ATTACHMENT 1

Maps 16 Pages

Blue Ridge Landfill 2200 FM 521 Fresno, Texas 77545 RN 102610102 FG-0536-E

Investigation Date: April 30, 2018 through July 6, 2018

Investigation Number: 1486565

Area Map Investigation Date: April 30, 2018 – July 6, 2018 Blue Ridge Landfill Fresno, Fort Bend County



Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 1
Page: 1 of 16

Site Map Investigation Date: April 30, 2018 – July 6, 2018 Blue Ridge Landfill

Fresno, Fort Bend County



Investigation Type: FIAIRMON
Air Account No.; FG-0536-E
Attachment: 1
Page: 3 of 16

May 11, 2018: Email Coordinates Phase 1 Map Date: April 30, 2018 – May 4, 2018 Blue Ridge Landfill

Fresno, Fort Bend County



Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 1
Page: 5 of 16

May 11, 2018: Email Coordinates Phase 3 Map Date: April 30, 2018 – May 4, 2018 Blue Ridge Landfill

Fresno, Fort Bend County



Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 1
Page: 7 of 16

May 29, 2018: Email Coordinates Phase 1 Map
Date: April 30, 2018 – May 4, 2018
Blue Ridge Landfill
Fresno, Fort Bend County



Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 1
Page: 9 of 16

Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 1
Page: 10 of 16

May 29, 2018: Email Coordinates Phase 3 Map
Date: April 30, 2018 – May 4, 2018
Blue Ridge Landfill
Fresno, Fort Bend County



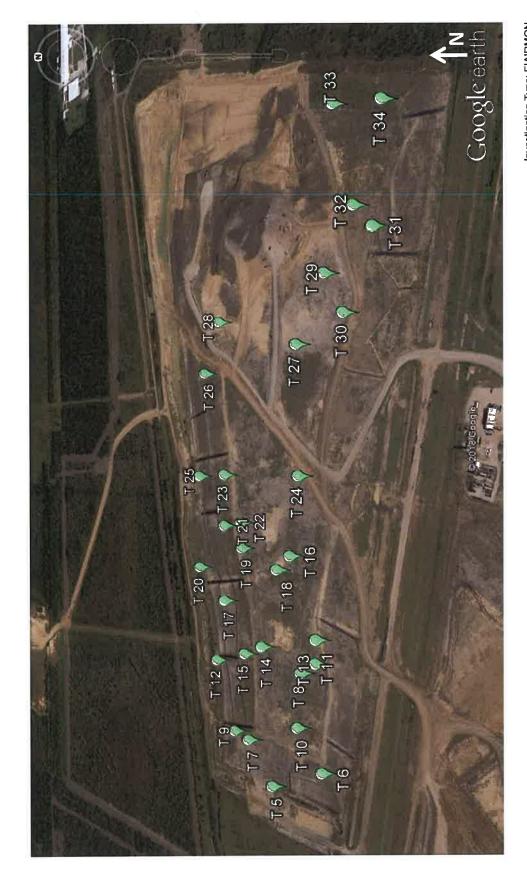
Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 1
Page: 11 of 16

TCEQ SEM Phase 1 Exceedance Location Map Date: April 30, 2018 – May 4, 2018 Blue Ridge Landfill Fresno, Fort Bend County



Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 1
Page, 13 of 16

TCEQ SEM Phase 3 Exceedance Location Map Date: May 15, 2018 – May 24, 2018 Blue Ridge Landfill Fresno, Fort Bend County



Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 1
Page: 15 of 16

ATTACHMENT 2

May 11, 2018: Email Coordinates 2 pages

Blue Ridge Landfill 2200 FM 521 Fresno, Texas 77545 RN 102610102 FG-0536-E

Investigation Date: April 30, 2018 through July 6, 2018

Investigation Number: 1486565

Samuel Cortez

From:

Stengl, Burgess

Sent:

Friday, May 11, 2018 1:43 PM

To:

Samuel Cortez

Cc:

Trebus, Scott; Rogers, Brandon; Montagna, Matthew

Subject:

Blue Ridge Landfill SEM Follow-ups

Sam, Chance mentioned that you had called and asked about coming for SEM follow-ups at Blue Ridge next Monday. Unfortunately, Mario Nunez will not be back at the landfill until late Wednesday, or early Thursday. In addition, AEG will need to coordinate retrieving the meter as it is a rental unit, and was being sent for calibration prior to the 30 day rechecks.

I also left you a voice message on your office phone with the same information.

For the locations, please see below:

Phase 1:

LAT	LON
WGS84	WGS84
29.55759	
	95.4511
29.55501	3
	95.4458
29.55507	+
	95.4485
29.55878	~
	95.4494
29.55619	-95.445
	0-

Phase 3:

LAT	LON WGS84
WGS84	
N/A	N/A
29.56636	-95.453528
29.5654	-95.453518
29.56514	-95.452103
29.56506	-95.451527
29.56502	-95.451352
29.56502	-95.451213
29.56466	-95.44903
29.56465	-95.4489
29.56428	-95.444138

Investigation Type: FIAIR MON

Air Account NO: F6 - 0536 - E

Attachment: 2

Page: 1 of 2

29.56534	-95.442358
N/A	N/A
29.56826	-95.447893
29.56734	-95.451493
N/A	N/A
29.56581	-95.451287
29.56584	-95.450755
29.5659	-95.450238
29.56569	-95.448988
29.56542	-95.447495
29.56673	-95.446295
N/A	N/A
29.56754	-95.446512
29.56762	-95.446895
29.5677	-95.44695
N/A	N/A
29.56757	-95.447173
29.56759	-95.447837
29.56755	-95.448678
N/A	N/A
29.56707	-95.451233
	-95.449165

As for the "N/A" notes above, Mario sent, "We did have 6 on phase 1, this would be a meter issue, all exceedances were GPS saved in the meter but when I downloaded some of them comes up as NA, I can get with "Elkins" (manufacturer) to ask why.

This is why I also mark notes on my field book/phone, in case data gets lost."

Please let me know if you have any questions.

Thank you,

Burgess Stengl

Environmental Manager

USPS: P.O. Box 879, Fresno, TX 77545

Overnight Pkgs: 2200 FM 521, Fresno, TX 77545

o 713-676-7669 c 713-851-0506

f 713-676-7882 w www.RepublicServices.com



We'll handle it from here."

Investigati	on Ty	pe: F	IA	IRM	No
Air Accoun	nt NO	F	G -	053	6-E
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Page:	2	of	2		

ATTACHMENT 3

May 29, 2018: Email Coordinates
4 Pages

Blue Ridge Landfill 2200 FM 521 Fresno, Texas 77545 RN 102610102 FG-0536-E

Investigation Date: April 30, 2018 through July 6, 2018

Investigation Number: 1486565

Samuel Cortez

rrom:	Sterigi, Burgess
Sent:	Tuesday, May 29, 2018 11:54 AM
To:	Samuel Cortez; Seely, Chance
Cc:	Montagna, Matthew; Trebus, Scott; Meadows, Mark; Markuten, Christi
Subject:	RE: Blue Ridge Landfill SEM

Subject: RE: Blue Ridge Landfill SEM

Mr. Cortez, as requested, below is the coordinate information for the exceedances detected at the Blue Ridge Landfill during the 2018 second quarter surface emission monitoring event.

Phase 3 (32 locations)

Investigation Type: FIAIR MON
Air Account NO: F6 - 0536-E

Attachment: 3

Page: 1 of 4

LAT WGS8 LON WGS8 29.56865 -95.4474 29.56637 -95.4535 29.56543 -95.4535 29.5651 -95.4521 29.56503 -95.4515 29.565 -95.4514 29.56498 -95.4512 29.56469 -95.449 29.56467 -95.4489 29.5643 -95.4441 29.56532 -95.4424 29.56814 -95.4458 29.5683 -95.4479 29.56735 -95.4515 29.56595 -95.4526 29.56584 -95.4513 29.56586 -95.4507 29.56592 -95.4503 29.56571 -95.449 29.56541 -95.4475 29.5667 -95.4463 29.56754 -95.446 29.56754 -95.4465 29.56766 -95.4469 29.56772 -95.447 29.5676 -95.4472 29.56757 -95.4471 29.5676 -95.4478 29.56756 -95.4487 29.5675 -95.449 29.56709 -95.4512

Phase 1 (6 locations)

29.56605 -95.4492

Investigation Type: FI AIR MON

Air Account NO: FG - 0536- E

Attachment: 3

Page: 2 of 4

LAT WGS8 LON WGS8

29.5576 -95.4511 29.55502 -95.4458

29.55504 -95.4485

29.55877 -95.4494

29.5583 -95.4499

29.55617 -95.445

Please let us know if you have any questions

Thank you,

Burgess Stengl

Environmental Manager

USPS: P.O. Box 879, Fresno, TX 77545

Overnight Pkgs: 2200 FM 521, Fresno, TX 77545

o 713-676-7669 c 713-851-0506

f 713-676-7882 w www.RepublicServices.com



We'll handle it from here

From: Samuel Cortez [mailto:samuel.cortez@tceq.texas.gov]

Sent: Thursday, May 24, 2018 5:02 PM

To: Seely, Chance

Cc: Stengl, Burgess; Montagna, Matthew; Trebus, Scott

Subject: RE: Blue Ridge Landfill SEM

Mr. Seely,

We will be returning to the Blue Ridge Landfill on Wednesday, May 30, 2018. We will continue our assessment of the corrective actions taken during the course of all monitoring conducted since April 30, 2018. Please provide a list of second attempt corrective action details for the points of concern noted by AEG during quarterly monitoring conducted from April 30, 2018 through May 4, 2018. Thank you again for your time and cooperation. Please let me know if you have any questions or concerns and have a great weekend.

Samuel Cortez Senior Environmental Investigator V Investigation Type: FIAIR MON

Air Account NO: FG - 0536 - E

Attachment: 3

Page: 3 of 4

Texas Commission on Environmental Quality Air Section, Region 12 Office 5425 Polk Street, Suite H Houston, Texas 77023 Office: (713) 767-3723

Fax: (713) 767-3761

Email: samuel.cortez@tceq.texas.gov

From: Seely, Chance [mailto

Sent: Friday, May 18, 2018 3:59 PM

To: Samuel Cortez <samuel.cortez@tceq.texas.gov>

Cc: Stengl, Burgess

); Montagna, Matthew

Trebus, Scott

Subject: Blue Ridge Landfill SEM

Mr.Cortez,

As we discussed in this morning's safety meeting please make sure that all of the personnel that will be conducting the SEM event here at Blue Ridge, have the following PPE requirements:

- Steel Toe Boots
- Reflective Safety Vests
- Hard Hats

Additionally, we ask that TCEQ provides an adequate supply of water for the continuation of monitoring next week, we can place any coolers in the Kubotas for your convenience.

Have a great weekend!

Thank you, Chance Seely

Chance Seely, G.I.T

Environmental Specialist

USPS: P.O. Box 879, Fresno, TX 77545

Overnight Pkgs: 2200 FM 521, Fresno, TX 77545

c 832-835-8839

f 713-676-7882 w www.RepublicServices.com



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Air Account NO: FG - 0536 -	15
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Page: 4 of 4	7

ATTACHMENT 4

Participation Rosters
6 Pages

Blue Ridge Landfill 2200 FM 521 Fresno, Texas 77545 RN 102610102 FG-0536-E

Investigation Date: April 30, 2018 through July 6, 2018

Investigation Number: 1486565

Participation Rosters

4/30/2018 (9:15 AM - 4:30 PM)	Affiliation
Samuel Cortez	TCEQ
Seth Tate	TCEQ
Yayma Martinez	TCEQ
Richard Blackney	TCEQ
Chance Seely	Republic Services
Mario Nunez	Tetra Tech

5/1/2018 (9:00 AM - 4:00 PM)	Affiliation
Samuel Cortez	TCEQ
Seth Tate	TCEQ
Yayma Martinez	TCEQ
Richard Blackney	TCEQ
Chance Seely	Republic Services
Mario Nunez	Tetra Tech

5/2/2018 (9:00 AM - 4:00 PM)	Affiliation
Samuel Cortez	TCEQ
Seth Tate	TCEQ
William Austin Jorn	TCEQ
Richard Blackney	TCEQ
Chance Seely	Republic Services
Mario Nunez	Tetra Tech

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5/3/2018 (9:00 AM - 4:00 PM)	Affiliation
Samuel Cortez	TCEQ
William Austin Jorn	TCEQ
Andrew Jay Evans	TCEQ
Richard Blackney	TCEQ
Chance Seely	Republic Services
Mario Nunez	Tetra Tech

5/4/2018 (9:00 AM - 4:00 PM)	Affiliation
Samuel Cortez	TCEQ
Hasanain Alameen	TCEQ
Daniel Villarreal	TCEQ
Richard Blackney	TCEQ
Josh Mefford	TCEQ
Chance Seely	Republic Services
Mario Nunez	Tetra Tech

5/14/2018 (9:45 AM - 3:00 PM)	Affiliation
Samuel Cortez	TCEQ
William Austin Jorn	TCEQ
Seth Tate	TCEQ
Hasanain Alameen	TCEQ
Josh Mefford	TCEQ
Danielle Woods	TCEQ
Chance Seely	Republic Services
Christi Markuten	Tetra Tech

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5/15/2018 (7:45 AM - 3:00 PM)	Affiliation
William Austin Jorn	TCEQ
Anallely Salinas	TCEQ
Hasanain Alameen	TCEQ
Josh Mefford	TCEQ
Danielle Woods	TCEQ
David Broussard	TCEQ
Chance Seely	Republic Services
Christi Markuten	Tetra Tech

5/16/2018 (7:15 AM - 3:00 PM)	Affiliation
William Austin Jorn	TCEQ
Anallely Salinas	TCEQ
Hasanain Alameen	TCEQ
Josh Mefford	TCEQ
Danielle Woods	TCEQ
Davide Broussard	TCEQ
Chance Seely	Republic Services
Christi Markuten	Tetra Tech

Affiliation
TCEQ
Republic Services
Tetra Tech

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5/18/2018 (7:00 AM - 12:00 PM)	Affiliation
Samuel Cortez	TCEQ
William Austin Jorn	TCEQ
Seth Tate	TCEQ
Josh Mefford	TCEQ
David Broussard	TCEQ
Chance Seely	Republic Services
Christi Markuten	Tetra Tech

5/21/2018 (7:45 Am - 1:00 PM)	Affiliation
Samuel Cortez	TCEQ
Andrew Jay Evans	TCEQ
Yayma Martinez	TCEQ
Dominique Henson	TCEQ
Christopher Norgbey	TCEQ
Chance Seely	Republic Services
Christi Markuten	Tetra Tech

5/22/2018 (7:00 AM - 12:30 PM)	Affiliation
Seth Tate	TCEQ
Nicole Foster	TCEQ
Bianca Lopez	TCEQ
Danielle Woods	TCEQ
Daniel Villarreal	TCEQ
Christiphor Norgbey	TCEQ
Chance Seely	Republic Services
Christi Markuten	Tetra Tech

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5/23/2018 (7:45 AM - 1:00 PM)	Affiliation
Samuel Cortez	TCEQ
Bianca Lopez	TCEQ
Christopher Norgbey	TCEQ
Danielle Woods	TCEQ
Leann Kincaid	TCEQ
Gabrielle Lamoreaux	TCEQ
Chance Seely	Republic Services
Christi Markuten	Tetra Tech

5/24/2018 (7:45 AM - 3:00 PM)	Affiliation
Samuel Cortez	TCEQ
Bianca Lopez	TCEQ
Christopher Norgbey	TCEQ
Danielle Woods	TCEQ
Leann Kincaid	TCEQ
Gabrielle Lamoreaux	TCEQ
Chance Seely	Republic Services
Christi Markuten	Tetra Tech

5/30/2018 (7:50 AM - 3:30 PM)	Affiliation	
Samuel Cortez	TCEQ	
Daniel Villarreal	TCEQ	
Chance Seely	Republic Services	
Christi Markuten	Tetra Tech	

The Account No.

6/6/2018 (7:30 AM - 3:30 PM)	Affiliation	
Samuel Cortez	TCEQ	
William Austin Jorn	TCEQ	
David Broussard	TCEQ	
Danielle Woods	TCEQ	
Leann Kincaid	TCEQ	
Chance Seely	Republic Services	
Mario Nunez	Tetra Tech	

7/6/2018 (9:00 AM - 5:15 PM)	Affiliation		
Samuel Cortez	TCEQ		
William Austin Jorn	TCEQ		
Burgess Stengl	Republic Services		
Mark Meadows	Republic Services		
Amy Kubinski	Republic Services		
Michael Widner	Tetra Tech		
Archana Nagaraj	Weaver Consultants Group		
Mary-Leigh Winkler	Weaver Consultants Group		

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ATTACHMENT 5

July 2, 2018: NSPS Report Excerpts 69 Pages

> Blue Ridge Landfill 2200 FM 521 Fresno, Texas 77545 RN 102610102 FG-0536-E

Investigation Date: April 30, 2018 through July 6, 2018

Investigation Number: 1486565

JULY 2018 SEMI-ANNUAL NSPS REPORT / TITLE V DEVIATION AND MONITORING REPORT / SSM REPORT

BLUE RIDGE LANDFILL FORT BEND COUNTY, TEXAS RN 102610102 CN 602820599

Prepared for
Blue Ridge Landfill TX, LP
July 2018

Prepared by

Weaver Consultants Group, LLC 6420 Southwest Boulevard, Suite 206 Fort Worth, Texas 76109 817-735-9770

Project No. 0120-405-50-43

Investigation Type: FIAIRMON Air Account No.: FG-0536-E Attachment: 5 Page: 1 of 69



July 2, 2018 Project #: 0120-405-50-43

Mr. Joseph Doby Air Section Manager TCEQ - Region 12 5425 Polk Avenue, Suite H Houston, Texas 77023-1486

Re: July 2018 Semi-Annual NSPS Report / Title V Deviation and

Monitoring Report / SSM Report

Blue Ridge Landfill - Fort Bend County, Texas TCEQ Account No. FG-0536-E, GOP No. O-01472

CN 602820599 RN 102610102

Dear Mr. Doby:

Pursuant to Title 40 Code of Federal Regulations (CFR) §60.757, §63.10(d)(5)(i), Title 30 Texas Administrative Code (TAC) §122.145 and 30 TAC §122.146 and on behalf of Blue Ridge Landfill TX, LP, please find enclosed two copies of the July 2018 Semi-Annual New Source Performance Standards (NSPS) Report / Title V Deviation and Monitoring Report / Startup, Shutdown and Malfunction (SSM) Report for the Blue Ridge Landfill located in Fort Bend County, Texas. The reporting period for these reports covers the six-month period from December 5, 2017 through June 4, 2018. The TCEQ issued the facility's Title V permit on December 4, 2000. The GOP Authorization to Operate was renewed by TCEQ on March 3, 2016.

If you have any questions or comments regarding this submittal, please call.

Sincerely.

Weaver Consultants Group, LLC

Mary-Leigh Winkler **Environmental Scientist** Angie S. Vandergriff Senior Project Manager

Attachment:

July 2018 Semi-Annual NSPS Report / Title V Deviation and Monitoring

Report / SSM Report (2 copies)

cc:

EPA Region 6 Compliance Assurance and Enforcement Division (Title V Deviation

and Monitoring Report)

Scott Trebus P.E., Blue Ridge Landfill TX, LP (electronic) Burgess Stengl, Blue Ridge Landfill TX, LP (electronic)

Matthew Montagna, Blue Ridge Landfill TX, LP

Investigation Type: FIAIRMON Air Account No.: FG-0536-E

CONTENTS

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2	NSPS REPORTING REQUIREMENTS	2
	§60.757(f)	2
	§60.757(f)(1)	2
	§60.757(f)(2)	5
	§60.757(f)(3)	6
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	§60.758(c)(1)(i)	7
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APPENDIX A

Monthly Wellhead Monitoring Data

APPENDIX B

Quarterly Surface Emissions Monitoring Report by Tetra Tech

APPENDIX C

GCCS Expansion

APPENDIX D

Semi-Annual Deviation and Monitoring Report (Includes Title V Forms: PCC, DevRep, and OP-CRO1)

APPENDIX E

Startup, Shutdown, and Malfunction Report



Blue Ridge Landfill Fresno, Texas

Surface Emissions Monitoring 2nd Quarter Report 2018

Prepared By:



Tetra Tech 3600 Brecksville Road Richfield, Ohio 44286 (330) 659-5930

Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 5
Page: 4 of 69



June 12, 2018

Mr. Burgess Stengl District Environmental Manager Republic Services, Inc. 5757A Oates Road Houston, TX 77078

RE: NSPS Surface Emissions Monitoring at Blue Ridge Landfill – 2nd Quarter 2018

Dear Mr. Stengl,

Tetra Tech prepared the enclosed report documenting the results of the 2nd Quarter 2018 NSPS surface scan at Blue Ridge Landfill. The initial monitoring event was performed on May 1, May 2, May 3, and May 4, 2018. Thirty-eight (38) exceedances of the 500 parts per million methane by volume (ppm) standard were noted at the facility during the initial scan event.

The 10 day rechecks were performed on May 9, 2018. All of the 38 exceedance areas indicated readings below the 500 ppm standard.

The 30 day recheck monitoring was performed on May 24, 2018. Monitoring of the Thirty-eight exceedance locations again indicated all readings were less than the 500 ppm standard.

In summary, 38 of 38 exceedance areas passed the 2nd Quarter 2018 surface scan event. Field monitoring forms are attached for your files.

Weather Conditions

Weather condition recorded during the monitoring event was as follows:

May 1, 2018

- Temperature approximately 72° Fahrenheit
- Relative humidity of 87 percent
- Barometric pressure of 30.02"Hg
- Wind SE at 6 mph
- Overcast skies

May 2, 2018

- Temperature approximately 78° Fahrenheit
- Relative humidity of 83 percent
- Barometric pressure of 30.04"Hg
- Wind SSE at 8 mph
- Overcast skies

May 3, 2018

- Temperature approximately 78° Fahrenheit
- Relative humidity of 82 percent
- Barometric pressure of 30.03"Hg
- Wind SSE at 9 mph
- Overcast skies

May 4, 2018

- Temperature approximately 74° Fahrenheit
- Relative humidity of 87 percent
- Barometric pressure of 30.07"Hg
- Wind SE at 5 mph
- Overcast skies

May 9, 2018

- Temperature approximately 72° Fahrenheit
- Relative humidity of 70 percent
- Barometric pressure of 30.04"Hg
- Wind S at 2 mph
- Clear skies

May 24, 2018

- Temperature approximately 78° Fahrenheit
- Relative humidity of 85 percent
- Barometric pressure of 30.04"Hg
- Wind ESE at 2 mph
- Scattered clouds skies

In accordance with NSPS regulations, this monitoring event was performed during typical meteorological conditions.

