



Region 6 - Enforcement & Compliance Assurance Division
INSPECTION REPORT

Inspection Date(s):	09/23-24/2021	
Media Program:	Air	
Regulatory Program(s)	SIP, NESHAP, NSPS	
Company Name:	City of Dallas	
Facility Name:	McCommas Bluff Landfill	
Facility Physical Location:	5100 Youngblood Rd	
(city, state, zip code)	Dallas, TX 75241	
Mailing address:	3112 Canton Street, Suite 200	
(city, state, zip code)	Dallas, TX 75226	
County/Parish:	Dallas County	
Facility Phone Number	214-670-0977	
Facility Contact:	John Jones	Environmental Coordinator III
	John.Jones@dallascityhall.com	
FRS Number:	110005097714	
Identification/Permit Number:	TCEQ RN100752146 / Standard Permit Air New Source Registration 74705	
Media Identifier Number:	48-113-00859	
NAICS:	562212	
SIC:	4953	
Personnel participating in inspection:		
Ben Rosenthal	EPA/Region 6 ECDAT	Physical Scientist
James Haynes	EPA/Region 6 ECDAT	Physical Scientist
John Jones	City of Dallas	Environmental Coordinator III
Tad Bates	City of Dallas	Manager
Richard Akin	City of Dallas	Senior Engineer
Robert Fadden	City of Dallas	Interim Assistant Director
Debra Sanders	City of Dallas	Office Assistant II
David Mezzacappa	SCS Engineers	Vice President
Jason Lewalla	SCS Engineers	Project Director
Bobby Llanas	SCS Engineers	Project Coordinator
EPA Lead Inspector Signature/Date		
	Benjamin Rosenthal	Date
Supervisor Signature/Date		
	Sarah Frey (Acting)	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspectors Ben Rosenthal and James Haynes (“inspectors” or “We”) arrived at the City of Dallas, McCommas Bluff Landfill (“site”, “facility”, “landfill”, or “affected source”) at 13:19 on September 24, 2021, for an announced inspection. We met with John Jones, Environmental Coordinator III, City of Dallas, Tad Bates, Manager, City of Dallas, Richard Akin, Senior Engineer, City of Dallas, Robert Fadden, Interim Assistant Director, City of Dallas, Debra Sanders, Office Assistant II, City of Dallas, David Mezzacappa, Vice President, SCS Engineers (“SCS”), and Jason Lewalla, Project Director, SCS Engineers, for an opening conference. Mr. Haynes presented his credentials to Mr. Fadden. We informed Mr. Fadden that we were making entry to conduct an EPA inspection to determine compliance with the Clean Air Act (“CAA”) regulations applicable to the site. The scope of the inspection is a partial compliance evaluation (“PCE”) and includes evaluation of the facility’s compliance with Texas State Implementation Plan (“SIP”) regulations, New Source Performance Standards (“NSPS”) regulations (40 CFR Subpart 60, Subchapter Cf-Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills), and National Emissions Standards for Hazardous Air Pollutants (“NESHAP”) for Municipal Solid Waste Landfills (40 CFR Subpart 63, Subchapter AAAA). Photographs and videos taken during the inspection can be found in Appendix 1 and 2, respectively. The sign-in sheet for the opening conference is attached as Appendix 3.

FACILITY DESCRIPTION

McCommas Bluff Landfill is a Municipal Solid Waste (“MSW”) landfill owned by the City of Dallas (the “City”) and operated by the City Sanitation Services Department. The facility operates 6 days per week. The Sanitation Services Department has over 500 permanent and temporary employees. The facility received a solid waste permit in 1975 and began receiving waste in October 1980. The facility owns a total of 2,039 acres. Sectors 1 through 3 are areas that predate the Resource Conservation and Recovery Act Subtitle D and are underlaid with a clay liner. Cells 1 through 16 are bottom lined with liner compliant with Subtitle D and integrated with leachate recovery and disposal equipment. The Subtitle D applicable cells cover approximately 770 acres. Sectors 1 through 3 and the Subtitle D applicable cells have not exhausted their available air space and are covered with an intermediate cover. No area of the landfill is officially closed or capped with final cover. The working face is covered with a daily cover and is temporarily authorized to encompass no more than 2 acres. According to City officials, no design capacity expansions have been requested or approved since the initial design capacity report was submitted in 1975. The total maximum MSW design capacity is 66.48 million megagrams. The current estimated waste in place is 49 million megagrams as of 2020. The facility accepts approximately 1.5-2 million tons of waste per year.

The site has a Gas Collection and Control System (“GCCS”) based on a design plan first submitted to the State of Texas in 1998. The design plan was revised in 2001, 2006 and 2016. The system consists of vertical Landfill Gas (“LFG”) extraction wells spaced approximately 200 feet apart in Sectors 1-3 and Cells 1-16. The site currently contains over 500 active wells. In addition to the wells, 4 of the 11 leachate risers are incorporated into the GCCS from collection piping originating at the respective leachate riser cleanouts. LFG captured by the GCCS is routed offsite to Dallas Clean Energy McCommas Bluff (“Gas

Treatment Plant”), a gas treatment plant that is owned and operated in a public-private partnership with Energy Power Partners, LLC (“EPP”). Treated gas is then supplied for sale through a pipeline interconnect into the local gas utility distribution network. The Gas Treatment Plant has a daily maximum processing capacity of approximately 9.4 million cubic feet per day, according to the 2016 GCCS plan. The Gas Treatment Plant also maintains an unassisted semi-enclosed flare as an alternative means of control for the treated LFG.

The facility currently operates under the authorization of permit number 74705, a standard permit issued by the State of Texas under 30 Texas Administrative Code (“30 TAC”) 330 Subchapter U. The facility has applied to the State of Texas for an operating permit under Title V of the CAA. The permit application is under review by the Air Permits Division of the Texas Commission on Environmental Quality (“TCEQ”) at the time of writing this report.

