

AIR CP_102610102_CP_20180430_INVESTIGATION_1_1486565_
Texas Commission on Environmental Quality
Investigation Report

The TCEQ is committed to accessibility. If you need assistance in accessing this document, please contact oce@tceq.texas.gov

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

Regulated Entity Name: BLUE RIDGE LANDFILL

Regulated Entity Number: RN102610102

Investigation # 1486565

Investigator: SAMUEL CORTEZ

Conducted: 04/30/2018 -- 07/06/2018

Program(s): AIR OPERATING PERMITS

Investigation Type: Compliance Investigation

Additional ID(s): FG0536E
1472

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

Incident Numbers

Site Classification MAJOR SOURCE

NAIC Code: 562212

NAIC Code: 486210

SIC Code: 4922

SIC Code: 4953

SIC Code: 1521

Location: LOCATED ON 2200 FM 521

Local Unit: REGION 12 - HOUSTON

Activity Type(s): FLAIRMON - AIR FLAIRMON - FOC
INV GENERAL MONITORING

Principal(s):

Role

RESPONDENT

Name

BLUE RIDGE LANDFILL TX LP

Contact(s):

BLUE RIDGE LANDFILL - FRESNO**4/30/2018 to 7/6/2018 Inv. # - 1486565****Page 2 of 13**

Role	Title	Name	Phone	
PARTICIPATED IN	SOUTH REGION O&M MANAGER	MS CHRISTI MARKUTEN	Office	(281) 645-4190
PARTICIPATED IN	ENVIRONMENTAL SPECIALIST	MS AMY KUBINSKI	Phone	(281) 835-6142
PARTICIPATED IN	VICE PRESIDENT, BUSINESS DEVELOPMENT	MR MIKE WIDNER PG	Work Cell Work Fax Cell Fax	(817) 563-1144 (469) 628-5867 (330) 659-5930 (330) 659-5931 (682) 557-4697 (817) 563-1224
PARTICIPATED IN	AIR QUALITY MANAGER	MS ARCHANA NAGARAJ	Phone Fax Phone Fax	(817) 735-735 (817) 735-735 (817) 735-9770 (817) 735-9775
PARTICIPATED IN	ENVIRONMENTAL SCIENTIST	MS MARY-LEIGH WINKLER	Work	(817) 735-9770
REGULATED ENTITY MAIL CONTACT	ENVIRONMENTAL MANAGER	MR BURGESS STENGL	Phone Fax Office Work Cell	(713) 671-1561 (713) 676-7882 (713) 676-7669 (713) 671-1561 (713) 851-0506
PARTICIPATED IN	LANDFILL OPERATIONS	MR CHANCE SEELY	Cell Phone	(832) 835-8839 (281) 835-6142
PARTICIPATED IN	LANDFILL OPERATIONS	MR CHANCE SEELY	Phone	(281) 835-6142
PARTICIPATED IN	LANDFILL OPERATIONS MANAGER	MATT MONTAGNA	Office	(281) 668-9739
REGULATED ENTITY CONTACT	DIVISION MANAGER	MR MARK MEADOWS	Phone	(281) 668-9739
PARTICIPATED IN	SENIOR ENVIRONMENTAL TECHNICIAN	MR Mario NUNEZ		

BLUE RIDGE LANDFILL - FRESNO

4/30/2018 to 7/6/2018 Inv. # - 1486565

Page 3 of 13

Other Staff Member(s):

Role	Name
Investigator	NICOLE FOSTER
Investigator	LEANN KINCAID
Investigator	SETH TATE
Investigator	BLANCA LOPEZ
Investigator	DAVID BROUSSARD
Investigator	DANIELLE WOODS
Investigator	YAYMA MARTINEZ
Investigator	DOMINIQUE HENSON
Investigator	JOSH MEFFORD
Investigator	HASANAIN ALAMEEN
Investigator	GABRIELLE LAMOREAUX
Investigator	ANALLELY SALINAS
Investigator	CHRISTOPHER NORGBEY
Investigator	DANIEL VILLARREAL
QA Reviewer	CORBETT BRINLY
Investigator	ANDREW EVANS
Supervisor	ANDREA GUSTAVSON
Investigator	RICHARD BLACKNEY
Investigator	WILLIAM JORN

Associated Check List

<u>Checklist Name</u>	<u>Unit Name</u>
AIR FOCUSED INVESTIGATION - GENERAL MONITORING	Sitewide
AIR GENERIC INVESTIGATION (100 ITEMS)	Sitewide
AIR INVESTIGATION - EQUIPMENT MONITORING AND SAMPLING revised 06/2013	Sitewide

Investigation Comments:**INTRODUCTION**

This investigation was conducted at the Blue Ridge Landfill (BRL), located in Fresno in Fort Bend County. The purpose of the investigation was to evaluate compliance with air quality requirements related to surface emission monitoring (SEM) and the gas collection and control system (GCCS), which are subject to 40 Code of Federal Regulations (CFR) Part 60, Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills); Agreed Order (AO) Number 2016-1923-AIR-E; and the BRL Odor Control Plan approved April 10, 2018 (OCP). The on-site portion of the investigation began on April 30, 2018, and concluded on July 6, 2018.

