### AIR CP\_102610102\_CP\_20160623\_INVESTIGATION\_1342821 **Texas Commission on Environmental Quality Investigation Report**

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Customer: Blue Ridge Landfill TX, LP Customer Number: CN602820599

Regulated Entity Name: BLUE RIDGE LANDFILL Regulated Entity Number: RN102610102

Investigation #1342821

**Incident Numbers** 

235961

**Investigator:** 

**GREGORY CROOK** 

Site Classification MAJOR SOURCE

**Conducted:** 06/23/2016 -- 06/23/2016

**NAIC Code: 562212** 

**SIC Code:** 4953 SIC Code: 1521

Program(s):

AIR OPERATING PERMITS

Location: LOCATED ON 2200 FM 521

Additional ID(s):

FG0536E

Investigation Type: Compliance Investigation

Address: 2200 FM 521 RD,

FRESNO, TX, 77545

Local Unit: REGION 12 - HOUSTON

Activity Type(s):

AIRCOMPL - AIR CMPL - AIR

**COMPLAINT INV** 

Principal(s):

Role

Name

RESPONDENT

BLUE RIDGE LANDFILL TX LP

Contact(s):

Role

Title

Name

Phone

REGULATED **ENTITY MAIL**  **OPERATIONS** MANAGER

MR MATT **MONTAGNA**  Work

(713) 676-7664

CONTACT

Other Staff Member(s):

Role

Name

**OA Reviewer** 

JOSEPH DOBY

QA Reviewer

JUSTIN MAYWORN

Investigator

KARLA HARDISON

Supervisor

JOSEPH DOBY

**Associated Check List** 

**Checklist Name** 

**Unit Name** 

AIR GENERIC INVESTIGATION (10 ITEMS)

AIR INVESTIGATION - EQUIPMENT

Shadow Creek Ranch Area Shadow Creek Ranch Area

MONITORING AND SAMPLING revised 06/2013

**Investigation Comments:** 

INTRODUCTION

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Introduction

On the dates of June 21 through June 23, 2016 the TCEQ received sixty (60) complaints by telephone and e-mail regarding a strong odor in the vicinity of Shadow Creek Ranch neighborhood in Pearland, Texas. The complaints were documented in TCEQ incident #235961.

Complainants were contacted via telephone by Mr. Chris Crook on July 7 & 8, 2016. Complainants claimed a strong odor described as having a rotten garbage, chemical, rotten egg, noxious, chemical gas, sulfur like, pungent, burnt chemical, mercaptan, sour, putrid, sharp gas, metallic chemical, and landfill gas character was present either in the early morning (12:00 a.m.-11:00 a.m.) or in the evening (5:00 p.m.-11:00 p.m.). One complainant claimed that the odor problem has occurred for a couple of years. The majority of complainants believed that the source of the odor is Blue Ridge Landfill (BRL), located at 2200 Farm to Market (FM) 521 road, and/or an unspecified chemical plant. Several complainants claimed various health effects such as nausea, vomiting, headaches, eye irritation, breathing irritation, while others only expressed concern for their health.

In order to identify the most probable source and to determine whether a nuisance condition existed, the investigators conducted odor logs at various points near BRL at a distance that was approximately equidistant to the complainants' locations from the alleged source. Odors were assessed for frequency, intensity, duration, and offensiveness. It is important to note that during these odor surveys a MultiRAE analyzer was on the entire time. Other gear utilized during the investigation included a Kestrel wind & temperature meter.

An area map is in Attachment 1.

