



State of Oregon
Department of
Environmental
Quality

Title V and SM-80 Inspection Report Air Quality Division

General Information

Facility Name Zenith Energy Terminals Holdings LLC	Permit Number 26-2025-TV-01
Site Address 5501 NW Front Avenue, Portland, OR 97210	Permit Type Title V
Mailing Address (if different from above)	County Multnomah

Permit Issuance Date 5/16/2007	Permit Expiration Date 4/01/2012 (administratively extended)	NAICS 493190	ICIS-Air ID# OR0000004105102025
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Inspection Date(s): 11/13/2024	Inspection Arrival Date & Time: 11/13/2024; 09:30 PST	Inspection Departure Date & Time: 11/13/2024; 11:40 PST
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Inspection Type: (check two)	FCE/PCE (specify)	PCE	Reason for Inspection: (check one)	Regularly scheduled inspection	
	On-Site or Virtual Inspection	On-site		Complaint follow-up	
	Announced	No		Other (specify)	Informational

Inspector: (Name, Title and Phone #)	David Graiver, Environmental Engineer, 503-229-5690 Chris Moore, AQ Permit Writer & Inspector, 971-409-0562 Lisa Ball, NW Region AQ Manager, 503-229-5160
DEQ Air Quality Manager: (Name, Region, and Phone#)	Lisa Ball, NW Region, 503-229-5160
Facility Representative(s): (Name, Title, and Phone #)	JT Hendrix, Terminal Manager Brian O'Dell, Operations Supervisor Carlos Mungia, Chief Operations Officer (via phone)

David Graiver

Inspector Signature

2024-12-16

Report Finalized Date

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Previous Inspection Date: 06/25/2024	Violation(s) Found? No	Violation(s) Corrected?
Summary of Violation(s) and any Corrective Action(s):		

Most Recent Annual Report Submission Date 2/13/2024, revised submittal received 4/18/2024	Does Report Show Compliance? Yes
Description of Compliance or Non-Compliance	

Notes of Inspection Circumstances (weather, facility housekeeping, etc.): Temperature outside in mid 50s (F), wind gusts, cloudy, with intermittent rain.
Summary of Entry Meeting I, David Graiver (DG), arrived at the security station with Chris Moore (CM) and Lisa Ball (LB) at 09:30 PST, told the guard we were with Oregon DEQ Air Quality, provided him with our DEQ identifications, and informed him we were present for an unannounced air quality inspection. When asked who we were present to see I replied that we would like to speak with either JT Hendrix or Grady Reamer. The guard requested a driver's license but I told him that my DEQ identification was adequate and my license was required only for federally operated facilities. The guard instructed me to wait while he contacted Zenith staff. At approximately 09:35, JT Hendrix (JT) and Brian O'Dell (BO), arrived at the security station and escorted us to a conference room. I informed JT and BO that DEQ is investigating the installation and use of the McCall Dock for product receipt and shipping from Zenith. The main goals of the inspection are to: 1) Review, document, and check status of Notice of Approvals (NoAs) associated with the McCall Dock, and 2) Better understand the operations associated with the McCall & Chevron Docks Prior to leaving the office to view the McCall and Chevron Docks, I asked several questions. The questions and responses are detailed in the "Inspection Plan" section of this report, which starts on page 3 of this report. I also informed JT that it would be pertinent to inform the facility contact at McCall, Dustin Wilson, prior to us entering McCall's property.

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Zenith Facility Description

The permitted facility was built as a petroleum refinery with two distinct components; the refinery, which refines petroleum products, and a terminal, which receives, stores, and transports petroleum products. Currently, Zenith is utilizing only the terminal portion of the facility, no longer operating as an asphalt refinery, but operating as a “liquid warehousing and storage” for hire facility. Zenith does not own any products that they handle. Zenith is operating under a Title V Permit issued in 2007 but has applied for an ACDP with synthetic minor limits. The proposed ACDP is for the terminal operations only. The air quality permit authority to operate the asphalt refinery will remain under the existing Title V permit until the Title V permit is terminated. Zenith has committed to the City of Portland to request to terminate the Title V permit after the proposed ACDP is issued and fully in effect.

Current Issues

DEQ is investigating the installation and use of the McCall Dock for product receipt and shipping from Zenith. The inspection goals are to:

- 1) Review, document, and check status of NoAs associated with the McCall Dock.
- 2) Better understand the operations associated with the McCall & Chevron Docks.

