

AIR CP_102610102_CP_20160526_INVESTIGATION_1337795_
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 # 1337795

Investigator: GREGORY CROOK

Conducted: 05/26/2016 -- 05/26/2016

Program(s): AIR OPERATING PERMITS

Investigation Type: Site Assessment

Additional ID(s): FG0536E
1472

Address: 2200 FM 521 RD,
FRESNO, TX , 77545

Incident Numbers

Site Classification MAJOR SOURCE

NAIC Code: 562212

SIC Code: 4953

SIC Code: 1521

Location: LOCATED ON 2200 FM 521

Local Unit: REGION 12 - HOUSTON

Activity Type(s): FIAIRODOR - AIR FIAIRODOR - FOC
INV ODOR SURVEY

Principal(s):

Role	Name
RESPONDENT	BLUE RIDGE LANDFILL TX LP

Contact(s):

Role	Title	Name	Phone
REGULATED ENTITY CONTACT	ENVIRONMENTAL MANAGER	MR BURGESS STENGL	

Other Staff Member(s):

Role	Name
QA Reviewer	SAMUEL CORTEZ
Investigator	SAMUEL CORTEZ
QA Reviewer	CORBETT BRINLY
Supervisor	CORBETT BRINLY
QA Reviewer	JOSEPH DOBY

Associated Check List

<u>Checklist Name</u>
AIR FOCUSED INVESTIGATION - ODOR SURVEY
AIR INVESTIGATION - EQUIPMENT
MONITORING AND SAMPLING revised 06/2013

<u>Unit Name</u>
Blue Ridge Landfill
Blue Ridge Landfill

Investigation Comments:

RECEIVED

FEB 27 2017

TCEQ
CENTRAL FILE ROOM

INTRODUCTION/ INVESTIGATION SUMMARY

Introduction

On May 26, 2016, Chris Crook and Sam Cortez of the Texas Commission on Environmental Quality (TCEQ) Houston Region Office conducted a focused odor survey investigation in the Shadow Creek Ranch Subdivision area, in Pearland, in the Harris - Brazoria - Fort Bend County area. The purpose of this investigation (Investigation Typecode FIAIROPDOR) was to determine if any odors in the area constituted a nuisance condition. The Houston Region Office Air Section had investigators conducting odor surveys on the dates May 23 through May 26, 2016 in the Shadow Creek Ranch Subdivision and surrounding areas. The terrain in the area is flat land and the surrounding land use is residential.

May 26, 2016 - Investigation Daily Narrative

Meteorological data at time of investigation: May 26, 2016

Cloud cover: Overcast

Wind direction: Southeast

Wind speed: 0-8 mph

Average Temperature: 78° Fahrenheit

Precipitation: None

Source of Meteorological Data: Weather Underground (KAXH).

The investigators surveyed the Shadow Creek Ranch Subdivision and surrounding areas from 12:00 a.m. to 5:15 a.m. Refer to the attached log for specific details of time and location. The following is a summary of findings during this investigation:

The investigators arrived at the north side of the intersection of Highway 2234 and Highway 521, east of Akzo Noble at 12:15 a.m. The investigators conducted a general odor survey from 12:15 a.m. to 12:30 a.m. At 12:50 a.m., the investigators continued onto the first survey route (see attachment 1). For Section A of the survey route no odors were detected, in addition, a MultiRAE sensor was used and no readings were detected for Carbon Monoxide (CO), Hydrogen Sulfide (H₂S), or Volatile Organic Compounds (VOC). At 1:05 a.m. the investigators moved to section B of the survey route. At section B of the survey route no odors were detected and no readings were detected with the MultiRAE for CO, H₂S, or VOC. At 1:25 a.m. the investigators proceeded to section C of the survey route. At section C of the survey route no odors were detected and no readings were detected with the MultiRAE for CO, H₂S, or VOC. At 1:45 a.m. the investigators proceeded to section D of the survey route. At section D of the survey route, no odors were detected and no readings were detected with the MultiRAE for CO, H₂S, or VOC. At 2:07 a.m. the investigators completed the odor survey for route one.

