

February 15, 2023

Oregon Department of Environmental Quality  
ATTN: Joshua Alexander  
DEQ/NWR Office  
700 NE Multnomah St. Ste. 600  
Portland, OR 97232

**RE: Permit No. 26-3021-ST-01 Annual Report – 2021**

In compliance with Sections 8.2 (Semi-Annual NSPS Dc) and 8.3 (Annual Report) of our Air Contaminant Discharge Permit, Ecolube Recovery submits the following:

8.3.a.i

HTR-3	Month	Type	Quantity	Units
	January	RFO/No. 2 Distillate	8,540	gallons
	February	RFO/No. 2 Distillate	15,952.0	gallons
	March	RFO/No. 2 Distillate	15,790.0	gallons
	April	RFO/No. 2 Distillate	14,736.0	gallons
	May	RFO/No. 2 Distillate	10,297.0	gallons
	June	RFO/No. 2 Distillate	9,567.0	gallons
	July	RFO/No. 2 Distillate	20,373.0	gallons
	August	RFO/No. 2 Distillate	26,817.0	gallons
	September	RFO/No. 2 Distillate	6,104.0	gallons
	October	RFO/No. 2 Distillate	0	gallons
	November	RFO/No. 2 Distillate	0	gallons
	December	RFO/No. 2 Distillate	0	gallons
	<b>Total</b>		<b>128,126</b>	<b>gallons</b>

**HTR-4** No Emissions: Decommissioned February 2017 in Accordance with MAO

TO-01 BLR-01/02 WH1,2,3,4,5 HTR-3	Month	Type	Quantity	Units
	January	Natural Gas	6,509	therms
	February	Natural Gas	6,046	therms
	March	Natural Gas	6,684	therms
	April	Natural Gas	6,159	therms
	May	Natural Gas	4,486	therms
	June	Natural Gas	6,136	therms
	July	Natural Gas	5,524	therms
	August	Natural Gas	5,226	therms
	September	Natural Gas	25,845	therms
	October	Natural Gas	37,638	therms
	November	Natural Gas	50,244	therms
	December	Natural Gas	39,837	therms
	<b>Total</b>		<b>200,332</b>	<b>therms</b>

HTR-3 began operating on natural gas in September 2022

8.3.a.ii

See Attachment A for Monthly and Annual data

8.3.a.iii

HTR-3 (Max 5000 ppm)	Month	Sulfur Content	Units
No oil burned in HTR-3 October – December 2022	January	2500	ppm
	February	2330	ppm
	March	1730	ppm
	April	1500	ppm
	May	2330	ppm
	June	2060	ppm
	July	2060	ppm
	August	990	ppm
	September	470	ppm
	October	NA	ppm
	November	NA	ppm
	December	NA	ppm
	MAX	2500	ppm

8.3.a.iv

PESCO Refinery	Month	Oil Processed	Units
	January	503,803	gallons
	February	448,898	gallons
	March	429,300	gallons
	April	413,910	gallons
	May	542,110	gallons
	June	469,383	gallons
	July	689,249	gallons
	August	587,649	gallons
	September	624,672	gallons
	October	594,720	gallons
	November	656,640	gallons
	December	576,000	gallons
	Total	6,536,334	gallons

**Sulfonation**

*Sulfonation processed 23,040 gallons in January*

8.3.a.iv (continued)

**OPS**

Month	Oil Processed	Units
January	156,796	gallons
February	165,211	gallons

March	111,300	gallons
April	107,310	gallons
May	114,864	gallons
June	126,996	gallons
July	166,699	gallons
August	125,900	gallons
September	135,131	gallons
October	128,400	gallons
November	115,104	gallons
December	101,928	gallons
<b>Total</b>	<b>1,555,639</b>	<b>gallons</b>

