

CORRESPONDENCE COVER SHEET WASTE PERMITS DIVISION TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Date: 7/05/2017 Facility Name: Angelina County Waste Management Center Permit or Registration No.: 2105A

Nature of Correspondence: Initial/New Response/Revision*

*If Response/Revision, please provide previous TCEQ Tracking No.: 21222965 (Previous TCEQ Tracking No. can be found in the Subject line of the TCEQ's response letter to your original submittal.)

This cover sheet should accompany all correspondences submitted to the Waste Permits Division and should be affixed to the front of your submittal as a cover page. Please check the appropriate box for the type of correspondence being submitted. For questions regarding this form, please contact the Waste Permits Division at (512) 239-2335.

APPLICATIONS	REPORTS and RESPONSES
New Notification	Closure Report
New Permit (including Subchapter T)	Groundwater Alternate SRC Demonstration
New Registration (including Subchapter T)	Groundwater Corrective Action
🗌 Major Amendment	Groundwater Monitoring Report
Minor Amendment	Groundwater Statistical Evaluation
Limited Scope Major Amendment	Landfill Gas Corrective Action
Notice Modification	Landfill Gas Monitoring
Non-Notice Modification	Liner Evaluation Report
Transfer/Name Change Modification	🗌 Soil Boring Plan
Temporary Authorization	Special Waste Request
Voluntary Revocation	Other:
🗌 Subchapter T Workplan	
Other:	

Table 1 - Municipal Solid Waste

Table 2 - Industrial & Hazardous Waste

Table 2 - Industrial & Hazardous Waste			
APPLICATIONS	REPORTS and RESPONSES		
New	Annual/Biennial Site Activity Report		
Renewal	CfPT Plan/Result		
Post-Closure Order	Closure Certification/Report		
🗌 Major Amendment	Construction Certification/Report		
Minor Amendment	CPT Plan/Result		
Class 3 Modification	Extension Request		
Class 2 Modification	Groundwater Monitoring Report		
Class 1 ED Modification	🗌 Interim Status Change		
Class 1 Modification	🗌 Interim Status Closure Plan		
Endorsement	Soil Core Monitoring Report		
Temporary Authorization	Treatability Study		
Voluntary Revocation	Trial Burn Plan/Result		
335.6 Notification	Unsaturated Zone Monitoring Report		
Other:	Waste Minimization Report		
	Other:		

July 5, 2017



MC-124 Chance Goodin, Manager Municipal Solid Waste Permits Section Waste Permits Division Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087

Re: Permit Modification Request Landfill Gas Collection and Control System Expansion Angelina County Waste Management Center 7521 FM 58 Lufkin (Angelina County), Texas 75901 MSW Permit No. 2105A TCEQ CN 600833511, RN 101947323

Mr. Goodin:

On behalf of Angelina County Waste Management Center (ACWMC) and in accordance with 30 TAC §305.70(k)(3), Hydrex Environmental (Hydrex), hereby submits this request for a Municipal Solid Waste Permit Modification to the existing permit at the above-referenced site. Specifically, the modification pertains to the Site Development Plan, Attachment 14, Landfill Gas Management Plan.

In response to methane exceedances reported for site monitoring probes, the existing landfill gas collection and control system (GCCS) was expanded to increase landfill gas recovery efficiency and mitigate the potential for landfill gas migration beyond the existing permitted waste footprint on the east and west sides of Tract 1 of ACWMC. The expansion has resulted in the connection of the existing GCCS to six newly-installed landfill gas extraction wells with associated piping for transfer to the existing blower/flare system. This expansion is illustrated on the attached Figure GMP-A-5. Additional landfill gas recovery, achieved by connection of the GCCS to leachate collection and recovery sidewall riser pipes, is also proposed as part of this permit modification.

Based on previous TCEQ correspondence dated February 10 and 13, 2017 (Tracking No. 2122965 and 21303199, respectively), public notice is required for the GCCS expansion. We trust the submittal is sufficient to affect the proposed revision to Permit No. MSW-2105A. Upon receipt and review of this material, if you or any of your staff has any questions regarding this permit modification, please contact me at (832) 483-6671 or by email at jhargrove@hydrex-inc.com.