Investigation Narrative

The investigation took place on June 23, 2016. The investigation was conducted by Mr. Chris Crook and Ms. Karla Hardison. The surrounding land use is a mix of residential, commercial, and industrial areas. The terrain is flat with sporadic forest. Meteorological conditions for the alleged incident dates and investigation dates are as follows:

Meteorological conditions June 21, 2016 (alleged incident date)

Cloud Cover: Scattered Clouds

Wind Direction: South Wind Speed: 0-8 mph

Temperature: Minimum 73° Fahrenheit- Maximum 88° Fahrenheit

Precipitation: 0.09 in

Source of Meteorological Conditions: Weather Underground (KAXH)

Meteorological conditions June 22, 2016 (alleged incident date)

Cloud Cover: Scattered Clouds Wind Direction: Southeast Wind Speed: 0-10 mph

Temperature: Minimum 73° Fahrenheit- Maximum 88° Fahrenheit

Precipitation: 0.05 in

Source of Meteorological Conditions: Weather Underground (KAXH)

Meteorological conditions June 23, 2016 (investigation date)

Cloud Cover: Scattered Clouds Wind Direction: South Southeast

Wind Speed: 0-10 mph

Temperature: Minimum 71° Fahrenheit- Maximum 90° Fahrenheit

Precipitation: 0.00 in

Source of Meteorological Conditions: Weather Underground (KAXH)

TCEQ Investigators Mr. Chris Crook and Ms. Karla Hardison arrived in the Shadow Creek Ranch area at the intersection of Discovery Bay Drive and Business Center Drive at 5:15 a.m. The investigators conducted odor surveys throughout the neighborhood starting at the Enclave Terrace subsection of the Shadow Creek Ranch area. The investigators conducted an odor survey in area #1 (SEE ATTACHMENT 2) from 5:15 a.m. to 5:45 a.m. No odors were detected.

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At 5:45 a.m. the investigators continued their survey throughout the Shadow Creek Ranch area. At 5:52 a.m. the investigators arrived at the intersection of Shadow Creek Parkway and Kingsley Drive. The investigators drove down Kingsley Drive and surveyed for odor throughout survey area #2 (SEE ATTACHMENT 2.1). During this survey, no odors were detected. The investigators departed from survey area #2 at 6:05 a.m.

At 6:05 a.m. the investigators continued onto Shadow Creek Parkway and continued onto FM522 (McHard Road). At 6:09 a.m. the investigators detected a highly offensive moderate landfill gas/ honeysuckle odor at Triple A Storage (SEE ATTACHMENT 2.2- First & Second Odor Log Locations) located at McHard Road and Hiram Clarke Road from 6:10 a.m. to 6:40 a.m. The one-minute and 10 minute weighted averages were each moderate intensity. The wind direction was variable with speeds below one mph. (SEE ATTACHMENT 3- page 1).

At 6:40 a.m the investigators traced the odor down to the intersection of Hiram Clarke Road and McHard Road, directly across from the Green Valley Estates sign (SEE ATTACHMENT 2.2- First & Second Odor Log Locations). Light landfill gas odors were detected at this location. The investigators documented the odor at this intensity from 6:40 a.m. to 7:10 a.m. The one minute weighted average was very light, and the 10 minute weighted average was light. The wind direction was variable with speeds below one mph. (SEE ATTACHMENT 3- page 2). The investigators departed from this location at 7:12 a.m.

At 7:12 a.m. the investigators headed into Green Valley Estates via Hiram Clarke Road. The investigators continued to the end of Hiram Clarke Road & Clark Springs Drive, approximately 480 yards south of Lonestar Recycling & Disposal (SEE ATTACHMENT 2.3- End of Hiram Clarke Road). During the survey, no odors were detected. The investigators left this location at 7:25 a.m. The investigators exited out of Green Valley Estates and took a left onto McHard Road and followed Mchard Road until a left turn was made at FM 521. The wind direction was variable with speeds below one mph.

At 7:30 a.m. the investigators continued to survey, took a left down West Broadway Street, and continued left onto Windward Bay Drive in the Shadow Creek Ranch area. During the survey the investigators drove down Arcadian Bay Drive until the intersection of Trinity Bay Drive (SEE ATTACHMENT 2.4). The investigators surveyed this area until 8:30 a.m. No odor was detected. The wind direction was variable with speeds below one mph.

