



Region 6 – Enforcement & Compliance Assurance Division
INSPECTION REPORT

Inspection Date(s):	06/22-23/2021, 6/30/2021	
Media Program:	Air	
Regulatory Program(s)	SIP, Title V, NSPS, NESHAP	
Company Name:	Motiva Enterprises, LLC	
Facility Name:	Dallas Marketing Terminal	
Facility Physical Location:	3900 Singleton Blvd	
(city, state, zip code)	Dallas, Texas 75212	
Mailing address:	3900 Singleton Blvd	
(city, state, zip code)	Dallas, Texas 75212	
County/Parish:	Dallas County	
Facility Phone Number	214-631-6193	
Facility Contact:	Sandra Mena	Terminal Superintendent
	sandra.mena@motiva.com	
FRS Number:	110000495027	
Identification/Permit Number:	TCEQ RN100519651 / Title V O-2713	
Media Identifier Number:	AFS # 48-113-00046	
NAICS:	424710	
SIC:	5171	
Personnel participating in inspection:		
James Haynes	EPA/Region 6 ECDAT	Physical Scientist
Ben Rosenthal	EPA/Region 6 ECDAT	Physical Scientist
Austin Boehmer	Motiva	Operator
Spencer Fitzhenry	Motiva	Coordinator
Sandra Mena	Motiva	Terminal Superintendent
Donald Ferry	Motiva	Complex Manager
Kevin Buchanan	Motiva	Project Engineer
Naomi McElroy	Motiva	Environmental Coordinator
Kristine Pelt	Motiva	HSE Manager
EPA Lead Inspector Signature/Date		
	James Haynes	Date
Supervisor Signature/Date		
	Marie Stucky	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

Two United States Environmental Protection Agency (“EPA”) Region 6 inspectors, Mr. James Haynes and Mr. Ben Rosenthal, arrived at the at Motiva Enterprises, LLC’s Dallas Marketing Terminal (“Motiva” or “the terminal”) at approximately 11:15 on June 22, 2021 for an announced inspection. We met with Austin Boehmer, Motiva Operator. I, James Haynes, presented my credentials to Mr. Boehmer and informed him that this was an EPA inspection to determine compliance with the facility’s permits and the Clean Air Act (“CAA”). Ms. Sandra Mena, Terminal Superintendent, Mr. Donald Ferry, Complex Manager, and Ms. Naomi McElroy, Environmental Coordinator, were unavailable and not at the terminal for the opening conference. The scope of the inspection is a partial compliance evaluation (“PCE”) and includes evaluation of the compliance of the facility with its Title V Federal Operating Permit (“FOP”), New Source Review (“NSR”) Permit, and Texas State Implementation Plan (“SIP”) regulations. Additional federal regulations include New Source Performance Standards (“NSPS”) and National Emission Standards for Hazardous Air Pollutants (“NESHAP”) requirements. See **Appendix 1** for a copy of the inspection’s sign-in sheet.

FACILITY DESCRIPTION

Motiva owns and operates the Dallas Marketing Terminal, a petroleum storage and distribution terminal in Dallas, Texas. The site operates under NSR Permit No. 1285 and Title V FOP No. O-2713, both issued by the Texas Commission on Environmental Quality. Motiva’s NSR is set to expire January 9, 2022, and the FOP is set to expire on August 16, 2022. These permits authorize Motiva’s storage tanks, truck loading operations, and vapor control equipment. See **Appendix 2** for a copy of the terminal’s plot plan. The terminal receives, stores, and distributes diesel, jet fuel, two different grades of gasoline, and additives (such as ethanol). These products are received by the terminal via pipeline and truck. Motiva blends ethanol, butane, and gasoline at the loading racks to create the final product.

Section II - OBSERVATIONS

Mr. Rosenthal and I provided a Document Request to Mr. Boehmer prior to beginning any field activity. See **Appendix 3** for a copy of this Document Request. We requested that Motiva start gathering documents so I could collect them at the end of the day. Following the discussion, Mr. Boehmer transmitted the Document Request to Ms. McElroy. For the inspection, I used a Nikon COOLPIX AW120 digital camera to photograph observations and a FLIR Systems GF320 infrared camera to screen equipment that visually detects hydrocarbon emissions. See **Appendix 4** for photographs taken during the inspection.

On June 22, 2021, we began the field portion of the inspection with Mr. Boehmer. We walked to the location of the terminal where Motiva receives and takes custody of incoming product. We continued to walk around the facility and observed a second custody transfer location from a nearby terminal. Mr.