The surrounding land use is commercial, industrial, and residential. The nearest residential receptors are approximately 300 feet east of the facility adjacent to FM 521. An area map is provided on Page 1 in Attachment 1 (Maps).

Eighteen investigators with the Texas Commission on Environmental Quality (TCEQ) participated in the investigation. Mr. Samuel Cortez was the lead investigator and the other 17 investigators are listed above under "Other Staff Members."

TCEQ investigators utilized equipment during the on-site investigation from April 30, 2018, through June 6, 2018. Equipment was not utilized on July 6, 2018, because the scope of the investigation on that date was focused on the records review. The equipment was utilized as follows:

A. MultiRAE (serial numbers: PGM6208 and PGM6228)

The investigators utilized the MultiRAEs to determine if concentrations of volatile organic compounds (VOC), sulfur dioxide (SO₂), hydrogen sulfide (H₂S), lower explosive limit (LEL), and oxygen (O₂) were at safe levels. The MultiRAEs were bump tested daily prior to the investigation.

BLUE RIDGE LANDFILL - FRESNO

4/30/2018 to 7/6/2018 Inv. # - 1486565

Page 4 of 13

B. Toxic Vapor Analyzer 1000B (TVA) (TCEQ asset numbers: 582-037002 and 582-053785)

The investigators utilized the TVAs for measuring methane concentrations. The TVAs were calibrated daily prior to the investigation.

C. Jerome 605 (J605) H₂S Analyzer (serial numbers: 60500088 and 60500403)

The investigators utilized the J605s to measure for associated H₂S emissions when methane concentrations were detected at levels near or exceeding 500 parts per million (ppm). The J605s were regenerated daily before and after the investigation.

D. Optical Gas Imaging Cameras (OGIC) (serial numbers: 055745-01; 055756-01; and 048420-01)

The investigators utilized the OGICs to visualize emissions using infrared technology.

E. Global positioning system (GPS) receiver – Garmin Model GPSmap 60CS

TCEQ investigators utilized the GPS receiver to obtain coordinates for the monitored locations.

F. Digital camera

TCEQ investigators utilized digital cameras for the primary purpose of visually documenting locations where methane concentrations were detected above 500 ppm.

BRL was represented during the investigation by:

Mr. Burgess Stengl: Environmental Manager; Republic Services

Mr. Chance Seely: Landfill Operations; Republic Services

Mr. Matt Montagna: Landfill Operations Manager; Republic Services

Mr. Mark Meadows: Division Manager; Republic Services

Mr. Mario Nunez: Senior Environmental Technician; Tetra Tech

Ms. Christi Markuten: South Region O&M Manager; Tetra Tech

Ms. Amy Kubinski: Environmental Specialist; Republic Services

Mr. Michael Widner: Vice President, Business Development; Tetra Tech

Ms. Archana Nagaraj: Air Quality Manager; Weaver Consultants Group

Ms. Mary-Leigh Winkler: Environmental Scientist; Weaver Consultants Group

Daily Narrative

This investigation was conducted from April 30, 2018, through July 6, 2018. The scope of the investigation was as follows:

A. The BRL SEM was conducted by a third-party contractor, Tetra Tech, for BRL from April 30, 2018, through May 4, 2018. The landfill is divided into three fill areas which BRL designates as Phases 1, 2, and 3. A Site Map is provided on Page 3 in Attachment 1 (Maps). All three phases were monitored by the contractor during the BRL SEM. Municipal solid waste (MSW), subject to 30 Texas Administrative Code (TAC) 330, is received and placed in Phases 1 and 3. BRL is not currently placing MSW in Phase 1. Class 1 non-hazardous waste, subject to 30 TAC 335, is received and placed in Phase 2. This area of the landfill is referred to as Class 1/Phase 2. TCEQ investigators observed and conducted observation monitoring during the BRL SEM. Details of this portion of the investigation are summarized in the report section titled "BRL SEM Summary."

B. On May 14, 2018; May 15, 2018; May 30, 2018; and June 6, 2018; TCEQ investigators conducted checks of locations found by the contractor where methane concentrations exceeded 500 ppm. The investigators used the coordinates provided by BRL on May 11, 2018, and May 29, 2018, to identify the locations. See the list of coordinates in Attachment 2 (May 11, 2018: Email Coordinates) and Attachment 3 (May 29, 2018: Email Coordinates). For location details of the coordinates provided, see Pages 5-11 in Attachment 1 (Maps). Details of this portion of the investigation are summarized in the report section titled "BRL SEM Summary."