At 8:35 a.m. the investigators surveyed the Green Valley Estates area once more. No odor was detected. The investigators continued to survey the Shadow Creek Ranch area until 9:25 a.m. The subsections of Shadow Creek that were surveyed included Crystal Cove and Westhaven. In addition, the MultiRAE that was operated during the investigation did not detect any ppm readings. The wind was blowing from the South Southeast at 0-5 mph.

During the odor logs taken at 6:10 a.m. and 6:40 a.m. Ms. Karla Hardison of the TCEQ alleged health effects caused by the landfill gas odors. Ms. Hardison alleged that the odors caused her to have a headache and nausea.

#### **Exit Interview**

An exit interview was not conducted since there were no alleged violations, additional issues, or records requested.

In addition, the complainants were contacted by phone with the results of the investigation July 7 & 8, 2016. Several of the complainants were anonymous and were not contacted.

### GENERAL FACILITY AND PROCESS INFORMATION

#### **Process Description**

Blue Ridge Landfill accepts waste and has a gas collection and control system. Detailed process descriptions can be found in the Houston Region files.

#### BACKGROUND

Agreed Orders, Court Orders, and Other Compliance Agreements

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Based on review of CCEDS and the regional office files, there were no agreed orders, court orders, or other compliance agreements for the site.

#### Prior Enforcement Issues

Based on a review of CCEDS and the regional office files, violations were issued by the TCEQ to the alleged source during the past five years. There are no repeat violations.

#### Complaints

Based on a review of CCEDS and regional office records, there have been hundreds of odor complaints received from within the survey area and numerous investigations related to odors. At the time of the review, multiple related odor investigations were being conducted by the Region 12 office. Many of these incidents include complaints received from multiple complainants.

#### ADDITIONAL INFORMATION

Conclusions, Recommendations, and Current Enforcement Actions

Landfill gas/honeysuckle odors were detected at two locations during the investigation. Investigators characterized the landfill gas odors as highly offensive based on experience, training, and the examples on the TCEQ Frequency, Intensity, Duration and Offensiveness (FIDO) chart. The landfill gas odor and honeysuckle odor were the same as experienced by Investigator Chris Crook on May 25, 2016 (investigation #1349609), May 26, 2016 (investigation #1337795), and June 6 & 7, 2016 (investigation#1337792). During this investigation, the investigators experienced a landfill gas/honeysuckle odor that was highly offensive and a moderate intensity for ten minutes. During this investigation and in investigation #1331231, Blue Ridge Landfill was determined to be the source of the odors detected at offsite locations. The findings from this investigation will be addressed in investigation #1331231.

#### Additional Issues

No additional issues were noted during this investigation.

#### REPORT ATTACHMENTS

- 1. Area Map
- 2. Survey Area #1
- 2.1. Survey Area #2
- 2.2. First & Second Odor Log Locations
- 2.3. End of Hiram Clarke Rd
- 2.4. Survey Area #3
- 3. Investigators' Odor Logs

No Violations Associated to this Investigation

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Signed him Grown	Date 0/27/2016
Environmental Investigator	
Signed Supervisor	Date 10/17/16
Attachments: (in order of final report submi	ittal) /
Enforcement Action Request (EAR)	Maps, Plans, Sketches
Letter to Facility (specify type) :	Photographs
Investigation Report	Correspondence from the facility
Sample Analysis Results	Other (specify):
Manifests	See Attachments
Notice of Registration	