Section II - OBSERVATIONS

On September 20, 2021, I contacted Mr. Jones via telephone and informed him of the planned inspection. Mr. Haynes and I made entry at the facility on September 23, 2021. During the opening conference we discussed the scope of the inspection and provided a copy of a document request to members of the group (See Appendix 4: Document Request). I informed the group of the planned inspection activities for that day including a discussion of the site’s current authorizations and pending permits, the site’s applicability under the CAA and SIP, the administration of the site’s environmental program to ensure compliance with the applicable air rules, and an on-site walkthrough of a cell to observe the conditions of the GCCS, intermediate cover, and leachate system components. I informed the Site Representatives that we had brought a Toxic Vapor Analyzer 2020 (“TVA”), a flame ionization detector used to satisfy EPA Reference Method 21 for detecting VOC emissions, and a FLIR GF320 Optical Gas Imaging Camera (“OGIC”) as qualitative screening tools of site conditions.

Mr. Mezzacappa and I discussed the current permit status and the applicability of CAA rules to the site. Mr. Mezzacappa stated that the City permitted air emissions from the landfill under a 30 TAC Subchapter U permit for MSW landfills (Permit No. 74705). Mr. Mezzacappa also stated that the City had, after conversations with TCEQ Air Permits Division, applied for a Title V Permit, because the site was prior to June 21, 2021-subject to 30 TAC Chapter 113, Subchapter D, which incorporates 40 C.F.R. § 60.751-60.759 (NSPS Subpart WWW) by reference. Mr. Mezzacappa stated the facility is subject to NESHAP Subpart AAAA and to the final MSW Landfills Federal Plan, which implements the 2016 NSPS Emission Guidelines for MSW Landfills (EG Subpart Cf) under 40 CFR Part 62 Subpart OOO.

Mr. Fadden and Mr. Akin discussed the site’s layout, history, and current operations. We discussed the document request, and it was noted that EPP was the owner and operator of all the equipment associated to the GCCS, even components located inside the perimeter of the landfill. EPP maintained the records of environmental compliance for the GCCS. Site representatives explained that EPP had a contractual obligation to the City to maintain their equipment in compliance with the applicable regulatory standards. Site representatives also stated that EPP was the primary custodian of records related to the GCCS. Mr. Fadden stated that the City and EPP have monthly meetings and are in

communication as necessary. SCS is consulting for both the City and EPP according to Mr. Mezzacappa. See Area of Concern ("AOC") 1.

I requested a plot plan to discuss areas where we could safely conduct an inspection of surface conditions. Mr. Bates produced a copy of the current plot plan and indicated that an area of Cell 5 would be easily accessible, and that waste deposition had not occurred there in over a year. I inquired about the procedures for conducting quarterly Surface Emission Monitoring ("SEM") as required by the SIP rules and NESHAP Subpart AAAA. Mr. Lewalla explained that SCS conducted the quarterly SEMs on behalf of the landfill utilizing a Landtec SEM5000 Portable Methane Detector ("SEM5000") traversing the landfill at 30-meter increments by foot and inspecting cover penetrations. SCS did not have a SEM5000 on the first day of the inspection to confirm our readings with the TVA and OGIC.

Mr. Rosenthal, Mr. Lewalla, Mr. Haynes, Mr. Jones, Mr. Bates, and Mr. Akin departed the main administrative office and arrived at Cell 5 at 14:50. I detected moderate LFG odors upon arrival at Cell 5. Mr. Haynes and I used a Nikon COOLPIX AW120 digital camera to photograph the area and document conditions at Cell 5 (See Appendix 1: Photographs). We walked from the access road towards gas wellheads, evaluating the site's conditions and using the TVA to screen both the intermediate cover and cover penetrations for detectable emissions. Mr. Haynes and I had affixed a stick to the TVA probe to act as a spacer and maintain consistency with the 5 to 10 cm probe distance requirements of NSPS WWW and NESHAP Subpart AAAA.

We proceeded in a northern direction, using the TVA to note intermittent readings of the intermediate cover along the ground. We inspected areas in proximity to Wells K49 and 20A, and Sump 25. We observed several instances where the TVA readings were above 500 ppm. The greatest exceedance noted was 1.11% VOC as methane, a concentration above 11,000 ppm, taken from the ground near Sump 25 (See Photograph 2). We observed black piping protruding from the cover that did not appear to be a component of the GCCS. I observed that the piping did not have identifying numbers or letters as other components of the GCCS did. I asked City staff and Mr. Lewalla about the pipe's purpose and origin. Mr. Lewalla stated that the pipes were known as "witness pipes", "sentry pipes", or "sentry wells". The witness pipes were used in survey activities to mark where components of the GCCS, such as lateral lines, were located. I placed the TVA probe above the open-ended top of a witness pipe, without inserting it into the pipe itself, and noted readings over 5,000 ppm (See Photograph 3). Mr. Llanas arrived and used a four-gas meter to take readings above one of the witness pipes. The meter alarmed because its lower explosive limit parameters were exceeded. Mr. Haynes used the OGIC (see Appendix 2: Video Log, Video 1) and observed hydrocarbon emissions emanating from the witness pipe. See AOC 2.

At Cell 5, I discussed my observations of site conditions, including the potential surface emission exceedances, with City and SCS staff. Mr. Jones, Mr. Lewalla and Mr. Akin stated the Gas Treatment Plant undergoes annual maintenance which was coinciding with EPA's inspection. They stated that the Gas Treatment Plant was operating under reduced capacity conditions because of the maintenance. The capacity reduction resulted in less LFG inflow to the plant and a corresponding change in pressure across

the GCCS. City and SCS staff also stated that the Gas Treatment Plant's flare was also down due to maintenance activities and that they believed, based on conversations with Gas Treatment Plant representatives, that all LFG inflows had stopped. The resulting change in pressure from the cessation of LFG inflow to the Gas Treatment Plant was observed by Mr. Lewalla at a nearby well. It was also reasoned by City staff that the primary cause for the surface monitoring exceedances was operational conditions at the plant. We departed Cell 5 at 16:16. See AOC 3.

We returned to the facility's administrative office with the site's representatives at 16:30. I discussed our observations, including the TVA measurements consistent with surface emission exceedances at Cell 5, the witness pipes, and the discussion regarding the Gas Treatment Plant's operational status. Mr. Fadden reiterated that the conditions at the Gas Treatment Plant were not typical of normal operations. I discussed the areas of interest for the next day, including observing the accessible components of the leachate system and conducting additional surface monitoring. I requested SCS bring monitoring equipment for comparative analysis. Mr. Lewellen said he would attempt to have SCS personnel available with a SEM5000 so that we could observe SCS' typical SEM procedures. Mr. Haynes and I departed the site at 16:52.