Inspection Plan and Initial Questions

- 1) View McCall Dock
 - a) Walk through how material moves between McCall Dock and Zenith
 - i) Compare image from the McCall Dock NoA application to actual pipeline
 - (1) Why does 2021 connection appear to terminate at McCall rail rack? **The rail rack location (blue dot in photo provided with NoA application [image is included on page 5 of this report]) is the location of an existing pipeline used to transport asphalt between McCall Oil and Zenith.**
 - (2) What was existing and what work had to be performed? **The existing infrastructure was an asphalt pipeline used to transfer asphalt between McCall Oil and Zenith. Zenith paid for the pipeline that was constructed on McCall Oil’s property (yellow line in map submitted with the NoA application [image is included on page 5 of this report]) which runs from near McCall Oil’s rail rack and connects approximately 250 meters to the NNW to an existing diesel pipeline. Zenith also performed work on their property, as shown in photo #6, to route the distillate fuel to the distillate storage tanks because the existing pipeline connected to asphalt tanks.**
 - (3) View the construction required to connect the McCall Dock and Zenith.
 - ii) Compare NoA Images from July 13, 2023, NoA to actual pipeline(s)
 - (1) Has this been completed? What is status of project? DEQ doesn’t have an AQ104C for this project. **No, construction on the new pipe segments has not yet commenced.**
 - (2) What was existing and what work had to be performed? **The entire project is new.**
 - b) Existing piping between the Zenith terminal and the McCall property has existed and been used to exchange products between the two facilities since the 1940s.
 - i) Where is existing piping and how does it connect McCall & Zenith? **The existing piping carried asphalt between McCall Oil and Zenith. The pipeline connected the asphalt tanks to the “plant south” of the new connection in photo #6 and connected to McCall’s asphalt tanks through the silver pipe identified with an orange arrow in photo #8.**
 - ii) Are there constraints with existing and new piping (e.g., product types, input/output locations, etc.) **The existing piping was dedicated to transferring asphalt and connected to Zenith’s**

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- asphalt tanks, which are in the process of being decommissioned (they are among the tanks scheduled for decommissioning in accordance with Zenith's October 2022 LUCS). The new pipeline transfers ultra-low sulfur diesel (ULSD) and renewable diesel (RD); any change in the product handled will require a clean out of the pipeline to ensure the product handled remains within specification.
- c) Starting in April 2021, Zenith began moving ULSD and RD through the pipe and a connection was added to pass the products directly to the existing dock lines.
 - i) Specifically, what is different compared to the existing infrastructure? The main difference is the addition of new piping constructed on McCall's property; represented as yellow lines in the April 2024 NoA application. Zenith also rerouted the piping on their property to move product to the appropriate storage tanks (piping previously connected to asphalt tanks).
 - ii) Why was a connection required when piping already exists? The existing piping connected the asphalt tanks between Zenith and McCall. The new piping was required to connect the Zenith facility to the McCall dock.
 - d) Zenith leases the dock and associated piping/hoses on the dock from McCall. Zenith owns the pipeline leading to the dock and has an easement for siting and access.
 - i) Explain this in lay terms. The pipeline itself is owned by Zenith and has legal right to use specific land even though it's owned by a separate entity? Carlos Munguia, Zenith's Chief Operations Officer, was able to confirm that Zenith paid for the pipe segment on McCall's property but nobody on site was able to confirm legal ownership of the pipe segment or explain any associated easements.
- 2) Compare EUs that are in both McCall & Zenith Air Permits
- a) MLOAD: Marine Loading EU (e.g., McCall Dock)
 - b) Is there an agreement in place for accounting emissions from each user of MLOAD? Emissions accounting is based on the legal entity that is loading/unloading product from barges but Zenith staff were unaware of any legal agreement.
 - c) Are there any fugitive leak EUs associated directly with the Dock? If so, how are emissions accounted for between Zenith/McCall? DEQ asked this question as part of an information request on November 27, 2024.
- 3) View Chevron Dock
- a) Trace pipelines and associated connections.
- 4) What products does Zenith need to heat in order to move through pipelines? Zenith uses heat to reduce the viscosity of biodiesel to make it easier to move through pipelines. Zenith does not need heat to assist in transferring crude oil.

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This image is from NoA application #35947 for the Zenith connection to the McCall Dock. The blue dot/square, highlighted by a green arrow) is referenced in responses to some of the questions on page 3 of this report.

Facility Walkthrough

At approximately 10:00 PST LB had to return to the DEQ office while DG, CM, JT, and BO left the conference room to head to the Chevron Dock. We arrived at the Chevron dock at 10:15 PST. Zenith has three pipes to carry product from the Chevron dock to Zenith's property. Cargo lines 1 and 2 carry crude oil and cargo line 3 is used for synthetic blended components (SBC). JT pointed out the change of custody location for Cargo Line #2. All three pipelines run underneath NW Front Ave and resurface on Zenith's property near Tank 63. JT explained that historically, the land currently occupied by Zenith and

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the Chevron dock were all part of a single company, the Chevron Willbridge Terminal. The company split around 2005 and Chevron maintained ownership of the dock which required Zenith (and its predecessors) to obtain a contract with Chevron for use of the Chevron dock.