The survey was conducted in accordance with the regulations set forth in the New Source Performance Standard (NSPS), 40 CFR 60.755 (c) and (d); (2) 40 CFR 60, 40 CFR 60.753(d) - Surface Scan Requirements, Appendix A – Method 21. A Thermo Scientific (MicroFID) flame ionization detector (FID) was used to perform the emissions monitoring. The FID was calibrated at the beginning of each day, prior to performing the monitoring, in accordance with Method 21 compliance requirements. The calibration log was completed by the field technician performing the work, and is included in Attachment: Daily Calibration Log. Results are presented in the attached forms.

Please forward any questions regarding this report, attachments, or data to Christi Markuten at (330) 352-9620.

Sincerely,

O&M South Region Project Manager

Attachment: Daily Calibration Logs

Attachment: Daily Surface Monitoring Logs

Attachment: Calibration Gas Certificate of Analysis

Attachment: Site Drawing

Christi M-



Blue Ridge Landfill Fresno, Texas

Daily Calibration Logs

CALIBRATION PRECISION TEST RECORD

Initial Event: May 1, 2018

LANDFILL NAME:	LANDFILL NAME: Blue Ridge		EVENT:	2	nd Quarter	
INSTRUMENT MAKE:	Trimble (GPS)	MODEL:	SiteFID	SERIAL #:	TLCF0305	
PERFORMED BY:	Mario Nunez	TIME:	8:44	DATE:	May 1, 2018	
Calibration Gas Stand	ard: 500ppm CH4					
MEASUREMENT # 1:						
Meter Reading	for Zero Air:			0.0	ppm (1)	
Meter Reading	for Calibration Gas:		109	486.1	ppm (2)	
MEASUREMENT # 2:						
Meter Reading	for Zero Air:		1	0.0	ppm (3)	
Meter Reading	for Calibration Gas:			486.0	ppm (4)	
IEASUREMENT # 3:						
Meter Reading	for Zero Air:			0.0	ppm (5)	
Meter Reading	for Calibration Gas:			490.0	ppm (6)	
ALCULATE PRECISION of the less than 10%	ON:					
<u> 500 - (2) + 50</u>	<u>00 - (4) + 500 - (6) </u> 3	х _	<u>1</u> 500	х _	100	
	-	2.527%				

Investigation Type: FIAIRMON Air Account No.: FG-0536-E Attachment: 5 Page: 8 of 69

INSTRUMENT RESPONSE TIME TEST RECORD

Initial Event:	May 1, 2018

LANDFILL NAM	DFILL NAME: Blue Ridge		EVENT:	2nd Quarter		
INSTRUMENT MAK	E:Trimble (GPS)	MODEL:	SiteFID	SERIAL #:	TLCF0305	
PERFORMED B	Y: Mario Nunez	TIME: _	8:46	DATE:	May 1, 2018	
MEASUREMENT :	# 1:					
Stabilized	Reading Using Calib	oration Gas:		500.0	ppm	
90% of the	e Stabilized Reading:			450.0	ppm	
	each 90% of Stabilize Air to Calibration Ga		vitching	5.0	seconds (1)	
MEASUREMENT	# 2 :	5				
Stabilized	Reading Using Calib	oration Gas:		500.0	ppm	
90% of the	e Stabilized Reading:	:		450.0	ppm	
	each 90% of Stabilize Air to Calibration Ga	witching	4.0	seconds (2)		
MEASUREMENT	# 3:					
Stabilized	l Reading Using Calib	oration Gas:		500.0	ppm	
90% of the	e Stabilized Reading:			450.0	ppm	
	Time to Reach 90% of Stabilized reading after switching from Zero Air to Calibration Gas: 6.0 seconds (3)					
CALCULATE RES		(1) + (2) + (3)		5.000	seconds	
Must be less than 30	Seconds	111+(21+(3)	-			

2 of 3

CALIBRATION PROCEDURE & BACKGROUND DETERMINATION REPORT

Initial Event: May 1, 2018

LANDFILL NAME	LANDFILL NAME: Blue Ridge		EVENT:	2n	d Quarter
INSTRUMENT MAKE	:Trimble (GPS)	MODEL:	SiteFID	SERIAL #:	TLCF0305
PERFORMED BY	: Mario Nunez	TIME:_	8:52	DATE:_	May 1, 2018
CALIBRATION PRO	OCEDURE				
1. Allow in:	strument to internally zero	o itself while	introducing	zero air.	
	e the calibration gas into	the probe.			
Stab	le Reading =492.0				
3. Adjust m	neter to read 500 ppm.				
BACKGROUND DE	TERMINATION PROCE	EDURE			
1. Upwind	Reading (highest in 30 se	conds):			
Location:	South of phase 1 by scale	e house	_	1.5pr	om (1)
2. Downwii	nd Reading (highest in 30	seconds):			
Location:	North of phase 1	-	-	1.3pp	om (2)
CALCULATE BACK	GROUND VALUE				
	TOTAL TALOL	(1) + (2)		1.4 pp	ım

CALIBRATION PRECISION TEST RECORD

Initial Event: May 1, 2018

LANDFILL NAME:	LANDFILL NAME: Blue Ridge		EVENT:	21	nd Quarter
INSTRUMENT MAKE:	Trimble (GPS)	MODEL:	SiteFID	SERIAL #:	TLCF0305
PERFORMED BY:	Mario Nunez	TIME:_	8:27	DATE:	May 2, 2018
alibration Gas Standa	rd: 500ppm CH4				
IEASUREMENT # 1:					
Meter Reading fo	or Zero Air:		14	0.0	ppm (1)
Meter Reading fo	or Calibration Gas:			494.0	ppm (2)
IEASUREMENT # 2:					
Meter Reading fo	or Zero Air:			0.0	ppm (3)
Meter Reading fo	or Calibration Gas:			494.8	ppm (4)
EASUREMENT # 3:					
Meter Reading fo	or Zero Air:			0.0	ppm (5)
Meter Reading fo	or Calibration Gas:			497.3	ppm (6)
ALCULATE PRECISIO	N:				
<u> 500 - (2) + 500</u>	0 - (4) + 500 - (6) 3	x -	<u>1</u> 500	x _	100
		0.927%			

Investigation Type: FIAIRMON Air Account No.: FG-0536-E Attachment: 5 Page: 11 of 69

INSTRUMENT RESPONSE TIME TEST RECORD

Initial Event: May 1, 2018

LANDFILL NAME:	NDFILL NAME: Blue Ridge		EVENT:	2nd Quarter		
INSTRUMENT MAKE:	Trimble (GPS)	MODEL:_	SiteFID	SERIAL #:	TLCF0305	
PERFORMED BY:	Mario Nunez	TIME:_	8:28	DATE:	May 2, 2018	
MEASUREMENT#1	:					
Stabilized Re	eading Using Calibra	tion Gas:		500.0	ppm	
90% of the S	tabilized Reading:		T e	450.0	ppm	
	ch 90% of Stabilized in the Calibration Gas:	reading after sv	vitching	3.0	seconds (1)	
MEASUREMENT # 2	:					
Stabilized Re	eading Using Calibra	tion Gas:	16.	500.0	ррт	
90% of the S	tabilized Reading:			450.0	ppm	
	ch 90% of Stabilized in the Calibration Gas:	reading after sw	vitching	6.0	seconds (2)	
MEASUREMENT#3	:					
Stabilized Re	eading Using Calibrat	tion Gas:		500.0	ppm	
90% of the St	tabilized Reading:			450.0	ppm	
	th 90% of Stabilized r r to Calibration Gas:	reading after sw	vitching	5.0	seconds (3)	
CALCULATE RESPO						
Must be less than 30 sec	conds	$\frac{(1) + (2) + (3)}{3}$		4.667	seconds	

Investigation Type: FIAIRMON Air Account No.: FG-0536-E Attachment: 5 Page: 12 of 69

CALIBRATION PROCEDURE & BACKGROUND DETERMINATION REPORT

Initial Event: May 1, 2018

LANDFILL NAME: Blue Ridge			EVENT:	2nd	d Quarter
INSTRUMENT MAKE:_	Trimble (GPS)	MODEL:	SiteFID	SERIAL #:	TLCF0305
PERFORMED BY:_	Mario Nunez	TIME:_	8:30	DATE:	May 2, 2018

CALIBRATION PROCEDURE

- 1. Allow instrument to internally zero itself while introducing zero air.
- 2. Introduce the calibration gas into the probe.

3. Adjust meter to read 500 ppm.

BACKGROUND DETERMINATION PROCEDURE

- 2. Downwind Reading (highest in 30 seconds):

$$\frac{(1) + (2)}{2}$$
 = $\frac{1.4}{2}$ ppm

CALIBRATION PRECISION TEST RECORD

Initial Event: ____ May 1, 2018

LANDFILL NAME:	LANDFILL NAME: Blue Ridge		EVENT:	2	nd Quarter
INSTRUMENT MAKE:	Trimble (GPS)	MODEL:_	SiteFID	SERIAL #:_	TLCF0305
PERFORMED BY:	Mario Nunez	TIME:_	8:11	DATE:	May 3, 2018
Calibration Gas Stand	lard: 500ppm CH4				
MEASUREMENT # 1:					
Meter Reading	for Zero Air:			0.0	ppm (1)
Meter Reading	for Calibration Gas:			498.0	ppm (2)
MEASUREMENT # 2:					
Meter Reading	for Zero Air:		1.5	0.0	ppm (3)
Meter Reading	for Calibration Gas:			492.0	ppm (4)
MEASUREMENT # 3:					
Meter Reading	for Zero Air:			0.0	ppm (5)
Meter Reading	for Calibration Gas:			499.0	ppm (6)
CALCULATE PRECISION Must be less than 10%	ON:				
<u> 500 - (2) + 5</u>	<u>00 - (4) + 500 - (6) </u> 3	x _	500	x _	100
	A _E	0.733%			

Investigation Type: FIAIRMON Air Account No.: FG-0536-E Attachment: 5 Page: 14 of 69

INSTRUMENT RESPONSE TIME TEST RECORD

Initial Event:	May 1, 2018	

LANDFILL	NAME:	Blue Ridge		EVENT:		2nd Quarter
INSTRUMENT	MAKE:	Trimble (GPS)	MODEL:	SiteFID	SERIAL #:	TLCF0305
PERFORM	MED BY:	Mario Nunez	TIME:_	8:14	DATE:	May 3, 2018
MEASUREM	ENT # 1:					
Stab	oilized Read	ling Using Calibration	Gas:		500.0	ppm
90%	of the Stab	oilized Reading:		i da	450.0	ppm
		90% of Stabilized read o Calibration Gas:	ding after sv	vitching	5.0	seconds (1)
MEASUREM	ENT # 2:					
Stab	oilized Read	ling Using Calibration	Gas:	0.0	500.0	ppm
90%	90% of the Stabilized Reading:					ppm
		90% of Stabilized read o Calibration Gas:	ding after sv	vitching	4.0	seconds (2)
MEASUREM	ENT # 3:					
Stat	oilized Read	ling Using Calibration	n Gas:		500.0	ppm
90%	of the Stat	oilized Reading:		5	450.0	ppm
		90% of Stabilized read o Calibration Gas:	ding after sv	vitching	5.0	seconds (3)
CALCULATE	RESPON	SE TIME:				
Must be less th	an 30 secor	nds (1) + (2) + (3)	=	4.667	seconds

3

Investigation Type: FIAIRMON Air Account No.: FG-0536-E Attachment: 5 Page: 15 of 69

CALIBRATION PROCEDURE & BACKGROUND DETERMINATION REPORT

Initial Event:	May 1, 2018
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LANDFILL NAME	: Blue Ridge		EVENT:	2n	d Quarter
INSTRUMENT MAKE	:Trimble (GPS)	MODEL:_	SiteFID	SERIAL #:_	TLCF0305
PERFORMED BY	:Mario Nunez	TIME:_	8:30	DATE: _	May 3, 2018
CALIBRATION PRO	OCEDURE				
1. Allow ins	strument to internally zero	itself while	introducing	j zero air.	
	e the calibration gas into t	the probe.			
Stab	le Reading =496.0				
3. Adjust m	neter to read 500 ppm.				
BACKGROUND DE	TERMINATION PROCE	DURE			
1. Upwind	Reading (highest in 30 sec	conds):			
Location:	South of phase 1 by scale	house		1.8pj	om (1)
2. Downwii	nd Reading (highest in 30	seconds):			
Location:	North of phase 3 by acces	s road		1.1p _j	om (2)
CALCULATE BACK	CROUND VALUE				
CALCULATE BACK	AGROUND VALUE	<u>(1) + (2)</u>		1.5 pr	om
		2			

Investigation Type: FIAIRMON Air Account No.: FG-0536-E Attachment: 5 Page: 16 of 69

CALIBRATION PRECISION TEST RECORD

Initial Event: May 1, 2018

LANDFILL NAME:	Blue Ridge		EVENT:	21	nd Quarter
INSTRUMENT MAKE:	Trimble (GPS)	MODEL:_	SiteFID	SERIAL #:_	TLCF0305
PERFORMED BY:	Mario Nunez	TIME: _	8:38	DATE:_	May 4, 2018
Calibration Gas Stand	lard: 500ppm CH4				
MEASUREMENT # 1:					
Meter Reading	for Zero Air:			0.0	ppm (1)
Meter Reading	for Calibration Gas:			496.9	ppm (2)
MEASUREMENT # 2:					
Meter Reading	for Zero Air:			0.0	ppm (3)
Meter Reading	for Calibration Gas:			496.2	ppm (4)
MEASUREMENT # 3:					
Meter Reading	for Zero Air:			0.0	ppm (5)
Meter Reading	for Calibration Gas:			496.2	ppm (6)
CALCULATE PRECIS Must be less than 10%	ION:				
<u> 500 - (2) + </u>	<u>500 - (4) + 500 - (6) </u> 3	x	500	х _	100
		0.713%			

Investigation Type: FIAIRMON Air Account No.: FG-0536-E Attachment: 5 Page: 17 of 69

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INSTRUMENT RESPONSE TIME TEST RECORD

Initial Event: May 1, 2018

LANDFILL NAME:	Blue Ridge		EVENT:	2nd	l Quarter
INSTRUMENT MAKE:	Trimble (GPS)	MODEL:_	SiteFID	SERIAL #:	TLCF0305
PERFORMED BY:	Mario Nunez	TIME:_	8:39	DATE:	May 4, 2018
MEASUREMENT # 1:					
Stabilized Read	ding Using Calibration	Gas:		500.0pp	m
90% of the Sta	bilized Reading:			450.0 pp	m
Time to Reach from Zero Air t	90% of Stabilized read o Calibration Gas:	ling after sw	itching	10.0se	conds (1)
MEASUREMENT # 2:					
Stabilized Read	ding Using Calibration	Gas:	-	500.0 pp	m
90% of the Stal	bilized Reading:		1	450.0 pp	m
	90% of Stabilized read o Calibration Gas:	ing after sw	itching -	7.0 se	conds (2)
MEASUREMENT # 3:					
Stabilized Read	ding Using Calibration	Gas:	4	500.0 pp	m
90% of the Stat	oilized Reading:		_	450.0 pp	m
	90% of Stabilized read o Calibration Gas:	ing after sw	itching _	9.0 sec	conds (3)
CALCULATE RESPON	ISE TIME:				
Must be less than 30 secor	nds <u>(1)</u>	+(2)+(3)	-	8.667 se	conds

Investigation Type: FIAIRMON Air Account No.: FG-0536-E Attachment; 5 Page: 18 of 69

CALIBRATION PROCEDURE & BACKGROUND DETERMINATION REPORT

Initial Event:	May 1, 2018	
IIIILIGI E VOIIC	11104) 1, 2010	_

LANDFILL NAME:	Blue Ridge		EVENT:	2nd	d Quarter	_
INSTRUMENT MAKE:	Trimble (GPS)	MODEL:	SiteFID	SERIAL #:	TLCF0305	_
PERFORMED BY:	Mario Nunez	TIME:_	8:42	DATE:	May 4, 2018	_

CALIBRATION PROCEDURE

- 1. Allow instrument to internally zero itself while introducing zero air.
- 2. Introduce the calibration gas into the probe.

3. Adjust meter to read 500 ppm.

BACKGROUND DETERMINATION PROCEDURE

- 1. Upwind Reading (highest in 30 seconds):

 Location: South of phase 1 by scale house 1.3 ppm (1)
- 2. Downwind Reading (highest in 30 seconds):

 Location: North of phase 3 by access road

 1.9

CALIBRATION PRECISION TEST RECORD

Initial Event: May 1, 2018

Blue Ridge	MODEL:	EVENT:	2nd Quart	ter 10 day recheck
rimble (GPS)	MODEL .	-u -:-		
	HODLL.	SiteFID	SERIAL #:_	TLCF0305
Mario Nunez	TIME:_	9:22	DATE:_	May 9, 2018
l: 500ppm CH4				
Zero Air:			0.0	ppm (1)
Calibration Gas:			499.0	ppm (2)
Zero Air:			0.0	ppm (3)
Calibration Gas:		19	494.5	ppm (4)
Zero Air:		F. 6	0.0	ppm (5)
Calibration Gas:			499.0	ppm (6)
(4) + 500 - (6)	x	<u>1</u> 500	x _	100
	I: 500ppm CH4 Zero Air: Calibration Gas: Zero Air: Calibration Gas: Zero Air: Calibration Gas:	I: 500ppm CH4 Zero Air: Calibration Gas: Calibration Gas: Zero Air: Calibration Gas:	I: 500ppm CH4 Zero Air: Calibration Gas: Zero Air: Calibration Gas: Calibration Gas:	Soloppm CH4 Sero Air:

Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
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INSTRUMENT RESPONSE TIME TEST RECORD

Initial Event: May 1, 2018

LANDFILL NA	AME: Blue R	idge	EVENT:	2nd Quart	er 10 day rechecks
INSTRUMENT MA	AKE:Trimble (GPS)	MODEL:	SiteFID	SERIAL #:	TLCF0305
PERFORMED	BY: Mario Nunez	TIME: _	9:26	DATE:_	May 9, 2018
MEASUREMEN'	T # 1:				
Stabiliz	ed Reading Using Calib	ration Gas:	0.	500.0	opm
90% of	the Stabilized Reading:			450.0	opm
	Reach 90% of Stabilized Fro Air to Calibration Gas		ritching	6.0	seconds (1)
MEASUREMEN	T # 2:				
Stabiliz	ed Reading Using Calib	ration Gas:		500.0	opm
90% of	the Stabilized Reading:			450.0	opm
	Reach 90% of Stabilizeero Air to Calibration Gas	_	vitching	6.0	seconds (2)
MEASUREMEN	T # 3:				
Stabiliz	ed Reading Using Calib	ration Gas:		500.0	opm
90% of	the Stabilized Reading:			450.0	opm
	Reach 90% of Stabilizer Pro Air to Calibration Gas	_	vitching	5.0	seconds (3)
	ESPONSE TIME:				
Must be less than 3	30 seconds	(1) + (2) + (3)		5.667	seconds

3

Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
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CALIBRATION PROCEDURE & BACKGROUND DETERMINATION REPORT

Initial Event: May 1, 2018

LANDFILL NAME:_	Blue Ridge		EVENT:	2nd Quarte	r 10 day rechecks	
INSTRUMENT MAKE:_	Trimble (GPS)	MODEL:_	SiteFID	SERIAL #:	TLCF0305	
PERFORMED BY:_	Mario Nunez	TIME:_	9:42	DATE:	May 9, 2018	

CALIBRATION PROCEDURE

- 1. Allow instrument to internally zero itself while introducing zero air.
- 2. Introduce the calibration gas into the probe. Stable Reading = 498.0
- 3. Adjust meter to read 500 ppm.

BACKGROUND DETERMINATION PROCEDURE

1. Upwind Reading (highest in 30 seconds): Location: South of phase 1 by scale house 1.3 ppm (1) 2. Downwind Reading (highest in 30 seconds): Location: North of phase 3 by access road 1.9 **ppm (2)** CALCULATE BACKGROUND VALUE (1) + (2)1.6 ppm

2

CALIBRATION PRECISION TEST RECORD

Initial Event: May 1, 2018

LANDFILL NAME:	Blue Ridge		EVENT:	2nd Quarte	er 30 day rechecks	
INSTRUMENT MAKE:	Trimble (GPS)	MODEL:_	SiteFID	SERIAL #:_	TLCF0305	
PERFORMED BY:	Mario Nunez	TIME: _	9:05	SERIAL #: 1LCF-0305 DATE: May 24, 2018		
Calibration Gas Stand	ard: 500ppm CH4					
MEASUREMENT # 1:						
Meter Reading	for Zero Air:			0.0	ppm (1)	
Meter Reading	for Calibration Gas:			498.3	ppm (2)	
MEASUREMENT # 2:						
Meter Reading	for Zero Air:			0.0	ppm (3)	
Meter Reading	for Calibration Gas:			500.0	ppm (4)	
MEASUREMENT # 3:						
Meter Reading	for Zero Air:			0.0	ppm (5)	
Meter Reading	for Calibration Gas:			501.1	ppm (6)	
CALCULATE PRECISI Must be less than 10%	ON:					
<u> 500 - (2) + 5</u>	3 (600 - (4) + 500 - (6)	X _	<u>1</u> 500	x -	100	

0.187%

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INSTRUMENT RESPONSE TIME TEST RECORD

May 1, 2018

6.0

seconds (2)

LANDFILL N	IAME:	Blue Ridge		EVENT:	2nd Quarte	er 30 day rechecks
INSTRUMENT N	MAKE:	Trimble (GPS)	MODEL:_	SiteFID	SERIAL #:_	TLCF0305
PERFORME	D BY:	Mario Nunez	TIME:_	9:08	DATE:_	May 24, 2018
MEASUREMEN	NT # 1:					
Stabili	zed Read	ing Using Calibration	Gas:		500.0 p	pm
90% of	the Stab	ilized Reading:		-	450.0 p	pm
	ero Air to	90% of Stabilized read Calibration Gas:	ling after sw	itching -	6.0 s	econds (1)
Stabiliz	zed Read	ing Using Calibration	Gas:	_	500.0p	pm
90% of	the Stab	ilized Reading:			450.0 p	pm

Initial Event:

Stabilized Reading Using Calibration Gas: 500.0 ppm

Time to Reach 90% of Stabilized reading after switching

from Zero Air to Calibration Gas:

90% of the Stabilized Reading: 450.0 ppm

Time to Reach 90% of Stabilized reading after switching from Zero Air to Calibration Gas:

5.0 seconds (3)

CALCULATE RESPONSE TIME:

MEASUREMENT #3:

Must be less than 30 seconds (1) + (2) + (3) = 5.667 seconds

CALIBRATION PROCEDURE & BACKGROUND DETERMINATION REPORT

Initial Event:	May 1, 2018	

LANDFILL NAME:_	Blue Ridge		EVENT:	2nd Quarte	r 30 day rechecks
INSTRUMENT MAKE:_	Trimble (GPS)	MODEL:	SiteFID	SERIAL #:	TLCF0305
PERFORMED BY:	Mario Nunez	TIME:_	9:12	DATE:	May 24, 2018

CALIBRATION PROCEDURE

- 1. Allow instrument to internally zero itself while introducing zero air.
- 2. Introduce the calibration gas into the probe.

