



DEPARTMENT OF THE NAVY
COMMANDER
NAVY REGION HAWAII
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Ser N45/300
April 10, 2015

CERTIFIED NO: 7014 1200 0000 9858 9668

Mr. Richard Takaba
Hawaii State Department of Health
Environmental Management Division
Solid and Hazardous Waste Branch
Underground Storage Tank Section
919 Ala Moana Boulevard, Room 212
Honolulu, HI 96814

Dear Mr. Takaba:

SUBJECT: RED HILL TANK COMPLEX
SOIL VAPOR SAMPLING RESULTS FOR MARCH 2015
DOH FACILITY ID NO. 9-102271
DOH RELEASE ID NO. 990051, 010011, 020028, AND 140010

Soil vapor samples were collected from beneath all active and accessible Red Hill Tanks on March 26, 2015.

Soil vapor samples were analyzed in the field for VOC concentrations using a photo-ionization detector. The soil vapor sampling results are being submitted as Enclosure 1.

A conservative approach is to assess the integrity of the associated tank system if VOC concentrations exceed 280,000 ppbv in soil vapor monitoring points (SVMPs) beneath tanks containing JP-5 or JP-8, or 14,000 ppbv in soil vapor monitoring probes beneath tanks containing marine diesel fuel. These values are 50 percent of the calculated vapor concentration from fuel-saturated water.

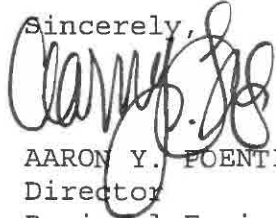
The SVMPs were previously sampled in February 2015. Since the previous event, soil vapor VOC concentrations decreased at least 50 percent in all SVMPs at Tank 10, and in SVMPs SV03S, SV03M, SV05D, SV07S, and SV16S. Soil vapor VOC concentrations increased at least 100 percent in all SVMPs at Tanks 17 and 20, and in SVMPs SV02S, SV04D, SV08M, SV11M, SV12M, SV12D, SV13S, SV13M, SV14S, SV14M, and SV16D. Soil vapor VOC concentrations in the remaining SVMPs were generally consistent with the February monitoring event.

Concentrations of VOCs detected in the front, middle, and outer edge soil vapor monitoring probes at Tank 5 were 75,200 ppbv, 88,900 ppbv, and 73,800 ppbv, respectively.

The next soil vapor sampling event is tentatively scheduled for April 2015, and will include collecting samples from soil vapor monitoring probes beneath all active and accessible tanks.

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If there are any questions regarding this matter, or if more information is needed, please contact Ms. Raelynn Kishaba at (808) 471-1171, extension 233.

Sincerely,


AARON Y. POENTIS
Director
Regional Environmental Department
By direction of the
Commander

Enclosure: 1. Summary of Soil Vapor Sampling Results for Tanks 2 through 18 and 20 through March 2015 (36 pages)

Copy to: LCDR Andrew Lovgren, NAVSUP FLC Pearl Harbor
Mr. Rockne Krill, DLA Energy Pacific

Table 1
Soil Vapor Results for SV02
Soil Vapor Monitoring Letter Report
Red Hill Bulk Fuel Storage Facility

Date	SV02S	SV02M	SV02D
3/24/2008	NC	NC	NC
5/6/2008	129	252	157
5/29/2008	1785	1217	657
7/3/2008	1090	984	525
7/31/2008	728	677	437
9/2/2008	754	693	434
9/29/2008	520	553	456
10/23/2008	493	555	413
11/25/2008	3396	1762	2792
1/14/2009	89	329	312
2/5/2009	188	264	202
2/26/2009	1912	348	184
4/1/2009	169	195	102
4/20/2009	704	557	504
5/27/2009	1473	835	799
6/29/2009	2141	659	511
7/20/2009	1360	628	544
8/28/2009	564	318	258
9/24/2009	488	294	241
10/29/2009	999	425	533
11/19/2009	305	283	241
12/16/2009	356	284	238
1/28/2010	684	283	299
2/22/2010	364	159	135
3/25/2010	394	340	277
4/28/2010	385	282	209
5/26/2010	374	252	294
6/28/2010	400	253	223
7/28/2010	332	232	205
9/29/2010	224	217	207
10/18/2010	525	577	565
11/16/2010	303	424	338
12/14/2010	313	416	330
1/14/2011	494	357	651
2/15/2011	280	298	283
3/15/2011	221	208	217
4/18/2011	327	270	305
5/18/2011	980	562	755
6/22/2011	184	205	162
7/27/2011	101	83	86
9/22/2011	318	268	313
10/27/2011	270	241	211
11/22/2011	235	226	183
12/16/2011	408	333	397

Date	SV02S	SV02M	SV02D
1/20/2012	103	111	239
2/23/2012	132	167	161
3/13/2012	222	155	58
4/16/2012	115	92	149
5/15/2012	146	145	131
6/19/2012	292	276	230
7/10/2012	206	184	194
8/14/2012	389	362	348
10/24/2012	166	139	144
11/26/2012	101	72	110
12/18/2012	106	83	97
1/31/2013	546	914	966
2/28/2013	47	26	18
3/28/2013	12	12	5
4/25/2013	13	15	18
5/30/2013	204	153	176
6/27/2013	13	15	15
7/25/2013	258	252	316
8/29/2013	165	28	11
9/26/2013	304	263	306
10/24/2013	281	271	285
11/21/2013	186	172	140
12/23/2013	21	33	61
1/30/2014	11	11	8
2/24/2014	135	51	82
3/5/2014	1	0	0
3/10/2014	1	11	1
3/25/2014	146	19	47
4/7/2014	575	342	308
4/22/2014	739	610	662
5/8/2014	481	308	333
5/21/2014	344	280	278
5/27/2014	481	697	413
6/11/2014	527	475	468
6/23/2014	170	183	169
7/21/2014	527	392	426
8/27/2014	180	105	199
9/25/2014	1028	827	830
10/29/2014	409	227	164
11/20/2014	194	167	309
12/23/2014	810	811	715
1/28/2015	3808	2150	2530
2/27/2015	129	160	133
3/26/2015	360	115	176

ppbv: parts per billion by volume
 NC: Not collected

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Figure 1
Soil Vapor Measurements
SV02