Sincerely, Hydrex Environmental

oh PH 4

John Q. Hargrove, P.E. Project Engineer

Attachments: TCEQ Form 20650 Redline-Strikethrough Attachment 14 Clean Copy Attachment 14 Figure GMP-A-5 – Proposed GCCS Expansion Site Plan Land Ownership Map Land Ownership List

Distribution:

1 сору	1 сору	Original + 2 copies
The Honorable Wes Suiter – Angelina County Judge	Marilyn Gates - TCEQ Region 10 – Waste Section Manager	MC-124 Chance Goodin, Manager Municipal Solid Waste Permits Section Waste Permits Division Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087

- 1 copy Chuck Brooks – ACWMC
- 1 copy Hydrex Environmental

Facility Name: Angelina County Waste Management Center Permittee/Registrant Name: Angelina County MSW Authorization #: 2105A Initial Submittal Date: July 5, 2017 Revision Date:



Texas Commission on Environmental Quality

Permit/Registration Modification and Temporary Authorization Application Form for an MSW Facility

1. Reason for Submittal	
🛛 Initial Submittal	Notice of Deficiency (NOD) Response
2. Authorization Type	
Permit	Registration
3. Application Type	
Modification with Pub	olic Notice 🗌 Modification without Public Notice
Temporary Authoriza	ation (TA) Dodification for Name Change/Transfer
4. Application Fees	
Pay by Check	Online Payment
If paid online, e-Pay Con	firmation Number: 582EA000263109
5. Application URL	
Is the application submit	tted for a permit/registration modification with public notice?
Xes No	
	nter the URL address of a publicly accessible internet web site ad all revisions to that application will be posted in the space nacounty.net
6. Confidential Documen	ts
Does the application con	tain confidential documents?
🗌 Yes 🛛 No	
	the confidential documents throughout the application and achment in a binder clearly marked "CONFIDENTIAL."

Facility Name: Angelina County Waste Management CenterInitial Submittal Date: July 5, 2017MSW Authorization #: 2105ARevision Date:

7. General Facility Information
Facility Name: Angelina County Waste Management Center
MSW Authorization No.: 2105A
Regulated Entity Reference No.: 101947323
Physical or Street Address (if available): 7521 FM 58
City: Lufkin County: Angelina State: Texas Zip Code: 75901
(Area code) Telephone Number: 936-632-7168
Latitude: 31.2465 N Longitude: 94.0000 W

8. Facility Type(s)

Type I

☐ Type IV ☐ Type IV AE ☐ Type V ☐ Type VI

9. Description of the Revisions to the Facility

Provide a brief description of all revisions to the permit/registration conditions and supporting documents referred by the permit/registration, and a reference to the specific provisions under which the modification/temporary authorization application is being made. Also, provide an explanation of why the modification/temporary authorization is requested: **Expansion of the active landfill gas collection system requiring a public notice modification in accordance with 30 TAC 305.70(k)(3) to address observed landfill gas migration beyond the permitted waste limits.**

This section is intentionally left blank; please continue to the next page.

10. Facility Contact Information

Site Operator (Permittee/Registrant) Name: Angelina County Waste Management Center

Customer Reference No. (if issued)*: CN60083351

Mailing Address: PO Box 1862

City: Lufkin County: Angelina State: Texas Zip Code: 75902-1862

(Area Code) Telephone Number: 936-632-7168

Email Address: pstrickland@angelinacounty.net

TX Secretary of State (SOS) Filing Number:

*If the Site Operator (Permittee/Registrant) does not have this number, complete a TCEQ Core Data Form (TCEQ-10400) and submit it with this application. List the Site Operator (Permittee/Registrant) as the Customer.

Operator Name¹: Angelina County

Customer Reference No. (if issued)*: 60083351

Mailing Address: **PO Box 908**

City: Lufkin County: Angelina State: Texas Zip Code: 75902

(Area Code) Telephone Number: 936-671-4064

Email Address: wsuiter@angelinacounty.net

Charter Number:

¹If the Operator is the same as Site Operator/Permittee type "Same as "Site Operator (Permittee/Registrant)". *If the Operator does not have this number, complete a TCEQ Core Data Form (TCEQ-10400) and submit it with this application. List the Operator as the customer.

