AIR CP_10261012_CP_20160818_INVESTIGATION_1331231_ **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 # 1331231

Incident Numbers

232554

Investigator:

JUSTIN MAYWORN

Site Classification MAJOR SOURCE

Conducted: 05/04/2016 -- 08/18/2016

NAIC Code: 562212

SIC Code: 4953

SIC Code: 1521

Program(s):

AIR OPERATING PERMITS

Investigation Type: Compliance Investigation

Location: LOCATED ON 2200 FM 521

Additional ID(s):

FG0536E

1472

Address: 2200 FM 521 RD,

FRESNO, TX, 77545

Local Unit: REGION 12 - HOUSTON

Activity Type(s):

AIR MNSR - MINOR SOURCE NEW

SOURCE REVIEW

AIRCOMPL - AIR CMPL - AIR

COMPLAINT INV

Principal(s):

Role

Name

RESPONDENT

BLUE RIDGE LANDFILL TX LP

Contact(s):

Role

Title

Name

Phone

REGULATED **ENTITY**

OPERATIONS MANAGER

MR MATT **MONTAGNA** Work

(713) 676-7664

CONTACT

Other Staff Member(s):

Role

Name

Investigator

WILLIAM JORN

Supervisor **QA Reviewer** JOSEPH DOBY ROBERT MCLEOD

QA Reviewer OA Reviewer CORBETT BRINLY JOSEPH DOBY

OA Reviewer

GABRIELLE LAMOREAUX

Investigator

GARY ACKERMAN

Investigator

Investigator

GABRIELLE LAMOREAUX **GREGORY CROOK**

Investigator Investigator ANDREW EVANS ALEJANDRA DE LOS SANTOS

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Associated Check List

Checklist Name

Unit Name

AIR GENERIC INVESTIGATION (10 ITEMS)

Site Wide

AIR INVESTIGATION - EQUIPMENT

Site Wide

MONITORING AND SAMPLING revised 06/2013

Investigation Comments:

INTRODUCTION Introduction

Between the dates of May 2 and May 6, 2016 the TCEQ Region 12 office received seventy-six (76) complaints (assigned to incident #232554) regarding a strong odor described as having a chemical, garbage, landfill, seafood, rotten egg, chemical, rot, natural gas, sewage, or sulfurous character. The source of the odor was alleged to emanate from either Akzo Nobel Surface Chemistry or Blue Ridge Landfill by the complainants. The odors were reported to occur between the hours of 2000-1000 several times per week. Several complainants claimed to be suffering from health effects including headaches, difficulty breathing, sleep loss, burning eyes, and nausea due to the odor.

The first complainant was contacted by Justin Mayworn at 1001 on May 3, 2016.

The GPS coordinates referenced in this report (odor log locations) are uncorrected field data that were collected with a recreational GPS receiver for informational purposes only.

Daily Summary

Date of investigations: May 4 and 5, 2016

Name of investigators: Justin Mayworn, Gabrielle Lamoreaux, Jay Evans, Alejandra De Los Santos

Time of arrival: 0536 (May 4), and 0552 (May 5)

Description of the surrounding land use: Residential and light industrial

Description of the terrain: Flat with sporadic forest

Investigation Summary

Meteorological conditions May 2, 2016 (alleged incident date)

Cloud Cover: Partly cloudy Wind direction: North Wind Speed: 0-20 mph

Temperature: 68 degrees Fahrenheit

Precipitation: 0.07 in

Source of Meteorological Conditions: Weather Underground (KAXH)

Meteorological conditions May 3, 2016 (alleged incident date)

Cloud Cover: Partly cloudy Wind direction: Northwest Wind Speed: 0-12 mph

Temperature: 68 degrees Fahrenheit

Precipitation: o in

Source of Meteorological Conditions: Weather Underground (KAXH)

Meteorological conditions May 4, 2016 (alleged incident date and investigation date)

Cloud Cover: Partly cloudy Wind direction: Northwest Wind Speed: 0-13 mph

Temperature: 66 degrees Fahrenheit

Precipitation: o in

Source of Meteorological Conditions: Weather Underground (KAXH)

Meteorological conditions May 5, 2016 (alleged incident date and investigation date)

