



ZENITH ENERGY TERMINALS HOLDINGS LLC

3900 Essex Lane, Suite 700
Houston, Texas 77027

SUBMITTED VIA YOUR DEQ ONLINE

February 12, 2025

Oregon Department of Environmental Quality
ATTN: Betsy Everman, AQ Permits
DEQ Northwest Region, Portland Office
700 Multnomah Street, Suite 600
Portland, OR 97232

**RE: 2024 Title V Permit Annual Report
Permit No.: 26-2025**

Ms. Everman:

Zenith Energy Terminals Holdings LLC (Zenith Energy Terminals) is submitting for your review one copy of the 2024 Title V Permit Annual Report for Permit No. 26-2025. Permit No. 26-2025 is associated with the Zenith Energy Terminals Portland Facility located at 5501 NW Front Avenue, Portland, OR 97210. The report includes the following items specified in Permit No. 26-2025 Condition 68.

- Condition 68.a. – Second semi-annual compliance certification including forms:
 - Form R1002: Compliance Status
 - Form R1003: Summary of Permit Deviations
- Condition 68.b. – Emissions fee report which includes:
 - Form F1101: Total Emissions by Regulated Pollutant
 - Form F1102: Emissions by Source
- Condition 68.c. – Excess emissions upset logs if applicable.
 - Not Applicable - There were no upsets or excess emissions in 2024.
- Condition 68.d. – The compliance and monitoring data specified in Conditions 8, 11, 25, 28, 31, 34, and 58. The following items are attached to demonstrate compliance with Condition 68.d.
 - Highest vapor pressure stored in applicable FIXTANK (condition 8)
 - Summary of public complaints (condition 11)
 - Oil and water separator inspection results (condition 25)
 - VOC emitted from process unit turnarounds (condition 28)
 - Furnace temperature compliance verification results (condition 31)
 - Fourth quarter fugitive monitoring results (condition 34)
 - Highest annual and summary of annual emission rates (condition 58)

Please contact me should you have any questions concerning the report.

Thank you,
On Behalf of Zenith Energy Terminals Holdings, LLC

A handwritten signature in black ink, appearing to read "Travis Quarles", with a long horizontal flourish extending to the right.

Travis Quarles
Consultant, Bridgewater Group
Email: tquarles@bridgeh2o.com
Phone: 503-327-9679

ENCLOSURES

2024 Second Semi-Annual Compliance (Condition 68a)

- **Form R1002**
- **Form R1003**
- **Summary of Excess Emissions**

Title V Operation Permit Program

Semi-annual Compliance Certification

FORM
 R1002
 Answer
 Sheet

Permit Number: 26-2025

Facility name: Zenith Energy

1. Reporting Period: July 1 - December 31, 2024

2. Plan development/revision triggered [yes/no]: No

3. Compliance status:

a. Permit Condition #	b. Method of Determining Compliance	c. Compliance Status (C/I)	d. Emissions Unit(s)	e. Permit Deviation Type	f. Number of Deviation s
4	Recordkeeping	Continuous			
5	Recordkeeping	Continuous			
6	Recordkeeping & Monitoring	Continuous			
7	Recordkeeping	Continuous			
8	Reporting	Continuous			
9	Operations & Maintenance	Continuous			
10	Recordkeeping & Monitoring	Continuous			
11	Reporting	Continuous			
12	Operations & Maintenance	Continuous			
13	Operations & Maintenance	Continuous			
14	Operations & Maintenance	Continuous			
15	Operations	Continuous			
16	Recordkeeping	Continuous			
17	Reporting	Continuous			
18	Operations & Maintenance	Continuous			
19	Monitoring & Recordkeeping	Continuous			
20	Operations & Maintenance	Continuous			
21	Recordkeeping	Continuous			
22	Reporting	Continuous			
23	Inspections	Continuous			
24	Recordkeeping	Continuous			
25	Reporting	Continuous			
26	Operations & Maintenance	Continuous			
27	Recordkeeping	Continuous			
28	Reporting	Continuous			
29	Operations & Maintenance	Continuous			
30	Recordkeeping	Continuous			

a. Permit Condition #	b. Method of Determining Compliance	c. Compliance Status (C/I)	d. Emissions Unit(s)	e. Permit Deviation Type	f. Number of Deviations
31	Reporting	Continuous			
32	Inspections & Maintenance	Continuous			
33	Recordkeeping	Continuous			
34	Reporting	Continuous			
35	Floating Roof Construction, Operation, & Maintenance	Continuous			
36	Inspections & Notifications	Continuous			
37	Floating Roof Construction, Operation, & Maintenance	Continuous			
38	Inspections & Notifications	Continuous			
39	Floating Roof Construction, Operation, & Maintenance	Continuous			
40	Inspections & Notifications	Continuous			
41	Recordkeeping & Monitoring	Continuous			
42	Recordkeeping	Continuous			
43	Operations & Maintenance	Continuous			
44	Operations & Maintenance	Continuous			
45	Operations & Maintenance	Continuous			
46	Operations & Maintenance	Continuous			
47	Operations & Maintenance	Continuous			
48	Inspections, Training, Operations, & Maintenance	Continuous			
49	Training & Recordkeeping	Continuous			
50	Inspections & Training	Continuous			
51	Not Applicable	Continuous			
52	Not Applicable	Continuous			
53	Emission Calculations, & Recordkeeping	Continuous			
54	Recordkeeping	Continuous			
55	Recordkeeping	Continuous			
56	Emission Calculations, & Recordkeeping	Continuous			
57	Emission Calculations, & Recordkeeping	Continuous			
58	Reporting	Continuous			
59	Testing	Continuous			
60	Testing	Continuous			
61	Testing	Continuous			
62	Testing	Continuous			
63	Recordkeeping	Continuous			
64	Recordkeeping	Continuous			
65	Recordkeeping	Continuous			
66	Reporting	Continuous			

[illegible]

Statement of Certification:

Based on information and belief formed after reasonable inquiry, the statements and information in this document and any attachments are true, accurate and complete. I also certify that all statements made concerning compliance, which are based on monitoring required by the permit but not required to be submitted to the Department, are true, accurate and complete based on information and belief formed after reasonable inquiry.

