

DISCLAIMER: Sampling Plan will be updated/revised in coordination with Department of Health.

	SAMPLE TYPE	METHOD	LOCATIONS	FREQUENCY/DURATION	START DATE	REPORTING	NOTES
2.a.	Soil Vapor Concentrations	Photo-ionization Detector (PID)	Tanks 13, 14, 15, 16, 17, 18, 20 - At all available (2 or 3) soil vapor monitoring points (SVMPs) - Background reading at each tank - 20 May 21: Include Tanks 2-12	Daily, 7 days per week for 3 weeks	- 10-12 May 21: Initial PID readings at Tanks 13-16 - 13 May 21: Daily PID readings at Tanks 13-17 and 20 - 20 May 21: Include Tanks 2-12	- Excel spreadsheet - April monthly results	
2.b.	Summa Canister Samples	Method TO-15	Tanks 13, 14, 15, 16, 17, 18, 20 - At shallow SVMPs	- One time - Additional targeted sampling if increased trends in PID readings are observed	- 10 May 21: Initial Summa canister sample of tunnel air near the collection sump - 11 May 21: Summa canister sample at Tank 13 shallow SVMP - 13 May 21: With 4 canisters on hand, prioritize sampling of shallow SVMPs at tanks 20, 17, 16, and 15	- Laboratory report with chromatograms - Expedited laboratory turnaround time of 7 days	Evaluating method change to Modified TO-15 PIANO or TO-17 - Pending DOH Direction
2.c.	Headspace Monitoring	PID	RHMW01R, RHMW02, RHMW03 - 2 inches in well casing - Breathing zone 15 May 21: Include RHMW01 and RHMW05	Daily, 7 days per week for 3 weeks	- 12 May 21: Initial test at RHMW01R during GW sampling event - 13 May 21: Initial tests at RHMW01R, 02, 03 during GW sampling event - 15 May 21: Begin daily monitoring	Excel spreadsheet	
	Fuel Product Gauging	Oil/water interface probe	RHMW01R, RHMW02, RHMW03 15 May 21: Include RHMW01 and RHMW05	Daily, 7 days per week for 3 weeks	- 12 May 21: Initial test at RHMW01R during GW sampling event - 13 May 21: Initial tests at RHMW01R, 02, 03 during GW sampling event - 15 May 21: Begin daily monitoring	Excel spreadsheet	
	Groundwater Sampling	TPH-g/d/o, BTEX, 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene	RHMW01R, RHMW02, RHMW03	- Every Monday, Wednesday, and Friday for 3 weeks - Followed by normal quarterly LTM schedule	- 12-13 May 21: 1st sample collection - 19-20 May 21: 2nd sample collection - 24 May : Initiate three times a week sampling	- Laboratory report with chromatograms prior to data validation - Expedited laboratory turnaround time	

AVERAGE SOIL VAPOR CONCENTRATION READINGS

DATE	SV02 S	SV02 M	SV02 D	SV03 S	SV03 M	SV03 D	SV04 S	SV04 M	SV04 D	SV05 S	SV05 M	SV05 D	SV06 S	SV06 M	SV07 S	SV07 M	SV07 D	SV08 S	SV08 M	SV08 D	SV09 S	SV09 M	SV09 D	SV10 S	SV10 M/D	SV11 S	SV11 M/D	SV12 S	SV12 M	SV12 D	SV13 S	SV13 M	SV13 D	SV14 S	SV14 M	SV14 D	SV15 S	SV15 M	SV15 D	SV16 S	SV16 M	SV16 D	SV17 S	SV17 M	SV17 D	SV18 S	SV18 D	SV20 S	SV20 M	SV20 D
4/22/2021	241	234	248	180	175	446	149	157	186	187	416	1170	3993	243	293	235	477	263	238	227	222	223	367	269	242	259	257	304	368	346	770	693	550	404	361	475	175	NC2	170	207	185	191	289	320	363	1009	1184	223	173	184

DISCLAIMER: Preliminary Data: Undergoing Validation - Subject to Change.

Notes:

* Air compressor used to clear obstruction prior to collecting sample

** "M/D" monitoring points were constructed to screen both middle & deep depth intervals along the respective underground storage tank.