Consultant Name (if applicable): Hydrex Environmental

Texas Board of Professional Engineers Firm Registration Number: F-13588

Mailing Address: 1120 NW Stallings Drive

City: Nacogdoches County: Nacogdoches State: Texas Zip Code: 75964-3428

(Area Code) Telephone Number: 936-568-9451

E-Mail Address: jhargrove@hydrex-inc.com

Agent in Service Name (required only for out-of-state):

Mailing Address:

City: County: State: Zip Code:

(Area Code) Telephone Number:

E-Mail Address:

Facility Name: Angelina County Waste Management CenterInitial Submittal Date: July 5, 2017 MSW Authorization #: 2105A Revision Date:

11. Ownership S	tatus of the F	acility	
Is this a modific Operator (Perm		•	scription, the property owner, or the Site
Yes	🛛 No		
If the answer is	s "No", skip this	section.	
Does the Site C property?	Does the Site Operator (Permittee/Registrant) own all the facility units and all the facility property?		
🛛 Yes	🗌 No		
If "No", provide	e the informatio	n requested belo	ow for any additional ownership.
Owner Name:			
Street or P.O. E	Box:		
City: 0	County:	State:	Zip Code:
(Area Code) Telephone Number:			
Email Address ((optional):		
Charter Numbe	r:		

Signature Page

_____Angelina County Judge, I, _Wes Suiter_____ (Site Operator (Permittee/Registrant)'s Authorized Signatory) (Title)

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 athering 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: _____ Date: _____

TO BE COMPLETED BY THE OPERATOR IF THE APPLICATION IS SIGNED BY AN AUTHORIZED REPRESENTATIVE FOR THE OPERATOR

I, _____, hereby designate _____ (Print or Type Operator Name) (Print or Type Representative Name)

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

Printed or Typed Name of Operator or Principal Executive Officer

Signature

SUBSCRIBED AND SWORN to before me by the said_____

On this _____ day of _____, ____

My commission expires on the _____ day of _____, ____

Notary Public in and for

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

Permit/Registration Modification with Public Notice

(See Instructions for P.E. seal requirements.)

Required Attachments	Attachment No.
Land Ownership Map	1
Land Ownership List	2
Marked (Redline/Strikeout) Pages	3
Unmarked Revised Pages	4

Additional Attachments as Applicable- Select all those apply and add as necessary

Signatory	Authority
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	\boxtimes	Fee	Payment	Receipt
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Confidential Documents

5

Facility Name: Angelina County Waste Management CenterInitial Submittal Date: July 5, 2017MSW Authorization #: 2105ARevision Date:

Permit/Registration Modification without Public Notice or TA

(See Instructions for P.E. seal requirements.)

Required Attachments (for Modifications only)

Attachment No.

Marked (Redline/Strikeout) Pages Unmarked Revised Pages

Additional Attachments as Applicable- Select all those apply and add as necessary

Signatory Authority

- E Fee Payment Receipt
- Confidential Documents

Facility Name: Angelina County Waste Management CenterInitial Submittal Date: July 5, 2017MSW Authorization #: 2105ARevision Date:

Permit/Registration Name Change/Transfer Modification

(See Instructions for P.E. seal requirements.)

Required Attachments TCEQ Core Data Form(s)