At 2:12 a.m. the investigators conducted an odor survey of the second survey route (see attachment 2). During this odor survey, no odors were detected and no readings were detected with the MultiRAE for O₂, CO, H₂S, or VOC.

At 4:45 a.m. a highly offensive very light landfill gas/ honeysuckle odor was detected for under five minutes on the McHard Rd portion of the second survey route. The honeysuckle odor is a characteristic that can be linked to Blue Ridge Landfill, based on their usage of the scent as a deodorizer in their landfill process. During this time, the investigators set up two orifice SUMMA canister samples and one field blank SUMMA canister sample. The investigators took these samples North of Blue Ridge Landfill from 4:45 a.m. to 5:15 a.m. The approximate location of the SUMMA canister samples can be seen in attachment 3. Additionally, a 15-minute odor log was taken (see attachment 5). The one-minute and 10 minute weighted averages were each very light intensity. The wind was blowing from the Southeast at 0-5 mph.

SUMMA canister sample results were received on June 17, 2016 (see attachment 4). The TCEQ evaluation report noted that all of the 84 VOCs analyzed for both samples were either not detected or were detected below their respective short-term air monitoring comparison values (AMCVs). According to the evaluation conducted by the TCEQ Toxicology Division, exposure to levels of VOCs measured in this sample would not be expected to cause short-term adverse health effects, adverse vegetation effects, or odors. However, it is important to note that this evaluation only applies to the 84 VOCs that are analytically measured in a canister sample.

Process Description

BLUE RIDGE LANDFILL - FRESNO

5/26/2016 Inv. # - 1337795

Page 3 of 4

Blue Ridge Landfill is a municipal solid waste (MSW) landfill located at 2200 FM 521, in Fresno, Fort Bend County, Texas and is authorized to operate by TCEQ General Operating Permit No. O-01472. The landfill was issued this permit on August 23, 2003. The surrounding land use includes light industry, agricultural production and several residential subdivisions.

Exit Interview

No exit interview conducted for this investigation.

Background

Agreed Orders, Court Orders, and Other Compliance Agreements

These are not reviewed when no violations resulted from an investigation.

Prior Enforcement Issues

Based on review of CCEDS and enforcement database, there were no prior enforcement issues in the last five years.

Complaints

Based on review of CCEDS, there were approximately one thousand two hundred and seventy six (1,276) complaints filed against the regulated entity for the past year (August 1, 2016 through June 30, 2016).

Additional Information

Conclusions, Recommendations, and Current Enforcement Actions

One landfill gas/honeysuckle odor was detected throughout the investigation. Investigators characterized the landfill gas odor as highly offensive based on experience, training, and the examples on the TCEQ Frequency, Intensity, Duration and Offensiveness (FIDO) chart. During the survey, the strongest one-minute intensity was very light for the lead investigator. The 10 minute weighted average was determined to be very light for the lead investigator. 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.

Report Attachments

1. First Survey Route Map
2. Second Survey Route Map
3. Approximate Location of SUMMA Canister Samples
4. SUMMA Canister sample results
5. Odor Log

No Violations Associated to this Investigation

Signed Chris Cook
Environmental Investigator

Date 1/27/2017

Signed Corbett Bandy
Supervisor

Date 1-27-2017

Attachments: (in order of final report submittal)

- Enforcement Action Request (EAR)
- Letter to Facility (specify type) : _____
- Investigation Report
- Sample Analysis Results
- Manifests
- Notice of Registration

- Maps, Plans, Sketches
- Photographs
- Correspondence from the facility
- Other (specify) :
ODOR LOG
- Lab Analysis

Attachment 1

Blue Ridge Landfill

RN #102610102

Investigation #1337795

First Survey Route Map

May 26, 2016



Yellow : first survey route
Red Line: second survey route

Investigation Type: FIAIRODOR
Air Account NO: FG0536E
Attachment: 1. First Survey Route
Page: 1 of 1