8.3.a.v

No Molten Sulfur deliveries in 2022

8.3.a.vi

*Determined through ASTM D2879 at 100°F at outside lab*

	<b>Tank</b>	<b>True Vapor Pressure</b>	<b>Units</b>
To prevent cross-contamination, tanks are only used for one type of liquid.	Jail-1	0.6	psia
	Jail-2	0.6	psia
	Jail-3	0.6	psia
	Jail-4	0.6	psia
	Jail-5	REMOVED FROM SITE	
It is assumed based on testing at 100F that true vapor pressure of liquids are at or below reported levels.	Jail-6	REMOVED FROM SITE	
	Jail-7	0.6	psia
	Jail-8	0.6	psia
	Jail-9	0.6	psia
	Jail-10	REMOVED FROM SITE	
	Jail-11	REMOVED FROM SITE	
	WW-1	Non-Petroleum Liquid (Water)	
	CT-1	0.6	psia
	CT-2	0.6	psia
	CT-3	0.6	psia
	CT-4	0.6	psia
	CT-5	Non-Petroleum Liquid (Water)	
	CT-6	Non-Petroleum Liquid (Spent AF)	
	Tank-12	1.2	psia
	IT-100-1	0.8	psia
	IT-100-2	1.1	psia
	IT-220-1	Non-Petroleum Liquid (Tank Not in Use)	
	IT-220-2	0.8	psia
	AF-1	0.8	psia
	WLE-1	1.1	psia
	PF-1	REMOVED FROM SITE	
	PF-2	1.1	psia
	Tank-30	1.1	psia
8.3.a.vi (continued)	<b>Tank</b>	<b>True Vapor Pressure</b>	<b>Units</b>
	MDO-1	0.7	psia
	UO-1	1.1	psia
	UO-2	1.1	psia
	UO-3	1.1	psia

UO-4	1.1	psia
UO-5	1.1	psia
UO-6	1.1	psia
TK10401	0.4	psia
TK10402	0.4	psia
TK10403	0.4	psia
TK10404	0.4	psia
TK10501	0.4	psia
TK10502	0.4	Psia

8.3.b A summary of annual pollutant emissions determined each month.

Year	Month	Rolling YTD Emissions											
		PM	YTD	PM10	YTD	SO2	YTD	NOx	YTD	CO	YTD	VOC	YTD
2022	January	0.02	0.32	0.02	0.25	0.85	10.44	0.18	4.27	0.08	0.98	0.39	4.45
2022	February	0.03	0.33	0.02	0.25	1.14	10.77	0.25	4.16	0.08	0.99	0.38	4.46
2022	March	0.03	0.32	0.02	0.24	1.04	10.57	0.24	3.92	0.08	0.96	0.41	4.47
2022	April	0.03	0.31	0.02	0.23	0.80	10.38	0.23	3.71	0.08	0.94	0.40	4.49
2022	May	0.02	0.32	0.02	0.24	0.77	10.62	0.19	3.60	0.07	0.95	0.39	4.51
2022	June	0.02	0.32	0.02	0.23	0.78	10.68	0.18	3.43	0.07	0.94	0.38	4.54
2022	July	0.04	0.34	0.03	0.25	1.30	11.18	0.30	3.48	0.10	0.96	0.39	4.56
2022	August	0.05	0.36	0.02	0.24	1.39	11.64	0.36	3.45	0.11	0.99	0.40	4.58
2022	September	0.02	0.36	0.02	0.24	0.69	11.48	0.25	3.34	0.14	1.06	0.40	4.61
2022	October	0.01	0.35	0.01	0.23	0.45	10.98	0.25	3.19	0.18	1.15	0.39	4.63
2022	November	0.01	0.33	0.01	0.22	0.40	10.55	0.31	3.12	0.23	1.30	0.42	4.66
2022	December	0.01	0.32	0.01	0.21	0.36	9.97	0.23	2.97	0.18	1.39	0.35	4.69
	<b>2022 Total</b>	<b>0.32</b>		<b>0.21</b>		<b>10.0</b>		<b>3.0</b>		<b>1.4</b>		<b>4.7</b>	
	<b>12-Month Permit Limits</b>	<b>24</b>		<b>14</b>		<b>39</b>		<b>39</b>		<b>99</b>		<b>39</b>	

\* Includes an 89.4% VOC Destruction Efficiency (average of January 2022 & June 2022 source test) of VOCs controlled by the RTO

8.3.c No excess emission events occurred in 2022.