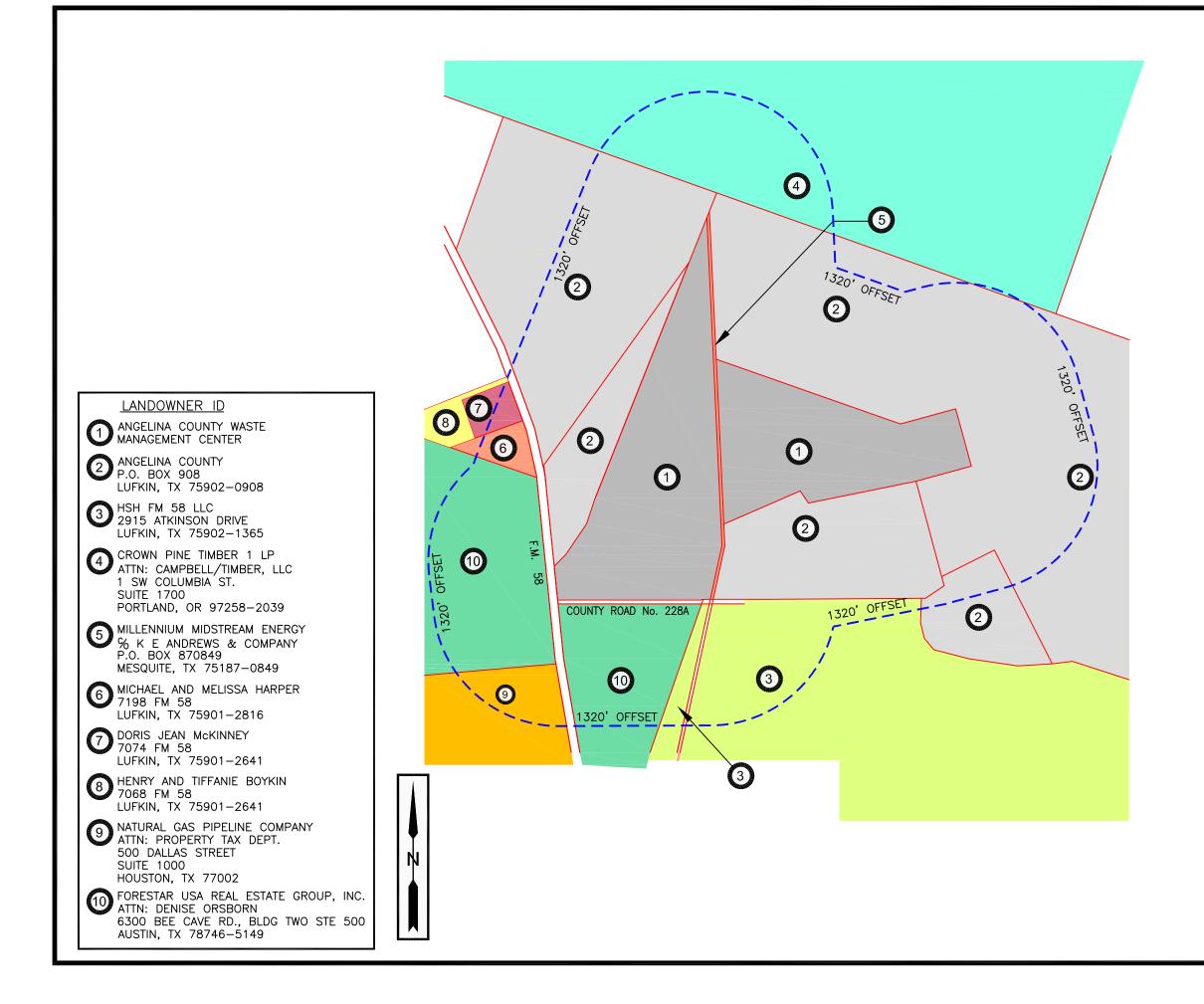
Attachment No.

- Property Legal Description Property Metes and Bounds Description Metes and Bounds Drawings
 - On-Site Easements Drawing
- Land Ownership List
- Land Ownership Map
- Property Owner Affidavit
- Verification of Legal Status
- Evidence of Competency

Additional Attachments as Applicable- Select all those apply and add as necessary

- Signatory Authority
- E Fee Payment Receipt
- Confidential Documents
- Final Plat Record of Property, if platted
- Assumed Name Certificate

Attachment 1



NOTE: PROPERTY OWNERSHIP INFORMATION IS BASED ON DATA OBTAINED FROM THE ANGELINA COUNTY APPRAISAL DISTRICT.

