UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

ENFORCEMENT &
COMPLIANCE ASSURANCE
DIVISION

Reply To: 20-C04

RETURN RECEIPT REQUESTED

Mr. Stephen Lang
Vice President and Refinery Manager
HF Sinclair Puget Sound Refining LLC
8505 South Texas Road
Anacortes, Washington 98221

Mr. Jeff Bullen
Claims Advisor, US
Shell Oil Products US
150 North Dairy Ashford, E0590
Houston, Texas 77079

Re: Notice of Violation of the Clean Air Act, Emergency Planning and Community Right-to-Know Act and Pollution Prevention Act of 1990 at Puget Sound Refinery in Anacortes, Washington

Dear Mr. Lang and Mr. Bullen:

Enclosed is a Notice of Violation (NOV) issued to Equilon Enterprises LLC dba Shell Oil Products US and HollyFrontier Puget Sound Refining LLC ("Respondents") under Section 113 of the Clean Air Act (CAA), 42 U.S.C. § 7413, by the United States Environmental Protection Agency (EPA), for violations at the Puget Sound Refinery in Anacortes, Washington. The NOV notifies Respondents of violations of the CAA, 42 U.S.C. §§ 7401 *et seq.*, and the implementing regulations, including the National Emission Standards for Hazardous Air Pollutants located at 40 C.F.R. Part 61, Subparts A and FF, and 40 C.F.R. Part 63, Subparts R, CC, and WW; and the New Source Performance Standards located at 40 C.F.R. Part 60, Subparts A, Kb, and QQQ. In addition, this NOV also identifies violations of Section 313 of the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. § 11023, and Section 6607 of the Pollution Prevention Act of 1990, 42 U.S.C. § 13106, at the Refinery.

We are offering you an opportunity to confer with us to discuss the alleged violations. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations.

To arrange a conference, please contact Elizabeth Walters, Clean Air Act Enforcement Officer, EPA Region 10, at (206) 553-6317 or Walters.Elizabeth@epa.gov within 10 days of receipt of this letter.

Thank you for your attention to this important matter.

Sincerely,

MORGAN JENCIUS

Digitally signed by MORGAN JENCIUS
Date: 2023.09.29 09:54:40 -07'00'

Morgan Jencius, Chief
Air and Land Enforcement Branch

Enclosure

cc: Mr. Scott McCreery
HF Sinclair Puget Sound Refining LLC

Mr. Aaron Vahid
HF Sinclair Puget Sound Refining LLC

Ms. Toby Mahar
Compliance Manager, Northwest Clean Air Agency

Ms. Crystal Rau
Air Quality Scientist, Northwest Clean Air Agency

Attachment to Notice of Violation Issued to Equilon Enterprises LLC dba Shell Oil Products US and HF Sinclair Puget Sound Refining LLC

Table 1: 2021 CAA Inspection – Detectable Emissions at Oil-Water Separators Subject to Subpart FF

Description	Inspection Date	Reading (ppm)	Additional Notes
API Separator (Fixed Roof Portion)			
Visibly damaged seal along edge near hatch H17	8/27/2021	>10,000	No repair
Hatch 17	8/27/2021	800	
Valve V1 on afterbay (north) cover	8/27/2021	1,200	
Fixed roof seal on north side	8/27/2021	8,000	No repair
Hatch H10	8/27/2021	2,800	
Hatch H18	8/27/2021	1,100	
Edge of concrete adjacent to C-5	8/27/2021	Flameout[1]	
Hatch around valve V7	8/27/2021	1,200	
Visibly cracked caulking around hatch H22	8/27/2021	20,000	
Hatch H23	8/27/2021	1,500	
Hatch H24	8/27/2021	2,000	
Hatch H27	8/27/2021	40,000	Repair documented 12/18/2021
DAF 1			
Pump 9QVM75	8/27/2021	OGI[2]	
Visibly cracked caulking along seam of hatch around valve V5	8/27/2021	10,000	
Large hatch near H3	8/27/2021	1,400	No repair
Hatch H3	8/27/2021	>10,000	
Visibly cracked seal along unidentified roof hatch	8/27/2021	>10,000	No repair
Pump 9QVM73 leaking from a crack in the roof where pump is mounted	8/27/2021	Flameout	
Visibly cracked seal along the hatch of pump 9QVM71	8/27/2021	Flameout	
Seam on the roof near pump 9QVM76	8/27/2021	9,000	

[1] A "flameout" occurs when vapors overwhelmed the instrument.
[2] "OGI" indicates that Optical Gas Imaging was used and imaged a hydrocarbon leak.

