EnviroTrac
Environmental Services

March 5, 2009

Ms. Sarah Carlson
New York State Department of Environmental Conservation
Division of Environmental Remediation – Region 2
Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101-5407

**Re: Spill #98-30002**
**Hess Station 32518**
**2880 Atlantic Avenue**
**Brooklyn, NY**

Dear Ms. Carlson:

This correspondence is in regard to discussions that we had in our October 2008 meeting with Hess Corporation (Hess) regarding additional environmental investigations for the above referenced site. As a result, the following items are included in this work plan.

**Short Term Remedial Event (STRE) Investigation**

In reviewing the historical groundwater (GW) data with respect to the short term remedial events (STRE's) that were conducted at the site in October 2008 and November 2008, it is evident that there is a decrease in residual levels of Ethylbenzene and Xylenes in wells (MW-4 & MW-6), especially in MW-6 that showed a ten fold reduction in Ethylbenzene and a three fold reduction in Xylenes as shown in the attached table. However, wells (MW-1 & MW-5) showed slight increases in residual petroleum impacts even though the data obtained during these events confirmed effective radii of influence (ROI) on all wells as depicted in the attached site plan.

**Recommendation**

At this time, we propose to conduct two (2) more quarters of groundwater sampling. Once we evaluate the groundwater sampling data we will then make a determination if we should continue to conduct further STRE's.

If you have questions or comments, please do not hesitate to contact us at (631) 924-3001. Thank you for your time in this matter.

Sincerely,

Joseph Rennie
Project Manager

Attachments

cc: John Schenkewitz – Hess Corp.

**Table 1**
**Summary of Well Gauging and Groundwater Analytical Data**
**Hess Station # 32518**
**2880 Atlantic Avenue**
**Brooklyn, NY**