ANGELINA COUNTY WASTE MANAGEMENT CENTER LAND OWNERSHIP MAP ALL PROPERTY OWNERS WITHIN 1320 FT OF FACILITY						
ENGINEERS - SURVEYORS EVERTET GRIffith, Jr. & Associates Inc. 408 NORTH THIRD STREET, LUFKIN, TEXAS 75901 939-634-5528 TX ENGINEERING FIRM NO. F-1156 TX SURVEYING FIRM NO. 100291-00						
DESIGNED BY:	n/a	CHECKED BY:	RFF	SCALE:	1"=1000'	1
DRAWN BY:	DKF	APPROVED BY:	RFF	DATE:	4/29/15	OF 1

Permit Mod-Modifications to Final Closure/L-O-Map 1320ft Radius (4-29-15).dwg

Attachment 2

ANGELINA COUNTY P.O. BOX 908 LUFKIN, TX 75902-0908

CROWN PINE TIMBER LP 1 ATTN: CAMPBELL/TIMBER, LLC 1 SW COLUMBIA ST. SUITE 1700 PORTLAND, OR 97258-2039

HSH FM 58 LLC 2915 ATKINSON DRIVE LUFKIN, TX 75902-1365 ANGELINA COUNTY WASTE MANAGEMENT CENTER 7521 FM 58 LUFKIN, TX 75901-2816

FORESTAR USA REAL ESTATE GROUP, INC. ATTN: DENISE ORSBORN 6300 BEE CAVE RD., BLDG TWO STE 500 AUSTIN, TX 78746-5149

MCKINNEY, DORIS JEAN 7074 FM 58 LUFKIN, TX 75901-2641 BOYKIN, HENRY AND TIFFANIE 7068 FM 58 LUFKIN, TX 75901-2641

HARPER, MICHAEL AND MELISSA 7198 FM 58 LUFKIN, TX 75901-2816

MILLENIUM MIDSTREAM ENERGY c/o K.E. ANDREWS & COMPANY P.O. BOX 870849 MESQUITE, TX 75187-0849

NATURAL GAS PIPELINE COMPANY ATTN.: PROPERTY TAX DEPT. 500 DALLAS STREET SUITE 1000 HOUSTON, TX 77002 Attachment 3

ANGELINA COUNTY WASTE MANAGEMENT CENTER ANGELINA COUNTY, TEXAS PERMIT NO. MSW 2105A LANDFILL GAS MANAGEMENT PLAN

PART III-SITE DEVELOPMENT PLAN ATTACHMENT 14-LANDFILL GAS MANAGEMENT PLAN

Prepared for

Mr. Chuck Brooks MSW Manager Angelina County Waste Management Center 7521 FM 58 Lufkin, TX 75901

> May 2014 Revised July 2017

Hydrex Environmental, Inc. 1120 NW Stallings Drive Nacogdoches, Texas 75964-3428

ANGELINA COUNTY WASTE MANAGEMENT CENTER ANGELINA COUNTY, TEXAS PERMIT NO. MSW 2105A

LANDFILL GAS MANAGEMENT PLAN

William D. Jones, P.E. John Q. Hargrove, P.E. Project Engineer

Glen A. Collier, P.G. Senior Hydrogeologist

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Figure GMP-A-2	Topographic Map
Figure GMP-A-3	Site Buildings & Utilities
Figure GMP-A-4	Site Map Gas Monitoring System
Figure GMP-A-5	GCCS Expansion Layout

APPENDIX B - GAS MONITORING PROBE CONSTRUCTION DETAILS

Exhibit GMP-B-1	Schematic of Gas Monitoring Probe

Exhibit GMP-B-2 Gas Monitor Probe Data Sheet

APPENDIX C - REPORTING FORMAT

Exhibit GMP-C-1 Tabular Reporting Form

APPENDIX D - MANUFACTURERS' SPECIFICATIONS FOR INSTRUMENTS

APPENDIX E - INSTALLED GAS MONITORING PROBE (GMP) LOGS

included as part of a remediation plan, the passive landfill gas wells described in Section 6.2.1 will be converted to active landfill gas wells. A piping network, condensate management system, and a blower/flare facility or an energy recovery facility may be used to dispose of collected landfill gas. A voluntary, active landfill gas system became operational in December 2011 for carbon credit offset purposes.