At 10:42 PST, while facing “plant south” I took a picture of the new McCall connection (the P-18 line) on Zenith’s property, photo #6. This is the pipeline that connects the McCall and Zenith properties. The P-18 line used to connect to the asphalt tanks (e.g., T-143, T-145, etc., which are located farther “plant south” from the connection) but now connects to Cargo Line #4. I took a picture at 10:48 PST of the connection which shows “45” and “46” yellow tags, photo #7. The pipe components associated with these tags are the new segments installed on Zenith’s property for the McCall dock connection.

At 10:50, we walked to McCall Oil’s property and met with their facility contact, Dustin Wilson (DW). I explained to DW that:

- DEQ was present for an unannounced inspection of Zenith,
- The inspection plan was to observe how material moves between Zenith’s facility and the Chevron and McCall docks,
- I do not plan to inspect McCall’s operations unless I notice something that could be an imminent threat to human health or the environment.

At 10:56 PST I took a picture of the Zenith-McCall connection on McCall’s property prior to the pipeline going underground, photo 8. We then began walking the length of the new piping to where it hooked into the McCall diesel pipeline. McCall’s diesel pipe then connects to the McCall dock. I asked when the last time asphalt was transferred between Zenith and McCall through the existing pipeline. JT and DW were unsure but believed that the last asphalt transfer occurred in the 1980s or 1990s.

We returned to the Zenith conference room at 11:22 PST for a closing conference. JT called Carlos Mungia to include him in the closing conference (via phone). I confirmed that Zenith was an odd facility in the CEI hub because it didn’t have its own property on the river so it needed to obtain contracts with other entities (e.g., McCall, Chevron) to perform marine loading activities. Zenith staff had answered all my questions regarding the loading operations at both the McCall and Chevron docks. Carlos asked if my observations during the site visit were consistent with our understanding prior to coming on site. I replied “No, the McCall dock expansion was a larger in scope than we previously understood.” I informed Zenith staff that I planned to send an information request by the afternoon of November 14, 2024. CM and I left the conference room at 11:33 PST and returned to the DEQ office.

Post-Inspection Analysis

I e-mailed Carlos and JT on November 14, with follow up questions. The e-mail and responses will be included in the facility file as opposed to becoming an attachment to this report.

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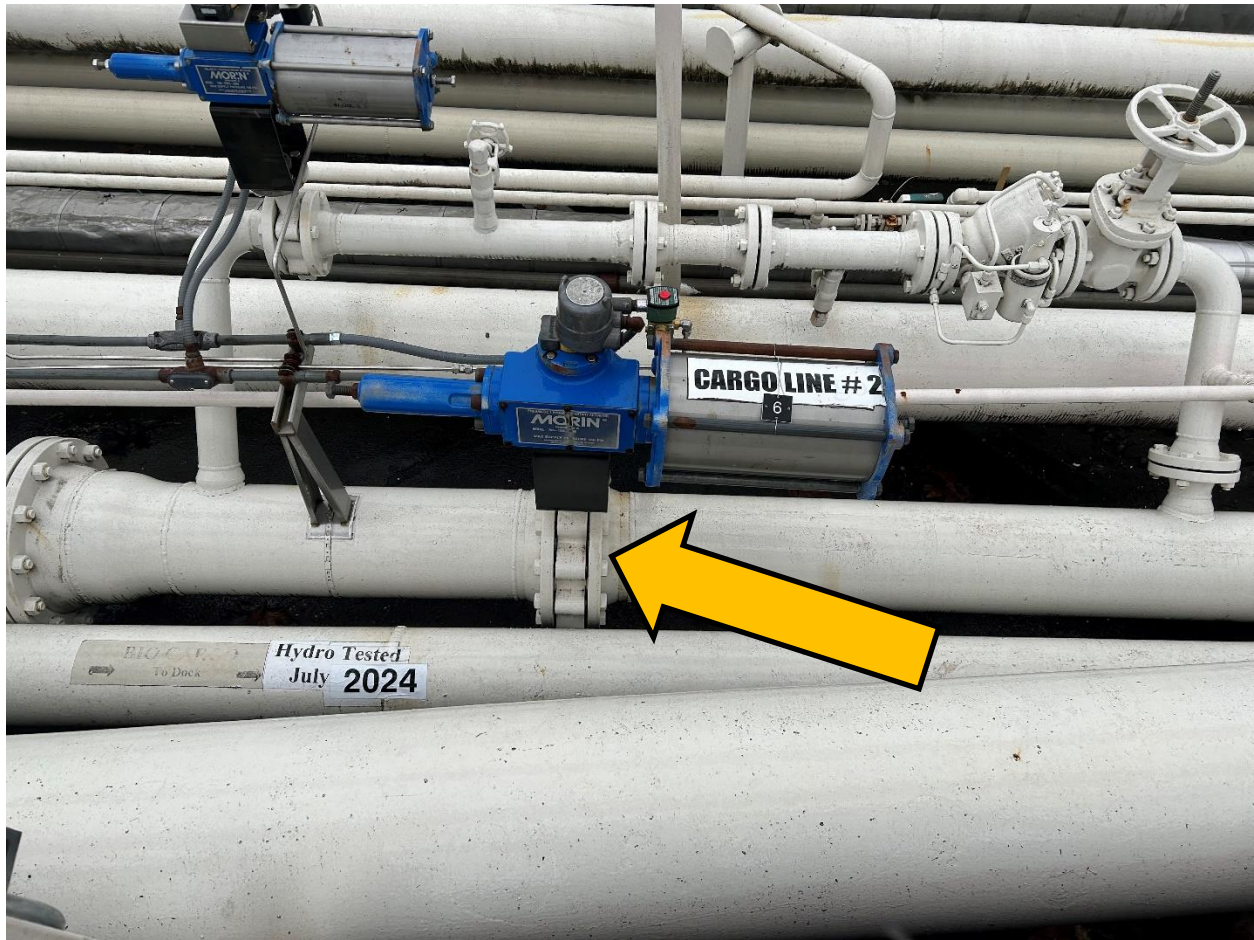