Name of Responsible Official Carlos Munguia
Signature of Responsible Official <i>Carlos T. Munguia</i>

Title of Responsible Official Vice President Operations and Engineering
Date <i>Feb 11, 2025</i>



State of Oregon
Department of
Environmental
Quality

State of Oregon Department of Environmental Quality

Title V Operation Permit Program

SUMMARY OF PERMIT DEVIATIONS

FORM R1003

Answer Sheet

Facility name: _____ Permit Number: _____

1.	Reporting period	
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2. Summary of permit deviations:

a. Permit Condition Number	b. Emissions Unit(s)	c. cause	d. time began		e. time ended		f. Deviation	g. corrective action/prevention
			(date)	(hour)	(date)	(hour)		

- **There were no Excess Emissions in 2024**

Emission Fee Report (Condition 68a)

- **Form F1101**
- **Form F1102**
 - **Reference #1 – Boiler Furnace Emission Summary**
 - **Reference #2 – Track Emission Summary**
 - **Reference #3 – Oil/W Emission Summary**
 - **Reference #4 – FGTVOG Emission Summary**
 - **Reference #5 – FW Emission Summary**
 - **Reference #6 – FIXTANK, EXTANK, and INTANK Emission Summary**
 - **Reference #7 – MLOAD Emission Summary**



1. Reporting year: 2024															
2. Facility name: Zenith Energy Terminals Portland	4. Permit number: 26-2025														
3. 3900 Essex Lane, Suite 700 Mailing street address or PO Box Houston, TX 77027 Mailing city, state and ZIP code	5. Mark Bartee - HSE Specialist Portland Contact name and title 503-273-4720 Phone number with area code														
6. Emissions (in tons) by regulated air pollutant subject to fees for the reporting year: <table><tr><td>PM₁₀*</td><td><u>15</u></td></tr><tr><td>or PM</td><td><u> </u></td></tr><tr><td>or PM_{2.5}</td><td><u> </u></td></tr><tr><td>or TSP</td><td><u> </u></td></tr><tr><td>SO₂</td><td><u>82</u></td></tr><tr><td>NO_x (as NO₂)</td><td><u>78</u></td></tr><tr><td>VOC</td><td><u>180</u></td></tr></table> * Report only one particulate category. If permit has a PSEL for PM₁₀, report emissions of PM₁₀. If permit has a PSEL for particulate matter (PM) and not PM₁₀, report emissions of PM. If permit has a PSEL for PM_{2.5} and not PM₁₀ or PM, report emissions of PM_{2.5}. If permit has a PSEL for total suspended particulate (TSP) and not PM₁₀, PM or PM_{2.5}, report emissions of TSP.		PM ₁₀ *	<u>15</u>	or PM	<u> </u>	or PM _{2.5}	<u> </u>	or TSP	<u> </u>	SO ₂	<u>82</u>	NO _x (as NO ₂)	<u>78</u>	VOC	<u>180</u>
PM ₁₀ *	<u>15</u>														
or PM	<u> </u>														
or PM _{2.5}	<u> </u>														
or TSP	<u> </u>														
SO ₂	<u>82</u>														
NO _x (as NO ₂)	<u>78</u>														
VOC	<u>180</u>														
7. Total emissions (in tons) of pollutants subject to fees for the reporting year: <u>355</u>															
8. Statement of certification: I have reviewed this report and all supporting documentation in their entirety and to the best of my knowledge, information, and belief formed after reasonable inquiry, the statements and information contained herein are true, accurate and complete. <table><tr><td><u>Carlos Munguia</u> Name of designated responsible official <u><i>Carlos T. Munguia</i></u> Signature of responsible official</td><td><u>Vice President Operations and Engineering</u> Title of responsible official <u>2/11/2025</u> Date</td></tr></table>		<u>Carlos Munguia</u> Name of designated responsible official <u><i>Carlos T. Munguia</i></u> Signature of responsible official	<u>Vice President Operations and Engineering</u> Title of responsible official <u>2/11/2025</u> Date												
<u>Carlos Munguia</u> Name of designated responsible official <u><i>Carlos T. Munguia</i></u> Signature of responsible official	<u>Vice President Operations and Engineering</u> Title of responsible official <u>2/11/2025</u> Date														



DEQ

State of Oregon
Department of
Environmental
Quality

Emissions by Source

FORM F1102

1. Reporting year: 2024					
2. Facility name: Zenith Energy - Portland			3. Permit number: 26-2025		
4. Emissions by emission source					
a. Group code (EU #, ES #, FS#, PS# or PSEL)	b. Device or process ID	c. Pollutant	d. Emissions (tons)	e. Method	f. Reference
PSEL		PM10	14	1	Permit pg.24
PSEL		SO2	81	1	Permit pg.24
PSEL		NOX	77	1	Permit pg.24
PSEL		CO	99	1	Permit pg.24
PSEL		VOC	179	1	Permit pg.24
PSEL		H2S	9	1	Permit pg.24
AIA		PM10	1	1	Permit pg.24
AIA		SO2	1	1	Permit pg.24
AIA		NOX	1	1	Permit pg.24
AIA		CO	1	1	Permit pg.24
AIA		VOC	1	1	Permit pg.24
		H2S	1	1	Permit pg.24
5. Form F1102 page 1 of 1					