8.3.d

Date of Complaint	Date Complaint Received	Time Complaint Received by ELR	Air Pollution Concern	Complaint Origination	Complaint Duration	Actions to Investigate / Resolve Complaint**
<b>2022</b>						
1/9/22	1/13/22	9:16 AM	Petro-Chemical Odors	Delta Park area	started at 11:50 am	<p>Also received same complaint on ELR complaint hotline call-in number. Eric Spencer called complainant, Mr Wilson back on phone number left, but received a voice mail. Did not get follow up call from complainant. There was one used oil offload into tank storage at 8am – this is a standard offload of used oil picked up from a customer. The load was not flux or Light End fuel so would not be suspect for any odors that would trigger a community complaint. There were no other material transfers between 8am and 11:50am when the complaint was documented.</p> <p>The wind direction would not support carrying odors down to Delta Park. Any odors from Delta Park are more than likely due to homeless encampments where fires have been lit, ELR has experienced these types of odors in the recent past and reported them.</p>

4/8/22	4/11/22	11:48 AM	Odor Complaint	Force Ave. near Heron Lakes Golf Course	9:30 am- Complaint stated that the odor was noticed while driving to and from Heron Lakes Golf Course.	Operations supervisor, Jerome James looked into the plant operations at the time of the complaints and reported back that the plant distillation was down at the time of the complaint, due to routine electrical maintaince and that the LPS was on routed through RTO. No other abnormal activitives where happening at the time of the complaint. Tanner Smith provided an email back to DEQ on April 13, 2022 with additional investigation details and plant operations
4/27/22	4/28/22	8:17 PM	Odor Complaint	Kenton Neighborhood	Not provided	The refinery was down for the week of the compalint. No activity was taking place outside of normal tank transfers. The last off loading activity for the day took place at 4pm and was a normal used oil transfer. The wind direction at the time was a NE direction mkaing ELR as an unlikely colpurate of this odor. Tanner Smith provided an email back to DEQ on April 29th, 2022, with a follow up email on May 2nd, 2022
8/12/22	8/12/22	3:44 PM	Odor Complaint - "gas"	Not specific - community members	Not provided - occurring at 3:44 pm per caller	Upon receiving email of the complaint, the Ecolube Lead Operator verified his process plant conditions as stable. Noted that at our Truck Loading facility we were actively off loading one Used Oil truck. The Thermal Oxidizer

temperature was 1550 f and stable, and vent gas from process unit was routed to design location of the Hot Oil Heater. Verified physically in the field that the automatic valves on the Vent Lines to the Carbon Cannisters were closed and not leaking by and routed to the Thermal Oxidizer. We were not doing any other transfers or activities at that time or immediately prior to the odor complaint. The Lead Operator performed a perimeter check of the site and could not detect any odors, as well as verifying with the Truck Rack Operator that they did not smell any odors. Also confirmed that there were no unusual activities in the camp next door. Based on the information we have logged where we are tracking refinery operations, we are not able to identify any activity that could have contributed to this complaint. 08/22/22 follow up on 08/12 complaint: NW Natural notified ELR a natural gas lead was discovered at the natural gas meter set out in the plant yard. It has apparently been leaking for some time based on his assessment. The meter was repaired and leak has subsided as of now.

						NW Natural will be doing a permanent replacement of the entire meter when our new natural gas line is installed here in a few weeks.

8.3.e Pressure Vacuum Relief Valve inspections were completed 9/15/22. Inspections and maintenance were performed internally. Weights and mechanisms were manually lifted and cleaned.

8.3.f No permanent changes were made to plant equipment in 2022 that affected air contaminant emissions.

