

AIR CP\_104046545\_CP\_20160224\_INVESTIGATION\_1314183  
**Texas Commission on Environmental Quality**  
**Investigation Report**

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**Customer: Generic Incident Principal**  
**Customer Number: CN602295370**

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**Regulated Entity Name: GENERIC INCIDENT ZIP CODE 77584**

**Regulated Entity Number: RN104046545**

**Investigation #** 1314183

**Incident Numbers**

228806

227414

**Investigator:** MENGISTU LEMMA

**Site Classification**

**Conducted:** 02/03/2016 -- 02/24/2016

**No Industry Code Assigned**

**Program(s):** AIR QUALITY NON PERMITTED

**Investigation Type:** Compliance Investigation

**Location:**

**Additional ID(s):**

**Address:** ,  
, ,

**Local Unit:** REGION 12 - HOUSTON

**Activity Type(s):** AIRCOMPL - AIR CMPL - AIR  
COMPLAINT INV

**Principal(s):**

**Role**

**Name**

RESPONDENT

GENERIC INCIDENT PRINCIPAL

**Contact(s):**

**Role**

**Title**

**Name**

**Phone**

**Other Staff Member(s):**

**Role**

**Name**

QA Reviewer

ROBERT AGUILAR JR

Investigator

REGINA RHODA

Supervisor

ROBERT AGUILAR JR

**Associated Check List**

**Checklist Name**

AIR COMPLAINT INVESTIGATION

**Unit Name**

Area Wide

**Investigation Comments:**

INTRODUCTION

Introduction

From February 3, 2016 through February 24, 2016 the Texas Commission on Environmental Quality (TCEQ) Houston Regional Office received more than 130 complaints as part of the ongoing complaint investigation of various odors near the Shadow Creek neighborhood in the City of Pearland, Brazoria and Ft. Bend counties of Texas. Some complaints were received by telephone and most by email. The TCEQ Incident numbers for this investigation are 227414 and 228806. The complainants stated that there are mysterious odors in the area that

are intermittent but has been going on for a long time. Some of the complainants stated that it has been going on since they moved to the area more than 3 years ago and others stated that they start experiencing it within the past six months to a year. Most of the complainants stated that they don't have any idea where the odor is coming from. Some complainants suspected the odors are coming from the Blue Ridge Landfill and others suggested the chemical plants in the vicinity such as Akzo Nobel. The complainants stated that the odor gets stronger in the evening to night hours. Different people described the mysterious odors in different ways: spoiled trash, rotten eggs, chemical smell, acidic smell, and gas smell. The complainants described the odors as awful, sickening, pungent, very strong, and bad.

Some complainants alleged that the odor gives them headaches and others complained of nausea and vomiting when the odor is stronger. Some complainants stated they could not come out of their house when the odor is strong and are worried about the long time effect on their health and children's health. Others are worried about their property value decreasing because the odor is driving other homeowners out of the area.

The complaint was assigned to the investigator, Mr. Mengistu Lemma on February 17, 2016. The investigator conducted a 2-hour reconnaissance drive by investigation on February 19, 2016. The weather was sunny, temperature was 62 degrees Fahrenheit, winds were 7 miles per hour (mph) from the south southeast and there was no precipitation. The investigator drove to the allegedly affected area and located the potential sources. However, the investigator did not detect any odor on this day.

The investigator contacted two of the complainants on February 22, 2016. The investigator scheduled an onsite investigation for February 24, 2016.

#### Investigation Narrative

On February 24, 2016 at 10:40 A.M. TCEQ investigators Mr. Lemma and Ms. Regina Rhoda arrived in the general vicinity where most of the complainants indicated they experienced the odor, the north and northwest section of the Shadow Creek subdivision. A Summa Canister was brought along to collect a grab sample if the investigators encountered odor.

The weather was sunny, temperature was 59 degree Fahrenheit, winds were 12 miles per hour from the northwest, and the humidity was 48%. There was no precipitation.