 Stable Reading = 498.0
- 3. Adjust meter to read 500 ppm.

BACKGROUND DETERMINATION PROCEDURE

1. Upwind Reading (highest in 30 seconds):

Location: South of phase 1 by scale house 1.1 ppm (1)

2. Downwind Reading (highest in 30 seconds):

Location: North of phase 3 by access road 1.4 ppm (2)



Blue Ridge Landfill Fresno, Texas

Daily Surface Monitoring Logs

Exceedance #:

Date: 5/1/2018	Time:	10:06		Monitoring	Technician	Initials:	MN
Instrument reading - Backg	round reading:	2683	_ppm	5	_ ppm	= _	2678 ppm
ocation of monitored exce	edance (include des	scription o	f field mark	er used):	LCR lead	hate riser	north of phase 1
Describe cover maintenand measured exceedance bef							
Remonitor location within	n 10 calendar days	s of Initia	al Exceed	ance:			
Date: <u>5/9/2018</u> Instrument reading - Backg	Time: ground reading:	10:32 161.2	_ppm -	Monitoring 1	Technician _ppm	Initials: =	MN 160.2 ppm
f 10 day remonitoring show within 10 days:	vs an exceedance,	describe	additiona	I corrective a	ction taken	before ren	nonitoring again
f the 10 day remonitoring	g is <500 ppm, ren	nonitor 1	Month fi	om Initial Ex	cceedance:		
Date: <u>5/24/2018</u> Instrument reading - Backg	Time: ground reading:	10:11 192	_ _ppm	Monitoring 1	Technician _ppm	Initials:	MN ppm
f the 1 Month remonitoring	is <500 ppm, resu	me norm	al quarter	ly monitoring.	ı		
If the 1 Month remonitoring again within 10 Days:	shows an exceeda				tive action ta	aken befor	e remonitoring
Remonitor location withi	n 10 calendar day	s of 2nd	Exceeda	nce:			
Date: Instrument reading - Backg	Time:		2	Monitoring	Technician	Initials:	
nstrument reading - Backs	ground reading:		_ppm -		_ppm	= _	0 ppm
f the 10 Day remonitorin	g is <500 ppm, rer	nonitor '	Month f	rom Initial E	xceedance:		
Date: Instrument reading - Backs	Time:		<u> </u>	Monitoring	Technician	Initials:	
Instrument reading - Backs	ground reading:		_ppm -		_ppm	= _	0 ppm
f the 1 Month remonitoring	ı is <500 ppm, resu	me norm	al monitor	ing.			
f the 1 Month remonitoring again within 10 Days:	shows an exceeda	ance, des	scribe add	itional correc	tive action ta	aken befor	e remonitoring
I lee additional forms if nec	000000						

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading th Air Account No.: FG-0536-E *Use a separate form for each initial exceedance.*

Exceedance #: 2

Date: 5/1/201 Instrument reading	8 Time: - Background reading:		Monitorin	g Technician Initials: _ ppm =	MN 1955 ppm
Location of monito	red exceedance (include	description of field	d marker used):	Access riser south	of CS1-8
	intenance or adjustmen nce before remonitoring				ction in vicinity of
Remonitor location	n within 10 calendar d	lays of Initial Ex	cceedance:		
	- Background reading:	17.9 pp	m - <u>1</u>		16.9 ppm
f 10 day remonitor within 10 days:	ing shows an exceedan	ce, describe add	litional corrective a	action taken before re	emonitoring again
f the 10 day remo	nitoring is <500 ppm,	remonitor 1 Mo	nth from Initial E	xceedance:	
Date: 5/24/20	18 Time: - Background reading:			g Technician Initials: _ ppm =	MN 154 ppm
f the 1 Month remo	onitoring is <500 ppm, re	esume normal qu	uarterly monitoring].	
f the 1 Month remo	onitoring shows an exce	edance, describ	e additional correc	ctive action taken befo	ore remonitoring
Remonitor location	n within 10 calendar d	avs of 2nd Exc	eedance:		
Date:			Monitoring	g Technician Initials: _ ppm =	0 ppm
f the 10 Day remo	onitoring is <500 ppm,	remonitor 1 Mo	nth from Initial E	xceedance:	
Date:nstrument reading	Time: - Background reading:	ppi	Monitoring m -	g Technician Initials: _ ppm = _	0 ppm
f the 1 Month remo	onitoring is <500 ppm, re	sume normal m	onitoring.		
f the 1 Month remo	onitoring shows an exce	edance, describe	e additional correc	ctive action taken befo	ore remonitoring
Jse additional form	s if necessary				

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surface reaching the surface FIAIRMON *Use a separate form for each initial exceedance.*

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Exceedance #: Monitoring Technician Initials: MN 15:58 5/1/2018 Time: Date: 5508 ppm 5509 ppm Instrument reading - Background reading: South west of phase 1 by sign marker Location of monitored exceedance (include description of field marker used): Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Cover and granular seal added.

Date:5/9/2018	Time:	10:54		Mo	nitoring	Technicia	ın Initials:	MN	
nstrument reading - Background rea	ding:	45.5	ppm ·		1	_ppm	= -	44.5	_ ppm
f 10 day remonitoring shows an exce vithin 10 days:	edance,	describe	addition	nal corr	ective a	ction taker	n before re	monitoring	g again
f the 10 day remonitoring is <500	ppm, rem	nonitor 1	Month	from l	nitial Ex	ceedance	e:		
Date: <u>5/24/2018</u> Instrument reading - Background rea	Time:	10:21		Мс	nitoring	Technicia	n Initials:	MN _	_
	dina:	102	nnm	_	1	nnm	=	101	ppm
f the 1 Month remonitoring is <500 p f the 1 Month remonitoring shows ar	ppm, resul	me norma	al quart	erly mo dditiona	nitoring. I correct	tive action	taken befo		
f the 1 Month remonitoring is <500 p If the 1 Month remonitoring shows ar again within 10 Days:	opm, resul	me norma	al quart	erly mo	nitoring. I correct	tive action	taken befo		
If the 1 Month remonitoring is <500 p If the 1 Month remonitoring shows ar again within 10 Days: Remonitor location within 10 caler	opm, resul n exceeda ndar days	me normance, des	al quart	erly mo	nitoring.	tive action	taken befo	ore remon	
If the 1 Month remonitoring is <500 p If the 1 Month remonitoring shows ar again within 10 Days: Remonitor location within 10 caler	opm, resul n exceeda ndar days	me normance, des	al quart	erly mo	nitoring.	tive action	taken befo	ore remon	
If the 1 Month remonitoring is <500 p If the 1 Month remonitoring shows ar again within 10 Days: Remonitor location within 10 caler Date: Instrument reading - Background rea	n exceeda ndar days Time: ading:	me norma	ecribe accepted by the secretary accepted by	erly modditiona	nitoring. I correct	Technicia	taken befo	ore remon	itoring
If the 1 Month remonitoring is <500 p If the 1 Month remonitoring shows ar again within 10 Days: Remonitor location within 10 caler	n exceeda ndar days Time: ading:	me normance, des	Exceed	erly mo	nitoring. I correct onitoring	Technicia ppm	an Initials: _ = = e:	ore remon	itoring

Use additional forms if necessary

again within 10 Days:

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfacendating type: FIAIRMON Air Account No.: FG-0536-E *Use a separate form for each initial exceedance.* Attachment: 5

Exceedance #: 4

Date: <u>5/2/2018</u> Instrument reading - Backgrou	Time: 9:4			g Technician Initials:	
		74 ppm -		ppm =	5872.9 ppm
Location of monitored exceed flag	ance (include descript	tion of field ma	rker used):	South west of pha	ase 1 marked with red
Describe cover maintenance of measured exceedance before	or adjustments to the remonitoring in 10 c	e vacuum of a days: <u>Cover</u> a	adjacent wells and granular	to increase gas colle seal added.	ection in vicinity of
Remonitor location within 1	calendar days of	Initial Excee	edance:		
Date: <u>5/9/2018</u> Instrument reading - Backgrou	Time: 10:and reading: 21	48 8 ppm -	Monitoring	g Technician Initials: ppm =	MNppm
If 10 day remonitoring shows a within 10 days:	an exceedance, desc	cribe addition	al corrective a	action taken before re	emonitoring again
If the 10 day remonitoring is	<500 ppm, remoni	tor 1 Month	from Initial E	xceedance:	
Date: <u>5/24/2018</u> Instrument reading - Backgrou	Time: 10:2 nd reading: 31	26 ppm -		Technician Initials: ppm =	MNppm
If the 1 Month remonitoring is	<500 ppm, resume n	ormal quarte	erly monitoring	ļ.	
If the 1 Month remonitoring sha again within 10 Days:	ows an exceedance,	describe add	ditional correc	ctive action taken befo	ore remonitoring
Remonitor location within 10	calendar days of 2	2nd Exceeda	ance:		
Date:	Time:		Monitorino	Technician Initials:	
Instrument reading - Backgrou	nd reading:	ppm -		ppm =	0 ppm
If the 10 Day remonitoring is	<500 ppm, remonit	tor 1 Month	from Initial E	xceedance:	
Date:	Time:		Monitoring	Technician Initials:	
Instrument reading - Backgrou	nd reading:	ppm -		ppm =	0 ppm
If the 1 Month remonitoring is <	500 ppm, resume n	ormal monito	oring.		
If the 1 Month remonitoring sho again within 10 Days:	ows an exceedance,	describe add	ditional correc	tive action taken befo	ore remonitoring
Use additional forms if necessa	ary				

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfactingType: FIAIRMON
Use a separate form for each initial exceedance.

Air Account No.: FG-0536-E

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Exceedance #: 5

Date: 5/2/2018 nstrument reading - Background re	Time: 10:01 eading: 1580		Monitoring 1	Technician In ppm =	itials:	MN 1579	_ _ppm
ocation of monitored exceedance ralve marked with red flag.	(include descriptio	n of field mark	er used):	South west	of phase	1 near h	neader
Describe cover maintenance or ad neasured exceedance before rem	justments to the vonitoring in 10 da	vacuum of ad	jacent wells t nd granular s	to increase ga eal added.	s collecti	on in vic	inity of
Remonitor location within 10 ca	lendar days of Ir	nitial Exceed	ance:				
Date: 5/9/2018 Instrument reading - Background r	Time: 10:5° eading: 3	1ppm	Monitoring 1	Technician Ir ppm =	itials: 	<u>MN</u> 2	_ _ppm
f 10 day remonitoring shows an exwithin 10 days:	xceedance, descr	ibe additiona	I corrective a	ction taken be	fore rem	onitoring	again
If the 10 day remonitoring is <50	0 ppm, remonito	or 1 Month fr	om Initial Ex	xceedance:			
Date: <u>5/24/2018</u> Instrument reading - Background r	Time: 10:29 eading: 89			Technician Ir ppm =		MN 0	_ _ppm
f the 1 Month remonitoring is <500	O ppm, resume no	ormal quarter	ly monitoring				
If the 1 Month remonitoring shows again within 10 Days:	an exceedance,	describe add	itional correc	tive action tak	en befor	e remoni	toring
Remonitor location within 10 ca	lendar days of 2	nd Exceeda	nce:				
Date: Instrument reading - Background	Time: reading:	ppm -	Monitoring	g Technician II ppm =	nitials:	0	_ ppm
If the 10 Day remonitoring is <5	00 ppm, remonit	or 1 Month f	rom Initial E	xceedance:			
Date: Instrument reading - Background	Time: reading:	ppm -	Monitoring	Technician II ppm =	nitials:	0	ppm
If the 1 Month remonitoring is <50	0 ppm, resume n	ormal monito	ring.				
If the 1 Month remonitoring shows again within 10 Days:	an exceedance,	describe add	litional correc	ctive action tak	en befor	e remon	itoring
Use additional forms if necessary							

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfactionary FIAIRMON

Use a separate form for each initial exceedance.

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Exceedance #: Date: 5/2/2018 Time: 11:14 Monitoring Technician Initials: MN Instrument reading - Background reading: 802 ppm - 1.4 ppm 800.6 Location of monitored exceedance (include description of field marker used): South East of phase 1 by liner Marked with red flag Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Cover and granular seal added. Remonitor location within 10 calendar days of Initial Exceedance: Time: 10:55 Monitoring Technician Initials: Instrument reading - Background reading: ppm - 1 ppm If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days: If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Date: 5/24/2018 Time: ____10:33 Monitoring Technician Initials: Instrument reading - Background reading: 177 ppm - 1 ppm If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring. If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days: Remonitor location within 10 calendar days of 2nd Exceedance: Monitoring Technician Initials: Instrument reading - Background reading: _____ppm -If the 10 Day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Date: Time: Monitoring Technician Initials: Instrument reading - Background reading: ppm ppm

Use additional forms if necessary

again within 10 Days:

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring

The 3 Exceedances do NOT have to be consecutive.

If the 1 Month remonitoring is <500 ppm, resume normal monitoring.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfactory representation of 500 ppm above background is encountered during the surfactory representation of 500 ppm above background is encountered during the surfactory representation of 500 ppm above background is encountered during the surfactory representation of 500 ppm above background is encountered during the surfactory representation of 500 ppm above background is encountered during the surfactory representation of 500 ppm above background is encountered during the surfactory representation of 500 ppm above background is encountered during the surfactory representation of 500 ppm above background is encountered during the surfactory representation of 500 ppm above background is encountered during the surfactory representation of 500 ppm above background is encountered during the surfactory representation of 500 ppm above background is encountered during the surfactory representation of 500 ppm above background is encountered during the surfactory representation of 500 ppm above background is encountered during the surfactory representation of 500 ppm above background is encountered during the surfactory representation of 500 ppm above background is encountered during the surfactory representation of 500 ppm above background is encountered at the surfactory representation of 500 ppm above background is encountered at the surfactory representation of 500 ppm above background is encountered at the surfactory representation of 500 ppm above background is encountered at the surfactory representation of 500 ppm above background is encountered at the surfactory representation of 500 ppm above background is encountered at the surfactory representation of 500 ppm above background is encountered at the surfactory representation of 500 ppm above background is encountered at the surfactory representation of 500 ppm above background is encountered at the surfactory representation of 500 ppm above background is encount

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Exceedance #: Monitoring Technician Initials: MN 9:29 Time: Date: 5/3/2018 **533.2** ppm ppm - 1.2 __ppm Instrument reading - Background reading: 534.4 North side of phase 3 Location of monitored exceedance (include description of field marker used); Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Cover and granular seal added. Remonitor location within 10 calendar days of Initial Exceedance: 11:21 Monitoring Technician Initials: 5/9/2018 10.7 ppm - 1 Instrument reading - Background reading: If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days: If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Monitoring Technician Initials: Time: 10:45 Date: 5/24/2018 Instrument reading - Background reading: 87 ppm - 1 ppm = ppm If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring. If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days: Remonitor location within 10 calendar days of 2nd Exceedance: Instrument reading - Background reading: _____ppm -Monitoring Technician Initials: If the 10 Day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance:

If the 1 Month remonitor	ing is <500 ppm, resume normal monitoring.
If the 1 Month remonitor again within 10 Days:	ing shows an exceedance, describe additional corrective action taken before remonitoring

Monitoring Technician Initials:

Use additional forms if necessary

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Date: _____ Time: ____ ppm - __

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfacential transfer of the surfa Air Account No.: FG-0536-E

Use a separate form for each initial exceedance.

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Exceedance #: Date: 5/3/2018 Time: 9:54 Monitoring Technician Initials:

Instrument reading - Background reading:	790ppm -	1.2ppm	= 788.8 ppm
Location of monitored exceedance (include	description of field mark	er used): North Ea	st side of phase 3
Describe cover maintenance or adjustment measured exceedance before remonitoring	ts to the vacuum of ad g in 10 days: <u>Cover a</u>	jacent wells to increase nd granular seal added.	gas collection in vicinity of
Remonitor location within 10 calendar d	ays of Initial Exceed	ance:	
Date: 5/9/2018 Time: Instrument reading - Background reading:	11:23 40 ppm -	Monitoring Techniciar 2 ppm	n Initials: MN = 38 ppm
If 10 day remonitoring shows an exceedant within 10 days:	ce, describe additiona	l corrective action taken	before remonitoring again
If the 10 day remonitoring is <500 ppm, ı	remonitor 1 Month fr	om Initial Exceedance	
Date: <u>5/24/2018</u> Time: Instrument reading - Background reading: If the 1 Month remonitoring is <500 ppm, re If the 1 Month remonitoring shows an excee	52ppm esume normal quarterl	y monitoring.	= <u>51</u> ppm
again within 10 Days:			
Remonitor location within 10 calendar d			
Date: Time: Instrument reading - Background reading:	ppm	Monitoring Technician ppm	Initials:ppm
f the 10 Day remonitoring is <500 ppm, ı	remonitor 1 Month fr	om Initial Exceedance	
Date: Time: nstrument reading - Background reading:	ppm	Monitoring Technician	Initials:ppm
If the 1 Month remonitoring is <500 ppm, re If the 1 Month remonitoring shows an exceed again within 10 Days;		_	aken before remonitoring
lea additional forms if nanages			

Use additional forms if necessary

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading the surface reading of 500 ppm above background is encountered at the surface reading the surface read *Use a separate form for each initial exceedance.* Air Account No.: FG-0536-E

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MN

Exceedance #:

Date:		Time:	10:05			g Technician Initials:	
strumen	t reading - Backgro	und reading:	1092	_ppm -	1.1	ppm =	1090.9 ppm
ocation o	of monitored exceed	ance (include de	scription o	f field mark	er used):	EW385 Penetration	n
	cover maintenance l exceedance before					to increase gas colle seal added.	ection in vicinity of
emonito	or location within 1	0 calendar day	s of Initi	al Exceed	ance:		
Date: nstrumen	5/9/2018 It reading - Backgro	Time: und reading:	11:25 41	_ _ppm -	Monitorin 0	g Technician Initials: ppm =	MNppm
10 day r ithin 10 d	-	an exceedance,	describe	additiona	I corrective	action taken before re	emonitoring again
the 10 c	day remonitoring is	s <500 ppm, rer	nonitor 1	Month fi	om Initial E	Exceedance:	
Date: _ nstrumen	5/24/2018 nt reading - Backgro	Time: und reading:	10:57 56	_ _ppm -	Monitorin 1	g Technician Initials: ppm =	MNppm
the 1 M	onth remonitoring is	<500 ppm, resu	ıme norm	al quarter	ly monitoring	g.	
	onth remonitoring sl nin 10 Days:	nows an exceed	ance, des	scribe add	itional corre	ctive action taken bef	ore remonitoring
temonito	or location within 1	0 calendar day	s of 2nd	Exceeda	nce:		
Date:		Time:			Monitorin	g Technician Initials:	
strumer	nt reading - Backgro	und reading:		_ppm -		g Technician Initials: ppm =	0 ppm
the 10 I	Day remonitoring i	s <500 ppm, re	monitor	1 Month f	rom Initial E	Exceedance:	
Date:		Time:			Monitorin	g Technician Initials: ppm =	
nstrumer	nt reading - Backgro	und reading:		_ppm -		ppm =	0 ppm
the 1 M	onth remonitoring is	<500 ppm, resu	ıme norm	al monito	ring.		
the 1 M						ctive action taken bef	ore remonitoring
	ional forms if neces						

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfacences relating type: FIAIRMON Air Account No.: FG-0536-E *Use a separate form for each initial exceedance.*

Exceedance #: Date: 5/3/2018 10:20 Time: Monitoring Technician Initials: MN Instrument reading - Background reading: 816.2 ppm - 1.3 ppm **814.9** ppm Location of monitored exceedance (include description of field marker used): South of phase 3 by sign marker N Marked with red flag Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Cover and granular seal added. Remonitor location within 10 calendar days of Initial Exceedance: Time: 11:26 Monitoring Technician Initials: Instrument reading - Background reading: 11.3 ppm - 1 If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days: If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Date: 5/24/2018 Time: 11:03 Monitoring Technician Initials: Instrument reading - Background reading: 98 ppm - 1 ppm If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring. If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days: Remonitor location within 10 calendar days of 2nd Exceedance: Date: _____ Time: ____ Monitoring Technic
Instrument reading - Background reading _____ ppm - ____ ppm Monitoring Technician Initials: ppm If the 10 Day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Time: ___ Monitoring Technician Initials: Instrument reading - Background reading:

Use additional forms if necessary

again within 10 Days:

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring

The 3 Exceedances do NOT have to be consecutive.

If the 1 Month remonitoring is <500 ppm, resume normal monitoring.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm a

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Exceedance #:

Date: 5/3/	2018 ling - Backgroun	Time: _	10:29 1316	ppm -		g Technicia	an Initials:	MN 1314.7	- mag
	nitored exceedar	_					ohase 3 by		
Describe cover	maintenance or edance before r	adjustments emonitoring i	to the vac n 10 days	cuum of ac	djacent wells nd granular	to increas seal added	e gas colle l.	ection in vic	inity of
Remonitor loc	ation within 10	calendar da	ys of Initi	ial Exceed	lance:				
Date: 5/9/	<u>2018</u> ding - Backgroun	Time: _ nd reading; _	11:27 231	ppm -	Monitorin 1.3	g Technici	an Initials: =	MN 229.7	_ _ppm
f 10 day remor within 10 days:	nitoring shows ar	n exceedance	e, describe	e additiona	al corrective	action take	en before r	emonitoring	ı again
if the 10 day re	emonitoring is	<500 ppm, re	emonitor	1 Month f	rom Initial E	Exceedance	e:		
Date: 5/24	./2018 ding - Backgrour	Time: _ nd reading: _	11:05 198	_ ppm -	Monitorin	g Technici ppm	an Initials:	MN 197	_ _ppm
	emonitoring is <								
lf the 1 Month r again within 10	emonitoring sho	ws an exceed	dance, de	scribe add	litional corre	ctive action	n taken be	fore remoni	toring
Remonitor loc	ation within 10	calendar da	ys of 2nd	Exceeda	nce:				
Date: Instrument read	ding - Backgrour	Time: _ nd reading: _		ppm -	Monitorin	g Technici ppm	an Initials: =	0	_ _ppm
If the 10 Day r	emonitoring is	<500 ppm, r	emonitor	1 Month	from Initial I	Exceedan	ce:		
Date:	ding - Backgrour	Time: _		_	Monitorin	g Technici	an Initials:		-
Instrument read	ding - Backgrour	nd reading: _		ppm -		ppm	=	0	_ ppm
If the 1 Month r	remonitoring is <	:500 ppm, res	sume norr	nal monito	ring.				
	remonitoring sho					ctive action	n taken be	fore remon	toring
	- Duyo.								