In 2017, the active landfill gas extraction system was expanded to mitigate observed landfill gas migration beyond the permitted waste footprint. The expansion consisted of six extraction wells with associated header and lateral piping. The expansion connected to the northern limits of the existing system on the east and west sides of Tract 1. The layout of the system is illustrated on the attached Figure GMP-A-5.

Additional collection of landfill gas may be accomplished through connection of the active landfill gas extraction system to the leachate collection and recovery sidewall riser pipes. **Attachment 4**

ANGELINA COUNTY WASTE MANAGEMENT CENTER ANGELINA COUNTY, TEXAS PERMIT NO. MSW 2105A LANDFILL GAS MANAGEMENT PLAN

PART III-SITE DEVELOPMENT PLAN ATTACHMENT 14-LANDFILL GAS MANAGEMENT PLAN

Prepared for

Mr. Chuck Brooks MSW Manager Angelina County Waste Management Center 7521 FM 58 Lufkin, TX 75901

Revised July 2017

Hydrex Environmental, Inc. 1120 NW Stallings Drive Nacogdoches, Texas 75964-3428

ANGELINA COUNTY WASTE MANAGEMENT CENTER ANGELINA COUNTY, TEXAS PERMIT NO. MSW 2105A

LANDFILL GAS MANAGEMENT PLAN

John Q. Hargrove, P.E. Project Engineer

Glen A. Collier, P.G. Senior Hydrogeologist

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Figure GMP-A-3	Site Buildings & Utilities
Figure GMP-A-4	Site Map Gas Monitoring System
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Exhibit GMP-B-2 Gas Monitor Probe Data Sheet

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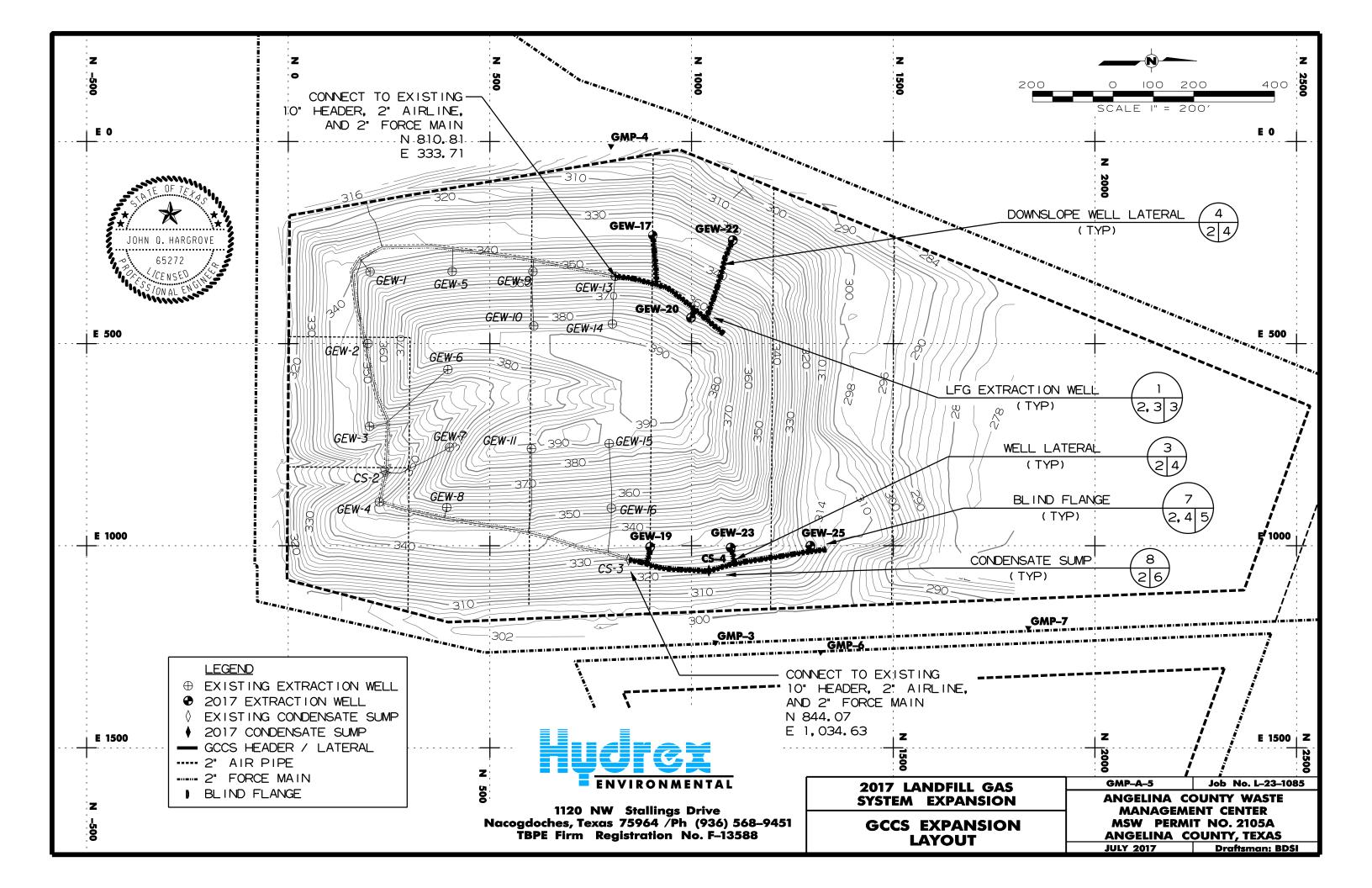
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In 2017, the active landfill gas extraction system was expanded to mitigate observed landfill gas migration beyond the permitted waste footprint. The expansion consisted of six extraction wells with associated header and lateral piping. The expansion connected to the northern limits of the existing system on the east and west sides of Tract 1. The layout of the system is illustrated on the attached Figure GMP-A-5.

