



5 June 2002

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NSB NEW LONDON

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Mr. Donald Gonyea  
Bureau of Water Management, PERD  
Connecticut Department of Environmental Protection  
79 Elm Street  
Hartford, Connecticut 06106-5127

RE: Annual Ground-Water Monitoring Reports for the Navy Exchange Service Station  
and Dolphin Mart, Naval Submarine Base – New London, Groton, Connecticut  
EA Project No. 29601.03

Dear Mr. Gonyea:

Please find enclosed one copy each of the following reports:

- Annual Ground-Water Monitoring Report for the Navy Exchange Service Station, Naval Submarine Base New London, Groton, Connecticut
- Annual Ground-Water Monitoring Report for the Dolphin Mart, Naval Submarine Base New London, Groton, Connecticut.

These reports provide quarterly ground-water monitoring results for the period of June 2001 – February 2002 at the Navy Exchange (NEX) Service Station and Dolphin Mart sites. The reports also include a summary of ground-water analytical data collected during previous monitoring events conducted during the period of March 1995 – February 2001. Active remediation has been completed at both sites through the implementation of separate soil vapor extraction/air sparging systems. Quarterly ground-water monitoring continues to be conducted at both sites to document ground-water quality improvement via natural attenuation and to ensure that residual dissolved-phase petroleum hydrocarbons are not migrating offsite.

Please note that the Navy is requesting to remove several monitoring wells (including DM-2, MW-1, OBG-9A, and WE-2D) from the quarterly ground-water monitoring program at the Dolphin Mart site. The Navy is also requesting to eliminate the requirement for methyl tertiary-butyl ether analysis in future ground-water samples collected from the Dolphin Mart site. Supportive discussions for the removal of the above referenced monitoring wells and for elimination of future methyl tertiary-butyl ether analysis from the quarterly monitoring program are provided in the Annual Ground-Water Monitoring Report prepared for the Dolphin Mart.

The Navy is also requesting to remove one monitoring well (MW-4) from the quarterly ground-water monitoring program at the NEX Service Station. Supportive discussion for this action is provided in the Annual Ground-Water Monitoring Report prepared for the NEX Service Station.

To provide further analytical data in support of the above requests to modify the scope of the ground-water monitoring programs at the NEX Service Station and Dolphin Mart sites, preliminary review copies of the May 2002 ground-water analytical data are attached to this letter (Tables 1 and 2). These data will be officially submitted (together with laboratory chain-of-custody and Form I documents) with the Annual Monitoring Reports prepared for the May 2002 – February 2003 quarterly monitoring period.

The next quarterly monitoring event for each site is scheduled to occur during August 2002. The Navy would appreciate your review of the enclosed reports and response to the requests to modify the scope of the ground-water monitoring programs prior to 15 August 2002 in order to incorporate program modifications (as approved by Connecticut Department of Environmental Protection).

If you should have any questions or require additional information, please do not hesitate to contact me at (845) 565-8100.

Respectfully,



Curtis J. Varner, P.E.  
CTO Manager

CJV/caw  
Enclosures

cc: B. Helland, EFANE (w/o enclosures)  
D. Conant, NSB-NLON (w/o enclosures)  
D. McClure, EA (w/o enclosures)

TABLE 1 SUMMARY OF ANALYTICAL RESULTS FOR GROUND-WATER SAMPLES COLLECTED ON 17 MAY 2002  
NAVY EXCHANGE SERVICE STATION, NAVAL SUBMARINE BASE NEW LONDON, GROTON, CONNECTICUT

