United States Environmental Protection Agency

Region 6 - Enforcement & Compliance Assurance Division

INSPECTION REPORT

Inspection Date(s):	04/13/2022	
Media Program:	Air	
Regulatory Program(s)	SIP, Title V, NESHAP, NSPS	
Company Name:	**Phillips 66 Company**	
Facility Name:	***Lake Charles Refinery***	
Facility Physical Location:	2200 Old Spanish Trail	
(city, state, zip code)	Westlake, Louisiana, 70669	
Mailing address:	2200 Old Spanish Trail P.O. Box 37	
(city, state, zip code)	Westlake, Louisiana, 70669	
County/Parish:	Calcasieu Parish	
Facility Phone Number	337-491-4742	
Facility Contact:	Erin Strang	Environmental Team Lead
	Erin.T.Strang@P66.com	
FRS Number:	110000539757	
Identification/Permit Number:	AI#: 2538 / 2626V-17; 2623-V19	
Media Identifier Number:	2201900005	
NAICS:	324110	
SIC:	2911	

Personnel participating in inspection:		
James Haynes	EPA ECD-AT	Inspector
Ben Rosenthal	EPA ECD-AT	Inspector
Erin Strang	Phillips 66 Company	Environmental Team Lead
Tricia Rapp	Phillips 66 Company	Environmental Specialist – Air Lead
John Tarasiewicz	Phillips 66 Company	Environmental Specialist – Tanks Lead
Dorey Meyers	Phillips 66 Company	Environmental Manager

EPA Lead Inspector Signature/Date	BENJAMIN ROSENTHAL Digitally signed by BENJAMIN ROSENTHAL DN: c=US, o=U.S. Government, ou=Environmental Protection Agency, cn=BENJAMIN ROSENTHAL, 0.9.2342.19200300.100.1.1=68001003844840 Date: 2022.10.17 09:54:28 -05'00'	
	Ben Rosenthal	Date
Supervisor Signature/Date	JAMES LEATHERS Digitally signed by JAMES LEATHERS Date: 2022.10.17 10:10:47 -05'00'	
	James Leathers	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspectors James Haynes and I, Ben Rosenthal, ("We", "Us") arrived at the Phillps 66 Company ("Phillips 66") Lake Charles Refinery (the "Facility", the "Site", or "LCR") on April 13, 2022, for an unannounced Clean Air Act ("CAA") inspection. We entered the facility and received safety passes at 1:55 p.m. We first met with Erin Strang, Phillips 66 Environmental Team Lead. CAA credentials were presented to Ms. Strang. We discussed the monitoring activities that were conducted using EPA's Geospatial Measurement of Air Pollution ("GMAP") vehicle on April 12, 2022. The GMAP made entry at the facility and detected emissions of sulfur compounds and volatile organic compounds while at the site. We explained that the scope of our inspection was to follow-up on the findings of the GMAP. The scope of the inspection is a partial compliance evaluation ("PCE") to identify the cause of the emissions detected by the GMAP at the site. This inspection occurred as part of the Administrator's Journey to Justice initiative.

FACILITY DESCRIPTION

Phillips 66 owns and operates the Facility, a petroleum refinery. The Facility processes crude oil into various petrochemical products including gasoline, heating oil, residual fuels, petroleum coke, feedstocks, and others. The Facility refines crude oil through atmospheric and vacuum distillation, and operates petroleum coker units, a calcining unit, a fluid catalytic cracking unit ("FCCU"), an alkylation unit, a polymerization unit, catalytic reformers, desulfurization units, sulfur recovery units, a hydrowaxer unit, a hydrofinisher unit, and associated infrastructure including Facility utilities. The facility operates for 8,760 hours per year.

The LCR is organized into four process areas: Area A, Area B, Area C, and Area D. Area A includes the Hot Resid Tanks, which are used to receive and store feedstocks and charge them to refinery units in Area A and other areas as needed. The tanks in this unit are all steam heated. Area D includes the Tank Farm. The Tank Farm is used to receive, store, and charge feedstocks to process units and for outside product transfer. The Tank Farm also blends various components for finished product sales. The Tank Farm consists of external floating roof tanks, internal floating roof tanks, cone roof tanks, and pressure vessels (including spheres and bullets), as well as auxiliary equipment necessary to move and handle feedstocks and products.

Section II – OBSERVATIONS

We met with Ms. Strang, John Tarasiewicz, Phillips 66 Environmental Specialist – Tanks Lead, and Tricia Rapp, Phillips 66 Environmental Specialist – Air Lead, in a Facility conference room to discuss the scope of the inspection and planned inspection activities. We discussed the GMAP findings from the previous day, Those findings included emissions observed at, or thought to originate from, tank T-2001 and 2005

–Residual oil holding ("Residuals") tanks, tank T-82-kerosene containing tank, tanks T-85/86-gasoline containing tanks, and tank T-338-FCCU residual containing tank.

Ms. Strang explained that the emissions detected from tanks T-2001 and T-2005 where due to ongoing maintenance activities that had increased the amount of material in the tanks. Ms. Strang also explained that because of the GMAP monitoring on April 12, 2022, the gauging hatches of T-2001 and T-2005 where cleaned and re-seated on that day. This cleaning seemed to stop emissions from T-2005 but not T-2001, according to Ms. Strang. We asked for records relating to the maintenance activities that the Facility believed led to the emissions observed by the GMAP at the Residual tanks, including a chronology of events, and any sampling records of the stored tank material. Mr. Tarasiewicz explained that tank T-85 had recently failed a visual inspection with noted deficiencies in the seal gap, guide pole, and vacuum breaker. Ms. Strang also explained that the Facility was undergoing a maintenance turnaround.