REFERENCE #1
ZENITH ENERGY TERMINALS - PORTLAND
2024 BOILER FURNACE EMISSION SUMMARY

Month	Year	Monthly Gas Usage		Rolling 12 Month Annual Usage		PM ₁₀			SO ₂			NO _x			CO			VOC		
						Emission Factor	Monthly Total	12-Month Total	Emission Factor	Monthly Total	12-Month Total	Emission Factor	Monthly Total	12-Month Total	Emission Factor	Monthly Total	12-Month Total	Emission Factor	Monthly Total	12-Month Total
		Therms	MMCF	Therms	MMCF	lb/MMCF	Tons	Tons	lb/MMCF	Tons	Tons	lb/MMCF	Tons	Tons	lb/MMCF	Tons	Tons	lb/MMCF	Tons	Tons
January	2024	45,859	4.59	227,648	22.8	2.5	5.73E-03	0.0285	1.7	3.90E-03	0.0194	100	0.229	1.138	84	0.19	0.956	5.5	1.26E-02	0.0626
February	2024	31,314	3.13	229,737	23.0	2.5	3.91E-03	0.0287	1.7	2.66E-03	0.0195	100	0.157	1.149	84	0.13	0.965	5.5	8.61E-03	0.0632
March	2024	20,476	2.05	237,689	23.8	2.5	2.56E-03	0.0297	1.7	1.74E-03	0.0202	100	0.102	1.188	84	0.09	0.998	5.5	5.63E-03	0.0654
April	2024	13,254	1.33	244,992	24.5	2.5	1.66E-03	0.0306	1.7	1.13E-03	0.0208	100	0.066	1.225	84	0.06	1.029	5.5	3.64E-03	0.0674
May	2024	10,593	1.06	242,857	24.3	2.5	1.32E-03	0.0304	1.7	9.00E-04	0.0206	100	0.0530	1.214	84	0.04	1.020	5.5	0.002913	0.0668
June	2024	7,173	0.72	238,506	23.9	2.5	8.97E-04	0.0298	1.7	6.10E-04	0.0203	100	0.0359	1.193	84	0.03	1.002	5.5	0.001973	0.0656
July	2024	12,866	1.29	241,537	24.2	2.5	1.61E-03	0.0302	1.7	1.09E-03	0.0205	100	0.0643	1.208	84	0.05	1.014	5.5	0.003538	0.0664
August	2024	7,283	0.73	234,039	23.4	2.5	9.10E-04	0.0293	1.7	6.19E-04	0.0199	100	0.036	1.170	84	0.03	0.983	5.5	0.002003	0.0644
September	2024	8,406	0.84	225,207	22.5	2.5	1.05E-03	0.0282	1.7	7.15E-04	0.0191	100	0.0420	1.126	84	0.04	0.946	5.5	0.002312	0.0619
October	2024	15,204	1.52	211,266	21.1	2.5	1.90E-03	0.0264	1.7	1.29E-03	0.0180	100	0.0760	1.056	84	0.06	0.887	5.5	0.004181	0.0581
November	2024	16,631	1.66	213,366	21.3	2.5	2.08E-03	0.0267	1.7	1.41E-03	0.0181	100	0.0832	1.067	84	0.07	0.896	5.5	0.004574	0.0587
December	2024	12,630	1.26	201,690	20.2	2.5	1.58E-03	0.0252	1.7	1.07E-03	0.0171	100	0.0632	1.008	84	0.05	0.847	5.5	0.003473	0.0555
12-Month Max/Total		201,690	20.17	---	24.50	---	---	0.0306	---	---	0.0208	---	---	1.225	---	---	1.029	---	---	0.0674

Reference #2
Zenith Energy Terminals - Portland
2024 TRACK Emissions
Diesel, Biodiesel, & Renewable VOC Loading Emissions

Month	Year	S ¹	M ²	P ³	T ³ (°F)	T (°R)	L _L ⁴ (lb/1,000 gallons)	Q _{diesel} ⁵ (barrels)	Q _{Diesel} (1,000 gallons)	E _{VOC} ⁶ (lb)	E _{VOC} (Tons)
January	2024	0.600	130	3.31E-03	39.2	499	6.45E-03	132,102	5,548	35.8	0.0179
February	2024	0.600	130	3.89E-03	44.2	504	7.50E-03	133,696	5,615	42.1	0.0211
March	2024	0.600	130	4.56E-03	45.0	505	8.79E-03	116,124	4,877	42.9	0.0214
April	2024	0.600	130	5.34E-03	52.5	512	0.0101	175,093	7,354	74.5	0.0372
May	2024	0.600	130	6.73E-03	57.2	517	0.0127	184,503	7,749	98.0	0.0490
June	2024	0.600	130	8.41E-03	62.4	522	0.0157	185,039	7,772	122	0.0608
July	2024	0.600	130	9.87E-03	70.9	530	0.0181	203,584	8,551	155	0.0773
August	2024	0.600	130	9.78E-03	70.1	530	0.0179	201,478	8,462	152	0.0759
September	2024	0.600	130	8.01E-03	68.2	528	0.0147	155,851	6,546	96.5	0.0482
October	2024	0.600	130	5.75E-03	61.0	521	0.0107	157,977	6,635	71.2	0.0356
November	2024	0.600	130	4.18E-03	49.4	509	7.98E-03	86,003	3,612	28.8	0.0144
December	2024	0.600	130	3.37E-03	43.6	503	6.51E-03	87,340	3,668	23.9	0.0119
12 Month Totals:								1,818,790	76,389	942	0.471

Notes:

- 1) Submerged loading: dedicated normal service saturation factor (AP-42 Table 5.2-1).
- 2) Biodiesel and renewable diesel assumed to have similar physical properties to diesel. Molecular weight of diesel obtained from AP-42 Table 7.1-2.
- 3) Vapor pressure and temperature from Tank 66 emission calculations.
- 4) Loading loss factor calculated using AP-42 Chapter 5 Equation 1.
- 5) Q = The combined monthly loading rack throughput of diesel, biodiesel, and renewable diesel.
- 6) Monthly loading emissions = Loading loss factor * monthly total throughput.

