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January 16, 2012

Ms. Jeannette DeBartolomeo
Maryland Department of Environment
Oil Control Program
1800 Washington Blvd. Suite 620
Baltimore, Maryland 21230-1719

Subject: **Revised Bio-Augmentation Pilot Test Work Plan** AECOM Project: 60144763
7-Eleven Store No.22281
2400 Pleasantville Road
Fallston, Maryland
Facility ID No. 0006365
MDE Case No. 2005-0120HA

Dear Ms. DeBartolomeo,

AECOM, on behalf of 7-Eleven, Inc. (7-Eleven), has prepared this Work Plan for extending the subsurface pilot testing for the injection of bio-remediation products to degrade petroleum hydrocarbons including the fuel oxygenate methyl-tertiary butyl ether (MTBE) at the above referenced site. The submittal of this Work Plan was discussed with the Maryland Department of the Environment (MDE) during a project review meeting on November 17, 2011. This Work Plan is a revision to the Work Plan submitted February 4, 2008 and complies with the request made by the MDE in correspondence dated November 30, 2011 (**Attachment A**).

Site Background

The site is located within Harford County, Maryland, which has been classified by the MDE as a High Risk Groundwater Use Area. Currently 19 monitoring wells exist at the site. Seventeen monitoring wells are located on-site and two monitoring wells are located off-site to the north across State Highway 152. **Figure 1** is a site map showing the locations of the monitoring wells and other site related features.

Groundwater samples were collected on December 8, 2011 from 18 on-site monitoring wells and two off-site monitoring wells. Monitoring well HW-2 was not sampled due to an insufficient amount of water in the wells. Groundwater samples were analyzed for full-list volatile organic compounds (VOCs) including Fuel Oxygenates by Environmental Protection Agency (EPA) Method 8260 and Total Petroleum Hydrocarbons-Gasoline Range Organics (TPH-GRO) by EPA Method 8015B.

Benzene, toluene, ethylbenzene and total xylenes (BTEX) concentrations were not detected above the laboratory detection limits during this groundwater sampling event. MTBE

concentrations ranged from below the laboratory detection limits in monitoring wells MW-1A, MW-1B, MW-3A, MW-3B and MW-7 to 3,100 micrograms per liter (µg/l) in monitoring well HW-3. TBA concentrations ranged from below laboratory detection limits in monitoring wells MW-1A through MW-8B to 2,900 µg/l in monitoring well MW-10. **Figure 2** is a dissolved-phase concentration map (BTEX/MTBE) from the December 8, 2011 groundwater sampling event. Historical results of the laboratory analysis are included in **Table 1**.

As determined from the historical sampling events, MTBE has consistently been detected in the shallow monitoring wells MW-4A, MW-6, MW-9, MW-10, MW-11, MW-12, MW-13, and HW-3 are above the MDE guidelines of 20 ug/l. Groundwater in the deeper zone, however, has historically shown MTBE below the laboratory detection limits with the exception of a sample from December 2006 with a MTBE concentration of 21 ug/l.

The objective of this revised bio-augmentation pilot test is to reduce the concentration of petroleum compounds including MTBE in the shallow groundwater by injecting groundwater amended nutrients, naturally-occurring microorganisms, enzymes and dissolved oxygen.

The specifications of this remediation program were discussed with the MDE during a project review meeting on November 17, 2011. The following text outlines test implementation details and the associated monitoring plan to determine the overall feasibility of this technology to reduce dissolved-phase hydrocarbons compounds at this location. Previous field and bench scale studies indicating favorable conditions for application of this technology have been submitted to the MDE in the August 27, 2007 report.

Field Pilot Testing

Based on the results of the existing bio-augmentation pilot study, AECOM, on behalf of 7-Eleven, is proposing to install two additional shallow injection trenches as part of the revised bio-augmentation pilot test. **Figure 3** is a site plan showing the proposed layout of the bio-injection trenches. As part of the trench system, 4-inch diameter injection/observation points are proposed to be installed spaced every 10 feet along the trench. Installation of the trenches and injection points will be dependent upon approval from the Maryland Department of Transportation – State Highway Administration (MDOT-SHA).

The three-foot wide injection trenches will be installed with a backhoe approximately 12 to 15 feet below ground surface (bgs) and backfilled with pea gravel to approximately five feet bgs to enhance permeability and allow for the injection of a combination of enzymes and dissolved oxygen. A filter fabric will be placed on top of the pea gravel and the remainder of the trench will be backfilled and compacted using clean soil to approximately 95% compaction to approximately six inches bgs. The top six inches will be completed to existing grade (asphalt or landscaping). **Figure 4** depicts cross-sections of Trench B and Trench C.

The upgradient trench (Trench B) was calculated to have a storage capacity of approximately 3,800 gallons and the downgradient trench (Trench C) was calculated to have a storage capacity of approximately 750 gallons. It is anticipated that the 500 gallons of water/enzyme mixture to be injected into each trench should not disturb current groundwater flow and equilibrium conditions.

A pilot test of enhanced in-situ bioremediation will be conducted using periodic injections of Petrozyme™, a biological stimulator, to augment and stimulate the naturally occurring population

of hydrocarbon degrading bacteria in the areas of residual dissolved-phase petroleum hydrocarbons detected in monitoring wells north of monitoring well MW-4A. The application of the bio-augmentation technology will involve a program of two site visits per month for nine months. The first monthly visit will include the addition of the Petrozyme™ products mixed with approximately 500 gallons of potable water that is transported to the site and injected into each trench through the injection points. Prior to the Petrozyme™ addition, dissolved oxygen (DO) concentrations and water level measurements will be collected. Oxygen will be delivered to the trenches during the injection process using in-situ Submerged Oxygen Curtain (iSOC®) diffusion units. The second site visit will be a monitoring event only, where DO concentrations will be collected and water levels will be measured. Information including Material Safety Data Sheets for the Petrozyme™ products have be previously submitted to the MDE in the August 27, 2007 Work Plan. The injectate will support aerobic in-situ microbial degradation of BTEX and MTBE.

The end-products of hydrocarbon and BTEX degradation are carbon dioxide (CO_2) and water (H_2O). These intermediate degradation products for petroleum hydrocarbon constituents (fatty acids, alcohols, etc.) are inert and easily degradable by indigenous bacteria already in the subsurface. No other reaction products or byproducts will be formed through these natural biological processes.

Bio-Injection Test Monitoring Program

Monitoring Objectives

Subsurface conditions within the pilot test area will be monitored throughout the proposed eight month testing period. The objectives of the pilot test monitoring program are:

1. To evaluate the efficiency and effectiveness of the bioremediation program to stimulate the biological degradation of the dissolved-phase petroleum hydrocarbons in the shallow water bearing zone in the area of monitoring well HW-3, MW-6, MW-9, MW-11, and MW-13.

2. To evaluate the potential area of remedial influence resulting from the addition of the bio-augmentation materials to the subsurface through the injection trenches.

3. To identify any change in the hydraulic gradient of the shallow water bearing zone in the area of the injection trenches induced by the addition of bio-augmentation materials to the subsurface through the injection trenches.

Monitoring Activity Schedule

Monitoring activities associated with the implementation of the pilot test program will be conducted prior to, during and following the proposed bio-augmentation activities. An outline of the anticipated scope of monitoring has been prepared based on information obtained from historic site investigation and monitoring activities and is included in the following sections. During the revised pilot test, in addition to the water level and DO readings to be collected twice per month, all on- and off-site monitoring wells will be sampled on a quarterly basis for BTEX, MTBE, and fuel oxygenates using EPA Method 8260B and TPH-GRO using EPA Method 8015B. It is anticipated that the monitoring activities will progress as proposed, however, alterations to the prescribed activities and schedule may be necessary based on the evaluation of results by

AECOM and 7-Eleven throughout the duration of the test program. MDE will be informed in writing of any changes in the design of the monitoring activities.

