4	10/2014	UPDATED MINIMUM BOTTOM OF BASE GRADE ELEVATIONS	SCS
5	06/2019	UPDATED MONITORING WELL NETWORK AND MRF LOCATION	SCS

TEXAS BOARD OF PROFESSIONAL ENGINEERS REG. NO. F-3407

ATTACHMENT TITLE: **LEACHATE FORCE MAIN ROUTING**

PROJECT TITLE: **PERMIT MODIFICATION MSW-2270**

FORT BEND REGIONAL LANDFILL, L.P.
FORT BEND REGIONAL LANDFILL
FORT BEND COUNTY, TEXAS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
12651 BRIAR FOREST, SUITE 205, HOUSTON, TX 77077
PH (281) 293-8494 FAX NO. (281) 293-7878

PROJ. NO. 162I2034.25 | DSN. BY: RLD | DRN. BY: RJE | CHK. BY: RLD | QA'K REW BY: MTR | APP. BY: RLD

CADD FILE: -15, 15A

DATE: 6/2019

SCALE: AS SHOWN

ATTACHMENT **15A**

6/20/2019 4:57 PM Z:\SAS\Projects\162I2034.25\CAD\A-15, 15A

Smithers Lake, Texas Quadrangle Location

FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT
HTTPS://MSC.FEMA.GOV

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone A, V, A99 With BFE or Depth Zone AE, AO, AH, VE, AR Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X Future Conditions 1% Annual Chance Flood Hazard Zone X Area with Reduced Flood Risk due to Levee See Notes. Zone X Area with Flood Risk due to Levee Zone D
OTHER AREAS	NO SCREEN Area of Minimal Flood Hazard Zone X Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer Levee, Dike, or Floodwall
OTHER FEATURES	18.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation Coastal Transect Coastal Transect Baseline Profile Baseline Hydrographic Feature 513 Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary

N

LEGEND

- UIC Waste Management
- Municipal Solid Waste Landfill
- Fort Bend Regional Landfill Property Boundary

Notes

Background Imagery: FEMA Flood Insurance Rate Map, Fort Bend County, Texas; Map No. 48157C0425M, Revised January 29, 2021.

Feet
0 1,000 2,000

Projected Coordinate System
WGS 1984 Web Mercator
(auxiliary sphere)

GSI ENVIRONMENTAL

FEMA FLOOD HAZARD INFORMATIION MAP

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP
Needville, Texas

GSI Job No.	6731	Drawn By:	CDM
Issued:	20-Feb-2024	Chk'd By:	JMM
Map ID:	**001_05**	Appv'd By:	JMM

ATTACHMENT VI.E

GSI Job No: 6731

INDUSTRIAL NONHAZARDOUS WASTE PERMIT APPLICATION

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENTS – SECTION VII

Attachment VII.A	Closure Plan
Attachment VII.B	Closure Cost Quotes

GSI Job No. 6731

ATTACHMENT VII.A
CLOSURE PLAN

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP, Needville, Texas

ATTACHMENT VII.A
CLOSURE PLAN

Industrial Nonhazardous Waste Permit Application
Fort Bend Regional Landfill, LP, Needville, Texas

TABLE OF CONTENTS

1.0 INTRODUCTION

This plan addresses the closure of the nonhazardous waste management unit (i.e., Tanks TK-1300, TK-1310, TK-1320, TK-1330, TK-1340, TK-1350, TK-1360, TK-1370, and TK-1380) at the Fort Bend Regional Landfill (FBRL) facility. Closure refers to the process of permanently removing from service a waste management unit (i.e., individual tank) or an entire facility (i.e., the pre-injection unit consisting of all four tanks). This plan has been developed to comply with State requirements (30 TAC 335.8 and 30 TAC 350) requirements, as well as applicable technical guidance.

Units subject to this closure plan include the four tanks associated with the UIC deep well pre-injection unit (see Table VII.A). General closure standards applicable to all units are described in Section 2.0 of this closure plan. Procedures specific to each type of unit are described in Section 3.0.

2.0 GENERAL REQUIREMENTS

2.1 Closure Performance Standards

By implementing the closure procedures described below, individual waste management units or the entire facility will be closed in a manner that minimizes the need for care after closure and ensures that the unit(s) will not pose a future threat to human health and the environment.

To achieve this performance standard, closure will involve removal and disposal of wastes and waste residues from each unit, decontamination of the unit and associated equipment, and verification of decontamination. Attainment of closure standards will be documented in reports discussed further below.

2.2 Partial and Final Closures

Circumstances which may prompt closure of an individual waste management unit (i.e., partial closures) may include the following: i) modification to facility operations; or ii) the end of the useful service life of the unit.

Final facility closure will be implemented after all individual nonhazardous waste management units are taken out of service. Although it is anticipated that individual unit closures will occur periodically throughout the operating life of the facility, the closure cost estimate (Section 5.0) has been based on the assumption that the maximum inventory of nonhazardous wastes is present at the time of facility closure.

