

October 11, 2010

Mr. Paul Cho, PG, Site Cleanup Unit IV  
California Environmental Protection Agency  
California Regional Water Quality Control Board, Los Angeles Region  
320 W. 4<sup>th</sup> Street, Suite 200  
Los Angeles, California 90013

**Re: 2010 Third Quarter Groundwater Monitoring Results**  
**DFSP Norwalk Facility, Norwalk**  
NPDES No. CAC834001  
File No. 90-02

Dear Mr. Cho:

Parsons is transmitting the groundwater monitoring results for the 2010 third quarter sentry event at the DFSP Norwalk Facility in Norwalk, California. A summary of the results is presented here and the details, including field and laboratory reports, will be included in the second 2010 semiannual report that will be prepared by Parsons and include the KMEP data.

Groundwater gauging, monitoring, sample collection and laboratory analyses were performed in accordance with the sampling plan. Field activities included measuring water levels and free product thicknesses and purging and sampling of the designated wells. Ninety wells have been gauged for groundwater levels and free product. Groundwater elevations and LNAPL thickness are presented in Table 1.

In addition, fifteen wells were purged and sampled on July 12 and 13, 2010. Wells sampled by Blaine Tech Services, Inc. on behalf of Parsons were purged and sampled using low-flow methods in general conformance with ASTM D6771-02. All purged groundwater was transferred to the onsite groundwater treatment system.

All groundwater samples were labeled, entered onto a chain-of-custody form, and delivered to Calscience Environmental Laboratories, Inc., a State-certified analytical laboratory in Garden Grove, California. Groundwater samples were analyzed using U.S. Environmental Protection Agency (EPA) Method 8015 modified for total petroleum hydrocarbons (TPH) as jet propellant 5 (TPH as JP5). Groundwater samples were also analyzed for volatile organic compounds (VOCs) using EPA Method 8260B, which includes methyl-t-butyl ether (MTBE) and oxygenates. Some selected samples were also analyzed for TPH as gasoline (TPHg). Table 2 presents a summary of analytical results for TPH, BTEX, and MTBE detected in the sampled wells. Table 3 presents a summary of miscellaneous VOC compounds detected in groundwater.

TPH was not detected in groundwater samples collected from the Exposition aquifer monitoring wells, EXP-1, EXP-2, or EXP-3. However, as shown on Table 2, there was one detection of

## 2010 Third Quarter Groundwater Monitoring Results

MTBE in EXP-3 at 0.39 micrograms per liter ( $\mu\text{g/L}$ ). This detection is most-likely not a true result but either a cross-contamination issue or lab anomaly. This well will be sampled again in the 4<sup>th</sup> quarter.

TPH as JP5 was detected in eight of the sampled wells, with GMW-62 indicating the highest concentration at 2,600  $\mu\text{g/L}$ . The detected TPH as JP5 concentration of 2,600  $\mu\text{g/L}$  is higher comparing to concentration reported during previous semi-annual sampling report (430  $\mu\text{g/L}$  in April 14, 2010). TPHg was analyzed and detected at four wells, with a maximum concentration of 4,600J  $\mu\text{g/L}$  at GMW-62, which is also higher than the previous quarter. GMW-62 is sampled quarterly.

Benzene was detected in seven wells sampled, with the highest concentration present in GMW-62 (1,000  $\mu\text{g/L}$ ) which is lower than the previous quarter (April 2010). GMW-62 also contained the highest concentrations of toluene (0.49  $\mu\text{g/L}$ ), ethylbenzene (200  $\mu\text{g/L}$ ) and total xylenes (159  $\mu\text{g/L}$ ). MTBE was detected in four wells with the highest concentration of 3.5  $\mu\text{g/L}$  at MW-14. TBA was detected in two wells with concentrations of 13  $\mu\text{g/L}$  and 8.2  $\mu\text{g/L}$  (9.4  $\mu\text{g/L}$  in a field duplicate) in wells GMW-47 and GMW-59, respectively.

Other VOCs detected during this sampling quarter included 1,1-dichloroethane, 1,2-dichloropropane, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, ethanol, diisopropyl ether, isopropylbenzene, naphthalene, n-butylbenzene, n-propylbenzene, p-isopropylbenzene, sec-butylbenzene, and tert-butylbenzene. Summary of miscellaneous VOC compounds detected is presented in Table 3.