| Well ID | Date | Gauge Pt. Elevation (feet) | Depth to Water (fbg) | Product Depth (fbg) | Product Thickness (feet) | Water Level Elevation (feet) | Benzene (ug/L) | Toluene (ug/L) | Ethylbenzene (ug/L) | Xylenes (ug/L) | BTEX (ug/L) | MTBE (ug/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 3/23/1999[a] | 39.26 | 33.00 | | | 6.26 | 14 | 1,200 | 650 | 7,700 | 9,564 | 14 |
| | 3/13/2000[b] | 39.26 | 33.60 | | | 5.66 | 2.4 | 3,300 | 2,300 | 16,000 | 21,602.4 | 6.2 |
| | 11/20/2007 | 39.26 | 34.04 | | | 5.22 | <10 | 11 | 420 | 1,980 | 2,411 | <10 |
| | 3/28/2008 | 39.26 | 33.89 | | | 5.37 | <10 | 33.8 | 708 | 4,170 | 4,911.8 | <10 |
| | 7/2/2008 | 39.26 | 33.98 | | | 5.28 | <5 | 38.1 | 597 | 4,230 | 4,865.1 | ND |
| | 11/19/2008 | 39.26 | 33.72 | | | 5.54 | <1.3 | 51.5 | 819 | 5,170 | 6,041 | ND |
| MW-2 | 3/23/1999[ac] | 38.30 | 30.03 | | | 8.27 | ND | ND | ND | ND | ND | 800 |
| | 7/26/1999[b] | 38.30 | 32.25 | | | 6.05 | ND | ND | 29 | 56 | 85 | 240 |
| | 11/20/2007 | 38.30 | 33.02 | | | 5.28 | <1 | <1 | <1 | <3 | ND | <1 |
| | 3/28/2008 | 38.30 | 32.84 | | | 5.46 | <1.0 | ND | ND | ND | <MDL | ND |
| | 7/2/2008 | 38.30 | 32.96 | | | 5.34 | <1.0 | ND | ND | ND | <MDL | ND |
| | 11/19/2008 | 38.30 | 32.69 | | | 5.61 | ND | ND | ND | ND | ND | ND |
| MW-3 | 3/23/1999[a] | 36.69 | 30.35 | | | 6.34 | ND | ND | ND | ND | ND | 2.3 |
| | 3/13/2000[b] | 36.69 | 30.95 | | | 5.74 | ND | 1.2 | 1.7 | 12 | 14.9 | 3.4 |
| | 11/20/2001[c] | 36.69 | 32.65 | | | 4.04 | 1 | <1 | <1 | <2 | 1 | 5.1 |
| | 11/20/2007 | 36.69 | 31.33 | | | 5.36 | <1 | <1 | <1 | <3 | ND | <1 |
| | 3/28/2008 | 36.69 | 31.15 | | | 5.54 | <1.0 | ND | ND | ND | <MDL | ND |
| | 7/2/2008 | 36.69 | 31.30 | | | 5.39 | <1.0 | ND | ND | ND | <MDL | ND |
| | 11/19/2008 | 36.69 | 31.00 | | | 5.69 | ND | ND | ND | ND | ND | ND |
| MW-4 | 3/23/1999[ab] | 38.69 | 32.40 | | | 6.29 | 9 | 8.5 | 690 | 6,100 | 6,807.5 | 33 |
| | 7/15/2002[c] | 38.69 | 33.58 | | | 5.11 | <5 | 11 | 1,400 | 3,020 | 4,431 | 160 |