DAF 2			
Large roof hatch next to hatch H7 measured at 3,300 ppm	8/27/2021	3,300	
Pump 9QVM74	8/27/2021	OGI	
Seam at interface between tank and roof	8/27/2021	OGI	
DAF 3			
Visibly damaged seal around hatch near flange F14	8/27/2021	Flameout	
Visibly damaged seal along edge of tank	8/27/2021	Flameout	No repair
Visibly cracked sealant and holes observed from many places on the roof (more than 10 locations with visible defects)	8/27/2021	OGI	No repair

Table 2: 2022 CAA Inspection – Detectable Emissions at Oil-Water Separators Subject to Subpart FF

Description	Inspection Date	Reading (ppm)	Additional Notes
API Separator (Fixed Roof Portion)			
Hatch H16	8/3/2022	610	
Edge of concrete next to E5	8/3/2022	OGI	No repair
Hatch H27	8/3/2022	Flameout	
Hatch H26	8/3/2022	719	
Next to Hatch H26	8/3/2022	1,100	
Fixed roof seam between H22 and H23	8/3/2022	926	
Fixed roof seam between H23 and H24	8/3/2022	OGI	
Hatch H19	8/3/2022	2,541	No repair
Edge of concrete next to SW corner of W6	8/3/2022	1,252	No repair
Fixed roof seam on NW corner of C5	8/3/2022	15,900	No repair
Corner of fixed roof next to W5	8/3/2022	3,003	No repair
Hatch H15	8/3/2022	2,900	No repair
Hatch H18	8/3/2022	14,000	No repair
Hatch H14	8/3/2022	1,300	
Corner of fixed roof next to E6	8/3/2022	3,300	No repair
Fixed roof seam between C6 and E6	8/3/2022	710	No repair

Fixed roof seam between V5 and V4	8/3/2022	17,300	No repair
Flange F5	8/3/2022	1,969	No repair
DAF 1			
SW upper rim	8/4/2022	2,300	
Gap by walkway	8/4/2022	10,300	
4’ from entrance (section 1 south)	8/4/2022	13,100	
S walkway 12’ (section 2 south)	8/4/2022	9,180	
Seal in center (center south)	8/4/2022	11,000	
S walkway N of center	8/4/2022	1,575	
Above corner plus 4’ (section 4 south)	8/4/2022	Flameout	
Above point plus 4’ (section 5 south)	8/4/2022	Flameout	
Above point to edge (section 6 south)	8/4/2022	1,424	
Bottom surface near H1A	8/4/2022	616	
Platform near H3	8/4/2022	2,321	
H3	8/4/2022	846	
NW walkway plus 4’ (section 6 north)	8/4/2022	Flameout	
Above plus 4’ (section 5 north)	8/4/2022	Flameout	
Above to corner of center (section 4 north)	8/4/2022	6,438	
Corner of platform away from seal	8/4/2022	1,300	
N edge of center	8/4/2022	1,475	
N edge of seam (center north)	8/4/2022	2,075	
Corner to 4’ (section 3 north)	8/4/2022	Flameout	
Above plus 4’ (section 2 north)	8/4/2022	3,546	
Above to corner (section 1 north)	8/4/2022	1,548	
S seam of center	8/4/2022	785	
N seam of center	8/4/2022	2,700	
Rim near 9QC5	8/4/2022	875	
6’ from 9QC5	8/4/2022	13,700	
20’ from 9QC5	8/4/2022	1,389	
Midway from 9QC5	8/4/2022	824	
E Seal	8/4/2022	12,400	
Pump base 9QVM71 N corner	8/4/2022	10,800	
Pump base 9QVM71 SW corner	8/4/2022	1,379	

Pump base 9QVM71 SE corner	8/4/2022	2,416	
Seam E of 9QVM76	8/4/2022	696	
Seam W of 9QVM76	8/4/2022	Flameout	
SW corner of platform	8/4/2022	1,286	
W seam	8/4/2022	1,263	
DAF 2			
Opening SW of center (H6A)	8/4/2022	4,900	
W seam	8/4/2022	5,680	
N walkway, N edge (section 1 north)	8/4/2022	1,250	
N walkway edge plus 4' (section 2 north)	8/4/2022	2,000	
Above plus 4' (section 3 north)	8/4/2022	6,000	
N corner of center	8/4/2022	3,100	
N seam (center north)	8/4/2022	20,000	
SE corner of center	8/4/2022	10,700	
Center plus 4' (section 4 north)	8/4/2022	1,180	
N walkway 4' from edge (section 6 north)	8/4/2022	1,108	
Edge of tank lid on south side of tank	8/3/2022	30,000	
Duct tape patch crack	8/3/2022	839	
Angle iron at walkway	8/3/2022	6,300 and flameout	