On September 24, 2021, Mr. Haynes and I arrived at the administrative building and checked in at 9:50. We met with site representatives and discussed the planned inspection activities for the day, which included observing leachate system components and taking surface readings at both an area with older waste-in-place than Cell 5 and the areas of Cell 5 that we had monitored the previous day. We decided to look at Sector 3C, an area that was accessible and contained older waste than Cell 5. Mr. Lewalla discussed the procedure for conducting SEMs in this area. We were also informed that the Gas Treatment Plant was operating under conditions that were approaching normal operations compared to the previous day.

Mr. Rosenthal, Mr. Haynes, Mr. Bates, Mr. Jones, Mr. Lewalla, and Mr. Llanas left the office at 10:17 and arrived at the Sector 3C monitoring area at 10:23. Mr. Lewalla and Mr. Llanas used the SEM5000 manufacturer's prescribed field calibration procedures, using zero air and 500 ppm methane-in-air as calibration gases. SCS noted that the SEM5000 was reading slightly higher than 500 ppm at that span point. After the SEM5000 calibration, Mr. Haynes used SCS's calibration gas to bump test our TVA. We were unable to completely seal the piping from the calibration gas canister to the TVA probe, but we observed readings near 460 ppm when applying the 500 ppm methane gas. We proceeded up a slope and to an area where GCCS wells were located and conducted surface monitoring in and around the well equipment. The areas around the wellheads and access paths leading to the wellheads were mowed. In areas that were not mowed, we observed vegetation that was greater than 6 feet tall. I asked about SCS's SOP for conducting surface monitoring areas that may be difficult or dangerous to monitor. Mr. Lewalla explained that areas of tall vegetation, like those we observed covering most of Sector 3C, would be excluded from surface monitoring. Mr. Bates explained that the area around wellheads and other GCCS equipment were always mowed as were access paths leading to that equipment. Mr. Lewalla stated that SCS coordinated with Landfill mowing operations and follows the scheduled mowers so as not to encounter areas of tall vegetation. We observed trees that appeared to be several years old,

and Mr. Bates explained that the City may mow around mature trees, and that the City had recently purchased new equipment that could remove small diameter trees during mowing.

As we proceeded among GCCS well sites at Sector 3C, we observed several surface monitoring exceedances. These exceedances are documented in Table 1 below:

Table 1. Methane Concentrations Observed at Sector 3C.

Area/Landmark	Reading on the SEM5000	Photograph No.
Well RW-9	3500 ppm	5
Base of Wells RW-3, C-57, C-13A	5800 ppm	6
Well C-49	8% [80,000 ppm]	6

At 11:49 we departed the area of Sector 3C. We traveled to Cell 5 to conduct follow-up monitoring of the areas where we had observed exceedances on the previous day. At 11:59, we arrived at Cell 5 with SCS and landfill personnel and began re-monitoring the area. We observed several surface monitoring exceedances, some of these exceedances are noted in Table 2 below:

Table 2. Methane Concentrations Observed at Cell 5.

Area/Landmark	Reading on the SEM5000	Photograph No.
Well K-12S at witness pipe	10.3 % [103,000 ppm]	7
Well K-12S base	2,000 ppm	7
Well K-12R	5,000 ppm	8
Well K-49	2,700 ppm	9
Well K-17A	1,250 ppm	10
Sump 25 riser	2,500 ppm	11
Well K-18S	4,500 ppm	12
Well K-20A at witness pipe	10% [100,000 ppm]	13
Well K-19S back-end riser	16% [160,000 ppm]	13
Witness pipe	1.1% [11,000 ppm]	14
Unmarked header access riser	2,200 ppm	15
Sump 28 riser	1,400 ppm	16

At 13:21 we departed the area for a tour of the surface components of the leachate system. We arrived at Leachate Riser 1 at approximately 13:30. Mr. Jones explained that none of the accessible or visible leachate system components, including the risers, were monitored for air compliance because they are considered outside of the boundary of the waste mass, delineated by the boundary of the liner, and are not regulated by air rules. SCS did not perform any comparative monitoring with us on the leachate system components. While at Leachate Riser 1 we also observed small turbine ventilators on poles along the access road. Mr. Haynes placed the TVA probe in the vicinity of one of these turbine ventilators and observed a reading above 1,000 ppm. Mr. Haynes inquired about the purpose of the turbine ventilators. Mr. Akin explained that the turbine ventilators were uncontrolled passive vents to the atmosphere for

gases that may otherwise flow through subsurface transport into an adjacent creek bed, water body, or other low-lying area. Mr. Haynes used the FLIR camera and observed emissions from both the turbine ventilator and the leachate riser (See Appendix 2: Video Log, Videos 2 and 3). I noted that the leachate riser appeared to be missing some bolts and looked to be in a general state of disrepair. I also detected strong LFG odors around Leachate Riser 1. Mr. Akin explained that Leachate Riser 1 was the oldest of the 11 leachate risers. We departed the area at 14:05. See AOC 4 and 5.

Section III – AREAS OF CONCERN

At 15:48 Mr. Haynes and I arrived at the site's main administrative office for a closing conference and passed around a sign-in sheet (See Appendix 3: Opening and Closing Conference Sign-in Sheets). I provided Mr. Fadden with two notices concerning Confidential Business Information ("CBI"), which he signed and returned to me. The City did not claim any CBI. Mr. Haynes and I discussed our general observations of the daily inspection activities with City of Dallas and SCS personnel. We noted the surface monitoring exceedances observed in Sector 3C and Cell 5, discussed the facilities current air authorizations, and discussed the City's interpretation of the CAA rules that regulate landfills. Mr. Fadden stated that the conditions we observed during the two days of the inspection were not typical operating conditions that would be encountered the rest of the year. AOCs 2 through 5 were noted during the inspection's closing conference. AOCs 1, 6, 7, and 8 were determined after the conclusion of the inspection and were not specifically discussed during the closing conference. We departed the site at 16:34. Following the closing conference, we transmitted copies of all photos and videos from the inspection to Mr. Jones and Mr. Mezzacappa.