Groundwater samples will also be collected during these sampling events to assess the subsurface characteristics associated with the biological degradation of dissolved-phase petroleum hydrocarbons. These samples will be collected from monitoring wells HW-3, MW-6, MW-9, MW-11, and MW-13 at the same time as those designated for hydrocarbon analysis. These samples will represent locations central to the area of impact, within the lower water bearing zone and in an area without hydrocarbon impact, respectively. In addition to analysis of BTEX, MTBE, and fuel oxygenates using EPA Method 8260B and TPH-GRO using EPA Method 8015B, the groundwater samples will be analyzed by Phase Separation Science of Baltimore, Maryland (Phase) for nitrate, nitrite, and orthophosphate.

Baseline Monitoring Summary

An assessment of the subsurface conditions with respect to the current level of biological activity and the potential to enhance the biological degradation of petroleum hydrocarbons will be performed prior to the initiation of the proposed bio-augmentation activities. The data obtained from this assessment, as well as information obtained during previous site assessment activities, prior to the initiation of the pilot test program, the First Quarter 2012 groundwater sampling event will serve to establish a baseline to which data gathered throughout the pilot test program will be compared. This sampling event will be performed in accordance with previously established monitoring procedures and includes the collection of groundwater samples from each monitoring well associated with the site. The groundwater samples will be analyzed by Phase for BTEX, MTBE and fuel oxygenates using EPA Method 8260B, TPH-GRO using EPA Method 8015B, and the other analytes as detailed in the previous section. Field measurements of groundwater elevations and dissolved oxygen concentrations will also be collected during the sampling event.

Test Implementation Monitoring Summary

Throughout the proposed pilot test program, monitoring of biological, chemical and physical parameters will be conducted within the test area. Analysis of this site data resulting from these monitoring activities will be performed with respect to baseline conditions be performed to evaluate the effectiveness of the bio-augmentation test and to identify any opportunities to maximize the efficiency of the bio-augmentation process. All site monitoring activities will be performed prior to the initiation of the bio-augmentation activities anticipated for that particular visit.

As detailed in the previous sections, biweekly visits to the site are anticipated to facilitate the addition of augmented groundwater to the pilot test treatment area. Field measurement of groundwater elevation and groundwater dissolved oxygen concentration in monitoring wells HW-3, MW-6, MW-9, MW-11, and MW-13 will be collected upon arrival at the site during each biweekly visit.

Routine groundwater sampling of all monitoring wells associated with the site will continue on a quarterly basis to evaluate the distribution of dissolved-phase petroleum hydrocarbons. As the eight-month pilot test program is anticipated for implementation immediately following a routine groundwater sampling event, the subsequent sampling event will be due to occur at approximately the half-way point of the pilot test program. This groundwater sampling event will

be conducted in an identical manner to the established sampling regiment as described above for baseline sampling. Collection of groundwater samples for evaluation of any changes induced in the biological characteristics within the test area will also be conducted at this time. Groundwater samples will be obtained from the same monitoring wells used for baseline sampling (HW-3, MW-6, MW-9, MW-11, and MW-13) and analyzed by Phase for the parameters previously identified.

Test Follow-up Monitoring Summary

Upon completion of the prescribed nine-month pilot test program, the routine site monitoring schedule associated with the evaluation of the distribution of dissolved-phase petroleum hydrocarbons will continue according to the previously established schedule. Groundwater elevation and dissolved oxygen concentration measurements will be made from all monitoring wells on a twice monthly basis. Groundwater samples will be collected from all monitoring wells associated with the site on a quarterly basis for laboratory analysis by Phase for BTEX, MTBE, and fuel oxygenates using EPA Method 8260B and TPH-GRO using EPA Method 8015B.

A post-test assessment of the biological characteristics within the test area will be performed via the collection of groundwater samples from the same monitoring wells used for baseline sampling (HW-3, MW-6, MW-9, MW-11, and MW-13). These samples will be collected within one month following the final injection of bio-augmentation materials and again approximately three months later.

Reporting of Monitoring Results

Data obtained from all prescribed laboratory analysis and field measurements will be provided to MDE as part of the scheduled submittal of quarterly site update reports during the months of January, April, July and October. In addition to the data, an activity summary will be provided and will include the following information pertaining to the specific reporting period:

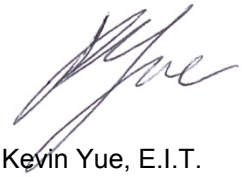
- A summary of all site activities performed,
- A summary of any past or proposed deviations from the proposed pilot test or monitoring program,
- An assessment of the efficiency and effectiveness of the bioremediation program to stimulate the biological degradation of the dissolved-phase petroleum hydrocarbons in the shallow water bearing zone in the area of monitoring wells HW-3, MW-6, MW-9, MW-11, and MW-13,
- An evaluation of the potential area of remedial influence resulting from the addition of the bio-augmentation materials to the subsurface through the injection trenches, and
- An assessment of any change in the hydraulic gradient of the shallow water bearing zone in the area of monitoring wells HW-3, MW-6, MW-9, MW-11, and MW-13 induced by the addition of bio-augmentation materials to the subsurface through the injection trenches.

7-Eleven and AECOM appreciate the continued support from the MDE regarding this case. If you have any questions regarding this pilot test work plan, please contact the undersigned at (240) 565-6501.