The information presented in this letter-report will also be included in the 2010 second semiannual groundwater monitoring report for the site. If you have any questions, please call me at 602-734-1083 or Mary Lucas at 626-440-6032.

Sincerely,



Redwan Hassan, PG  
Project Manager

**PARSONS**

**Attachments:** Table 1 – Groundwater Elevations  
Table 2 – Summary of Groundwater Analytical Data  
Table 3 – Summary of Miscellaneous Compounds Detected in Groundwater



2010 Third Quarter Groundwater Monitoring Results

**Distribution:**

Mr. Kola Olowu, DESC-FQ  
Lt. Col. Jon Ramer, DESC  
Mr. Tim Whyte, URS  
Ms. Adriana Figueroa, City of Norwalk  
Mr. Thomas Lynch, City of Norwalk  
Mr. Norman Dupont, City of Norwalk Attorney  
Mr. Charles Emig, City of Cerritos  
Ms. Nancy Matsumoto, Water Replenishment District of So. CA  
Mr. Steve Defibaugh, KMEP  
Mr. Mark Wuttig, CH2M Hill  
Mr. Dan Jablonski, CH2M Hill  
Ms. Mary Lucas, Parsons  
Office of Congresswoman Grace Napolitano

RAB Members

Ms. Mary Jane McIntosh  
Dr. Eugene Garcia  
Mr. Bob Hoskins  
Ms. Tracy Winkler



**Table 1**  
**Groundwater Elevations**  
**Third Quarter 2010 Sentry Event**  
 Defense Fuel Support Point, Norwalk  
 Norwalk, California

Well	Date	Casing Diameter (inches)	Casing Elevation (ftmsl)	Depth to LNAPL (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Groundwater Elevation (ftmsl)
EXP-1	7/8/2010	4	78.44	--	55.77	--	22.67
EXP-2	7/9/2010	4	79.43	--	56.12	--	23.31
EXP-3	7/8/2010	4	77.58	--	54.89	--	22.69
GMW-5	7/8/2010	4	77.61	--	30.46	--	47.15
GMW-6	7/8/2010	4	77.31	--	29.87	--	47.44
GMW-7	7/8/2010	4	75.84	--	28.46	--	47.38
GMW-11	7/8/2010	4	72.90	--	25.49	--	47.41
GMW-12	7/8/2010	4	75.21	--	27.3	--	47.91
GMW-14	7/8/2010	4	74.72	--	26.99	--	47.73
GMW-15	7/8/2010	4	76.21	Sheen	28.81	0.00	47.40
GMW-16	7/9/2010	4	77.00	--	29.85	--	47.15
GMW-17	7/8/2010	4	74.66	--	26.35	--	48.31
GMW-18	7/8/2010	4	75.36	--	27.69	--	47.67
GMW-19	7/8/2010	4	76.83	--	29.41	--	47.42
GMW-20	7/8/2010	4	75.10	--	27.49	--	47.61
GMW-21	7/9/2010	4	76.23	--	--	--	--
GMW-31	7/8/2010	4	76.50	--	29.24	--	47.26
GMW-32	7/8/2010	4	74.62	--	26.91	--	47.71
GMW-33	7/8/2010	4	74.88	--	27.23	--	47.65
GMW-34	7/8/2010	4	75.25	--	27.52	--	47.73
GMW-35	7/8/2010	4	76.12	--	28.56	--	47.56
GMW-40	7/9/2010	4	73.13	--	25.66	--	47.47
GMW-42	7/8/2010	4	75.50	--	28.01	--	47.49
GMW-43	7/8/2010	4	74.44	--	26.98	--	47.46
GMW-44	7/8/2010	4	74.45	--	27.18	--	47.27
GMW-45	7/8/2010	4	75.67	--	28.31	--	47.36
GMW-47	7/8/2010	4	75.98	--	28.55	--	47.43
GMW-48	7/8/2010	4	75.03	--	26.68	--	48.35
GMW-49	7/8/2010	4	74.75	Sheen	26.14	0.00	48.61
GMW-50	7/8/2010	4	75.51	--	27.92	--	47.59
GMW-51	7/8/2010	4	75.93	--	28.33	--	47.60
GMW-52	7/8/2010	4	75.03	--	27.21	--	47.82
GMW-53	7/8/2010	4	74.90	--	27.1	--	47.80
GMW-54	7/8/2010	4	75.16	--	27.53	--	47.63
GMW-55	7/8/2010	4	74.60	--	27.03	--	47.57
GMW-56	7/8/2010	4	76.52	--	29.13	--	47.39
GMW-57	7/8/2010	4	76.66	--	29.2	--	47.46
GMW-58	7/8/2010	4	75.48	--	27.22	--	48.26
GMW-59	7/8/2010	4	75.28	--	26.45	--	48.83
GMW-60	7/8/2010	4	76.24	--	28.72	--	47.52
GMW-61	7/8/2010	4	75.60	--	27.97	--	47.63
GMW-62	7/9/2010	4	76.34	Sheen	28.65	0.00	47.69
GMW-63	7/9/2010	4	77.32	--	29.74	--	47.58
GMW-64	7/8/2010	4	75.84	--	27.91	--	47.93
GMW-65	7/9/2010	4	76.78	--	29.16	--	47.62
GMW-66	7/8/2010	4	77.00	--	29.57	--	47.43
GW-1	7/9/2010	1	75.46	--	29.24	--	46.22
GW-2	7/9/2010	1	76.39	--	--	--	--
GW-4	7/9/2010	1	74.77	--	--	--	--

