



## FLYNN ENVIRONMENTAL, INC.

5640 WHIPPLE AVE NW \* NORTH CANTON, OH 44720 \* 800-690-9409 \* 330-499-1000 \* FAX 330-499-4499

Mr. John Barron  
940 Henderson Ave.  
Washington, PA 15301

February 29, 2016

Dear Mr. Barron:

This letter concerns the environmental status of property address 800 Washington Road, South Strabane Township, Washington County, Pennsylvania. The property is located on the east side of Washington Road/Route 19 and is approximately 2.5 acres. The property is mostly west sloping towards Washington Road. The groundwater directional flow is to the southwest towards Washington Road and a tributary of Chartiers Creek. The property is zoned C2, General Commercial District, with a front building setback of 50 feet.

The historical use of the property was the former Rush Woodford Amoco gas station with three gasoline underground storage tanks (USTs). The three USTs were piped to one pump island. The pump island was located near the west/front property line and the PennDOT right-a-way. The USTs were permanently closed in 1988 and later removed. The service station building was razed and all vestiges of the service station were removed in 2010.

Environmental Investigations identified an area of soil contamination below the former pump island location. The area of soil contamination below the pump island totaling 215 cubic yards was excavated in August 2012 and subsequently removed. Soil sampling conducted during the excavation indicated that some amount of contaminated soil remains in the subsoil beyond the extent of the excavation. The remaining soil contamination is, however, well within the building setback of 50 feet.

Post excavation groundwater sampling in 2013 showed a significant reduction in petroleum contamination. This trend is expected to have continued since the removal of the contaminated soil below the pump island. As mentioned previously the groundwater directional flow is southwest under Washington Road.

Although a potential environmental liability remains at the property, the PADEP would not require any further clean-up work at this property under regulations pursuant to the Storage Tank Spill Prevention Act. I hope the letter serves to allay concerns regarding the property so that it may be successfully redeveloped.

Sincerely,

Michael J. Flynn

Project Manager

Flynn Environmental, Inc.





5640 WHIPPLE AVE NW • NORTH CANTON, OH 44720 • 800-690-9409 • 330-499-1000 • FAX 330-499-4400

March 14, 2016

Mr. John Barron  
940 Henderson Ave.  
Washington, PA 15301

Re: 800 Washington Road

Dear Mr. Barron:

The letter from Michael Ford from Coast Commercial Credit, LLC says he believes the SBA would require a clean Phase II Environmental Report and a "No Further Action" letter from the Pennsylvania Department of Environmental Protection.

Obtaining a No Further Action from the PADEP would require entering into the Act 2 voluntary cleanup program. This would take at least two years and may cost \$100,000.

It is known the vast majority of the contaminated soil source area has been excavated and removed. However, the analytical results of soil samples collected from the perimeter west, east and south facing walls of the excavation showed petroleum contamination above PADEP standards. The likely recommendation to satisfy the Act 2 program would be to further excavate and remove the remaining petroleum contaminated soil, add oxygen release chemicals to the open excavation prior to backfilling the excavation. This would be followed by the installation of groundwater monitoring wells and sampling the wells for one to two years to confirm clean conditions.

Sincerely,

A handwritten signature in cursive script that reads "Michael J. Flynn".

Michael J. Flynn  
Project Manager  
Flynn Environmental, Inc.  
800-690-9409

Enclosure



4-18-14

ALB-11

11-11-11



---

## Comprehensive Site Summary

Former Rush Woodford Amoco Property  
800 Washington Road  
Washington, PA 15301



FLYNN ENVIRONMENTAL, INC.