Photo #1 **2024-11-13, 10:15 PST**

This picture was taken at the Chevron dock. The orange arrow indicates the change of custody flange for Cargo Line #2, which transports crude oil.

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Photo #2 **2024-11-13, 10:16 PST**

This picture was taken at the Chevron dock and shows a Cargo Line #3 connection.

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Photo #3 **2024-11-13, 10:17 PST**

This picture was taken at the Chevron dock and shows a Cargo Line #2 connection.

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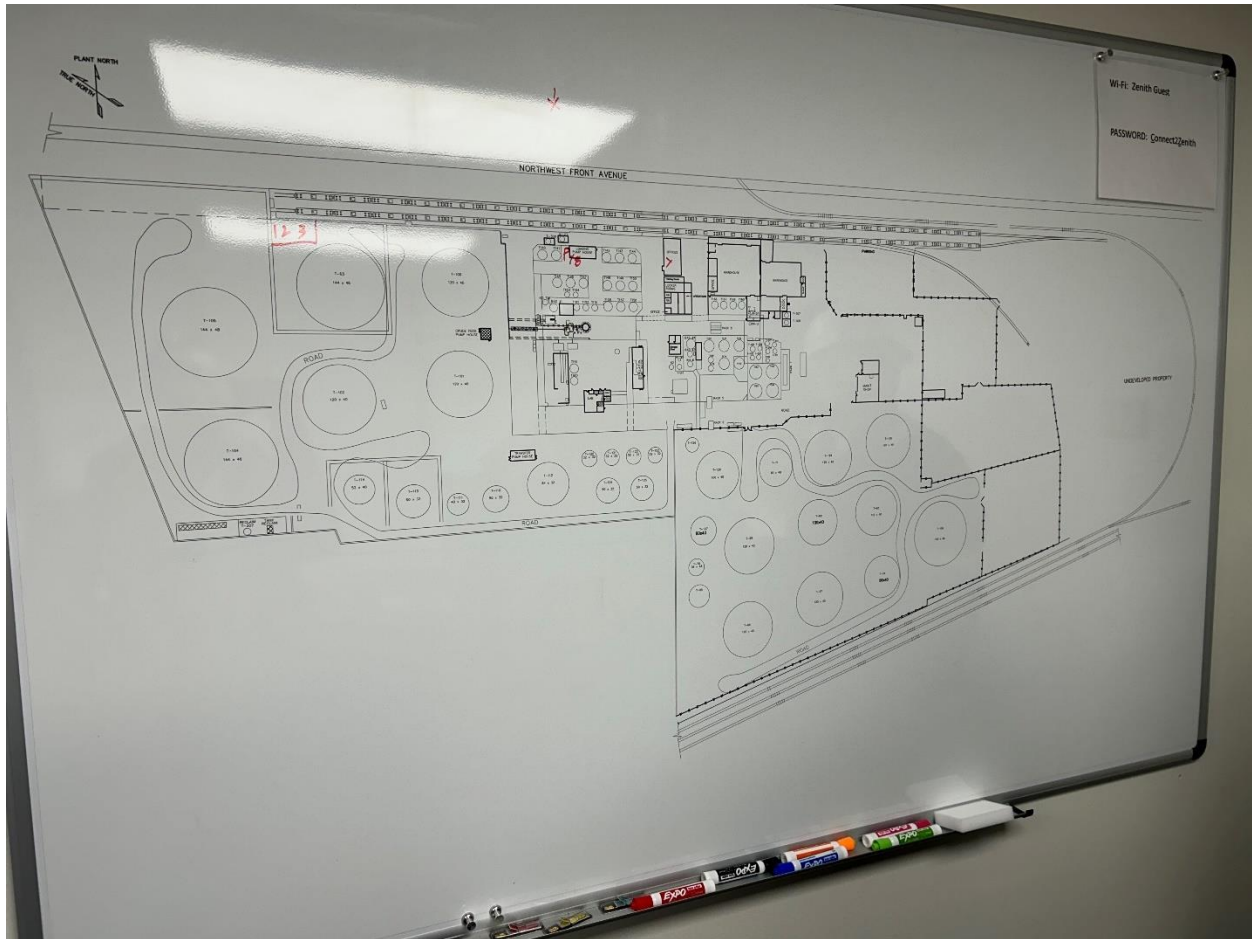


Photo #4 **2024-11-13, 10:37 PST**

This picture was taken at the Zenith conference room. However, the picture was a “live picture” instead of a still picture and DG chose to retake the picture.