Cloud Cover: Partly cloudy Wind direction: Northwest

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Wind Speed: 0-13 mph

Temperature: 70 degrees Fahrenheit

Precipitation: o in

Source of Meteorological Conditions: Weather Underground (KAXH)

Meteorological conditions May 6, 2016 (alleged incident date)

Cloud Cover: Partly cloudy Wind direction: East

Wind Speed: o-8 mph

Temperature: 68 degrees Fahrenheit

Precipitation: o in

Source of Meteorological Conditions: Weather Underground (KAXH)

Investigation Narrative

On May 4, 2016, Environmental Investigators Justin Mayworn, Gabrielle Lamoreaux, Alejandra De Los Santos, and Jay Evans separated into two teams (Team 1: Justin Mayworn and Jay Evans, Team 2: Gabrielle Lamoreaux and Alejandra De Los Santos) to survey the area for odors.

A map of the source location and odor log locations is included in Attachment 1.

Team 1 May 4, 2016

Justin Mayworn and Jay Evans were equipped with a MultiRAE, five Summa canisters (one trip blank and four sample canisters), and a Kestrel weather meter.

At 0536, Team 1 arrived at a location near a complainant's home located in Green Valley Estates (location 1, general vicinity of 29°35'13.80"N, 95°27'32.55"W), to conduct an odor survey and to assess odor frequency, intensity, duration, and offensiveness (FIDO). A 15 minute odor log was taken (see attachment 2, page 1). No odor was detected. The wind was blowing from the northwest toward the southeast at 5-10 mph.

At 0605, Team 1 arrived at Biscayne Lake Drive (location 2, 29°34'33.01"N, 95°25'48.55"W), to conduct an odor survey and to assess odor FIDO. A landfill gas/honeysuckle odor was detected and a 30 minute odor log was taken (see attachment 2, page 2). The one minute and 10 minute weighted averages were each very light intensity. The investigators characterized the odor as highly offensive based on experience, training, and the examples on the TCEQ FIDO chart. The wind was blowing from the northwest toward the southeast at 5-10 mph.

At 0643, Team 1 arrived at the intersection of Broadway Street and Southlake Boulevard (location 3, 29° 33'18.53"N, 95°25'51.49"W), to conduct an odor survey and to assess odor FIDO. A landfill gas/honeysuckle odor was detected and a 34 minute odor log was taken (see attachment 2, page 3). The one minute and 10 minute weighted averages were each strong intensity. The investigators characterized the odor as highly offensive based on experience, training, and the examples on the TCEQ FIDO chart. The wind was blowing from the northwest toward the southeast at 5-10 mph.

At 0716, Team 1 arrived at the intersection of Timber Ridge Drive and Leafwood Lane (location 4, 29°33'30.41"N, 95°26'23.98"W) to conduct an odor survey and to assess odor FIDO. A landfill gas/honeysuckle odor was detected and a 93 minute odor survey was conducted and documented on a 60 minute odor log followed by a 33 minute odor log (see attachment 2, pages 4 and 5). For the 60 minute log, the one minute and 10 minute weighted averages were very strong intensity; the one hour weighted average was strong intensity. During the 33 minute log, the one and 10 minute weighted averages were strong. Two Summa canister samples were collected simultaneously (canister IDs N1061 and N0528). The samples were taken using the orifice flow controller for a duration of 30 minutes. The investigators characterized the odor as highly offensive based on experience, training, and the examples on the TCEQ FIDO chart. During this portion of the odor observation, Mr. Mayworn experienced nausea due to the odor. The wind was blowing from the northwest toward the southeast at 5-10 mph.

At 0948, Team 1 arrived at Blue Ridge Landfill to survey the odors on-site. The investigators met with Mr. Matt Montagna (Landfill Operations Manager) and were taken on a full site tour. During the tour, the investigators experienced the same landfill gas/honeysuckle odor that had been recorded earlier that morning in multiple odor

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logs. The odor was most intense within approximately 50 meters of the working face. During the odor observations made earlier in the day, it was noted that a honeysuckle odor often accompanied the landfill gas odor experienced by the investigators. The investigators questioned Mr. Montagna about this, who replied that the honeysuckle odor is a deodorizing agent used by the landfill to suppress odors, and that if the honeysuckle odor is detected off-site, it is likely that the landfill is the source. After confirming that the odor generated on-site was consistent with the odor reported by the complainants, the investigators departed the site at 1017.