C. An independent TCEQ SEM was conducted by TCEQ investigators from May 15, 2018, through May 24, 2018. Details of this portion of the investigation are summarized in the report section titled "TCEQ SEM Summary."

D. An on-site records review was conducted by TCEQ investigators on July 6, 2018. Details of this portion of the investigation are summarized in the report sections titled "Approved BRL Odor Control Plan (April 10, 2018)" and

“40 CFR Part 60, Subpart WWW.”

Information for each day of the investigation, including dates, TCEQ investigators present, arrival and departure times, and BRL representatives present is included in Attachment 4 (Participation Rosters).

BRL SEM Summary

From April 30, 2018, through May 4, 2018, the BRL SEM was conducted by Mr. Nunez with Tetra Tech, a third-party contractor hired by BRL. TCEQ investigators also conducted observation monitoring to check BRL collected information during the BRL SEM. Mr. Nunez conducted the BRL SEM while walking and used a MultiRAE on Class 1/Phase 2 and a SiteFID on Phase 1 and Phase 3. The SiteFID was operated with an elongated tube extension to reach the ground.

Overview of the BRL SEM of Class 1/Phase 2

The BRL SEM of Class 1/Phase 2 was conducted by Mr. Nunez on April 30, 2018. There were six locations where TCEQ investigators observed visible liquid on the surface of Class 1/Phase 2. No methane concentrations above 500 ppm were noted during the BRL SEM of Class 1/Phase 2.

Overview of the BRL SEM of Phase 1

During the BRL SEM of Phase 1, conducted by Mr. Nunez on May 1 and 2, 2018, six locations were found by the contractor where methane concentrations exceeded 500 ppm. These were reported as locations 1-6 in the New Source Performance Standards (NSPS) periodic report dated July 2, 2018 (NSPS Report). See Pages 27-32 in Attachment 5 (July 2, 2018: NSPS Report Excerpts). Mr. Nunez re-monitored the six locations on May 9, 2018, and May 24, 2018. TCEQ investigators checked six locations on May 14, 2018, and June 6, 2018, using the coordinates provided by BRL on May 11, 2018, and May 29, 2018.

Overview of the BRL SEM of Phase 3

During the BRL SEM of Phase 3, conducted by Mr. Nunez on May 3 and 4, 2018, 32 locations were found by the contractor where methane concentrations exceeded 500 ppm. These were reported as locations 7-37 in the NSPS Report. See Pages 33-63 in Attachment 5 (July 2, 2018: NSPS Report Excerpts). Mr. Nunez re-monitored the 32 exceedance locations on May 9, 2018, and May 24, 2018. TCEQ investigators checked 32 locations on June 6, 2018, using the coordinates provided by BRL on May 11, 2018, and May 29, 2018.

Assessment of the BRL SEM

The 38 exceedance locations reported by BRL during the BRL SEM, conducted April 30, 2018, through May 4, 2018, were identified on the site drawing included in the NSPS Report. See Page 65 of Attachment 5 (July 2, 2018: NSPS Report Excerpts). Of the 38 exceedance locations, the measured methane concentration was not included in the NSPS Report for one location (#38). For more information, see Violation Tracking Number (VTN) 688094 (Category B3 Violation).

For the 37 exceedance locations where the measured methane concentration was reported, the concentrations ranged from 503.1 to 8,108.8 ppm, and the average was 2120.1 ppm.

The 10-day follow-up monitoring was conducted by Mr. Nunez on May 9, 2018, and the reported methane concentrations ranged from 2 to 307.9 ppm, and the average was 109 ppm.

The 1-month follow-up monitoring was conducted by Mr. Nunez on May 24, 2018, and the reported methane concentrations ranged from 0 to 210 ppm, and the average was 126.5 ppm.

On June 6, 2018, TCEQ investigators conducted checks of locations reported by BRL where methane concentrations exceeded 500 ppm, 13 days after BRL concluded corrective actions and re-monitoring activities. Of the 37 exceedance locations with measured methane concentrations documented in the NSPS Report, 16 locations (43%) were found by the TCEQ investigators to be emitting methane at concentrations greater than 500 ppm. These locations correspond to numbers 1, 4, 7, 10, 11, 12, 13, 14, 15, 19, 22, 23, 25, 28, 34, and 35 in the NSPS Report. Locations 1 and 4 were on Phase 1, and the remaining 14 locations were on Phase 3. The measured

BLUE RIDGE LANDFILL - FRESNO

4/30/2018 to 7/6/2018 Inv. # - 1486565

Page 6 of 13

methane concentrations ranged from 700 to 10,200 ppm, and the average concentration was 3,164.5 ppm. TCEQ data is provided in Attachment 6 (TCEQ Observation and Check Data). Photographs of the exceedance locations are provided on Pages 1-54 in Attachment 7 (Photographs). Videos recorded with the OGIC are provided in Attachment 8 (OGIC Videos).

