

Region 6 - Enforcement & Compliance Assurance Division INSPECTION REPORT

Media Program(s)	Inspection Date(s):	04/14/22			
Company Name: Westlake Chemical Facility Name: Lake Charles North, Axiall Facility Physical Location: 1600 VCM Plant Rd (city, state, zip code) Westlake, LA 70669 Mailing address: 1600 VCM Plant Rd (city, state, zip code) Westlake, LA 70669 County/Parish: Calcasieu Parish Facility Phone Number 337-708-4688 Facility Contact: Paula McCain Environmental Manager pmccain@westlake.com FRS Number: 110070228618 Identification/Permit Number: 0520-00012-V7 Media Identifier Number: LA0000002201900012 NAICS: 325110 SIC: 2869 Personnel participating in inspection: Nicholas Bobbs EPA/OECA/OCE/AED Inspector Richard Helmich EPA/OECA/OCEFT/NEIC Chemist Agustin Martinez EPA/OECA/OCEFT/NEIC Technician Ali Gitipour EPA/R6/ECAD/AEB Inspector Marcie Sharpe LDEQ/OEC/SD Inspector Paula McCain Westlake Chemical Environmental Manager Westlake Chemical Environmental Manager Production Supervisor EPA LDEQ/OEC/SD Inspector Paula McCain Westlake Chemical Environmental Manager Bob Craft Westlake Chemical Production Engineer Sarah Donahe Westlake Chemical Production Supervisor EPA Lead Inspector Signature/Date IMAES I EAT LIED © Digitally signed by NiCHOLAS BOBBS Date: 2022.07.08 15:36:31-0400' [Inspector name] Date	Media Program:	Air			
Facility Name: Lake Charles North, Axiall Facility Physical Location: 1600 VCM Plant Rd (city, state, zip code) Westlake, LA 70669 Mailing address: 1600 VCM Plant Rd (city, state, zip code) Westlake, LA 70669 County/Parish: Calcasieu Parish Facility Phone Number 337-708-4688 Facility Contact: Paula McCain Environmental Manager FRS Number: 110070228618 Identification/Permit Number: 0520-00012-V7 Media Identifier Number: LA0000002201900012 NAICS: 325110 SIC: 2869 Personnel participating in inspection: Nicholas Bobbs EPA/OECA/OCE/AED Inspector Richard Helmich EPA/OECA/OCEFT/NEIC Chemist Agustin Martinez EPA/OECA/OCEFT/NEIC Technician Ali Gitipour EPA/OBCCA/OCEFT/NEIC Technician Ali Gitipour EPA/OBCCA/OEB Inspector Marcie Sharpe LDEQ/OEC/SD Inspector Paula McCain Westlake Chemical Environmental Manager Bob Craft Westlake Chemical Environmental Manager EPA/ DEA/OBCA/OEB Inspector Signature/Date NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022207/08 153631-0400° [Inspector name] Date LAMES LEATLIEDS Digitally signed by NICHOLAS BOBBS Date: 2022207/08 153631-0400° Date	Regulatory Program(s)	Title V			
Facility Physical Location: (city, state, zip code) Mailing address: 1600 VCM Plant Rd (city, state, zip code) Westlake, LA 70669 County/Parish: Calcasieu Parish Facility Phone Number 337-708-4688 Facility Contact: Paula McCain Pmccain@westlake.com FRS Number: 110070228618 Identification/Permit Number: Media Identifier Number: LA000002201900012 NAICS: 325110 SIC: 2869 Personnel participating in inspection: Nicholas Bobbs FPA/OECA/OCE/AED Richard Helmich PPA/OECA/OCEFT/NEIC Agustin Martinez EPA/OECA/OCEFT/NEIC Ali Gitipour EPA/ORD/CEMM/AMCD Physical Scientist Justin Chen Marcie Sharpe LDEQ/OEC/SD Inspector Paula McCain Westlake Chemical Bob Craft Westlake Chemical Production Engineer NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022207/08 1536:31-0400° [Inspector name] Date IAMES LEATLIEDS Digitally signed by NICHOLAS BOBBS Date: 2022207/08 1536:31-0400° Date IAMES LEATLIEDS Digitally signed by JAMES LEATHERS	Company Name:	Westlake Chemical			