Team 2 May 4, 2016

Gabrielle Lamoreaux and Alejandra De Los Santos were equipped with five Summa canisters (one trip blank and four sample canisters) to aid in their observations.

At 0536, Team 2 arrived at the intersection of Shadow Creek Parkway and Reflection Bay (location 6, 29°34'39.78"N, 95°24'24.19"W) to conduct an odor survey and to assess odor FIDO. A sewage/sulfur odor was detected and three odor logs were taken: A 60 minute odor log by Ms. De Los Santos and a 22 minute and 11 minute log taken by Ms. Lamoreaux (see attachment 2, pages 7, 8, and 9). For the 60 minute odor log, the one minute weighted average was very light intensity, the 10 minute weighted average was strong intensity, and one hour weighted average was light. For the 22 minute odor log, the one minute weighted average was strong, and the 10 minute weighted average was light. For the 11 minute odor log, the one minute weighted average was strong and the 10 minute weighted average very light. The investigators characterized the odor as highly offensive based on experience, training, and the examples on the TCEQ FIDO chart. Two Summa canister samples were taken simultaneously at this location (canister IDs No435 and N9113) using an orifice flow controller for a duration of 30 minutes. The winds were 0-10 mph and variable.

At 0623, Ms. Lamoreaux arrived at the sewer lift station located on Biscayne Bay Drive (location 7, 29° 34'22.70"N, 95°25'20.57"W) to conduct an odor survey and to assess odor FIDO. A 15 minute odor log was taken (see attachment 2, page 10). No odor was detected.

At 0713, Team 2 arrived at the intersection of Shadow Creek Ranch Parkway and Kirby Drive (location 8, 29°34'41.24"N, 95°23'58.78"W) to conduct an odor survey and to assess odor FIDO. An amine/chemically fishy odor was detected. A 70 minute odor survey was conducted and documented on a 60 minute log followed by a 10 minute log. A 39 minute odor log was simultaneously taken by Ms. De Los Santos. For the 60 minute log, the one minute weighted average was strong, the 10 minute weighted average was light, and the one hour weighted average was very light intensity. For the 10 minute log, the one minute weighted average was very light; there was not sufficient odor detected to make a 10 minute weighted average determination. For the 39 minute log, the one minute and 10 minute weighted averages were each very strong intensity (see attachment 2, pages 11, 12, and 13). The investigators characterized the odor as highly offensive based on experience, training, and the examples on the TCEQ FIDO chart. Two Summa canister samples were taken simultaneously at this location (canister IDs N1624 and N0560), utilizing the orifice flow controller to take 30 minute samples. The wind was blowing from the northwest toward the southeast at 0-5 mph.

At 0842, Team 2 arrived at West Road (location 9, 29°34'58.44"N, 95°26'25.31"W) to conduct an odor survey and to assess odor FIDO. A garbage and laundry detergent odor was detected. Two odor logs were taken simultaneously, one with a duration of 44 minutes and the other with a duration of 53 minutes. For the 44 minute odor log the one minute weighted average was very light intensity, and the 10 minute weighted average was light (see attachment 2, pages 14 and 15). For the 53 minute log the one minute weighted average was moderate, and the 10 minute weighted average was very light. The investigators characterized the odor as offensive based on experience, training, and the examples on the TCEQ FIDO chart. The wind was blowing from the northwest toward the southeast at 0-5 mph.

At 1000, Team 2 arrived at Antioch Drive (location 10, 29°35'35.58"N, 95°26'45.64"W) to conduct an odor survey and to assess odor FIDO. A garbage odor was detected. Two odor logs were taken simultaneously with a duration of three minutes each. For the first odor log, the one minute weighted average was very light intensity. For the other odor log, the one minute weighted average was very strong. Because of truck traffic, the investigators moved to another location (29°35'53.16"N, 95°26'45.02"W) and took an additional 10 minute odor log. For the 10 minute log, no odor was detected (see attachment 2, pages 16 and 17). The investigators characterized the odor as offensive based on experience, training, and the examples on the TCEQ FIDO chart. The investigators believe that the brief detection of garbage odor was due to passing garbage trucks entering Lone Star Recycling at this

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location. No other odor was detected at this location. The wind was blowing from the northwest toward the southeast at 0-5 mph.