Rosenthal and I continued walking around the terminal and observed Motiva's storage tanks. The following table summarizes the list of tanks we observed:

Table 1. List of Tanks Observed by EPA

Tank Number	Tank Contents	Tank Type
30745	Commingled Product (gasoline, diesel, ethanol)	Internal Floating Roof ("IFR")
29515	Ethanol	IFR
29514	Out of Service	IFR
29537	Diesel	Fixed Roof
28538	Diesel	IFR
30967	Gasoline	IFR
31476	Gasoline	IFR

NOTE: This list does not include tanks storing additives or butane.

We climbed Tank 29537 (storing diesel) and observed light hydrocarbons emanating from the access hatch near the sample well. See Photo 1 for the location of the leak. Following additional observations of the storage tanks referenced in Table 1, we walked to the location where the terminal injects butane into the piping that feeds the loading racks. Motiva uses this butane to adjust the Reid vapor pressure ("RVP") of the gasoline for seasonal changes. We also observed the terminal's oil-water separator and other tanks storing additives blended into the gasoline and diesel. In this area of the terminal, I detected odors near an additive tank. Mr. Boehmer identified the likely source, the tape gauge of Tank 5457 (storing additive). I confirmed light hydrocarbons coming from the tape gauge with the FLIR camera.

We later observed the devices the terminal uses to control emissions from loading operations. The back-up control device is a John Zink vapor combustion unit ("VCU") that thermally destructs the loading vapors. See Photo 2. The primary control device is a vapor recovery unit ("VRU") that uses a carbon adsorption system to recover gasoline product that can be returned to the storage tanks. Mr. Boehmer stated that the VRU was currently out of service due to a defect with a valve; therefore, vapors from loading operations were being routed to the VCU at the time of the inspection. See Photo 3. Mr. Boehmer noted that Motiva had ordered a replacement valve for the VRU prior to the inspection.

We observed the loading racks and loading operations at the terminal. Mr. Boehmer showed us the location where blending occurs at the racks, the MultiLoad II loading interface, and the Scully system. See Photo 4 for a photograph of the loading interface system. We returned to the office for a brief phone call with Ms. McElroy before departing the terminal at 15:15.

On June 23, 2021, we returned to the terminal 11:35 and met with Ms. Mena and Mr. Ferry. We confirmed that the VRU was out of service until the terminal received a replacement valve. Additionally, we climbed Tank 29537 again to confirm any hydrocarbons with the FLIR camera; however, I did not observe any emissions with the FLIR camera at that time. We also returned to Tank 5457. Motiva staff indicated that the tape gauge was repaired, and I confirmed that there were no visible hydrocarbons with the FLIR camera.

We later observed a sample recovery tank at Skid FJB06 where I detected light hydrocarbons using the FLIR camera. See Photo 5 and 6 for the location of the skid and the leaking component. Using Motiva's 4-gas meter, we observed readings less than 500 ppm VOC with an estimated lower explosive limit ("LEL") of 3%. After viewing the sample recovery tank, we returned to the loading rack. At Bay 5, Mr. Rosenthal and I encountered odors at the back of a trailer loading gasoline. After using the FLIR camera, I observed emissions at Bay 5's flame arrestor. See Photo 7 for a photo of the flame arrestor. Displaced vapors from the truck travel through this arrestor during loading operations and then through additional piping to the downstream vapor processing system. We used Motiva's 4-gas meter again, and I observed a reading of about 1,200 ppm VOC with an estimated LEL of greater than 10%. The meter also noted that the LEL was outside the calibrated range. See Area of Concern (AOC) 1.

On June 30, 2021, Mr. Rosenthal and I conducted a virtual meeting with Motiva staff, discussing the terminal's operations, procedures, and permitted sources. We also identified additional records we would need to continue evaluating the compliance of the terminal. At the end of the call, Mr. Rosenthal and I conducted the closing conference with Motiva staff available for the call. Following the closing conference, I transmitted a copy of the sign-in sheet, two notices regarding confidential business information, and copies of all photos from the inspection.

Section III – AREAS OF CONCERN

1) Hydrocarbons Observed with the FLIR Camera at the Flame Arrestor

EPA observed hydrocarbon vapors using the FLIR camera at Bay 5's flame arrestor. Motiva is required to equip the loading rack with a vapor collection system that transports displaced vapors from the cargo tanks to a control device that reduces total organic compounds. Additionally, Motiva's 4-gas meter documented elevated LEL and VOC readings that may indicate that Motiva is not operating and maintaining an affected source in a manner consistent with safety and good air pollution practices for minimizing emissions. Note: the LEL measurement did not factor in the meter's calibration gas and/or LEL correction factors that may be necessary to adjust for gasoline vapors.