Yours sincerely,

John Canzeri
Project Manager

Marie Treiber
Regional Senior Project Manager

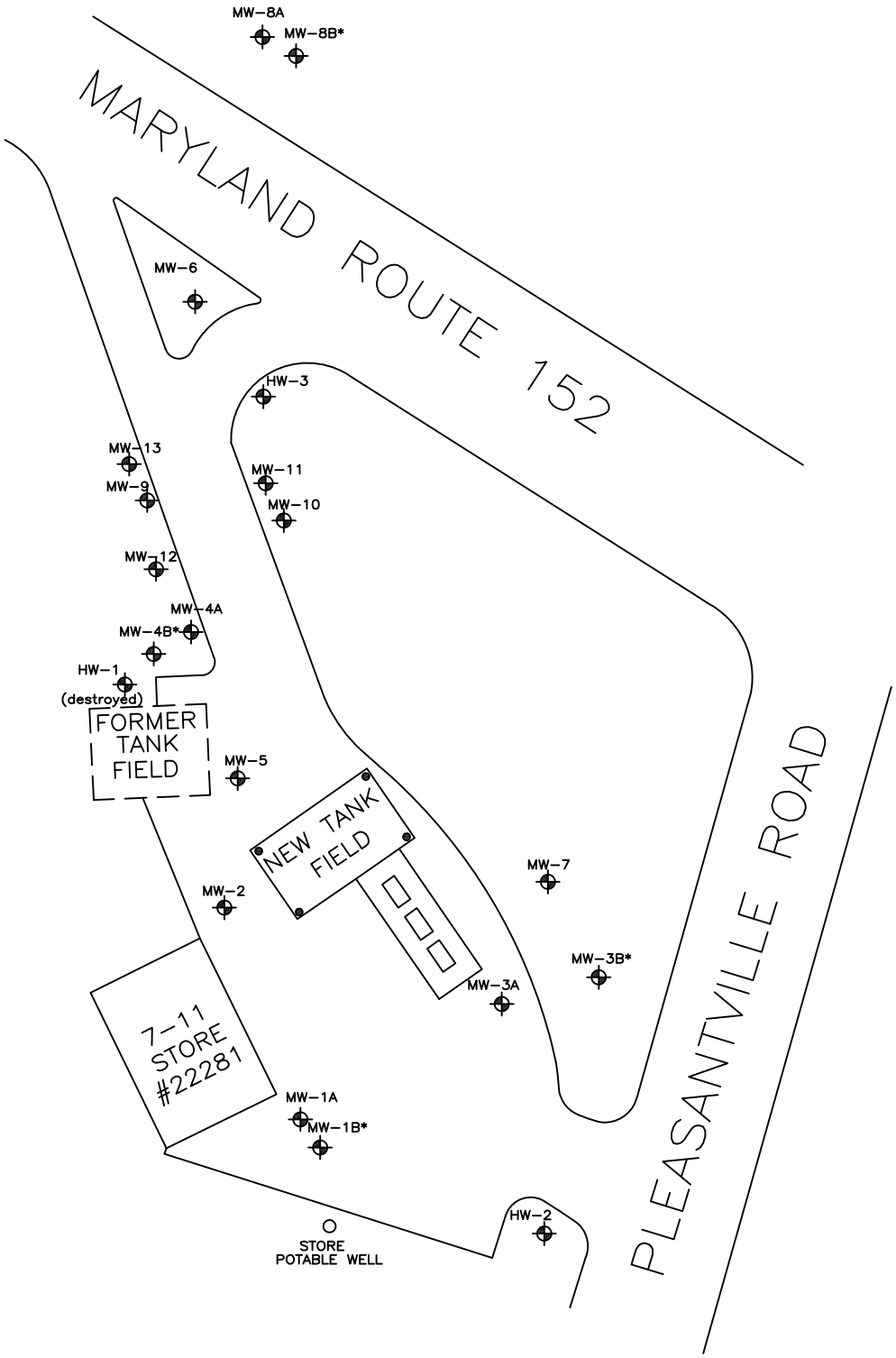


Kevin Yue, E.I.T.
Environmental Engineer

Attachments

cc: Mr. Herbert Meade, MDE
7-Eleven Project File

Figures



LEGEND

- MONITORING WELL
- HW HISTORICAL WELL
- TANK FIELD WELL
- DEEP WELL

N

APPROX. SCALE: FT

40 0 40

SITE MAP WITH WELL LOCATIONS

JANUARY 2012

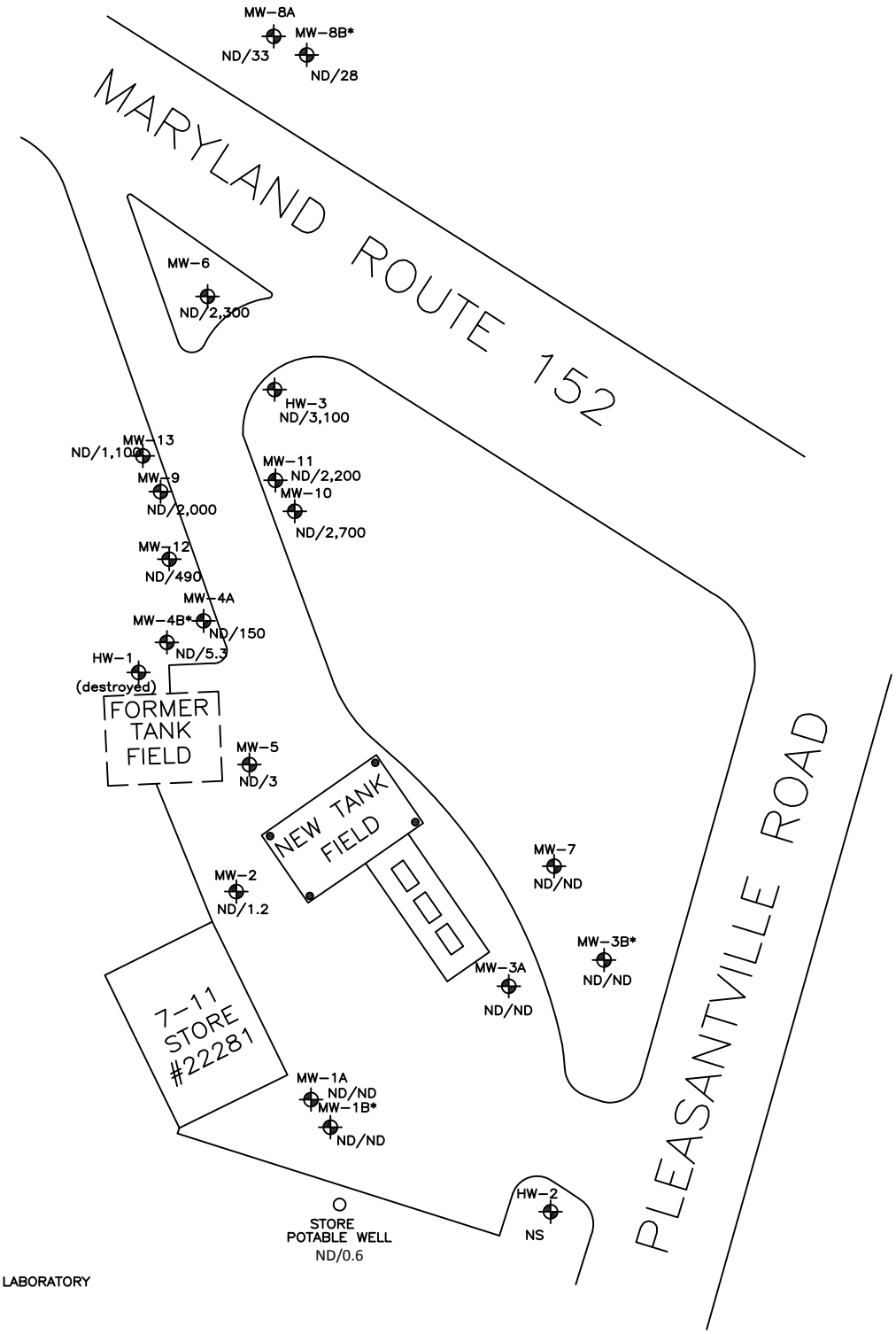
Drawn By: KY | Reviewed By: JC

7-ELEVEN Inc.
STORE No. 22281
2400 PLEASANTVILLE ROAD
FALLSTON, MARYLAND

Project No.: 60144763

FIGURE 1

AECOM



LEGEND

- MONITORING WELL
- ND — NOT DETECTED ABOVE LABORATORY DETECTION LIMITS
- NS — NOT SAMPLED
- HW — HISTORICAL WELL
- * — DEEP WELL
- ● — TANK FIELD WELL