2.3 Schedule

Operation and subsequent closure of individual permitted units will depend upon actual FBRL waste management needs and requirements; therefore, no date has been set for the closures. An estimated schedule prepared in accordance with the time limits specified in TCEQ guidance and general timelines outlined in 40 CFR 264 is provided below. Note that this unit is not a hazardous waste management unit; therefore, 40 CFR 264 was only used as a general guideline

for closure timelines. This schedule will be followed for unit closures as well as final facility closure.

Time from Final Waste Receipt	Closure Task Description
10 to 45 days prior to final waste receipt and initiation of closure activities	Provide written notice to TCEQ Region and Central Office of intent to close unit: • Unit Closure: Provide notice at least 10 days prior to closure activities [TCEQ, 2009a]. A schedule for confirmation sampling will either be included with the notice or will be submitted separately. • Final Facility Closure: Provide notice at least 45 days prior to final waste receipt [40 CFR 264.112(d)].
0 days	Discontinue receipt of waste and commence closure.
90 days	Remove and dispose of waste at authorized on-site or off-site facility [40 CFR 264.113(a)].
120 days	Complete decontamination process.
180 days	Complete closure activities [40 CFR 264.113(b)].
240 days	Submit closure certification to the TCEQ. Closure certification reports will be submitted for final facility closure [40 CFR 264.115] as well as for individual unit closures.

Although not anticipated, the closure process may require longer than the 90-day period listed above for waste inventory removal or the 180-day period prescribed for completion of closure activities. If a longer period is required, an extension request will be submitted to the TCEQ.

3.0 CLOSURE PROCEDURES

3.1 Tanks

Tank closures will be conducted in accordance with the Closure and Post-Closure Cost Estimates Technical Guideline No. 10 and using 40 CFR 264.197 as a general guideline. To ensure that closures are completed in accordance with the closure plan, the activities will be supervised by FBRL and reviewed by an independent professional engineer registered in the State of Texas.

Specific steps include the following:

- *Notification:* Notification of the intent to close the unit will be submitted to the TCEQ.
- *Waste Removal and Disposal:* At the time of closure, receipt of nonhazardous waste will be discontinued. The contents of the tank(s) and associated piping will be removed and the system flushed of remaining waste materials. Waste fluids remaining in the tanks and appurtenances will be removed for disposal either by: i) pumping to a permitted on-site injection well, or ii) transport to a permitted off-site disposal facility. Any waste solids collected in the tank(s) will be removed. These solids may be: i) treated on-site, if needed, and disposed in the on-site municipal solid waste landfill, or ii) sent off-site for treatment, if necessary, and authorized disposal.

- *Decontamination:* On the basis of operating plans at the time of closure, equipment for the tank(s) will be managed in one of the following ways: i) decontamination and retention in service; ii) decontamination, demolition, and salvage; or iii) demolition and disposal. Various components of the tank system may be managed in different ways (e.g., some items may be salvaged and others disposed). The tank(s), piping, and appurtenances will be decontaminated by steam cleaning, pressure washing, or other appropriate methods. Pumps, piping, and other mechanical equipment will be flushed and salvaged or left in place. The decontamination process will typically involve a triple-rinse of the tanks and appurtenances using water or another solvent, if necessary.

  Equipment used during closure operations will be decontaminated by pressure washing, steam cleaning, or other appropriate methods.

  The rinsate generated during the decontamination process may be disposed in a permitted on-site injection well. Wastes or waste residues that cannot be managed on-site will be disposed at an authorized off-site facility. Wastes (e.g., solids) to be land disposed will be treated as necessary.

- *Verification of Decontamination:* At the end of the decontamination process, rinsate samples will be collected. The samples will be analyzed and results evaluated as described in Section 4.0 below. The decontamination process will be repeated as needed until the verification samples meet regulatory requirements. As noted in Section 2.3 (Schedule), the TCEQ Regional Office will be provided initial notice of the closure activities including verification sampling.

- *Inspection:* After completion of the tank cleaning process, the tank area will be visually inspected for evidence of contamination or cracks or gaps that could constitute pathways for release of hazardous waste or waste constituents to the environment. Facility operating records will be reviewed to determine whether releases occurred during the operating life of the unit. Evidence of a potential release will consist of records in the facility operating record or other visual evidence that a spill has occurred and has not been cleaned up in accordance with applicable regulatory or permit requirements. If evidence of a potential release is identified, FBRL will conduct follow-up actions in accordance with 30 TAC 327 or 30 TAC 350, as appropriate.

- *Closure Certification:* A report describing the closure activities will be prepared and submitted to the TCEQ in accordance with the schedule in Section 2.3.