**Table 1**  
**Groundwater Elevations**  
**Third Quarter 2010 Sentry Event**  
 Defense Fuel Support Point, Norwalk  
 Norwalk, California

Well	Date	Casing Diameter (inches)	Casing Elevation (ftmsl)	Depth to LNAPL (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Groundwater Elevation (ftmsl)
GW-5	7/9/2010	4	76.99	--	30.05	--	46.94
GW-6	7/9/2010	4	76.38	--	29.34	--	47.04
GW-7	7/8/2010	1	76.76	--	27.89	--	48.87
GW-8	7/9/2010	4	76.15	--	29.19	--	46.96
GW-13	7/9/2010	1	77	--	30.22	--	46.78
GW-14	7/8/2010	6	76.54	--	29.13	--	47.41
GW-15	7/9/2010	1	75.36	Sheen	28.14	0.00	47.22
GW-16	7/8/2010	6	76.33	--	28.89	--	47.44
GW-16P	7/8/2010	1	76.55	--	29.18	--	47.37
MW-10	7/9/2010	4	79.12	--	32.15	--	46.97
MW-11	7/8/2010	4	78.17	--	30.94	--	47.23
MW-12	7/8/2010	4	75.76	--	28.25	--	47.51
MW-13	7/8/2010	4	78.25	Sheen	30.89	0.00	47.36
MW-14	7/9/2010	4	78.60	--	31.91	--	46.69
MW-16	7/8/2010	4	76.87	--	29.1	--	47.77
MW-17	7/8/2010	4	77.86	--	30.26	--	47.60
MW-22 (MID)	7/9/2010	4	79.57	--	34.16	--	45.41
MW-23 (MID)	7/9/2010	4	79.59	--	32.39	--	47.20
MW-24	7/9/2010	4	78.51	--	31.78	--	46.73
MW-25	7/9/2010	4	79.15	--	32.38	--	46.77
MW-26	7/9/2010	4	77.40	Sheen	30.38	0.00	47.02
MW-27	7/9/2010	4	78.46	--	31.19	--	47.27
MW-28	7/8/2010	4	78.53	--	30.97	--	47.56
MW-29	7/8/2010	4	79.13	--	31.48	--	47.65
PZ-3	7/8/2010	2	76.17	--	28.73	--	47.44
PZ-4	7/8/2010	2	76.13	--	28.73	--	47.40
TF-8	7/8/2010	4	74.86	Sheen	27.71		47.15
TF-9	7/8/2010	4	74.47	--	26.96		47.51
TF-10	7/8/2010	4	73.61	--	26.12	--	47.49
TF-11	7/8/2010	4	74.40	--	27.49	--	46.91
TF-13	7/8/2010	4	75.47	--	28.49	--	46.98
TF-14	7/8/2010	4	74.35	--	27.29	--	47.06
TF-15	7/8/2010	4	74.78	--	27.89	--	46.89
TF-16	7/8/2010	4	75.89	--	28.39	--	47.50
TF-17	7/8/2010	4	74.88	Sheen	27.44	0.00	47.44
TF-19	7/8/2010	4	75.61	--	27.94	--	47.67
TF-20	7/9/2010	1.5	75.59	--	28.31	--	47.28
TF-21	7/9/2010	4	75.60	--	27.34	--	48.26
TF-22	7/8/2010	1.5	74.95	--	26.44	--	48.51
TF-23	7/8/2010	4	75.31	--	27.51	--	47.80
TF-24	7/9/2010	4	76.43	--	29.36	--	47.07
TF-25	7/8/2010	4	74.85	--	27.49	--	47.36
TF-26	7/9/2010	4	75.85	--	--	--	--
WCW-1	7/9/2010	4	72.86	--	25.43	--	47.43
WCW-5	7/9/2010	4	73.49	--	25.96	--	47.53
WCW-6	7/9/2010	4	75.52	--	28.35	--	47.17