Attachment 2

Blue Ridge Landfill

RN #102610102

Investigation #1337795

Second Survey Route Map

May 26, 2016



Yellow : first survey route

Red Line: second survey route

Yellow dot: potential places to take odor logs

Investigation Type: FIAIRODOR

Air Account NO: FG0536E

Attachment: 2. Second Survey Route

Page: 1 of 1

Attachment 3

Blue Ridge Landfill

RN #102610102

Investigation #1337795

Approximate Location of Summa Canister Samples

May 26, 2016



Google earth



Investigation Type: FIARODOR

Air Account NO: FG0536E

Attachment: 3. Approximate location of Summa samples

Page: 1 of 1

Attachment 4

Blue Ridge Landfill

RN #102610102

Investigation #1337795

Summa Canister Sample Results

May 26, 2016

Texas Commission on Environmental Quality

Laboratory and Quality Assurance Section
 P.O. Box 13087, MC-165
 Austin, Texas 78711-3087
 (512) 239-1716

Laboratory Analysis Results

Request Number: 1606001

Request Lead: Frank Martinez

Region: T12

Date Received: 6/15/2016

Project(s): NA

Facility(ies) Sampled	City	County	Facility Type
Blue Ridge Landfill	Fresno	Fort Bend	Waste Disposal

Sample(s) Received

Field ID Number: OFC-233 052616 Laboratory Sample Number: 1606001-001 Sampled by: Chris Crook
 Sampling Site: Intersection of Mchard Rd. and Manor Park Dr. Date & Time Sampled: 05/26/16 04:45:00 Valid Sample: Yes
 Comments: Canister N1670 was used to collect a 30-minute sample using OFC-233.

Field ID Number: OFC-205 052616 Laboratory Sample Number: 1606001-001FD Sampled by: Chris Crook
 Sampling Site: Intersection of Mchard Rd. and Manor Park Dr. Date & Time Sampled: 05/26/16 04:45:00 Valid Sample: Yes
 Comments: Canister N2007 was used to collect a 30-minute sample using OFC-205.

Field ID Number: Blank 052616 Laboratory Sample Number: 1606001-002TB Sampled by: Chris Crook
 Sampling Site: Date & Time Sampled: 05/26/16 04:45:00 Valid Sample: Yes
 Comments: Canister N0652 was used as trip blank.
 Requested Laboratory Procedure(s):

Analysis: AP001VOC

Determination of VOCs in Canisters by GC/MS Using Modified Method TO-15

Please note that this analytical technique is not capable of measuring all compounds which might have adverse health effects. For questions on the analytical procedures please contact the laboratory manager at (512) 239-1716. For an update on the health effects evaluation of these data, please contact the Toxicology Division at (512) 239-1795.