The Shadow Creek Subdivision is a large subdivision that is bordered to the east by State Highway 288, to the north by Sam Houston Parkway, to the west by FM 521 (Alameda Road) and to the south by South Fork Drive. The major part of the subdivision lies in Brazoria County, but the western part of the subdivision extends into Ft. Bend County. Most of the complainants for this investigation are concentrated north of Broadway Street, west of Kirby Drive, south of Shadow Creek Parkway, and north of Alameda Road (Attachment 1).

The investigators conducted an audio, visual and olfactory (AVO) observation while driving from Sam Houston Parkway south on Alameda Road. There are several facilities along Alameda Road that could be considered potential sources for the alleged odor. Some of these facilities include Hunt & Hunt Machine Shop, auto body shop, Akzo Nobel Surfactants, Flexicare of Texas, an Energy Transfer Station and Blue Ridge Landfill.

As the investigators were driving south on Alameda Road, they detected a faint odor just south of McHard Road. The odor started getting stronger about 1.4 miles south of McHard Road on Alameda Road. The odor was difficult to identify but both investigators agreed that it had a smell of spoiled garbage with a hint of some type of chemical odor. When the investigators reached W. Broadway Street, it was becoming difficult to detect. The investigators then turned back to the area where the strongest spoiled garbage odor was detected. The investigators then stopped at the entrance gate of the Energy Transfer Station located about half way between McHard Road and Broadway Street on the west side of Alameda Road. The time was 11:30 A.M. This location was selected due to the strongest odor, and safe location to park the vehicle. An odor intensity time log was completed (Attachment 3).

The frequency, intensity, duration and offensiveness of the odor was characterized by the investigators as follows. As far as the frequency is concerned, the odor was detected during the sampling process. However, the intensity of the odor was changing from moderate to light and very light and back to light during the duration of the sampling process. The odor was classified as offensive.

Prior to collecting the grab sample, the pressure of the Summa Canister was checked using the Druck instrument

## GENERIC INCIDENT ZIP CODE 77584 - PEARLAND

2/3/2016 to 2/24/2016 Inv. # - 1314183

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(Serial Number 8000013764). The Druck registered 0.02 Hg for the pre-sampling pressure. The grab sample was collected for 15 seconds at 11:51 A.M. with the Summa Canister (Canister # No624). After collecting the sample, the pressure was checked with the same Druck. The Druck registered 29.12 Hg. The canister was shut tight and stored back in the vehicle. The coordinates for the sample collection location is N 290 33.695' W 950 26.241.

Next, the investigators started driving through the neighborhood streets where some of the complainants' houses are located and continued their audio visual and olfactory (AVO) observations. No detectable odor was observed. The investigators detected very weak odors intermittently. The investigators left the area at 3:00 p.m. and headed back to the office.

Upon arrival at the office, the lead investigator secured the sample in a locked metal cabinet. On February 25, 2016 the investigator prepared the sample for shipment with a chain of custody form (Attachment 4). The investigator then signed the chain of custody form and relinquished the package for shipment. On February 26, 2016 the investigator called the laboratory and they confirmed receipt of the sample.

The analytical results of the grab sample were received by the investigator on March 22, 2016. However, the results were deemed not valid because the lab reported that the canister was received at ambient pressure and a valid leak check could not be performed. Therefore, it was not possible to use the analytical results to identify the alleged odors during this investigation.

### Facility Authorization Narrative

The investigators conducted a general area survey. The investigators did not enter any facilities because the facilities could not be identified as sources of the odor. Therefore, no site visit was conducted.

### Exit Interview

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

## GENERAL FACILITY AND PROCESS INFORMATION

### Process Description

N/A

## BACKGROUND

### Agreed Orders, Court Orders, and Other Compliance Agreements

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

### Prior Enforcement Issues

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

### Complaints

Based on a review of CCEDS during the past five years, there are hundreds of odor complaint received and other investigations are being conducted by the Region 12 Office concurrently.

