Chevron Richmond Refinery Monthly Flare Data Report

Month: January 2019

Flare Name: <u>H2 Flare</u>

	Vent Gas Volume (SCF) (Note 7)	Emissions (lbs)		
Date	Daily Total Vent Gas (Note 6)	Methane	Non- methane	Sulfur Dioxide
1	594,158	192.7	18.9	0.2
2	21,485,888	5,242.8	440.5	25.2
3	31,152	16.3	1.6	0.0
4	47,343,891	3,127.8	347.6	10.9
5	62,027,731	8,339.2	405.7	12.5
6	54,532,237	9,287.5	392.6	11.9
7	6,723,071	2,325.9	134.9	2.1
8	36,199,619	5,622.0	229.2	2.6
9	6,812,676	1,268.0	39.4	0.2
10	134,568	80.0	10.6	0.2
11	383,989	184.1	48.2	0.2
12	102,580	75.0	8.9	0.0
13	10,807	7.8	0.9	0.0
14	36,183	21.1	2.5	0.0
15	2,475	1.7	0.2	0.0
16	87,685	42.1	4.0	0.0
17	134,997	63.7	6.6	0.0
18	28,050	12.8	1.0	0.0
19	149,453	67.7	7.2	0.0
20	42	0.0	0.0	0.0
21	23	0.0	0.0	0.0
22	333	0.2	0.0	0.0
23	12,618	8.7	1.0	0.0
24	68	0.0	0.0	0.0
25	148	0.1	0.0	0.0
26	132	0.1	0.0	0.0
27	207	0.1	0.0	0.0
28	211	0.2	0.0	0.0
29	185,609	129.9	14.5	0.1
30	594,165	325.4	37.2	0.2
31	375,653	271.1	30.5	0.2
Monthly Total	237,990,419	36,714.18	2,183.77	66.68

For any 24-hour period in January 2019, there were three events where more than 1 MMSCF of vent gas was flared from H2 flare. Natural gas is used for pilot gas and both natural gas and nitrogen are used as purge gas. The flow rates are measured by rotameters and coriolis meters. There was monitoring system downtime experienced during January 2019.