Analyst: Jaydeep Patel

Jaydeep Patel

Date: 06/16/16

Laboratory Manager: Frank Martinez

Frank Martinez

Date: 6/17/16

Investigation Type: FIAIRODOR

Air Account NO: FG0536E

Attachment: Summa Canister Sample Results

Page: 1 of 6

Laboratory Analysis Results
 Request Number: 1606001
 Analysis Code: AP001VOC

Note: Results are reported in units of ppbv

Lab ID	1606001-001					1606001-001FD				
Field ID	OPC-233 052616					OPC-205 052616				
Canister ID	N1670					N2007				
Compound	Conc.	SDL	SQL	Analysis Date	Flags**	Conc.	SDL	SQL	Analysis Date	Flags**
ethane	0.62	1.0	2.4	6/14/2016	J,T,D1	0.81	1.0	2.4	6/14/2016	J,T,D1
ethylene	ND	1.0	2.4	6/14/2016	T,D1	ND	1.0	2.4	6/14/2016	T,D1
acetylene	ND	1.0	2.4	6/14/2016	T,D1	ND	1.0	2.4	6/14/2016	T,D1
propane	ND	1.0	2.4	6/14/2016	T,D1	ND	1.0	2.4	6/14/2016	T,D1
propylene	ND	1.0	2.4	6/14/2016	T,D1	ND	1.0	2.4	6/14/2016	T,D1
dichlorodifluoromethane	0.48	0.40	1.2	6/14/2016	L,D1	0.49	0.40	1.2	6/14/2016	L,D1
methyl chloride	0.82	0.40	1.2	6/14/2016	L,D1	0.88	0.40	1.2	6/14/2016	L,D1
isobutane	0.13	0.46	2.4	6/14/2016	J,D1	0.15	0.46	2.4	6/14/2016	J,D1
vinyl chloride	0.01	0.34	1.2	6/14/2016	J,D1	0.01	0.34	1.2	6/14/2016	J,D1
1-butene	0.27	0.40	1.2	6/14/2016	J,D1	0.33	0.40	1.2	6/14/2016	J,D1
1,3-butadiene	0.01	0.54	1.2	6/14/2016	J,D1	ND	0.54	1.2	6/14/2016	D1
n-butane	0.14	0.40	2.4	6/14/2016	J,D1	0.16	0.40	2.4	6/14/2016	J,D1
t-2-butene	ND	0.36	1.2	6/14/2016	D1	ND	0.36	1.2	6/14/2016	D1
bromomethane	ND	0.54	1.2	6/14/2016	D1	0.02	0.54	1.2	6/14/2016	J,D1
c-2-butene	ND	0.54	1.2	6/14/2016	D1	ND	0.54	1.2	6/14/2016	D1
3-methyl-1-butene	ND	0.46	1.2	6/14/2016	D1	ND	0.46	1.2	6/14/2016	D1
isopentane	0.08	0.54	4.8	6/14/2016	J,D1	0.12	0.54	4.8	6/14/2016	J,D1
trichlorofluoromethane	0.21	0.58	1.2	6/14/2016	J,D1	0.22	0.58	1.2	6/14/2016	J,D1
1-pentene	ND	0.54	1.2	6/14/2016	D1	ND	0.54	1.2	6/14/2016	D1
n-pentane	0.05	0.54	4.8	6/14/2016	J,D1	0.07	0.54	4.8	6/14/2016	J,D1
isoprene	ND	0.54	1.2	6/14/2016	D1	0.03	0.54	1.2	6/14/2016	J,D1
t-2-pentene	ND	0.54	2.4	6/14/2016	D1	ND	0.54	2.4	6/14/2016	D1
1,1-dichloroethylene	ND	0.36	1.2	6/14/2016	D1	ND	0.36	1.2	6/14/2016	D1
c-2-pentene	ND	0.50	2.4	6/14/2016	D1	ND	0.50	2.4	6/14/2016	D1
methylene chloride	0.04	0.28	1.2	6/14/2016	J,D1	0.05	0.28	1.2	6/14/2016	J,D1
2-methyl-2-butene	ND	0.46	1.2	6/14/2016	D1	ND	0.46	1.2	6/14/2016	D1
2,2-dimethylbutane	ND	0.42	1.2	6/14/2016	D1	ND	0.42	1.2	6/14/2016	D1
cyclopentene	ND	0.40	1.2	6/14/2016	D1	ND	0.40	1.2	6/14/2016	D1
4-methyl-1-pentene	ND	0.44	2.4	6/14/2016	D1	ND	0.44	2.4	6/14/2016	D1
1,1-dichloroethane	ND	0.38	1.2	6/14/2016	D1	ND	0.38	1.2	6/14/2016	D1
cyclopentane	ND	0.54	1.2	6/14/2016	D1	ND	0.54	1.2	6/14/2016	D1
2,3-dimethylbutane	ND	0.56	2.4	6/14/2016	D1	ND	0.56	2.4	6/14/2016	D1
2-methylpentane	0.01	0.54	1.2	6/14/2016	J,D1	ND	0.54	1.2	6/14/2016	D1
3-methylpentane	ND	0.46	1.2	6/14/2016	D1	ND	0.46	1.2	6/14/2016	D1
2-methyl-1-pentene + 1-hexene	ND	0.40	4.8	6/14/2016	D1	ND	0.40	4.8	6/14/2016	D1
n-hexane	ND	0.40	2.4	6/14/2016	D1	ND	0.40	2.4	6/14/2016	D1
chloroform	ND	0.42	1.2	6/14/2016	D1	ND	0.42	1.2	6/14/2016	D1
t-2-hexene	ND	0.54	2.4	6/14/2016	D1	ND	0.54	2.4	6/14/2016	D1
c-2-hexene	ND	0.54	2.4	6/14/2016	D1	ND	0.54	2.4	6/14/2016	D1
1,2-dichloroethane	ND	0.54	1.2	6/14/2016	D1	ND	0.54	1.2	6/14/2016	D1
methylcyclopentane	ND	0.54	2.4	6/14/2016	D1	ND	0.54	2.4	6/14/2016	D1
2,4-dimethylpentane	ND	0.54	2.4	6/14/2016	D1	ND	0.54	2.4	6/14/2016	D1
1,1,1-trichloroethane	ND	0.52	1.2	6/14/2016	D1	ND	0.52	1.2	6/14/2016	D1
benzene	ND	0.54	1.2	6/14/2016	D1	0.19	0.54	1.2	6/14/2016	J,D1
carbon tetrachloride	0.09	0.54	1.2	6/14/2016	J,D1	ND	0.54	1.2	6/14/2016	D1
cyclohexane	ND	0.48	1.2	6/14/2016	D1	ND	0.48	1.2	6/14/2016	D1
2-methylhexane	ND	0.54	1.2	6/14/2016	D1	ND	0.54	1.2	6/14/2016	D1
2,3-dimethylpentane	ND	0.52	1.2	6/14/2016	D1	ND	0.52	1.2	6/14/2016	D1