BRL is required by 40 CFR 60.11(d) to operate the facility and all air pollution control equipment, including the GCCS, in a manner consistent with good air pollution control practice for minimizing emissions. Given that 43% of the locations were leaking 13 days following the final 1-month re-monitoring at an average concentration of 3,164.5 ppm, this is a significant deviation and indicates that BRL does not appear to be maintaining the GCCS in a manner to minimize surface emissions. For more information, see VTN 688109 (Category A12.i.6 Violation).

BRL provided coordinates for the exceedance locations to the investigator on May 11, 2018, and May 29, 2018. The 38 exceedance locations were later identified on the site drawing included in the NSPS Report. The exceedance locations were also described in the NSPS Report, except for location #38. The coordinates provided to the investigator, locations identified on the site drawing, and descriptions in the NSPS Report were inconsistent for 18 of the 38 locations. These 18 locations correspond to numbers 2, 3, 4, 6, 8, 9, 17, 19, 20, 23, 24, 29, 30, 31, 32, 33, 36, and 37 in the NSPS Report. See Pages 28-63 in Attachment 5 (July 2, 2018: NSPS Report Excerpts).

The coordinates for seven of the 38 exceedance locations (NSPS Report exceedance location numbers 5, 7, 18, 21, 28, 32, and 36) were not included in the email correspondence to the TCEQ on May 11, 2018. The coordinates for the seven missing monitoring locations were later provided to the TCEQ via email on May 29, 2018.

The adjusted methane concentration was incorrectly reported for the 1-month re-monitoring of exceedance location 5 on May 24, 2018. Specifically, this calculation error was determined by using the Individual Monitoring Exceedance record in the NSPS Report. The Individual Monitoring Exceedance record for location 5 indicated that the instrument reading was 89 ppm, the background reading was 1 ppm, and the reported adjusted reading was 0 ppm; however, based on the reported instrument and background readings the adjusted reading should have been reported as 88 ppm. See Page 31 in Attachment 5 (July 2, 2018: NSPS Report Excerpts).

The calibration documentation for the SiteFID included in the NSPS Report does not indicate if the calibration was conducted with the elongated tube attached to the SiteFID. Equipment modifications have the potential to impact instrument response time, which is determined as part of the calibration procedure. See Pages 8-25 in Attachment 5 (July 2, 2018: NSPS Report Excerpts).

SEM information and recordkeeping issues, including the inconsistencies, limited availability of information upon request, calculation error, and calibration documentation are addressed as an Additional Issue.

TCEQ SEM SUMMARY

TCEQ investigators conducted an independent SEM from May 15, 2018, through May 24, 2018. The overview of each phase monitored during the TCEQ SEM is discussed below.

Overview of the TCEQ SEM of Phase 3

During the TCEQ SEM on Phase 3, conducted from May 15, 2018, through May 18, 2018, 30 locations were found where methane concentrations exceeded 500 ppm. The exceedance locations consisted of one surface emission and 29 components of the GCCS on Phase 3, including the following: 20 wellheads; three leachate risers; four sumps; an isolation valve; and a condensate force main. TCEQ data collected during the TCEQ SEM, including location descriptions, is provided in Attachment 9 (TCEQ SEM Data).

Overview of the TCEQ SEM of Class 1/Phase 2

The TCEQ SEM on Class 1/Phase 2 was conducted on May 18, 2018. During the TCEQ SEM, a visible dark pool of liquid was observed on the south side of Class 1/Phase 2. No methane concentrations were found above 500 ppm during the TCEQ SEM of Class 1/Phase 2. On May 30, 2018, the investigators noted that the dark pool of liquid was no longer visible. Photographs of the visible dark pool are provided on Pages 55 and 57 in Attachment 7 (Photographs). The visible dark pool of liquid will be addressed as an Additional Issue.

Overview of the TCEQ SEM of Phase 1

During the TCEQ SEM on Phase 1, conducted from May 21, 2018, through May 24, 2018, three locations were found where methane concentrations exceeded 500 ppm. The exceedance locations consisted of one surface emission and two wellhead components of the GCCS on Phase 1.

Assessment from the TCEQ SEM

TCEQ investigators found 33 locations where the methane concentrations exceeded 500 ppm. Maps of the exceedance locations discovered during the TCEQ SEM are provided on Pages 13 and 15 in Attachment 1 (Maps).