1) The facility should maintain records in a form readily available for expeditious inspection and review

During the opening conference and subsequent conversations with the facility, site representatives stated that EPP was the primary custodian of records associated to the GCCS. EPP is not the owner or operator of the affected source. A document request was provided to the City on September 23, 2021, and the only record provided during the inspection was a plot-plan of the site. Additional records were submitted to EPA by the City on September 29, 2021 and October 12, 2021.

2) The facility may not be maintaining proper cover integrity

40 C.F.R. § 63.1958(d)(1) requires the site to operate the collection system so that the methane concentration is less than 500 parts per million (ppm) above background at the surface of the landfill. Numerous exceedances of this standard were observed during the inspection at various cover penetrations, including witness pipes, large erosive cracks, and other areas where visual observations indicated elevated concentrations of LFG. 40 C.F.R. § 63.1960(c)(5) states the owner or operator of an affected source must implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis. Additionally, a cursory review of monthly intermediate cover inspection reports indicates a lack of documentation regarding corrective actions taken in response to observed cover deficiencies. For instance, a May 5, 2021 monthly cover inspection report lists "exposed

waste” in “sectors 3-C thru [sic] 6-B all area’s [sic] exposed trash”. There is no indication of corrective action taken in response to this observation, and the subsequent month’s cover inspection report lists exposed waste in the same areas. In response to the observations made by EPA during the inspection, the City stated that the witness pipes would be removed, and the areas where SCS detected exceedances during the inspection would be restored pursuant to the corrective action provisions of the CAA. See Appendix 5: Inspection Follow-up Actions by the City of Dallas.

3) There may be extended periods of time where LFG generated by the Landfill is not collected and controlled by the GCCS

SCS and City personnel noted that a possible cause for the surface emission exceedances observed during the inspection was a reduction or cessation in Gas Treatment Plant operating capacity due to maintenance at that facility. Also, during the inspection, we observed intermittent flare operation that did not appear to coincide with the entirety of the Gas Treatment Plant’s downtime. SCS and City personnel explained that all collected LFG from the Landfill is routed to the Gas Treatment Plant prior to the flare and that the collected LFG does not have a bypass to an alternative control device. Site representatives also stated that the flare may have been down due to maintenance and that this was typical of periods of annual maintenance at the Gas Treatment Plant. These facts indicate that when the Gas Treatment Plant is shut down or in a state of reduced capacity, LFG that would otherwise be collected and controlled may be vented to the atmosphere as was observed during the inspection. Pursuant to 40 C.F.R. § 60.755(e) and Subpart AAAAA, GCCS periods of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and 1 hour for treatment or control devices. 40 C.F.R. § 63.1960(e)(1).

4) The City may not be correctly interpreting CAA provisions regarding Leachate System components

During the inspection, we observed hydrocarbon emissions with the OGIC and detected landfill gas odors around Leachate Riser 1. City personnel stated that components of the leachate systems, including the risers, were not monitored or evaluated pursuant to an air compliance program. 40 C.F.R. § 63.1962(a)(1) states that the collection system must address “leachate and condensate management”. Further, 40 C.F.R. § 63.1981(d)(6) addresses the variety of possible system designs that may be approved by the administrator, including “leachate collection systems”. According to the plot plan, only 4 of the 11 leachate risers are incorporated into the GCCS from collection piping originating at the respective leachate riser cleanouts. We observed the gas collection system valve interconnection for Leachate Riser 1 during the inspection (see Photograph No. 18). Additionally, 40 C.F.R. § 60.753(d) requires owners and operators to monitor surface methane concentrations around the perimeter of the collection area. In response to our inspection observations of the leachate system components, the City stated that they would conduct leachate riser repairs within the next two weeks to replace worn bolts and gaskets. See Appendix 5: Inspection Follow-up Actions by the City of Dallas.

5) There are uncollected emissions of LFG at the perimeter of the landfill due to subsurface gas migration

During the inspection, we observed emissions with the OGIC from an uncontrolled turbine ventilator at the perimeter of the landfill. The City explained that the purpose of the ventilators is to disperse migrating subsurface gas to prevent it from collecting in low lying areas and mitigate associated hazards. 40 C.F.R. §§ 60.759(a)(2), 60.769(a)(2), and 63.1959(b)(2)(ii)(B)(4) designate provisions for a sufficient density of the GCCS to address landfill gas migration issues including augmentation of the system through wells at the perimeter or exterior of the landfill. The rules state that the GCCS shall be designed to minimize off-site migration of subsurface gas. The uncontrolled turbine ventilators are outside the boundary of the landfill waste mass and are not listed components of the GCCS. Our observations of emissions from these components indicate subsurface gas migration is not being adequately mitigated by the GCCS.

6) There are inconsistencies between the landfill's recorded gas flow rate and the maximum capacity of the Gas Treatment Plant according to the GCCS design plan

The City submitted the site's most recent GCCS design plan in 2016 and lists the Gas Treatment Plant's maximum treatment capacity as 9,500 cubic feet per minute ("cfm"), or 13.7 million cubic feet ("mcf") per day of LFG. The plan also estimates that the site is generating a maximum flow rate of approximately 4,900 cfm of gas. A cursory review of Gas Treatment Plant inflow records provided by the City shows that some months may exceed these plan rates. For instance, in August 2020, the Gas Treatment Plant reported total inflows of 501.05 million cubic feet. This monthly rate equates to an average of 16.7 mcf of LFG per day, exceeding the treatment capacity and maximum flow rate values approved in the design plan. Additionally, the LFG inflow receipts appear to vary substantially by month without a clear indication of potential causative factors including weather, waste deposition rates, or other unknown variables. For instance, total LFG inflows in August 2019 recorded 189.85 million cubic feet, but in August 2020, they recorded 501.05 million cubic feet, a 265% increase.

7) The facility does not have a Title V Federal Operating Permit

The facility was subject to 30 TAC Chapter 113, Subchapter D, a SIP provision approved by EPA on June 17, 1999 (FR Doc No: 99-15265), which incorporates 40 C.F.R. § 60.751-60.759 (NSPS Subpart WWW) by reference. 40 C.F.R. § 60.752(b) requires an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters to obtain authorization pursuant to 40 C.F.R. Part 70 or 71 permitting requirements. According to the TCEQ's Central Registry database and conversations with the City and SCS personnel, the facility had a Title V permit that was voided in 2007 after the site failed to renew it. The facility has applied for a new Title V Permit.