Laboratory Analysis Results
Request Number: 1606001
Analysis Code: AP001VOC

investigation Type: FLAVORODOR
 Air Account NO: FG0536E
 Attachment: Summa Canister Sample results
 Page: 3 of 6

Note: Results are reported in units of ppbv

Lab ID	1606001-002TB									
Field ID	Blank 052616									
Canister ID	N0652									
Compound	Conc.	SDL	SQL	Analysis Date	Flags**	Conc.	SDL	SQL	Analysis Date	Flags**
ethane	ND	0.50	1.2	6/13/2016	T					
ethylene	ND	0.50	1.2	6/13/2016	T					
acetylene	ND	0.50	1.2	6/13/2016	T					
propane	ND	0.50	1.2	6/13/2016	T					
propylene	ND	0.50	1.2	6/13/2016	T					
dichlorodifluoromethane	ND	0.20	0.60	6/13/2016						
methyl chloride	0.02	0.20	0.60	6/13/2016	J					
isobutane	0.05	0.23	1.2	6/13/2016	J					
vinyl chloride	ND	0.17	0.60	6/13/2016						
1-butene	0.11	0.20	0.60	6/13/2016	J					
1,3-butadiene	ND	0.27	0.60	6/13/2016						
n-butane	0.05	0.20	1.2	6/13/2016	J					
t-2-butene	ND	0.18	0.60	6/13/2016						
bromomethane	ND	0.27	0.60	6/13/2016						
c-2-butene	ND	0.27	0.60	6/13/2016						
3-methyl-1-butene	ND	0.23	0.60	6/13/2016						
isopentane	ND	0.27	2.4	6/13/2016						
trichlorofluoromethane	0.01	0.29	0.60	6/13/2016	J					
1-pentene	ND	0.27	0.60	6/13/2016						
n-pentane	0.04	0.27	2.4	6/13/2016	J					
isoprene	ND	0.27	0.60	6/13/2016						
t-2-pentene	ND	0.27	1.2	6/13/2016						
1,1-dichloroethylene	ND	0.18	0.60	6/13/2016						
c-2-pentene	ND	0.25	1.2	6/13/2016						
methylene chloride	ND	0.14	0.60	6/13/2016						
2-methyl-2-butene	ND	0.23	0.60	6/13/2016						
2,2-dimethylbutane	ND	0.21	0.60	6/13/2016						
cyclopentene	ND	0.20	0.60	6/13/2016						
4-methyl-1-pentene	ND	0.22	1.2	6/13/2016						
1,1-dichloroethane	ND	0.19	0.60	6/13/2016						
cyclopentane	ND	0.27	0.60	6/13/2016						
2,3-dimethylbutane	ND	0.28	1.2	6/13/2016						
2-methylpentane	ND	0.27	0.60	6/13/2016						
3-methylpentane	ND	0.23	0.60	6/13/2016						
2-methyl-1-pentene + 1-hexene	ND	0.20	2.4	6/13/2016						
n-hexane	ND	0.20	1.2	6/13/2016						
chloroform	ND	0.21	0.60	6/13/2016						
t-2-hexene	ND	0.27	1.2	6/13/2016						
c-2-hexene	ND	0.27	1.2	6/13/2016						
1,2-dichloroethane	ND	0.27	0.60	6/13/2016						
methylcyclopentane	ND	0.27	1.2	6/13/2016						
2,4-dimethylpentane	ND	0.27	1.2	6/13/2016						
1,1,1-trichloroethane	ND	0.26	0.60	6/13/2016						
benzene	ND	0.27	0.60	6/13/2016						
carbon tetrachloride	ND	0.27	0.60	6/13/2016						
cyclohexane	ND	0.24	0.60	6/13/2016						
2-methylhexane	ND	0.27	0.60	6/13/2016						
2,3-dimethylpentane	ND	0.26	0.60	6/13/2016						