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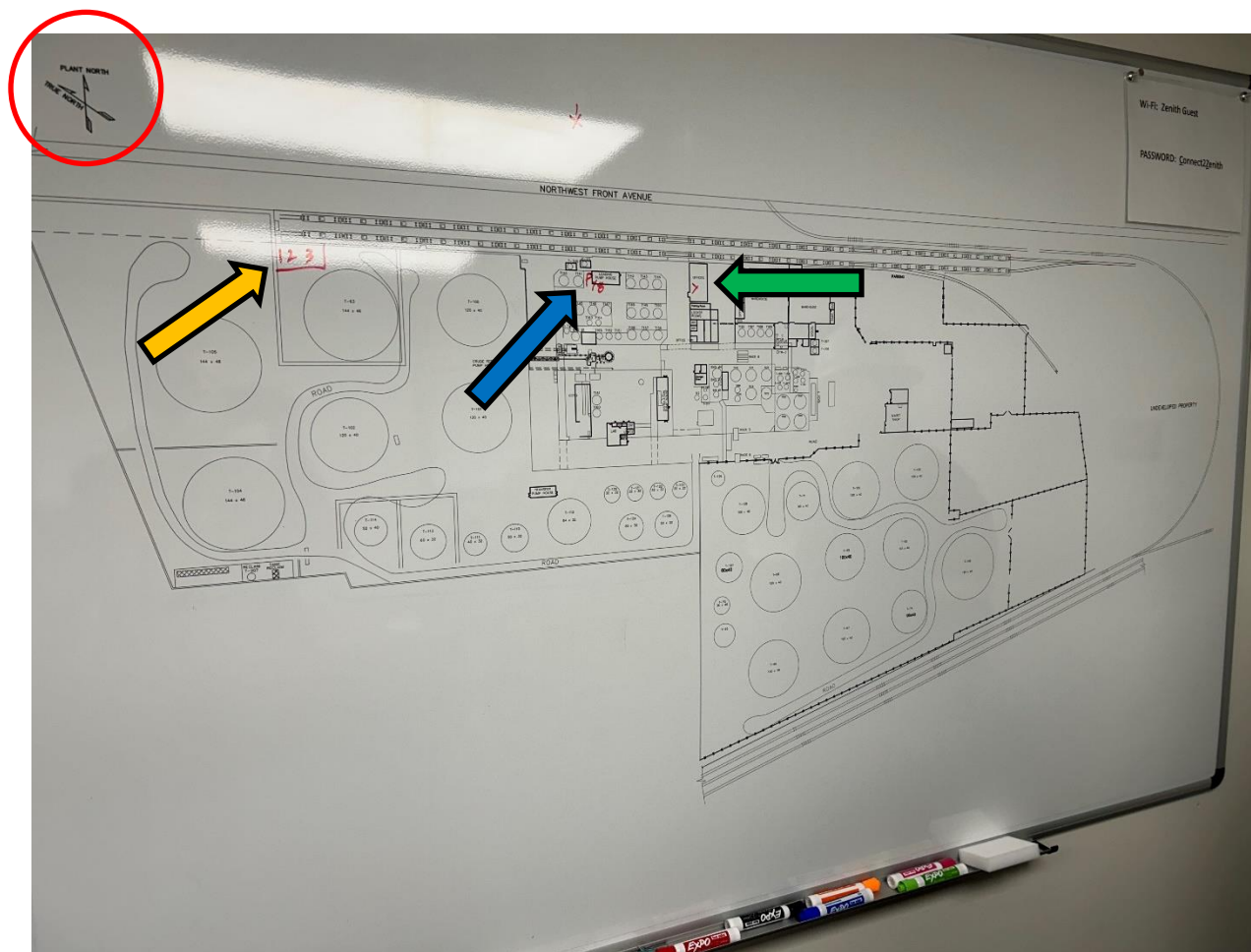


Photo #5 **2024-11-13, 10:38 PST**

This picture was taken at the Zenith conference room. This is a map of Zenith's facility. Notation showing true north and "plant north" is indicated by the red circle. JT included notations showing:

- the three pipes connected to the Chevron dock (orange arrow),
- the P-18 connection, where the Zenith-McCall pipeline resurfaces above ground (blue arrow), and
- the Zenith conference room (green arrow)

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Photo #6 2024-11-13, 10:42 PST

This picture was taken on Zenith's property facing "plant south". The piping shown in this picture is all new construction from NoA #35397.