(city, state, zip code) Mailing address: (city, state, zip code) Westlake, LA 70669 County/Parish: Facility Phone Number 337-708-4688 Facility Contact: Paula McCain pmccain@westlake.com FRS Number: I10070228618 Identification/Permit Number: LA0000002201900012 NAICS: 325110 SIC: 2869 Personnel participating in inspection: Nicholas Bobbs EPA/OECA/OCE/AED Richard Helmich EPA/OECA/OCEFT/NEIC Agustin Martinez EPA/OECA/OCEFT/NEIC Agustin Martinez BPA/OECA/OCEFT/NEIC JUstin Chen EPA/ORD/CEMM/AMCD EPA/ORD/CEMM/AMCD Physical Scientist Justin Chen EPA/R6/ECAD/AEB Inspector Marcie Sharpe LDEQ/OEC/SD Paula McCain Westlake Chemical Bob Craft Westlake Chemical FPA Cemical Sarah Donahe NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 202207.08 1536:31-0400' [Inspector name] Date LAMES LEATHLEDS Digitally signed by JAMES LEATHLEDS Digitally signed by JAMES LEATHLEDS Date	Facility Name:	Lake Charles North, Axiall			
Mailing address: 1600 VCM Plant Rd (city, state, zip code) Westlake, LA 70669 County/Parish: Calcasieu Parish Facility Phone Number 337-708-4688 Facility Contact: Paula McCain Environmental Manager FRS Number: 110070228618 Identification/Permit Number: 0520-00012-V7 Media Identifier Number: LA0000002201900012 NAICS: 325110 SIC: 2869 Personnel participating in inspection: Nicholas Bobbs EPA/OECA/OCE/AED Inspector Richard Helmich EPA/OECA/OCEFT/NEIC Chemist Agustin Martinez EPA/OECA/OCEFT/NEIC Technician Ali Gitipour EPA/ORD/CEMM/AMCD Physical Scientist Justin Chen EPA/R6/ECAD/AEB Inspector Marcie Sharpe LDEQ/OEC/SD Inspector Paula McCain Westlake Chemical Environmental Manager Bob Craft Westlake Chemical Production Supervisor EPA Lead Inspector Signature/Date NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 202207.08 15:36:31-0400° [Inspector name] Date	Facility Physical Location:	1600 VCM Plant Rd			
(city, state, zip code) Westlake, LA 70669 County/Parish: Calcasieu Parish Facility Phone Number 337-708-4688 Facility Contact: Paula McCain Environmental Manager pmccain@westlake.com FRS Number: 110070228618 Identification/Permit Number: 0520-00012-V7 Media Identifier Number: LA000002201900012 NAICS: 325110 SIC: 2869 Personnel participating in inspection: Nicholas Bobbs EPA/OECA/OCE/AED Inspector Richard Helmich EPA/OECA/OCEFT/NEIC Chemist Agustin Martinez EPA/OECA/OCEFT/NEIC Technician Ali Gitipour EPA/ORD/CEMM/AMCD Physical Scientist Justin Chen EPA/R6/ECAD/AEB Inspector Marcie Sharpe LDEQ/OEC/SD Inspector Paula McCain Westlake Chemical Environmental Manager Bob Craft Westlake Chemical Production Engineer Sarah Donahe Westlake Chemical Production Supervisor EPA Lead Inspector Signature/Date NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:3631-0400 [Inspector name] Date	(city, state, zip code)	Westlake, LA 70669			
Calcasieu Parish Facility Phone Number 337-708-4688 Facility Contact: Paula McCain Environmental Manager pmccain@westlake.com Environmental Manager Environmenta	Mailing address:	1600 VCM Plant Rd			
Facility Phone Number Facility Contact: Paula McCain pmccain@westlake.com FRS Number: 110070228618 Identification/Permit Number: 0520-00012-V7 Media Identifier Number: LA000002201900012 NAICS: 325110 SIC: 2869 Personnel participating in inspection: Nicholas Bobbs EPA/OECA/OCE/AED Richard Helmich EPA/OECA/OCEFT/NEIC Agustin Martinez EPA/OECA/OCEFT/NEIC Ali Gitipour EPA/ORD/CEMM/AMCD Physical Scientist Justin Chen BPA/R6/ECAD/AEB Inspector Marcie Sharpe LDEO/OEC/SD Paula McCain Westlake Chemical Bob Craft Westlake Chemical EPA/CHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31-04/00' {Inspector name} Date ENDAMES LEATHERS	(city, state, zip code)				
Facility Contact: Paula McCain pmccain@westlake.com FRS Number: 110070228618 Identification/Permit Number: 0520-00012-V7 Media Identifier Number: LA0000002201900012 NAICS: 325110 SIC: 2869 Personnel participating in inspection: Nicholas Bobbs EPA/OECA/OCE/AED Richard Helmich EPA/OECA/OCEFT/NEIC Agustin Martinez EPA/OECA/OCEFT/NEIC Ali Gitipour EPA/ORD/CEMM/AMCD Physical Scientist Justin Chen EPA/R6/ECAD/AEB Inspector Marcie Sharpe LDEQ/OEC/SD Inspector Paula McCain Bob Craft Westlake Chemical Bob Craft Westlake Chemical Production Engineer Sarah Donahe NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31-0400' [Inspector name] Date	County/Parish:	Calcasieu Parish			