Use additional forms if necessary

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfacendaring type: FIAIRMON Air Account No.: FG-0536-E

Use a separate form for each initial exceedance.

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Exceedance #: Date: 5/3/2018 Time: 10:35 Monitoring Technician Initials: MN Instrument reading - Background reading: 4311 1.1 ppm 4309.9 ppm ppm -Location of monitored exceedance (include description of field marker used): South of phase 3, by sign marker P. Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Cover and granular seal added. Remonitor location within 10 calendar days of Initial Exceedance: Time: Monitoring Technician Initials: Instrument reading - Background reading: 117.3 ppm -116.3 If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days: If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Date: 5/24/2018 Time: 11:09 Monitoring Technician Initials: Instrument reading - Background reading: ____182 181 ppm If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring. If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days:

Remonitor location v	within 10 calendar days of	2nd Exceedand	ce:			
Date:	Time:		Monitoring Technici	an Initials:		
Instrument reading - B	Background reading:	ppm -	ppm	=	0	— ppm
If the 10 Day remonit	toring is <500 ppm roman	ites 4 Month for	luitial Essas dans			
	toring is <500 ppm, remon	itor 1 Month fro				
If the 10 Day remonit Date: Instrument reading - B	Time:	itor 1 Month fro	om Initial Exceedance Monitoring Technici			

Use additional forms if necessary

again within 10 Days:

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring

The 3 Exceedances do NOT have to be consecutive.

If the 1 Month remonitoring is <500 ppm, resume normal monitoring.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surface to the surface of th

Attachment: 5 Page: 38 of 69

Exceedance #: Monitoring Technician Initials: MN Date: Time: 10:40 5/3/2018 2668 ppm - 1.3 ppm **2666.7** ppm Instrument reading - Background reading: Location of monitored exceedance (include description of field marker used): South of phase 3 by sign marker P Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Granular seal cover added. Remonitor location within 10 calendar days of Initial Exceedance: Date: 5/9/2018 Time: 11:31 Monitoring Technician Initials: ppm - 0 ppm = If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days: If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Date: 5/24/2018 Time: 11:14 Monitoring Technician Initials: Instrument reading - Background reading: 111 ppm - 1 ppm = If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring. If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days: Remonitor location within 10 calendar days of 2nd Exceedance: Date: _____ Time: _____ Monitoring Technician Initials: ______
Instrument reading - Background reading: _____ ppm - _____ ppm = ____ If the 10 Day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Date: _____ Time: _____ Monitoring Technician Initials: Instrument reading - Background reading: _____ ppm = ____ ppm =

If the 1 Month remonitoring is <500 ppm, resume normal monitoring.

If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days:

Use additional forms if necessary

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfacence when a reading of 500 ppm above background is encountered during the surfacence when a reading of 500 ppm above background is encountered during the surfacence when a reading of 500 ppm above background is encountered during the surfacence when a reading of 500 ppm above background is encountered during the surfacence when a reading of 500 ppm above background is encountered during the surfacence when a reading of 500 ppm above background is encountered during the surfacence when a reading of 500 ppm above background is encountered during the surfacence when a reading of 500 ppm above background is encountered during the surfacence when a reading of 500 ppm above background is encountered during the surfacence when a reading of 500 ppm above background is encountered during the surfacence when a reading of 500 ppm above background is encountered during the surfacence when a reading of 500 ppm above background is encountered at the surfacence when a reading of 500 ppm above background is encountered at the surfacence when a reading of 500 ppm above background is encountered at the surfacence when a reading of 500 ppm above background is encountered at the surfacence when a reading of 500 ppm above background is encountered at the surfacence when a reading of 500 ppm above background is encountered at the surfacence when a reading of 500 ppm above background is encountered at the surfacence when a reading of 500 ppm above background is encountered at the surfacence when a reading of 500 ppm above background is encountered at the surfacence when a reading of 500 ppm above background is encountered at the surfacence when a reading of 500 ppm above background is encountered at the surfacence when a reading of 500 ppm above background is encountered at the surfacence when a reading of 500 ppm above background is encountered at the surfacence when a reading of 500 ppm above background is encountered at the surf Air Account No.: FG-0536-E *Use a separate form for each initial exceedance.*

ppm

Exceedance #: Date: 5/3/2018 Time: 12:51 Monitoring Technician Initials: MN Instrument reading - Background reading: 2668 ppm - 1.1 ppm 2666.9 ppm Location of monitored exceedance (include description of field marker used) South of phase 3 by sign marker X Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Granular seal cover added. Remonitor location within 10 calendar days of Initial Exceedance: Date: 5/9/2018 Time: 11:33 Monitoring Technician Initials: Instrument reading - Background reading: 11 ppm If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days: If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Date: 5/24/2018 Time: 11:17 Monitoring Technician Initials: ppm - ____1 __ppm Instrument reading - Background reading: 98 If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring.

Date:	Time:	Mo	nitoring Technician	nitials.	
nstrument reading - Back			_	= 0	ppn
nstrument reading - Back	(ground reading:	ppm -	ppm	= n	

If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring

If the 1 Month remonitoring is <500 ppm, resume normal monitoring.

If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days:

Use additional forms if necessary

again within 10 Days:

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading the surface *Use a separate form for each initial exceedance.*

Air Account No.: FG-0536-E

Exceedance #: MN Time: Monitoring Technician Initials: 12:54 5/3/2018 Date: Instrument reading - Background reading: 3044 ppm - 1.1 ppm **3042.9** ppm South of phase 3 by sign marker X Location of monitored exceedance (include description of field marker used): Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Cover and granular seal added. Remonitor location within 10 calendar days of Initial Exceedance: 11:36 Monitoring Technician Initials: ____ Time: 11:36 Instrument reading - Background reading: If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days: If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Monitoring Technician Initials: Time: 11:20 Date: 5/24/2018 ppm - 1 ppm Instrument reading - Background reading: 88 If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring. If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days: Remonitor location within 10 calendar days of 2nd Exceedance: Monitoring Technician Initials: Date: _____ Time: _____ ppm - _ If the 10 Day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Monitoring Technician Initials: Time: ____ Instrument reading - Background reading: ppm If the 1 Month remonitoring is <500 ppm, resume normal monitoring.

Use additional forms if necessary

again within 10 Days:

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfacence of the surf Air Account No.: FG-0536-E

Use a separate form for each initial exceedance.

Exceedance #:

Date:5/3/2018 Time:	13:27	Monitoring Tech	nician Initials:	MN
Instrument reading - Background reading:	1307 ppm -	1.1ppr	-	1305.9 ppm
Location of monitored exceedance (include de	escription of field mark	ser used): So	uth of phase 3	
Describe cover maintenance or adjustments measured exceedance before remonitoring in	to the vacuum of ac 1 10 days: <u>Dirt cove</u>	ljacent wells to Inci er added	rease gas colle	ction in vicinity of
Remonitor location within 10 calendar day	s of Initial Exceed	ance:		
Date: <u>5/9/2018</u> Time: _ Instrument reading - Background reading: _	11:40 211 ppm -	Monitoring Tech	_	MNppm
If 10 day remonitoring shows an exceedance, within 10 days:	, describe additiona	corrective action	taken before re	monitoring again
If the 10 day remonitoring is <500 ppm, rer	monitor 1 Month fr	om Initial Exceed	ance:	
Date: <u>5/24/2018</u> Time: _ Instrument reading - Background reading:	11:25 193 ppm -			MN 192 ppm
If the 1 Month remonitoring is <500 ppm, resu	ıme normal quarterl	y moniloring.		
If the 1 Month remonitoring shows an exceeda again within 10 Days:	ance, describe addi	tional corrective ac	ction taken befo	re remonitoring
Remonitor location within 10 calendar day	s of 2nd Exceedar	ice:		
Date: Time: Instrument reading - Background reading:	ppm	Monitoring Tech	nician Initials: _ n = _	ppm
If the 10 Day remonitoring is <500 ppm, rer	monitor 1 Month fr	om Initial Exceed	ance:	
Date: Time: Instrument reading - Background reading:	ppm	Monitoring Tech		0 ppm
If the 1 Month remonitoring is <500 ppm, resu	me normal monitori	ng.		
If the 1 Month remonitoring shows an exceeda	ance, describe addit	ional corrective ac	tion taken befor	re remonitoring
Use additional forms if necessary				

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading the sur *Use a separate form for each initial exceedance.* Air Account No.: FG-0536-E

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Exceedance #: MN Monitoring Technician Initials: 14:49 Time: Date: 5/3/2018 Instrument reading - Background reading: 604.7 ppm - 1.1 ppm 603.6 ppm EW310A penetration Location of monitored exceedance (include description of field marker used): Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Dirt cover added, increase flow Remonitor location within 10 calendar days of Initial Exceedance: Monitoring Technician Initials: Time: 11:42 5/9/2018 Instrument reading - Background reading: 16 ppm - 1 If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days: If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Monitoring Technician Initials: Time: 11:28 Date: 5/24/2018 ppm - ______ ppm Instrument reading - Background reading: 121 If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring. If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days: Remonitor location within 10 calendar days of 2nd Exceedance: Monitoring Technician Initials: Date: _____ Time: ____ ppm -If the 10 Day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Monitoring Technician Initials: Time: ____ Instrument reading - Background reading: ppm If the 1 Month remonitoring is <500 ppm, resume normal monitoring. If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring

Use additional forms if necessary

again within 10 Days:

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading the sur Air Account No.: FG-0536-E

Use a separate form for each initial exceedance.

Exceedance #: 5/3/2018 Date: Time: 15:33 Monitoring Technician Initials: MN Instrument reading - Background reading: 526.5 ppm -1.2 525.3 ppm Location of monitored exceedance (include description of field marker used): EW3102 Penetration Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Cover and granular seal added, increase flow. Remonitor location within 10 calendar days of Initial Exceedance: Time: 11:46 Monitoring Technician Initials: Instrument reading - Background reading: 18 ppm -If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days: If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Date: 5/24/2018 Time: 11:31 Monitoring Technician Initials: Instrument reading - Background reading: ____ 98 ppm - _ 1 _ ppm

Remonitor location within 10 cale	ondur days of	Ziiu Exceeua	nce:				
Date:	Time:		Monitoring 1	Гесhnici	an Initials:		
Instrument reading - Background re	eading:	ppm -		ppm	=	0	ppm
f the 10 Day sementication in 4500		24 4 88 44 4			_		
If the 10 Day remonitoring is <500 Date: Instrument reading - Background re-	Time:	itor 1 Month f	rom Initial Exc	eedan			

If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring

Use additional forms if necessary

again within 10 Days:

again within 10 Days:

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring

The 3 Exceedances do NOT have to be consecutive.

If the 1 Month remonitoring is <500 ppm, resume normal monitoring.

Use this form to record an Individual monitoring exceedance and follow-up monitoring activities.

If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfacence of the surf *Use a separate form for each initial exceedance.* Air Account No.: FG-0536-E

ppm

19

Exceedance #:

Date: 5/3/2018		Time:		-		oring Technic	_		
strument reading -	· Background r	eading:	745.1	_ppm	1.2	ppm	=)-	743.9	_ppm
ocation of monitore	ed exceedance) (include de	scription o	of field ma	arker used):	LCR3-	6 penetration	on	
Describe cover mair neasured exceedar								ction in vic	inity of
Remonitor location	within 10 ca	lendar day	s of Initi	al Exce	edance:				
Date: 5/9/2018	}	Time:	11:50		Monito	ring Technici	ian Initials:	MN	
Date: 5/9/2018	Background r	eading: _	54.7	ppm	- 1.1	ppm	=	53.6	ppm
f 10 day remonitorir vithin 10 days:	ng shows an e	xceedance,	describe	additio	nal correcti	ve action take	en before re	monitoring	g again
f the 10 day remor	nitoring is <50	0 ppm, rer	nonitor '	1 Month	from Initia	al Exceedance	ce;		
Date: 5/24/201		Time:	11:35	_	Monito	ring Technici		MN	_
nstrument reading -	Background r	reading:	211	_ppm	1	ppm	= -	210	_ ppm
f the 1 Month remo	nitoring is <506	ວ ppm, resu	me norm	al quart	erly monito	ring.			
f the 1 Month remo again within 10 Day	_	an exceeda				rrective action	n taken befo	ore remoni	toring
Remonitor location	n within 10 ca	lendar day	s of 2nd	Exceed	ance:				
Date:		Time:			Monito	oring Technici	ian Initials:		
Date: nstrument reading -	- Background r	eading:		_ ppm		ppm	= -	0	_ ppm
f the 10 Day remo	nitoring is <50)0 ppm, rei	nonitor	1 Month	from Initi	al Exceedan	ce:		
					Monito	oring Technici	an Initials:		
Date:		l ime:							_
Date: Instrument reading	Background r	eading:		ppm	_	ppm	+	0	_ ppm

Use additional forms if necessary

again within 10 Days:

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading the surface Air Account No.: FG-0536-E

Use a separate form for each initial exceedance.

Exceedance #: 20
Date: 5/4/2018 Time: 9:40 Monitoring Technician Initials: MN Instrument reading - Background reading: 2459 ppm - 1.2 ppm = 2457.8 ppm
Location of monitored exceedance (include description of field marker used): West of phase 3
Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Cover added
Remonitor location within 10 calendar days of Initial Exceedance:
Date: 5/9/2018 Time: 11:52 Monitoring Technician Initials: MN Instrument reading - Background reading: 133 ppm - 1.1 ppm = 131.9 ppm If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again
within 10 days:
If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance:
Date: 5/24/2018 Time: 11:41 Monitoring Technician Initials: MN Instrument reading - Background reading: 152 ppm - 1 ppm = 151 ppm
If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring.
If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days:
Remonitor location within 10 calendar days of 2nd Exceedance:
Date: Monitoring Technician Initials: ppm ppm = ppm
If the 10 Day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance:
Date: Time: Monitoring Technician Initials: ppm - ppm = 0 ppm
If the 1 Month remonitoring is <500 ppm, resume normal monitoring.
If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days:

Use additional forms if necessary

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered at the surface reaction of 500 ppm above background is encountered at the surface reaction of 500 ppm above background is encountered at the surface reaction of 500 ppm above background is encountered at the surface reaction of 500 ppm above background is encountered at the surface reaction of 500 ppm above background is encountered at the surface reaction of 500 ppm above background is encountered at the surface reaction of 500 ppm above background is encountered at the surface reaction of 500 ppm above background is encountered at the surface reaction of 500 ppm above background is encountered at the surface reaction of 500 ppm above background is encountered at the surface reaction of 500 ppm above background is encountered at the surface reaction of 500 ppm above background is encountered at the surface reaction of 500 ppm above background is encountered at the surface reaction of 500 ppm above background is encountered at the surface reaction of

Air Account No.: FG-0536-E Attachment: 5

Exceedance #: 21 Monitoring Technician Initials: MN Time: 10:02 Date: 5/4/2018 Instrument reading - Background reading: 504.1 ppm - 1 ppm Location of monitored exceedance (include description of field marker used): Southwest of phase 3. Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Increase vacuum on near wells and cover added. Remonitor location within 10 calendar days of Initial Exceedance: Date: 5/9/2018 Time: 11:54 Monitoring Technician Initials: _____
Instrument reading - Background reading: ______ 31 ____ppm - _____ 1 ____ppm = _____ If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days: If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Date: 5/24/2018 Time: 11:47 Monitoring Technician Initials: _____
Instrument reading - Background reading: 51 ppm - 1 ppm = If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring. If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days: Remonitor location within 10 calendar days of 2nd Exceedance: If the 10 Day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Date: _____ Time: _____ Monitoring Technician Initials: Instrument reading - Background reading: _____ ppm - ____ ppm = ppm

Use additional forms if necessary

again within 10 Days:

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring

The 3 Exceedances do NOT have to be consecutive.

If the 1 Month remonitoring is <500 ppm, resume normal monitoring.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surface that the surface th

Exceedance #: 22

Date: 5/4/2018 Time: 10 strument reading - Background reading: 42	22 Monit 209 ppm - 1.	oring Technician Initials: 1ppm =	MN 4207.9 ppm
ocation of monitored exceedance (include descrip	otion of field marker used):	EW3126 Penetratio	n
Describe cover maintenance or adjustments to the neasured exceedance before remonitoring in 10			
temonitor location within 10 calendar days of	finitial Exceedance:		
Date: 5/9/2018 Time: 11 estrument reading - Background reading: 16			
10 day remonitoring shows an exceedance, des vithin 10 days:	scribe additional correct	ive action taken before ren	nonitoring again
the 10 day remonitoring is <500 ppm, remon	itor 1 Month from Initi	al Exceedance:	
Date: 5/24/2018 Time: 11 hstrument reading - Background reading: 15		oring Technician Initials: ppm =	MN 151 ppm
the 1 Month remonitoring is <500 ppm, resume	normal quarterly monito	oring.	
the 1 Month remonitoring shows an exceedance gain within 10 Days:	e, describe additional co	orrective action taken befor	e remonitoring
emonitor location within 10 calendar days of	² 2nd Exceedance:		
Date: Time: nstrument reading - Background reading:	Monito	oring Technician Initials:	
strument reading - Background reading:	ppm	ppm =	0 ppm
the 10 Day remonitoring is <500 ppm, remon	itor 1 Month from Initi	al Exceedance:	
Date: Time:	Monito	oring Technician Initials:	
strument reading - Background reading:	ppm	ppm =	0 ppm
the 1 Month remonitoring is <500 ppm, resume	normal monitoring.		
the 1 Month remonitoring shows an exceedance gain within 10 Days:	e, describe additional co	prective action taken before	e remonitoring
se additional forms if necessary			

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading at the surface r

Attachment: 5 Page: 48 of 69

Exceedance #: Monitoring Technician Initials: MN 10:30 Time: Date: 5/4/2018 1366 ppm - 1.1 ppm 1364.9 ppm Instrument reading - Background reading: EW361A Penetration Location of monitored exceedance (include description of field marker used): Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Cover added and increase flow, Remonitor location within 10 calendar days of Initial Exceedance: Monitoring Technician Initials: Time: 12:00 5/9/2018 Instrument reading - Background reading: 10 ppm - 1 ppm If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days: If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Monitoring Technician Initials: Time: 11:52 ppm Instrument reading - Background reading: 31 If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring. If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days: Remonitor location within 10 calendar days of 2nd Exceedance: Date: _____ Time: _____ Monitoring Technician Initials: Instrument reading - Background reading: _____ ppm - ____ ppm = If the 10 Day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Time: ____ Monitoring Technician Initials:

If the 1 Month remonitoring is <500 ppm, resume normal monitoring.

If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days:

Use additional forms if necessary

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Instrument reading - Background reading:

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surface the surface of the s Air Account No.: FG-0536-E

Use a separate form for each initial exceedance.

Exceedance #: 24

Date: 5/4/2018 Time: 10:41 Monitoring Technician Initials: MN Instrument reading - Background reading: 4211 ppm - 1.1 ppm = 4209.9 ppm
Location of monitored exceedance (include description of field marker used): EW366A Penetration
Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Cover Added
Remonitor location within 10 calendar days of Initial Exceedance:
Date:5/9/2018
If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:
If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance:
Date: 5/24/2018 Time: 11:53 Monitoring Technician Initials: MN Instrument reading - Background reading: 31 ppm - 1 ppm = 30 ppm
If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring.
If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days:
Remonitor location within 10 calendar days of 2nd Exceedance:
Date: Time: Monitoring Technician Initials: ppm = ppm = ppm
If the 10 Day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance:
Date: Time: Monitoring Technician Initials: ppm ppm = ppm
If the 1 Month remonitoring is <500 ppm, resume normal monitoring.
If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days:
Use additional forms if necessary

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfactive type: FIAIRMON
Use a separate form for each initial exceedance.

Air Account No.: FG-0536-E

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Exceedance #:

measured exceedance before remonitoring in 10 days: Cover added and increase flow.

Date: 5/4/2018 Time: 10:55 Monitoring Technician Initials: MN Instrument reading - Background reading: 2607 ppm - 1.3 ppm = 2605.7 ppm

Location of monitored exceedance (include description of field marker used): EW351A Penetration

Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of

Remonitor location within 10 calendar days of Initial Exceedance: Monitoring Technician Initials: Date: 5/9/2018 Time: 12:03 Instrument reading - Background reading: 201 ppm - 1.1 ppm If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days: If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Monitoring Technician Initials: Time: ppm - 1 ppm Instrument reading - Background reading: If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring. If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days:

Date:	Time:	Mo	onitoring Technicia	an Initials:		
Instrument reading - B	Background reading:	ppm -	ppm	= -	0	ppm
If the 10 Day remonit	toring is <500 ppm, remoni					
If the 10 Day remonit Date: Instrument reading - E	Time:		Initial Exceedanc			_

If the 1 Month remonitoring is <500 ppm, resume normal monitoring.