Analyte	ERM-5	ERM-5 DUP	FD-1	FD-2	MW-4	OBG-1	OBG-2	OBG-4	Trip Blank	Ground-Water Residential Volatilization Criteria <sup>(a)</sup>
<b>VOLATILE ORGANIC COMPOUNDS BY U.S. ENVIRONMENTAL PROTECTION AGENCY METHOD 8260B (µg/L)</b>										
Benzene	3.3	3.24	29.8	98.7	129D	88.2	45.4	78.9	(<1.0U)	215
Toluene	(<1.0U)	(<1.0U)	1.02	1.1	77.6D	20.8	(<1.0U)	(<1.0U)	(<1.0U)	23,500
Ethylbenzene	(<1.0U)	(<1.0U)	123D	24.7	266D	77.0	48.1	55.2	(<1.0U)	50,000
Xylenes	(<2.0U)	(<2.0U)	7.79	(<2.0U)	291D	279D	54.8	(<2.0U)	(<2.0U)	21,300
Total BTEX	3.3	3.24	161.6	124.5	764	465	148.3	134.1	ND	NA
MTBE	(<1.0U)	(<1.0U)	61.5	492D	(<1.0U)	270D	437D	11,800D	(<1.0U)	50,000
<b>TOTAL PETROLEUM HYDROCARBONS BY U.S. ENVIRONMENTAL PROTECTION AGENCY METHOD 8100M (µg/L)</b>										
Total petroleum hydrocarbons	600	300J	900	2,800	1,700	2,200	2,600	600	NA	NA
(a) Residential Volatilization Criteria for Ground-Water from Appendix E of Section 22a-133K-3 of the Regulations of Connecticut State Agencies (1995).										
NOTE: DUP = Duplicate sample.										
D = Analysis at a secondary dilution factor.										
U = Not detected. Sample quantitation limits shown as (<_U).										
BTEX = Benzene, toluene, ethylbenzene, and total xylene.										
NA = Not applicable.										
ND = Not detected.										
MTBE = Methyl tertiary-butyl ether.										
J = Estimated concentration below detection limit.										

TABLE 2 SUMMARY OF ANALYTICAL RESULTS FOR GROUND-WATER SAMPLES COLLECTED ON 16 MAY 2002  
DOLPHIN MART, NAVAL SUBMARINE BASE NEW LONDON, GROTON, CONNECTICUT

Analyte	MW-1	MW-2	MW-2 DUP	MW-3	OGB-8A	OGB-9A	WE-2S	WE-2D	WE-4	WE-5	WE-6	DM-2	DM-4	Trip Blank	Ground- Water Protection Criteria <sup>(a)</sup>
<b>VOLATILE ORGANIC COMPOUNDS BY U.S. ENVIRONMENTAL PROTECTION AGENCY METHOD 8260B (µg/L)</b>															
Benzene	(<0.2U)	0.72J	0.75J	<b>59.3</b>	<b>6.39</b>	(<0.2U)	<b>1.26</b>	(<0.2U)	(<0.2U)	<b>2.42</b>	(<0.2U)	(<0.2U)	(<0.2U)	(<0.2U)	1
Toluene	(<0.2U)	(<0.2U)	(<0.2U)	4.37	(<0.2U)	(<0.2U)	(<0.2U)	(<0.2U)	(<0.2U)	(<0.2U)	(<0.2U)	(<0.2U)	(<0.2U)	(<0.2U)	1,000
Ethylbenzene	(<0.2U)	1.23	1.14	123D	2.20	(<0.2U)	7.23	(<0.2U)	(<0.2U)	0.92J	(<0.2U)	(<0.2U)	(<0.2U)	(<0.2U)	700
Xylenes	(<0.6U)	2.99	2.67	57.8	(<0.6U)	(<0.6U)	11.8	(<0.6U)	(<0.6U)	4.33	(<0.6U)	(<0.6U)	(<0.6U)	(<0.6U)	530
Total BTEX	ND	4.94	4.56	244.5	8.59	ND	20.3	ND	ND	7.67	ND	ND	ND	ND	NA
MTBE	(<0.4U)	(<1.0U)	(<1.0U)	(<1.0U)	(<1.0U)	0.62J	5.12	1.24	3.63	1.23	0.95J	2.36	(<0.4U)	(<0.4U)	100
<b>TOTAL PETROLEUM HYDROCARBONS BY U.S. ENVIRONMENTAL PROTECTION AGENCY METHOD 8100M (µg/L)</b>															
Total petroleum hydrocarbons	(<500U)	400J	300J	<b>3,400</b>	<b>800</b>	300J	200J	(<500U)	200J	<b>800</b>	<b>1,100</b>	(<500U)	<b>600</b>	NA	500
(a) Ground-Water Protection Criteria from Appendix C of Section 22a-133K-3 of the Regulations of Connecticut State Agencies (1995).															
NOTE: Exceedance of Connecticut Department of Environmental Protection Ground-Water Protection Criteria denoted in bold.															
DUP = Duplicate sample.															
U = Not detected. Sample quantitation limits shown as (<_U).															
J = Estimated concentration below detection limit.															
D = Analysis at a secondary dilution factor.															
BTEX = Benzene, toluene, ethylbenzene, and total xylene.															
ND = Not detected.															
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