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Photo #7 **2024-11-13, 10:48 PST**

This picture was taken on Zenith's property facing "plant SSW". The two circles highlight tags 45 and 46, the valve identifiers, which are new components installed as part of NoA #35397.

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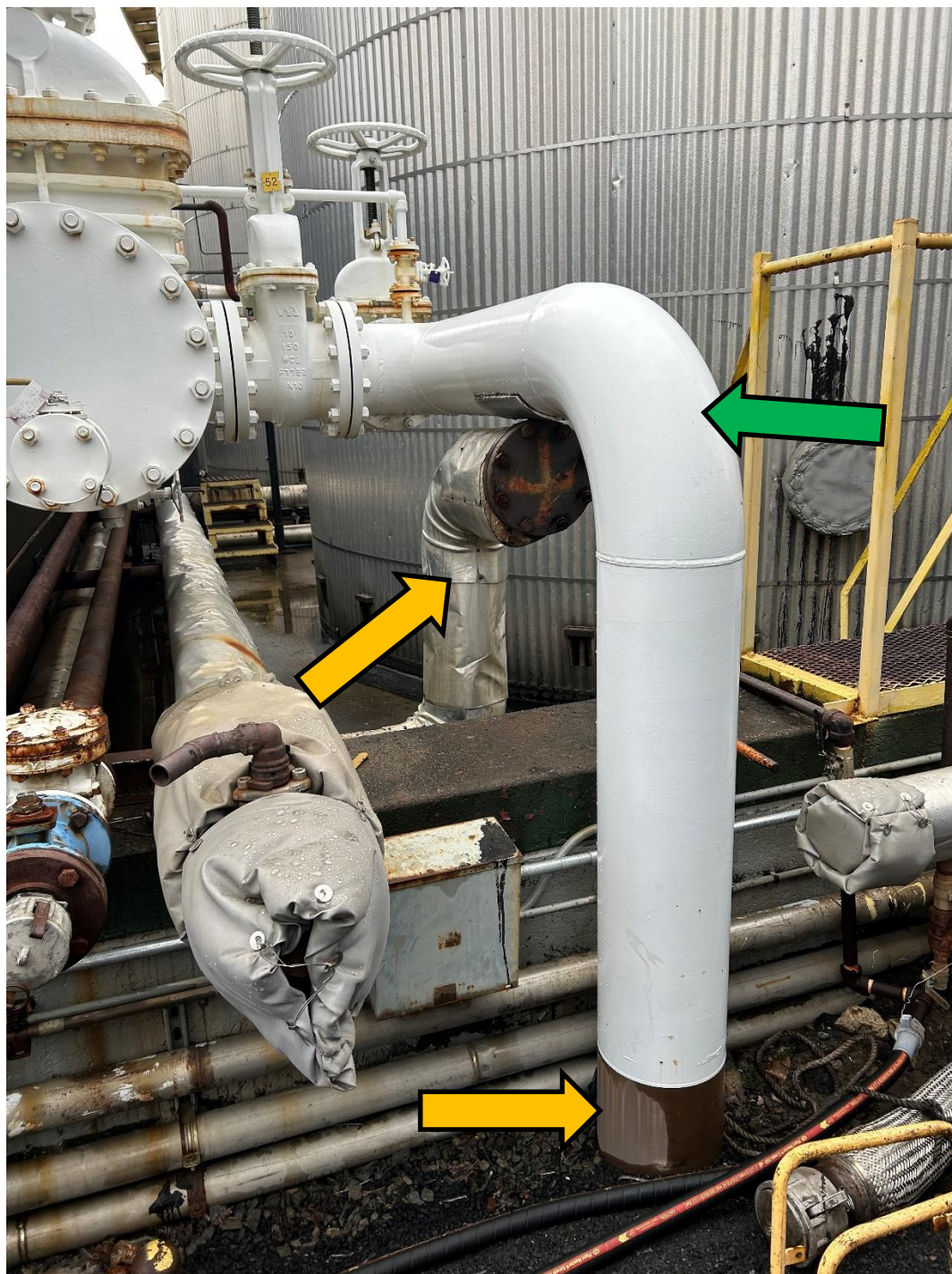


Photo #8 **2024-11-13, 10:56 PST**

This picture was taken on McCall's property, facing approximately ENE. The orange arrows indicate the existing pipe connections between Zenith and McCall and the green arrow indicates the new pipe segments constructed as part of NoA #35397.