N

APPROX. SCALE: FT

40 0 40

BTEX/MTBE CONCENTRATIONS

DECEMBER 8, 2011

JANUARY 2012

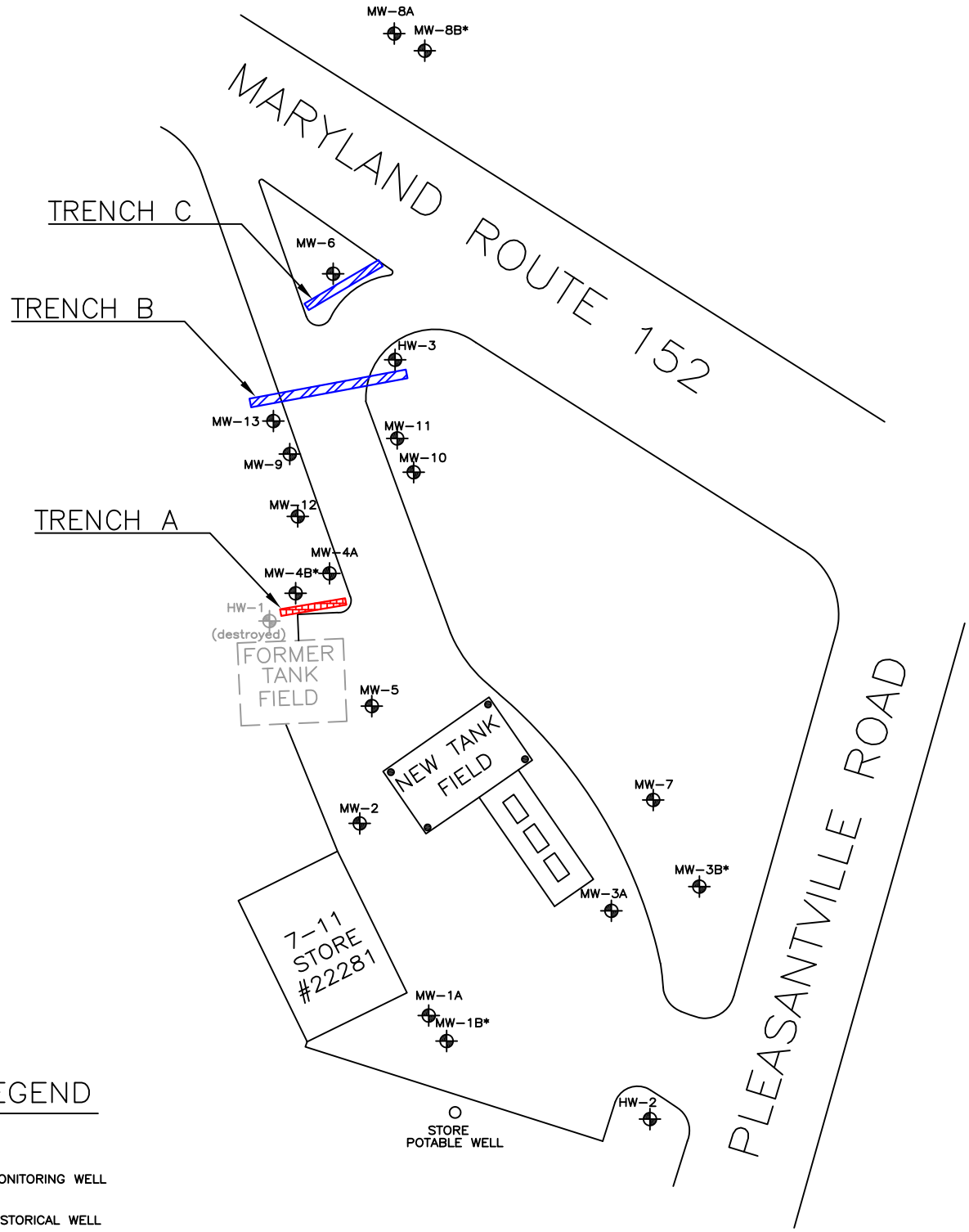
Drawn By: JLT | Reviewed By: NP

7-ELEVEN Inc.
STORE No. 22281
2400 PLEASANTVILLE ROAD
FALLSTON, MARYLAND

Project No.: 60144763

FIGURE 2

AECOM



LEGEND

- MONITORING WELL
- HW HISTORICAL WELL
- TANK FIELD WELL
- DEEP WELL
- PROPOSED INJECTION TRENCH
- EXISTING INJECTION TRENCH

N

APPROX. SCALE: FT

40 0 40

PROPOSED INJECTION TRENCH LOCATIONS

JANUARY 2012

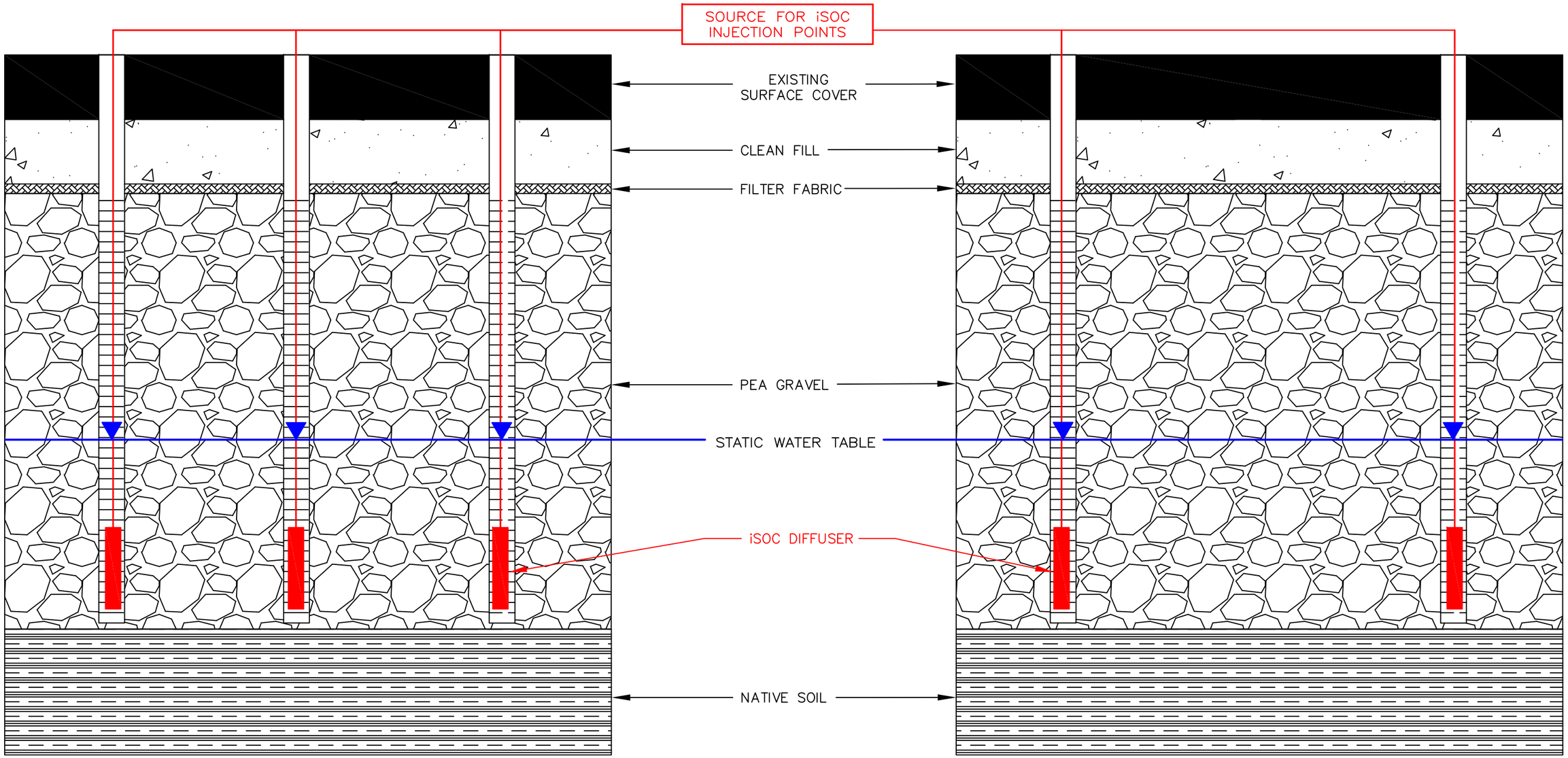
Drawn By: KY | Reviewed By: JC

7-ELEVEN Inc.
STORE No. 22281
2400 PLEASANTVILLE ROAD
FALLSTON, MARYLAND

Project No.: 60144763

FIGURE 3

AECOM



TRENCH B (PROPOSED)