## ADDITIONAL INFORMATION

### Conclusions, Recommendations, and Current Enforcement Actions

Based on the TCEQ's Odor Complaint Investigation Procedures and application of the FIDO Chart, an "offensive" odor with an intensity of "very light" would have to be present on a daily basis continuously for at least 12 hours to constitute a nuisance. Although the investigators confirmed an odor, a nuisance condition and source of odor

could not be confirmed at the time.

Based on this investigation, no violations are being alleged.

Additional Issues

No additional issues were noted during this investigation.

#### REPORT ATTACHMENTS

1. Area Map
2. Investigator's Odor Log
3. Sampling Chain of Custody Form

**No Violations Associated to this Investigation**

Signed

Mengshi Kumar  
Environmental Investigator

Date

4/28/16

Signed

Robert G. Gular  
Supervisor

Date

4/28/16

#### Attachments: (in order of final report submittal)

\_\_\_ Enforcement Action Request (EAR)

\_\_\_ Maps, Plans, Sketches

\_\_\_ Letter to Facility (specify type) : \_\_\_\_\_

\_\_\_ Photographs

\_\_\_ Investigation Report

\_\_\_ Correspondence from the facility

\_\_\_ Sample Analysis Results

☒ Other (specify) :

\_\_\_ Manifests

ATT. 1: Area Map

\_\_\_ Notice of Registration

ATT. 2: Odor Log

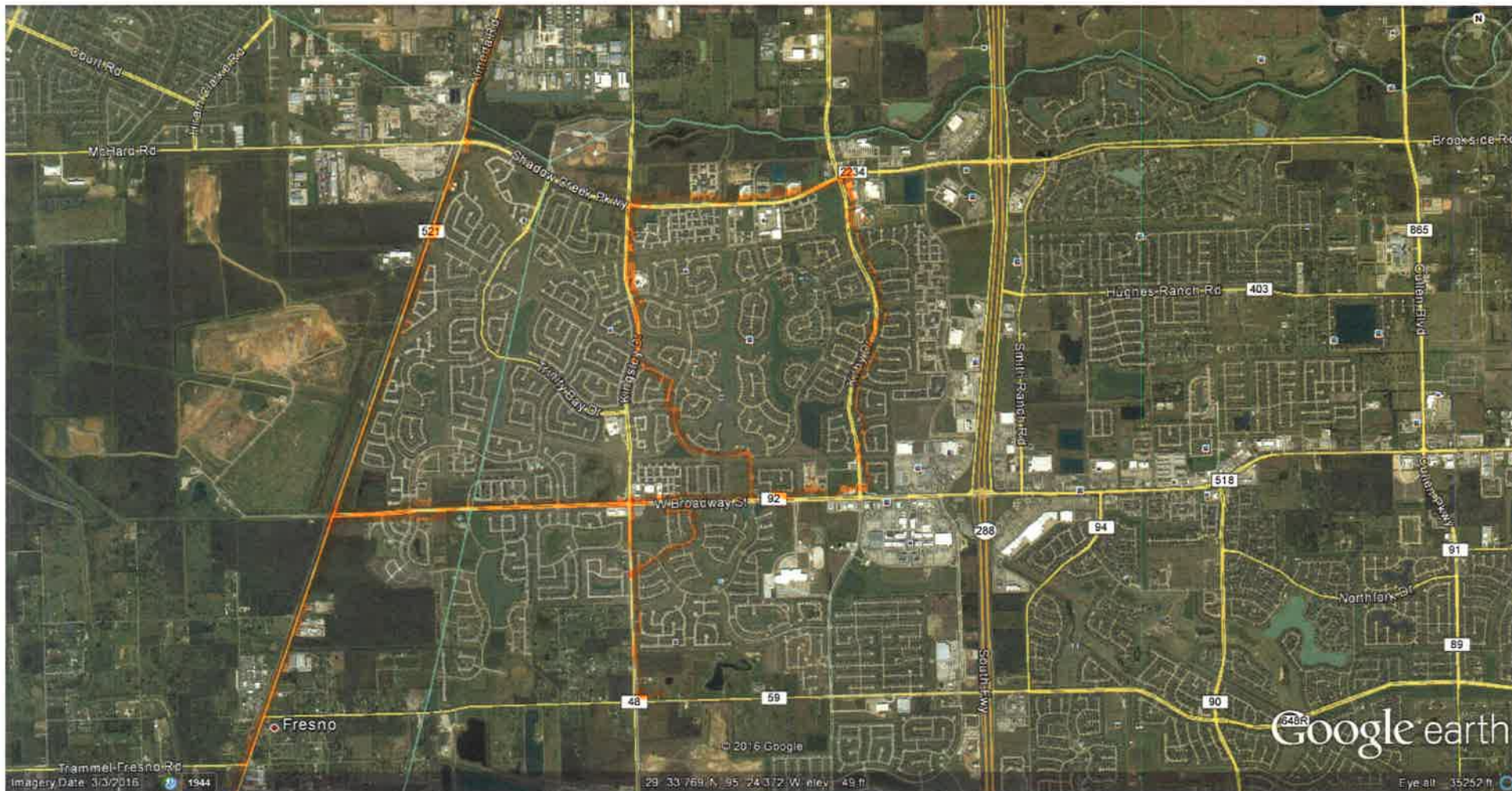
ATT. 3- Sampling Chain of Custody Form

**Attachment 1  
Area Map**

**RN104046545  
Pearland Odor Compliant Investigation  
Pearland, Brazoria/Ft. Bend Counties, TX.**

**February 24, 2016**





DRIVING ROUTE

Investigation Type: 1314183  
 Air Account NO: BN104046545  