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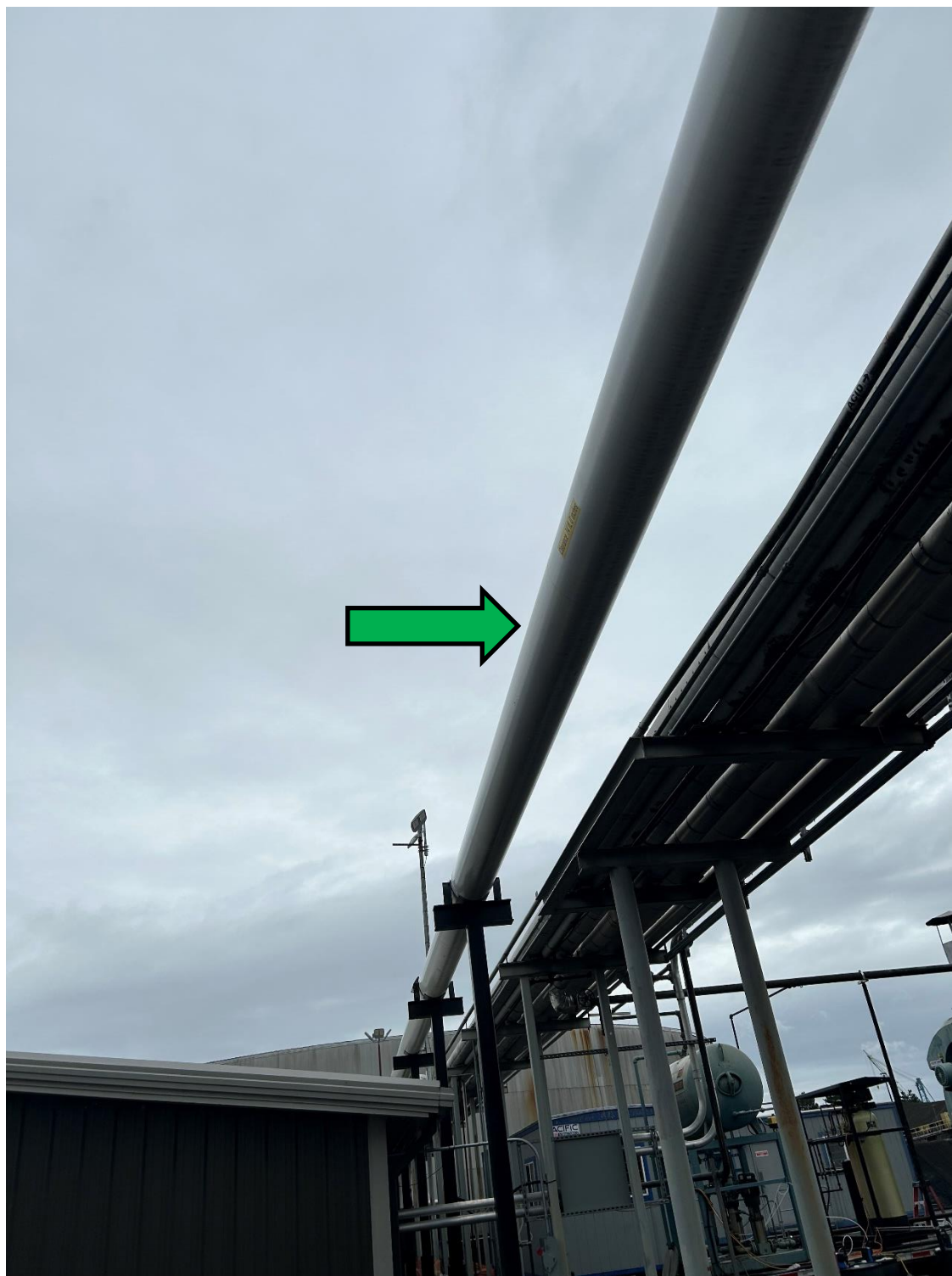


Photo #9 **2024-11-13, 10:16 PST**

This picture was taken on McCall's property, facing approximately NE. The green arrow indicates the new pipe segments constructed as part of NoA #35397.