If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days:

Use additional forms if necessary

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfacentiating type: FIAIRMON *Use a separate form for each initial exceedance.*

Air Account No.: FG-0536-E

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Exceed	dance #:	26		
Date: 5/4/2018 Time: Instrument reading - Background reading: Location of monitored exceedance (include des	1-	1.3	echnician Initials: _ ppm = _ South of phase 3 b	2443.7 ppm
Describe cover maintenance or adjustments to measured exceedance before remonitoring in			increase gas collec	tion in vicinity of
Remonitor location within 10 calendar days	s of Initial Exceeda	ance:		
Date: 5/9/2018 Time: Instrument reading - Background reading:	12:05 191 ppm	Monitoring To	echnician Initials: _ ppm = _	MN 189.9 ppm
If 10 day remonitoring shows an exceedance, within 10 days;	describe additional	corrective acti	on taken before rer	nonitoring again
If the 10 day remonitoring is <500 ppm, rem	nonitor 1 Month fre	om Initial Exc	eedance:	
Date: 5/24/2018 Time: Instrument reading - Background reading:	11:59 89 ppm	Monitoring To	echnician Initials: _ ppm = _	MNppm
If the 1 Month remonitoring is <500 ppm, resur	me normal quarterly	y monitoring.		
If the 1 Month remonitoring shows an exceeda again within 10 Days:	ınce, describe addit	ional corrective	e action taken befo	re remonitoring
Remonitor location within 10 calendar days	of 2nd Exceedan	ce:		
Date: Time: Instrument reading - Background reading:	ppm	_	echnician Initials: _ ppm = _	0 ppm
If the 10 Day remonitoring is <500 ppm, rem	nonitor 1 Month fr	om Initial Exc	eedance:	
Date: Time: Instrument reading - Background reading:	ppm	Monitoring Te	echnician Initials; _ ppm = _	0 ppm
If the 1 Month remonitoring is <500 ppm, resur	me normal monitori	ng.		
If the 1 Month remonitoring shows an exceeda again within 10 Days:	nce, describe addit	ional corrective	e action taken befor	re remonitoring

Use additional forms if necessary

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered during the surface reaction of 500 ppm above background is encountered at the 500 ppm above back

Account No.: FG-0536-E Attachment: 5

Exceedance #: Monitoring Technician Initials: MN Time: 13:50 5/4/2018 Date: ppm - 1.3 ppm Instrument reading - Background reading: 754 752.7 mag Location of monitored exceedance (include description of field marker used): CS3-18 Penetration Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Dirt cover added Remonitor location within 10 calendar days of Initial Exceedance: Date: 5/9/2018 Time: 12:06 Monitoring Technician Initials: _____
Instrument reading - Background reading: 111 ppm - 1.1 ppm = If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days: If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Monitoring Technician Initials: Time: 12:03 Date: 5/24/2018 ppm - 1 ppm Instrument reading - Background reading: 98 If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring. If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days: Remonitor location within 10 calendar days of 2nd Exceedance: Date: _____ Time: _____ Monitoring Technician Initials: Instrument reading - Background reading: _____ ppm - ____ ppm = If the 10 Day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Time: ___ Monitoring Technician Initials: Date: Instrument reading - Background reading: ppm If the 1 Month remonitoring is <500 ppm, resume normal monitoring.

Use additional forms if necessary

again within 10 Days:

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfacentiaring type: FIAIRMON *Use a separate form for each initial exceedance.*

			1	28	-			
Date: <u>5/4/2018</u> Instrument reading - Background re		14:02 51 <u>5</u> .8	_ppm -	Monitoring 1.1		n Initials:	MN 514.7	ppm
ocation of monitored exceedance	(include des	cription o	f field mark	er used):	EW399	Penetration		
Describe cover maintenance or adjunction of the cover maintenance or adjunction or adjunction of the cover maintenance or adjunction of the cover maintenance or adjunction or adjunction or adjunction of the cover maintenance or adjunction or adju	ustments to onitoring in	the vac 10 days:	uum of ad Dirt cove	jacent wells to er added and i	o increase increase fl	gas collec ow	tlon in vic	inity of
temonitor location within 10 cale	endar days	of Initia	Exceed	ance:				
Date:5/9/2018nstrument reading - Background re	Time: eading:	12:07 28	_ _ppm	Monitoring 1.1	Techniciai _ppm	n Initials:	MN 26.9	_ _ppm
10 day remonitoring shows an exc within 10 days:	ceedance,	describe	additiona	corrective ac	tion taken	before ren	nonitoring	again
the 10 day remonitoring is <500	ppm, rem	onitor 1	Month fr	om Initial Ex	ceedance			
Date: <u>5/24/2018</u> estrument reading - Background re	Time: ading:	12:08 51	- ppm -	Monitoring	Techniciar ppm	Initials:	MN 50	- ppm
the 1 Month remonitoring is <500 the 1 Month remonitoring shows a	ppm, resun	ne norma	al quarterl	y monitoring.		aken befor	e remonii	
the 1 Month remonitoring is <500 the 1 Month remonitoring shows a gain within 10 Days:	ppm, resun	ne norma	al quarterl	y monitoring. tional correcti		aken befor	e remonii	
the 1 Month remonitoring is <500 the 1 Month remonitoring shows a gain within 10 Days: emonitor location within 10 cale	ppm, resun	ne norma	al quarterl cribe addi Exceedan	y monitoring. tional correcti	ve action t			oring
the 1 Month remonitoring is <500 the 1 Month remonitoring shows a gain within 10 Days: emonitor location within 10 cale Date: strument reading - Background rea	ppm, resun in exceedar endar days Time:	ne norma	al quarterl cribe addi Exceedan	y monitoring. tional corrective. ce: Monitoring	ve action t	Initials:		
the 1 Month remonitoring is <500 the 1 Month remonitoring shows a gain within 10 Days: Commonitor location within 10 cale Date:	ppm, resundant exceedadendar days Time: ading:	ne normance, des	al quarteri cribe addi Exceedan _ppm	y monitoring. tional corrective. ce: Monitoring	ve action t Techniciar ppm ceedance	Initials: =		oring

Use additional forms if necessary

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfactingType: FIAIRMON
Use a separate form for each initial exceedance.

Air Account No.: FG-0536-E

Exceedance #: Monitoring Technician Initials: MN 14:16 5/4/2018 Time: Date: 1751 ppm - 1.3 1749.7 ppm Instrument reading - Background reading: ppm **EW387 Penetration** Location of monitored exceedance (include description of field marker used): Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Dirt cover added and increase flow. Remonitor location within 10 calendar days of Initial Exceedance: Monitoring Technician Initials: Time: 12:08 Instrument reading - Background reading: 21 ppm - 1.1 If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days: If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Monitoring Technician Initials: Time: 12:13 Date: 5/24/2018 Instrument reading - Background reading: 98 ppm - 1 ppm ppm If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring. If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days: Remonitor location within 10 calendar days of 2nd Exceedance: Monitoring Technician Initials: Date: _____ Time: _____ ppm - _ If the 10 Day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Monitoring Technician Initials: Time: ppm Instrument reading - Background reading:

Use additional forms if necessary

again within 10 Days:

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring

The 3 Exceedances do NOT have to be consecutive.

If the 1 Month remonitoring is <500 ppm, resume normal monitoring.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surface transfer of the surface of the surf Air Account No.: FG-0536-E

Use a separate form for each initial exceedance.

			Excee	dance #		3	30	-			
Date: 5 Instrument re Location of r			reading:	1023			1.3		an Initials: = f EW387	MN 1021.7	ppm
Describe cov measured ex	ver mainte xceedance	enance or ac e before rem	djustments to	to the vac 10 days:	uum of Dirt co	adjad over a	ent wells to	o increas	e gas colle	ction in vic	cinity of
Remonitor I	ocation v	vithin 10 ca	lendar day	s of Initia	al Exce	edan	ce:				
Date: <u>5</u> Instrument re If 10 day rem within 10 day	5/9/2018 eading - B	 ackground i	Time: reading:	12:10 33	_ _ppm	ا 	Monitoring	_ppm	an Initials: = n before re	31.9	ppm _ pgain
		-							_		
If the 10 day				nonitor 1	Month	from	Initial Ex	ceedanc	e:		
Date: 5/ Instrument re		_ ackground r		12:16 53			Monitoring 1	Technicia ppm	n Initials: _ =	MN 52	 ppm
If the 1 Montl	h remonite	oring is <500	D ppm, resu	me norma	- al quart	terly n	nonitoring,		_		= ' '
If the 1 Montl again within	h remonite							ve action	taken befo	ore remoni	toring
Remonitor I	ocation w	ithin 10 ca	lendar day	s of 2nd l	Exceed	dance	:				
Date: Instrument re		_ ackground r			ppm ·		Monitoring [*]	Technicia _ppm	n Initials: _ =	0	_ _ppm
f the 10 Day	remonite	oring is <50	0 ppm, ren	nonitor 1	Month	from	Initial Ex	ceedanc	e:		
Date: nstrument re	eading - Ba	_ ackground r	Time: eading:		ppm -	- <u> </u>	fonitoring ⁻	Technicia ppm	n Initials: _ = _	0	_ppm
f the 1 Month	n remonito	oring is <500	ppm, resul	me norma	al monit	torina					
f the 1 Month	n remonito							e action	taken befo	re remonit	oring

Use additional forms if necessary

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfact the surfact that th

Attachment: 5 Page: 56 of 69

Exceedance #: Monitoring Technician Initials: 14:27 Time: 683.8 685 1.2 ppm Instrument reading - Background reading:

MN

South west of well EW387

ppm

Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of

Remonitor location within 10 cale	endar days of	Initial Excee	edance:		
Date:5/9/2018	Time:12:	12	Monitoring	Technician Initials:	MN
strument reading - Background re	ading: 12	2 ppm	1.1	_ppm =	ppm
10 day remonitoring shows an exc vithin 10 days:	ceedance, des	cribe additior	nal corrective a	ction taken before r	emonitoring again
the 10 day remonitoring is <500	ppm, remon	tor 1 Month	from Initial Ex	cceedance:	
Date: 5/24/2018	Time: 12:	19	Monitoring	Technician Initials:	MN
the 1 Month remonitoring is <500 the 1 Month remonitoring shows a	ading: 1' ppm, resume	1 ppm normal quart	- <u>1</u> erly monitoring.	_ppm =	110ppm
nstrument reading - Background re the 1 Month remonitoring is <500 the 1 Month remonitoring shows a gain within 10 Days:	ading:1^	1 ppm on	- <u>1</u> erly monitoring.	ppm = tive action taken be	110ppm
the 1 Month remonitoring is <500 the 1 Month remonitoring is <500 the 1 Month remonitoring shows a gain within 10 Days:	ppm, resume an exceedance	normal quarter, describe ac	- 1 erly monitoring. dditional correct	ppm = tive action taken be	110ppm
the 1 Month remonitoring is <500 the 1 Month remonitoring is <500 the 1 Month remonitoring shows a gain within 10 Days:	ppm, resume an exceedance	normal quarter, describe ac	- 1 erly monitoring. dditional correct	ppm = tive action taken be	110ppm
nstrument reading - Background re the 1 Month remonitoring is <500 the 1 Month remonitoring shows a	ppm, resume an exceedance endar days of Time: ading:	normal quarter, describe ac	- 1 erly monitoring. dditional correct lance: Monitoring	ppm = .tive action taken be .Technician Initials:ppm =	110ppm
nstrument reading - Background refithe 1 Month remonitoring is <500 if the 1 Month remonitoring shows a gain within 10 Days: Remonitor location within 10 cale Date: Instrument reading - Background refited the strument reading - Background refit the strument reading - Background - Backg	ppm, resume an exceedance endar days of Time: eading:	normal quarter, describe accepted accep	- 1 erly monitoring. dditional correct lance: Monitoring from Initial Ex	ppm = .tive action taken be .Technician Initials:ppm = xceedance:	fore remonitoring

Use additional forms if necessary

again within 10 Days:

5/4/2018

Location of monitored exceedance (include description of field marker used):

Date:

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfacence reading to ppm above background is encountered during the surfacence reading to ppm above background is encountered during the surfacence reading to ppm above background is encountered during the surfacence reading to ppm above background is encountered during the surfacence reading to ppm above background is encountered during the surfacence reading to ppm above background is encountered during the surfacence reading to ppm above background is encountered during the surfacence reading to ppm above background is encountered during the surfacence reading to ppm above background is encountered during the surfacence reading to ppm above background is encountered during the surfacence reading to ppm above background is encountered during the surfacence reading to ppm above background is encountered during the surfacence reading to ppm above background is encountered during the surfacence reading to ppm above background is encountered at the surfacence reading to ppm above background is encountered at the surfacence reading to ppm above background is encountered at the surfacence reading to ppm above background is encountered at the surfacence reading to ppm above background is encountered at the surfacence reading to ppm above background is encountered at the surfacence reading to ppm above background is encountered at the surfacence reading to ppm above background is encountered at the surfacence reading to ppm above background is encountered at the surfacence reading to ppm above background is encountered at the surfacence reading the surfacence reading to ppm above at the surfacence reading to ppm above reading to ppm above at the surfacence reading to ppm above at the surfacence reading to ppm above reading the surfacence reading the surfacence reading to ppm above reading to ppm above rea Air Account No.: FG-0536-E

Use a separate form for each initial exceedance.

				-		
Date: <u>5/4/2018</u> nstrument reading - Background re		:32 3.5 ppm		Technician Initials: _ppm =	MN 592.3	ppm
ocation of monitored exceedance	(include descrip	tion of field n	marker used):	South west of well	I EW387	
Describe cover maintenance or adjunction of adjunction of the cover maintenance or adjunction or adjunction of the cover maintenance or adjunction of the cover maintenance or adjunction or adjunction or adjunction or adjunction of the cover maintenance or adjunction o	ustments to the	e vacuum o days: <u>Dirt c</u>	of adjacent wells to	to increase gas colle near wells were che	ection in vicin	nlty of cuum
Remonitor location within 10 cale	endar days of	Initial Exc	eedance:			
Date: <u>5/9/2018</u> nstrument reading - Background re	Time: 12:	14 1 ppm	Monitoring - 1.1	Technician Initials: _ _ppm =	MN 29.9	ppm
f 10 day remonitoring shows an exc vithin 10 days:	ceedance, des	cribe addition	onal corrective a	ction taken before re	emonitoring	again
the 10 day remonitoring is <500	ppm, remon	itor 1 Mont	h from Initial Ex	ceedance:		
Date: 5/24/2018 enstrument reading - Background re	Time: 12: ading: 5	21 1 ppm	Monitoring	Technician Initials: _ppm =	MN 50	ppm
f the 1 Month remonitoring is <500	ppm, resume	normal quar	rterly monitoring.			
f the 1 Month remonitoring shows a gain within 10 Days:	n exceedance	, describe a	additional correct	ive action taken befo	ore remonito	oring
Remonitor location within 10 cale	ndar days of	2nd Excee	dance:			
The state of the s						
Date:nstrument reading - Background re	Time: ading:	ppm	Monitoring	Technician Initials: _ppm =	0	ppm
				_ppm = _	0	ppm

Use additional forms if necessary

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered at the surfacence reading of 500 ppm above background is encountered at the surfacence reading of 500 ppm above background is encountered at the surfacence reading of 500 ppm above background is encountered at the surfacence reading of 500 ppm above background is encountered at the surfacence reading of 500 ppm above background is encountered at the surfacence reading of 500 ppm above background is encountered at the surfacence reading of 500 ppm above background is encountered at the surfacence reading of 500 ppm above background is encountered at the surfacence reading of 500 ppm above background is encountered at the surfacence reading of 500 ppm above background is encountered at the surfacence reading at the surfac

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Exceedance #: _	33
Date: 5/4/2018 Time: 14:37 Instrument reading - Background reading: 750 p Location of monitored exceedance (include description of fie	Monitoring Technician Initials: MN pm - 1.2 ppm = 748.8 ppm eld marker used): Phase 3 north of well EW394
Describe cover maintenance or adjustments to the vacuumeasured exceedance before remonitoring in 10 days:	m of adjacent wells to increase gas collection in vicinity of hirt cover added and near wells were checked for vacuum
Remonitor location within 10 calendar days of Initial E	Exceedance:
-	Monitoring Technician Initials: MN pm - 1.1 ppm = 87.9 ppm Iditional corrective action taken before remonitoring again
within 10 days:	
f the 10 day remonitoring is <500 ppm, remonitor 1 M	onth from Initial Exceedance:
Date: 5/24/2018 Time: 12:23 nstrument reading - Background reading: 100 p	Monitoring Technician Initials: MN pm - 1 ppm = 99 ppm
f the 1 Month remonitoring is <500 ppm, resume normal	quarterly monitoring.
If the 1 Month remonitoring shows an exceedance, descri again within 10 Days:	be additional corrective action taken before remonitoring
Remonitor location within 10 calendar days of 2nd Ex	ceedance:
Date:p Instrument reading - Background reading:p	Monitoring Technician Initials:ppm =ppm
f the 10 Day remonitoring is <500 ppm, remonitor 1 M	lonth from Initial Exceedance:
Date: Time: p	Monitoring Technician Initials:ppm =ppm
If the 1 Month remonitoring is <500 ppm, resume normal	monitoring.
If the 1 Month remonitoring shows an exceedance, descri again within 10 Days:	be additional corrective action taken before remonitoring

Use additional forms if necessary

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surface reading the surface reading of 500 ppm above background is encountered during the surface reading the surface reading of 500 ppm above background is encountered during the surface reading the surface reading of 500 ppm above background is encountered during the surface reading the surface reading of 500 ppm above background is encountered during the surface reading the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surface reading of 500 ppm above background is encountered at the surfac

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Exceedance #:

	5/4/2018	Background	Time:	14:54			Monitoring		an Initials:		
mstrumen	reading -	Background	reading: _	3405	_ppm	Q.	1.2	_ppm	-5 V	3403.8	ppm
Location o	f monitore	d exceedan	ce (include de	escription o	of field m	arke	rused):	EW394	Penetrati	on	
			adjustments monitoring ir								
Remonito	r location	within 10 c	alendar day	s of Initi	al Exce	eda	nce:				
Date: Instrument	5/9/2018 t reading -	 Background	Time: _ I reading: _	12:18 211	_ppm		Monitoring	Technicia _ppm	an Initials: =	MN 209.9	ppm
If 10 day rowithin 10 d		shows an	exceedance	, describe	additio	nal	corrective a	ction take	n before r	emonitorin	g again
If the 10 d	ay remon	toring is <	500 ppm, rei	monitor 1	l Month	ı fro	m Initial Ex	ceedanc	e:		
Date: Instrument	5/24/2018 t reading -	 Background	Time: _ reading:	12:25 155	_ _ppm		Monitoring 1.3	Technicia _ppm	an Initials: =	MN 153.7	 ppm
			00 ppm, resu								
If the 1 Mo again withi			s an exceed	ance, des	scribe a	dditi	onal correct	ive action	taken bet	ore remon	itoring
Remonito	r location	within 10 c	alendar day	s of 2nd	Exceed	danc	e:				
Date: Instrument	reading -	 Background	Time: reading:		_ppm	-	Monitoring	Technicia _ppm	an Initials: =	0	ppm
If the 10 D	ay remon	toring is <	500 ррт, ге	monitor '	l Month	ı fro	m Initial Ex	ceedanc	e:		
Date:			Time: reading:		21		Monitoring	Technicia	an Initials:		_
Instrument	reading -	Background	reading:		_ppm	-		_ppm	=	0	_ ppm
If the 1 Mo	nth remon	toring is <50	00 ppm, resu	ıme norm	al moni	torin	g.				
If the 1 Mo again withi	nth remon n 10 Days	toring show	s an exceed	ance, des	cribe a	dditi	onal correct	ive action	taken bef	ore remon	itoring
Lleo additi	anal forms	if necessan	,								

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfacenteering type: FIAIRMON *Use a separate form for each initial exceedance.* Air Account No.: FG-0536-E

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Exceedance #: 15:05 Monitoring Technician Initials: MN 5/4/2018 Time: Date: Instrument reading - Background reading: 8110 ppm - 1.2 ppm 8108.8 ppm EW390 Penetration Location of monitored exceedance (include description of field marker used): Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Dirt cover added and near wells were checked for vacuum Remonitor location within 10 calendar days of Initial Exceedance: Time: 12:21 Instrument reading - Background reading: If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days: If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance: Time: 12:27 Monitoring Technician Initials: Instrument reading - Background reading: 200 ppm - 1.3 ppm If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring. If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days: Remonitor location within 10 calendar days of 2nd Exceedance: Date: _____ Time: _____ Monitoring Technician Initials: Instrument reading - Background reading: _____ ppm - ____ ppm =

If the 1 Month remonitoring is <500 ppm, resume normal monitoring.

Instrument reading - Background reading: _____ppm -

If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 Days:

Monitoring Technician Initials:

ppm

Use additional forms if necessary

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

If the 10 Day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance:

Time: ____

This form is only to be used when a reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading of 500 ppm above background is encountered during the surface reading th Air Account No.: FG-0536-E *Use a separate form for each initial exceedance.*

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ppm

Exceedance #: Date: 5/4/2018 Time: 15:10 Monitoring Technician Initials: MN Instrument reading - Background reading: 574.3 573.1 ppm Location of monitored exceedance (include description of field marker used): North of well EW354A Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days: Dirt cover added and near wells were checked for vacuum Remonitor location within 10 calendar days of Initial Exceedance: 5/9/2018 Date: Time: 12:23 Monitoring Technician Initials: Instrument reading - Background reading: ppm -96.9 If 10 day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days: If the 10 day remonitoring is <500 ppm, remonitor 1 Month from Initial Exceedance:

Monitoring Technician Initials:

1.3 ppm

MN

ppm

			ance:			
Date:	Time:		Monitori	ing Technici	an Initials:	
nstrument reading - Background re	a dia m.			nnm	-	
		ppm -		ppm		 ppm
			from Initial		ce:	 ppm
f the 10 Day remonitoring is <500	ppm, remon			Exceedan		 bbiii
f the 10 Day remonitoring is <500 Date:	ppm, remon					 ppm

If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring

Use additional forms if necessary

again within 10 Days:

Date: 5/24/2018

again within 10 Days:

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

If the 1 Month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring

The 3 Exceedances do NOT have to be consecutive.

If the 1 Month remonitoring is <500 ppm, resume normal monitoring.

Instrument reading - Background reading: ____100

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

Time: 12:29

If the 1 Month remonitoring is <500 ppm, resume normal quarterly monitoring.

This form is only to be used when a reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading of 500 ppm above background is encountered during the surfacence reading the sur *Use a separate form for each initial exceedance.*

Air Account No.: FG-0536-E

Attachment: 5 Page: 62 of 69

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Evceedance #

Date: <u>5/4/2018</u> Instrument reading - Back		ppm	Monitoring Technician I 1.2 ppm =	3701.8 ppm
_ocation of monitored exc	eedance (include description	າ of field marker ເ	used): North East	of well EW354A
	nce or adjustments to the v fore remonitoring in 10 day			
Remonitor location with	in 10 calendar days of In	itial Exceedan	ce:	
Date: <u>5/9/2018</u> Instrument reading - Back	Time: 12:25 ground reading: 144	ppm	Monitoring Technician I 1.1ppm =	nitials: MN 142.9 ppm
If 10 day remonitoring sho within 10 days:	ws an exceedance, descri	be additional co	orrective action taken b	efore remonitoring again
If the 10 day remonitorin	ng is <500 ppm, remonito	r 1 Month from	Initial Exceedance:	
Date: <u>5/24/2018</u> Instrument reading - Back	Time: 12:33 ground reading: 141	ppm	Monitoring Technician I ppm =	nitials: <u>MN</u> = <u>139.9</u> ppm
If the 1 Month remonitoring	g is <500 ppm, resume no	rmal quarterly n	nonitoring.	
If the 1 Month remonitoring again within 10 Days:	g shows an exceedance, c	lescribe addition	nal corrective action tak	ken before remonitoring
Remonitor location with	in 10 calendar days of 2r	nd Exceedance):	
Date: Instrument reading - Back	Time: ground reading;	ppm	Monitoring Technician I	nitials:ppm
			n Initial Evenedance:	
If the 10 Day remonitorin	ng is <500 ppm, remonito	or 1 Month fron	i ilitiai Exceedance.	
If the 10 Day remonitorin Date: Instrument reading - Back			,	

Use additional forms if necessary

If monitoring shows 3 Exceedances within a quarterly period, a new well or other collection device must be installed within 120 Days of the Initial Exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

The 3 Exceedances do NOT have to be consecutive.