Laboratory Analysis Results

Request Number: 1606001

Analysis Code: AP001VOC

Note: Results are reported in units of ppbv

Lab ID	1606001-001					1606001-001FD				
	Conc.	SDL	SQL	Analysis Date	Flags**	Conc.	SDL	SQL	Analysis Date	Flags**
3-methylhexane	0.02	0.40	1.2	6/14/2016	J,D1	0.02	0.40	1.2	6/14/2016	J,D1
1,2-dichloropropane	ND	0.34	1.2	6/14/2016	D1	ND	0.34	1.2	6/14/2016	D1
trichloroethylene	ND	0.58	1.2	6/14/2016	D1	ND	0.58	1.2	6/14/2016	D1
2,2,4-trimethylpentane	ND	0.48	1.2	6/14/2016	D1	0.02	0.48	1.2	6/14/2016	J,D1
2-chloropentane	ND	0.54	1.2	6/14/2016	D1	ND	0.54	1.2	6/14/2016	D1
n-heptane	0.02	0.50	2.4	6/14/2016	J,D1	0.02	0.50	2.4	6/14/2016	J,D1
o-1,3-dichloropropylene	ND	0.40	1.2	6/14/2016	D1	ND	0.40	1.2	6/14/2016	D1
methylcyclohexane	ND	0.52	2.4	6/14/2016	D1	0.01	0.52	2.4	6/14/2016	J,D1
t-1,3-dichloropropylene	ND	0.40	1.2	6/14/2016	D1	ND	0.40	1.2	6/14/2016	D1
1,1,2-trichloroethane	ND	0.42	1.2	6/14/2016	D1	ND	0.42	1.2	6/14/2016	D1
2,3,4-trimethylpentane	ND	0.48	2.4	6/14/2016	D1	ND	0.48	2.4	6/14/2016	D1
toluene	0.10	0.54	1.2	6/14/2016	J,D1	0.13	0.54	1.2	6/14/2016	J,D1
2-methylheptane	ND	0.40	2.4	6/14/2016	D1	ND	0.40	2.4	6/14/2016	D1
3-methylheptane	ND	0.46	2.4	6/14/2016	D1	ND	0.46	2.4	6/14/2016	D1
1,2-dibromoethane	ND	0.40	1.2	6/14/2016	D1	ND	0.40	1.2	6/14/2016	D1
n-octane	0.01	0.38	2.4	6/14/2016	J,D1	0.01	0.38	2.4	6/14/2016	J,D1
tetrachloroethylene	ND	0.48	1.2	6/14/2016	D1	ND	0.48	1.2	6/14/2016	D1
chlorobenzene	ND	0.54	1.2	6/14/2016	D1	ND	0.54	1.2	6/14/2016	D1
ethylbenzene	0.03	0.54	2.4	6/14/2016	J,D1	0.03	0.54	2.4	6/14/2016	J,D1
m & p-xylene	0.05	0.54	4.8	6/14/2016	J,D1	0.05	0.54	4.8	6/14/2016	J,D1
styrene	ND	0.54	2.4	6/14/2016	D1	0.01	0.54	2.4	6/14/2016	J,D1
1,1,2,2-tetrachloroethane	ND	0.40	1.2	6/14/2016	D1	ND	0.40	1.2	6/14/2016	D1
o-xylene	0.01	0.54	2.4	6/14/2016	J,D1	0.02	0.54	2.4	6/14/2016	J,D1
n-nonane	ND	0.44	1.2	6/14/2016	D1	ND	0.44	1.2	6/14/2016	D1
isopropylbenzene	ND	0.48	1.2	6/14/2016	D1	ND	0.48	1.2	6/14/2016	D1
n-propylbenzene	ND	0.54	1.2	6/14/2016	D1	ND	0.54	1.2	6/14/2016	D1
m-ethyltoluene	ND	0.22	1.2	6/14/2016	D1	ND	0.22	1.2	6/14/2016	D1
p-ethyltoluene	ND	0.32	2.4	6/14/2016	D1	ND	0.32	2.4	6/14/2016	D1
1,3,5-trimethylbenzene	ND	0.50	2.4	6/14/2016	D1	ND	0.50	2.4	6/14/2016	D1
o-ethyltoluene	ND	0.26	2.4	6/14/2016	D1	ND	0.26	2.4	6/14/2016	D1
1,2,4-trimethylbenzene	ND	0.54	1.2	6/14/2016	D1	ND	0.54	1.2	6/14/2016	D1
n-decane	0.01	0.54	2.4	6/14/2016	J,D1	0.01	0.54	2.4	6/14/2016	J,D1
1,2,3-trimethylbenzene	ND	0.54	1.2	6/14/2016	D1	ND	0.54	1.2	6/14/2016	D1
m-diethylbenzene	ND	0.54	2.4	6/14/2016	D1	ND	0.54	2.4	6/14/2016	D1
p-diethylbenzene	ND	0.54	1.2	6/14/2016	D1	ND	0.54	1.2	6/14/2016	D1
n-undecane	0.01	0.54	2.4	6/14/2016	J,D1	ND	0.54	2.4	6/14/2016	D1