Table 3: Records Review – Detectable Emissions at Oil-Water Separators Subject to Subpart FF

Location Description	Date	Reading (ppm)
API Separator (Fixed Roof Portion)		
H2	11/28/2018	596
	6/25/2019	1,803
H3	6/19/2018	561
	6/25/2019	784
	12/28/2020	M21[3]
	6/21/2022	662

[3] A reading of "M21" indicates that the leak was discovered during the Refinery's regular Method 21 inspections and reported in the Refinery's reports submitted pursuant to 40 C.F.R. Part 61, Subpart FF as a leak with detectable emissions that was repaired, and no specific ppm value was reported.

V1	12/28/2020	M21
H6	12/28/2020	M21
H8	11/28/2018	M21
	6/25/2019	864
H9	6/25/2019	798
H11	6/25/2019	989
	12/28/2020	M21
H14	11/28/2018	532
	6/25/2019	1,041
	12/28/2020	M21
H18	11/28/2018	564
	6/25/2019	3,786
	12/23/2019	608
	12/28/2020	M21
	6/21/2022	1,065
	11/29/2022	M21
H15	6/19/2018	1,052
	11/28/2018	3,494
	6/25/2019	1,653
	12/28/2020	M21
	6/21/2022	740
V9	12/23/2019	1,342
H16	11/28/2018	1,734
	6/25/2019	3,724
	12/28/2020	M21
H17	6/25/2019	1,147
	12/28/2020	M21
H28	6/19/2018	722
	11/28/2018	4,097
	6/25/2019	538
	12/28/2020	M21
H27	12/28/2020	M21
	5/18/2021	M21

H26	12/23/2019	7,526
	12/28/2020	M21
	5/18/2021	M21
H24	6/19/2018	728
	12/28/2020	M21
H23	12/23/2019	6,266
H22	12/23/2019	539
	12/28/2020	M21
	5/18/2021	M21
H20	12/28/2020	M21
Wall at Southeast corner, on East side	12/23/2019	5,425
Wall at south end, middle section	12/28/2020	M21
DAF 1		
Wall Seam 2	6/19/2018	2,453
	11/28/2018	998
	6/25/2019	1,042
	2/12/2020	2,341
	12/28/2020	M21
	6/21/2022	10,396
Wall Seam 1	6/19/2018	3,088
	11/28/2018	8,775
	6/25/2019	33,889
	12/23/2019	2,743
	2/12/2020	2,828
	6/21/2022	2,943
	7/26/2022	M21
Wall Seam 4	11/28/2018	1,430
	6/25/2019	2,114
	12/23/2019	1,600
	2/12/2020	1,310
	6/21/2022	1,135
Wall Seam 3	11/28/2018	9,160

	6/25/2019	17,199
	12/23/2019	2,760
	2/12/2020	1,284
	6/21/2022	3,529
	7/26/2022	M21
9QS23	11/28/2018	779
	6/25/2019	3,253
	12/23/2019	7,813
	2/12/2020	1,053
	5/18/2021	M21
	6/21/2022	7991
	7/26/2022	M21
F5	11/29/2022	M21
H2	6/19/2018	2,001
	11/28/2018	3,749
	12/12/2018	1,233
	12/23/2019	15,393
	2/12/2020	1,397
H3	6/19/2018	573
	11/28/2018	7,419
	12/23/2019	14,793
	2/12/2020	951
9QVM73 pump base	6/25/2019	1,306
	6/21/2022	4,067
	7/26/2022	M21
F6	7/26/2022	M21
V5	7/26/2022	M21
H1	6/19/2018	814
	6/25/2019	8,171
	12/23/2019	2,629
	2/12/2020	2,103
	5/18/2021	M21
	6/21/2022	5,508

V1	2/12/2020	1,056
9QVM75 pump base	6/19/2018	950
H4	6/19/2018	1,904
	5/18/2021	M21
H5	2/12/2020	961
9QVM76 pump base	12/23/2019	5,282
	2/12/2020	14,696
	5/18/2021	M21
	6/21/2022	1215
9QVM71 pump base	11/28/2018	1,386
	12/23/2019	502
	2/12/2020	1,556
	5/18/2021	M21
	6/21/2022	45,496
DAF 2		
Seam 8	6/19/2018	6,372
	11/28/2018	2,094
	6/25/2019	8,804
	2/12/2020	1,006
	12/28/2020	M21
	5/18/2021	M21
Seam 5	6/19/2018	2,129
	12/23/2019	2,137
	2/12/2020	5,017
	5/18/2021	M21
	6/21/2022	1931
Seam 6	6/19/2018	3,678
	6/25/2019	15,499
	12/23/2019	1,860
	2/12/2020	12,896
	5/18/2021	M21
	6/21/2022	825
Seam 7	6/19/2018	7,422