4.0 ATTAINMENT OF CLOSURE STANDARDS

Samples, such as rinsate samples, will be collected to verify whether the tank area has been adequately decontaminated during the closure process. Because of the potentially broad spectrum of wastes managed over the lifetime of a unit at FBRL, indicator parameters have been selected to evaluate the adequacy of decontamination. Therefore, rinsate samples will be analyzed for the following: i) pH (if relevant to the material stored); ii) RCRA metals (if relevant to the material stored); iii) semivolatile organics (if relevant to the material stored); iv) volatile organics (if relevant to the material stored); and v) Total Petroleum Hydrocarbons (TPH) by Method TX1005. TPH by Method TX1005 will be used to provide concentrations of total hydrocarbon boiling point ranges, typically between C6 and C28. These ranges correspond to

TCEQ-calculated, risk-based criteria which will be used to determine whether the closure standard has been met.

Decontamination will be considered complete when no visible evidence of contamination is observed and when the results from verification sampling and analysis indicate that concentrations of applicable chemicals of concern (COCs) are below Remedy Standard A Protective Concentration Levels (PCLs) as specified in the Texas Risk Reduction Program rules (TRRP; 30 TAC 350). Institutional controls such as deed recordation will be implemented as required under TRRP in the event that concentrations of COCs are evaluated with respect to Standard A commercial/industrial PCLs, rather than residential PCLs.

5.0 CLOSURE COST ESTIMATES

5.1 Basis for Closure Cost Estimates

For the purpose of preparing financial assurance documentation, cost estimates have been prepared for tanks on the FBRL facility (see Tables VII.A through VII.C). Third-party unit rates for labor and equipment, transportation, waste disposal, laboratory analyses, and certification are provided on Table VII.B. Closure costs for all units are summarized on Table VII.C. Calculations and assumptions for the cost estimates are provided below.

5.2 Assumptions

In accordance with TCEQ guidance (e.g., TCEQ, 2011a and 2017), closure costs have been estimated based on a scenario of facility abandonment at full permitted capacity (i.e., a scenario that would make closure the most expensive). This scenario assumes that no operable on-site equipment is available, all wastes are shipped and disposed off-site, and that the closure activities are conducted by a third party. Unit rates for closure activities, including labor and equipment for waste removal, transport, and disposal, have been obtained from contractors for such work (see Table VII.B and Attachment VII.B). Conservative assumptions used for preparing the closure cost estimates are as follows.

5.2.1 Tanks

For closure cost estimates, tanks have been assumed to be storing the maximum permitted volume of waste at the time of closure. Of the waste volume in the tank, 98% is assumed to be liquid and 2% is assumed to be sludge; however, the sludge volume is assumed to be no greater than 500 gallons. The volume of decontamination rinsate is equal to 5% of the tank volume. Liquid tank contents and decontamination rinsate will be transported off-site for disposal in a permitted injection well and sludge will be transported off-site for stabilization and disposal in a permitted landfill. Any other assumptions used for the calculation of closure costs are stated in the notes under Table VII.B.

6.0 REFERENCES

TCEQ, 2009a, TRRP Compatibility with RCRA, RG-366/TRRP-03, Revised March 2009.

TCEQ, 2011a, Closure of Waste-Management Units Subject to TRRP, RG-366/TRRP-2A, Remediation Division, July 2011.

TCEQ, 2011b, TCEQ Part B Application Form TCEQ-00376, Revised 18 August 2011.

TCEQ, 2017, Draft Technical Guideline No. 10, Topic: Closure and Post-Closure Cost Estimates, Issued 12 October 1984, Revised 7 December 2017.

ATTACHMENT VII.B: CLOSURE COST CONTRACTOR QUOTES

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENTS

Attachment 1 IKON Tank Cleaning Quote

October 27, 2023

Mr. John Cook
GSI Environmental Inc.
2211 Norfolk, Suite 1000
Houston, Texas 77098

Subject: Proposal for Tank Liquids / Sludge Cleaning w/ T&D
Needville, Texas

Dear Mr. Cook,

IKON Environmental Solutions, LP (IKON) is pleased to provide this for the removal of the Liquids and Cleaning of Sludges from the following tanks:

- 21,000 gallon Frac Tank.
- 10,000 gallon AST Tank w/ Manway.
- 10,000 gallon AST Tank w/ Manway.
- 10,000 gallon AST Tank w/ Manway.

Tanks are reported to have access manways.
IKON will remove the liquids from the tanks by Vacuum Truck 130 bbl truck.
IKON will perform confined entrance into each of the above listed tanks.
Remove sludges by Drum Vac and place into 55-gal. Steel Drums.

Client (GSI) shall perform any/all analytical sampling needed for waste characterization.