Investigation Type: FIA/RODOR
 Air Account NO: FG0536E
 Attachment: Summa Canister Sample Results
 Page: 4 of 6

Laboratory Analysis Results

Request Number: 1606001

Analysis Code: AP001VOC

Note: Results are reported in units of ppbv

Lab ID	1606001-002TB					Conc.	SDL	SQL	Analysis Date	Flags**
	Compound	Conc.	SDL	SQL	Analysis Date					
3-methylhexane	ND	0.20	0.60	6/13/2016						
1,2-dichloropropane	ND	0.17	0.60	6/13/2016						
trichloroethylene	ND	0.29	0.60	6/13/2016						
2,2,4-trimethylpentane	ND	0.24	0.60	6/13/2016						
2-chloropentane	ND	0.27	0.60	6/13/2016						
n-heptane	ND	0.25	1.2	6/13/2016						
c-1,3-dichloropropylene	ND	0.20	0.60	6/13/2016						
methylcyclohexane	ND	0.26	1.2	6/13/2016						
t-1,3-dichloropropylene	ND	0.20	0.60	6/13/2016						
1,1,2-trichloroethane	ND	0.21	0.60	6/13/2016						
2,3,4-trimethylpentane	ND	0.24	1.2	6/13/2016						
toluene	0.05	0.27	0.60	6/13/2016	J					
2-methylheptane	ND	0.20	1.2	6/13/2016						
3-methylheptane	ND	0.23	1.2	6/13/2016						
1,2-dibromoethane	ND	0.20	0.60	6/13/2016						
n-octane	ND	0.19	1.2	6/13/2016						
tetrachloroethylene	ND	0.24	0.60	6/13/2016						
chlorobenzene	ND	0.27	0.60	6/13/2016						
ethylbenzene	ND	0.27	1.2	6/13/2016						
m & p-xylene	0.01	0.27	2.4	6/13/2016	J					
styrene	ND	0.27	1.2	6/13/2016						
1,1,2,2-tetrachloroethane	ND	0.20	0.60	6/13/2016						
o-xylene	ND	0.27	1.2	6/13/2016						
n-nonane	ND	0.22	0.60	6/13/2016						
isopropylbenzene	ND	0.24	0.60	6/13/2016						
n-propylbenzene	ND	0.27	0.60	6/13/2016						
m-ethyltoluene	ND	0.11	0.60	6/13/2016						
p-ethyltoluene	ND	0.16	1.2	6/13/2016						
1,3,5-trimethylbenzene	ND	0.25	1.2	6/13/2016						
o-ethyltoluene	ND	0.13	1.2	6/13/2016						
1,2,4-trimethylbenzene	ND	0.27	0.60	6/13/2016						
n-decane	ND	0.27	1.2	6/13/2016						
1,2,3-trimethylbenzene	ND	0.27	0.60	6/13/2016						
m-diethylbenzene	ND	0.27	1.2	6/13/2016						
p-diethylbenzene	ND	0.27	0.60	6/13/2016						
n-undecane	ND	0.27	1.2	6/13/2016						