We decided to focus the field portion of the inspection on the Tank Farm in area D. We explained that we would utilize a FLIR GF320 Optical Gas Imaging Camera ("OGIC") to monitor components for leaks and to take photographic documentation (See Appendix 1 – Photograph Log and Appendix 2 – Video Log). Mr. Tarasiewicz stated he would bring the facility's OGIC to take comparative videos and photos. We departed the conference room and arrived in area D around 3:00 p.m.

Using the OGIC, we observed hydrocarbon emissions from three tanks in area D. See Area of Concern ("AOC") 1. On T-82, we had noted that two large "door sheets" or areas where portions of the tank had been cut open for maintenance activities and then replaced. Ms. Strang noted that it was a maintenance practice to cut openings into the tank for construction equipment to remove built-up sludge from the interior of the tank. We observed several other tanks in the tank farms that appeared to have door sheets. See AOC 2. We also traveled to T-2001 in area B and made additional observations with the OGIC. The following table summarizes some of the observations made with the OGIC.

Table 1. List of Tanks Observed by EPA with the OGIC

Tank Number	Tank Contents	Hydrocarbons Observed with the OGIC	Visualized Emissions Location	Viewing Location
T-82	Kerosene	Yes	Observed at open gooseneck vent on roof.	Base of Tank
T-85	Gasoline	Yes	Observed at seal gap and coming from pinhole leaks.	Roof of Tank
T-86	Gasoline	Yes	Observed at seal gap.	Roof of Tank
T-2001	Residuals	No	None.	Base of Tank

The top ten feet of the stairway leading to the roof of tank T-2001 was not accessible without a full-face respirator and supplied air due to safety concerns. A Leak Detection and Repair ("LDAR") Technician from the facility with proper protective equipment accessed the roof of T-2001 and took measurements

with a flame ionization detector. The technician did not observe detectable emission from the regulator flanges or connectors in proximity to the top of the stairwell. A high reading of 31,886 parts per million volatile organic compounds ("VOC") was observed along the observation hatch. The technician attempted to lift and re-seat the hatch, which she described as loose and vibrating. The technician was unsure if the hatch was gasketed or the connection at the opening was metal to metal. See AOC 3.

We proceeded to the oil water separator. Mr. Haynes did not observe emissions with the OGIC at the oil water separator.

Section III – AREAS OF CONCERN

We returned to the facility conference room to discuss our observations and met with Dorey Meyers, Phillps 66 Environmental Manager. We discussed the visualized emissions at several of the tanks. Mr. Tarasiewicz stated that a seal gap inspection would be conducted on T-86 due to the observations of hydrocarbon emissions. We also discussed our observations of the condition of the tanks themselves, including the door sheets. We also noted the high reading of VOC at the observed hatch of T-2001. This reading seems to indicate some level of volatile material is being stored in the tank. Before departing the site, Mr. Haynes confirmed that the OGI videos taken would be subsequently shared with the facility electronically. Ms. Strang also confirmed that information that we requested would be shared electronically with EPA.

1) Visualized hydrocarbon emissions were observed at tanks T-82, T-85, and T-86.

We observed hydrocarbon emissions using the OGIC at three tanks: T-82, T-85, and T-86. The OGIC video suggests that the tanks may not be effectively controlling emissions. Information provided by the facility indicates T-85 and T-86 failed respective visual inspections. See Appendix 3 – Phillips 66 Lake Charles Refinery April 2022 EPA Inspection Response, for the T-85 and T-86 inspection report. T-86 was noted to have a 6-inch gap between the edge of the primary seal and the tank wall. T-85 was noted to have an oily substance on the roof, a deficient gasket at the guide pole, and a deficient gasket at the vacuum breaker. T-85 and T-86 are classified as Group 1 storage vessels under 40 CFR Part 63 Subpart CC (MACT CC) – National Emission Standards for Hazardous Air Pollutants ("NESHAP") From Petroleum Refineries which subjects them to the provisions or 40 CFR Part 63 Subpart WW – National Emission Standards for Storage Vessels (Tanks) - Control Level 2.

2) Door sheets were observed cut into several tanks at the tank farm.

Tanks can be physically distorted when large openings are cut into a tank shell. Force displacements from this type of disruption can cause flattening above the door sheet itself, bulging at the corners of the door sheet, and could cause the tank shell to deform into a more oval shape (Lieb, John M. *Importance of Door Sheet Stiffening*). Without proper stabilization of the tank shell, these changes in design characteristics could lead to excess emissions.

3) VOCs were observed at a hatch on the roof of T-2001.

A facility LDAR technician observed readings over 30,000 ppm, or above 3% of the sampled air, at a hatch on the roof of T-2001. The tank is not currently classified or monitored as a MACT CC Group 1 storage vessel. The facility must record any data, assumptions and procedures used to make the determination that the weight percent total of the HAP of the stored liquid is less than or equal to 4 percent. Additionally, the Facility should maintain best practical housekeeping and maintenance practices to the highest possible standards to reduce the quantity of organic compound emissions pursuant to the practices listed in Title 33 of the Louisiana Administrative Code Section 2113.