At 1020, Team 2 arrived at Hooper Road (location 11, 29°35'20.43"N, 95°24'16.89"W) to conduct an odor survey and to assess odor FIDO. An amine/glue/chemically fishy odor was detected. Two odor logs were taken simultaneously, one with a duration of 55 minutes, and the second with a duration of 26 minutes. For the 55 minute log, the one and 10 minute weighted averages were each very strong intensity. For the 26 minute log, the one and 10 minute weighted averages were each strong intensity (see attachment 2, pages 18 and 19). The investigators characterized the odor as highly offensive based on experience, training, and the examples on the TCEQ FIDO chart. Two Summa canister samples were taken simultaneously at this location (canister ID's No621 and N1068), utilizing the orifice flow controller for a duration of 30 minutes. The wind was blowing from the northwest toward the southeast at 0-5 mph. The investigators visited sites identified as Syntech Chemicals and Brenntag Southwest which were upwind of the location of the detected odors. Details regarding the onsite visits to these facilities are discussed below.

At 1045, all four investigators met to discuss their findings and plan their activities for the remainder of the day. Alejandra De Los Santos and Jay Evans returned to TCEQ Region 12 headquarters, while Justin Mayworn and Gabrielle Lamoreaux continued the investigation.

At 1115, the investigators arrived at South Freeway (location 5, 29°35'36.81"N, 95°23'7.13"W) to conduct an odor survey and to assess odor FIDO. A 15 minute odor log was taken (attachment 2, page 6). No odor was detected. The wind was blowing from the northwest toward the southeast at 0-5 mph.

At 1214, the investigators arrived at a complainant's home to examine the property for any material that could be collected by a tape lift. This complainant alleged that a clear film had accumulated on their property and believed the film was being caused by the same source as the odor. No films or residues were discovered on the property. No tape lift was collected.

At 1246, the investigators arrived at Akzo Nobel Surface Chemistry located at 15200 Almeda Rd, Houston, TX 77053. The investigators met with Mr. Sergio Sepulveda (Sr. Environmental Engineer) and requested records of any maintenance, startup, and shutdown (MSS) activities, upsets, and reportable events for the period of February 1, 2016 to May 4, 2016. These records were provided to Mr. Mayworn on May 9, 2016. The records did not indicate that there were any events that would have produced the odor described by the complainants. While on site, investigators noted a faint laundry detergent/soap odor having a "not unpleasant" character based on the investigators' experience and training.

At 1320, the investigators arrived at Syntech Chemicals Inc. (RN100664994) located at 14822 Hooper Rd, Houston, TX 77047. This site was investigated due to a fishy/chemical/amine odor detected in this vicinity during the odor survey conducted at Hooper Road, approximately 68 meters from the facility's fence line. This location is approximately one to two miles northeast of the location in Shadow Creek Ranch having the most complaints. Upon arriving, the investigators met and asked Mr. Christiaan Stevens (Owner) about what the company manufactures, its process, and its permits. Syntech is a small chemical manufacturing facility that currently produces fuel additive. The investigators reviewed the site's permits and collected copies of the material safety data sheets for the materials used in the production of its fuel additive. Records of upsets, MSS activities, or reportable events were requested for the period of February 1, 2016 to May 4, 2016. No events were reported for the requested period. Afterward, a complete site tour was conducted. During the tour, the investigators noted that the fishy, amine odor appeared to be originating from this site. This odor was not consistent with the descriptions of odors reported by the complainants. The permits by rule (PBRs) claimed by the site were noted and may be viewed in the "Facility Authorization Narrative" section of this report.

At 1405, the investigators arrived at Brenntag Southwest (RN100544675) located at 14826 Hooper Rd, Houston, TX 77047. Brenntag Southwest is a chemical supply and shipping company located directly adjacent to Syntech. This is a distribution site where chemicals are received, repackaged, and shipped. Chemicals are not produced or altered on-site. The investigators met with Mr. Brian Unruh (Operations Manager Houston-Pasadena) upon arrival. The investigators reviewed the site's new source review (NSR) permits and collected records of all chemicals and materials that are handled on-site. Afterward, the investigators conducted a full site tour. The investigators did not detect any odors coming from the site; therefore, no odor log was recorded.