Notes and Assumptions:

IKON has made the following assumptions in preparation of the above pricing:

- **All Liquids & Sludges are classified as Non-Hazardous.**
- ****Sales/Use Tax of 8.25% was assessed on all work unless an exemption certificate, resale certificate, direct pay permit, or other applicable certificate(s) are provided by the consultant, general contractor, or end user to IKON Environmental Solutions, LP.**
- All disposal pricing is subject to a review of analytical data and final acceptance by the targeted disposal facility. Analytical performed by Client (GSI) – Min. TPH, VOC's & Metals TX 11.
- Pricing is valid for 60 days and subject to the execution of a mutually acceptable agreement and payment terms.
- Work hours are Monday-Friday; 10 hours per day.
- No Hazardous waste has been included and is not anticipated to be encountered. If hazardous waste is encountered or requires disposal, this will be an additional cost to the project.
- Water is available on site for our use.
- Payment Terms Net 45 days.

Pricing Table

Description	Qty	Unit	Rate	Total
Mobilization / Demobilization - Tank Cleaning Crew & Equipment	1	LS	$880.00	$880.00
Vacuum truck - 5,000-gallon (130 bbl) loads - 6 hrs per load	60	Hr	$145.00	$8,700.00
Disposal of non-hazardous liquids, assuming ($500/min. charge)	50000	Gal	$0.72	$36,000.00
Vacuum truck washout (no heel)	1	Ea.	$680.00	$680.00
Tank Cleaning Crew - SLUDGES - Drum Vac / Confined Space Entry	5	Day	$3,200.00	$16,000.00
Drums (4 per cy + Washout Liquids - use ~6 drums per sludge CY)	30	Ea.	$95.00	$2,850.00
Disposal of non-hazardous SLUDGES (Class 1) - WCA Fort Bend LF	30	Dm	$112.00	$3,360.00
Transportation Drums	4	Hr	$135.00	$540.00
			Estimated Subtotal =	**$69,010.00**
			Sales Tax 8.25% =	**$5,693.33**
			Total Anticipated =	**$74,703.33**

If you have any questions, please call me at 281-766-4566.

Sincerely,

John Savage

Project Manager

1102 Ralphcrest Drive | Houston, TX 77039
Ph: 281-766-IKON | Fax: 281-973-0010

ATTACHMENT VII.B: CLOSURE COST CONTRACTOR QUOTES

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENTS

Attachment 2 CIMA Tank and Secondary Cleaning and Dismantling Quote

CIMA Services, L.P.
A Full Service Industrial Company

Budgetary Proposal

Estimate #: 1247-1123-005

Non Hazardous Waste Tank Closures

CUSTOMER INFORMATION	
Name:	GSI Environmental
Address:	2211 Norfolk, Ste 1000
City:	Houston, Texas 77098
Contact:	John Cook, EIT

SITE LOCATION	
Name:	GSI Environmental
Address:	TBD
City:	Needville, Texas
Contact:	John Cook, EIT

CIMA Services, L.P. (CIMA) is pleased to present the following pricing for the closure/cleaning of miscellaneous tanks at the Needville site. Our scope of work includes mobilization and demobilization of personnel and equipment to the job site to perform the work. CIMA personnel will obtain work permits and perform tailgate safety meetings daily prior to starting any work. The following scope summary and pricing has been prepared for you review:

Scope of Work:

- Cleaning out the tanks (3 - 10,000-gallon cylindrical tanks and 1 - 21,000-gallon Frac tank)
  - Vacuum Truck w/Operator
    - Assumes removal and disposal of up to 50,000 Gallons of Liquid waste as Class I Non-Hazardous
- Transport and disposal of tank remnants.
  - Assumes removal of up to 4 cubic yards of sludge/bottoms.
    - Cylindrical tanks (3 CY total) would be agitated/water washed into vacuum truck.
      - This is based on the cylindrical tanks not having a man way hatch for entry.
    - Frac Tanks will require entry and using an air mover and vacuum box.
      - Will be washed using on site water source after sludge removal.
    - Pricing is based on Class I Non-Hazardous disposal.
- Dismantling tanks
  - Assume this is to disconnect hoses from tanks.
  - Excludes any washing of hoses.
- Pressure wash of the secondary containment (80’ x 40’ concrete)
  - Assume using on site water source and this waste can go in vacuum truck.
  - Includes collection, transport, and disposal of wash water (1200 gallons)

Pricing/Duration:

*** Duration – 5 - 10hr. Days**

DESCRIPTION	UNIT	QTY	RATE	TOTAL
Mob/Demob	Each	1	$7,900.00	$7,900.00
Labor and Equipment - Cleaning Crew	Daily	5	$4,100.00	$20,500.00
Liquid Transportation (Includes Truck Washout)	Load	11	$1,800.00	$19,800.00
Sludge Vacuum Box Transportation (Includes Washout) to WMCP Alvin, Texas	Loads	1	$7,500.00	$7,500.00
Disposal of Liquids as Class I Non-Hazardous	Load	55000	$0.65	$35,750.00
Air Mover	Daily	2	$4,500.00	$9,000.00
Supplied Air	Daily	2	$1,100.00	$2,200.00
Date: 11/6/2023			Subtotal	$102,650.00
Sales Rep: AC			Repair Tax 8.25%	*$8,468.63*
Prepared by: AC/CG			**TOTAL**	**$111,118.63**

ASSUMPTIONS/CLARIFICATIONS:

1. Schedule includes 5/10 work week – assume work permit will be issued by 7:00 AM.
2. Not responsible for delays due to weather.
3. CIMA will have continuous access to the site.
4. Pricing excludes any site training that may be required.