Use this form to record an individual monitoring exceedance and follow-up monitoring activities.

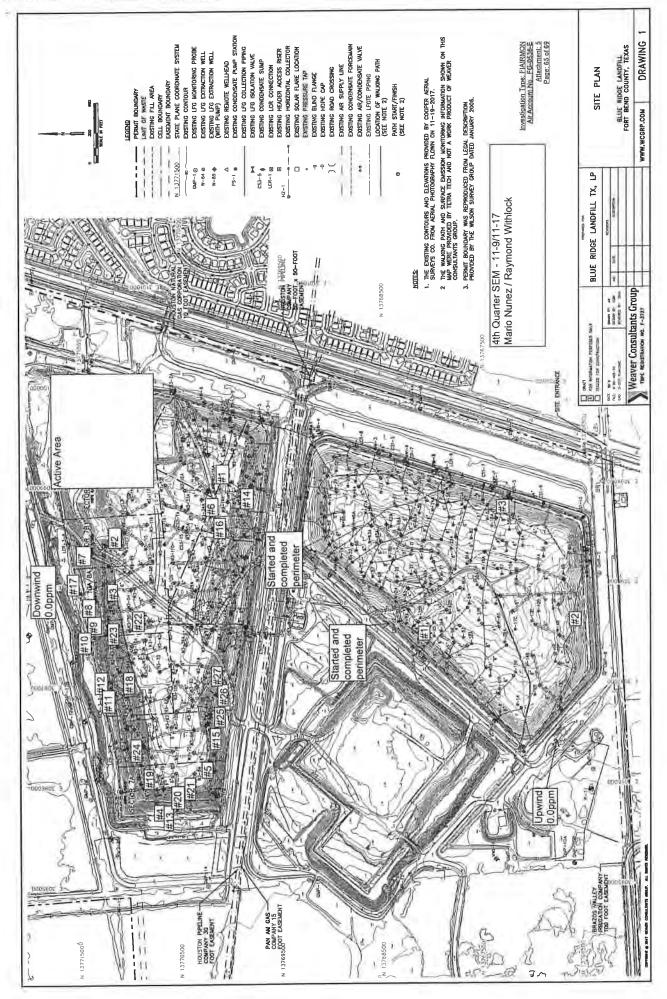
This form is only to be used when a reading of 500 ppm above background is encountered during the surface reading the surface

Attachment: 5 Page: 63 of 69



Blue Ridge Landfill Fresno, Texas

Site Drawing



APPENDIX D

SEMI-ANNUAL DEVIATION AND MONITORING REPORT (TITLE V FORMS: PCC, DEVREP, and OP-CRO1)



Texas Commission on Environmental Quality Federal Operating Permit Form Permit Compliance Certification – PCC (Part 1)

Permit Holder Name	Blue Ridge Landfill TX, LP	Customer Number	CN602820599
Area Name	Blue Ridge Landfill	Account Number	FG-0536-E
Operating Permit Number	O - 01472	Report Submittal Date	7/2/2018
Certification Period Start Date	12/5/2017	End Date	6/4/2018

I. Certification of Continuous Compliance with Permit Terms and Conditions	Resp	onse:
(Indicate response by placing a 'x' in the appropriate column for each of the following questions)	Yes	No
With the possible exception of those permit terms and conditions identified in the 'Summary of Deviations' found using, at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information, was the permit holder in continuous compliance with all the terms and conditions of the permit over the Certification Period?	\boxtimes	

II. Su	mmary of Deviations	Resp	onse:
(Indica	te response by placing a 'x' in the appropriate column for each of the following	Yes	No
A.	Were there any deviations from any permit requirements during the Certification Period that have <i>previously</i> been reported to the agency? If the answer to this question is 'Yes', please complete and attach Part 2 to this submittal. Important Note: If previously submitted reports did not contain specific information on monitoring methods, frequency and the total number of		\boxtimes
В.	deviations experienced over the entire certification period, then use form DevRep to provide that information. Were there any deviations from any terms or conditions of the permit during		
	the Certification Period that are <i>currently</i> being submitted to the agency? If the answer to this question is 'Yes', please include the relevant reports along with this page.		



Federal Operating Permit Deviation Report Form Texas Commission on Environmental Quality Form Dev Rep (Part 1)

Permit Holder Name	Blue Ridge	Blue Ridge Landfill TX, LP	٩.				Customer Number	CN602820599
Area Name	Blue Ridge Landfill	Landfill					Account Number	FG-0536-E
Report Period Start Date	12/5/2017	Report Period End Date	6/4/2018		g Permit	0-01472	Report Submittal Date	7/2/2018
	Opera	ating Permit	Requirem	ent for Which	Deviations	Operating Permit Requirement for Which Deviations are Being Reported	orted	
ID Number	er	Term &	4:10	Regulatory	Type of	SOP or GOP	Monitoring	Monitoring
Unit ID	Group ID	No.	Pollutant	Citation	Requirement	t Number	Method	140
FLARE2011 FLARE-T	A/X	517(c)	A/N	30 TAC	Record	517-09-004	Dermit	ZieC
S3UFLARE1		(2)		(A)(ii)				Cany

Dev	STEERS		Deviatio	Deviation Period		4			m
Item No.	Incident	Start	Million Million	End		No. of	Cause of Deviation	Corrective Action Taken to Remedy or Mingate Deviation Situation	medy or Mingate on
Š	9	Date	Time	Date	Time				
-	N/A	12/5/2017		6/4/2018			Flare observation records were maintained on days the facility was operational. However, when the site was closed daily flare observations were not conducted.	Flare observation records were maintained on days the facility was operational. However, when the site was closed daily flare observations were not conducted.	TCEQ issued a nforcement action e observations on The landfill will servation records
Investigat		V RYSIN	-24	Total Devia	Deviations:	-	Is there a Part 3 Miscel Evidence form supp	Is there a Part 3 Miscellaneous Monitoring/Credible Evidence form supporting this deviation report?	□ YES ⅓ NO

The state of the s

Page 1 of 1

Form OP-CRO1 Certification by Responsible Official Federal Operating Permit Program

All initial permit application, revision, renewal, and reopening submittals requiring certification must be addressed using this form. Updates to site operating permit (SOP) and temporary operating permit (TOP) applications, other than public notice verification materials, must be certified prior to authorization of public notice or start of public announcement. Updates to general operating permit (GOP) applications must be certified prior to receiving an authorization to operate under a GOP.

I.	Identifying Information					
RN:	102610102	CN: 602820599		Account 1	No.: FG-053 6	6-E
Perm	it No.: O-01472		Project No.:			
Area	Name: Blue Ridge Landfill		Company Name: I	Blue Ridge La	andfill TX, L	P
II.	Certification Type (Please mark	the appropriate b	pox)			
□R	esponsible Official		Duly Author	ized Representa	itive	
III.	Submittal Type (Please mark the	e appropriate box,	Only one respons	se can be accep	ted per form)	
□s	OP/TOP Initial Permit Application	☐ Update	e to Permit Applica	tion		
□G	OP Initial Permit Application	Permit	Revision, Renewa	l, or Reopening	5	
	other: Semi-Annual Compliance	Certification				
IV.	Certification of Truth					
This only.	certification does not extend to i Burgess Stengl	nformation whic				
1,	(Certifier Name printed o	r typed)	certify tha	t I am the	(RO or DA	(R)
the ti	that, based on information and beliance period or on the specific date(see Enter Either a Time Period OR Section is not valid without documn	s) below, are true, Specific Date(s) fo	accurate, and comp	lete:		
Time	e Period: From	itart Date	to	End D	lata	
Spec		2018	Date 3 Da	te 4	Date 5	Date 6
	Date I	Date 2	Date 3 Da	ie 4	Date 3	Date 0
Sign	ature: <u>Bungm Sleay</u>	1	Si	gnature Date: _	6/28/18	
Title	: Environmental Manager		-			

ATTACHMENT 6

TCEQ Observation and Check Data 4 Pages

> Blue Ridge Landfill 2200 FM 521 Fresno, Texas 77545 RN 102610102 FG-0536-E

Investigation Date: April 30, 2018 through July 6, 2018

Investigation Number: 1486565

21.61 - 32.88 ppb -95.452103 -95.452111 29.565111 6/6/2018 5/3/2018 29.56514 Surface 1294 812 10 0 Not Present 6.003 ppm 29.56865 -95.4474 6/6/2018 1982 Y Y 5000 - 1.8% -95.449389 29.558778 0.134 ppm 21.82 ppb 5/2/2018 6/6/2018 -95.4494 29.55877 Surface 1350 4 17.83 - 21.55 ppb 5.27 - 117.8 ppb 95.451111 Not Taken 29.557611 5/1/2018 6/6/2018 -95.451129.5576 **LCR 1-2** 4900 **TCEQ Observation Monitoring** Instrument VOC Reading (ppm) **Exceedance Location Number** Instrument H2S Reading TVA Reading (ppm) TCEQ Final Check **J605 Results** Comments Longitude Longitude Latitude Latitude Date Date

Phase 3

Phase 1

Investigation Type: FIAIRMON
Air Account NO: FG - 0536 - E
Attachment: 6
Page: 1 of 4

Surface

Surface

Surface

LCR 1-2

Comments

Exceedance Location Number	11	12	13	14	15
TCEQ Observation Monitoring					
Latitude	29.565028	29.565028	29.565	NA	NA
Longitude	-95.452111	-95.451389	-95.45125	N	NA
Date	5/3/2018	5/3/2018	5/3/2018	N	NA
TVA Reading (ppm)	941 - 1068	11.80%	1808	NA	NA
J605 Results	1.371 ppm	0.32 ppb	9.09 ppb	N A	NA
Comments	Surface	Surface	Surface	Not Present	Not Present
TCEQ Final Check					
Latitude	29.56506	29.56502	29.56502	29.56466	29.56465
Longitude	-95.451527	-95.451352	-95.451213	-95.44903	-95.4489
Date	6/6/2018	6/6/2018	6/6/2018	6/6/2018	6/6/2018
Instrument VOC Reading (ppm)	700	2241	1500	1819	2000
Instrument H2S Reading	24.74 ppb	3.18 ppb	49.12 ppb	100.7 ppb	35.37 ppb
Comments	Surface	Surface	Surface	Surface	Surface

Air Account NO: FG - 0536-E

Attachment: 6

Page: 2 of 4

Exceedance Location Number	19	22	23	25
TCEQ Observation Monitoring				
Latitude	AN	29.565833	29.565861	29.565694
Longitude	AN AN	-95.452667	-95.450778	-95.465667
Date	ĄZ	5/4/2018	5/4/2018	5/4/2018
TVA Reading (ppm)	AN	3500	7000	4000
J605 Results	AN	103.5 ppb - 1.317 ppm	9.5 ppb	3.07 - 27.2 ppb
Comments	Not Present	W3-126	W3-61A	W3-51A
TCEQ Final Check				
Latitude	29.56826	29.56581	29.56584	29.56569
Longitude	-95.447893	-95.451287	-95.450755	-95.448988
Date	6/6/2018	6/6/2018	6/6/2018	6/6/2018
Instrument VOC Reading (ppm)	5762	3841	9051	2586
Instrument H2S Reading	0	105.13 ppb	0.308 ppm	29.44 ppb
	LCR 3-6			
Comments	Header	W3-126	W3-61A	W3-51A
	access			

Air Account NO: FG-0536-E
Attachment:
Page: 3 of 4

Comments	Instrument H2S Reading	Instrument VOC Reading (ppm)	Date	Longitude	Latitude	TCEQ Final Check	Comments	J605 Results	TVA Reading (ppm)	Date	Longitude	Latitude	TCEQ Observation Monitoring	Exceedance Location Number
W3-99	0 ppb	1488 - 4000	6/6/2018	-95.446	29.56754		W3-99	7.86 - 40.82 ppb	640	5/4/2018	-95.445972	29.567556		28
W3-94	5.04 ppb	1449	6/6/2018	-95.447837	29.56759		W3-94	11.68 ppb	6000	5/4/2018	-95.447167	29.567611		34
W3-90	7.42 ppb	5590 - 1.02%	6/6/2018	-95.448678	29.56755		W3-90	0	2.80%	5/4/2018	-95.447778	29.567639		35

Air Account NO: FG - 0536-E

Attachment: 6

Page: 4 of 4

ATTACHMENT 7

Photographs 58 Pages

Blue Ridge Landfill 2200 FM 521 Fresno, Texas 77545 RN 102610102 FG-0536-E

Investigation Date: April 30, 2018 through July 6, 2018

Investigation Number: 1486565

Blue Ridge Landfill May 1, 2018 Initial Observation Monitoring Phase 1: Exceedance Location 1 (LCR 1-2)

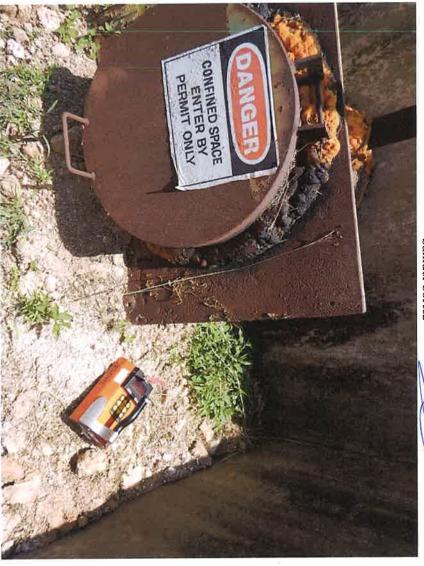
Time: 10:21 AM
Photograph Taken by:
Samuel Cortez



Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 7
Page: 1 of 58

Phase 1: Exceedance Location 1 (LCR1-2)

Time: 1:07 PM Photograph Taken by: Samuel Cortez



Blue Ridge Landfill May 2, 2018 Initial Observation Monitoring Phase 1: Exceedance Location 4 (Surface)

Time: 10:00 AM
Photograph Taken by:
Samuel Cortez





Investigation Type: FIARMON Air Account No.: FG-0538-E Attachment: 7 Page: 5 of 58

Phase 1: Exceedance Location 4 (Surface)

Time: 12:55 PM
Photograph Taken by:
Samuel Cortez



Time: 12:55 PM
Photograph Taken by:
Samuel Cortez

Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 7
Page: 7 of 58

Phase 1: Exceedance Location 7 (Surface)

Time: 11:11 AM
Photograph Taken by:
Samuel Cortez





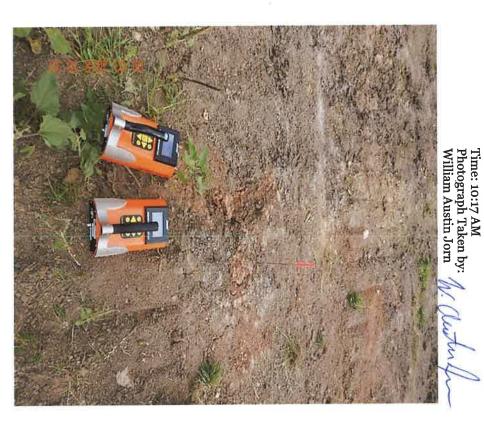
Blue Ridge Landfill May 3, 2018 Initial Observation Monitoring

Phase 3: Exceedance Location 10 (Surface)

Time: 10:17 AM
Photograph Taken by:
William Austin Jorn



Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 7
Page: 11 of 58



Phase 3: Exceedance Location 10 (Surface)

Time: 8:50 AM Photograph Taken by: Danielle Woods



Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 7
Page: 13 of 58

Phase 3: Exceedance Location 11 (Surface) Blue Ridge Landfill May 3, 2018 Initial Observation Monitoring

Investigation Type: FIAIRMON Air Account No.: FG-0536-E Attachment: 7 Page: 15 of 58

Time: 10:36 AM Photograph Taken by: Danielle Woods





Phase 3: Exceedance Location 11 (Surface)

Time: 8:57 AM
Photograph Taken by:
Samuel Cortez



Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 7
Page: 17 of 58

Phase 3: Exceedance Location 12 (Surface) Blue Ridge Landfill May 3, 2018 Initial Observation Monitoring

Time: 10:46 AM
Photograph Taken by:
Samuel Cortez

Time: 10:47 AM
Photograph Taken by:
Samuel Cortez



Investigation Type: FIAIRMON
Air Account No.; FG-0536-E
Attachment: 7
Page: 19 of 58

Phase 3: Exceedance Location 12 (Surface)

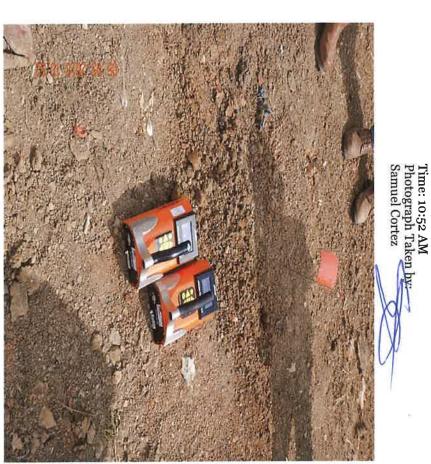
Time: 8:59 AM
Photograph Taken by:
Danielle Woods



Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 7
Page: 21 of 58

Phase 3: Exceedance Location 13 (Surface) **Initial Observation Monitoring** Blue Ridge Landfill May 3, 2018

Time: 10:51 AM
Photograph Taken by:
Samuel Cortez



Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 7
Page: 23 of 58

Phase 3: Exceedance Location 13 (Surface)

Time: 9:05 AM Photograph Taken by: Samuel Cortez



Time: 9:05 AM
Photograph Taken by:
Samuel Cortez

Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 7
Page: 25 of 58



Phase 3: Exceedance Location 14 (Surface)

Time: 9:22 AM Photograph Taken by: Danielle Woods



Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 7
Page: 27 of 58

Phase 3: Exceedance Location 15 (Surface)

Time: 9:21 AM Photograph Taken by: Samuel Cortez



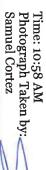
Investigation Type, FIAIRMON Air Account No.; EG-0536-E Atlachment: 7 Page: 29 of 58

Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 7
Page: 31 of 58

Phase 3: Exceedance Location 19 (LCR3-6)

Time: 10:57 AM Photograph Taken by: Samuel Cortez







Blue Ridge Landfill May 4, 2018 Initial Observation Monitoring Phase 3: Exceedance Location 22 (W3-126)

Time: 10:35 AM Photograph Taken by: Samuel Cortez

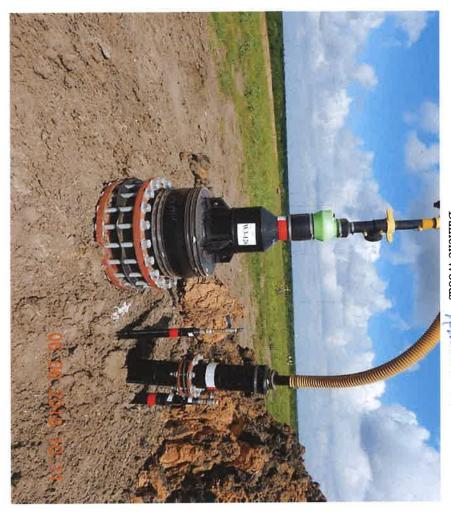




Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 7
Page: 33 of 58

Phase 3: Exceedance Location 22 (W3-126)

Time: 10:11 AM Photograph Taken by: Danielle Woods



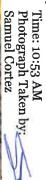
Investigation Type: FIAIRMON Air Account No.: FG-0536-E Attachment: 7 Page: 35 of 58

Blue Ridge Landfill

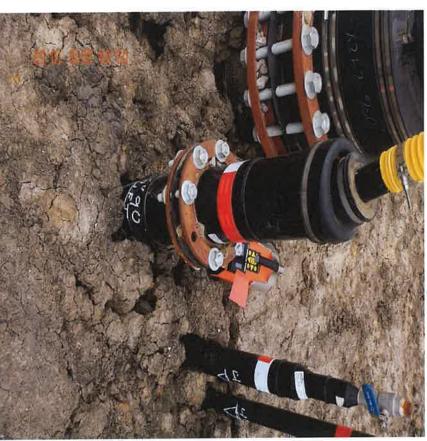
May 4, 2018
Initial Observation Monitoring
Phase 3: Exceedance Location 23 (W3-61A)

Time: 10:53 AM
Photograph Taken by:
Samuel Cortez





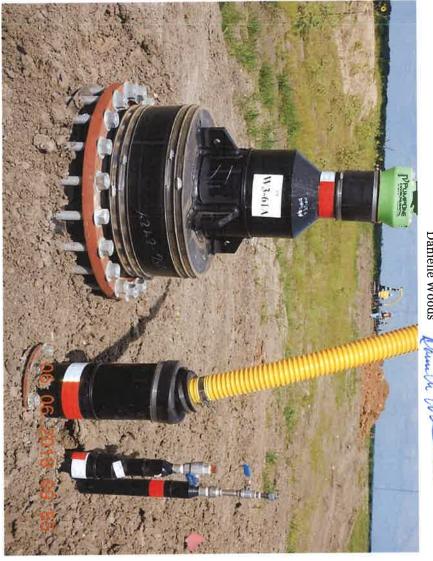
Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 7
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Blue Ridge Landfill June 6, 2018 Final Check

Phase 3: Exceedance Location 23 (W3-61A)

Time: 9:55 AM Photograph Taken by: Danielle Woods



Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Altachment: 7
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Blue Ridge Landfill May 4, 2018 Initial Observation Monitoring Phase 3: Exceedance Location 25 (W3-51A)

Time: 11:07 AM
Photograph Taken by:
Samuel Cortez





Investigation Type: FIAIRMON Air Account No.; FG-0536-E Attachment: 7 Page: 41 of 58