PMCCain@westlake.com FRS Number: 110070228618 Identification/Permit Number: 0520-00012-V7 Media Identifier Number: LA0000002201900012 NAICS: 325110 SIC: 2869 Personnel participating in inspection: Nicholas Bobbs EPA/OECA/OCE/AED Inspector Richard Helmich EPA/OECA/OCEFT/NEIC Chemist Agustin Martinez EPA/OECA/OCEFT/NEIC Technician Ali Gitipour EPA/ORD/CEMM/AMCD Physical Scientist Justin Chen EPA/R6/ECAD/AEB Inspector Marcie Sharpe LDEQ/OEC/SD Inspector Paula McCain Westlake Chemical Environmental Manager Bob Craft Westlake Chemical Production Engineer Sarah Donahe Westlake Chemical Production Supervisor EPA Lead Inspector Signature/Date NICHOLAS BOBBS Date: 2022.07.08 15:36:31-04:00' {Inspector name} Date	Facility Phone Number	337-708-4688			
Inspector Insp	Facility Contact:	Paula McCain Environmental Manager		r	
Identification/Permit Number: D520-00012-V7		pmccain@westlake.com			
Media Identifier Number: LA0000002201900012 NAICS: 325110 SIC: 2869 Personnel participating in inspection: Inspector Nicholas Bobbs EPA/OECA/OCE/AED Inspector Richard Helmich EPA/OECA/OCEFT/NEIC Chemist Agustin Martinez EPA/OECA/OCEFT/NEIC Technician Ali Gitipour EPA/ORD/CEMM/AMCD Physical Scientist Justin Chen EPA/R6/ECAD/AEB Inspector Marcie Sharpe LDEQ/OEC/SD Inspector Paula McCain Westlake Chemical Environmental Manager Bob Craft Westlake Chemical Production Engineer Sarah Donahe Westlake Chemical Production Supervisor EPA Lead Inspector Signature/Date NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31 -04'00' Inspector name Date	FRS Number:	110070228618			
NAICS: 325110 SIC: 2869 Personnel participating in inspection: Nicholas Bobbs EPA/OECA/OCE/AED Inspector Richard Helmich EPA/OECA/OCEFT/NEIC Chemist Agustin Martinez EPA/OECA/OCEFT/NEIC Technician Ali Gitipour EPA/OBCCA/OCEFT/NEIC Technician Ali Gitipour EPA/OBCCA/OCEMM/AMCD Physical Scientist Justin Chen EPA/R6/ECAD/AEB Inspector Marcie Sharpe LDEQ/OEC/SD Inspector Paula McCain Westlake Chemical Environmental Manager Bob Craft Westlake Chemical Production Engineer Sarah Donahe Westlake Chemical Production Supervisor EPA Lead Inspector Signature/Date NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31-04'00' {Inspector name} Date	Identification/Permit Number:	0520-00012-V7			
Personnel participating in inspection: Nicholas Bobbs EPA/OECA/OCE/AED Inspector Richard Helmich EPA/OECA/OCEFT/NEIC Chemist Agustin Martinez EPA/OECA/OCEFT/NEIC Technician Ali Gitipour EPA/OBCCA/OCEFT/NEIC Technician Ali Gitipour EPA/OBCCA/OCEFT/NEIC Inspector Justin Chen EPA/R6/ECAD/AEB Inspector Marcie Sharpe LDEQ/OEC/SD Inspector Paula McCain Westlake Chemical Environmental Manager Bob Craft Westlake Chemical Production Engineer Sarah Donahe Westlake Chemical Production Supervisor EPA Lead Inspector Signature/Date NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31-04'00' {Inspector name} Date	Media Identifier Number:	LA0000002201900012			
Personnel participating in inspection: Nicholas Bobbs	NAICS:	325110			
Nicholas Bobbs	SIC:	2869			
Richard Helmich Agustin Martinez EPA/OECA/OCEFT/NEIC Ali Gitipour EPA/ORD/CEMM/AMCD Physical Scientist Justin Chen EPA/R6/ECAD/AEB Inspector Marcie Sharpe LDEQ/OEC/SD Paula McCain Bob Craft Westlake Chemical Westlake Chemical Froduction Engineer Sarah Donahe Westlake Chemical Production Supervisor EPA Lead Inspector Signature/Date NICHOLAS BOBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31-04'00' [Inspector name] Date	Personnel participating in inspec	tion:			