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During this day of the investigation, Environmental Investigator Mr. Chris Crook conducted odor surveys upwind of Blue Ridge Landfill, while Justin Mayworn and Jay Evans conducted odor surveys downwind of Blue Ridge Landfill.

At 0550, the investigators arrived at Mountain Sage Drive (location 13, 29°33′51.00″N, 95°26′15.96″W) to conduct an odor survey and to assess odor FIDO. A landfill gas/honeysuckle odor was detected. Two 30 minute odor logs were taken simultaneously by both investigators. For both odor logs the one minute and 10 minute weighted averages were very strong intensity (see attachment 2, pages 20 and 21). The investigators characterized the odor as highly offensive based on experience, training, and the examples on the TCEQ FIDO chart. At the same time, Chris Crook conducted a 30 minute odor survey upwind at the intersection of West Road and McHard Road (location 12, 29°34′55.66″N, 95°26′26.00″W) north of Blue Ridge landfill. No odor was detected at location 12 (see attachment 2, page 22). The wind was blowing from the northwest toward the southeast at 0-10 mph at both locations. At 0613 Mr. Matt Montagna of Blue Ridge landfill (Landfill Operations Manager) arrived at location 13 while conducting his own odor surveys. Mr. Montagna stopped to chat with the investigators for several minutes. The investigators asked Mr. Montagna if he was able to identify the odor the investigators were experiencing at that site, and where he thought it may be coming from. Mr. Montagna replied that the odor smelled like the odor typically emitted by the landfill, and that cover dirt on the working face of the landfill had recently been overturned or removed to receive garbage for that day.

At o646, the investigators arrived at Lilac Breeze Lane (location 14, 29°34'12.81"N, 95°25'57.57"W) to conduct an odor survey and to assess odor FIDO. A strong landfill gas/honeysuckle odor was detected. A 32 minute and a 30 minute odor log were taken simultaneously by both investigators (see attachment 2, pages 26 and 27). For both odor logs the one minute and 10 minute weighted averages were strong intensity. The investigators characterized the odor as highly offensive based on experience, training, and the examples on the TCEQ FIDO chart. At the same time, Chris Crook remained at location 12 and conducted a 30 minute odor survey (see attachment 2, page 23). No odor was detected at location 12. The wind was blowing from the northwest toward the southeast at 0-10 mph at both locations.

At 0731, the investigators arrived at Morgan Bay Court (location 15, 29°34'2.07"N, 95°26'7.27"W) to conduct an odor survey and to assess odor FIDO. A landfill gas/honeysuckle odor was detected and a 12 minute odor log was taken (see attachment 2, page 28). The one minute weighted average was very strong and the 10 minute weighted average was moderate. The investigators characterized the odor as highly offensive based on experience, training, and the examples on the TCEQ FIDO chart. At the same time, Chris Crook remained at location 12 and conducted a 30 minute odor survey (see attachment 2 page 24). No odor was detected at location 12. The wind was blowing from the northwest toward the southeast at 0-10 mph at both locations.

At 0748, the investigators arrived at Field Hollow Drive (location 16, 29°33'37.41"N, 95°26'17.22"W) to conduct an odor survey and to assess odor FIDO. A landfill gas/honeysuckle odor was detected and a 19 minute odor log was taken. The one minute and 10 minute weighted averages were very strong intensity (see attachment 2, page 29). The investigators characterized the odor as highly offensive based on experience, training, and the examples on the TCEQ FIDO chart. At the same time, Chris Crook remained at location 12 and continued the 30 minute odor survey he began at 0733 (see attachment 2 page 24). No odor was detected at location 12. The wind was blowing from the northwest toward the southeast at 0-10 mph at both locations.

At 0810, the investigators arrived at Mountain Sage Drive (location 17, 29°33'56.53"N, 95°26'13.67"W) to conduct an odor survey and to assess odor FIDO. A landfill gas/honeysuckle odor was detected. Two 24 minute odor logs were taken simultaneously by both investigators. For both odor logs, the one minute and 10 minute weighted averages were very strong intensity (see attachment 2, pages 30 and 31). The investigators characterized the odor as highly offensive based on experience, training, and the examples on the TCEQ FIDO chart. At the same time, Mr. Crook remained at location 12 and conducted a 30 minute odor survey (see attachment 2 page 25). No odor was detected at location 12. The wind was blowing from the northwest toward the southeast at 0-10 mph at both locations.