**Table 2**  
**Summary of Groundwater Analytical Data**  
**Third Quarter 2010 Sentry Event**  
 Defense Fuel Support Point, Norwalk  
 Norwalk, California

Results reported in micrograms per liter (µg/L)

Well	Sample Date	TPH as JP5 <sup>1</sup>	TPHg <sup>2</sup>	Benzene	Toluene	Ethyl-benzene	O-xylene	P/M-xylene	1,2-DCA <sup>3</sup>	MTBE <sup>4</sup>	TBA <sup>5</sup>
EXP-1	7/12/2010	< 100	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 10
EXP-2	7/12/2010	< 100	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 10
EXP-3	7/12/2010	< 100	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<b>0.39</b>	< 10
GMW-47	7/13/2010	<b>1400</b>	--	<b>0.45</b>	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<b>13</b>
GMW-57	7/13/2010	<b>100</b>	--	<b>0.44</b>	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 10
GMW-58	7/13/2010	<b>280</b>	--	<b>4.8</b>	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<b>0.41</b>	< 10
GMW-58 DUP	7/13/2010	<b>380</b>	--	<b>4.8</b>	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<b>0.4</b>	< 10
GMW-59	7/13/2010	<b>1600</b>	<b>2400 J</b>	<b>210</b>	< 1.0	<b>0.77</b>	< 1.0	< 1.0	< 1.0	<b>1.2</b>	<b>8.2</b>
GMW-59 DUP	7/13/2010	<b>1400</b>	--	<b>210</b>	< 1.0	<b>0.82</b>	< 1.0	< 1.0	< 1.0	<b>1.4</b>	<b>9.4</b>
GMW-60	7/13/2010	<b>1200</b>	<b>3100 J</b>	<b>700</b>	< 0.50	<b>12</b>	< 0.50	< 0.50	< 0.50	< 0.50	< 10
GMW-61	7/13/2010	<b>710</b>	<b>970 J</b>	<b>320</b>	<b>0.46</b>	<b>1.2</b>	<b>0.54</b>	< 0.50	< 0.50	< 0.50	< 10
GMW-62	7/12/2010	<b>2600</b>	<b>4600 J</b>	<b>1000</b>	<b>0.49</b>	<b>200</b>	<b>99</b>	<b>60</b>	< 0.50	< 0.50	< 10
GMW-63	7/13/2010	< 100	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 10
GMW-64	7/12/2010	< 100	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 10
GMW-65	7/12/2010	< 100	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 10
MW-14	7/12/2010	< 100	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<b>3.5</b>	< 10
MW-22 MID	7/12/2010	<b>100 J</b>	--	--	--	--	--	--	--	--	--

Notes:

<sup>1</sup>TPH as JP5 = total petroleum hydrocarbons against a jet propellant 5 standard.

<sup>2</sup>TPHg = total petroleum hydrocarbons against a gasoline standard.