	6/25/2019	8,924
	5/28/2021	M21
	6/21/2022	2,545
	7/26/2022	M21
H6	6/25/2019	573
	6/21/2022	18,396
V6	6/19/2018	1,236
	5/18/2021	M21
	7/26/2022	M21
F13	7/26/2022	M21
9QVM74 pump base	6/25/2019	1,780
	12/23/2019	963
	2/12/2019	1,414
	7/26/2022	M21
9QS24 Hatch	6/19/2018	551
	6/25/2019	21,599
	12/23/2019	1,157
	2/12/2020	1,225
DAF 3		
9QVM98 pump base	6/19/2018	17,098
	6/25/2019	971
	12/23/2019	14,093
	2/12/2020	14,896
	5/18/2021	M21
	6/21/2022	2604
	11/29/2022	M21
H14	6/19/2018	13,798
H11	6/25/2019	7,767
	2/12/2020	14,996
	5/18/2021	M21
H12	12/23/2019	1,606
H13	6/19/2018	3,877
	11/28/2018	5,553

	2/12/2020	516
	6/21/2022	638
	11/29/2022	M21
V7	11/29/2022	M21
V8	11/29/2022	M21
F20	11/29/2022	M21
F17	11/29/2022	M21
Seam 9	6/21/2022	2,116
9QG90A pump base	11/29/2022	12,396

Table 4: 2021 CAA Inspection – Detectable Emissions at Individual Drain Systems Subject to Subpart FF

Description and Location	Inspection Date	Reading (ppm)
Tank Farm Area		
Tank 22 drain	8/30/2021	64,700
Tank 21 drain	8/30/2021	3,427
Tank 26 drain	8/30/2021	1,062
Tank 51 drain	8/30/2021	3,326
Tank 52 drain	8/30/2021	1,432
Tank 54 drain	8/30/2021	622
Tank 43 drain	8/30/2021	2,154
Tank 30 drain	8/30/2021	3,146
Tank 28 drain	8/30/2021	32,400
Tank 38 drain	8/30/2021	12,800
Tank 36 drain	8/30/2021	26,600
Tank 11 drain	8/30/2021	Flameout
Tank 17 drain	8/30/2021	2,537
Tank 4 drain	8/30/2021	2,201
Process Area		
Drum wash pad	8/27/2021	OGI; Flameout with Method 21 instrument
Drum wash pad	8/30/2021	OGI
Crude Unit (VPS) manhole	8/30/2021	OGI; Refinery measured 83,000 ppm along edge

Table 5: 2022 CAA Inspection – Detectable Emissions at Individual Drain Systems Subject to Subpart FF

Location Description	Inspection Date	Reading (ppm)
Tank Farm Area		
Tank 53 drain	8/2/2022	850 and 1,200
Tank 36 drain	8/2/2022	9,000
Tank 39 drain	8/2/2022	660
Tank 4 drain	8/2/2022	877
Tank 11 drain	8/2/2022	2,000
Tank 26 drain	8/2/2022	3,600
Tank 24 drain	8/2/2022	680 and 15,000
Tank 503 drain	8/2/2022	563
Tank 22 drain	8/2/2022	1043
Process Area		
Crude Unit (VPS) manhole	8/2/2022	OGI; 1,900 ppm
Manhole M-Hole-21	8/2/2022	OGI
Manhole MH5	8/2/2022	3,337
Manhole MH-21A	8/2/2022	4,500 and 75,000
Manhole D-7	8/2/2022	2,352
Manhole E-8	8/2/2022	Flameout
Manhole 8-F	8/2/2022	2,700, 10,400 and 668
Manhole C-8	8/2/2022	2,842 and 8,000

Table 6: 2022 CAA Inspection - Open Tank Drain Boxes Observed at Individual Drain Systems at the Tank Farm Area, Subject to Subpart FF

Location	Inspection Date	Identified Defect	Additional Information
Tank 40	8/2/2022	No cover on drain box, oily sheen on water was observed in the box	No repair
Tank 41	8/2/2022	Grated cover on drain box	No repair
Tank 38	8/2/2022	Grated opening in cover on drain box, measured leak at 698 ppm	
Tank 25	8/2/2022	Grated cover on drain box, oily water was observed in the box	No repair