At 0907, investigators Justin Mayworn, Chris Crook, Austin Jorn, and Gary Ackerman arrived at Blue Ridge Landfill to conduct an optical gas imaging camera (OGIC) survey. The investigators met with Mr. Matt Montagna (Landfill Operations Manager) who escorted the investigators during the OGIC survey. All accessible landfill gas collection well heads, the working face, the gas plant, flares, and inactive areas of the landfill were surveyed by OGIC. No fugitive emissions or volatile organic compounds (VOCs) were detected with the camera.

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In addition to the odors reported in the complaints, other odors were detected during the course of the investigation. In particular, an amine/chemically fishy odor was present in the vicinity of Sytech Chemicals Inc. and Brenntag Southwest. However, these odors were not present in areas where complainants were located, were not detected while the investigators remained within the Shadow Creek Ranch neighborhood, and were not reported by the complainants.

Additionally, during the weeks of May 23 and June 6, 2016, the TCEQ conducted a series of focused odor survey investigations in the area.

Focused odor investigation #1336503 was conducted May 23, 2016. During the investigation, a landfill gas/honeysuckle odor was detected and recorded by odor log at a strong intensity for a period of one hour. The investigators characterized the odor as highly offensive based on experience, training, and the examples on the TCEQ FIDO chart.

Focused odor investigation #1345016 was conducted May 24, 2016. During the investigation, a landfill gas/honeysuckle odor was detected and recorded by odor log at a strong intensity for a period of one hour. The investigators characterized the odor as highly offensive based on experience, training, and the examples on the TCEQ FIDO chart.

Focused odor investigation #1349609 was conducted May 25, 2016. During the investigation, a landfill gas/honeysuckle odor was detected and recorded by odor log at a very light intensity for a period of one hour. The investigators characterized the odor as highly offensive based on experience, training, and the examples on the TCEQ FIDO chart.

Focused odor investigation #1337792 was conducted June 6, 2016. During the investigation, a landfill gas/honeysuckle odor was detected and recorded at a very strong intensity for a period of one hour (see attachment 3). The investigators characterized the odor as highly offensive based on experience, training, and the examples on the TCEQ FIDO chart. This constitutes a nuisance violation as a single occurrence event under FIDO.

Complaint investigation # 1342821 was conducted June 23, 2016. During the investigation, a landfill gas/honeysuckle odor was detected and recorded at a moderate intensity for a period of ten minutes. During the investigation, TCEQ Investigator Ms. Karla Hardison experienced nausea due to landfill gas odors observed at a location downwind of the Blue Ridge Landfill. The investigators characterized the odor as highly offensive based on experience, training, and the examples on the TCEQ FIDO chart.

The landfill gas odor identified in this report and in the referenced investigations was most often observed downwind of the Blue Ridge Landfill. This odor was consistently accompanied by the honeysuckle odor characteristic of the deodorizer in use at Blue Ridge Landfill. The observed landfill gas odor was distinctly different from odors encountered at other facilities investigated. Investigators described it as having a putrid garbage odor, but also with strong chemical notes of sulfur, garlic, decaying onions, and honeysuckle.

Until July 2016, Blue Ridge Landfill discharged its leachate into the local municipal sanitary sewer collection system. The leachate had a strong chemical odor with a definite sulfurous character. The investigators determined that the odor of the leachate sample was consistent with the landfill gas odor detected during the odor surveys.

Additionally, a representative of the City of Pearland Public Works Department allowed TCEQ investigators to smell a representative sample of leachate that had been discharged by Blue Ridge Landfill to the city wastewater collection system. This leachate had a strong chemical odor with a definite sulfurous character. The investigators determined that the odor of the leachate sample was consistent with that detected during the odor surveys, albeit with stronger chemical notes.

Based on information gathered through odor observations conducted during this investigation it has been determined that Blue Ridge Landfill is the source of the odor reported by the complainants.

Due to the intensity, duration, and offensiveness of these confirmed odor nuisance condition events, the nuisance violation that will be issued falls within the "single occurrence", "weekly", "monthly", and "quarterly" frequency

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categories as defined by FIDO.