# Attachment 1

Area Map

RN #102610102

Investigation #1342821



Air Account NO: NAr

Attachment: I Area Map

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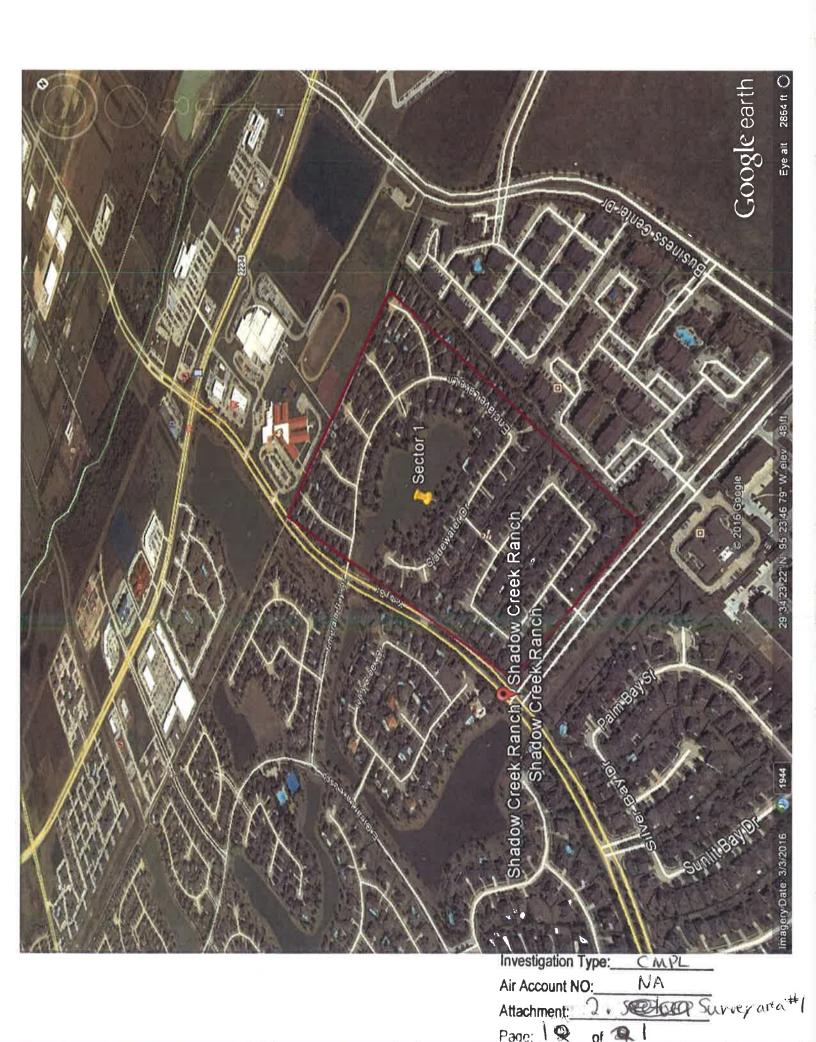
Attachment 2