REFERENCE #3
ZENITH ENERGY TERMINALS PORTLAND
2024 OIL/W VOC EMISSION Tracking

Month	Year	VOC						
		Monthly Wastewater Discharge		12-Month Wastewater Discharge	Emission Factor	Monthly Total		12-Month Total
		Gallons	1,000 ft ³	Gallons	lb/1000 ft ³	lb	Tons	Tons
January	2024	2,039,530	273	7,397,460	0.2	54.5	0.0273	0.0989
February	2024	336,930	45	7,734,390	0.2	9.0	0.0045	0.1034
March	2024	717,660	96	6,479,110	0.2	19.2	0.0096	0.0866
April	2024	421,010	56	6,254,750	0.2	11.3	0.0056	0.0836
May	2024	317,540	42	6,094,400	0.2	8.49	0.0042	0.0815
June	2024	0	0	6,094,400	0.2	0.00	0.0000	0.0815
July	2024	0	0	6,094,400	0.2	0.0	0.0000	0.0815
August	2024	0	0	6,094,400	0.2	0.0	0.0000	0.0815
September	2024	0	0	6,094,400	0.2	0.0	0.0000	0.0815
October	2024	0	0	4,910,550	0.2	0.0	0.0000	0.0656
November	2024	457,810	61	4,765,980	0.2	12.2	0.0061	0.0637
December	2024	1,425,470	191	5,715,950	0.2	38.1	0.0191	0.0764
12-Month Max/Total		5,715,950	764	7,734,390	---	---	---	

Reference #4-1
Zenith Energy Terminals Portland Emissions Unit FGTVOG
Total VOC Emissions

Month	Year	Refinery VOC Emissions	Marine Terminal VOC Emissions	Other Facility VOC Emissions	Total VOC Emissions
		(tons/month)	(tons/month)	(tons/month)	(tons/month)
January	2024	0.502	0.0223	1.68	2.20
February	2024	0.470	0.0208	1.57	2.06
March	2024	0.502	0.0223	1.68	2.20
April	2024	0.486	0.0215	1.62	2.13
May	2024	0.502	0.0223	1.68	2.20
June	2024	0.486	0.0215	1.62	2.13
July	2024	0.502	0.0223	1.68	2.20
August	2024	0.502	0.0223	1.68	2.20
September	2024	0.486	0.0215	1.62	2.13
October	2024	0.502	0.0223	1.68	2.20
November	2024	0.486	0.0215	1.62	2.13
December	2024	0.502	0.0223	1.68	2.20
Annual Totals		5.93	0.263	19.8	26.0

Reference #4-2
Zenith Energy Terminals Portland Emissions Unit FGTVOG
Refinery VOC Emissions

Component	Service	Total Components ¹	Non-Leaking Components	Leaking Components ¹	Emission Factors	Annual Hours of Operation			Annual Emissions			Total (kg/yr) (tons/yr)	
					Leaking Components (kg/hr-)	Non-Leaking Components (kg/hr-component)	Leaking Components (days/year) (hours/year)		Non-Leaking Components (hours/year)	Leaking Components (kg/yr)	Non-Leaking Components (kg/yr)		
Valves (V)	HL	525	525	0	0.00023	0.00023	105	2520	8,760	0.0	1,058	1,058	1.16
	LL	0	0	0	0.0852	0.0017	105	2520	8,760	0	0	0	0.00
	G	2	2	0	0.2626	0.0006	105	2520	8,760	0	11	11	0.01
Pump Seals (P)	HL	23	23	0	0.3885	0.0135	105	2520	8,760	0	2,720	2,720	3.0
	LL	0	0	0	0.437	0.0120	105	2520	8,760	0	0	0	0.0
Pressure Relief Valves (PRV)	G	1	1	0	1.691	0.0447	105	2520	8,760	0	392	392	0.4
Connectors (C)	All	2272	2272	0	0.0375	0.00006	105	2520	8,760	0	1,194	1,194	1.31

Annual VOC Emissions: 5.91

Month	Year	VOC Emissions	12 Month Total	H2S Emissions
		(tons/month)		(tons/month)
January	2024	0.502	5.91	0.0025
February	2024	0.470	5.93	0.0023
March	2024	0.502	5.93	0.0025
April	2024	0.486	5.93	0.0024
May	2024	0.502	5.93	0.0025
June	2024	0.486	5.93	0.0024
July	2024	0.502	5.93	0.0025
August	2024	0.502	5.93	0.0025
September	2024	0.486	5.93	0.0024
October	2024	0.502	5.93	0.0025
November	2024	0.486	5.93	0.0024
December	2024	0.502	5.93	0.0025
12-Month Maximum		---	5.91	0.030

Notes:

1 - Total refinery components and leaking components from 2022 Asphalt Refinery Method 21 Fugitive Emission Survey Report, Montrose Environmental, December 12, 2022.

Reference #4-3
Zenith Energy Terminals Portland Emissions Unit FGTVOG
Marine Terminal VOC Emissions

Component	Service	Total Components ¹	Non-Leaking Components	Leaking Components ²	Emission Factors		Annual Hours of Operation		Annual Emissions			Total	
					Leaking Components (kg/hr-component)	Non-Leaking Components (kg/hr-component)	Leaking Components (days/year)	(hours/year)	Non-Leaking Components (hours/year)	Leaking Components (kg/yr)	Non-Leaking Components (kg/yr)	(kg/yr)	(tons/yr)
Valves (V)	HL	10	9	1	0.00023	0.00023	105	2520	8,760	0.6	18	19	0.0206
	LL	0	0	0	0.0852	0.0017	105	2520	8,760	0	0	0	0.00
	G	0	0	0	0.2626	0.0006	105	2520	8,760	0	0	0	0.00
Pump Seals (P)	HL	0	0	0	0.3885	0.0135	105	2520	8,760	0	0	0	0.0
	LL	0	0	0	0.437	0.0120	105	2520	8,760	0	0	0	0.0
Pressure Relief Valves (PRV)	G	0	0	0	1.691	0.0447	105	2520	8,760	0	0	0	0.0
Connectors (C)	All	60	58	2	0.0375	0.00006	105	2520	8,760	189	30	219	0.241

Annual VOC Emissions: 0.262

Month	Year	VOC Emissions	12 Month Total	H2S Emissions
		(tons/month)		(tons/month)
January	2024	0.0223	0.262	0.0001
February	2024	0.0208	0.263	0.0001
March	2024	0.0223	0.263	0.0001
April	2024	0.0215	0.263	0.0001
May	2024	0.0223	0.263	0.0001
June	2024	0.0215	0.263	0.0001
July	2024	0.0223	0.263	0.0001
August	2024	0.0223	0.263	0.0001
September	2024	0.0215	0.263	0.0001
October	2024	0.0223	0.263	0.0001
November	2024	0.0215	0.263	0.0001
December	2024	0.0223	0.263	0.0001
12-Month Maximum		---	0.262	0.001

Notes:

1 - Total marine loading components that came on-line in November 2018.