Should you have any questions, please contact Adam Cortez @ 832-623-1725

ATTACHMENT VII.B: CLOSURE COST CONTRACTOR QUOTES

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENTS

Attachment 3 RL Doskocil Tank and Liner Demolition Quote

RL Doskocil, Inc.
PO Box 505
Crosby, Texas 77532
October 5, 2023
713-551-6369 Cell
281-426-4777 Office
281-426-8339 FAX

Proposal

PROJECT: GFL Fort Bend Regional Tank Demo
DATE: October 5, 2023
ATTN: Joe Spinks/Jennifer Glowacki
SECTIONS BID: Site Maintenance
RL DOSKOCIL JOB #: 169**-13178**
SCOPE:

RL Doskocil Inc. will provide all labor, equipment, materials, fuel, and supervision necessary to demolish two waste water tanks at the Fort Bend Regional Landfill.

- **RL Doskocil Inc. will disassemble and demolish two metal waste water tanks. The tanks will be transported to the active face.**
- **All piping, liner material and tank rings will be removed and transported to the active face. Inlet piping to the tanks will be capped above ground level. The rerouting of the inlet piping will be a separate bid item.**
- **Existing fencing will be temporarily removed for equipment access and replaced upon project completion.**
- **1,300 cu. yds. of fill dirt will be placed in the containment in 6'' compacted lifts to existing ground level.**

Equipment:
D-5 Dozer 1 week = $3,178.50
320 Excavator 2 weeks = $7,441.20
Pad Foot Roller 1 week = $3,042.00
(2) Job Trucks 10 days = $3,250.00
Job Trailer 1 week = $487.50
Heavy Trucking x 4 = $5,200.00
Dump Truck 1 week = $5,850.00
2 Cut Off Saws 1 week = $1,235.00
Equipment Total = $29,684.20

Labor:
Project Manager 2 weeks = $7,989.28
(4) Operators 2 weeks = $18,645.12
Per Diem x 32 = $4,992.00
Labor Total = $31,626.40

Materials:
Cutting Wheels = $703.63
Fuel 600 gallons = $3,510.00

Material Total = $4,213.63

Project total = $65,524.23

ASSUMPTIONS:

- **This project is anticipated to be complete in 2 weeks.**
- **With your approval this work can be scheduled for 1 week after approval.**
- **This proposal makes no allowances for any work beyond the scope.**
- **Delays of any nature with the exception of weather beyond the control of RL Doskocil Inc. will be billed on a T&M basis as per rate sheet to be provided.**

OUT OF SCOPE:

No horizontal engineering, no road bores, no SWPP maintenance, no SWPPP, no traffic control, not responsible for unknown utilities not marked by owner or one call, no permits included.
Sales and use tax are not included. If this project is deemed taxable; sales and use tax must be added or direct pay permit issued to RL DOSKOCIL, INC.

Submitted by:
RL Doskocil, INC
Billy Johnston

Accepted by: _____
Title: _____
Date: _____

ATTACHMENT VII.B: CLOSURE COST CONTRACTOR QUOTES

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENTS

Attachment 4 RS Means Pressure Washing Cost Estimate

Cost Estimate Report

GFL

Needville, Texas, 77461

14115 Davis Estates Road

Date: 11/27/2023

GFL Secondary Containment Decon Estima

Year 2023 Quarter 3

Unit Detail Report

Prepared By: Travis McGuire Travis McGuire

LineNumber	Description	Quantity	Unit	Total Incl. O&P	Ext. Total Incl. O&P
Division 04 Masonry					
040120520300	Cleaning masonry, heavy restoration, light soil, by chemical, high pressure wash, brush and rinse, excludes scaffolding	7,150.00	S.F.	$0.99	$7,078.50
Division 04 Masonry Subtotal					**$7,078.50**
Subtotal					**$7,078.50**
General Contractor's Markup on Subs				**0.00%**	**$0.00**
Subtotal					**$7,078.50**
General Conditions				**0.00%**	**$0.00**
Subtotal					**$7,078.50**
General Contractor's Overhead and Profit				**0.00%**	**$0.00**
Grand Total					**$7,078.50**

ATTACHMENT VII.B: CLOSURE COST CONTRACTOR QUOTES

Fort Bend Regional Landfill, LP

Needville, Texas

ATTACHMENTS

Attachment 5 Pace Labs Rinsate Analysis Quote

12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone: 615-758-5858
Fax:

Quote Prepared for:

GSI Environmental

2211 Norfolk Street, Suite 1000
Houston, TX 77098
USA

John Cook

4342585456

[redacted]