Approved BRL Odor Control Plan (April 10, 2018)

TCEQ investigators reviewed the OCP required under the terms of the AO and approved by TCEQ on April 10, 2018. BRL is required to evaluate the GCCS annually to determine the adequacy of the coverage compared to areas of potential odors. Records related to the GCCS and OCP were reviewed. These included on-site daily odor survey logs, 2017 gas flow data for the enclosed flare, utility flare, rental flare, gas collection pipeline, and LandGEM calculations. Based on the LandGEM calculation included in the Emissions Inventory submittal for 2017, the waste acceptance rate was 1,244,993 tons and the average flow rate of landfill gas (LFG) captured by the GCCS was calculated to be 7,471 standard cubic feet per minute (scfm). BRL indicated that the cumulative capacity of the GCCS is 17,100 scfm, which is greater than the calculated average flow rate of LFG captured by the GCCS.

During the review of the records, Additional Issues were documented with several of the terms of the OCP. These Additional Issues are discussed below.

The OCP indicates BRL will complete on-site daily odor survey logs. BRL provided the on-site daily odor survey logs for the period of May 1, 2018, through June 29, 2018. The on-site daily odor survey logs documented the following information: date; odor neutralizing system operation; survey location, survey start time; survey end time; weather conditions; personnel conducting the survey; and odor presence. The surveys were conducted utilizing the Nasal Ranger. The on-site daily odor survey log for May 22, 2018, provided to the investigator, did not include survey documentation for the solidification pit area and citizen collection station. See Attachment 10 (Supporting Documentation). The incomplete daily odor log is addressed as an Additional Issue.

BRL is required to evaluate the GCCS annually to determine the adequacy of the coverage compared to areas of potential odors. BRL provided the 2017 gas flow data for the enclosed flare, utility flare, rental flare, and gas collection pipeline. It was noted that the rental flare maintained an average flow rate of 2,107 standard cubic feet per minute (scfm) during 2017 over the total 2,099 operating hours. The highest operating flow was documented to be 3,000 scfm on December 8, 2017. This exceeded the design capacity of the flare which is 2,100 scfm. See Attachment 11 (Flare Documentation). For more information, see VTN 688109 (Category A12.i.6 Violation).

The deviation report for Title V Permit O-01472 for the period of December 5, 2017, through June 4, 2018, was included in the NSPS Report as an appendix. It was noted that the exceedance of the flare flow design capacity was not reported as a deviation. See Pages 67-69 in Attachment 5 (July 2, 2018: NSPS Report Excerpts). For more information, see VTN 689239 (Category B3 Violation).

Section 4 of the OCP indicates BRL will receive and document odor complaints. The plan also requires that BRL is to contact the complainant within one business day of reviewing the complaint. A total of 10 complaints were received by BRL from May 1, 2018, through July 5, 2018. The 10 complaints were followed by eight field investigations by BRL personnel. The Odor Complaint Forms documented the following: when the complaint was received; complainant contact information; when the odor was detected by the complainant; odor description details; and weather information. Additionally, follow-up contact information, investigation results, and corrective actions were documented on the Odor Complaint Forms. It appears that BRL is generally meeting the current conditions of the OCP for receiving and documenting odor complaints; however, it was noted that an Odor Complaint Form indicated that an odor was detected by a complainant on May 11, 2018, at 11:00 AM, but BRL received the complaint on May 10, 2018, at 9:22 AM. See Page 8 in Attachment 12 (Supporting Documentation (CONFIDENTIAL)). Contact was made with the complainant by phone on May 10, 2018, at 3:35 PM by Mr. Seely. The odor investigation and findings conducted on May 10, 2018, at 9:37 AM, documented that no odors were detected. The date the complainant smelled the odors and the received date of the complaint did not appear to be documented accurately. Additionally, upon review of the complaints, initial contact within

BLUE RIDGE LANDFILL - FRESNO

4/30/2018 to 7/6/2018 Inv. # - 1486565

Page 8 of 13

1-business day did not appear to be documented on the Odor Complaint Forms as described by Section 4.2 of the OCP. See Attachment 12 (Supporting Documentation (CONFIDENTIAL)). The conflicting information noted on the Odor Complaint Forms is addressed as an Additional Issue.

Appendix 10 of the OCP indicates when an exceedance is identified during SEM, BRL is to identify the sequential number for the exceedance area and note it on the pin flag. BRL did not appear to note the sequential number on all of the pin flags. See Pages 11, 19, 23, 37, and 51 in Attachment 7 (Photographs). The lack of identified sequential numbers on the pin flags is addressed as an Additional Issue.