TRENCH C (PROPOSED)

AECOM	7-ELEVEN Inc. STORE No. 22281 2400 PLEASANTVILLE ROAD FALLSTON, MARYLAND	TRENCH CROSS SECTION TRENCH B AND C (PROPOSED)	NOT TO SCALE
FIGURE 4	JANUARY 2012 | Drawn By: KY	Reviewed By: JC	Project No.: 60144763

Table

Table 1
Monitoring Well Groundwater Analytical Results
7-Eleven Store No. 22281
Fallston, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
MW-1A	7/26/05	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.56
	11/22/05	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	NA	NA
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.50
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	12/7/06	ND@1	ND@1	ND@1	ND@3	ND	1	ND@10	ND@10	ND@100	ND@0.5
	3/28/07	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@1	ND@3	ND	1	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	ND@0.5
	12/23/08	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA

Table 1
Monitoring Well Groundwater Analytical Results
7-Eleven Store No. 22281
Fallston, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
MW-1B	7/26/05	ND@1	ND@1	ND@1	ND@3	ND	11	ND@25	ND@25	ND@100	ND@0.5
	11/22/05	ND@1	ND@1	ND@1	ND@3	ND	12	ND@25	ND@25	NA	NA
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	6	ND@25	ND@25	ND@100	ND@0.5
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	3	ND@25	ND@25	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	6	ND@25	ND@25	ND@100	ND@0.5
	12/7/06	ND@1	ND@1	ND@1	ND@3	ND	6	ND@10	ND@10	ND@100	ND@0.5
	3/28/07	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	ND@0.5
	12/23/08	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA

Table 1
Monitoring Well Groundwater Analytical Results
7-Eleven Store No. 22281
Fallston, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
MW-2	7/26/05	ND@1	ND@1	ND@1	ND@3	ND	3	ND@25	ND@25	ND@100	ND@0.56
	11/22/05	ND@1	ND@1	ND@1	ND@3	ND	**37**	ND@25	ND@25	NA	NA
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	**49**	28	ND@25	ND@100	ND@0.5
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	**52**	ND@25	ND@25	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	**31**	ND@25	ND@25	ND@100	ND@0.5
	12/7/06	ND@1	ND@1	ND@1	ND@3	ND	**27**	ND@10	ND@10	ND@100	ND@0.5
	3/28/07	ND@1	ND@1	ND@1	ND@3	ND	12	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@1	ND@3	ND	9	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@1	ND@3	ND	5	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@1	ND@3	ND	5	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	5	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	4	ND@20	ND@10	ND@100	ND@0.5
	12/23/08	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	12/23/09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	1.2	ND@20	ND@10	ND@100	NA

Table 1
Monitoring Well Groundwater Analytical Results
7-Eleven Store No. 22281
Fallston, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
MW-3A	7/26/05	ND@1	ND@1	ND@1	ND@3	ND	**2400**	1700	110	**2700**	ND@0.5
	11/22/05	ND@1	ND@1	ND@1	ND@3	ND	**260**	120	ND@25	NA	NA
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	**37**	ND@25	ND@25	ND@100	ND@0.5
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	3	ND@25	ND@25	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	12/7/06	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	3/28/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	12/23/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA

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7-Eleven Store No. 22281
Fallston, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
MW-3B	2/16/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	2/22/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	12/7/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	**2.5**
	3/28/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	12/23/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA

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7-Eleven Store No. 22281
Fallston, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
MW-4A	7/26/05	**11**	ND@1	ND@1	10	21	**31,000**	25,000	E 2,200	**30,000**	ND@0.5
	11/22/05	**15**	ND@1	ND@1	10	25	**42,000**	29,000	3,200	NA	NA
	3/16/06	ND@5	ND@5	ND@5	ND@10	0	**20,000**	9,900	940	**2,100**	ND@0.5
	6/30/06	**14**	3	ND@1	12	29	**E 3,300**	E 3,400	E 560	**2,000**	LF 0.52
	9/12/06	**34**	9	ND@1	25	68	**20,000**	E 21,000	E 630	**2,900**	ND@0.5
	12/7/06	**30**	ND@5	ND@5	11	41	**27,000**	32000	780	**3,000**	LF 0.72
	3/28/07	**8**	ND@1	ND@1	6	14	**E 37,000**	E 41,000	E 490	**2,500**	**0.7**
	6/22/07	**8**	ND@1	ND@1	10	18	**E 12,000**	E 5,300	E 480	**2,500**	ND@0.5
	9/25/07	**7**	ND@1	ND@1	6	13	**E 11,000**	E 4,500	E 560	**1,500**	ND@0.5
	12/14/07	**7**	ND@1	ND@1	6	13	**E 7,600**	ND@10	E 460	**1,700**	ND@0.5
	3/14/08	ND@100	ND@100	ND@100	ND@300	ND	**15,000**	11,000	ND@1,000	**20,000**	ND@0.5
	6/18/08	ND@50	ND@50	ND@50	ND@150	ND	**8,100**	4,500	ND@500	**1,500**	ND@0.5
	9/3/08	**7**	ND@1	ND@1	ND@3	7	**8,200**	11,000	460	**4,400**	ND@0.5
	12/23/08	ND@100	ND@100	ND@100	ND@300	ND	**15,000**	9,500	ND@1,000	**6,000**	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	**4,900**	4,100	130	**720**	NA
	6/8/09	2	ND@1	ND@1	ND@3	2	**5,100**	2,900	150	**1,600**	NA
	9/27/09	3	ND@1	ND@1	1	4	**6,600**	3,700	220	**9,100**	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	**1,500**	660	54	**1,900**	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	**1,500**	470	55	**1,400**	NA
	5/6/10	ND@1	ND@1	ND@1	ND@3	ND	**150**	61	ND@10	**120**	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	**23**	ND@20	ND@10	ND@100	NA
	7/31/10	ND@1	ND@1	ND@1	ND@3	ND	**35**	ND@20	ND@10	ND@100	NA
	8/16/10	ND@1	ND@1	ND@1	ND@3	ND	**55**	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	`	ND@1	ND@3	ND	**740**	340	36	**1,100**	NA
	10/26/10	ND@1	ND@1	ND@1	ND@3	ND	**730**	210	ND@10	**810**	NA
	11/23/10	ND@1	ND@1	ND@1	ND@3	ND	**870**	210	41	**850**	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	**1,400**	420	56	**1,400**	NA
	2/28/11	ND@1	ND@1	ND@1	ND@3	ND	**860**	90	45	**850**	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	**370**	86	15	**280**	NA
	4/26/11	ND@1	ND@1	ND@1	ND@3	ND	**390**	82	18	**530**	NA
	5/25/11	ND@1	ND@1	ND@1	ND@3	ND	**220**	ND@20	ND@10	**200**	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	**1,100**	ND@20	48	**1,100**	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	**210**	39	ND@10	**150**	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	**150**	ND@20	ND@10	**150**	NA