2 - Leakers were determined by taking the sum of one and one percent of the total components.

Reference #4-4
Zenith Energy Terminals Portland Emissions Unit FGTVOG
Other Facility VOC Emissions

Component	Service	Total Components ¹	Non-Leaking Components	Leaking Components ²	Emission Factors		Annual Hours of Operation		Annual Emissions			Total	
					Leaking Components (kg/hr-component)	Non-Leaking Components (kg/hr-component)	Leaking Components (days/year)	(hours/year)	Non-Leaking Components (hours/year)	Leaking Components (kg/yr)	Non-Leaking Components (kg/yr)	(kg/yr)	(tons/yr)
Valves (V)	HL	1735	1717	18	0.00023	0.00023	105	2520	8,760	10.4	3,459	3,470	3.82
	LL	43	42	1	0.0852	0.0017	105	2520	8,760	215	625	840	0.92
	G	0	0	0	0.2626	0.0006	105	2520	8,760	0	0	0	0.00
Pump Seals (P)	HL	40	39	1	0.3885	0.0135	105	2520	8,760	979	4,612	5,591	6.2
	LL	2	1	1	0.437	0.0120	105	2520	8,760	1,101	105	1,206	1.3
Pressure Relief Valves (PRV)	G	0	0	0	1.691	0.0447	105	2520	8,760	0	0	0	0.0
Connectors (C)	All	4594	4547	47	0.0375	0.00006	105	2520	8,760	4,442	2,390	6,831	7.51

Annual VOC Emissions: 19.7

Month	Year	VOC Emissions	12 Month Total	H2S Emissions
		(tons/month)		(tons/month)
January	2024	1.68	19.7	0.0084
February	2024	1.57	19.8	0.0078
March	2024	1.68	19.8	0.0084
April	2024	1.62	19.8	0.0081
May	2024	1.68	19.8	0.0084
June	2024	1.62	19.8	0.0081
July	2024	1.68	19.8	0.0084
August	2024	1.68	19.8	0.0084
September	2024	1.62	19.8	0.0081
October	2024	1.68	19.8	0.0084
November	2024	1.62	19.8	0.0081
December	2024	1.68	19.8	0.0084
12-Month Maximum		---	19.7	0.099

Notes:

1 - Total non-refinery and non-marine terminal components.

2 - Leakers were determined by taking the sum of one and one percent of the total components.

Reference #5
Zenith Energy Terminals
Monthly and Annual Summary for 2024

Product Name	Product Density (lbs/gallon)	VOC Content		Product Name	Product Density (lbs/gallon)	VOC Content	
		(%)	(lb/gal)			(%)	(lb/gal)
Citri-Kleen	8.09	50	4.05	PPG Amerlock 2		0.70	
Carboline Carboguard 890	14.5	12	1.81	PPG Amerlock 2 AL	11.16	1.00	
Carboline Carbothane 134 HG	11.40	19	2.20	PPG Amerlock Sealer	9.00	0.90	
BullPaint	9.35	37	3.50	PPG Amerlock 600	13.40	2.00	
Pro-Power II	6.42	100	6.42	PPG Durethane DTM		2.00	
Miller ACRI-Metal Exterior Paint	10.20	0	0.00	Macropoxy 920		2.80	
Solvent 33	7.41	100	7.41	Macropoxy 646		0.83	
Solvent 215	7.25	100	7.25	Hi Solids Polyurethane		2.80	
Solvent 365	6.55	100	6.55	Corothane Mio-Aluminum		2.80	
Thinner 225	6.20	100	6.20				

max per PDS
max per PDS
max per PDS
max per PDS
max per PDS

Monthly Usage

	Citri-Kleen	Carboline Carboguard 890	Carboline Carbothane 134 HG	Misc. Maintenance Paint	Pro-Power II	Miller ACRI-Metal Exterior Paint	PPG Amerlock 2	PPG Amerlock 2 AL	PPG Amerlock Sealer	PPG Amerlock 600	PPG Durethane DTM	SW Macropoxy 920	SW Macropoxy 646	SW Hi Solids Polyurethane Semi-Gloss	SW Corothane Mio-Aluminum	Solvent 33	Solvent 215	Solvent 365	Thinner 225	Total	12-Month Total
	(gal/mth)	(gal/mth)	(gal/mth)	(gal/mth)	(gal/mth)	(gal/mth)	(gal/mth)	(gal/mth)	(gal/mth)	(gal/mth)	(gal/mth)	(gal/mth)	(gal/mth)	(gal/mth)	(gal/mth)	(gal/mth)	(gal/mth)	(gal/mth)	(gal/mth)	(gal/mth)	(gallons)
Jan-24	0	0	0	0	0	0										0	0	0	0	0	151.0
Feb-24	0	0	0	0	0	0										0	0	0	0	0	151.0
Mar-24	0	0	0	0	0	0										0	0	0	0	0	151.0
Apr-24	0	0	0	0	0	0			18	90						0	0	0	0	108	259.0
May-24	0	0	0	0	0	0			10	50						0	0	0	0	60	319.0
Jun-24	0	0	0	0	0	0										0	0	0	0	0	319.0
Jul-24	0	0	0	0	0	0										0	0	0	0	0	319.0
Aug-24	0	0	0	0	0	0										0	0	0	0	0	319.0
Sep-24	0	0	0	0	0	0						40	95	70	10	0	0	0	0	215	383.0
Oct-24	0	0	0	0	0	0							165	189		0	0	0	0	354	737.0
Nov-24	0	0	0	0	0	0							10			0	0	0	0	10	747.0
Dec-24	0	0	0	0	0	0										0	0	0	0	0	747.0
2024 Total	0	0	0	0	0	25	30	8	36	186	34	40	270	259	10	0	0	0	0	898	