Agustin Martinez EPA/OECA/OCEFT/NEIC Ali Gitipour EPA/ORD/CEMM/AMCD Physical Scientist Justin Chen EPA/R6/ECAD/AEB Inspector Marcie Sharpe LDEQ/OEC/SD Paula McCain Westlake Chemical Bob Craft Westlake Chemical Froduction Engineer Westlake Chemical Production Supervisor EPA Lead Inspector Signature/Date NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31 - 04'00' [Inspector name] Date Supervisor LAMES LEATHERS	Nicholas Bobbs	EPA/OECA/OCE/AED	Inspector		
Ali Gitipour Justin Chen EPA/ORD/CEMM/AMCD Physical Scientist Inspector Marcie Sharpe LDEQ/OEC/SD Paula McCain Bob Craft Westlake Chemical Westlake Chemical Froduction Engineer Westlake Chemical Production Supervisor EPA Lead Inspector Signature/Date NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31 -04'00' [Inspector name] Date Supervisor	Richard Helmich	EPA/OECA/OCEFT/NEIC	Chemist	Chemist	
Justin Chen Marcie Sharpe LDEQ/OEC/SD Paula McCain Bob Craft Westlake Chemical Westlake Chemical Production Engineer Westlake Chemical Production Supervisor Westlake Chemical Production Supervisor Mestlake Chemical Production Supervisor Micholas Bobbs Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31-04'00' {Inspector name} Date	Agustin Martinez	EPA/OECA/OCEFT/NEIC	Technician	Technician	
Marcie Sharpe LDEQ/OEC/SD Paula McCain Westlake Chemical Bob Craft Westlake Chemical Production Engineer Westlake Chemical Production Supervisor EPA Lead Inspector Signature/Date NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31 - 04'00' [Inspector name] Date INMES LEATHERS	Ali Gitipour	EPA/ORD/CEMM/AMCD	Physical Scientist	Physical Scientist	
Paula McCain Bob Craft Westlake Chemical Production Engineer Sarah Donahe Westlake Chemical Production Supervisor EPA Lead Inspector Signature/Date NICHOLAS BOBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31 -04'00' [Inspector name] IANAES LEATHERS	Justin Chen	EPA/R6/ECAD/AEB	Inspector	Inspector	
Bob Craft Sarah Donahe Westlake Chemical Production Engineer Westlake Chemical Production Supervisor EPA Lead Inspector Signature/Date NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31 -04'00' [Inspector name] Date IANAES LEATHERS	Marcie Sharpe	LDEQ/OEC/SD	Inspector	Inspector	
Sarah Donahe Westlake Chemical Production Supervisor EPA Lead Inspector Signature/Date NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31 -04'00' [Inspector name] Date IANAES LEATHERS	Paula McCain	Westlake Chemical	Environmental Ma		
EPA Lead Inspector Signature/Date NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31 -04'00' {Inspector name} Date IANAES LEATHERS	Bob Craft	Westlake Chemical	Production Engine	Ü	
Signature/Date NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31 -04'00' [Inspector name] Date LANAES LEATHERS	Sarah Donahe	Westlake Chemical	Production Superv	Production Supervisor	
Signature/Date NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31 -04'00' [Inspector name] Date LANAES LEATHERS					
Signature/Date NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31 -04'00' [Inspector name] Date LANAES LEATHERS					
{Inspector name} Date INNIEC I ENTIEDC Digitally signed by JAMES LEATHERS	EPA Lead Inspector		itally at an and by Aliculating Robbs		
{Inspector name} Date INNIEC I ENTIEDC Digitally signed by JAMES LEATHERS	Signature/Date	NICHOLAS BOBBS Digitally signed by NICHOLAS BOBBS Date: 2022.07.08 15:36:31 -04'00'			
		<u>U</u>		Date	
		Digitally signed by IAMES LEATHERS			
Signature/Date Date: 2022.07.08 15:22:29 -05'00'	Supervisor	JAMES LEATHERS Digitally signed by JAMES LEATHERS Date: 2022.07.08 15:22:29 -05'00'			
{Supervisor name} Date	Signature/Date	{Supervisor name}		Date	