Pace® Contact Information

Account Executive

Shannon Tyrell-Swadis

[redacted]

Pace Project Manager

Lori Vahrenkamp

[redacted]

(361) 572-8224

Project Information

Quote Name	00148814 - GSI-Rinsate waters/Permit Application closure - 10/30/2023	Created Date	10/30/2023
Quote Number	00148814	Expiration Date	12/31/2023
Standard TAT:	7 Business Days	Report Level	TRRP reporting
Project Location	TX	EDD Requirements:	Routine
		Certification Requirements	TCEQ

Minimum Laboratory Fee

$250

Quote Details

Quantity	Method	Matrix	Product	Line Item Description	Sales Price	Sub-Total	Total-Price
4.00	EPA 9040	Water Only	pH/ Corrosivity (water)		$20.00	$80.00	$80.00
4.00	EPA 8260	Water Only	Volatile Organic Compounds (VOCs) (water)		$90.00	$360.00	$360.00
4.00	EPA 8270	Water Only	Semi-Volatile Organics (full list SVOCs) (water)		$180.00	$720.00	$720.00
4.00	TCEQ 1005 / TX 1005	Water Only	Texas 1005 (TPH)		$50.00	$200.00	$200.00
4.00	EPA 6010/7470	Water Only	RCRA 8 Metals (As, Ba, Cd, Cr, Pb, Hg, Se, Ag) (water)		$92.00	$368.00	$368.00
4.00			Sample Disposal	Per sample	$6.00	$24.00	$24.00
1.00	Pace SOP		Metals Prep Charge	Per batch	$15.00	$15.00	$15.00
1.00			Environmental Impact Fee (Per Invoice)		$25.00	$25.00	$25.00

Grand-Total $1,792.00

12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone: 615-758-5858
Fax:

Additional Pricing Considerations:

If you have specific questions about any conditions noted below, please contact your Pace Analytical Representative.
•Unless accepted, signed and returned, or otherwise noted above, proposal expires 60 days from Created Date above.
• Quoted prices include standard Pace Analytical QA/QC, reporting limits, compound lists and standard report format unless noted otherwise.
• If project specific MS/MSD samples are submitted, they may be billable.
• Volatile soils need to be frozen within 48 hours of collection. To facilitate this, they should be submitted to the lab within 40 hours of collection.
• TAT (Turn Around Time) is in working days unless otherwise specified above.
• To ensure requested TAT is available, please coordinate with your Pace Analytical representative at time of sample submittal.
• Any deviation from the above quoted scope of work, including sample arrival date and volume, may result in adjustment of prices.
• Please include Quote Number on Chain-of-custody to ensure proper billing.
• Pricing includes standard delivery of bottle/sample kits and coolers.
• Charges will apply for non-standard shipping and for projects where shipping exceeds 10% of the total analytical costs of the shipment.
• All air and air-related equipment charges (i.e. rental fees for unused, unreturned or damaged equipment, are detailed in the Pace® Canister Use Policy
• PACE RESERVES THE RIGHT TO SURCHARGE ON CREDIT CARD PAYMENTS BASED ON CARD TYPE AND ZIP CODE
• PACE RESERVES THE RIGHT TO PASS ALONG ALL EXPEDITED SHIPPING FEES. A MINIMUM FEE OF $100 PER COOLER MAY BE APPLIED.

Pace Analytical Terms and Conditions

These Standard Terms (Terms) govern all services that Pace Analytical _____ ("Lab") will perform on behalf of _____ ("Client"), and supersede any other written provisions (including purchase/work orders) related to the services, as well as all prior discussions, courses of dealing, and/or performance, unless a separate, executed agreement for the same or similar services already exists between the Lab and Client (collectively "the Parties), or the Parties subsequently agree to terminate or amend these Terms, as allowed in Section 10 and 12, respectively.

1. Definitions:
Chain of Custody (COC): A document evidencing the collection, handling, delivery, etc. of a sample or Sample Delivery Group
Holding Time: The maximum amount of time a sample may be stored before being analyzed.
Sample Delivery Acceptance (SDA): The date and time when Lab officially receives a sample or Sample Delivery Group, as evidenced by either a notation on the Chain of Custody or an entry in the Lab's information management system (LIMS).
Sample Delivery Group (SDG): A set of samples normally shipped and reported to the Lab as a group.
Turnaround Time (TAT): The maximum allowable period within which Lab must report out its analytical testing results to Client, calculated from the date of SDA.