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Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
MW-4B	2/16/06	ND@1	ND@1	ND@1	ND@3	ND	16	ND@25	ND@25	ND@100	ND@0.5
	2/22/06	ND@1	ND@1	ND@1	ND@3	ND	16	ND@25	ND@25	ND@100	ND@0.5
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	13	ND@25	ND@25	ND@100	ND@0.5
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	7	ND@25	ND@25	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	6	ND@25	ND@25	ND@100	ND@0.5
	12/7/06	ND@1	ND@1	ND@1	ND@3	ND	**21**	ND@10	ND@10	ND@100	ND@0.5
	3/28/07	ND@1	ND@1	ND@1	ND@3	ND	7	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@1	ND@3	ND	3	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@1	ND@3	ND	8	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@1	ND@3	ND	6	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@1	ND@3	ND	5	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	12	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	13	ND@20	ND@10	ND@100	ND@0.5
	12/23/08	ND@1	ND@1	ND@1	ND@3	ND	18	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	4	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	4	ND@20	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	5	ND@20	ND@10	ND@100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	11	ND@20	ND@10	ND@100	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	6	ND@20	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	13	ND@20	ND@10	ND@100	NA
	7/31/10	ND@1	ND@1	ND@1	ND@3	ND	11	ND@20	ND@10	ND@100	NA
	8/16/10	ND@1	ND@1	ND@1	ND@3	ND	11	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	12	ND@20	ND@10	ND@100	NA
	10/26/10	ND@1	ND@1	ND@1	ND@3	ND	14	ND@20	ND@10	ND@100	NA
	11/23/10	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	2/28/11	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	4	ND@20	ND@10	ND@100	NA
	4/26/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	5/25/11	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	5	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	5.3	ND@20	ND@10	ND@100	NA

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Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
MW-5	7/26/05	ND@1	ND@1	ND@1	ND@3	ND	10	ND@25	ND@25	ND@100	ND@0.5
	11/22/05	ND@1	ND@1	ND@1	ND@3	ND	15	ND@25	ND@25	NA	NA
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	**76**	44	ND@25	ND@100	ND@0.5
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	11	ND@25	ND@25	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	**27**	ND@25	ND@25	ND@100	ND@0.5
	12/7/06	ND@1	ND@1	ND@1	ND@3	ND	15	ND@10	ND@10	ND@100	ND@0.5
	3/28/07	ND@1	ND@1	ND@1	ND@3	ND	3	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@1	ND@3	ND	3	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@1	ND@3	ND	4	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@1	ND@3	ND	5	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@1	ND@3	ND	7	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	9	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	7	ND@20	ND@10	ND@100	ND@0.5
	12/23/08	ND@1	ND@1	ND@1	ND@3	ND	**32**	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	15	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	8	ND@20	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	5	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	5	24	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	4	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA

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Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
MW-6	7/26/05	ND@1	ND@1	ND@1	ND@3	ND	**760**	560	28	**840**	ND@0.5
	11/22/05	ND@1	ND@1	ND@1	ND@3	ND	**1,900**	990	77	NA	NA
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	**1,300**	650	48	ND@100	ND@0.5
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	**E 860**	59	48	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	**1,200**	78	52	ND@100	ND@0.5
	12/7/06	ND@10	ND@10	ND@10	ND@30	ND	**2,400**	140	110	**140**	ND@0.5
	3/28/07	ND@100	ND@100	ND@100	ND@300	ND	**1,100**	ND@1,000	ND@1,000	**110**	ND@0.5
	6/22/07	ND@1	ND@1	ND@1	ND@3	ND	**E 1,000**	78	62	**130**	ND@0.5
	9/25/07	ND@1	ND@1	ND@1	ND@3	ND	**E 1,200**	120	65	**150**	ND@0.5
	12/14/07	2	ND@1	ND@1	ND@3	2	**E 3,800**	E 330	E 350	**600**	ND@0.5
	3/14/08	ND@50	ND@50	ND@50	ND@350	ND	**3,000**	ND@500	ND@500	**3,700**	ND@0.5
	6/18/08	ND@10	ND@10	ND@10	ND@30	ND	**2,200**	ND@200	120	**510**	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	**1,200**	210	84	**300**	ND@0.5
	12/27/08	ND@10	ND@10	ND@10	ND@30	ND	**3,600**	320	260	**1,700**	ND@0.5
	3/24/09	ND@10	ND@10	ND@10	ND@30	ND	**2,100**	230	120	**360**	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	**2,600**	230	170	**810**	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	**1,600**	170	99	**2,300**	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	**1,200**	190	78	**1,500**	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	**330**	87	18	**330**	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	**670**	210	29	**590**	NA
	7/31/10	ND@1	ND@1	ND@1	ND@3	ND	**1,400**	290	71	**1,800**	NA
	8/16/10	ND@1	ND@1	ND@1	ND@3	ND	**1,700**	310	84	**2,300**	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	**1,700**	750	78	**2,000**	NA
	10/26/10	ND@1	ND@1	ND@1	ND@3	ND	**2,400**	900	130	**2,800**	NA
	11/23/10	ND@1	ND@1	ND@1	ND@3	ND	**2,400**	940	130	**3,400**	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	**2,200**	920	87	**2,100**	NA
	2/28/11	ND@1	ND@1	ND@1	ND@3	ND	**2,400**	1,200	130	**2,400**	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	**2,300**	1,000	99	**1,800**	NA
	4/26/11	ND@1	ND@1	ND@1	ND@3	ND	**2,500**	800	120	**3,500**	NA
	5/25/11	ND@1	ND@1	ND@1	ND@3	ND	**2,200**	390	100	**2,900**	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	**1,700**	ND@20	75	**2,000**	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	**1,200**	350	50	**850**	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	**2,300**	630	110	**1,600**	NA

Table 1
Monitoring Well Groundwater Analytical Results
7-Eleven Store No. 22281
Fallston, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
MW-7	7/26/05	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.56
	11/22/05	ND@1	ND@1	ND@1	ND@3	ND	ND@1	34	ND@25	NA	NA
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	12/7/06	ND@1	ND@1	ND@100	ND@3	ND	ND@1	ND@10	ND@10	ND@100	**0.94**
	3/28/07	ND@1	ND@1	ND@100	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@100	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@100	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@100	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@100	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	12/23/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	13	ND@20	ND@10	ND@100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA

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Fallston, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
MW-8A	3/28/07	ND@1	1	ND@100	ND@3	1	**44**	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@100	ND@3	ND	9	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@100	ND@3	ND	3	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@100	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@100	ND@3	ND	3	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	ND@0.5
	12/27/08	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	4	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	5	ND@20	ND@10	ND@100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	7	ND@20	ND@10	ND@100	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	17	ND@20	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	13	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	**24**	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	9	ND@20	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	**21**	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	**30**	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	**30**	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	**33**	ND@20	ND@10	ND@100	NA

Table 1
Monitoring Well Groundwater Analytical Results
7-Eleven Store No. 22281
Fallston, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
MW-8B	10/15/07	ND@1	1	ND@1	ND@3	1	14	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@100	ND@3	ND	15	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@100	ND@3	ND	16	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	**24**	ND@20		ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	**28**	ND@20	ND@10	ND@100	ND@0.5
	12/27/08	ND@1	ND@1	ND@1	ND@3	ND	**23**	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	**39**	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	**64**	25	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	**77**	31	ND@10	ND@100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	**93**	31	ND@10	ND@100	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	**100**	33	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	**56**	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	**65**	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	**56**	ND@20	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	**34**	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	**29**	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	**22**	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	**28**	ND@20	ND@10	ND@100	NA