40 CFR Part 60, Subpart WWW

BRL operates a GCCS, which was installed as required by this subpart, because non-methane organic compound (NMOC) emissions are greater than 50 megagrams per year. This subpart also requires BRL to conduct periodic SEM. The following records and reports were reviewed for this subpart:

Initial Design Capacity Report dated June 6, 1996

Utility Flare Performance Test Report dated May 1, 2006

Landfill GCCS Design Plan dated December 6, 2010

Enclosed Flare Performance Test Report dated April 3, 2012

Rental Utility Flare Performance Test Report dated March 19, 2018

Periodic Reports dated December 22, 2015; June 30, 2016; December 22, 2016; June 29, 2017; December 28, 2017; and July 2, 2018

Additional Issues and three alleged violations were noted during the review of the NSPS periodic report dated July 2, 2018. These Additional Issues and alleged violations were previously discussed in the "BRL SEM Summary" section of this investigation report.

Exit Interview

On October 11, 2018, the investigator conducted an exit interview with Mr. Stengl. The Exit Interview Forms were completed by the investigator and acknowledged by Mr. Stengl of BRL. The Exit Interview Forms are provided in Attachment 13.

GENERAL FACILITY AND PROCESS INFORMATION

Process Description

BRL is a Type I landfill which is authorized to operate by TCEQ MSW Permit Number 1505A and Title V Permit O-01472. BRL maintains a GCCS to remove LFG from within the landfill before it can percolate to the landfill surface and enter the atmosphere. The removed LFG is routed to control devices and pipeline distribution system.

The landfill is authorized to dispose of MSW including household solid waste, commercial solid waste, construction and demolition waste, and yard waste; Class 1, Class 2, and Class 3 non-hazardous industrial solid waste; and certain special wastes. Liquid waste will be accepted at the Liquid Waste Bulking Facility for stabilization and subsequent disposal. BRL may not accept regulated hazardous waste, prohibited polychlorinated biphenyls, or untreated medical waste.

BACKGROUND

Compliance history details can be obtained from TCEQ Central Registry.

Prior Enforcement Issues

Based on a review of CCEDS, TCEQ Central Files, and the enforcement database, the following AO pertaining to violations of air quality regulations was issued by the TCEQ within the past 5 years:

2016-1923-AIR-E

BLUE RIDGE LANDFILL - FRESNO

4/30/2018 to 7/6/2018 Inv. # - 1486565

Page 9 of 13

This AO required BRL to submit the OCP setting forth industry best management practices designed to prevent the emission of odors. The OCP included elements related to SEM. The OCP and included SEM elements were evaluated during this investigation and were previously discussed in this investigation report.

Based on a review of CCEDS, there were NOV's issued by the TCEQ within the past five years. See Compliance History for details. There are no repeat violations of air quality requirements documented in this investigation.

Complaints

As of October 1, 2018, the TCEQ has received 5,629 complaint contacts and has conducted 180 complaint investigations over the past five years.

On June 15, 2018, the TCEQ Monitoring Division provided the TCEQ Houston Region Office with a summary of the sampling event that took place on May 14 through 18, 2018, see Attachment 14 (Monitoring Division Summary). According to the summary, odor surveys were documented in coordination with measurements from the Picarro Surveyor to determine if methane could be used as a "marker" for odorous conditions. The methane concentration and odor intensity exhibited a qualitative correlation. Odor characteristics in the Shadow Creek Ranch neighborhood were consistent with the observed odors from BRL and were accompanied with the signature methane measurements associated with landfill gases. None of the odors observed at other area facilities where odor surveys were conducted were consistent in character with odors observed in the Shadow Creek Ranch neighborhood.

TCEQ investigators documented a nuisance odor condition in TCEQ investigation number 1489897, conducted May 9, 2018, through July 6, 2018. For more details of off-site odor impacts, see VTN 688109.

ADDITIONAL INFORMATION

Conclusions, Recommendations, and Current Enforcement Actions

Based on this investigation, three alleged violations were documented and a Notice of Enforcement will be issued. For more information, see the alleged violations listed below.

Additional Issues

There were five additional issues noted.

The information and records provided by Blue Ridge Landfill for the Surface Emission Monitoring and follow-up monitoring conducted from April 30, 2018, through May 24, 2018, appeared to contain inconsistencies, and appeared to be incomplete and contain errors. Specifically, information provided for the exceedance locations was inconsistent between responsive documents provided in the New Source Performance Standards periodic report dated July 2, 2018, and email correspondence with coordinates provided May 11, 2018, and May 29, 2018. Additionally, location information was not provided for all exceedance locations upon request, an adjusted instrument reading appears to have been incorrectly calculated, and instrument calibration documentation did not indicate if the calibration was conducted with the instrument modification in place.

On May 18, 2018, a visible dark pool of liquid was observed on the south side of the Class 1/Phase 2 area of the landfill. On May 30, 2018, Texas Commission on Environmental Quality investigators noted that the dark pool of liquid was no longer visible. Blue Ridge Landfill is requested to provide information on the specific makeup of the dark pool of liquid, the cause of the pool, and what corrective actions were taken.