4) **The Facility may be underestimating emissions of materials stored in tanks.**

Visible emissions observed by EPA at T-82, and emissions detected with handheld monitoring equipment at T-2001, indicate that the physical characteristics of the materials contained within those vessels are not consistent with the assumptions the Facility is making about the product's vapor pressure and emissions profile, and increased emissions from those tanks may be due to a misapplied regulatory scheme. T-82 contains Kerosene and T-2001 contains residual oil. Kerosene and Residual Oil are commonly applied names for refined petroleum products that are assumed to have similar respective physical characteristics. However, different facilities use proprietary processes in the storage and transport of materials and products and may apply additives to decrease the viscosity of products with higher specific gravities. These additives may increase the vapor pressure of the stored products and materials and subject them to additional requirements for controls and monitoring. The Facility should ensure that the materials stored in tanks are assessed based on quantifiable and empirical data specific to those materials rather than qualitative assessments based on industry assumptions.

Section IV – FOLLOW UP

On May 13, 2022, Ms. Strang provided follow-up information, including visual inspection reports conducted on T-85 and T-86, and a chronology of maintenance events that the Facility believed caused the emissions observed from T-2001 and T-2005 (See Appendix 3). Additional information regarding the observations made by the GMAP at the facility will be provided in a future report.

Section V – LIST OF APPENDICES

Appendix 1 – Photograph Log – 5 Photographs
Appendix 2 – Video Log – 4 OGIC videos taken on 4/13/2022
Appendix 3 – Phillips 66 Lake Charles Refinery April 2022 EPA Inspection Response

Appendix 1

Photograph Log

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: 2200 Old Spanish Trail		
City: Westlake	County/Parish: Calcasieu	State: Louisiana

Photo File Name: DSCN0703.jpg
Date of Photo: 4/13/2022
Time of Photo: 15:37
Photographer: Ben Rosenthal
Description: Tank T-85. OGIC-visualized hydrocarbon emissions were observed on the roof of the tank.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: 2200 Old Spanish Trail		
City: Westlake	County/Parish: Calcasieu	State: Louisiana

Photo File Name: DSCN0704.jpg
Date of Photo: 4/13/2022
Time of Photo: 16:30
Photographer: Ben Rosenthal
Description: Tank T-86. OGIC-visualized hydrocarbon emissions were observed on the roof of the tank.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: 2200 Old Spanish Trail		
City: Westlake	County/Parish: Calcasieu	State: Louisiana

Photo File Name: DSCN0702.jpg
Date of Photo: 4/13/2022
Time of Photo: 16:42
Photographer: Ben Rosenthal
Description: Tank T-82. OGIC-visualized hydrocarbon emissions were observed exiting the gooseneck valve at the top of the tank. Two door sheets are visible at the base of the tank.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: 2200 Old Spanish Trail		
City: Westlake	County/Parish: Calcasieu	State: Louisiana

Photo File Name: DSCN0707.jpg
Date of Photo: 4/13/2022
Time of Photo: 17:45
Photographer: Ben Rosenthal
Description: Tank T-2001.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: 2200 Old Spanish Trail		
City: Westlake	County/Parish: Calcasieu	State: Louisiana

Photo File Name: DSC0708.JPG
Date of Photo: 4/13/2022
Time of Photo: 17:51
Photographer: Ben Rosenthal
Description: Facility LDAR technician using handheld monitoring equipment at the top of T-2001.

Appendix 2
Video Log

Appendix 2

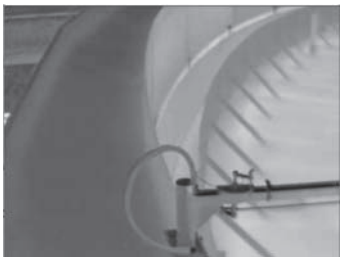
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Video Log

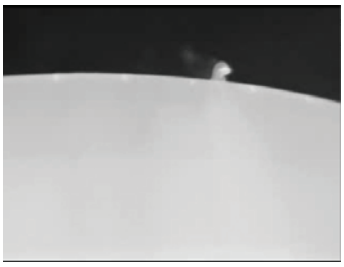
Location: **Phillips 66 Company / Lake Charles Refinery**		
City: **Westlake**	**Calcasieu**	State: **Louisiana**

Video File Name: MOV_0051.mp4
Date of Video: 04/13/2021
Time of Video: 15:50
Videographer: James Haynes
Description: OGIC visualized emissions from the roof of T-85 near the primary seal-tank shell interface. *

Video File Name: MOV_0054.mp4
Date of Video: 4/13/2022
Time of Video: 15:55
Videographer: Ben Rosenthal
Description: OGIC visualized emissions from the roof of T-85 at pinhoil leaks on the surface of the roof. *



Video File Name: MOV_0056.mp4
Date of Video: 04/13/2021
Time of Video: 16:40
Videographer: Ben Rosenthal
Description: OGIC visualized emissions from the roof of T-86 near the primary seal-tank shell interface. *



Video File Name: MOV_0061.mp4
Date of Video: 4/13/2022
Time of Video: 16:30
Videographer: Ben Rosenthal
Description: OGIC visualized emissions from the gooseneck vent on T-82. *

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

Appendix 3

Phillips 66 Lake Charles Refinery April 2022 EPA Inspection Response

Erin T. Strang
Environmental Team Lead
Lake Charles Refinery

Phillips 66
2200 Old Spanish Trail, P.O. Box 37
Westlake, LA 70669
(337) 491-4742

May 12, 2022

Via Electronic Mail

James Haynes, U.S. Environmental Protection Agency Region 6 (haynes.james@epa.gov)

Re: Phillips 66 Response to the USEPA's April 12 – 13, 2022 Inspection at the Lake Charles Refinery

Dear Mr. Haynes:

The April 12-13, 2022 joint EPA/LDEQ inspections resulted in several questions about tanks located at the Lake Charles Refinery. Phillips 66 is submitting the accompanying files and documents as requested by the EPA during the onsite inspection closing meeting on April 13, 2022.