Survey Area #1

Blue Ridge Landfill

RN #102610102

Investigation #1342821



Survey Area#2

Blue Ridge Landfill

RN #102610102

Investigation #1342821



Air Account NO: NA

Attachment: A Survey

# First & Second Odor Log Locations

RN #102610102

Investigation #1342821



Altachment: 2.2 First + Second odor lange: 19 of 19

End of Hiram Clarke Rd

RN #102610102

Investigation #1342821



Air Account NO: NA

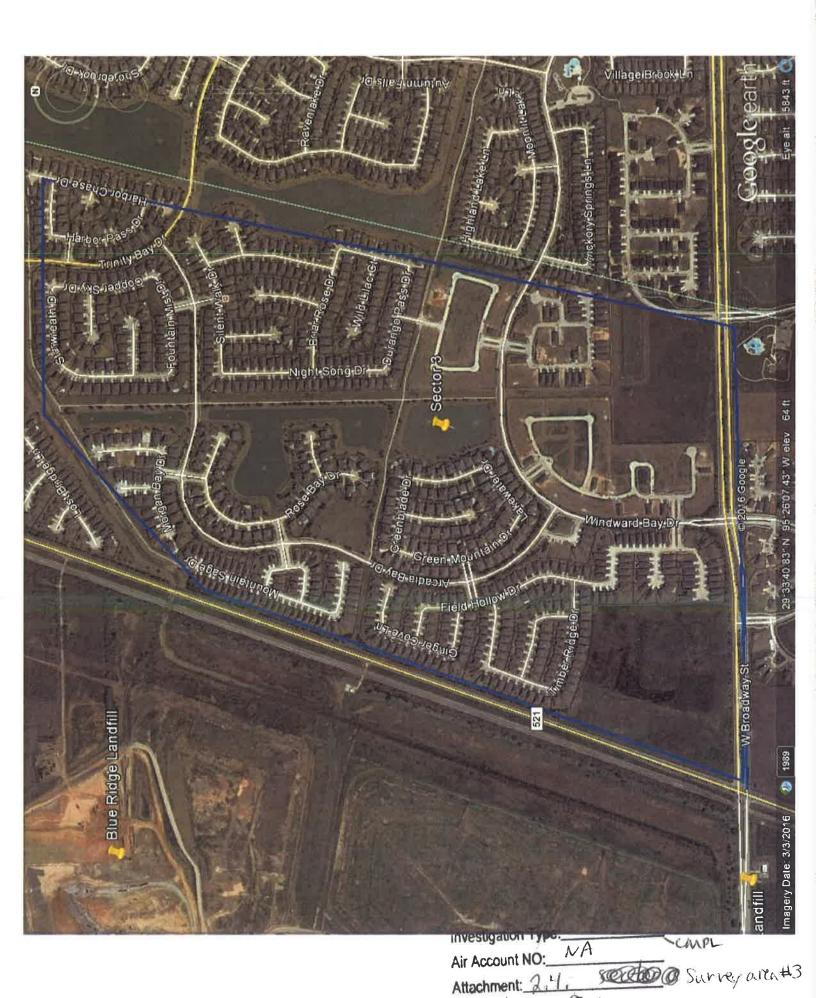
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Survey Area #3

Blue Ridge Landfill

RN #102610102

Investigation #1342821



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### Attachment 3

Investigator's Odor Logs

RN #102610102

Investigation #1342821

Investigator's Odor Intensity Time Log								
Date of Investigation: 6/23/2016 Start Time 6:10								
Date of In	vestigation: $0/03/1$	2016 Sta	rt Time_	6,10				
Name and	Address of Alleged Sour	rce: Blue Rad	lge Land	fill / Log Location Trip	k A Storage			
Investigator's Name: Print: Chris Crock Sign: Chris Crock								
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Minutes	Odor Intensity VL, L, M, S,VS		Minutes	Odor Intensity VL, L, M, S, VS				
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3	M		33					
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5	L		35					
6	M		36					

Minutes	Odor Intensity VL, L, M, S,VS
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5	L
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7	- M
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9	M
10	M
11	M
12	M
13	W
14	M
15	W
16	M
17	W
18	
19	VL
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21	M
22	VL
23	M
24	M
25	W
26	W
27	M
28	
29	
30	

Minutes	Odor Intensity VL, L, M, S, VS
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Attachmer	nt: 3. Investigations oclar	
Page:	1 of 2	

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Investigate	or's Name: Print:	Chris	Crook	Si	gn:	zing Cres	Ac.	Across from
		CIVIO	01 0-1		0			Green valley Estates son
Minutes	Odor Intensity VL, L, N	1 6 1/6		Minutes	Odor Inte	nsity VL, L, M, S,	VS	Estades syn
	Odor intensity VL, L, ii	11, 3, 43			Odor linter	IISILY VL, L, IVI, O,	VO	
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2				32				
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8	W			38				
9				39				
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26	L			56				
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Offensiver	ness: Highly	_Offensive _	Un	pleasant _	Not	t Unpleasant		
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10 Min					V			
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rpe: CMPL FG0536E Investigator's odor logs Air Account NO: ":achment:\_\_ Q 2 of