8.3.g	Date	Description
	12/16/2022	Change out carbon in carbon cannisters



## Air Permit reporting 2022 - ATTACHMENT A

<u>Gallons of Used Oil Received</u>	
Jan	577,068
Feb	667,240
March	801,638
Apr	883,501
May	713,201
June	724,952
July	678,949
Aug	786,038
Sept	696,415
Oct	732,960
Nov	778,561
Dec	633,143
<b>Totals</b>	<b>8,673,666</b>

<u>Gallons of Spent AF Received</u>	
Jan	12,867
Feb	16,368
March	23,026
Apr	13,300
May	20,822
June	21,235
July	10,190
Aug	17,840
Sept	13,357
Oct	28,380
Nov	14,577
Dec	13,179
<b>Totals</b>	<b>205,141</b>

<u>Tons of Oil Filters Shipped off-site</u>	
Jan	73.85
Feb	76.63
March	86.06
Apr	62.05
May	65.81
June	89.97
July	73.12
Aug	89.07
Sept	97.07
Oct	97.50
Nov	94.29
Dec	59.06
<b>Totals</b>	<b>964.48</b>

<u>Tons of Oily Debris Shipped off-site</u>	
Jan	23.12
Feb	29.82
March	31.98
Apr	25.32
May	29.18
June	32.28
July	29.43
Aug	27.12
Sept	29.39
Oct	25.89
Nov	31.32
Dec	22.55
<b>Totals</b>	<b>337.40</b>

January - September 2022 TRANSFERS INTO PF-2 TANK

<u>DATE</u>	<u>FROM TANK</u>	<u>TO TANK</u>	<u>SULFUR %</u>	<u>GALLONS</u>	<u>AVERAGE</u>
1/1/2022					0.250
1/2/2022					0.250
1/3/2022					0.250
1/4/2022					0.250
1/5/2022					0.250
1/6/2022					0.250
1/7/2022					0.250
1/8/2022					0.250
1/9/2022	UO-1	PF-2	0.25	3,138	0.250
1/10/2022					0.250
1/11/2022					0.250
1/12/2022					0.250
1/13/2022					0.250
1/14/2022					0.250
1/15/2022	UO-4	PF-2	0.233	1,804	0.248
1/16/2022					0.248
1/17/2022					0.247
1/18/2022					0.247
1/19/2022					0.247
1/20/2022					0.247
1/21/2022					0.247
1/22/2022					0.247
1/23/2022					0.247
1/24/2022	TK-30	PF-2	0.233	801	0.244
1/25/2022					0.243
1/26/2022					0.242
1/27/2022					0.239
1/28/2022					0.239
1/29/2022					0.239
1/30/2022					0.239
1/31/2022	TK-30	PF-2	0.233	2,797	0.237
2/1/2022					0.237
2/2/2022					0.237
2/3/2022					0.237
2/4/2022	UO-4	PF-2	0.233	2,467	0.236
2/4/2022	UO-4	PF-2	0.233	2,480	0.236
2/5/2022					0.236
2/6/2022					0.233
2/7/2022	TK-30	PF-2	0.233	2,408	0.233
2/8/2022					0.233
2/9/2022					0.233
2/10/2022					0.233
2/11/2022					0.233
2/12/2022					0.233
2/13/2022					0.233
2/14/2022					0.233
2/15/2022					0.233
2/16/2022					0.233
2/17/2022	UO-1	PF-2	0.233	2,450	0.233
2/18/2022					0.233
2/19/2022					0.233
2/20/2022	TK-30	PF-2	0.173	2,285	0.224
2/21/2022					0.223
2/22/2022					0.223
2/23/2022	TK-30	PF-2	0.173	2,674	0.216
2/24/2022					0.216
2/25/2022					0.216
2/26/2022					0.216
2/27/2022					0.216
2/28/2022	TK-30	PF-2	0.173	1,188	0.207