8) The City may not be submitting required reports to the Administrator

I requested annual reports concerning the GCCS in the document request given to the City on September 23, 2021. The facility did not transmit a response to that request. During the technical meeting conducted on October 4, 2021, representatives of the facility stated that they anticipated the first such report would be submitted that year, indicating the facility has not been submitting required annual reports. Prior to June 21, 2021 the facility was required to submit semi-annual reports to the

Administrator. 40 C.F.R. § 60.757(f). After June 21, 2021, the facility must submit annual reports pursuant to 40 C.F.R. § 62.16724(h).

The Areas of Concern referenced above are not comprehensive. They only reflect the concerns identified during this inspection. The inspection team will continue to evaluate the City's records and engage with facility staff to determine compliance with the CAA as part of a more detailed investigation.

Section IV – FOLLOW UP

The following information was received by EPA on September 29, 2021 after exiting the facility on September 24, 2021:

- 1) Follow-up actions in response to inspection observations documented by EPA on 9/23 and 9/24, 2021
- 2) Title V Application
- 3) Initial Design Capacity Report
- 4) GCCS Design Plan and Updates
- 5) Monthly Pressure Well Header Readings
- 6) Waste-in-Place Estimates
- 7) Wellfield, and Surface Emission Monitoring
- 8) Documented Parameter Exceedances
- 9) Plot Plan of the GCCS
- 10) Site-specific Treatment Monitoring Plan
- 11) Header Pipe Gas Flow Rate

We conducted a follow-up technical meeting to discuss the submitted records on October 4, 2021 with Mr. Mezzacappa, Mr. Jones, Mr. Akin, and Mr. Joseph Krasner, Project Manager with SCS Engineers. We requested additional records after this meeting.

The City submitted additional records on October 12, 2021.

EPA continues to review the records submitted by the City at the writing of this report.

Section V – LIST OF APPENDICES

Appendix 1 – Photograph Log

Appendix 2 – Video Log

Appendix 3 – Opening and Closing Conference Sign-in Sheets

Appendix 4 – Document Request

Appendix 5 – Inspection Follow-up Actions by the City of Dallas

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas



Photo File Name: DSCN3089.JPG

Date of Photo: 09/23/2021

Time of Photo: 14:58

Photographer: Ben Rosenthal

Description: Typical conditions encountered by Inspectors at Cell 5



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas



Photo File Name: DSCN3089.JPG

Date of Photo: 9/23/2021

Time of Photo: 15:16

Photographer: James Haynes

Description: 1.11 % VOC reading in the vicinity of Sump 25.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas



Photo File Name: DSCN0396.JPG

Date of Photo: 9/23/2021

Time of Photo: 15:37

Photographer: James Haynes

Description: 5260 ppm VOC reading above a witness pipe.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas



Photo File Name: DSCN0398.JPG

Date of Photo: 09/23/2021

Time of Photo: 15:46

Photographer: James Haynes

Description: Witness pipe with Wells K-20A and K-19S in the background. Arrow notes location at which EPA observed hydrocarbon emissions with the FLIR camera.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas



Photo File Name: DSCN0404.jpg

Date of Photo: 09/24/2021

Time of Photo: 11:15

Photographer: Ben Rosenthal

Description: Well RW-9. Arrow notes location where SEM5000 detected an exceedance of 500 ppm methane.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas

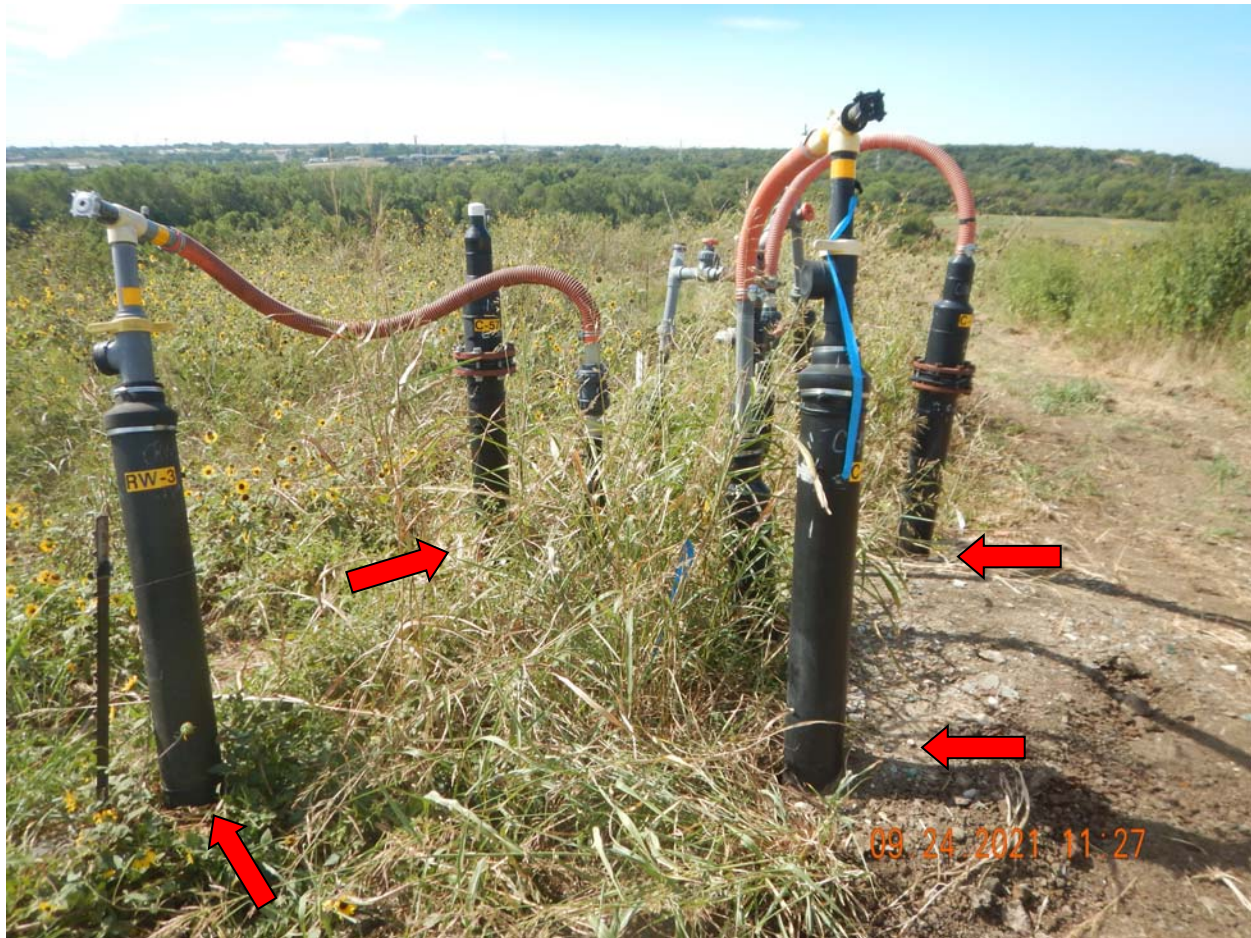


Photo File Name: DSCN0405.jpg

Date of Photo: 09/24/2021

Time of Photo: 11:27

Photographer: Ben Rosenthal

Description: Cluster of wells including Wells RW-3, C-57, C-13A, C-49. Arrows note locations where SEM5000 detected exceedances of 500 ppm methane.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas



Photo File Name: DSCN0406.jpg

Date of Photo: 09/24/2021

Time of Photo: 12:07

Photographer: Ben Rosenthal

Description: SCS using SEM5000 to monitor surface emissions around Well K-12S. Arrow notes locations where SEM5000 detected exceedances of 500 ppm methane.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas



Photo File Name: DSCN0408.jpg

Date of Photo: 09/24/2021

Time of Photo: 12:12

Photographer: Ben Rosenthal

Description: Well K-12R(foreground). Arrow notes location where SEM5000 detected exceedances of 500 ppm methane.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas



Photo File Name: DSCN4010.jpg

Date of Photo: 09/24/2021

Time of Photo: 12:12

Photographer: Ben Rosenthal

Description: Well K-49. Arrow notes location where SEM5000 detected exceedances of 500 ppm methane.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas

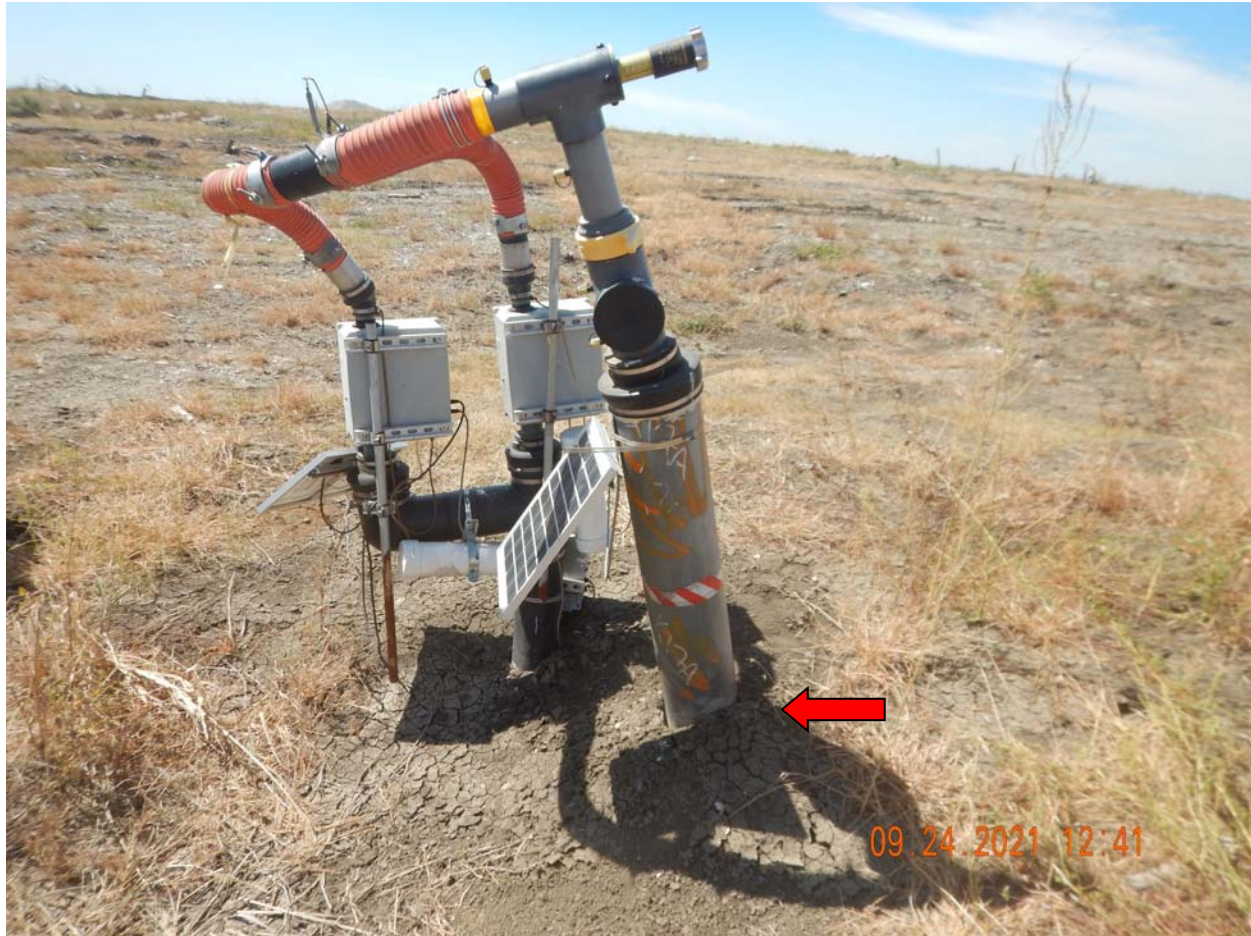


Photo File Name: DSCN0411.jpg

Date of Photo: 09/24/2021

Time of Photo: 12:41

Photographer: Ben Rosenthal

Description: Well K-17A. Arrow notes location where SEM5000 detected exceedances of 500 ppm methane.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas



Photo File Name: DSCN0412.jpg

Date of Photo: 09/24/2021

Time of Photo: 12:46

Photographer: Ben Rosenthal

Description: Sump 25 Riser. Arrow notes location where SEM5000 detected exceedances of 500 ppm methane.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas



Photo File Name: DSCN0414.jpg

Date of Photo: 09/24/2021

Time of Photo: 12:50

Photographer: Ben Rosenthal

Description: Well K-18S. Arrow notes location where SEM5000 detected exceedances of 500 ppm methane.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas

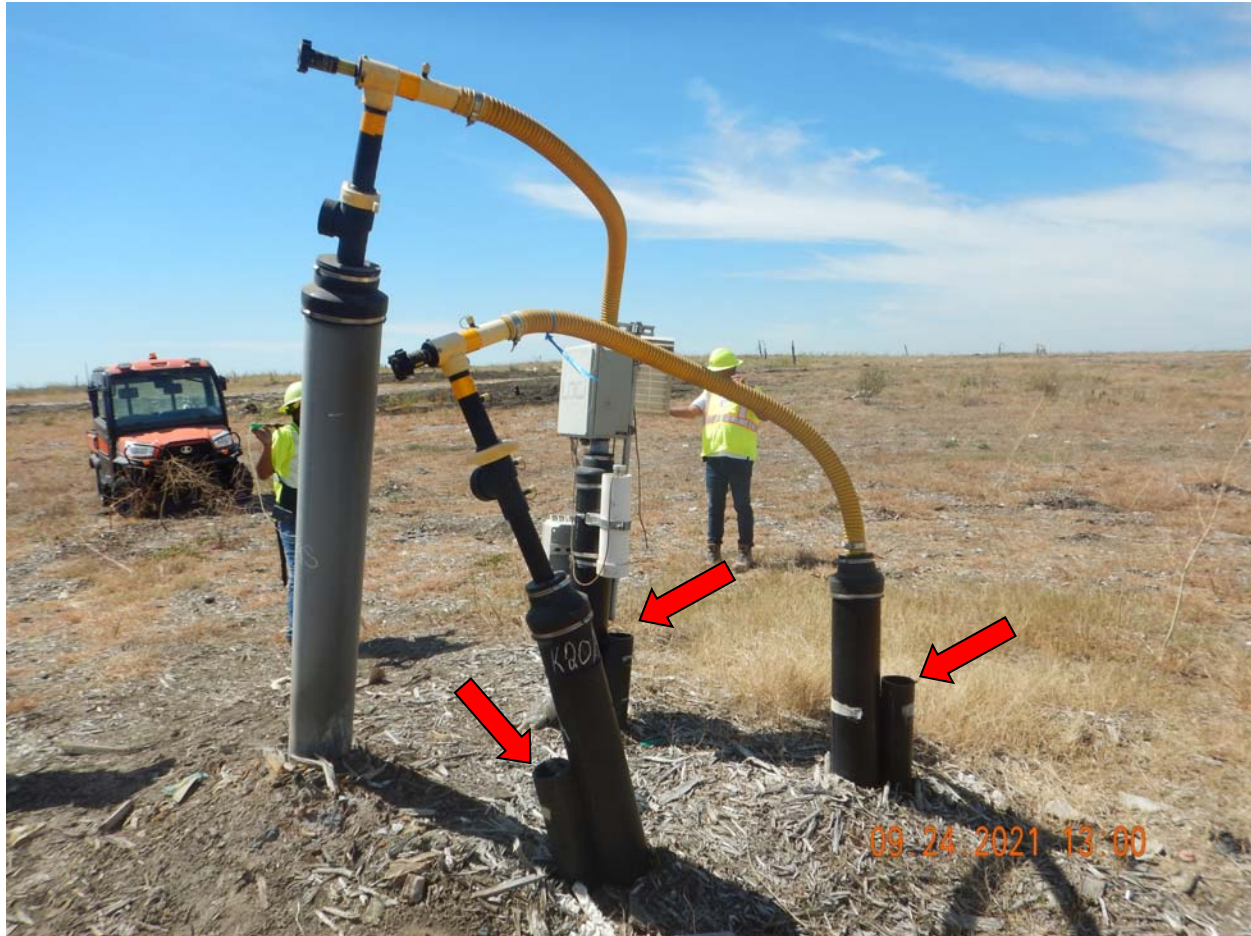


Photo File Name: DSCN01416.jpg

Date of Photo: 09/24/2021

Time of Photo: 13:00

Photographer: Ben Rosenthal

Description: Wells K-19S, K-20A. Arrows note locations where SEM5000 detected exceedances of 500 ppm methane.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 14

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas



Photo File Name: DSCN0418.jpg

Date of Photo: 9/24/2021

Time of Photo: 13:00

Photographer: Ben Rosenthal

Description: Wells K-19S, K-20A (reverse view of Photo No. 13). Arrows note locations where SEM5000 detected exceedances of 500 ppm methane.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 15

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas



Photo File Name: DSCN0419.jpg

Date of Photo: 09/24/2021

Time of Photo: 13:02

Photographer: Ben Rosenthal

Description: Witness pipe depicted in Photo No. 3. Arrow notes location where SEM5000 detected exceedances of 500 ppm methane.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 16

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas



Photo File Name: DSCN0420.jpg

Date of Photo: 09/24/2021

Time of Photo: 13:11

Photographer: Ben Rosenthal

Description: Unmarked header access riser. Arrow notes location where SEM5000 detected exceedances of 500 ppm methane.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 17

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas



Photo File Name: DSCN0421.jpg

Date of Photo: 09/24/2021

Time of Photo: 13:19

Photographer: Ben Rosenthal

Description: Sump 28 Riser. Arrow notes location where SEM5000 detected exceedances of 500 ppm methane.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 18

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas



Photo File Name: DSCN0423.jpg

Date of Photo: 09/24/2021

Time of Photo: 13:35

Photographer: Ben Rosenthal

Description: GCCS valve tied into Leachate Riser 1.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 19

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas



Photo File Name: DSCN0424.jpg

Date of Photo: 09/24/2021

Time of Photo: 13:49

Photographer: Ben Rosenthal

Description: Access road along the perimeter of the landfill. Leachate riser 1, its control panel, and the GCCS valve tie-in depicted in Photo No. 18 are visible in the foreground. Turbine ventilators are visible along the road behind the utility vehicle.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 20

Location: McCommas Bluff Landfill		
City: Dallas	County: Dallas	State: Texas



Photo File Name: DSCN0425.jpg

Date of Photo: 09/24/2021

Time of Photo: 14:02

Photographer: Ben Rosenthal

Description: Leachate Riser 1. Arrow notes locations at which EPA observed hydrocarbon emissions with the FLIR camera.

