



Clean Air Act Compliance Inspection Report

United States Environmental Protection Agency
Region 10 – Seattle, WA

Partial Compliance Evaluation

**Zenith Energy
Portland, OR**

Inspection Date: December 4, 2024

Report Author Signature

Date

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Environmental Engineer
EPA Region 10

Peer Review Signature

Date

Brendan Whyte
CAA Inspector
EPA Region 10

Manager Signature

Date

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Attachments

Attachment 1	Photo and Video Log
Attachment 2	EPA Region 10 FLIR GF320 SOP

1. Basic Facility and Inspection Information

Facility Location: Zenith Energy
Portland, OR Terminal
5501 NW Front Avenue
Portland, OR 97210

Permit Number: Title V Operating Permit #26-2025
Oregon Department of Environmental Quality (ODEQ)

Facility Contact: JT Hendrix – Terminal Manager

Wes Davenport – Inventory Manager
wes.davenport@zenithterminals.com

Agency Inspectors: Zach Hedgpeth, PE – EPA Region 10
206-553-1217, hedgpeth.zach@epa.gov

Brendan Whyte – EPA Region 10
206-450-0014, whyte.brendan@epa.gov

Trey Peterson – EPA Region 10
Alex Liebert – EPA Region 10
David Graiver – Oregon DEQ

Inspection Date: December 4, 2024

Inspection Notice: Unannounced

Disclaimer

This report is a summary of observations and information gathered from the facility at the time of the inspection. The information provided does not constitute a final decision regarding compliance with the Clean Air Act (CAA) and applicable regulations or permits, nor is it meant to be a comprehensive report of all activities and processes conducted at the facility.

1. Introduction

- a) This was a Clean Air Act (CAA) compliance inspection by the Environmental Protection Agency (EPA). The purpose of this inspection was to conduct a partial compliance evaluation (PCE) inspection of the facility. The inspection included general discussion of facility operations and a visual walk-through including observations using FLIR GF320 and Gx620 infrared gas imaging cameras¹, in addition to the observations of the inspectors.
- b) Advance notice of this inspection was not provided to the facility.

2. Inspection Elements and Field Observations – December 4, 2024

- a) The EPA inspectors arrived onsite at approximately 13:05. David Graiver with the Oregon Department of Environmental Quality also arrived around this time. I spoke with the security guard at the entrance regarding the purpose of our visit and the EPA inspectors provided our credentials. The guard explained that Mr. Hendrix, the Terminal Manager, was not on-site. After a few minutes, Brian O'Dell, Operations Supervisor, and Wesley Davenport, Inventory Manager, arrived.
- b) Opening Conference
 - 1. A brief opening conference was held in the facility parking lot with the five agency personnel, Mr. O'Dell and Mr. Davenport. The EPA inspectors presented our credentials to facility staff at this time. Mr. Davenport explained that he would serve as EPA's point of contact for the inspection.
 - 2. I began the opening conference by explaining that we (EPA inspectors) were onsite to conduct an unannounced inspection under the Federal Clean Air Act (CAA). The inspection would be a PCE centering around emissions observations using the FLIR cameras. I noted that the planned scope included observation of the truck rack vapor recovery system where the facility had removed the carbon drum control system, and observation of the rim seal on Tank T-106. EPA had observed during inspections conducted during summer 2024 that this tank rim seal was malfunctioning (had been turned inside out).
 - 3. Collection of photos, videos, FLIR infrared videos were discussed, and facility personnel expressed their agreement, but requested that we avoid taking photos of security cameras. I agreed and also explained that copies of all recordings collected during the inspection would be transmitted to the facility along with the inspection report.
 - 4. I noted that some of the EPA equipment is not intrinsically safe, however, the facility personnel did not require a hot work permit to be issued for the inspection work.

¹ Use of the cameras during this inspection followed U.S. EPA Region 10 Office of Environmental Assessment Standard Operating Procedure OEAFIELDSOP-111 entitled "Optical Gas Imaging with a FLIR GF320 Infrared Camera", which is included as Attachment 2.