| | 11/20/2007 | 38.69 | 33.44 | | | 5.25 | <1 | <1 | 110 | 417 | 527 | <1 |
| | 3/28/2008 | 38.69 | 33.29 | | | 5.40 | <1.0 | ND | 174 | 688 | 862 | ND |
| | 7/2/2008 | 38.69 | 33.35 | | | 5.34 | <1.0 | 5.6 | 195 | 496 | 696.6 | ND |
| | 11/19/2008 | 38.69 | 33.49 | | | 5.20 | ND | 0.34 J | 138 | 420 | 558 | ND |
| MW-5 | 2/23/2000[ab] | 39.37 | 33.80 | | | 5.57 | 26 | 22 | 780 | 3,600 | 4,428 | 17 |
| | 11/26/2002[c] | 39.37 | 34.01 | | | 5.36 | 22 | 18 | 250 | 821 | 1,111 | 83 |
| | 11/20/2007 | 39.37 | 34.24 | | | 5.13 | <1 | <1 | 84 | 73 | 157 | <1 |
| | 3/28/2008 | 39.37 | 34.08 | | | 5.29 | <1.0 | ND | 51.7 | 76.2 | 127.9 | ND |
| | 7/2/2008 | 39.37 | 34.15 | | | 5.22 | <1.0 | ND | 51.3 | 60.5 | 111.8 | ND |
| | 11/19/2008 | 39.37 | 33.05 | | | 6.32 | 0.56 J | ND | 25.5 | 99.4 | 125.5 J | ND |
| MW-6 | 2/23/2000[a] | 38.95 | 33.21 | | | 5.74 | 7.9 | 68 | 780 | 2,300 | 3,155.9 | 140 |
| | 7/24/2000[c] | 38.95 | 32.16 | | | 6.79 | 21 | 150 | 1,200 | 5,400 | 6,771 | 180 |
| | 1/24/2004[b] | 38.95 | NM | | | NM | <20 | 79 | 2,700 | 10,200 | 12,979 | <20 |
| | 11/20/2007 | 38.95 | 34.19 | | | 4.76 | <5 | <5 | 990 | 1,683 | 2,673 | <5 |
| | 3/28/2008 | 38.95 | 33.48 | | | 5.47 | <20.0 | <20.0 | 2,370 | 6,513 | 8,883 | <20.0 |
| | 7/2/2008 | 38.95 | 33.60 | | | 5.35 | <10 | <10 | 2,430 | 3,420 | 5,850 | <10 |
| | 11/19/2008 | 38.95 | 33.31 | | | 5.64 | ND | 1.4 J | 240 | 1,030 | 1,271 J | ND |
| MW-7 | 8/30/2000[a] | 38.99 | 33.29 | | | 5.70 | 1 | 1 | 9.1 | 6.4 | 17.5 | <1 |
| | 7/16/2001[b] | 38.99 | 33.18 | | | 5.81 | <0.5 | <1 | 10 | 39 | 49 | <1 |
| | 7/15/2002[c] | 38.99 | 34.12 | | | 4.87 | <1 | <1 | <1 | <2 | <MDL | 1.3 |
| | 11/20/2007 | 38.99 | 33.99 | | | 5.00 | <1 | <1 | <1 | <3 | ND | <1 |
| | 3/28/2008 | 38.99 | 33.81 | | | 5.18 | <1.0 | ND | ND | ND | <MDL | ND |
| | 7/2/2008 | 38.99 | 33.90 | | | 5.09 | <1.0 | ND | ND | ND | <MDL | ND |
| | 11/19/2008 | 38.99 | 33.59 | | | 5.40 | ND | ND | ND | ND | ND | ND |