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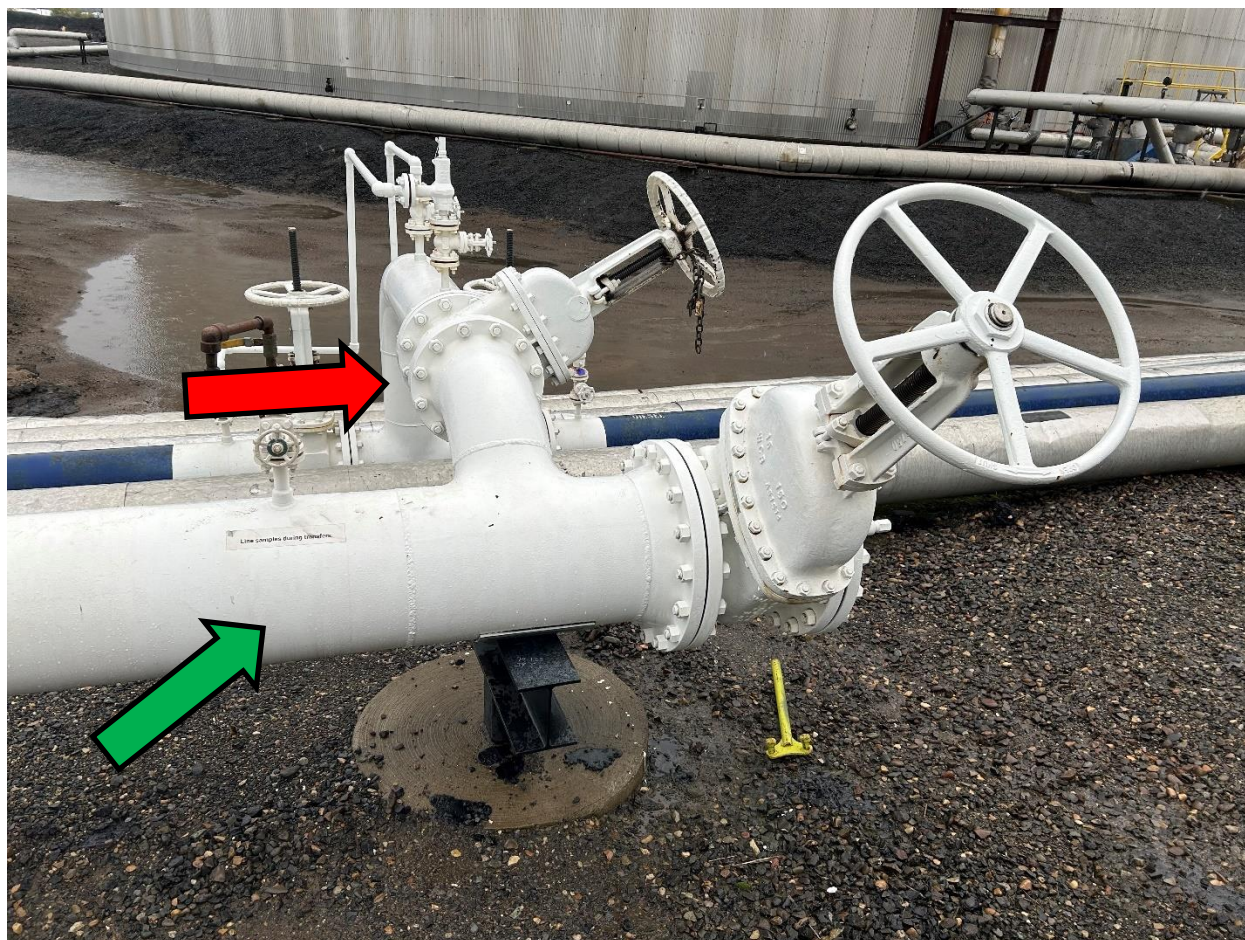


Photo #10 **2024-11-13, 11:05 PST**

This picture was taken on McCall's property approximately 80 m SW of the ramp to the McCall dock. The red arrow indicates where Zenith's new pipe segments connect to McCall's existing diesel pipeline (blue and white pipe). The Zenith pipe (indicated by the green arrow) and connection were constructed as part of NoA #35397.

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Common Abbreviations

ACDP = Air Contaminant Discharge Permit
ASTM = American Society for Testing and Materials
AQMA = Air Quality Maintenance Area
CFR = Code of Federal Regulations
CO = Carbon monoxide
CO_{2e} = Carbon dioxide equivalent
DEQ = Department of Environmental Quality
dscf = Dry standard cubic foot
EPA = Environmental Protection Agency
EU = Emissions Unit
FCAA = Federal Clean Air Act
FCE = Full Compliance Evaluation
gal = Gallon(s)
GHGs = Greenhouse gases
gr/dscf = Grains per dry standard cubic foot
HAP = Hazardous Air Pollutant(s)
ICIS = Integrated Compliance Information System
I&M = Inspection & Maintenance
lb = pound(s)
LUCS = Land Use Compatibility Statement
MMBtu = million British thermal units
NA = Not Applicable
NAICS = North American Industry Classification System
NoA = Notice of Approval
NESHAP = National Emissions Standards for Hazardous Air Pollutants
NO_x = Nitrogen oxides

NSPS = New Source Performance Standard
NSR = New Source Review
O₂ = Oxygen
OAR = Oregon Administrative Rules
ORS = Oregon Revised Statutes
O&M = Operation & Maintenance
Pb = Lead
PCD = Pollution Control Device
PCE = Partial Compliance Evaluation
PEN = Pre-Enforcement Notice
PM = Particulate Matter
PM₁₀ = Particulate Matter 10µm or less in diameter (coarse particles)
PM_{2.5} = Particulate Matter 2.5µm or less in diameter (fine particles)
ppm = parts per million
PSD = Prevention of Significant Deterioration
PSEL = Plant Site Emission Limit
RACT = Reasonably Available Control Technology
RD = Renewable Diesel
SBC = Synthetic Blend Components
scf = Standard cubic foot
SER = Significant Emission Rate
SIC = Standard Industrial Code
SIP = State Implementation Plan
SO₂ = Sulfur dioxide
ULSD = Ultra Low Sulfur Diesel
VE = Visible Emissions
VOC = Volatile Organic Compound
WL = Warning Letter