January - September 2022 TRANSFERS INTO PF-2 TANK

<u>DATE</u>	<u>FROM TANK</u>	<u>TO TANK</u>	<u>SULFUR %</u>	<u>GALLONS</u>	<u>AVERAGE</u>
3/1/2022					0.207
3/2/2022					0.207
3/3/2022	UO-4	PF-2	0.173	2,615	0.203
3/4/2022					0.199
3/5/2022					0.193
3/6/2022	UO-4	PF-2	0.173	1,337	0.190
3/7/2022					0.190
3/8/2022					0.183
3/9/2022	UO-4	PF-2	0.173	3,043	0.182
3/10/2022					0.182
3/11/2022					0.182
3/12/2022					0.182
3/13/2022	TK-30	PF-2	0.15	2,434	0.178
3/14/2022					0.178
3/15/2022					0.178
3/16/2022	100-2	PF-2	0.15	2,098	0.175
3/17/2022					0.175
3/18/2022					0.167
3/19/2022					0.167
3/20/2022	TK-30	PF-2	0.15	2,533	0.165
3/21/2022					0.164
3/22/2022	UO-4	PF-2	0.15	1,730	0.163
3/23/2022					0.163
3/24/2022					0.162
3/25/2022					0.162
3/26/2022					0.162
3/27/2022					0.162
3/28/2022					0.162
3/29/2022					0.160
3/30/2022					0.160
3/31/2022					0.160
4/1/2022					0.158
4/2/2022	TK-30	PF-2	0.15	2,211	0.157
4/3/2022	TK-30	PF-2	0.15	1,069	0.156
4/4/2022	UO-1	PF-2	0.15	1,074	0.153
4/5/2022					0.153
4/6/2022					0.153
4/7/2022	UO-1	PF-2	0.15	1,934	0.150
4/8/2022					0.150
4/9/2022					0.150
4/10/2022	TK-30	PF-2	0.15	2,667	0.150
4/11/2022					0.150
4/12/2022					0.150
4/13/2022	UO-4	PF-2	0.15	2,444	0.150
4/14/2022					0.150
4/15/2022					0.150
4/16/2022	TK-30	PF-2	0.15	1,861	0.150
4/17/2022					0.150
4/18/2022	TK-30	PF-2	0.15	1,476	0.150
4/19/2022					0.150
4/20/2022					0.150
4/21/2022					0.150
4/22/2022					0.150
4/23/2022					0.150
4/24/2022					0.150
4/25/2022					0.150
4/26/2022					0.150
4/27/2022					0.150
4/28/2022					0.150
4/29/2022					0.150
4/30/2022					0.150

January - September 2022 TRANSFERS INTO PF-2 TANK

<u>DATE</u>	<u>FROM TANK</u>	<u>TO TANK</u>	<u>SULFUR %</u>	<u>GALLONS</u>	<u>AVERAGE</u>
5/1/2022					0.150
5/2/2022					0.150
5/3/2022	TK-30	PF-2	0.15	2,475	0.150
5/4/2022					0.150
5/5/2022					0.150
5/6/2022	TK-30	PF-2	0.15	1,826	0.150
5/7/2022					0.150
5/8/2022					0.150
5/9/2022					0.150
5/10/2022					0.150
5/11/2022					0.150
5/12/2022					0.150
5/13/2022					0.150
5/14/2022					0.150
5/15/2022					0.150
5/16/2022	UO-1	PF-2	0.15	860	0.150
5/16/2022	UO-4	PF-2	0.167	2,086	0.154
5/17/2022					0.154
5/18/2022					0.154
5/19/2022					0.154
5/20/2022					0.154
5/21/2022					0.154
5/22/2022					0.154
5/23/2022					0.154
5/24/2022					0.154
5/25/2022					0.154
5/26/2022	TK-30	PF-2	0.167	1,880	0.157
5/27/2022	TK-30	PF-2	0.167	1,170	0.159
5/28/2022					0.159
5/29/2022					0.159
5/30/2022					0.159
5/31/2022					0.160
6/1/2022					0.160
6/2/2022					0.160
6/3/2022					0.163
6/4/2022					0.163
6/5/2022					0.163
6/6/2022					0.163
6/7/2022					0.163
6/8/2022					0.163
6/9/2022					0.163
6/10/2022	UO-1	PF-2	0.206	1,424	0.171
6/11/2022					0.171
6/12/2022					0.171
6/13/2022					0.177
6/14/2022	UO-4	PF-2	0.206	2,001	0.187
6/15/2022					0.187
6/16/2022	TK-30	PF-2	0.206	1,947	0.190
6/17/2022					0.190
6/18/2022					0.190
6/19/2022	TK-30	PF-2	0.206	1,267	0.193
6/20/2022					0.193
6/21/2022					0.193
6/22/2022					0.193
6/23/2022					0.193
6/24/2022					0.198
6/25/2022	TK-30	PF-2	0.206	1,145	0.206
6/26/2022					0.206
6/27/2022					0.206
6/28/2022					0.206
6/29/2022	TK-30	PF-2	0.206	1,783	0.206
6/30/2022					0.206