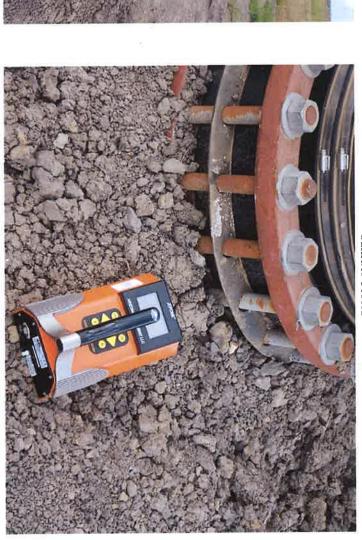
Blue Ridge Landfill June 6, 2018 Final Check

Investigation Type: FIAIRMON Air Account No.: FG-0536-E Attachment: 7 Page: 43 of 58

Phase 3: Exceedance Location 25 (W3-51A)

Time: 9:42 AM Photograph Taken by: Samuel Cortez





Blue Ridge Landfill May 4, 2018 Initial Observation Monitoring Phase 3: Exceedance Location 28 (W3-99)

Time: 2:12 PM
Photograph Taken by:
Samuel Cortez



Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 7
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Blue Ridge Landfill May 4, 2018 Initial Observation Monitoring Phase 3: Exceedance Location 34 (W3-94)

Time: 2:51 PM Photograph Taken by: Samuel Cortez



Investigation Type; FIAIRMON
Air Account No.; FG-0536-E
Attachment: 7
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Blue Ridge Landfill June 6, 2018 Final Check

Phase 3: Exceedance Location 34 (W3-94)

Time: 11:21 AM Photograph Taken by: Danielle Woods



Investigation Type: FIAIRMON Air Account No.: FG-0536-E Attachment: 7 Page: 49 of 58

Blue Ridge Landfill May 4, 2018 Initial Observation Monitoring Phase 3: Exceedance Location 35 (W3-90)



Investigation Type: FIAIRMON
Air Account No.: FG-0536-E
Attachment: 7
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Blue Ridge Landfill June 6, 2018 Final Check Phase 3: Exceedance Location 35 (W3-90)

Time: 10:55 AM Photograph Taken by: Danielle Woods



Blue Ridge Landfill May 18, 2018 TCEQ SEM Class 1/Phase 2: Visible Dark Pool of Liquid

Time: 11:14 AM Photograph Taken by: Samuel Cortez



Investigation Type: FIAIRMON Air Account No.: FG-0536-E Attachment: Z Page: 55 of 58

Blue Ridge Landfill May 30, 2018 Final Check Class 1/Phase 2: Visible Dark Pool of Liquid





ATTACHMENT 8 OGIC Videos

AIR CP_102610102_CP_20180430_INVESTIGATION_2_1486565_
AIR CP_102610102_CP_20180430_INVESTIGATION_3_1486565_
AIR CP_102610102_CP_20180430_INVESTIGATION_4_1486565_
AIR CP_102610102_CP_20180430_INVESTIGATION_5_1486565_
AIR CP_102610102_CP_20180430_INVESTIGATION_6_1486565_
(Available Electronically)

Blue Ridge Landfill 2200 FM 521 Fresno, Texas 77545 RN 102610102 FG-0536-E

Investigation Date: April 30, 2018 through July 6, 2018

ATTACHMENT 9

TCEQ SEM Data
1 Page

Blue Ridge Landfill 2200 FM 521 Fresno, Texas 77545 RN 102610102 FG-0536-E

Investigation Date: April 30, 2018 through July 6, 2018

	Date	Latitude	Longitude	TVA (ppm)	Comments
Phase III					
	5/15/2018	29.566450	-95.453510	750	Under liner
	5/15/2018	29.565390	-95.452880	7000	Sump 3-11A
	5/16/2018	29.567010	-95.452840	5000	W-380 Remote
	5/16/2018	29.565830	-95.451270	1338	W3-126
	5/16/2018	29.567350	-95.452780	537	LCR35
	5/16/2018	29.565900	-95.452260	886	W-384
	5/16/2018	29.565510	-95.450610	1285	CFM
	5/16/2018	29.567810	-95.451520	1061	CS3-10
	5/16/2018	29.565520	-95.451030	615	Isolation Valve
	5/16/2018	29.566690	-95.451000	6000	W3-67A
	5/16/2018	29.567100	-95.451230	2180	W3-70
	5/16/2018	29.566040	-95.449220	1354	W3-132
	5/16/2018	29.567580	-95.450290	1150	W3-58A
	5/16/2018	29.566330	-95.449510	2000	W3-106
	5/16/2018	29.567100	-95.449200	4500	W3-131
	5/16/2018	29.568180	-95.449710	1000	CS-39
	5/16/2018	29.567550	-95.448810	6000	W3-54A
	5/16/2018	29.567150	-95.448720	1200	W3-53A
	5/17/2018	29.567610	-95.447820	1100	W3-90
	5/17/2018	29.565910	-95.447780	814	W3-38A
	5/17/2018	29.568280	-95.447870	2000	LCR3-6
	5/17/2018	29.568110	-95.445790	1025	W3-102/W3-141
	5/17/2018	29.565920	-95.445430	680	W-331A
	5/17/2018	29.567710	-95.444800	8900	CS3-16
	5/17/2018	29.565310	-95.444280	1203	W3-26A
	5/17/2018	29.565000	-95.444990	9000	W3-27A
	5/18/2018	29.564370	-95.443710	617	W3-13R
	5/18/2018	29.564710	-95.443290	8,321	W3-22
	5/18/2018	29.565120	-95.441470	14,700	W3-312
	5/18/2018	29.564220	-95.441730	6,082	LCR 3-1
Phase II/Class I					
	5/18/2018	29.55947	-95.45376	NA	Visible leachate in ditch
Phase I					
	5/24/2018	NA	N/A	630	W-39A
	5/24/2018	29.55675	-95.45029	503	Surface
	5/24/2018	29.55637	-95.44642	2,479	W-11A

nvestiga	ation 1	ype:	FI	AIF	M	NO
Air Acco	unt N	0: F	6	05	36	-E
Attachm	ent:	9				_
Page;	1	_of	1			

ATTACHMENT 10

Supporting Documentation 2 Pages

Blue Ridge Landfill 2200 FM 521 Fresno, Texas 77545 RN 102610102 FG-0536-E

Investigation Date: April 30, 2018 through July 6, 2018

Appendix 2	Investigation Type: FTATAM & M. Air Account NO: F6-0534-E
3	Promote company of
	8 \$\frac{1}{2}\$ \frac{1}{2}\$ \f

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ATTACHMENT 11

Flare Documentation 10 Pages

Blue Ridge Landfill 2200 FM 521 Fresno, Texas 77545 RN 102610102 FG-0536-E

Investigation Date: April 30, 2018 through July 6, 2018

Samuel Cortez

From:	Stengl, Burgess
Sent:	Tuesday, August 21, 2018 3:32 PM
To:	Samuel Cortez
Cc:	Meadows, Mark; Nagaraj, Archana
Subject:	RE: Records Request
Attachments:	Supporting Documentation-Blue Ridge-El2017.pdf

Mr. Cortez, per your attached records request, please see the below responses, and the attached document.

- Enclosed Flare average flow rate, peak max flow for 2017, max capacity, hours, total emissions in 2017: The
 design capacity of the enclosed flare is 6,000 scfm. The 2017 flow rate, hours of operation and total emissions
 were reported in the Emissions Inventory submittal, which is attached. The maximum operating flow was 5,275
 scfm averaged over approximately 23 hours that occurred on April 7, 2017.
- Utility Flare average flow rate, peak max flow for 2017, max capacity, hours, total emissions in 2017: The design capacity of the utility flare is 3,000 scfm. The 2017 flow rate, hours of operation and total emissions were reported in the Emissions Inventory submittal, which is attached. The maximum operating flow was 2,737 scfm averaged over approximately 19.5 hours that occurred on July 15, 2017.
- 3. Rental Flare average flow rate, peak max flow for 2017, max capacity, hours, total emissions in 2017: The design capacity of the rental flare is 2,100 scfm. The 2017 flow rate, hours of operation and total emissions were reported in the Emissions Inventory submittal, which is attached. The maximum operating flow was 2,190 scfm averaged over approximately 5 days that occurred on December 8, 2017. The slightly higher flow rates may have been due to flow meter fluctuations.
- 4. Pipeline average flow rate, peak max flow for 2017, max capacity, hours, total collected in 2017: The design capacity of the Beneficial-Use Plant (Pipeline) is 6,000 scfm. The 2017 flow rate was approximately 2,658 scfm and operated about 4,944 hrs in 2017. The total LFG collected in 2017 was 788,560,291 scf. The maximum operating flow was 5145 scfm averaged over approximately 30 minutes that occurred on May 31, 2017.
- 5. <u>Total MSW submittal in 2017:</u> It is our understanding that the requested information is total MSW waste accepted in 2017. This value is included in the LandGEM in the 2017 El which is attached.
- 6. <u>LandGEM 2017:</u> Included in the attached 2017 El submittal.
- 7. <u>Total Capacity of Controls:</u> The current on-site total control design capacity is 17,100 scfm, which includes 6,000 scfm enclosed flare, 3000 scfm of utility flare, 2,100 scfm rental flare, 6,000 scfm gas plant.

Please let me know if you have any questions.

Thank you,

Burgess Stengl

Environmental Manager

USPS: P.O. Box 879, Fresno, TX 77545

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Overnight Pkgs: 2200 FM 521, Fresno, TX 77545

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f 713-676-7882 w www.RepublicServices.com



We'll handle it from here."

From: Samuel Cortez [mailto:samuel.cortez@tceq.texas.gov]

Sent: Tuesday, August 21, 2018 2:29 PM

To: Stengl, Burgess

Subject: RE: Records Request

Note that (samuel.cortez@tceq.texas.gov) is an external email. Forward unfamiliar emails to

Tomorrow, August 22, 2018.

From: Stengl, Burgess

Sent: Tuesday, August 21, 2018 2:15 PM

To: Samuel Cortez <Samuel.Cortez@tceq.texas.gov>;

Subject: RE: Records Request

Sam, please confirm the due date for the information.

Thank you,

Burgess Stengl

Environmental Manager

USPS: P.O. Box 879, Fresno, TX 77545

Overnight Pkgs: 2200 FM 521, Fresno, TX 77545

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We'll handle it from here."

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Attachment: 11

Page: 2 of 10

From: Samuel Cortez [mailto:samuel.cortez@tceq.texas.gov]

Sent: Tuesday, August 21, 2018 2:08 PM To: Stengl, Burgess;

Subject: RE: Records Request

Note that (samuel.cortez@tceq.texas.gov) is an external email. Forward unfamiliar emails to

Mr. Stengl,

Attached is a records request for documentation regarding the LandGEM and GCCS controls revised from August 8, 2018 to include maximum peak values for 2017 for the control equipment. Please review and let me know if you have any questions or concerns. Please provide by 12PM Wednesday, August 21, 2018. Thank you for your time and cooperation, have a great day.

Samuel Cortez
Senior Environmental Investigator V
Texas Commission on Environmental Quality
Air Section, Region 12 Office
5425 Polk Street, Suite H
Houston, Texas 77023
Office: (713) 767-3723

Fax: (713) 767-3761

Email: samuel.cortez@tceq.texas.gov

From: Samuel Cortez

Sent: Wednesday, August 8, 2018 12:01 PM

To: 'Stengl, Burgess'
Subject: Records Request

Mr. Stengl,

Attached is a records request for documentation regarding the LandGEM and GCCS controls. Please review and let me know if you have any questions or concerns. Thank you for your time and cooperation, have a great day.

Samuel Cortez
Senior Environmental Investigator V
Texas Commission on Environmental Quality
Air Section, Region 12 Office
5425 Polk Street, Suite H
Houston, Texas 77023
Office: (713) 767-3723
Fax: (713) 767-3761

Email: samuel.cortez@tceq.texas.gov

Investigation Type: FTATICM ON Air Account NO: F6-0536-E

Attachment: 11

Page: 3 of 10



July 17, 2018

Mr. Sam Cortez, Air Section Investigator Texas Commission on Environmental Quality Environmental Investigator, Region 12, Houston 5425 Polk Street, Suite H Houston, Texas 77023-1452

RE: Blue Ridge Landfill TX, LP, MSW Permit No. 1505A TCEQ Exit Interview Form 7/13/18 Agreed Order, Odor Plan, 40 CFR 60 WWW compliance TCEQ Add. ID No. FG0536E

Dear Mr. Cortez:

This letter is in response to your Exit Interview Form ("Form") provided to Blue Ridge Landfill (BRLF) via e-mail on July 13, 2018 at 4:35 p.m., with a response due by close of business on July 17, 2018. The Form requested information/documentation for four issues. The noted issues and responses are below.

Request 1: "Flare data: flow rates; pilot presence; exit velocity; net heating value (1st 2 weeks Aug. 2017 & 1st 2 weeks Dec. 2017)"

Response:

Please note, Pilot Presence, Exit Velocity, & Net heating Value are applicable to Utility flares.

- <u>Pilot Presence</u>: Temperature records provided in the attached flare charts demonstrate pilot presence.
- Exit Velocity:
 - * South Utility Flare (FlareT): 59.4 ft/s. Calculations are shown in Attachment 2 of the Initial Performance Test Report submitted May 1, 2006, and provided to the TCEQ during the BRLF Investigation on July 6, 2018.
 - * Rental Flare (FlareS3UFLARE1): 102.0 ft/s (Calculations shown in Appendix D of the Initial Performance Test Report submitted March 19, 2018), and provided to the TCEQ during the BRLF Investigation on July 6, 2018.
- Net Heating Value:
 - * South Utility Flare (FlareT): 522.47 BTU/ft3 (Calculations shown in Attachment 2 of the Initial Performance Test Report submitted May 1, 2006), and provided to the TCEQ during the BRLF Investigation on July 6, 2018.

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Mr. Sam Cortez July 17, 2018 Page 2

* Rental Flare (FlareS3UFLARE1): 496.96 BTU/fi3 (Calculations shown in Appendix D of the Initial Performance Test Report submitted March 19, 2018), and provided to the TCEQ during the BRLF Investigation on July 6, 2018.

Request 2: "H2S Fence line monitoring (May 22, 2018 – June 30, 2018)"

Response: On advice of counsel, we intend to provide the data according to the provisions of the Odor Plan that was negotiated between BRLF and TCEQ. There were important reasons that Section 3.3 of the Plan was so carefully worded, the primary reason being BRLF's concern about the use of raw data without analysis and context. For this reason, BRLF will place the H2S fence line monitoring data in the Site Operating Record. Therefore, BRLF will include the H2S fence-line monitoring data in the quarterly report that is placed in the site monitoring record pursuant to the terms of the Plan.

Please contact Mr. Duncan Norton, with Lloyd Gosselink Rochelle & Townsend, P.C. at 512-322-5884, if you would like to talk about the terms of the Plan and the Agreed Order.

Request 3: "Mist system installation date"

Response: February 26, 2007

Request 4: "Portable mist system installation date"

Response: September 1, 2017

Please contact me at 713-676-7669 if you have any questions.

Burgess Stengl

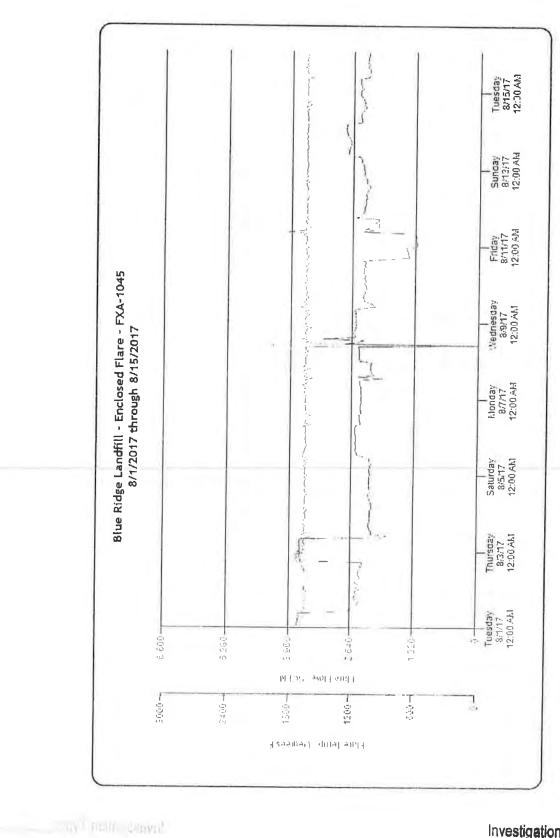
Environmental Manager

cc: Scott Trebus, Blue Ridge Landfill Mark Meadows, Blue Ridge Landfill

Air Account No. 10

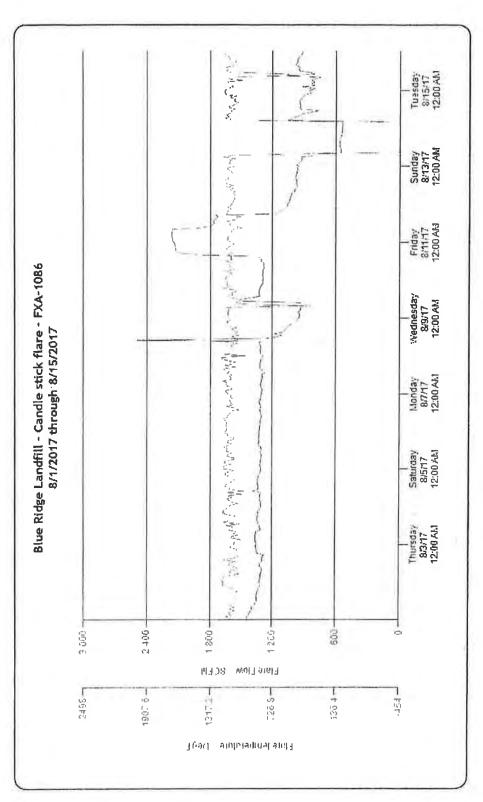
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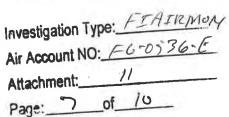
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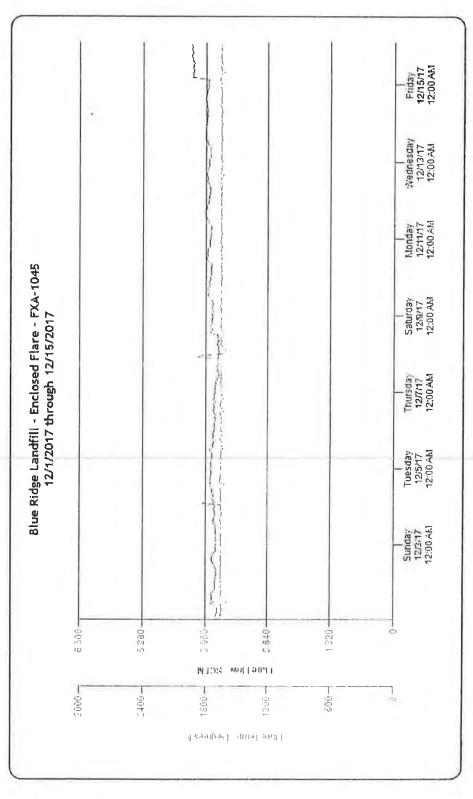
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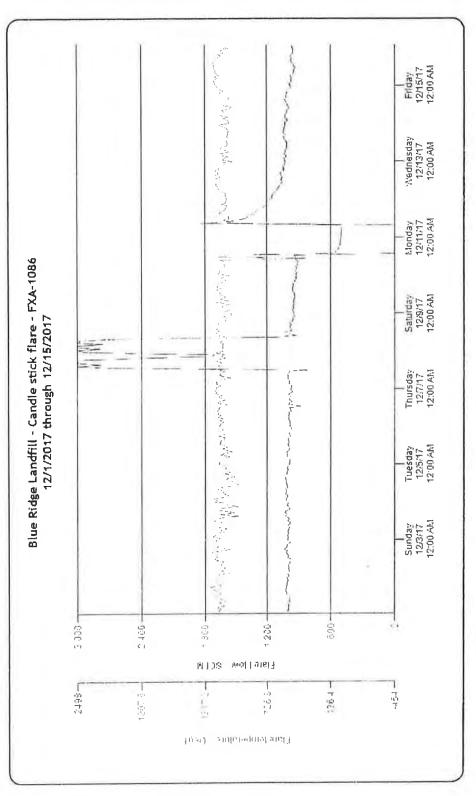


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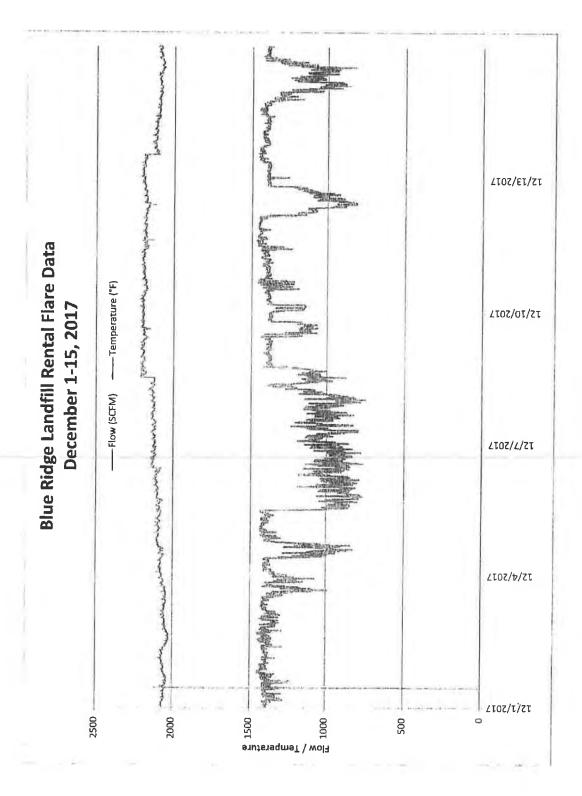
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(CONFIDENTIAL) ATTACHMENT 12

Supporting Documentation (CONFIDENTIAL)
20 Pages

Blue Ridge Landfill 2200 FM 521 Fresno, Texas 77545 RN 102610102 FG-0536-E

Investigation Date: April 30, 2018 through July 6, 2018

Investigation Number: 1486565

ATTACHMENT 13

Exit Interview Forms 8 Pages

Blue Ridge Landfill 2200 FM 521 Fresno, Texas 77545 RN 102610102 FG-0536-E

Investigation Date: April 30, 2018 through July 6, 2018

Investigation Number: 1486565

	EXIT	EXIT INTERVIEW FORM: Potential Violations and/or Records Requested	Poten	tial Violations and/	or Records Requ	ested	
Regulated Entity/Site Name	Blue Rid	Blue Ridge Landfill			TCEQ Add. ID No. RN No (optional)	FG0536E	
Investigation Type	FIAIR	FIAIR Contact Made In-House (Y/N) Y	Y	Purpose of Investigation Agreed Order, Odor Plan, 40 CFR 60 WWW compliance	Agreed Order, Odor Pla	ın, 40 CFR 60 WW	W compliance
Regulated Entity Contact	Mr. Burg	Mr. Burgess Stengl		Telephone No.		Date Contacted	7/6/18
Title	Environn	Environmental Manager		E-mail:		Date Faxed:	

NOTICE: The information provided in this Note is intended to provide clarity to issues that have arisen to the date of this Note during the investigation process between the agency and the company and does not represent agency findings related to violations. Any potential or alleged violations discovered after the date of this Note will be communicated by telephone to the regulated entity representative prior to the issuance of a notice of violation or enforcement. Conclusions drawn from this investigation, including additional violations or potential violations discovered (if any) during the course of this investigation, will be documented in this investigation is final report.