 Attachment: 1  
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**Attachment 2**  
**Investigators Odor Log**

**RN104046545**  
**Pearland Odor Compliant Investigation**  
**Pearland, Brazoria/Ft. Bend Counties, TX.**

**February 24, 2016**



# Investigator's Odor Intensity Time Log

Date of Investigation: 2-22-16

Start Time 11:30

Name and Address of Alleged Source: Intersection of I-75 & I-76, Brown 12th PERMANENT

Investigator's Name: Print: M. Lemma

Sign: \_\_\_\_\_

Minutes	Odor Intensity VL, L, M, S, VS			
1 min	M			X
2	L			X
3	VL		X	
4				X
5				X
6				X
7			X	
8			X	
9			X	
10			X	
11			X	
12				X
13				X
14				X
15				X
16				X
17				X
18				X
19			X	
20			X	
21			X	
22				X
23				X
24			X	
25			X	
26			X	
27			X	
28			X	
29			X	
30			X	

Minutes	Odor Intensity VL, L, M, S, VS			
31 min				
32				
33				
34				
35				
36				
37				
38				
39				
40				
41				
42				
43				
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57				
58				
59				
60				

Offensiveness: Highly \_\_\_\_\_ Offensive X Unpleasant \_\_\_\_\_ Not Unpleasant \_\_\_\_\_

Dominant Odor Intensity For:

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

Investigation Type: 131/1123

Air Account NO: QW 1041 0416 5-15

Attachment: 2

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**Attachment 3**  
**Sampling Chain of Custody Form**

**RN104046545**  
**Pearland Odor Compliant Investigation**  
**Pearland, Brazoria/Ft. Bend Counties, TX.**

**February 24, 2016**



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## Field Canister Sampling Data Sheet and Chain-of-Custody

Final Site No.