**Notes:**
[a] **Initial Sample/Gauging**
[b] **Total BTEX Historical High**
[c] **MTBE Historical High**
**J = Estimated Value**
**MDL = Method Detection Limit**
**ND = Not Detected**
**NS = Not Sampled**
**NM = Not Measured**

**Table 2**
**Summary of Soil Vapor Extraction/Air Sparge Pilot Test Events**
**Hess Station 32518 (Jerome)**
**2880 Atlantic Avenue**
**Brooklyn, NY**

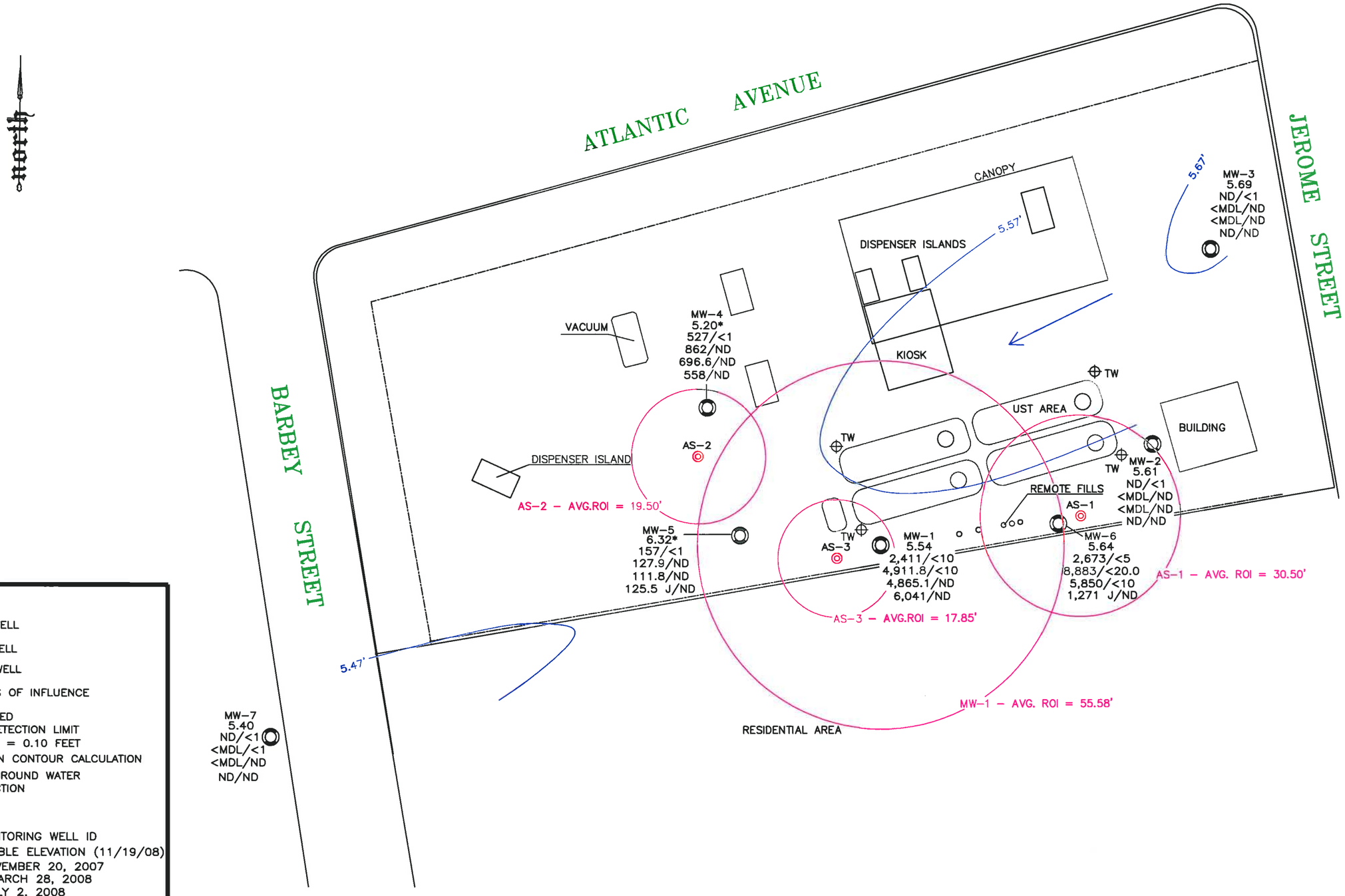
| Date | SVE Well | AS Well | SVE Vacuum ("H2O) | SVE Flow (cfm) | AS Pressure (psi) | AS Flow (cfm) | SVE Effluent PID (ppm) |
|---|---|---|---|---|---|---|---|
| **10/23/08** | MW-1 | AS-3 | 12 | 50 | 5.5 | 16 | 745 |
| | MW-4 | AS-2 | 10 | 30 | 5.5 | 18 | 373 |
| | | | | | | | |
| **11/15/08** | MW-1 | AS-3 | 14 | 50 | 3 | 17 | 717 |
| | MW-6 | AS-1 | 10 | 30 | 3 | 18 | 920 |

**Notes:**

**cfm - cubic feet per minute**

**psi - Pounds per Square Inch**

**ppm - parts per million**




LEGEND:

- MONITORING WELL
- TANK FIELD WELL
- AIR SPARGE WELL
- ROI = RADIUS OF INFLUENCE

ND = NOT DETECTED
MDL = METHOD DETECTION LIMIT
CONTOUR INTERVAL = 0.10 FEET
* NOT INCLUDED IN CONTOUR CALCULATION
INFERRED GROUND WATER FLOW DIRECTION

SAMPLE WELL:

MW-1 = MONITORING WELL ID
5.54 = WATER-TABLE ELEVATION (11/19/08)
2,411/<10 = NOVEMBER 20, 2007
4,911.8/<10 = MARCH 28, 2008
4,865.1/ND = JULY 2, 2008
6,041/ND = NOVEMBER 19, 2008

TOTAL BTEX/MTBE CONCENTRATIONS IN ug/L

Base map taken from DELTA map dated 12/28/07

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0 15 FT 30

REVISION DATE: MARCH 5, 2009 | SCALE: 1" = 30 FEET | REVISED BY: TB

HESS STATION # 32518
2880 ATLANTIC AVENUE
BROOKLYN, NEW YORK

# ROI FROM SHORT TERM REMEDIATION EVENT ON OCTOBER 23, 2008 AND TOTAL BTEX/MTBE CONCENTRATIONS MAP

FIGURE # 1