Monthly Emissions

	Citri-Kleen	Carboline Carboguard 890	Carboline Carbothane 134 HG	Misc. Maintenance Paint	Pro-Power II	Miller ACRI-Metal Exterior Paint	PPG Amerlock 2	PPG Amerlock 2 AL	PPG Amerlock Sealer	PPG Amerlock 600	PPG Durethane DTM	SW Macropoxy 920	SW Macropoxy 646	SW Hi Solids Polyurethane Semi-Gloss	SW Corothane Mio-Aluminum	Solvent 33	Solvent 215	Solvent 365	Thinner 225	Total	12-Month Total
	(tons/mth)	(tons/mth)	(tons/mth)	(tons/mth)	(tons/mth)	(tons/mth)	(tons/mth)	(tons/mth)	(tons/mth)	(tons/mth)	(tons/mth)	(tons/mth)	(tons/mth)	(tons/mth)	(tons/mth)	(tons/mth)	(tons/mth)	(tons/mth)	(tons/mth)	(tons/mth)	(tons)
Jan-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0.098
Feb-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0.098
Mar-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0.098
Apr-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.090	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0981	0.196
May-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0545	0.251
Jun-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0.251
Jul-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0.251
Aug-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0.251
Sep-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.056	0.039	0.098	0.014	0.000	0.000	0.000	0.000	0.207425	0.360
Oct-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.068	0.265	0.000	0.000	0.000	0.000	0.000	0.333075	0.693
Nov-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.00415	0.697
Dec-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0.697

Annual Maximum: 0.697

Reference #6
Zenith Energy Terminals Portland
2024 FIXTANK, EXTANK, and INTANK EMISSIONS

Month	Year	Contaminant	Monthly Emissions (tons/month)	Rolling 12 Month Total (tons/yr)	Contaminant	Monthly Emissions (tons/month)	Rolling 12 Month Total (tons/yr)
Jan	2024	VOC	0.840	13.7	H2S	0.0037	0.05
Feb	2024	VOC	0.853	13.8	H2S	0.0036	0.05
Mar	2024	VOC	0.986	14.0	H2S	0.0041	0.05
Apr	2024	VOC	0.963	13.9	H2S	0.0038	0.05
May	2024	VOC	1.18	13.7	H2S	0.0045	0.05
Jun	2024	VOC	1.34	13.3	H2S	0.0050	0.05
Jul	2024	VOC	1.64	13.1	H2S	0.0062	0.05
Aug	2024	VOC	1.54	13.1	H2S	0.0057	0.05
Sep	2024	VOC	1.36	13.1	H2S	0.0050	0.05
Oct	2024	VOC	1.09	13.1	H2S	0.0044	0.05
Nov	2024	VOC	0.78	12.9	H2S	0.0035	0.05
Dec	2024	VOC	0.69	13.3	H2S	0.0031	0.05
12-Month Max		VOC	---	14.0	H2S	---	0.05

Emissions calculated using AP-42 Chapter 7 equations

Reference #7-1
Zenith Energy Terminals - Portland
Monthly and Annual VOC Emission Summary for 2024 Emissions Unit: MLOAD

Date	Bakken Crude Oil Throughput (gallons/mo)	Diesel Throughput (gallons/mo)	Total Throughput (gallons/mo)	Bakken Marine Loading VOC Emissions (tons/mo)	Diesel Loading VOC Emissions (tons/mo)	Total Marine Loading VOC Emissions (tons/mo)	Rolling 12-Month Marine Loading VOC Emissions (tons/12 mo)	Bakken Marine Loading H2S Emissions (tons/mo)
January-24	32,604,534	0	32,604,534	0.210	0.00000	0.210	2.95	0.0010
February-24	27,205,986	2,368,674	29,574,660	0.178	0.00296	0.181	2.84	0.0009
March-24	23,431,181	0	23,431,181	0.161	0.00000	0.161	2.89	0.0008
April-24	25,189,987	2,935,506	28,125,493	0.180	0.0050	0.185	3.01	0.0009
May-24	30,235,274	3,874,038	34,109,312	0.216	0.0082	0.224	3.07	0.0011
June-24	23,431,399	6,559,801	29,991,200	0.175	0.0171	0.192	2.88	0.0009
July-24	32,619,252	4,101,290	36,720,542	0.257	0.0124	0.270	2.99	0.0013
August-24	26,945,310	919,729	27,865,038	0.219	0.0028	0.221	2.82	0.0011
September-24	29,398,999	5,116,458	34,515,457	0.234	0.0126	0.247	2.70	0.0012
October-24	44,472,062	1,683,017	46,155,080	0.340	0.00301	0.343	2.65	0.0017
November-24	36,212,713	6,587,547	42,800,260	0.256	0.0088	0.264	2.73	0.0013
December-24	19,300,284	0	19,300,284	0.126	0.00000	0.126	2.62	0.0006
Totals or 12-Month Maximum:	351,046,983	34,146,059	385,193,042	2.55	0.073	2.62	3.07	0.0128

Notes:

- 1) Emissions calculated using the crude oil ship and barge loading emission methodology found in AP-42 Chapter 5 (see equation 2, equation 3, and Table 5.2-3).
- 2) Marine crude oil loading operations allowed by Permit No. 26-2025 began on November 11, 2018.
- 3) Bakken crude oil marine loading operations began in March 2019.
- 4) AWB crude oil marine loading operations ceased in February 2021.