Appendix 2

Video Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Video Log

Location: City of Dallas / McCommas Bluff Landfill		
City: Dallas	Dallas County	State: Texas



Video File Name: MOV_0037.mp4
 Date of Video: 09/23/2021
 Time of Video: 15:40
 Videographer: James Haynes
 Description: OGIC visualized emissions from a witness pipe in Cell 5.*



Video File Name: MOV_0038.mp4
 Date of Video: 9/24/2021
 Time of Video: 14:00 pm
 Videographer: James Haynes
 Description: Leachate Riser 1: OGIC visualized emissions from bolts, bolt holes, and flange around riser cap.*



Video File Name: MOV_0039.mp4
 Date of Video: 9/24/2021
 Time of Video: 13:45 pm
 Videographer: James Haynes
 Description: OGIC visualized emissions from a turbine ventilator located on the perimeter of the landfill in the area of Leachate Riser 1.*

*All videos can be made available for viewing upon request.

Appendix 3

Opening and Closing Conference Sign-in Sheets

EPA Project/Facility ID

Project/Facility Name

Page 4 of 20

BMR
 McCommas Bluff Landfill
 Opening/Pre-Inspection Meeting

Commence opening/pre-inspection meeting Time: 13:30

Name	Title	Representing	Telephone No.
James Haynes	Physical Scientist	EPA R6	214-665-8546
Ben Rosenthal	Physical Scientist	EPA R6	214 665 6453
Tad Bates	Manager city of Dallas	CO.D	214 670 5905
JOHN L. JONES	ENV. COORD III	CO.D	469-243-9887
Richard Akin	Senior Engineer	CO.D	214-671-8987
David Mezzacappa	SCS ENGINEERS Vice President	SCS ENGINEERS	972-522-9174
Jason Lemalla	Project Director	SCS-FS	817-680-2264
Robert Fadden	Interim Asst. Dir	City of Dallas	214-670-0990
Debra SANDOZ	OFFICE ASST. II	City of Dallas	214-671-5161

sharedrive

sharedrive

Conclude opening/pre-inspection meeting Time: 14:35Initials / Date: BMR / 9/23

EPA Project/Facility ID

~~Project/Facility Name~~~~Page 16 of 20~~

Exit interview / Out-briefing Meeting

Commenced meeting

3:50 pm - Ben Rosenthal

Time: 3:50 pm

Name	Title	Representing	Telephone No.
Robert Fadden	Interim Asst. Director	City of Dallas	
Bobby Llanas	Project Coordinator	SCS	214-605-4666
Jason Lewallen	Project Director	SCS	817-680-2264
JOHN L. JONES	ENV. COORD III	SAN	469-243-9887
Richard Akin	Senior Engineer	SAN	214 671 8987
Tad Bates	Manager	SAN	214 670 5905
Debra Sanders	OFFICE ASST.	SAN	214-671-5761
James Haynes	Physical Scientist	EPA R6	214-665-8546

Conclude meeting

Time: 4:15 pm

Initials / Date:

BMR / 9/24

Appendix 4

Document Request

Mccommas Bluff Landfill EPA Record Request - 9/2021		
	Description	Period
	Current operating permit(s) and application(s).	
	Initial Design Capacity Report	
	NMOC emission rate report	
	Gas Collection and Control System Design Plan (initial and current)	
	Monthly gauge pressure in the gas collection header at each individual well	
	Annual GCCS report	
	Initial and subsequent performance test reports of the GCCS	5 years
	Current amount of waste-in-place	
	Annual waste acceptance rate	5 years
	Maximum Gas generation flow rate	
	The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in §60.759(a)(1)	
	Type of control system utilized (flare, boiler, process heater, gas treatment for resale etc.)	
	Equipment operating parameters (wellhead, control device, surface monitoring)	5 years
	Equipment parameter exceedences defined under §60.758(c)(1-6)	5 years
	Plot plan of collector system	
	Title V reports (ACC, Semi-annual Monitoring and Deviation Reports)	5 years
	Collection control system exceedences	5 years
	SOP for SEM	
	Surface monitoring design plan	
	Site specific treatment monitoring plan	
	Treatment system bypass records	
	Header Pipe Gas Flow Rate	
	Recent permit amendments/projects	

Appendix 5

Inspection Follow-up Actions by the City of Dallas

SCS ENGINEERS

Environmental Consulting & Contracting

September 29, 2021
File No. 16220085.00, T1243

MEMORANDUM

TO: City of Dallas Sanitation Services, Disposal
FROM: David Mezzacappa, P.E.
SUBJECT: Summary of Follow-Up Actions to EPA Inspection



This memorandum has been prepared to document City of Dallas follow-up measures performed with SCS Engineers since EPA's inspection visits on September 23/24.

"Witness" survey pipes on-site that were monitored during the inspection were surveyed by SCS's SEM 5000 which logs GPS coordinates to 5 decimal degrees. All on-site witness pipes were then removed from the landfill, and the cover restored. The restored locations of where the witness pipes were monitored during the inspection will be rescanned with the SEM 5000 on Monday, October 4th along with the other wells/areas that showed concentrations over 500 ppm. We will follow the normal surface emissions monitoring (SEM) procedures and timelines per regulatory requirements. All remonitoring information will include calibration records, logger line of data to confirm the timestamp, GPS coordinates, and gas ppm. Any remonitored location that is still exceeding 500 ppm above background will need additional corrective action and be rescanned within 10 days. All locations that were below 500 ppm above background will be rescanned again at 30 days to confirm the exceedance has been resolved.

Regarding the leachate collection system components, we expect completion of leachate riser repairs in approximately two weeks, October 15. This includes replacing worn bolts and gaskets.