Tank 85 (T-85) Gasoline Tank (EQT-225, Permit No. 2626-V17)

T-85 is an external floating roof tank used to store gasoline located in Area D. As mentioned during the inspection, a seal inspection performed on February 28, 2022, noted deficiencies. The letter to LDEQ informing the agency of the tank seal inspection failure and the tank seal inspection record are included in Attachment 1. Repairs were completed within 45 days of the seal inspection.

Tank 86 (T-86) Gasoline Tank (EQT-226, Permit No. 2626-V17)

T-86 is an external floating roof tank used to store gasoline located in Area D. Phillips 66 committed to performing a primary and secondary seal inspection as soon as practicable. Both a primary and a secondary seal inspection were performed on April 14, 2022. The inspection noted that the measured primary gap width exceeded the maximum allowable gap width. The letter to LDEQ informing the agency of the tank seal inspection failure and the tank seal inspection record are included in Attachment 2.

Tank 82 (T-82) Jet/Kerosene Tank (EQT-222, Permit No. 2626-V17)

T-82 is a cone roof tank used to store jet/kerosene located in Area D. The information below is representative of the conditions closest to the day of the inspection.

- Temperature = 91F (measured 4/12/2022)
- API gravity = 42.9 (measured 4/12/2022)

Tank 2001 (T-2001) Residual Oil Tank (EQT-540, Permit No. 2623-V19)

T-2001 is a residual oil tank located in Area A. As noted during the inspection, level in T-2001 was building more rapidly than normal due a heater decoke, cleaning, and preventative maintenance occurring on the days of the inspection. During heater decokes, the Coker goes to two drum operation rather than four drum operation, and as a result level builds in T-2001 more quickly than it does during normal Coker operation. During the inspection, the gauging hatch was observed to be periodically lifting (presumably due to tank pressurization) but this was likely occurring more frequently than usual due to the level building in the tank because of the decoke.

The information provided below is representative of the conditions in the tank closest to the day of the inspection.

- Temperature = 379 (measured 4/11/2022)
- API gravity = 5.1 (measured 4/11/2022)

If you have any questions regarding this response, please contact Erin Strang at 337-491-4742 or erin.t.strang@p66.com.

Erin T. Strang
Environmental Team Lead
Lake Charles Refinery

Attachments

1. T-85 Tank Seal Inspection Records
2. T-86 Tank Seal Inspection Records

II. Attachments

Attachment 1: T-85 Tank Seal Inspection Record

John Tarasiewicz
Environmental Specialist
Environmental Department
Lake Charles Refinery

Phillips 66
2200 Old Spanish Trail, P.O. Box 37
Westlake, LA 70669
(337) 491-4906 Fax: (337) 491-5613

CERTIFIED MAIL - RETURNED RECEIPT REQUESTED – 7019 1120 0000 9105 1032

March 2, 2022

Mr. Chance McNeely
Louisiana Department of Environmental Quality
Office of Environmental Compliance
Post Office Box 4301
Baton Rouge, Louisiana 70821-4301

Notice of Failure 2022 Seal Inspection
Tank 85 (EQT-225), Permit No. 2626-V17
Phillips 66 Inc., Lake Charles Refinery – Agency Interest #2538

Dear Mr. McNeely:

The Phillips 66 Lake Charles Refinery Tank 85 is an external floating roof tank with primary and secondary seals. As required by 40 CFR 63 Subpart CC, 40 CFR 63 Subpart WW and LAC 33:III.2103, Phillips 66 performed a seal inspection on the secondary seal on February 28, 2022.

During the inspection, a small oily spot was observed on the floating roof and gaskets for the vacuum breaker vent and guide pole were found to be in need of repair. Repairs have been initiated within 7 days by scheduling work to clean the floating roof and replacing the gaskets. Repairs will be completed within 45 days or the tank will be taken out of service.

Please contact me at 337-491-4906 if there are any questions concerning this notification for the above referenced tank.