Reference #7-2
Zenith Energy Terminals - Portland
Monthly and Annual Summary for 2024 Emissions Unit: MLOAD (Bakken Crude Oil Loading)

Date	Bakken Throughput (gallons/mo)	Arrival Emission Factor (lb/1,000 gal)	Liquid Bulk Temperature		Reid Vapor Pressure (psia)	True Vapor Pressure (psia)	Vapor Molecular Weight (lb/lb-mol)	Vapor Growth Factor	Generated Vapors Emission Factor (lb/1,000 gal)	Loading Loss Emission Factor (lb/1,000 gal)	Uncontrolled VOC Emissions (tons/mo)	Capture Efficiency ³ (%)	VCU Removal Efficiency ⁴ (%)	Control Efficiency ⁵ (%)	Actual VOC Emissions (tons/mo)
			(°F)	(°R)											
Jan-24	32,604,534	0.86	37.7	498	10.2	5.24	58	1.02	0.413	1.27	20.7	99.0%	99.99%	98.99%	0.210
Feb-24	27,205,986	0.86	40.5	500	10.2	5.51	58	1.02	0.436	1.30	17.6	99.0%	99.99%	98.99%	0.178
Mar-24	23,431,181	0.86	48.1	508	10.2	6.29	58	1.02	0.503	1.36	16.0	99.0%	99.99%	98.99%	0.161
Apr-24	25,189,987	0.86	53.3	513	10.2	6.87	58	1.02	0.552	1.41	17.8	99.0%	99.99%	98.99%	0.180
May-24	30,235,274	0.86	53.7	514	10.2	6.93	58	1.02	0.557	1.42	21.4	99.0%	99.99%	98.99%	0.216
Jun-24	23,431,399	0.86	60.1	520	10.2	7.69	58	1.02	0.621	1.48	17.3	99.0%	99.99%	98.99%	0.175
Jul-24	32,619,252	0.86	67.5	528	10.2	8.68	58	1.02	0.701	1.56	25.5	99.0%	99.99%	98.99%	0.257
Aug-24	26,945,310	0.86	71.5	532	10.2	9.25	58	1.02	0.747	1.61	21.7	99.0%	99.99%	98.99%	0.219
Sep-24	29,398,999	0.86	68.9	529	10.2	8.87	58	1.02	0.717	1.58	23.2	99.0%	99.99%	98.99%	0.234
Oct-24	44,472,062	0.86	63.0	523	10.2	8.08	58	1.02	0.652	1.51	33.6	99.0%	99.99%	98.99%	0.340
Nov-24	36,212,713	0.86	51.9	512	10.2	6.71	58	1.02	0.538	1.40	25.3	99.0%	99.99%	98.99%	0.256
Dec-24	19,300,284	0.86	39.9	500	10.2	5.45	58	1.02	0.431	1.29	12.5	99.0%	99.99%	98.99%	0.126

Notes:

- 1) Emissions calculated using the crude oil ship and barge loading emission methodology found in AP-42 Chapter 5 (see equation 2, equation 3, and Table 5.2-3).
- 2) Marine crude oil loading operations allowed by Permit No. 26-2025 began on November 11, 2018.
- 3) Capture efficiency from Permit No. 26-2025 Marine Loading Notice of Approval Application submitted on August 14, 2017.
- 4) VCU removal efficiency from emission test conducted on December 4, 2022.
- 5) Control efficiency is capture efficiency times VCU removal efficiency.

Reference #7-3
Zenith Energy Terminals - Portland
Monthly and Annual Summary for 2024 Emissions Unit: MLOAD (Diesel & Biodiesel Loading)

Month	Year	S ¹	M ²	P ³	T ³ (°F)	T (°R)	L _L ⁴ (lb/1,000 gallons)	Q _{Diesel} ⁵ (barrels)	Q _{Diesel} (1,000 gallons)	E _{VOC} ⁶ (lb)	E _{VOC} (Tons)
January	2024	0.200	130	3.31E-03	39.2	499	2.15E-03	0	0	0	0
February	2024	0.200	130	3.89E-03	44.2	504	2.50E-03	56,397	2,369	5.92	2.96E-03
March	2024	0.200	130	4.56E-03	45.0	505	2.93E-03	0	0	0	0
April	2024	0.200	130	5.34E-03	52.5	512	3.38E-03	69,893	2,936	9.91	4.96E-03
May	2024	0.200	130	6.73E-03	57.2	517	4.22E-03	92,239	3,874	16.3	8.17E-03
June	2024	0.200	130	8.41E-03	62.4	522	5.22E-03	156,186	6,560	34.2	0.0171
July	2024	0.200	130	9.87E-03	70.9	530	6.02E-03	97,650	4,101	24.7	0.0124
August	2024	0.200	130	9.78E-03	70.1	530	5.98E-03	21,898	920	5.50	2.75E-03
September	2024	0.200	130	8.01E-03	68.2	528	4.91E-03	121,820	5,116	25.1	0.0126
October	2024	0.200	130	5.75E-03	61.0	521	3.58E-03	40,072	1,683	6.02	3.01E-03
November	2024	0.200	130	4.18E-03	49.4	509	2.66E-03	156,846	6,588	17.5	8.77E-03
December	2024	0.200	130	3.37E-03	43.6	503	2.17E-03	0	0	0	0

12 Month Totals: 813,001 34,146 145 0.0727

Notes:

- 1) Submerged loading: Ships (AP-42 Table 5.2-1).
- 2) Biodiesel and renewable diesel assumed to have similar physical properties to diesel. Molecular weight of diesel obtained from AP-42 Table 7.1-2.
- 3) Vapor pressure and temperature from Tank 66 emission calculations.
- 4) Loading loss factor calculated using AP-42 Chapter 5 Equation 1.
- 5) Q = Monthly loading dock throughput.
- 6) Monthly loading emissions = Loading loss factor * monthly total throughput.

