



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 6TH AVENUE
SEATTLE, WASHINGTON 98101

DATE: See date of Section Chief signature

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Kinder Morgan Willbridge & Linnton Terminals, Portland, Oregon

FROM: Daniel Heins, Environmental Scientist
Air Toxics Enforcement Section, EPA Region 10

THRU: Derrick Terada, Acting Section Chief
Air Toxics Enforcement Section, EPA Region 10

TO: File

BASIC INFORMATION

Facility Name: Kinder Morgan Willbridge & Linnton Terminals
Facility Location: 5880 NW St. Helens Road, Portland, OR 97210

Date of Inspection: June 22, 2022

EPA Inspector(s):

1. Daniel Heins, Environmental Scientist

Other Attendees:

1. Lane Karabaic, Area Manager – Kinder Morgan
2. Andrew Holbrook, Northwest Operations Manager – Kinder Morgan
3. Sean Gray, Operations Supervisor – Kinder Morgan

Contact Email Address: Lane_Karabaic@kindermorgan.com

Purpose of Inspection: Tanks inspection

Facility Type: Bulk fuels terminal / gasoline distribution facility

Arrival Time: 13:30

Departure Time: 15:40

Inspection Type: Announced Inspection

OPENING CONFERENCE

- ☒ Presented Credentials
- ☒ Stated authority and purpose of inspection
- ☐ Provided Small Business Resource Information Sheet
- ☒ Small Business Resource Information Sheet not provided. Reason: Not a small business
- ☒ Provided CBI warning to facility

The following information was obtained verbally from Kinder Morgan representatives.

Process Description:

Kinder Morgan stores gasoline, diesel, Jet A, transmix, ethanol, and biodiesel at its Willbridge and Linnton Terminals ("the Facility"). At this terminal, the transmix is mixed Jet A and diesel. The Linnton Terminal is primarily diesel, except for two gasoline external floating roof tanks. Kinder Morgan does not itself own any of the product, but rather stores product on behalf of its customers. Kinder Morgan, Phillips66, and Chevron share pipe interconnections, allowing transfers between tanks on the different properties and the ability to receive product through the other facilities' docks. The Linnton and Willbridge Terminals are linked by pipe, as are the other five terminals in the area.

The Facility receives petroleum products via the Olympic Pipeline, barges/marine vessels, and rail; ethanol primarily by vessel, but also rail and small amounts by truck; and biodiesel by rail and small amounts by truck. The Facility sends petroleum products to Eugene and Jet A to PDX airport both via pipeline. All products are loaded out onto trucks. Petroleum products are also loaded onto barges/marine vessels. No product is shipped out by rail. The Facility has a zinc carbon vapor recovery unit (VRU) at the truck rack to control loading emissions. There is a booster to convey captured vapors from marine loading to the VRU.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations:

Daniel Heins made observations with a FLIR GF320 optical gas imaging camera ("the FLIR"), capable of seeing hydrocarbon emissions plumes. EPA also used a Thermofisher TVA2020 flame ionization device ("the TVA") to measure the total hydrocarbon concentration in parts per million as methane (ppm) from vents or through hatches at the tops of tanks.

Daniel Heins toured the northwest portion of the Willbridge Terminal. See Appendix A for site maps. This was where all gasoline and ethanol tanks at the Facility are located, with the exceptions of external floating roof tanks #45028 and 59029 at the Linnton terminal.

Daniel Heins observed emissions plumes out of tanks 123, 128, 85, 101, 84, 124, 116, and 134, all of which contained gasoline. For each of these tanks, he then took TVA readings from center vents if available or from rim vents lifted by Facility personnel to facilitate readings.

Daniel Heins made observations of tanks 12003, 118, and 139 with the FLIR and did not observe any plumes and thus did not take any TVA readings.

Photos and/or Videos: were taken during the inspection. See Appendix B.

Field Measurements: were taken during this inspection. See Appendix C.

RECORDS REVIEW

Ahead of the inspection, Daniel Heins requested and reviewed a site map and a list of storage tanks with details of tank product, construction, size, and applicable air regulations.

CLOSING CONFERENCE

☒ Provided U.S. EPA point of contact to the facility

Requested documents:

Daniel Heins requested tank levels of selected tanks at the Facility from the time of the inspection.

Concerns:

Daniel Heins noted the moderately to significantly elevated hydrocarbon concentrations at all but one of the gasoline tanks, and that concentrations would likely be significantly higher towards the bottom of the tank headspace. Daniel Heins noted that this could potentially be an indication of an issue in the performance of the internal floating roof in suppressing emissions and that there is potential that the concentrations may be high enough at the bottom to pose a safety concern.

DIGITAL SIGNATURES

Heins,
Daniel

Digitally signed by
Heins, Daniel
Date: 2022.07.18
10:27:07 -07'00'

Daniel Heins, Report Author

DERRICK
TERADA

Digitally signed by
DERRICK TERADA
Date: 2022.07.18
12:10:33 -07'00'

Derrick Terada, Acting Section Chief