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Monitoring Well Groundwater Analytical Results
7-Eleven Store No. 22281
Fallston, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
MW-9	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	**1,800**	490	75	**1,600**	NA
	5/6/10	ND@1	ND@1	ND@1	ND@3	ND	**1,200**	330	52	**1,300**	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	**990**	290	33	**910**	NA
	7/31/10	ND@1	ND@1	ND@1	ND@3	ND	**1,600**	480	71	**2,100**	NA
	8/16/10	ND@1	ND@1	ND@1	ND@3	ND	**1,300**	350	49	**1,600**	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	**990**	340	34	**1,100**	NA
	10/26/10	ND@1	ND@1	ND@1	ND@3	ND	**1,300**	500	52	**1,400**	NA
	11/23/10	ND@1	ND@1	ND@1	ND@3	ND	**1,200**	360	50	**1,300**	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	**1,400**	470	48	**1,400**	NA
	2/28/11	ND@1	ND@1	ND@1	ND@3	ND	**1,200**	190	57	**1,300**	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	**1,100**	340	42	**850**	NA
	4/26/11	ND@1	ND@1	ND@1	ND@3	ND	**1,300**	320	59	**1,800**	NA
	5/25/11	ND@1	ND@1	ND@1	ND@3	ND	**1,200**	150	53	**1,500**	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	**1,600**	200	68	**1,700**	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	**2,200**	690	ND@100	**1,300**	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	**2,000**	560	95	**1,500**	NA
MW-10	3/10/10	6	ND@1	ND@1	11	17	**17,000**	5,400	810	**18,000**	NA
	5/6/10	3	ND@1	1	4	8	**8,300**	2,800	350	**10,000**	NA
	6/7/10	1	ND@1	ND@1	1	2	**4,700**	1,700	350	**5,200**	NA
	7/31/10	1	ND@1	ND@1	2	3	**6,600**	4,200	330	**8,500**	NA
	8/16/10	2	ND@1	ND@1	2	4	**6,600**	3,600	330	**9,200**	NA
	9/20/10	1	ND@1	ND@1	1	2	**5,600**	5,700	250	**6,900**	NA
	10/26/10	1	ND@1	ND@1	1	2	**6,100**	6,600	280	**7,100**	NA
	11/23/10	2	ND@1	ND@1	3	5	**7,700**	4,800	410	**9,400**	NA
	12/20/10	2	ND@1	ND@1	4	6	**11,000**	9,600	470	**12,000**	NA
	2/28/11	ND@1	ND@1	ND@1	ND@3	ND	**8,300**	5,200	530	**11,000**	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	**5,700**	4,600	240	**5,900**	NA
	4/26/11	2	ND@1	ND@1	3	5	**5,600**	6,000	290	**8,000**	NA
	5/25/11	2	ND@1	ND@1	3	5	**5,800**	6,000	270	**7,500**	NA
	6/29/11	ND@5	ND@5	ND@5	ND@15	ND	**4,100**	4,400	180	**4,800**	NA
	9/22/11	ND@20	ND@20	ND@20	ND@60	ND	**2,700**	1,700	180	**1,800**	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	**2,700**	2,900	120	**1,900**	NA

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Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
MW-11	1/5/11	6	ND@1	ND@1	14	20	**11,000**	14,000	660	**16,000**	NA
	3/22/11	4	ND@1	ND@1	7	11	**8,800**	9,600	440	**10,000**	NA
	4/26/11	2	ND@1	ND@1	3	5	**5,800**	7,200	300	**7,600**	NA
	5/25/11	1	ND@1	ND@1	1	2	**3,900**	3,500	200	**5,200**	NA
	6/29/11	ND@5	ND@5	ND@5	ND@15	ND	**4,000**	4,300	170	**4,400**	NA
	9/22/11	ND@20	ND@20	ND@20	ND@60	ND	**3,300**	2,300	ND@200	**1,900**	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	**2,200**	2,700	91	**1,500**	NA
MW-12	1/5/11	ND@1	ND@1	ND@1	ND@3	ND	**560**	56	20	**670**	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	**420**	84	13	**340**	NA
	4/26/11	ND@1	ND@1	ND@1	ND@3	ND	**530**	94	18	**700**	NA
	5/25/11	ND@1	ND@1	ND@1	ND@3	ND	**520**	390	17	**660**	NA
	6/29/11	ND@5	ND@5	ND@5	ND@15	ND	**540**	110	ND@50	**610**	NA
	9/22/11	ND@5	ND@5	ND@5	ND@15	ND	**380**	ND@100	ND@50	**270**	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	**490**	88	14	**400**	NA

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MW-13	1/5/11	ND@1	ND@1	ND@1	ND@3	ND	**590**	70	25	**660**	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	**510**	96	19	**410**	NA
	4/26/11	ND@1	ND@1	ND@1	ND@3	ND	**560**	99	24	**730**	NA
	5/25/11	ND@1	ND@1	ND@1	ND@3	ND	**700**	42	28	**880**	NA
	6/29/11	ND@5	ND@5	ND@5	ND@15	ND	**770**	ND@100	ND@50	**750**	NA
	9/22/11	ND@5	ND@5	ND@5	ND@15	ND	**850**	170	ND@50	**530**	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	**1,100**	92	47	**840**	NA
HW-1	3/16/06	100	880	ND@5	1,690	2,670	**3,700**	1,800	ND@130	**41,000**	**3.6**
	6/30/06	**8**	E 380	170	E 790	178	**62**	56	ND@25	**2,700**	LF/DF 2
	9/12/06	*Not Sampled, Well Dry									
	12/7/06	*Not Sampled, Well Dry									
	3/28/07	*Not Sampled, Well Dry									
	6/13/07	*Not Sampled, Well Dry									
	9/25/07	*Not Sampled, Well Dry									
	12/14/07	*Not Sampled, Well Dry									
	3/14/08	*Not Sampled, Well Dry									
	6/18/08	*Not Sampled, Well Dry									
	9/3/08	*Not Sampled, Well Dry									
	12/23/08	*Not Sampled; well destroyed during 10/08 UST excavation activities									

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Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
HW-2	3/16/06	*Not Sampled, Well Dry									
	6/30/06	*Not Sampled, Well Dry									
	9/12/06	*Not Sampled, Well Dry									
	12/7/06	*Not Sampled, Well Dry									
	3/28/07	*Not Sampled, Well Dry									
	6/13/07	*Not Sampled, Well Dry									
	9/25/07	*Not Sampled, Well Dry									
	12/14/07	*Not Sampled, Well Dry									
	3/14/08	*Not Sampled, Well Dry									
	6/18/08	*Not Sampled, Well Dry									
	9/3/08	*Not Sampled, Well Dry									
	12/23/08	*Not Sampled, Well Dry									
	3/24/09	*Not Sampled, Well Dry									
	6/8/09	*Not Sampled, Well Dry									
	9/27/09	*Not Sampled, Well Dry									
	12/23/09	*Not Sampled, Well Dry									
	3/10/10	*Not Sampled, Well Dry									
	6/7/10	*Not Sampled, Well Dry									