Reference #7-4
Zenith Energy Terminals - Portland
PM₁₀, SO₂, CO and NO_x Annual Summary for 2024 Emissions Unit: MLOAD

Pollutant	Hours Operated (hr/yr)	Loading Rate ¹ (bbl/hr)	Vapor Generated ²		Vapor Heat of Combustion ³ (Btu/ft ³)	Heat Generated (MMBtu/yr)	Emission Factor ³ (lb/MMBtu)	Emissions	
			(ft ³ /bbl)	(ft ³ /yr)				(lb/yr)	(tons/yr)
PM ₁₀	656	12,000	5.614	44,227,432	1,200	53,073	0.0025	133	0.0663
SO ₂	656	12,000	5.614	44,227,432	1,200	53,073	0.0067	354	0.160
CO	656	12,000	5.614	44,227,432	1,200	53,073	0.2	10,615	4.81
NO _x	656	12,000	5.614	44,227,432	1,200	53,073	0.11	5,838	2.65

Notes:

1 - Ship and barge crude oil loading rate.

2 - Crude oil vapors captured during ship and barge loading.

3 - Crude oil vapor heat of combustion and emission factors from the Title V Permit No. 26-2025 Notice of Approval Application dated August 14, 2018.

Emissions and Compliance Monitoring Data (Condition 68d)

Attachment 68d-1
Vapor Pressure Summary Table

**Zenith Energy Terminals
Portland, Oregon
2024 Tank Vapor Pressure Tracking**

Tank Number	Tank Contents	Air Contaminant	Vapor Pressures													
			Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	June 2024	July 2024	Aug 2024	Sep 2024	Oct 2024	Nov 2024	Dec 2024	12-Month Max	Permitted Max
			(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
Fixed Roof Tanks																
FIXTANK 151	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 152	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 167	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 168	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 169	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 177	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 202	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 209	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 211	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 213	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 306	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 66	Diesel	VOC	3.3E-03	3.9E-03	4.6E-03	5.3E-03	6.7E-03	8.4E-03	9.9E-03	9.8E-03	8.0E-03	5.7E-03	4.2E-03	3.4E-03	9.9E-03	1.50
FIXTANK 67	Renewable Diesel	VOC	3.3E-03	3.9E-03	4.6E-03	5.3E-03	6.7E-03	8.4E-03	9.9E-03	9.8E-03	8.0E-03	5.7E-03	4.2E-03	3.4E-03	9.9E-03	1.50
FIXTANK 69	Biodiesel	VOC	3.3E-03	3.9E-03	4.6E-03	5.3E-03	6.7E-03	8.4E-03	9.9E-03	9.8E-03	8.0E-03	5.7E-03	4.2E-03	3.4E-03	9.9E-03	1.50
FIXTANK 70	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 74	Renewable Diesel	VOC	3.2E-03	0	0	0	5.9E-03	0	0	0	0	0	0	0	5.9E-03	1.50
FIXTANK 93	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 100	Synthetic Para Kerosine	VOC	3.2E-03	3.7E-03	4.2E-03	4.8E-03	5.9E-03	7.2E-03	8.4E-03	8.5E-03	7.2E-03	5.4E-03	4.0E-03	0	8.5E-03	1.50
FIXTANK 101	Renewable Diesel	VOC	3.2E-03	3.7E-03	4.2E-03	4.8E-03	5.9E-03	0	0	0	0	0	0	0	5.9E-03	1.50
FIXTANK 102	Renewable Diesel	VOC	3.2E-03	0	0	4.8E-03	5.9E-03	7.2E-03	8.4E-03	0	0	0	0	0	8.4E-03	1.50
FIXTANK 110	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 111	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 112	Renewable Diesel	VOC	3.3E-03	3.9E-03	4.6E-03	5.3E-03	6.7E-03	8.4E-03	9.9E-03	9.8E-03	8.0E-03	5.7E-03	4.2E-03	3.4E-03	9.9E-03	1.50
FIXTANK 113	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 121	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 122	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 123	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 124	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 125	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 126	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 127	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 128	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 129	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 140	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 141	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 142	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 143	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 145	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 146	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 147	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 148	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 149	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 150	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 157	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 158	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 170	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 171	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 172	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 173	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 174	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 176	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 181	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 182	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 183	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50
FIXTANK 184	Biodiesel	VOC	3.5E-03	4.2E-03	5.1E-03	6.2E-03	8.0E-03	0.010	0.012	0.012	9.2E-03	6.3E-03	4.4E-03	3.5E-03	0.012	1.50
FIXTANK 185	Out of Service	VOC	0	0	0	0	0	0	0	0	0	0	0	0	0	1.50

Attachment 68d-2
Oil/Water Separator Annual Inspection

Title V Annual OW Separator Inspection

Date: 07-22-2024	Permit Holder: Zenith Terminals	Permit #: 262025
Requirement: Condition 24 Monitor and Record	Inspector: JT Hendrix	
Location: Oil/Water Separator		
Summary of Findings: On 07-22-2024 the terminal's oil/water separator was inspected and found to be in good operating condition. There were no mechanical failures or operation slowdowns. Bays were closed and sealed.		
Corrective Action: None required		

Attachment 68d-3
12-Month Summary of Annual Emissions

PSEL = 14 tons/year

[illegible]

Zenith Energy Terminals - Portland

SO₂ Plant Site Emission Summary

Summary Permit No. 26-2025

PSEL = 81 tons/year

[illegible]

**Zenith Energy Terminals - Portland
NO_x Plant Site Emission Summary
Summary Permit No. 26-2025
PSEL = 99 tons/year**

[illegible]

**Zenith Energy Terminals - Portland
CO Plant Site Emission Summary
Summary Permit No. 26-2025
PSEL = 99 tons/year**

[illegible]

Zenith Energy Terminals Portland VOC Plant Site Emission Summary

Summary Permit No. 26-2025

PSEL = 89.5 tons/year (reduced from 179 tpy by LUCS Notice of Decision from City of Portland)

[illegible]

PSEL = 9 tons/year

[illegible]