Sample ID <b>N0624 24022016</b>	Canister # <b>N0624</b>
	Orifice Flow Controller #
	Sampled By: <b>M. L. M. M.</b>
	Sampled Period: <b>15 seconds</b>
Initial Evacuation Pressure (from lab): <b>0.02</b> (psia or "Hg)	Canister Leak Check Results: <b>PASS / FAIL</b>
Did you use the Druck for Pressure readings? <b>(Yes)</b> or No	Druck Serial Number: <b>8000013764</b>

Can Pressure (psia or "Hg) **29.12** Date/Time **02/24/16 @ 11:51** Sampling Duration (sec. or min.) **15 Sec.**

START	<b>0.02</b>	<b>02/24/16 11:51</b>	Not Applicable
STOP	<b>29.12</b>	<b>02/24/16 11:51</b>	

Site Description and Field Comments:

Sample Taken With Vehicle

The Grab sample was collected at the entrance Gate of Energy Transfer Station facing east (the gate). The gate was closed and there was no one at the station. The station is located on ~~Highway~~ FM 521 in Pearland, TX. Temperature was 51°F; wind 8-10 mph from the NW.

Sample Type (circle) **Grab** OFC Duplicate Trip Blank Field Blank OFC EB

### FIELD CHAIN-OF-CUSTODY


Relinquished by:	Date/Time	Received by:	Date/Time	Comments:

Investigation Type: **1314123**  
 Air Account No: **RN 104046 5/15** 9/01/12  
 Attachment: **3**  
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# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## Canister Sampling Data Sheet and Chain-of-Custody

CAN ID	ATTACH SAMPLE ID LABEL HERE
 N062400026	
Canister Number: N0624 24022016	Do not use canister for sampling after this date: 4/3/2016

LAB USE ONLY: ☐ NMOC ☐ Acrolein ☐ MB Prep: Range 29.4 - 30.0 psia  
 µl Water added: 90 225 495

Can Leak Test	Lab Pressure (psia)	Field Pressure (psia)	Diff. In Pressure	Test Result
Final (post-sampling)				Pass / Fail / NA

Canister Preparation	DILUTION 1	DILUTION 2	Dilution factor for Multiple Dilutions: D1 x D2 =
Pre-Dilution Pressure	psia	psia	
Post-Dilution Pressure	0.02 psia	psia	
Dilution Factors	#1	#2	
Initials/Date/Time			

Canister Cleaning Operation	Cleaning Batch ID	Initials	Pressure
Canister Cleaned and Evacuated	010416d01	LSK	0.04 psia
Analysis must be completed by: 5/3/2016			

FIELD COMMENTS:

MULTICAN ONLY: Site # \_\_\_\_\_ Port # \_\_\_\_\_ Local Standard Start time: \_\_\_\_\_ Sampling Date: \_\_\_\_\_

CHAIN-OF-CUSTODY

Relinquished by: (Signature/Date/Time)	Received by: (Signature/Date/Time)	Circle only one that applies:
MA 2/18/16 10:28	M. Lemma 2/24/16 10:30	Custody Seal Intact Yes / No or Transferred Person to Person Yes / No
M. Lemma 2/25/16 11:30		Custody Seal Intact Yes / No or Transferred Person to Person Yes / No
		Custody Seal Intact Yes / No or Transferred Person to Person Yes / No
		Custody Seal Intact Yes / No or Transferred Person to Person Yes / No

INSTRUCTIONS FOR SAMPLING PERSONNEL (Shaded areas only):

- \* Sign and date the COC in the "Received by: (Signature/Date/Time)" field upon receiving canister.
- \* Sign and date the COC in the "Relinquished by: (Signature/Date/Time)" field before canister shipping.
- \* Circle only one of the following; Custody Seal intact or Transferred Person to Person (Yes/No).
- \* Make any useful comments such as any problems that may have occurred, in the "Field Comments" field.
- \* Attach the correct sample ID label in the "Attach Sample ID Label Here" field.
- \* Make sure the canister number entered in the can tracker matches the one on this COC.

FOR ANY QUESTIONS OR COMMENTS, CONTACT THE TCEQ AIR LAB AT (512) 239-1711.

Investigation Type: \_\_\_\_\_  
 Air Account NO: 104 046545  
 Attachment: 3  
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