Tank 28	8/2/2022	Unlatched hatch on the drain box cover, measured leak at 1,034 ppm	
Tank 52	8/2/2022	Unlatched hatch on the drain box cover	

Table 7: Records Review – Detectable Emissions Identified at Individual Drain Systems at the Tank Farm Area, Subject to Subpart FF

Location	Inspection Date	Reading (ppm)
Tank 54 drain	12/21/2018	949
Tank 43 drain	12/21/2018	4598
Tank 22 drain	10/29/2019	1579
Tank 36 drain	12/21/2018	59,400
	10/21/2020	881
Tank 11 drain	10/21/2020	1,396
Tank 38 drain	10/21/2020	1,979
Tank 17 drain	4/27/2020	10,000

Table 8: 2021 CAA Inspection – Detectable Emissions and Defects at API Separator (Floating Roof Portion) Subject to NSPS Subpart QQQ

Location and Description	Inspection Date	Reading (ppm)
C18 emergency roof drain was damaged with a hole in the top of the vent	8/27/2021	Visual
E5 hatch	8/27/2021	12,000
E7 hatch	8/27/2021	600
C29 hatch	8/27/2021	1,000
E29 hatch	8/27/2021	1,700
Seam between C2 and C3	8/27/2021	3,300

Table 9: 2022 CAA Inspection – Detectable Emissions and Defects at API Separator (Floating Roof Portion) Subject to NSPS Subpart QQQ

Location and Description	Inspection Date	Reading (ppm)	Additional Notes
Corner of E5	8/3/2022	1,365	
Hatch on E5	8/3/2022	24,000	
Corner of E4/E5	8/3/2022	3,672	
Corner of E3/E4	8/3/2022	16,600	

E2 secondary seal	8/3/2022	5,600	
E1 secondary seal	8/3/2022	4,938	
E1 SW secondary seal	8/3/2022	4,319	
E1 S seam	8/3/2022	819	No repair
E1 SE corner	8/3/2022	1,580	
W1 SW corner with large visible gap in secondary seal	8/3/2022	8,500	
Seam between W4 and W5	8/3/2022	862	
C5 west seam	8/3/2022	1,062	No repair
C3 west secondary seal	8/3/2022	1,600	
Seam between C2 and C3	8/3/2022	969	No repair
Corner secondary seal between C4 and C5	8/3/2022	981	
E6 east secondary seal	8/3/2022	922	
E6 south secondary seal	8/3/2022	6,700	
E6 west secondary seal	8/3/2022	1,800	
Seam and secondary seal between E7 and E8 with visible gap	8/3/2022	3,500	
Secondary seal between E8 and E9	8/3/2022	1,400	
Secondary seal between E9 and E10	8/3/2022	1,205	
Corner of E11 and E12	8/3/2022	1,901	
E13 secondary seal	8/3/2022	1,486	
Secondary seal between E13 and E14	8/3/2022	1,700	
Secondary seal between E15 and E16	8/3/2022	881	
E17 secondary seal	8/3/2022	910	
Secondary seal between E17 and E18	8/3/2022	1,048	
Seam between E19 and E20	8/3/2022	11,700	No repair
Seam corner of E21 and E22	8/3/2022	5,300	No repair
Secondary seal between E23 and E24	8/3/2022	6,300	
Secondary seal between E27 and E28	8/3/2022	Flameout	
E29 secondary seal	8/3/2022	2,688	
Corner of E29 with large visible gap	8/3/2022	6,800	
E29 north seal with visible gap	8/3/2022	1,384	
C29 east hatch	8/3/2022	1,182	No repair
E2 roof drain damaged with gaping panel	8/3/2022	Visual	No repair

W3 roof drain damaged with gaping panel	8/3/2022	Visual	
E16 roof drain damaged and coated in peeling sealant	8/3/2022	Visual	
W18 roof drain damaged with gaping panel	8/4/2022	Visual	No repair
Corner of W29 with large visible gap	8/4/2022	Visual	
Liquid with oil sheen on E2 roof panel	8/3/2022	Visual	No repair
Liquid with oil sheen on E1 roof panel	8/3/2022	Visual	No repair
Liquid with oil sheen on C5 roof panel	8/3/2022	Visual	
Liquid with oil sheen on C17 roof panel	8/3/2022	Visual	
Liquid with oil sheen on C18 roof panel	8/3/2022	Visual	No repair
Liquid with oil sheen on E25 roof panel	8/3/2022	Visual	No repair