



Region 6 - Enforcement & Compliance Assurance Division
INSPECTION REPORT

Inspection Date(s):	02/07/2024	
Media Program:	Air	
Regulatory Program(s)	NESHAP	
Company Name:	Phillips 66	
Facility Name:	Spindletop Compressor Station	
Facility Physical Location:	6175 Highland Ave	
(city, state, zip code)	Beaumont, Texas, 77705	
Mailing address:	6175 Highland Ave	
(city, state, zip code)	Beaumont, Texas, 77705	
County/Parish:	Jefferson County	
Facility Phone Number	409-332-3443	
Facility Contact:	Ruben Herrera	Environmental Specialist
	Ruben.Herrera@p66.com	
FRS Number:	110015744523	
Identification/Permit Number:	RN100211424 - Permit no. 02507	
Media Identifier Number:	48-245-00169	
NAICS:	211111, 486210	
SIC:	1311	
Personnel participating in inspection:		
Benjamin Donaldson	Region 6 ECDAT	Environmental Engineer
Kenneth McPherson	Region 6 ECDAT	Life Scientist
Justin Chen	Region 6 ECDAT	Environmental Engineer
Daniel Hoyt	OECA AED	Environmental Engineer
Nathan Hicks	OECA AED	Physical Scientist
Richard Helmich	NEIC	Chemist
Philip Myers	NEIC	Mechanical Engineer
Bryan Mason	Phillips 66	Operator
Justin Goss	Phillips 66	Supervisor
Ruben Herrera (via phone)	Phillips 66	Environmental Specialist
EPA Lead Inspector Signature/Date		
	Benjamin Donaldson	Date
Supervisor Signature/Date		
	James Leathers	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA inspectors Benjamin Donaldson (R6 ECDAT), Justin Chen (R6 ECDAT), Kenneth McPherson (R6 ECDAT), Daniel Hoyt (OECA AED), and Nathan Hicks (OECA AED) accompanied by Philip Myers and Richard Helmich (National Enforcement Investigations Center, “NEIC”) arrived at the Phillips 66 Spindletop Compressor Station (“Spindletop”) at 8:50AM on February 7, 2024, for an unannounced inspection. We met with Bryan Mason, a Phillips 66 operator, Justin Goss, a Phillips 66 site supervisor, and with a Phillips 66 environmental specialist, Ruben Herrera on the phone. Credentials were presented to Justin Goss, and we informed them that this was an EPA inspection to evaluate potential sources of excess emissions using EPA’s Geospatial Measurement of Air Pollution (“GMAP”) vehicle and evaluate compliance with the facility’s Title V Air Permit and the Clean Air Act. The scope of the inspection is a partial compliance evaluation (“PCE”). This inspection occurred as part of a multi-scale monitoring project in the Beaumont-Port Arthur area. Video taken during the inspection can be found in Appendix 1. The sign-in sheet for the opening conference is attached as Appendix 2.

FACILITY DESCRIPTION

Spindletop is a natural gas compressor station that operates under Permit Number 02570 issued January 15, 2021. The gas storage facility consists of eight compressor engines that are powered by natural gas, four glycol dehydration units with reboilers, line heaters, filter separators, gas scrubbers, an emergency generator engine, and metering equipment.

Section II - OBSERVATIONS

The NEIC GMAP vehicle was driven by Mr. Helmich, the instruments were operated by Mr. Myers, and observed by Mr. Donaldson. Facility representatives, Bryan Mason and Justin Goss, accompanied the GMAP, and we were later met in the field by Heather Low, Phillips 66 environmental specialist. Conditions were sunny. Inspectors Justin Chen, Kenneth McPherson, Daniel Hoyt, and Nathan Hicks followed the GMAP in secondary vehicles. Daniel Hoyt and Nathan Hicks operated a Data Acquisition in Real Time (“DART”) unit on their vehicle, equipped with a photoionization detector (“PID”) that measures volatile organic compounds (“VOC”) in the air, and a wind monitor that monitors wind speed, wind direction and geolocation. The DART unit had a 10.6ev PID installed. The GMAP drove on all available facility roads measuring air pollutant concentrations downwind of each of the process areas, if possible. A full report from the GMAP will be issued by NEIC at a later date.