ĭ	Issue	For Records Request, identi include the rule in question	For Records Request, identify the necessary records, the company contact and date due to the agency. For Alleged and Potential Violation issues, include the rule in question with the clearly described potential problem. Other type of issues: fully describe.
No.	Type	Rule Citation (if known)	Description of Issue
-	RR	60.758	Flare data: flow rates; pilot presence; exit velocity; net heating value (1st 2 weeks Aug. 2017 & 1st 2 weeks Dec. 2017)
2	RR	Odor plan	H2S Fence line monitoring (May 22, 2018 – June 30, 2018)
т	RR	Odor plan	Mist system installation date
4	R.R.	Odor plan	Portable mist system installation date
			Due COB: 7/17/18
Note 1	: Issue T	γpe Can Be One or More α	Note 1: Issue Type Can Be One or More of: AV (Alleged Violation), PV (Potential Violation), O (Other), or RR (Records Request)
Did th	e TCEO de	coment the regulated entity nar	Did the TCEO document the resulated entity named above operating without proper authorization?

°N □ Did the TCEQ document the regulated entity named above operating without proper authorization?

Did the investigator advise the regulated entity representative that continued operation is not authorized?

□Yes

O No

Document Acknowledgment. Signature on this document establishes only that the regulated entity (company) representative received a copy of this document and associated continuation pages on the date noted. If contact was made by telephone, document will be faxed to regulated entity; therefore, signature not required.

FG-0536-Regulated Entity Representative Name (Signestigation Exper. If you have questions about any information on this form, please contact your local TCEQ Regional Office. Date 7/13/18 Investigator Name (Signed &Printed) Samuel Cortez

Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, call Air Account NO: Attachment:

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Investigation Type: FEAFR MON Air Account NO: FCOS36-E Attachment: 15 Page: 2 of 8

	EXIT	EXIT INTERVIEW FORM: Potential Violations and/or Records Requested	Poten	tial Violations and/	or Records Requ	ested	
Regulated Entity/Site Name	Blue Rid	Blue Ridge Landfill			TCEQ Add. ID No. RN No (optional)	RN102610102	
Investigation Type		Contact Made In-House (Y/N) Yes Purpose of Investigation Compliance with SEM, NSPS, Odor Plan	Yes	Purpose of Investigation	Compliance with SEM,	NSPS, Odor Plan	
Regulated Entity Contact	Burgess Stengl	Stengl		Telephone No.	713-6767669	Date Contacted	8/8/18
Title	Environ	Environmental Manager		E-mail:	NA	Date Faxed:	NA

NOTICE: The information provided in this Note is intended to provide clarity to issues that nave arisen to the date of this Note will be communicated by telephone to the regulated entity representative prior to the issuance of a notice of violation agency findings related to violations. Any potential or alleged violations discovered after the date of this Note will be communicated by telephone to the regulated entity representative prior to the issuance of a notice of violation or enforcement Conclusions drawn from this investigation, including additional violations or potential violations discovered (if any) during the course of this investigation, will be documented in this investigation's final report

Is	Issue	Issue For Records Request, identify the nece include the rule in question with the cle	For Records Request, identify the necessary records, the company contact and date due to the agency. For Alleged and Potential Violation issues, include the rule in question with the clearly described potential problem. Other type of issues: fully describe.	ues,
No.	Type1	Rule Citation (if known)	Description of Issue	
-	RR		Enclosed Flare average flow rate: max capacity, hours, total emissions 2017	
2	RR		Utility Flare average flow rate; max capacity, hours, total emissions 2017	
3	RR		Rental Flare average flow rate; max capacity, hours, total emissions 2017	
4	RR		Pipeline average flow rate; max capacity; hours, total collected 2017	
5	RR		Total MSW submittal 2017	
9	RR		LandGEM 2017	
7	RR		Total Capacity of controls	
Note 1	: Issue T	ype Can Be One or More	Note 1: Issue Type Can Be One or More of: AV (Alleged Violation), PV (Potential Violation), O (Other), or RR (Records Request)	
Did the	e TCEQ de	ocument the regulated entity na	Did the TCEQ document the regulated entity named above operating without proper authorization?	Jyes

□Yes

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Did the investigator advise the regulated entity representative that continued operation is not authorized?

date noted. If contact was made by telephone, document will be faxed to regulated entity; therefore, signature not required.

Samuel Cortez	8/8/2018		
Investigator Name (Signed &Printed)	Date	Regulated Entity Representative Name (Signed & Printed)	Date
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Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, call \$12239-3282. FIATR moving the contracted to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, call \$12239-3282. If you have questions about any information on this form, please contact your local TCEQ Regional Office.

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Investigation Type: FIADR MON
Air Account NO: F6-0536-6

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Page: 7 of 8

	EXIT	EXIT INTERVIEW FORM: Potential Violations and/or Records Requested	Poter	itial Violations and/	or Records Regu	ested	
Regulated Entity/Site Name	Blue Rid	Blue Ridge Landfill			TCEQ Add. ID No. RN102610102 RN No (optional)	RN102610102	
Investigation Type		Contact Made In-House (Y/N) Yes Purpose of Investigation Compliance with SEM, NSPS, Odor Plan	Yes	Purpose of Investigation	Compliance with SEM,	NSPS, Odor Plan	
Regulated Entity Contact	Burgess Stengl	Stengl		Telephone No.	713-6767669	Date Contacted	8/8/18
Title	Environ	Environmental Manager		E-mail:	NA	Date Faxed:	NA

agency findings related to violations. Any potential or alleged violations discovered after the date of this Note will be communicated by telephone to the regulated entity representative prior to the issuance of a notice of violation or enforcement. Conclusions drawn from this investigation, including additional violations or potential violations discovered (if any) during the course of this investigation, will be documented in this investigation is final report. NOTICE: The information provided in this Note is intended to provide clarity to issues that have arisen to the date of this Note during the investigation process between the agency and the company and ages not represent

	Issue	For Records Request, identi include the rule in question	For Records Request, identify the necessary records, the company contact and date due to the agency. For Alleged and Potential Violation issues, include the rule in question with the clearly described potential problem. Other type of issues: fully describe.
No.	Type1	Rule Citation (if known)	Description of Issue
-	RR		Enclosed Flare average flow rate: beak max flow for 2017; max capacity, hours, total emissions 2017
2	RR		Utility Flare average flow rate; peak max flow for 2017; max capacity, hours, total emissions 2017
3	RR		Rental Flare average flow rate; peak max flow for 2017; max capacity, hours, total emissions 2017
4	RR		Pipeline average flow rate; peak max flow for 2017; max capacity; hours, total collected 2017
5	RR		Total MSW submittal 2017
9	RR		LandGEM 2017
7	RR		Total Capacity of controls

Note 1: Issue 1 ype Can be One of More of: AV (Allegea Violation), FV (Forential Violation), O (Unef), of RK (Recolds Request)

□Yes □ Yes % N % × Did the investigator advise the regulated entity representative that continued operation is not authorized? Did the TCEQ document the regulated entity named above operating without proper authorization?

Document Acknowledgment. Signature on this document establishes only that the regulated entity (company) representative received a copy of this document and associated continuation pages on the date noted. If contact was made by telephone, document will be faxed to regulated entity; therefore, signature not required.

Samuel Cortez	8/21/2018		
Investigator Name (Signed & Printed)	Date	Regulated Entity Representative Name (Signed & Printed)	Date
16.000 hours amortions about any information on this form places contact want local TOF	TOEO Degional Office		

If you have questions about any information on this form, please contact your local TCEQ Regional Office.

Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, call invigation Type: TTAFILM 3X

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Investigation Type: FTATRINGY
Air Account NO: F6-0536-6

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	TCEQ	TCEQ EXIT INTERVIEW FORM: Potential Violations and/or Records Request	M: I	Octential Violations	and/or Records R	equest	
Regulated Entity/Site Name	Blue Rid	Blue Ridge Landfill TX, LP			TCEQ Add. ID No. RN No (optional)	FG0536E	
Investigation Type	FIAIR	FIAIR Contact Made In-House (Y/N) Yes Purpose of Investigation MON	Yes	Purpose of Investigation	Compliance Investigation	no	
Regulated Entity Contact	Mr. Burg	Mr. Burgess Stengl		Telephone No.	(713) 676-7669	Date Contacted October 10, 2018	October 10, 2018
Title	Environn	Environmental Manager		FAX #/Email address	NA	FAX/Email date NA	NA

NOTICE: The information provided in this form is intended to provide clarity to issues that have arisen during the investigation process between the TCEQ and the regulated entity named above and does not represent final TCEQ findings related to violations. Any potential or alleged violation or enforcement. Conclusions drawn from this investigation, including additional violations or potential violations discovered (if any) during the course of this investigation, will be documented in a final investigation-report.

T.		rule in question with the clear	rule in question with the clearly described potential problem. Other type of issues: fully describe.
	Type1	Rule Citation (if known)	Description of Issue
1 A	AV	40 CFR 60.11(d)	Failure to operate control equipment in a manner consistent w/ good air pollution control practice for minimizing emissions
2 A	AV	40 CFR 60.757(f)(5)	Failure to include all exceedance information in the periodic NSPS report dated July 2, 2018
3 A	AV	30 TAC 122.145(2)(A)	Failure to report all instances of deviations in the deviation report dated July 2, 2018
4	0	40 CFR 60 WWW	Inconsistent recordkeeping and reporting
5	0	40 CFR 60 WWW	Visible dark pool of liquid on Class 1/Phase 2
9	0	Odor Control Plan	Inconsistent recordkeeping for surveys
7	0	Odor Control Plan	Inconsistent recordkeeping for complaints
8	0	Odor Control Plan	Pin flags not noted with sequential number

Note 1: Issue Type Can Be One or More of: AV (Alleged Violation), PV (Potential Violation), O (Other), or RR (Records Request)

Did the TCEQ document the regulated entity named above operating without proper authorization?	□ Yes	X No
Did the investigator advise the regulated entity representative that continued operation is not authorized?	□ Yes	No X

Document Acknowledgment. Signature on this document establishes only that the regulated entity (RE) representative received a copy of this document and associated continuation pages on the date noted. If contact was made by telephone, the document will be sent via FAX or Email to RE; therefore, the RE signature is not required

Samuel Cortez	10/10/18		
Investigator Name (Signed &Printed)	Date	Regulated Entity Representative Name (Signed & Printed)	Date
	* - 1		

If you have questions about any information on this form, please contact your local TCEQ Regional Office.

Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information that the agency gathers on its forms.

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Investigation Type: FTAFRM WY
Air Account NO: F6.0536-E

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ATTACHMENT 14

Monitoring Division Summary 8 Pages

Blue Ridge Landfill 2200 FM 521 Fresno, Texas 77545 RN 102610102 FG-0536-E

Investigation Date: April 30, 2018 through July 6, 2018

Investigation Number: 1486565

Monitoring Division Summary of May 14-18, 2018, Pearland Sampling Event OBJECTIVE:

The purpose of this sampling event was to assist Region 12 environmental investigators in determining the source of the odors in the Shadow Creek Ranch neighborhood in Pearland, Texas.

SAMPLING STRATEGY:

1. Conduct sampling during times that are consistent with the times documented complaints occurred. Most complaints from the Shadow Creek Ranch area over the last three years were documented as occurring between 8:00 p.m. and 8:00 a.m. as shown in Figure 1. Refer to the map of open complaints, Attachment A, for a visual representation of the investigation area. In addition, use wind direction to correlate odors observed in the neighborhood and documented in frequency, intensity, duration, and offensiveness (FIDO) surveys with the possible origins by conducting simultaneous downwind/upwind FIDO surveys around area facilities.

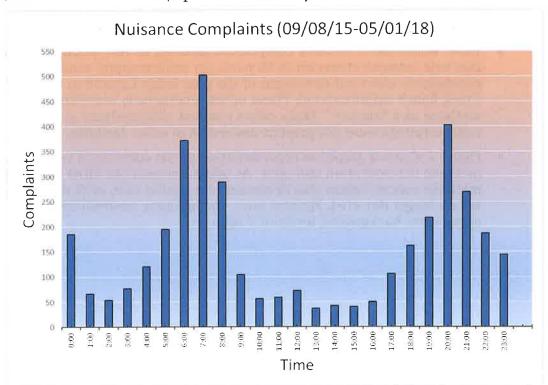


Figure 1: Number of odor complaints as reported throughout the day

2. Identify measurable "markers" related to instrument measurements and odor characterizations from FIDO surveys. Methane comprises a large portion of landfill gas and, while odorless, is a marker for the presence of other odorous compounds within the landfill gas make-up, including hydrogen sulfide (H₂S). Utilizing the ratio of methane to H₂S concentrations, establish a marker to distinguish between odor plumes from Blue Ridge Landfill and Lone Star Disposal and Recycling Facility (Lone Star Disposal).

Star Disposal).		
3. Characterize odors for are	a facilities using instrumentat	ion and FIDO surveys.
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RESULTS AND CONCLUSIONS:

- 1. FIDO surveys were conducted in the Shadow Creek Ranch neighborhood, when odors warranted, at various times and locations between midnight and 10 a.m. on the mornings of May 15-17, 2018. In addition, specific downwind/upwind FIDO surveys and instrument measurements were conducted at each facility throughout the week. See Attachment B for a complete list of FIDO surveys conducted. Locations varied depending on wind direction at the time of the surveys but were generally in the western half of the neighborhood along Farmto-Market (FM) 521 between Broadway and McHard Road.
 - Odorous conditions were observed in the Shadow Creek Ranch neighborhood the week of May 14-18, 2018, when winds were calm to light with a westerly component.
- 2. FIDO surveys were documented in coordination with measurements from the Picarro methane and H₂S analyzer to determine if either of these measurable compounds could be used as "markers" for odorous conditions. While there was no quantitative correlation between methane concentration and H₂S concentration as postulated, the methane concentration and odor intensity exhibited a qualitative correlation that can be used as a marker.
 - When winds had a westerly component, medium to very strong odors and methane concentrations up to 60 parts per million (ppm) were consistently observed downwind of the Blue Ridge Landfill in the Shadow Creek Ranch neighborhood. These odors qualitatively correlated to methane as a "marker." These odors coupled with methane at these concentrations were not present downwind of other facilities.
 - Figure 2 shows a graphical representation of the correlation between methane concentration and odor. As odors decrease for FIDO Log 9, the methane concentration also decreases at a similar rate, until the odors are no longer detected. Minutes later, the methane concentration approaches background levels of 2 ppm.

Investigation Type: FIATRMON

Air Account NO: FG-0536-F

Attachment: 14

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FIDO Log 9 Downwind Blue Ridge Landfill

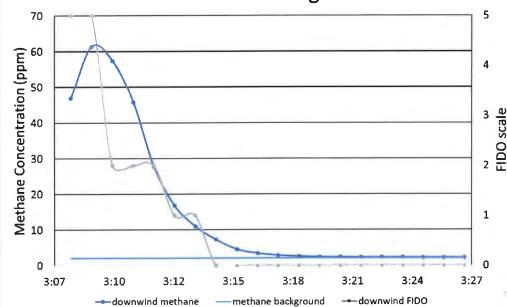


Figure 2: May 16, 2018-Comparison of downwind methane concentration measured with coinciding odor survey data. Wind speed averaged 3 mph out of the west-northwest direction.

- A correlation between H_2S and odors was not observed as no measurable (above method detection limits) H_2S was detected in the Shadow Creek Ranch neighborhood.
- Blue Ridge Landfill and Lone Star Disposal were the only facilities in the area with measurable methane concentrations above background levels. The two landfills differed in ratio of methane to H_2S content making the two distinguishable from one another.
- No concentrations were collected in the Shadow Creek Ranch neighborhood with the methane to H₂S ratio marker that would denote Lone Star Disposal as a contributor to odors observed.
- 3. Each potential source was assessed concurrently upwind and downwind to determine its odor profile. Each of the area facilities had its own distinct odor characteristics and differed from each other, except for Brenntag at which no odors were ever detected. Blue Ridge Landfill and Lone Star Disposal both have garbage odors, but odor characteristics are distinct between the two facilities due in part to the difference in H₂S content. Area facilities, excluding Blue Ridge, produce notable odors that are not consistent in character with odors observed in the Shadow Creek Ranch neighborhood. The odor characteristics in Shadow Creek Ranch neighborhood were consistent with the odors from Blue Ridge Landfill and were accompanied with the signature methane measurements associated with the landfill gases.

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Shadow Creek Ranch

Odors observed in the Shadow Creek Ranch neighborhood were described as moldy, soured garbage and were consistently observed with calm to light winds with a westerly component.

Blue Ridge Land Fill

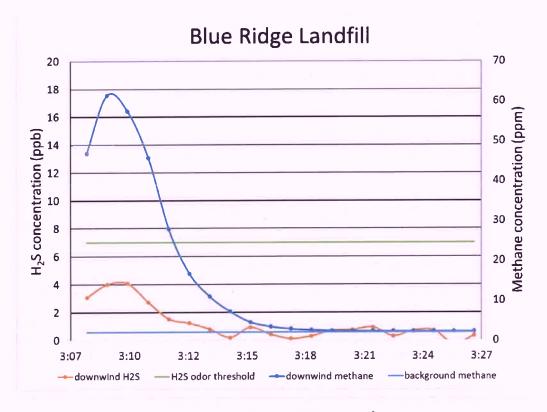
Odor descriptions of Blue Ridge Landfill were moldy, soured garbage odors consistent with those odors detected in the Shadow Creek Ranch neighborhood. These odors were detected, regardless of wind direction, when downwind of Blue Ridge Landfill.

Lone Star Disposal and Recycling Facility

The light rancid popcorn garbage odors, observed northeast of the landfill were not intense enough to be compared to odors observed in the Shadow Creek Ranch neighborhood. Although methane was measured consistently above background levels (Figure 3) during the downwind FIDO surveys, concentrations were generally lower than those measured around Blue Ridge Landfill, making it difficult to correlate the light smell with minimal methane concentrations. H₂S concentrations were below the odor threshold of 7 parts per billion (ppb) and were difficult to correlate with the FIDO scale, indicating H₂S was not the likely cause of the observed odors.

Odors observed by investigators downwind of Lone Star Disposal were consistently lower in intensity, based on FIDO surveys, and higher in $\rm H_2S$ concentration than those documented downwind of the Blue Ridge Landfill. Figure 3 denotes a comparison of downwind methane and $\rm H_2S$ levels at Blue Ridge Landfill and Lone Star Disposal, showing the two facilities are distinguishable from one another based on methane and $\rm H_2S$ ratios.

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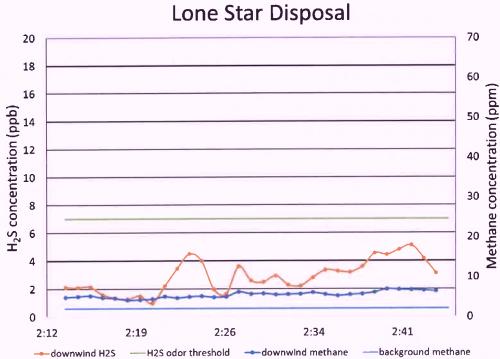


Figure 3: Lone Star Disposal showed only slightly elevated concentrations of methane in association with 3-5 ppb H_2S , whereas Blue Ridge Landfill produced similar H_2S concentrations when methane levels were 6 times as high at 60 ppm.

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Syntech Chemicals Inc.

No methane or H₂S concentrations were measured above the background level for methane or the odor threshold for H₂S at Syntech Chemicals Inc. indicating this is not a source of the odorous methane cloud. Fishy amine odors were observed downwind of Syntech and were not consistent with odors observed in the Shadow Creek Ranch neighborhood.

• Brenntag Southwest Chemical Wholesaler

No odor profile was characterized downwind of Brenntag Southwest Chemical Wholesaler. No concentrations above the background level for methane or the odor threshold for H_2S were recorded. No odors were detected by FIDO upwind or downwind of Brenntag. Including the 2016 monitoring data and two recent monitoring trips, no odors have been documented around Brenntag.

City of Pearland Wastewater Treatment Plant

Odors around this facility were described as raw sewage and sulfur. These odors were different than those observed in the Shadow Creek Ranch neighborhood. Measurements indicate near-background methane concentrations with no correlation between odor and concentration. Part per billion levels of H_2S were measured near this facility; however, these concentrations were below the regulatory limit of 80 ppb for this compound and not likely to contribute to the moldy, soured garbage odors observed at Shadow Creek Ranch neighborhood.

Akzo Nobel Surface Chemistry Plant

Minimal odors described as a sweet chemical smell were not consistent with the odors observed in the Shadow Creek Ranch neighborhood. The near-background levels of methane indicate this facility is not a methane source. No concentrations above the background level for methane or the odor threshold for H.S were recorded.

Shadow Creek Lift Station

Light odors observed in FIDO surveys near the lift station were described as a chemical, "port-a-potty" smell and were not consistent with the odors observed in other areas of the Shadow Creek Ranch neighborhood. Near-background methane concentrations near the lift station were recorded. No concentrations above the background level for methane or the odor threshold for H₂S were recorded.

NEXT STEPS:

- Most complaints do not include specific odor characterizations that could be used to help identify the source(s). Since local sources have distinct odor characterizations, a complaint reporting system that provides a selection of odor descriptions would provide more useful information to allow for source identification.
- Because of the similarity in odor characterization between observations downwind
 of the Blue Ridge Landfill and Lone Star Disposal, a meteorological assessment

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- should be used to determine how often complainant odors can be attributed to each facility.
- A closely coordinated monitoring effort should be scheduled to coincide with the next Surface Emissions Monitoring investigation at the Blue Ridge Landfill to assess plume movement and dilution over distance from leaking monitoring wells.
- Monitoring should also focus on downwind assessment of Blue Ridge Landfill between midnight and 4:00 a.m. during daily face opening activities to determine potential contributions to odor complaints.

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