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA inspectors Justin Chen, Richard Helmich, Agustin Martinez, Ali Gitipour, and I, Nicholas Bobbs, and LDEQ inspector Marcie Sharpe ("We", "Us") arrived at Westlake Chemical / Lake Charles North (the "Facility", the "Site", or "WLCN") at 8:00 AM on April 14, 2022 for an unannounced Clean Air Act ("CAA") inspection. We met with Paula McCain, Environmental Manager, Bob Craft, Production Engineer, and Sarah Donahe, Production Supervisor. I presented my credentials to Mrs. McCain and informed her that this was an EPA inspection to determine 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") including a survey of the facility using the Geospatial Measurement of Air Pollutants ("GMAP") Vehicle. This inspection occurred as part of the Administrator's Multi-Scale Monitoring Project called the Pollution Accountability Team (PAT).

FACILITY DESCRIPTION

The Lake Charles North facility is a Vinyl Chloride Monomer ("VCM") manufacturing facility owned and operated by Westlake Chemical but permitted under the name of prior owner Axiall, LLC. The facility is located in a dense industrial area between two other facilities.

Section II - OBSERVATIONS

The GMAP surveyed the entire facility. The complete GMAP data can be found in the report for the April 2022 GMAP project.

The GMAP detected high levels of methane near the area of the plant containing the thermal oxidizers. Mr. Chen and I used FLIR cameras to identify the source of the methane to be leaks in the fuel gas lines for the thermal oxidizers. I recorded two videos using the FLIR GF320 at approximately 9:20 AM. I recorded video MOV_0159 of a methane leak from the fuel gas line to 'I-901A'. I also recorded video MOV_0160 of a methane leak from a red valve labelled 'PT-926BA'. We identified which components were leaking to the facility personnel.

Mr. Chen and I observed the loading of VCM into a railcar using the FLIR cameras. We did not identify any leaks or fugitive emissions.

Section III - AREAS OF CONCERN

EPA inspectors Justin Chen, Richard Helmich, Agustin Martinez, Ali Gitipour, and I, Nicholas Bobbs, and LDEQ inspector Marcie Sharpe conducted a closing conference at Westlake Chemical/Lake Charles North at 10:15 AM on 04/14/2022 for the inspection. During the closing conference, I reviewed the 1 Areas of Concern noted during the inspection.

AOC 1 – Elevated methane concentrations due to leaks in thermal oxidizer fuel gas lines

The GMAP detected elevated methane concentrations downwind of the thermal oxidizers. We observed leaking components in the fuel gas lines for the thermal oxidizers using OGI. We identified the leaking components to facility personnel, and they began taking action the fix the leaks.

Section IV - FOLLOW UP

No additional information was received by EPA after exiting the Facility on 04/14/2022.

Section V – LIST OF APPENDICES

Appendix 1 – Video Log – 2 FLIR videos taken 04/14/22

Westlake Chemical/ Lake Charles North, Axiall Inspection Date 04/14/2022

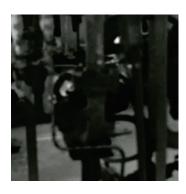
Appendix 1 Video Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Video Log

Location: West Lake Chemical North Axiall

City: Westlake Calcasieu Parish State: Louisiana



File Name: MOV_159.mp4
Date taken: 04/14/2022
Time taken: 9:20 pm
Videographer: Nicolas Bobbs

Description: OGI video of emissions from a methane leak from

the fuel gas line to 'I-901A'



File Name: MOV_160.mp4
Date taken: 04/14/2022
Time taken: 9:20 pm

Videographer: Nicholas Bobbs

Description: OGI video of emissions from a methane leak from a

red valve labelled 'PT-926BA'