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HW-3	1/23/07	2	ND@1	ND@1	ND@3	2	**6,600**	230	250	**510**	ND@0.5
	3/28/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/22/07	4	ND@1	ND@1	3	7	**5,800**	440	380	**900**	ND@0.5
	9/25/07	**6**	ND@1	ND@1	4	10	**E 7,200**	E 730	E 660	**1,600**	ND@0.5
	12/14/07	4	ND@1	ND@1	2	6	**E 6,300**	E 470	E600	**1,100**	ND@0.5
	3/14/08	ND@50	ND@50	ND@50	ND@350	ND	**7,100**	ND@500	ND@500	**9,000**	ND@0.5
	6/18/08	ND@50	ND@50	ND@50	ND@350	ND	**7,700**	ND@1000	ND@500	**1,500**	ND@0.5
	9/3/08	5	ND@1	ND@1	3	8	**6,500**	E 750	E 750	**3,100**	ND@0.5
	12/27/08	ND@10	ND@10	ND@10	ND@30	ND	**7,600**	530	590	**2,700**	ND@0.5
	3/24/09	2	ND@1	ND@1	1	3	**9,000**	790	660	**1,500**	NA
	6/8/09	2	ND@1	ND@1	ND@3	2	**7,000**	490	600	**2,500**	NA
	9/27/09	1	ND@1	ND@1	ND@3	1	**6,600**	380	510	**10,000**	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	**3,800**	230	310	**4,700**	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	**3,400**	880	240	**4,300**	NA
	5/6/10	ND@1	ND@1	ND@1	ND@3	ND	**3,000**	900	230	**4,000**	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	**1,400**	370	110	**1,400**	NA
	7/31/10	ND@1	ND@1	ND@1	ND@3	ND	**4,900**	580	420	**7,000**	NA
	8/16/10	1	ND@1	ND@1	ND@3	ND	**5,900**	740	490	**8,600**	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	**490**	54	34	**590**	NA
	10/26/10	ND@1	ND@1	ND@1	ND@3	ND	**3,900**	580	330	**4,500**	NA
	11/23/10	ND@1	ND@1	ND@1	ND@3	ND	**4,400**	760	350	**5,200**	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	**6,500**	1,200	440	**7,400**	NA
	2/28/11	ND@1	ND@1	ND@1	ND@3	ND	**4,600**	930	410	**5,900**	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	**4,500**	1,400	290	**4,200**	NA
	6/29/11	ND@5	ND@5	ND@5	ND@15	ND	**5,600**	1,000	330	**7,300**	NA
	9/22/11	ND@20	ND@20	ND@20	ND@60	ND	**3,200**	940	ND@200	**2,700**	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	**3,100**	1,100	170	**2,800**	NA
MDE CLEANUP STD		**5**	**1,000**	**700**	**10,000**	**--**	**20**	--	--	**47**	**0.047**

BTEX - Total Benzene, Toluene, Ethylbenzene and Xylenes
MTBE - methyl tert-butyl ether
µg/L - micrograms-per-liter
mg/L - milligrams-per-liter
* Well not sampled due to insufficient amount of water

ND@x - not detected above laboratory detection level of x
ND - not detected
NA - not analyzed
E - estimated value, exceeds calibration range of laboratory equipment
LF - lighter fuel/oil pattern observed in sample

Attachment A

MDE Correspondence – November 30, 2011

MDE

MARYLAND DEPARTMENT OF THE ENVIRONMENT
Oil Control Program, Suite 620, 1800 Washington Blvd., Baltimore MD 21230-1719
410-537-3442 • 410-537-3092 (fax) 1-800-633-6101

Martin O'Malley
Governor

Anthony G. Brown
Lieutenant Governor

Robert M. Summers, Ph.D.
Secretary

November 30, 2011

Mr. Jose Rios
Manager, Environmental Services
7-Eleven, Inc.
One Arts Plaza
1722 Routh Street, Suite 1000
Dallas TX 75201

RE: REQUEST FOR ADDITIONAL INFORMATION
Case No. 2005-0120-HA
Pleasantville 7-Eleven #22281
2400 Pleasantville Road, Fallston
Harford County, Maryland
Facility I.D. No. 6375

Dear Mr. Rios:

The Oil Control Program recently completed a review of the *Corrective Action Plan - June 29, 2011* and the *Third Quarter 2011 Monitoring and Sampling Report - October 21, 2011* for the above-referenced property. In September 2008, three 12,000-gallon first-generation gasoline underground storage tanks (USTs) were removed. The USTs were subsequently replaced with the existing second-generation gasoline USTs: a 10,000-gallon and a 15,000-gallon. Following UST replacement, the long-term soil vacuum extraction (SVE) pilot test was discontinued; and a bio-augmentation pilot test was implemented from November 2008 through April 2009, utilizing a trench for injection of bio-augmentation materials. Between April 2010 and June 2011, an additional six-month bio-augmentation pilot test was conducted, with direct injection of bio-augmentation materials, into HW-3, MW-4A, MW-9, and MW-10.

Currently, there are 17 on-site and 2 off-site monitoring wells. Sampling of the monitoring well network in September 2011 detected methyl tertiary-butyl ether (MTBE) at 3,200 parts per billion (ppb) and total petroleum hydrocarbons/gasoline-range organics (TPH/GRO) at 2,700 ppb. The most recent pre-filtration sample of the on-site drinking water supply well, collected in June 2011, was non-detect for petroleum constituents.

On September 13, 2010, representatives of the Oil Control Program, 7-Eleven, Inc., and their environmental consultant met to discuss the technical aspects of the proposed *CAP*. The Department understands that the original bio-augmentation trench used in the 2008-2009 pilot testing event remains on-site. Due to the pending development of residences across the street from the subject property, directly downgradient, the Department requires additional pilot testing of the bio-augmentation materials on the lower portion of the 7-Eleven property. Per the September 13, 2010 meeting, the Department requires completion of the following activities:

1) **No later than January 15, 2012**, submit a *Revised Pilot Test Work Plan* for additional pilot testing of the bio-augmentation materials for at least a six-month period. The *Work Plan* must include at a minimum the following:

   a. The location of any additional bio-augmentation trenches on a to-scale site map. Schematics for the trench must be included.
   b. Injection and sampling schedules.
   c. Sampling parameters. All entities sampled must be reported to the Department for review in tabulated format. Raw analytical data must also be included in the reports.
   d. Any changes to the approved *Work Plan* must be approved by the Department prior to implementation.

2) Continue **quarterly (every three months)** sampling of all monitoring wells and tank field monitoring pipes. All samples collected must be analyzed for full-suite volatile organic compounds (VOCs), including fuel oxygenates, using EPA Method 8260 and for total petroleum hydrocarbons/gasoline-range organics (TPH/GRO) using EPA Method 8015B/C.

3) Continue **quarterly** sampling of the on-site drinking water supply well. All samples collected must be analyzed for full-suite VOCs, including fuel oxygenates, using EPA Method 524.2. Since a granular activated carbon (GAC) filtration system is present, samples must be collected pre-, mid-, and post-filtration. **Please ensure that the results of these sampling events (including analytical results) are submitted to the Department in a timely manner.**

4) Continue **semi-annual (every six months)** sampling of the drinking water supply well located at 2414 Pleasantville Road (Dental Technology). All samples collected must be analyzed for full-suite VOCs, including fuel oxygenates, using EPA Method 524.2. Since a GAC filtration system is present, samples must be collected pre-, mid-, and post-filtration. Copies of the sampling results must be submitted to the property owner, the Harford County Health Department, and the Oil Control Program.

When submitting documentation to the Oil Control Program, please reference Case No. 2005-0120-HA and provide three hard copies and an electronic copy on a labeled compact disc (CD) to the attention of the case manager at the above letterhead address.

If you have any questions, please contact the case manager, Jeannette DeBartolomeo, at 410-537-3427 (jdebartolomeo@mde.state.md.us) or me at 410-537-3499 (sbull@mde.state.md.us).

Sincerely,

Susan R. Bull, Western Region Section Head
Remediation and State-Lead Division
Oil Control Program

JD/nln

cc: Ms. Marie Treiber (AECOM)
Mr. Peter Smith (Harford County Health Dept.)
Mr. Christopher H. Ralston
Mr. Horacio Tablada