Investigation Type: FIAIR O DOR

Air Account NO: FG0536E

Attachment: Summer Canister Sample Results

Page: 5 of 6

Laboratory Analysis Results

Request Number: 1606001

Analysis Code: AP001VOC

Qualifier Notes:

- ND - not detected
- NQ - concentration can not be quantified due to possible interferences or coelutions.
- SDL - Sample Detection Limit (Limit of Detection adjusted for dilutions).
- SQL - Sample Quantitation Limit (Limit of Quantitation adjusted for dilution).
- INV - Invalid.
- J - Reported concentration is below SDL.
- L - Reported concentration is at or above the SDL and is below the lower limit of quantitation.
- E - Reported concentration exceeds the upper limit of instrument calibration.
- M - Result modified from previous result.
- T - Data was not confirmed by a confirmational analysis. Compound and/or results is tentatively identified.
- F - Established acceptance criteria was not met due to factors outside the laboratory's control.
- H - Not all associated hold time specifications were met. Data may be biased.
- C - Sample received with a missing or broken custody seal.
- R - Sample received with a missing or incomplete chain of custody.
- I - Sample received without a legible unique identifier.
- G - Sample received in an improper container.
- U - Sample received with insufficient sample volume.
- W - Sample received with insufficient preservation.

Quality control notes for AP001VOC samples.

D1-Sample concentration was calculated using a dilution factor of 4.01.

Investigation Type: FIAIRODOR
Air Account NO: FG 0536E
Attachment: Summa Canister Sample Results
Page: 6 of 6

TCEQ laboratory customer support may be reached at Frank.Martinez@tceq.texas.gov

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Attachment 5

Blue Ridge Landfill

RN #102610102

Investigation #1337795

Odor Log

May 26, 2016

Investigator's Odor Intensity Time Log

Date of Investigation: 5/26/2016 Start Time 5:00 A.M.
 Name and Address of Alleged Source: Blue Ridge Landfill
 Investigator's Name: Print: Chris Crook Sign: Chris Crook

Minutes	Odor Intensity VL, L, M, S, VS
1 min	VL
2	NO ODOR
3	NO ODOR
4	VL
5	VL
6	VL
7	VL
8	NO ODOR
9	NO ODOR
10	NO ODOR
11	NO ODOR
12	VL
13	NO ODOR
14	NO ODOR
15	NO ODOR
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	

Minutes	Odor Intensity VL, L, M, S, VS
31 min	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	

Offensiveness: Highly Offensive Unpleasant Not Unpleasant
 Weighted Average Intensity For:

	VS	S	M	L	VL	No Odor
1 Min					✓	
10 Min					✓	
1 Hour						

Investigation Type: FIARODOR

Air Account NO: FG0536E

Attachment: ODOR LOG