Additional collection of landfill gas may be accomplished through connection of the active landfill gas extraction system to the leachate collection and recovery sidewall riser pipes.



Attachment 5

John Hargrove

From:	steers@tceq.texas.gov
Sent:	Wednesday, June 28, 2017 1:08 PM
То:	jhargrove@hydrex-inc.com
Subject:	TCEQ ePay Receipt for 582EA000263109

This is an automated message from the TCEQ ePay system. Please do not reply. Trace Number: 582EA000263109 Date: 06/28/2017 01:07 PM Payment Method: CC - Authorization 000002331G Amount Paid: \$150.00

Actor: John Q Hargrove Email: jhargrove@hydrex-inc.com

Payment Contact: John Hargrove Phone: 832-483-6671 Company: Hydrex Environmental Address: 1120 Nw Stallings Drive, Nacogdoches, TX 75964

Fees Paid: Fee Description AR Number Amount NONHAZARDOUS WASTE PERMIT - NEW, AMENDMENTS & MODIFICATIONS \$100.00 30 TAC 305.53B HWP NOTIFICATION FEE \$50.00

Total Fees For Transaction: \$150.00

Voucher: 327038 Trace Number: 582EA000263109 Date: 06/28/2017 01:07 PM Payment Method: CC - Authorization 000002331G Amount Paid: \$100.00 Fee Paid: NONHAZARDOUS WASTE PERMIT -NEW, AMENDMENTS & MODIFICATIONS RN Number: RN101947323 Site Name: ANGELINA COUNTY WASTE MANAGEMENT CENTER Site Address: 7521 FM 58, LUFKIN, TX 75901 Site Location: 5 MILES SOUTH OF LOOP 287 ON FM 58 Customer Name: ANGELINA COUNTY WASTE MANAGEMENT CENTER Customer Address: 7521 FM 58, LUFKIN, TX 75901 Program Area ID: 2105A

Voucher: 327039 Trace Number: 582EA000263109 Date: 06/28/2017 01:07 PM Payment Method: CC - Authorization 000002331G Amount Paid: \$50.00 Fee Paid: 30 TAC 305.53B HWP NOTIFICATION FEE

To print out a copy of the receipt and vouchers for this transaction either click on or copy and paste the following url into your browser:

https://www3.tceq.texas.gov/epay/index.cfm?fuseaction=cor.search&trace_num_txt=582EA000263109.