The daily log for the odor survey conducted by Blue Ridge Landfill on May 22, 2018, was incomplete. Specifically, the log documented that the storage tank area was surveyed but did not indicate if the solidification pit area and citizen collection station were surveyed.

Records of odor complaints received by Blue Ridge Landfill contained information data inconsistencies, and response times were absent from the forms. Specifically, an odor complaint form indicated that a complainant smelled odors on May 11, 2018, and the complaint was received by Blue Ridge Landfill on May 10, 2018. Also, Blue Ridge Landfill's initial contact with the complainant, which is to be made within one business day, did not appear to be documented on any of the odor complaint forms provided to the investigator.

BLUE RIDGE LANDFILL - FRESNO

4/30/2018 to 7/6/2018 Inv. # - 1486565

Page 10 of 13

Appendix 10 of the Odor Control Plan indicates when an exceedance is identified during surface emission monitoring, Blue Ridge Landfill is to identify the sequential number for the exceedance area and note it on the pin flag. TCEQ investigators did not observe sequential numbers noted on all of the pin flags during the Blue Ridge Landfill surface emission monitoring.

REPORT ATTACHMENTS

1. Maps
2. May 11, 2018: Email with Coordinates
3. May 29, 2018: Email with Coordinates
4. Participation Rosters
5. July 2, 2018: NSPS Report Excerpts
6. TCEQ Observation and Check Data
7. Photographs
8. OGIC Videos
9. TCEQ SEM Data
10. Supporting Documentation
11. Flare Documentation
12. Supporting Documentation (CONFIDENTIAL)
13. Exit Interview Forms
14. Monitoring Division Summary

NOE Date: 10/12/2018

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

Track Number: 688094

Compliance Due Date: To Be Determined

Violation Start Date: 7/2/2018

**30 TAC Chapter 122.143(4)
40 CFR Chapter 60.757(f)(5)
5C THSC Chapter 382.085(b)**

PERMIT 1472, Term (c)(20)

Alleged Violation:

Investigation: 1486565

Comment Date: 10/11/2018

Failure to include all exceedance information in the New Source Performance Standards (NSPS) periodic report dated July 2, 2018.

During the period from April 30, 2018, through July 6, 2018, an on-site investigation of the Blue Ridge Landfill (BRL) was conducted in which 38 exceedance locations were noted during surface emissions monitoring conducted from April 30, 2018 through May 4, 2018. During a review of the NSPS periodic report dated July 2, 2018, it was noted that concentration data for only 37 exceedance locations were reported, and concentration for one location was not reported. This constitutes a violation of 40 Code of Federal Regulations 60.757(f)(5), which states, "(f) Each owner or operator of a landfill seeking to comply with §60.752(b)(2) using an active collection system designed in accordance with §60.752(b)(2)(ii) shall submit to the Administrator annual reports of the recorded information in (f)(1) through (f)(6) of this paragraph... (5) The location of each exceedance of the 500 parts per million methane concentration as provided in §60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month."

This further constitutes a violation of the following: Federal Operating Permit O-01472 Term (c)(20); 30 Texas Administrative Code 122.143(4); and Texas Health and Safety Code 382.085(b).

BLUE RIDGE LANDFILL - FRESNO

4/30/2018 to 7/6/2018 Inv. # - 1486565

Page 11 of 13

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.

Track Number: 688109

Compliance Due Date: To Be Determined

Violation Start Date: 12/8/2017

30 TAC Chapter 122.143(4)

40 CFR Chapter 60.11(d)

5C THSC Chapter 382.085(b)

PERMIT 1472, Term (b)(29)

Alleged Violation:

Investigation: 1486565

Comment Date: 10/12/2018

Failure to maintain and operate the gas collection and control system (GCCS) in a manner consistent with good air pollution control practice for minimizing emissions.

During the period from April 30, 2018, through July 6, 2018, an on-site investigation of the Blue Ridge Landfill (BRL) was conducted in which the GCCS was not maintained in a manner consistent with good air pollution control practice for minimizing emissions as follows:

A. Based on Texas Commission on Environmental Quality (TCEQ) monitoring conducted on June 6, 2018, 13 days after BRL concluded 1-month follow-up monitoring on May 24, 2018, there were 16 locations found to be in exceedance of 500 parts per million (ppm) methane. The 16 exceedance locations were repaired based on statements by BRL on June 6, 2018 and were reported to be repaired on May 9, 2018, based on the periodic NSPS report dated July 2, 2018.

B. Based on the flare information provided by BRL in an email dated August 21, 2018, the rental flare had a maximum operating flow documented to be 3,000 standard cubic feet per minute (scfm) on December 8, 2017. The design capacity of the flare is 2,100 scfm.

C. Based on the Monitoring Division Summary of May 14-18, 2018, Pearland Sampling Event, 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.