****2) Leak Inspections Occurring Outside the Monthly Requirements**

During a cursory review of Motiva's leak inspection log book, EPA observed several instances where leak inspections occurred outside the monthly requirements. Under NESHAP Subpart BBBBBB ("NESHAP 6B"), Motiva is required to conduct monthly inspections of all equipment in gasoline service. Additionally, under NESHAP 6B, EPA defines *monthly* as once per calendar month at regular intervals of no less than 28 days and no more than 35 days. For example, in 2020, Motiva conducted a leak inspection on September 16. The following monthly inspection occurred on October 6 – 20 days later. Under NESHAP 6B, these two leak inspections should be no less than 28 days apart. The next month, Motiva conducted the leak inspection on November 25 – 50 days later and 15 days beyond what is allowed under the regulation.

****3) Vapor Combustor Compliance Options**

During a call on June 30, 2021, Motiva staff indicated that the VCU complies with the testing and monitoring requirements of NESHAP 6B by following 40 C.F.R. § 63.11092(b)(1)(iii)(B). Upon further review, compliance with this section of the rule is only allowed after conducting a performance test under 40 C.F.R. § 63.11092(a)(1); however, Motiva confirmed that they are complying with 40 C.F.R. § 63.11092(a)(2) which allows the terminal to certify the compliance status of the loading rack in lieu of the performance test under paragraph (a)(1). Under NESHAP 6B, if Motiva has elected to comply with 40 C.F.R. § 63.11092(a)(2), Motiva is required to follow the requirements outlined in 40 C.F.R. § 63.11092(b)(5).

****Not addressed with company during the inspection or at the closing conference.**

Note: The Areas of Concern referenced above are not comprehensive. It only reflects the concerns identified during this inspection. The inspection team will continue to evaluate Motiva's records and engage with terminal staff to determine compliance with the CAA as part of a more detailed investigation.

Section IV – FOLLOW UP

EPA received initial responses from Motiva on June 25, 2021. EPA received additional information on July 28 and August 5, 2021, after ending the inspection on June 30, 2021.

Section V – LIST OF APPENDICES

Appendix 1 – Sign-in Sheet

Appendix 2 – Terminal Plot Plan

Appendix 3 – Document Request

Appendix 4 – Photograph Log

Appendix 1

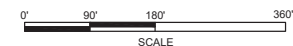
Sign-in Sheet

Meeting with: Motiva Enterprises - Dallas TerminalDate: 6/22/21Purpose of meeting: CAA Inspection

	Name	Title	Representing	E-mail	Phone
1	James Haynes	Inspector	EPA - Region 6	haynes.james@epa.gov	214-665-8546
2	Benjamin Rosenthal	Inspector	EPA - Region 6	rosenthal.benjamin@epa.gov	214-665-6453
3	Boehmer, Austin	Operator	Motiva Dallas	austin.boehmer@motiva.com	214-631-6193
4	Ferry, Donald E	Complex Manager	Motiva	Donald.Ferry@motiva.com	214-631-6194
5	Spencer Fitzharry	Coordinator	Motiva	spencer.fitzharry@motiva.com	214-631-6194
6	Sandra Mena	T. Superintendent	Motiva	Sandra.mena@motiva.com	214-631-6193
7	Kristine Pelt	HSE Manager	Motiva		
8	Kevin Buchanan	Project Engineer	Motiva		
9	Naomi McElroy	Environmental Coordinator	Motiva	naomi.mcelroy@motiva.com	713-427-3609
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Appendix 2

Terminal Plot Plan



Motiva Enterprises LLC
Dallas Terminal
3900 Singleton Blvd

DATE: 07/10/2019	JOB No: J15910	SCALE: AS NOTED	EDITED BY: SM
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WITT O'BRIEN'S

818 Town & Country, Ste 20
 Houston, Texas 77024
 Phone (281) 320-9796
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 MOI000646