Toxicology

A total of eight Summa canister samples were taken during the course of the investigation. On June 20, 2016 the investigators received the report of the toxicology evaluation of the sample results (see attachment 4). The canisters were tested for 84 different VOCs. According to the toxicology report, no VOCs were found to be present at a level that would be expected to adversely affect human health.

Facility Authorization Narrative

Blue Ridge Landfill operates under federal operating permit (FOP) # O-01472 (General Operating Permit #517).

Syntech Chemicals Inc. operates under the permits by rule (PBR) 106.262, 106.261, 106.183, 106.371, 106.372, and 106.373.

Brenntag operates under new source review (NSR) permit #3939.

These permits were reviewed to assist in determining what materials and chemicals were authorized to be handled on site.

Exit Interview

On October 21, 2016, the investigator conducted an exit interview with Mr. Matt Montagna. The Exit Interview Form was emailed to Mr. Montagna and is provided in Attachment No. 5.

In addition, the complainant was contacted via telephone with the results of the investigation on October 21, 2016.

GENERAL FACILITY AND PROCESS INFORMATION

Process Description

Blue Ridge Landfill is a Type 1 Municipal Solid Waste landfill. Details of the process description can be found at the Houston Region Central files.

BACKGROUND

Agreed Orders, Court Orders, and Other Compliance Agreements

Based on review of CCEDS and the regional office files during the past five years, 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, two 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. Many of these specifically identified Blue Ridge Landfill as the source.

ADDITIONAL INFORMATION

Conclusions, Recommendations, and Current Enforcement Actions

One violation was noted based upon conditions observed, information received, and records reviewed during this investigation. For more information, see the Summary of Investigation Finding below.

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Additional Issues

No additional issues were noted during this investigation.

REPORT ATTACHMENTS

- 1. Area and Odor Log Location Map
- 2. Odor Logs
- 3. Investigation #1337792 Odor Log
- 4. Toxicology Report
- 5. Exit Interview Form

NOE Date: 10/21/2016

OUTSTANDING ALLEGED VIOLATION(S) ASSOCIATED TO A NOTICE OF ENFORCEMENT

Track Number: 615250

Compliance Due Date: To Be Determined

Violation Start Date: 5/4/2016

30 TAC Chapter 101.4 5C THSC Chapter 382.085(a) 5C THSC Chapter 382.085(b)

Alleged Violation:

Investigation: 1331231

Failure to prevent a nuisance condition.

Comment Date: 10/21/2016

TCEQ Investigators conducted odor surveys at off-site locations and detected a moderate landfill gas/honeysuckle odor that was highly offensive on June 23, 2016; a strong landfill gas/honeysuckle odor that was highly offensive on May 23, 2016 and May 24, 2016; and a very strong landfill gas/honeysuckle odor that was highly offensive on May 4, 2016, May 5, 2016, and June 6, 2016. The investigators determined the source of the odors was from Blue Ridge Landfill. The pattern of odors resulted in the confirmation of a weekly nuisance condition. These nuisance odors from Blue Ridge landfill were determined to be injurious to or adversely affect human health or welfare, and interfered with the normal use and enjoyment of animal life, vegetation, or property.

This constitutes a violation of 30 TAC §101.4, which states, "No person shall discharge from any source whatsoever one or more air contaminants or combinations thereof, in such concentration and of such duration as are or may tend to be injurious to or to adversely affect human health or welfare, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property."

This further constitutes a violation of the following: Texas Health & Safety Code 382.085(a) and Texas Health & Safety Code 382.085(b).

Recommended Corrective Action: Submit a written description of corrective action taken and the required documentation demonstrating that compliance has been achieved for this outstanding alleged violation.

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| Signed | Date 10/21/16 |
|---------------------------------------------------------------------------|----------------------------------|
| Environmental Investigator Signed | Date |
| Supervisor Attachments: (in order of final report s | ubmittal) |
| Enforcement Action Request (EAR) Letter to Facility (specify type): No F | Photographs |
| Investigation Report | Correspondence from the facility |
| Sample Analysis Results | Other (specify) : |
| Manifests | See investigation attachments. |
| Notice of Registration | J |