D. Based on the TCEQ investigation number 1489897, conducted May 9, 2018, through July 6, 2018, nuisance odor conditions were documented by TCEQ investigators.

This constitutes a violation of 40 Code of Federal Regulations 60.11(d), which states, "At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions."

This further constitutes a violation of the following: Federal Operating Permit O-01472 Term (b)(29); 30 Texas Administrative Code 122.143(4); and Texas Health and 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.

Track Number: 689239

Compliance Due Date: To Be Determined

Violation Start Date: 7/2/2018

30 TAC Chapter 122.143(4)

BLUE RIDGE LANDFILL - FRESNO

4/30/2018 to 7/6/2018 Inv. # - 1486565

Page 12 of 13

30 TAC Chapter 122.145(2)(A)
5C THSC Chapter 382.085(b)

PERMIT 1472, Term (b)(2)

Alleged Violation:

Investigation: 1486565

Comment Date: 10/11/2018

Failure to report all instances of deviations in the deviation report dated July 2, 2018.

An on-site investigation of the Blue Ridge Landfill (BRL) was conducted on April 30, 2018 through July 6, 2018. During the investigation, it was determined that all instances of deviations were not reported as required. One deviation was reported in the deviation report submitted for the time period of December 5, 2017, through June 4, 2018, on July 2, 2018. A second deviation occurred in which the rental flare, with a design capacity of 2,100 standard cubic feet per minute (scfm), had a maximum operating flow documented to be 3,000 scfm on December 8, 2017. This deviation was not reported in the deviation report dated July 2, 2018. This constitutes a violation of 30 Texas Administrative Code (TAC) 122.145(2)(A), which states, "The permit holder shall report, in writing, to the executive director all instances of deviations, the probable cause of the deviations, and any corrective actions or preventative measures taken for each emission unit addressed in the permit."

This further constitutes a violation of the following: Federal Operating Permit O-01472 Term (b)(2); 30 TAC 122.143(4); and Texas Health and 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.

Additional Issues

Description Item 1

Additional Comments

The information and records provided by Blue Ridge Landfill for the Surface Emission Monitoring and follow-up monitoring conducted from April 30, 2018, through May 24, 2018, appeared to contain inconsistencies, and appeared to be incomplete and contain errors. Specifically, information provided for the exceedance locations was inconsistent between responsive documents provided in the New Source Performance Standards periodic report dated July 2, 2018, and email correspondence with coordinates provided May 11, 2018, and May 29, 2018. Additionally, location information was not provided for all exceedance locations upon request, an adjusted instrument reading appears to have been incorrectly calculated, and instrument calibration documentation did not indicate if the calibration was conducted with the instrument modification in place.

Description Item 2

Additional Comments

On May 18, 2018, a visible dark pool of liquid was observed on the south side of the Class 1/Phase 2 area of the landfill. On May 30, 2018, Texas Commission on Environmental Quality investigators noted that the dark pool of liquid was no longer visible. Blue Ridge Landfill is requested to provide information on the specific makeup of the dark pool of liquid, the cause of the pool, and what corrective actions were taken.

Description Item 3

Additional Comments

The daily log for the odor survey conducted by Blue Ridge Landfill on May 22, 2018, was incomplete. Specifically, the log documented that the storage tank area was surveyed but did not indicate if the solidification pit area and citizen collection station were surveyed.

Description Item 6

Additional Comments

BLUE RIDGE LANDFILL - FRESNO**4/30/2018 to 7/6/2018 Inv. # - 1486565****Page 13 of 13**

Records of odor complaints received by Blue Ridge Landfill contained information data inconsistencies, and response times were absent from the forms. Specifically, an odor complaint form indicated that a complainant smelled odors on May 11, 2018, and the complaint was received by Blue Ridge Landfill on May 10, 2018. Also, Blue Ridge Landfill's initial contact with the complainant, which is to be made within one business day, did not appear to be documented on any of the odor complaint forms provided to the investigator.

Description Item 8**Additional Comments**

Appendix 10 of the Odor Control Plan indicates when an exceedance is identified during surface emission monitoring, Blue Ridge Landfill is to identify the sequential number for the exceedance area and note it on the pin flag. TCEQ investigators did not observe sequential numbers noted on all of the pin flags during the Blue Ridge Landfill surface emission monitoring.

Signed**Environmental Investigator****Date**10/12/18**Signed****Supervisor****Date**10/12/18**Attachments: (in order of final report submittal)**☒ Enforcement Action Request (EAR)☒ Letter to Facility (specify type) : NOE Letter

Investigation Report

☐ Sample Analysis Results☐ Manifests☐ Notice of Registration☒ Maps, Plans, Sketches☒ Photographs☐ Correspondence from the facility☒ Other (specify) :See Report Attachments