January - September 2022 TRANSFERS INTO PF-2 TANK

<u>DATE</u>	<u>FROM TANK</u>	<u>TO TANK</u>	<u>SULFUR %</u>	<u>GALLONS</u>	<u>AVERAGE</u>
7/1/2022					0.206
7/2/2022	TK-30	PF-2	0.206	2,446	0.206
7/3/2022					0.206
7/4/2022					0.206
7/5/2022					0.206
7/6/2022					0.206
7/7/2022					0.206
7/8/2022					0.206
7/9/2022	UO-4	PF-2	0.206	1,471	0.206
7/10/2022					0.206
7/11/2022					0.206
7/12/2022					0.206
7/13/2022					0.206
7/14/2022					0.206
7/15/2022	TK-30	PF-2	0.206	2,455	0.206
7/16/2022					0.206
7/17/2022	UO-4	PF-2	0.206	1,944	0.206
7/18/2022					0.206
7/19/2022					0.206
7/20/2022	TK-30	PF-2	0.206	2,456	0.206
7/21/2022					0.206
7/22/2022	TK-30	PF-2	0.206	1,749	0.206
7/23/2022					0.206
7/24/2022					0.206
7/25/2022	TK-30	PF-2	0.206	2,046	0.206
7/26/2022					0.206
7/27/2022	TK-30	PF-2	0.099	2,423	0.194
7/28/2022					0.193
7/29/2022	TK-30	PF-2	0.099	1,702	0.182
7/30/2022					0.182
7/31/2022	TK-30	PF-2	0.099	1,681	0.170
8/1/2022					0.170
8/2/2022	UO-4	PF-2	0.099	2,473	0.163
8/3/2022					0.163
8/4/2022					0.163
8/5/2022	TK-30	PF-2	0.099	2,094	0.157
8/6/2022	UO-1	PF-2	0.099	2,016	0.153
8/7/2022					0.148
8/8/2022	TK-30	PF-2	0.099	2,191	0.144
8/9/2022	TK-30	PF-2	0.099	583	0.140
8/10/2022					0.140
8/11/2022	TK-30	PF-2	0.099	2,121	0.137
8/12/2022					0.137
8/13/2022					0.132
8/14/2022	TK-30	PF-2	0.047	2,445	0.126
8/15/2022					0.120
8/16/2022	TK-30	PF-2	0.047	1,345	0.115
8/17/2022	TK-30	PF-2	0.047	1,416	0.110
8/18/2022					0.103
8/19/2022					0.103
8/20/2022	TK-30	PF-2	0.047	1,956	0.092
8/21/2022					0.092
8/22/2022	TK-30	PF-2	0.047	2,217	0.089
8/23/2022					0.080
8/24/2022					0.080
8/25/2022	UO-1	PF-2	0.047	2,560	0.077
8/26/2022					0.077
8/27/2022					0.075
8/28/2022					0.075
8/29/2022	TK-30	PF-2	0.047	1,921	0.071
8/30/2022					0.071
8/31/2022	TK-30	PF-2	0.047	1,479	0.067

January - September 2022 TRANSFERS INTO PF-2 TANK

<u>DATE</u>	<u>FROM TANK</u>	<u>TO TANK</u>	<u>SULFUR %</u>	<u>GALLONS</u>	<u>AVERAGE</u>
9/1/2022					0.067
9/2/2022					0.067
9/3/2022	TK-30	PF-2	0.047	2,316	0.063
9/4/2022	TK-30	PF-2	0.047	695	0.059
9/5/2022					0.059
9/6/2022	TK-30	PF-2	0.047	2,067	0.055
9/7/2022					0.051
9/8/2022					0.051
9/9/2022					0.047
9/10/2022					0.047
9/11/2022					0.047
9/12/2022					0.047
9/13/2022					0.047
9/14/2022	TK-30	PF-2	0.047	1,026	0.047