At 10:30AM, the GMAP detected an approximately 500 parts per million (“ppm”) elevated reading of methane downwind of the inlet/outlet area of the compressor station. This spike was outside of the calibration range of >20 ppm. Elevated readings of total VOC were also measured by the DART and noted for follow up with the Optical Gas Imaging Camera (“OGIC”).

I used the OGIC to observe emissions from the slop oil tank's pressure release valve (FLIR0016.mp4). At 11:00AM, Mr. McPherson used a PID with a Draeger tube and observed a reading of 3.965 parts per million ("ppm") of benzene. [AOC 1]

We moved to the decommissioned flare where I observed emissions from the top of the flare with the OGIC (FLIR0017.mp4). Mr. Goss explained a third-party contractor recently removed some sludge from the bottom of the base of the decommissioned flare. Mr. Chen requested that a valve at the base of the flare be opened. Spindletop staff opened the valve and captured some water that had accumulated inside as a sample. We placed a PID over the water sample and measured a reading of 5.372 ppm of total VOC. [AOC2]

The site GMAP survey ended at 12:00PM and we returned to the parking lot.

At 12:04PM on February 7, 2024, EPA inspectors Benjamin Donaldson, Justin Chen, and Kenneth McPherson returned to the inlet/outlet area with the OGIC, but no emissions were observed.

The inspection team returned to the conference room at 12:30PM.

Section III – AREAS OF CONCERN

Benjamin Donaldson conducted an inspection closing conference at Phillips 66 Spindletop Compressor Station at 12:27PM on February 7, 2024. Mr. Meyers and Mr. Donaldson summarized the facility tour and presented their observations, including the following Areas of Concern:

- 1) Inspectors observed emissions from the slop oil tank with the OGIC. A PID with a Draeger tube measured emissions of 3.965 ppm benzene, which is not typically present in slop oil.
- 2) Inspectors observed emissions from the decommissioned flare with the OGIC and obtained a PID reading of 5.372 ppm of total VOC from the flare's base.

The facility made no claims of confidential business information regarding the videos provided. The facility was informed that copies of the videos would be made available to the facility following the inspection. We departed the facility at 12:51PM.

Section IV – FOLLOW UP

No additional information was received by EPA after exiting the Facility on February 7, 2024.

Section V – LIST OF APPENDICES

Appendix 1 – Video Log – 2 FLIR videos taken 02/07/2024

Appendix 2 – Opening and closing conference sign-in sheets

Appendix 1

Video Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Appendix 1

Video Log

Location: Phillips 66 / Spindletop Compressor Station		
City: Beaumont	Jefferson County	State: Texas



Video File Name: [FLIR0016.mp4](#)
Date of Video: 02/07/2024
Time of Video: 10:45 AM
Videographer: Benjamin Donaldson
Description: Emissions observed from the pressure release valve of the slop oil tank.



Video File Name: [FLIR0017.mp4](#)
Date of Video: 02/07/2024
Time of Video: 11:30 AM
Videographer: Benjamin Donaldson
Description: Emissions from the decommissioned flare

Appendix 2

Opening and Closing Conference Sign-In Sheets

OPENING CONFERENCE: 08:45

Kenneth R. McPherson	EPA	Life Scientist	214-665-6754
Daniel Hoyt	EPA	Env. Eng	202-564-7898
Richard Helmrich	EPA	Chemist	303-462-9849
Philp Myers	EPA	Mech. Engineer	(303) 462-9301 409-481-1440
Bryan Mason	Plc	Operator	314-391
Ben Donaldson	EPA	Env. Eng	214-665-7426
Nate Hicks	EPA	Physical Scientist	865-898-0343
Justin Chen	EPA	Env. Eng	214-665-2273
Justin Gross	EPA P66	Supervisor	409-332-3443
Ruben Herrera	Plc	Env. Spec.	

12:30 CLOSING CONFERENCE

Kenneth R. McPherson	Life Scientist, EPA R-6	214-665-6754
Heather Low	Environmental Specialist, Plc	409-248-0336
Todd Stanley	Operations P66	409-658-9342
Thaddeus Sysak	Field Tech P66	409-656-6604
Justin Gross	Ops Supervisor	409-332-3443
Justin Chen	Env Engineer	214-665-2273
Ben Donaldson	Env. Engineer	214-665-7426