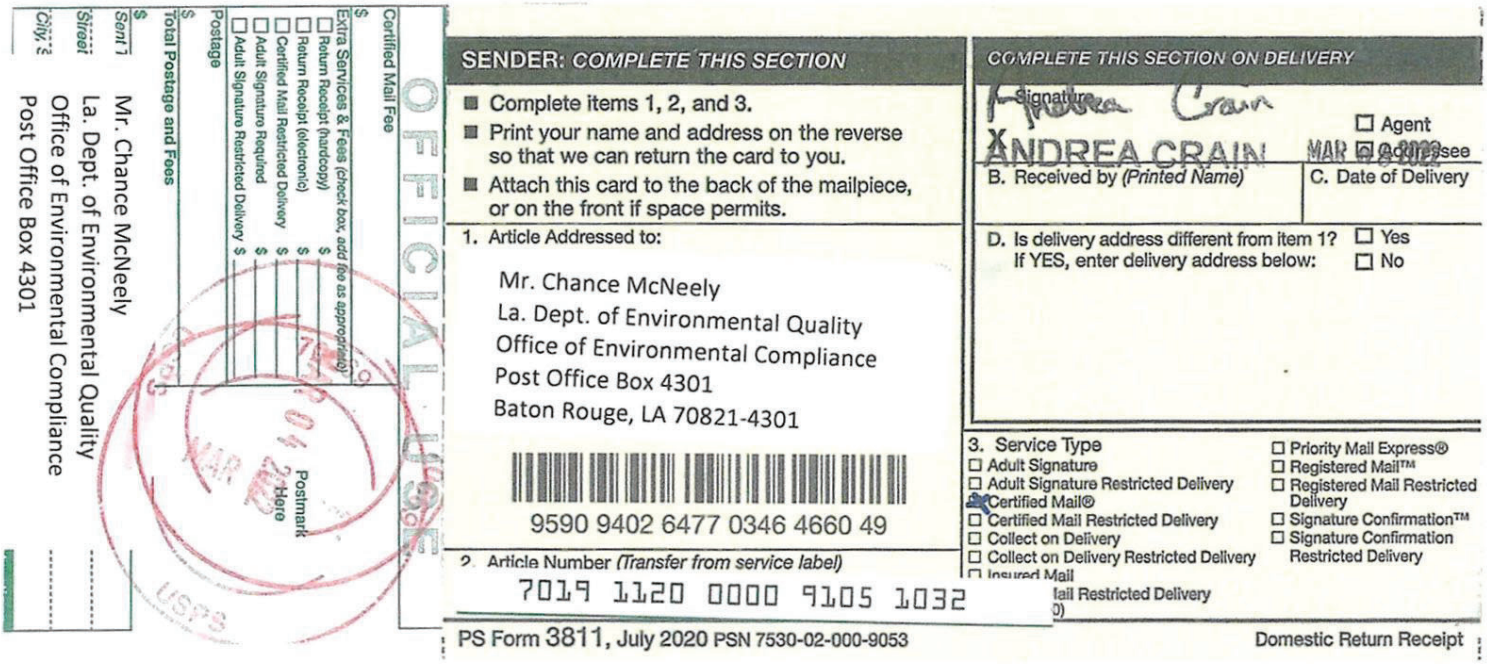
Sincerely,

John Tarasiewicz

Mr. McNeely
T-134–Seal Inspection Failure Notice
February 28, 2022
Page 2

cc:
Louisiana Department of Environmental Quality
Regional Manager
Southwest Regional Office
1301 Gadwall Street
Lake Charles, LA 70615

7019 1120 0000 9105 1032



PHILLIPS 66 LAKE CHARLES REFINERY
SECONDARY SEAL INSPECTION

ENVIRONMENTAL REGULATORY

TANK NO.	85	ROOF TYPE:	EFR
EMISSION POINT NO.	427	PRIMARY SEAL:	VAPOR MOUNTED
AREA:	D	SECONDARY SEAL:	N/A
PRODUCT:	FCC/CP BASE GASOLINE	APPLICABILITY:	(K, Ka, Kb, SIP, MACT)
LIQUID LEVEL:	32.828	SEAL INSPECTED: (Primary or Secondary)	SECONDARY
DIAMETER:	150	DATE:	28-Feb-22

SECONDARY SEAL ANNUAL INSPECTION

ITEM	YES	NO	N/A	ADDITIONAL COMMENTS
SECONDARY SEAL: any holes, tears, detached or other openings?		✓		
Are there visible gaps between the seal and the tank wall?		✓		
Are there visible defects? (Such as corrosion or pools of standing liquids)	✓			oily looking substance (very minimal) & Rain Water
Are automatic bleeder (vacuum breaker) vents closed? Are gaskets equipped and in good condition?		✓		Vacuum Breaker needs New Gasket
Are rim space vents closed? Are gaskets equipped and in good condition?	✓			
Is each roof opening (other than automatic bleeder vents, rim space vents, roof drains, and leg sleeves) equipped with a gasketed cover, seal or lid? In good condition?	✓			
Equipped with an emergency roof drain that empties back into the tank? If yes, is roof drain equipped with a fabric that covers >= 90% of opening?			✓	
Equipped with unslotted guide pole? If yes, equipped with gasketed sliding cover in good condition? Is cap closed?	✓			Gasket Needs Replace Not Touching the Pole
Equipped with slotted guide pole? If yes, equipped with gasketed sliding cover and flexible fabric sleeve in good condition? Is cap closed?			✓	

Notes:

TANK SEAL INSPECTOR SIGNATURE

Repairs Needed:

- ☐ Adjustment to Seal(s)
- ☐ Repair of Seal(s)
- ☐ Replacement of Seal(s)

ENVIRONMENTAL USE:
LDEQ CORRESPONDENCE:
REASON:
CERTIFICATION NO.

ENVIRONMENTAL CONTACT:

John Tarasiewicz
Environmental Specialist
Lake Charles Refinery

Phillips 66
2200 Old Spanish Trail
Westlake, LA 70669
Ph: (337) 491-4906

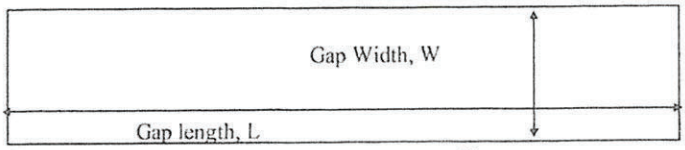
EFR/IFR FLOATING ROOF INSPECTION REPORT

Tank No. 85 Product Stored FCC/CP BASE G/ Inspector Jason Richard

Diameter 150 Roof Design EFR Date 28-Feb-22

Ladder position on tank (12 o'clock to the North): 180°

Gap calculations are made on a triangular area
A = L x W

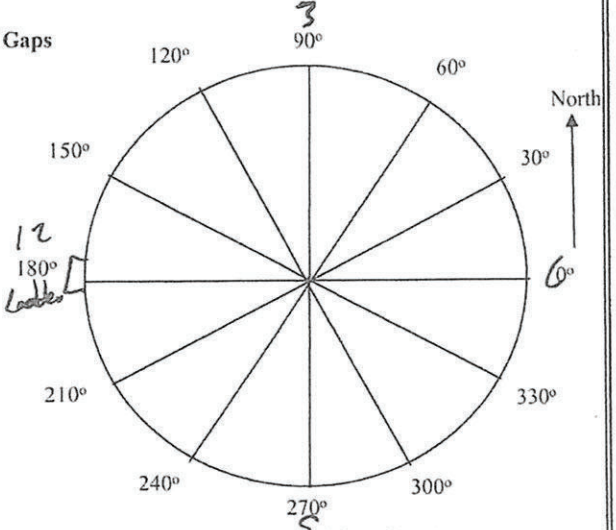


AS FOUND SEAL GAP CONDITIONS

Gap Location (clock position)	Gap length L (inches)		Max. widths W (inches)		Total Gap, A (sq. inches)
12	0	x	0	=	0
2	0	x	0	=	0
4	0	x	0	=	0
6	0	x	0	=	0
8	0	x	0	=	0
10	0	x	0	=	0
			Total Gap (sq. inches)	=	0
			Max. Gap Width, inches	=	0

ETS 5/12/22

Secondary Seal Gaps



(Indicate ladder and seal gap positions above)

Phillips 66 Westlake Refinery

Attachment 2: T-86 Tank Seal Inspection Records

John Tarasiewicz
Environmental Specialist
Environmental Department
Lake Charles Refinery

Phillips 66
2200 Old Spanish Trail, P.O. Box 37
Westlake, LA 70669
(337) 491-4906 Fax: (337) 491-5613

CERTIFIED MAIL - RETURNED RECEIPT REQUESTED – 7019 1120 0000 9105 1049

April 21, 2022

Mr. Chance McNeely
Louisiana Department of Environmental Quality
Office of Environmental Compliance
Post Office Box 4301
Baton Rouge, Louisiana 70821-4301

Notice of Failure 2022 Seal Inspection
Tank 86 (EQT-226), Permit No. 2626-V17
Phillips 66 Inc., Lake Charles Refinery – Agency Interest #2538

Dear Mr. McNeely:

The Phillips 66 Lake Charles Refinery Tank 86 is an external floating roof tank with primary and secondary seals. As a result of an EPA inspection, Phillips 66 performed a seal inspection on the primary and secondary seals on April 14, 2022.

The measured primary gap width exceeded the maximum allowable gap width. Repairs have been initiated within 7 days by assessing the primary seal and scheduling work to complete the repair. Repairs will be completed within 45 days or the tank will be taken out of service.

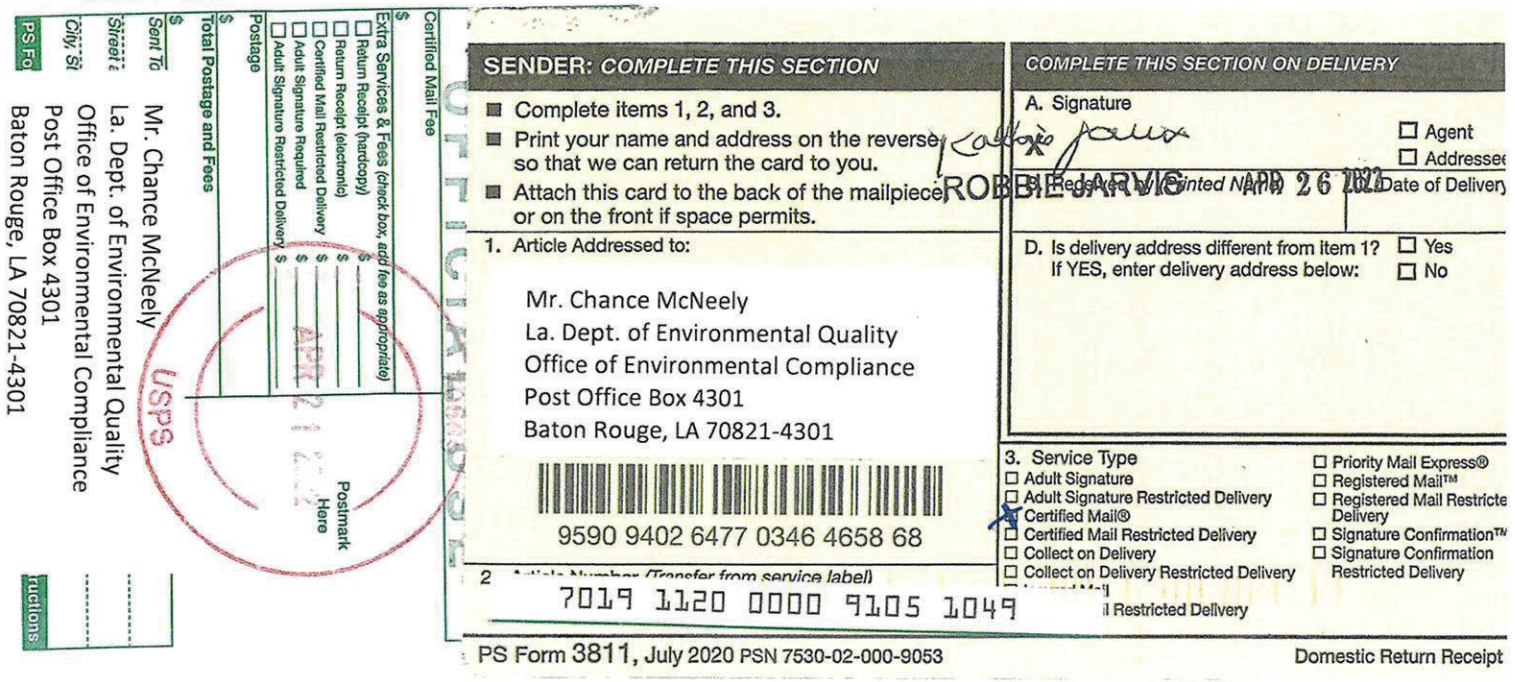
Please contact me at 337-491-4906 if there are any questions concerning this notification for the above referenced tank.