2. Client's Obligations:

a. To initiate Lab's services, Client must reference a quotation number (if applicable) and complete one of the following steps:
   i. Submit a completed purchase order by:
      1. hand (i.e., in person)
      2. mail, or
      3. e-mail; or
   ii. Place an order by:
      1. telephone
      2. e-mail, or
      3. delivering a sample (or SDG) to Lab and completing the COC

b. Subject to occasional, mutually agreed-upon exceptions, Client must give five (5) days' prior notice for each sample delivery and provide the following information:
   i. Name of the responsible project manager
   ii. Name of the person submitting the sample
   iii. Name/location of collection site
   iv. Date and time of collection
   v. Specific testing being requested, and
   vi. Sufficient details about reporting requirement(s).

c. Client shall also:
   i. Remain liable for any loss or damage to sample(s) until SDA (including that which may occur as a result of third-party shipping delays)
   ii. Pay all invoices in full on a net 30 basis or as otherwise agreed in writing
   iii. Notify Lab about any disputed charges or results within 30 days of receiving applicable invoice
   iv. Reimburse Lab for any costs* related to delinquent payments
   v. Demonstrate its (or, if applicable, the Prime Client's) credit worthiness by accessing the following link: https://www.pacelabs.com/my-account.html and clicking on "Client Profile Information." (Note: Client must pre-pay for services pending completion of this process and Lab's approval of a credit line.)
   vi. Pay for any services it orders on any already analyzed sample

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Mt. Juliet, TN 37122
Phone: 615-758-5858
Fax:

vii. Obtain Lab's written consent before assigning billing or payment of Lab services to any third party, (failure to do so shall mean Client remains responsible for the payment of any outstanding balance)
viii. Refrain from using any of Lab's supplies (e.g., containers) in connection with any non-Lab work
ix. Ensure that any sample(s) containing any known hazardous substance is (are) labeled, packaged, manifested, transported, and delivered to Lab in accordance with all applicable regulations. (No SDA of any "high hazard" sample can occur without Lab's express permission.)
x. Obtain Lab's prior written consent before publishing Lab's name and/or any data
xi. Reimburse Lab for any out-of-scope services and related expenses (e.g., defending its analytical results or responding to a subpoena for documents and/or expert testimony)
xii. Excuse Lab for any failure or delay in its performance caused by someone or something outside its control, e.g., a third party or "Force Majeure" event or circumstance, such as natural disasters or government shutdowns; and
xiii. Accept responsibility for any claims, damages, losses, expenses*, etc. to the extent caused by Client's: breach of these Terms; negligence or willful misconduct (includes Client's use of Lab data for anything other than the specific purpose for which it was intended), or violation of applicable laws.

3. Lab's Obligations:
Lab shall:
a. Perform its services in accordance with generally accepted analytical and environmental laboratory practices and professionally recognized standards.
b. Identify on quotation if services will be sent to another Lab location or to a third party.
c. Promptly notify Client of any:
i. Missing sample or otherwise compromised sample(s)
ii. Significant delays or other issues affecting Lab's services, or
iii. Subpoena or similar demand for Lab compliance
d. Maintain high-quality services.
e. Prepare and keep accurate records.
f. Obtain/maintain any permit(s), license(s), or certification(s).
g. Charge its fees on a net 30 basis (unless otherwise agreed).
h. Impose a one and one half percent (1.5%) per month late charge on any unpaid balances.
i. Assess a two and one half percent (2.5%) surcharge on any payments made by credit card. (Client can avoid this charge by paying with a debit card, an e-check/check by phone, a wire transfer, or an ACH payment.)
j. Invoice Client for each sample or SDG as reported.
k. Assume risk of loss or damage to any Client sample(s) upon SDA.
l. Initiate analysis within established holding times – so long as SDA occurred within 48 hours of collection or the first half of the maximum allowed holding time.
m. Indemnify Client for any claims, damages, losses, expenses*, etc. to the extent they were caused by Lab's breach of these Terms, negligence or willful misconduct, or the negligence and willful misconduct of persons for whom Lab is legally responsible.
n. Warrant the results, with the express understanding that this warranty is exclusive and does not extend to any merchantability or fitness for a particular purpose.

4. Lab's Discretionary Actions:
Lab may:
a. Cease all services, including any release of data, if Client does not pay as agreed
b. Reject or rescind any SDA if Lab decides sample poses any risk or hazard
c. Charge or bill Client directly for:
i. Any supplies (including containers) that are not used or returned
ii. Expedited outbound/return shipping for any sample that is not time-sensitive
iii. Disposal of any air samples that have not been reclaimed within seven (7) days of Lab's SDA thereof
iv. Disposal of any other sample not been reclaimed within 21 days of Lab's SDA thereof, or as otherwise required
v. A minimum fee for invoicing and/or handling any sample
vi. A sample that underwent SDA, but was not analyzed, at Client's direction
vii. Additional shipping and handling as deemed necessary
viii. Change in scope and/or rescheduling fees
ix. Minimum fees or additional surcharges as necessary
x. Reasonable attorneys' fees
xi. Project resampling related to missed deliveries, etc.
xii. Off cycle pricing increase dictated by the market
xiii. Any request for re-analysis following release of the report if the results are within the variability of the method (or acceptable parameters)

d. Return unused portions of samples found or suspected to be hazardous to Client, at Client's cost.
e. Retain Client's unreleased data and/or cancel Client's web portal access pending payment in full.
f. Increase prices on an annual basis to support market-driven cost-increases.