Appendix 3

Document Request

Motiva Enterprises LLC, Dallas Marketing Terminal EPA Record Request - 6/22/2021		
	Description	Period
	Current state and federal operating permit(s) and application(s)	
	Current plot plan with each tank ID	
	Listing of all tanks, year constructed, material stored, capacity, diameter, height, tank type (cone roof, IFR, EFR, CVS w/ control), applicable regulations. If floating roof, type of floating roof, type of primary seal, and type of secondary seal (if applicable)	
	Vapor pressure analysis/documentation of each material stored with ASTM test method	
	Strapping table for each tank including levels when the vacuum breaker opens and the level when the tank rests on it legs (if adjustable, high and low settings)	
	To what standards (e.g. API, ASTM) are/were each tank built? To what standards are they maintained?	
	Procedures for inspection, maintenance of tanks	
	Any policy, guidance, or interpretation of regulations and what that means for the operation of the tank or controls	
	Spreadsheet or database used to track inspections/repairs (e.g., API schedules, repair history)	
	Individual product throughput records (gasoline, ethanol, diesel, biodiesel, avjet, additives) for the site and individual product throughputs at the loading racks. Provide average and maximum loading rates for the tanks and loading racks. Provide truck loading data.	2 years
	How are tank levels recorded?	
	Are roof landings included in the facility permit(s)? Are tank cleanings included in the facility permit(s)? Provide a listing of tanks that have been landed, when they were landed, and the duration of the landing. Provide tank cleaning records.	5 years
	How are roof landings tracked/documented? Are different emission factors used for Emission Inventory reporting?	
	Annual Emissions Inventory Reports	5 years
	Title V reports (ACC, Semi-annual Monitoring and Deviation Reports)	5 years
	Provide all notifications and/or record of communication for fill/refill of IFR storage vessels to TCEQ	5 years
	Provide records of inspection (i.e. prior to filling the tank, roof top inspections, internal inspections each time emptied/degasses). If no internal inspection w/in 5 years, provide records of the last internal inspection. Include: Storage vessel ID, date of inspection, observed condition of each component (seals, IFR, and fittings)	5 years
	Provide copies of the previous two internal and external API inspections at each tank	
	Provide all reports to TCEQ of failed roof top visual inspections	5 years
	Provide all reports to TCEQ of failed internal inspections	5 years
	Provide the certification report to TCEQ for all new floating roof tanks	since 2016
	NESHAP Subpart 6B Notification of Compliance Status/Initial Notification	
	NESHAP Subpart 6B Semi-annual Compliance Reports	5 years
	All engineering assessments and performance test records for the VCU	
	CEMS records for the VRU	5 years
	Annual certification test for gasoline cargo tanks and/or documentation showing vapor-tight testing for each tank truck loaded at the facility	2 years
	Equipment leak log book records documenting inspection, leaks, and repairs	2 years

Appendix 4

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: Motiva Enterprises, LLC – Dallas Marketing Terminal		
City: Dallas	County: Dallas	State: TX



Photo File Name:	DSCN0502.JPG
Date of Photo:	06/22/2021
Time of Photo:	12:21
Photographer:	Ben Rosenthal
Description:	Access hatch of Tank 39537; arrow notes the location at which EPA observed hydrocarbon emissions using the FLIR camera.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: Motiva Enterprises, LLC – Dallas Marketing Terminal		
City: Dallas	County: Dallas	State: TX



Photo File Name:	DSCN0505.JPG
Date of Photo:	06/22/2021
Time of Photo:	12:50
Photographer:	Ben Rosenthal
Description:	Vapor combustion unit at terminal to control emissions from loading operations.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: Motiva Enterprises, LLC – Dallas Marketing Terminal		
City: Dallas	County: Dallas	State: TX



Photo File Name:	DSCN0506.JPG
Date of Photo:	06/22/2021
Time of Photo:	13:02
Photographer:	Ben Rosenthal
Description:	Sight glass into VCU showing flames; VCU was controlling emissions from loading operations at the time of the inspection.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Photograph Log

Photo No. 4

Location: Motiva Enterprises, LLC – Dallas Marketing Terminal		
City: Dallas	County: Dallas	State: TX



Photo File Name:	DSCN0514.JPG
Date of Photo:	06/22/2021
Time of Photo:	13:51
Photographer:	Ben Rosenthal
Description:	Loading interface system used by truckers prior to loading; a loading interface system is located at each bay.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 5

Location: Motiva Enterprises, LLC – Dallas Marketing Terminal		
City: Dallas	County: Dallas	State: TX



Photo File Name:	DSCN0517.JPG
Date of Photo:	06/23/2021
Time of Photo:	13:50
Photographer:	Ben Rosenthal
Description:	FJB06 skid used for sampling gasoline.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: Motiva Enterprises, LLC – Dallas Marketing Terminal		
City: Dallas	County: Dallas	State: TX



Photo File Name:	DSCN0518.JPG
Date of Photo:	06/23/2021
Time of Photo:	13:50
Photographer:	Ben Rosenthal
Description:	Rear of FJB06 skid with gasoline tank; arrow notes the location at which EPA observed hydrocarbon emissions using the FLIR camera.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 7

Location: Motiva Enterprises, LLC – Dallas Marketing Terminal		
City: Dallas	County: Dallas	State: TX



Photo File Name:	DSCN0519.JPG
Date of Photo:	06/23/2021
Time of Photo:	14:26
Photographer:	James Haynes
Description:	Bay 5 flame arrestor; arrow notes the location at which EPA observed hydrocarbon emissions using the FLIR camera.