NC - Not collected

NC1 - Not collected due to tank maintenance

NC2 - Not collected due to obstruction in vapor line

Red Hill Bulk Fuel Storage Facility

Notice of Interest 20210507-0852 JP-5 spill that occurred on 6 May 2021

2.c. Monitoring Wells: RHMW01, RHMW01R, RHMW02, RHMW03, and RHMW05 - Headspace and Fuel Product Gauging

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DATE	RHMW01						RHMW01R						RHMW02						RHMW03						RHMW05						
	TIME	AMBIENT (ppmv)	HEADSPACE (ppmv)	DTW (ft btoc)	PRODUCT? (Yes/No)	THICKNESS (ft)	TIME	AMBIENT (ppmv)	HEADSPACE (ppmv)	DTW (ft btoc)	PRODUCT? (Yes/No)	THICKNESS (ft)	TIME	AMBIENT (ppmv)	HEADSPACE (ppmv)	DTW (ft btoc)	PRODUCT? (Yes/No)	THICKNESS (ft)	TIME	AMBIENT (ppmv)	HEADSPACE (ppmv)	DTW (ft btoc)	PRODUCT? (Yes/No)	THICKNESS (ft)	TIME	AMBIENT (ppmv)	HEADSPACE (ppmv)	DTW (ft btoc)	PRODUCT? (Yes/No)	THICKNESS (ft)	
5/12/2021	NC1	NC1	NC1	NC1	NC1	NC1	1553	2.2	0.1	83.69	No	NA	NC1	NC1	NC1	NC1	NC1	NC1	NC1	NC1	NC1	NC1	NC1	NC1	NC1	NC1	NC1	NC1	NC1	NC1	NC1
5/13/2021	NC1	NC1	NC1	NC1	NC1	NC1	1150	1.3	0.3	83.85	No	NA	1000	1.1	0.1	86.77	No	NA	1030	0.8	0.1	103.02	No	NA	NC1	NC1	NC1	NC1	NC1	NC1	NC1
5/15/2021	1111	5.158	3.902	83.97	No	NA	1103	5.158	0.378	83.76	No	NA	1123	4.833	0.594	86.66	No	NA	1128	3.985	0.413	102.88	No	NA	1048	5.094	0.345	83.38	No	NA	
5/16/2021	1105	4.463	3.508	83.87	No	NA	1110	4.463	0	83.63	No	NA	1123	4.054	0	86.57	No	NA	1143	3.548	0.036	102.79	No	NA	1049	4.753	0	83.24	No	NA	
5/17/2021	1310	5.415	5.100	83.96	No	NA	1304	5.170	0	83.73	No	NA	1328	7.511	0.174	86.62	No	NA	1336	3.314	0.280	102.83	No	NA	1318	5.601	0.140	83.33	No	NA	
5/18/2021	1307	2.53	2.15	83.95	No	NA	1304	2.53	0	83.74	No	NA	1315	5.056	0	86.66	No	NA	1324	0.965	0	102.87	No	NA	1256	2.174	0	83.39	No	NA	
5/19/2021	0856	2.482	2.165	83.99	No	NA	0859	2.482	0.200	83.78	No	NA	0907	1.926	0.270	86.68	No	NA	0917	1.149	0.105	102.94	No	NA	0848	2.556	0.260	83.48	No	NA	
5/19/2021	NC1	NC1	NC1	NC1	NC1	NC1	1400	0.3	0.0	83.74	No	NA	1600	0.1	0.0	86.67	No	NA	1620	0.1	0.0	102.91	No	NA	NC1	NC1	NC1	NC1	NC1	NC1	
5/20/2021	0939	1.476	1.290	84.00	No	NA	0942	1.476	0.204	NM	NA	NA	0947	1.040	0.180	NM	NA	NA	1128	0.811	0.068	NM	NA	NA	0931	1.622	0.130	83.42	No	NA	
5/20/2021	NC1	NC1	NC1	NC1	NC1	NC1	1130	1.7	0.2	83.81	No	NA	1015	0.7	0.0	86.74	No	NA	1210	1.1	0.0	102.93	No	NA	NC1	NC1	NC1	NC1	NC1	NC1	
5/21/2021	0724	1.562	1.378	84.03	No	NA	0722	1.562	NM	NM	NA	NA	1056	1.339	0.202	86.74	No	NA	1048	0.689	0.181	102.95	No	NA	0717	1.456	0.080	83.44	No	NA	
5/21/2021	NC1	NC1	NC1	NC1	NC1	NC1	1500	0.2	0.4	83.81	No	NA	1540	0.1	0.1	86.72	No	NA	1622	0.1	0	102.94	No	NA	NC1	NC1	NC1	NC1	NC1	NC1	
5/22/2021	0745	3.440	3.202	84.05	No	NA	0750	3.440	0.227	83.84	No	NA	0945	3.386	0.590	86.73	No	NA	1246	4.060	0.507	102.97	No	NA	0734	3.525	0.152	83.44	No	NA	

DTW = Depth-to-water

ft = feet

ft btoc = feet below top of casing

NA = Not applicable

NM = No measurement taken, due to equipment installed in well.

ppmv = parts-per-million, volume

NC1- Not collected due to headspace and fuel product gauging occurring only where groundwater sampling was being conducted.