Sincerely,

John Tarasiewicz

cc:
Louisiana Department of Environmental Quality
Regional Manager
Southwest Regional Office
1301 Gadwall Street
Lake Charles, LA 70615

7019 1120 0000 9105 1049



PS Fo
Sent To
Street a
City, St
Mr. Chance McNeely
La. Dept. of Environmental Quality
Office of Environmental Compliance
Post Office Box 4301
Baton Rouge, LA 70821-4301
ructions
Certified Mail Fee
$
Extra Services & Fees (check box, add fee as appropriate)
$
Return Receipt (hardcopy)
$
Return Receipt (electronic)
$
Certified Mail Restricted Delivery
$
Adult Signature Required
$
Adult Signature Restricted Delivery
$
Postage
$
Total Postage and Fees
$
USPS
APR 26 2023
Postmark Here

SENDER: COMPLETE THIS SECTION
- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Chance McNeely
La. Dept. of Environmental Quality
Office of Environmental Compliance
Post Office Box 4301
Baton Rouge, LA 70821-4301

9590 9402 6477 0346 4658 68

2 Article Number (Transfer from service label)
7019 1120 0000 9105 1049

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☐ Agent
☐ Addressee

B. Received by (Printed Name) ROBBIE JARVIS C. Date of Delivery APR 26 2023

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☒ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery
☐ Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

PHILLIPS 66 LAKE CHARLES REFINERY
PRIMARY SEAL INSPECTION

ENVIRONMENTAL REGULATORY

TANK NO.	86	ROOF TYPE:	EFR
EMISSION POINT NO.	428	PRIMARY SEAL:	Mechanical Shoe
AREA:	D	SECONDARY SEAL:	Rim Mounted Wiper
PRODUCT:	FINISHED GASOLINE	APPLICABILITY:	(K, Ka, Kb, SIP, MACT)
LIQUID LEVEL:		SEAL INSPECTED: (Primary or Secondary)	PRIMARY
DIAMETER:	150	DATE:	14-Apr-22

PRIMARY SEAL VISUAL INSPECTION

ITEM	YES	NO	N/A	ADDITONAL COMMENTS
PRIMARY SEAL: any holes, tears, detached or other openings?		✓		
Are there visible gaps between the seal and the tank wall?	✓			
Are there visible defects? (Such as corrosion or pools of standing liquids)	✓			
Are automatic bleeder (vacuum breaker) vents closed? Are gaskets equipped and in good condition?	✓			
Are rim space vents closed? Are gaskets equipped and in good condition?	✓			
Is each roof opening (other than automatic bleeder vents, rim space vents, roof drains, and leg sleeves) equipped with a gasketed cover, seal or lid? In good condition?	✓			
Equipped with an emergency roof drain that empties back into the tank? If yes, is roof drain equipped with a fabric that covers >= 90% of opening?		✓		
Equipped with unslotted guide pole? If yes, equipped with gasketed sliding cover in good condition? Equipped with rollers in good condition? Is cap closed?	✓			
Equipped with slotted guide pole? If yes, equipped with gasketed sliding cover and flexible fabric sleeve in good condition? Equipped with rollers in good condition? Is cap closed?			✓	

Notes:

Rhett W2
TANK SEAL INSPECTOR SIGNATURE

Repairs Needed:
- ☐ Adjustment to Seal(s)
- ☑ Repair of Seal(s)
- ☑ Replacement of Seal(s)

ENVIRONMENTAL USE:
LDEQ CORRESPONDENCE:
REASON:
CERTIFICATION NO.

ENVIRONMENTAL CONTACT:

John Tarasiewicz
Environmental Specialist
Lake Charles Refinery

Phillips 66
2200 Old Spanish Trail
Westlake, LA 70669
Ph: (337) 491-4906

Rev: 04-26-10

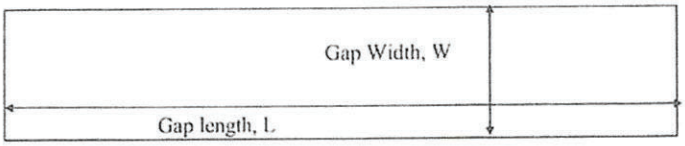
EFR/IFR FLOATING ROOF INSPECTION REPORT

Tank No. 86 Product Stored FINISHED GASO Inspector R Ward

Diameter 150 Roof Design EFR Date 14-Apr-22

Ladder position on tank (12 o'clock to the North): 12 o'clock

Gap calculations are made on a triangular area
A = L x W

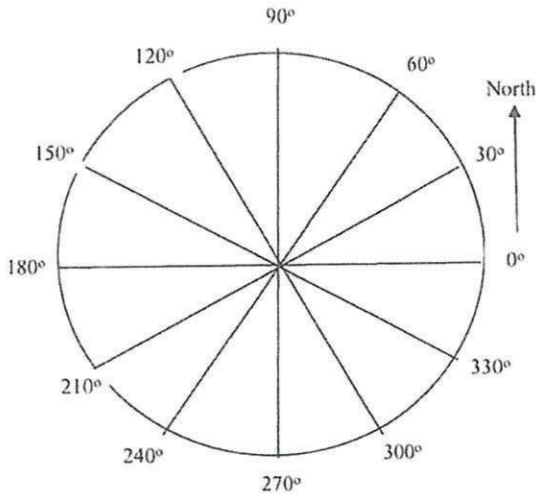


Primary Seal Gaps

AS FOUND SEAL GAP CONDITIONS

Gap Location (clock position)	Gap length L (inches)		Max. widths W (inches)		Total Gap A (sq. inches)
0	20'	x	6	=	120
210	12"	x	.5	=	6
180	12"	x	.5	=	6
150	12"	x	.5	=	6
		x		=	
		x		=	
	Total Gap (Square Inches)			=	138
	Max. Gap Width, inches			=	120

ETS 5/12/22



Phillips 66 Westlake Refinery

(Indicate ladder and seal gap positions above)

PHILLIPS 66 LAKE CHARLES REFINERY
SECONDARY SEAL INSPECTION

ENVIRONMENTAL REGULATORY

TANK NO.	86	ROOF TYPE:	EFR
EMISSION POINT NO.	428	PRIMARY SEAL:	Mechanical Shoe
AREA:	D	SECONDARY SEAL:	Rim Mounted Wiper
PRODUCT:	FINISHED GASOLINE	APPLICABILITY:	(K, Ka, Kb, SIP, MACT)
LIQUID LEVEL:		SEAL INSPECTED: (Primary or Secondary)	SECONDARY
DIAMETER:	150	DATE:	14-Apr-22

SECONDARY SEAL ANNUAL INSPECTION

ITEM	YES	NO	N/A	ADDITIONAL COMMENTS
SECONDARY SEAL: any holes, tears, detached or other openings?		✓		
Are there visible gaps between the seal and the tank wall?		✓		
Are there visible defects? (Such as corrosion or pools of standing liquids)		✓		
Are automatic bleeder (vacuum breaker) vents closed? Are gaskets equipped and in good condition?	✓			
Are rim space vents closed? Are gaskets equipped and in good condition?	✓			
Is each roof opening (other than automatic bleeder vents, rim space vents, roof drains, and leg sleeves) equipped with a gasketed cover, seal or lid? In good condition?	✓			
Equipped with an emergency roof drain that empties back into the tank? If yes, is roof drain equipped with a fabric that covers >= 90% of opening?		✓		
Equipped with unslotted guide pole? If yes, equipped with gasketed sliding cover in good condition? Is cap closed?	✓			
Equipped with slotted guide pole? If yes, equipped with gasketed sliding cover and flexible fabric sleeve in good condition? Is cap closed?		✓		

Notes:

TANK SEAL INSPECTOR SIGNATURE

Repairs Needed:
- ☐ Adjustment to Seal(s)
- ☐ Repair of Seal(s)
- ☐ Replacement of Seal(s)

ENVIRONMENTAL USE:
LDEQ CORRESPONDENCE:
REASON:
CERTIFICATION NO.

ENVIRONMENTAL CONTACT:

John Tarasiewicz
Environmental Specialist
Lake Charles Refinery

Phillips 66
2200 Old Spanish Trail
Westlake, LA 70669
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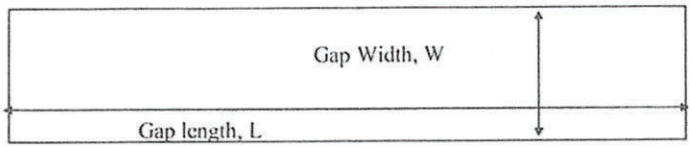
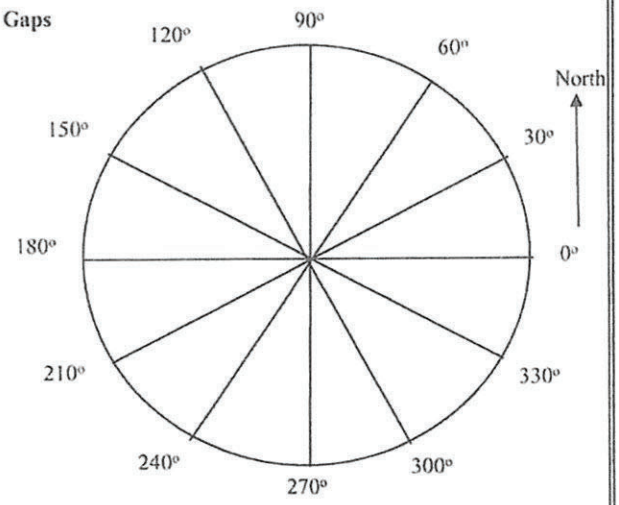


AS FOUND SEAL GAP CONDITIONS

Gap Location (clock position)	Gap length L (inches)		Max. widths W (inches)		Total Gap, A (sq. inches)
0	0	x	0	=	0
30	0	x	0	=	0
90	0	x	0	=	0
150	0	x	0	=	0
210	0	x	0	=	0
270	0	x	0	=	0
			Total Gap (sq. inches)	=	0
			Max. Gap Width, inches	=	0

ETS 5/12/22

Secondary Seal Gaps



(Indicate ladder and seal gap positions above)

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