5. Multiple Dilutions: Lab will report a single value for each analyte based on the most appropriate analysis or dilution for that analyte. Based on general screening where appropriate, samples will be reported on a dilution-only basis due to concentrations of target analytes present. Lab may attempt a 10-fold more concentrated analysis if practicable. Client may also request and pay for additional dilutions if practicable.

6. Dry Weight Correction / Percent (%) Moisture: Consistent with all applicable reporting methods, Lab will automatically analyze any solid

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Phone: 615-758-5858
Fax:

sample (soil) for % moisture to allow for dry weight correction and charge accordingly. If "wet weight" reporting is requested by the client or the regulatory agency, Lab will maintain the charge for dry weight correction even if the results were not corrected for the applicable reporting criteria.

7. Confidentiality: The Parties agree that they will take all reasonable precautions to prevent the unauthorized disclosure of any proprietary or confidential information of each other and that they will not disclose such information except to those employees, subcontractors, or agents who have expressly agreed to maintain confidentiality.

8. Governing Law: These Terms shall be construed and interpreted pursuant to the laws of the State of Minnesota without giving effect to the principles of conflicts of law thereof.

9. Term: The Parties shall perform the services identified in the applicable purchase order or other agreement until completed or terminated in accordance with Section 10 below

10. Termination:

a. Either party may terminate these Terms upon 30 days' prior written notice.
b. Lab may immediately terminate for any breach by Client, including its failure to pay within 60 days of Lab's dated invoice.

11. Limitation of Liability:

a. If a court of competent jurisdiction finds that Lab failed to meet applicable standards and if Client suffers damages as a result, Lab's aggregate liability for its negligence or unintentional breach of contract shall not exceed the total fee paid for its services.
b. This limitation shall not apply to any Client losses arising from Lab's negligence or willful misconduct, so long as Client:
   i. Notifies Lab of any issue within thirty (30) days of receiving applicable invoice, and
   ii. Allows Lab to defend its data, even to a regulatory agency that may have previously rejected same.
c. Notwithstanding the foregoing, neither Lab nor Client shall be liable to the other for special, incidental, consequential, or punitive damages.

12. Amendment/Change Order: Any attempt to modify, vary, supplement, or clarify any provision of these Terms is of no effect unless reduced to writing and signed by both Parties.

13. Storage of Data: Following final report issuance, Lab will retain back-up data and final test reports for ten (10) years in a format from which the data and/or test report can be reproduced.

14. Intellectual Property: Lab shall retain sole ownership of any new method, procedure, or equipment it develops or discovers while performing services for Client pursuant to these Terms. Lab may, however, grant a license to the Client for its use of same.

15. Non-competition: Client shall not solicit or recruit any Lab personnel for at least 12 months following the termination of the services governed by these Terms.

16. Non-assignment: Neither party may assign or transfer any right or obligation existing under these Terms without prior written notice to the other party, except that Lab may freely transfer the services to another Lab location or, with Client's permission, subcontract the services to a third-party.

17. Insurance: Lab carries insurance with the limits of coverage as indicated below and will, upon Client's request, submit certificates of insurance showing same.

a. General Liability - $1,000,000 each occurrence; $2,000,000 general aggregate;
b. Personal and Advertising Injury - $1,000,000;
c. Automobile Liability - $1,000,000 combined single limit;
d. Excess Liability Umbrella - $5,000,000 aggregate; $5,000,000 each occurrence;
e. Worker's Compensation Insurance - statutory limits; and
f. Professional Liability $5,000,000 aggregate, $5,000,000 per claim.

18. Miscellaneous Provisions:

a. In the absence of an executed agreement between the Parties, the SDA will constitute acceptance of these Terms by Client.
b. The Parties may use and rely upon electronic signatures and documents for the execution and delivery of these Terms and any amendments, notices, records, disclosures, or other documents of any type sent or received in accordance with these Terms.
c. The Parties are at all times acting and performing as independent contractors; neither one shall ever be considered an agent, servant, employee, or partner of the other.
d. These Terms shall be binding upon, and inure to the benefit of, the Parties and their respective successors and assigns.
e. Lab's compliance with a subpoena or other order shall not violate any requirement for confidentiality between the Parties.
f. If any Term herein is invalidated or deemed unenforceable, it shall not affect the validity or enforceability of the other Terms.

IN WITNESS WHEREOF, Client and Lab have executed this Agreement through their duly authorized representatives as of the last date below:

[Client] _____

By:_____
Name:_____
Title:_____

12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone: 615-758-5858
Fax:

Date:_____

Pace Analytical

By:_____
Name:_____
Title:_____
Date:_____

*May include reasonable attorney's fees

Quote Prepared by:

Lynette Ray [redacted]

New to Pace? Complete your Credit Application here!
Scroll down to "Client Profile Information"