5. Confidential business information (CBI) was discussed, and the EPA CBI forms were sent via email to Mr. Davenport later on 12/4/24. Facility personnel did not claim any information as CBI during the inspection.
6. The opening conference ended, and the group proceeded to the field at approximately 13:30.

c) Field Observations

1. Fieldwork began with a visual survey of selected tanks using the FLIR cameras. Mr. O'Dell and Mr. Davenport accompanied the inspectors throughout the inspection.
2. FLIR observations began with Tank T-130, which contains crude oil. Tank T-130 was receiving crude oil from rail at the time of the inspection. Volatile organic compound (VOC) emissions were observed from the rim vents using the FLIR cameras. Inspector Whyte recorded videos 190 and 191 (see Attachment 1).
3. The group next proceeded to Tank T-106, which is an external floating roof tank (EFR) containing crude oil. We climbed to the catwalk and observed that a portion of the secondary rim seal was inverted/flipped backwards (see photos 478-481). VOC emissions were observed from the rim seal using the FLIR cameras. Inspector Whyte recorded videos 192 and 193.
4. During our walk-through, VOC emissions were observed from the rim vents on Tank T-63, containing crude oil, using the FLIR cameras. Inspector Whyte recorded videos 194 and 195.
5. While in the area near crude Tank T-105, Mr. Davenport stated that this tank had been landed and emptied approximately four weeks prior for repairs.
6. VOC emissions were observed from the rim vents on Tank T-104, containing crude oil, using the FLIR cameras. Inspector Whyte recorded videos 196 and 197.
7. Sorbent tube monitoring Station 03 was observed, and I took photos 482-484 showing the installation of the sorbent tube monitoring equipment.
8. We next observed the railcars containing crude oil that were being offloaded to Tank T-130. No VOC emissions were noted when operations were observed using the FLIR cameras. Mr. Davenport stated that the facility is not equipped with the piping and other infrastructure that would be necessary to load product out via railcar.
9. While walking to the truck rack, we observed the Vapor Combustion Unit (VCU), which is an enclosed combustor used for marine loading vapor recovery. Mr. Davenport explained that while Zenith uses the Chevron dock, each company has their own vapor recovery system. Chevron uses a Vapor Recovery Unit (VRU) located at the dock, while Zenith pipes their vapor recovery gasses to this VCU located at their facility. Zenith installed the VCU in approximately 2018. The vapors are conveyed from the dock to the VCU via a recertified former product line.
10. Lastly, we observed the truck rack where EPA had observed a malfunctioning carbon drum collection system during our summer 2024 inspection. I noted that the carbon drum system had been removed. Vapors collected from truck loadout

are now conveyed through a knock-out drum through piping that releases directly to atmosphere (see photos 485-486).

11. At around 15:05, we completed the field walk and entered the facility office.

3. Closing Conference – December 4, 2024

- a) The closing conference was held in the facility conference room. I led the discussion, including providing an overview of the EPA Region 10 compliance process.
- b) Attendees:
 - 1. Zenith: Wes Davenport, Brian O'Dell
 - 2. EPA: Zach Hedgpeth, Brendan Whyte, Alex Liebert, Trey Peterson
 - 3. ODEQ: David Graiver
- c) EPA did not prepare a written records request, but did informally request information regarding the landing and repairs on Tank T-105. Mr. Davenport agreed to send this information within the next couple of days. Note that EPA had not received this follow-up information as of the date of this report.
- d) The following issues were identified as potential compliance concerns under the CAA. I clarified that these items did not necessarily constitute violations and may not include any additional compliance concerns that are identified post-inspection.
 - 1. Malfunctioning rim seal (flipped backwards) and VOC emissions from Tank T-106.
 - 2. VOC emissions from Tanks T-130, T-63, and T-104.
 - 3. Removal of carbon drum controls system from the truck rack.
- e) The closing conference ended around 15:30, and the inspectors departed the facility.