<sup>3</sup>1,2-DCA = 1,2-Dichloroethane.

<sup>4</sup>MTBE = Methyl tert-butyl ether.

<sup>5</sup>TBA = Tert-butyl alcohol.

<sup>6</sup>< 100 = compound not detected at or above the indicated reporting limit.

<sup>7</sup>Dup = duplicate.

**Table 3**  
**Summary of Miscellaneous VOC Compounds Detected in Groundwater**  
**Third Quarter 2010 Sentry Event**  
 Defense Fuel Support Point, Norwalk  
 Norwalk, California

Results reported in micrograms per liter (µg/L)

Well	Sample Date	1,1-Dichloroethane	1,2-Dichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Ethanol	Diisopropyl Ether (DIPE)	Isopropylbenzene	Naphthalene	n-Butylbenzene	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	tert-Butylbenzene
EXP-1	7/12/2010	< 1.0	< 1.0	< 1.0	< 1.0	< 100	< 2.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
EXP-2	7/12/2010	< 1.0	< 1.0	< 1.0	< 1.0	< 100	< 2.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
EXP-3	7/12/2010	< 1.0	< 1.0	< 1.0	< 1.0	< 100	< 2.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
GMW-47	7/13/2010	< 1.0	< 1.0	< 1.0	< 1.0	< 100	< 2.0	<b>4.9</b>	< 10	< 1.0	< 1.0	< 1.0	<b>0.69</b>	<b>0.45</b>
GMW-57	7/13/2010	< 1.0	< 1.0	< 1.0	< 1.0	< 100	< 2.0	<b>0.75</b>	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
GMW-58	7/13/2010	<b>0.71</b>	< 1.0	< 1.0	< 1.0	< 100	< 2.0	<b>3.1</b>	< 10	< 1.0	< 1.0	< 1.0	<b>0.34</b>	< 1.0
GMW-58 DUP	7/13/2010	<b>0.71</b>	< 1.0	< 1.0	< 1.0	< 100	< 2.0	<b>3.2</b>	< 10	< 1.0	< 1.0	< 1.0	<b>0.36</b>	< 1.0
GMW-59	7/13/2010	< 2.0	< 2.0	< 2.0	< 2.0	< 200	< 4.0	<b>30</b>	<b>6.9</b>	<b>1.2</b>	<b>28</b>	< 2.0	<b>3.7</b>	<b>0.66</b>
GMW-59 DUP	7/13/2010	< 2.0	< 2.0	< 2.0	< 2.0	< 200	< 4.0	<b>31</b>	<b>6.9</b>	<b>1.2</b>	<b>29</b>	< 2.0	<b>3.7</b>	<b>0.69</b>
GMW-60	7/13/2010	< 1.0	<b>3.9</b>	< 1.0	< 1.0	<b>53</b>	< 2.0	<b>96</b>	<b>120</b>	<b>4.1</b>	<b>95</b>	< 1.0	<b>13</b>	<b>1.3</b>
GMW-61	7/13/2010	< 1.0	< 1.0	< 1.0	< 1.0	< 100	< 2.0	<b>68</b>	< 10	<b>2.7</b>	<b>51</b>	< 1.0	<b>9.3</b>	<b>0.91</b>
GMW-62	7/12/2010	<b>0.44</b>	< 1.0	<b>270</b>	<b>83</b>	< 100	< 2.0	<b>78</b>	<b>41</b>	< 1.0	<b>53</b>	<b>13</b>	<b>13</b>	< 1.0
GMW-63	7/13/2010	< 1.0	< 1.0	< 1.0	< 1.0	< 100	< 2.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
GMW-64	7/12/2010	< 1.0	< 1.0	< 1.0	< 1.0	< 100	< 2.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
GMW-65	7/12/2010	< 1.0	< 1.0	< 1.0	< 1.0	< 100	< 2.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-14	7/12/2010	< 1.0	< 1.0	< 1.0	< 1.0	< 100	< 2.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-22 MID	7/12/2010	< 1.0	< 1.0	< 1.0	< 1.0	< 100	<b>2.6</b>	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Notes:

<sup>1</sup><1.0 = compound not detected at or above the indicated reporting limit.