<b>Groundwater Sampling (1 event)</b>				
Gauge and Sample Wells (4 wells)(1 event)	Technician	6	\$70	\$420
Analytical - Groundwater Samples	Laboratory	4	\$60	\$240
Purge Water Treatment (carbon)	Rental	1	\$45	\$45
Sampling Supplies (bailers, etc.)	Rental	1	\$25	\$25
Interface Probe	Rental	1	\$95	\$95
Vehicle	Rental	1	\$75	\$75
				\$900

<b>Aquifer Characterization</b>				
Slug Testing (4 Wells - 2 Technicians)	Geologist	14	\$70	\$980
Computer Data Reduction	Geologist	4	\$75	\$300
Interface Probe	Rental	1	\$95	\$95
Vehicle	Rental	1	\$75	\$75
				\$1,450

<b>Site Characterization Report</b>				
Report Preparation (including CSM)	Geologist	30	\$75	\$2,250
Tabulation of Data	Admin	4	\$55	\$220
Figures and Site Plans	Graphics	6	\$60	\$360
Senior Report Review and Coordination	Pr. Manager	2	\$85	\$170
				\$3,000

**Phase 2  
Total**

**\$12,663**

<b>TOTAL</b>	<b>\$25,505</b>
--------------	-----------------





**FLYNN ENVIRONMENTAL, INC.**

5640 WHIPPLE AVE NW • NORTH CANTON, OH 44720 • 800-690-9409 • 330-499-1000 • FAX 330-499-4499

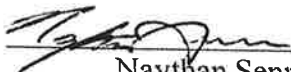
**Comprehensive Site Summary**


**Former Rush Woodford Amoco Property**  
800 Washington Road  
Washington, PA 15301

Prepared for:

Mr. John Barron  
940 Henderson Avenue  
Washington, PA 15301

Prepared by:

  
Naythan Senn  
*Environmental Scientist*

  
Michael J. Flynn  
*Project Manager*

Flynn Environmental, Inc.  
5640 Whipple Avenue N.W.  
North Canton, Ohio 44720  
Telephone: 800-690-9409

Report Date:  
April 17, 2014



## **1.0 INTRODUCTION**

This report summarizes the environmental status of the Former Rush Woodford Amoco property located at 800 Washington Road in South Strabane Township, Washington County, Pennsylvania (the Property). An historic release of gasoline from an unregulated underground storage tank system (UST) has impacted soil and groundwater at the Property; and has been addressed by completing the environmental assessment and remedial actions discussed herein. Descriptions of the site's geographic setting, operating history, and regulatory status are provided; the results of various environmental site investigations are summarized; and remedial activities completed since August 2012 are discussed. Conclusions and recommendations are also provided, along with figures, data tables, and color photographs which document work completed at the site since August 2012. This report has been prepared for the Property's current manager, Mr. John Barron.

## **2.0 SITE DESCRIPTION**

### **2.1 Site Location and Setting**

The Property is located in a hilly area of South Strabane Township, Washington County, Pennsylvania (Figure 1), just north of a highly developed commercial area. The Property is mostly wooded and is situated on a west-facing hillside on the east side of Washington Road / US Route 19. Grade at the Property generally slopes down to the west toward Washington Road. The area exhibits drainage to the southwest toward a tributary to Chartiers Creek. Soils across the western portion of the Property generally consist of silty and sandy clays overlain by 24 to 36 inches of mixed fill material, with shale bedrock encountered 11 to 15 feet below grade. Historic groundwater data indicate a water table ranging between 7 and 17 feet below grade with a flow direction to the west or southwest.

### **2.2 Site History and Underground Storage Tanks**

The Property was historically operated as an automotive service station with retail petroleum sales. It is not known when the gasoline sales were first introduced to the Property. Three underground storage tanks (USTs) were closed at the Property in 1988 which had been used for storing and dispensing gasoline and kerosene. No known subsequent USTs have been operated at the Property since that time. Uses of the Property following the UST closure have included automotive service, residential, retail antiques, and greenhouse agriculture. All buildings and structures were demolished and removed from the Property circa 2010, and the Property has been vacant since that time. Figure 2 includes a 2010 aerial photo of the Property and illustrates its historic layout.

### **2.3 Regulatory Status**

Given that the USTs were last operated and closed prior to enactment of the Storage Tank and Spill Prevention regulations of 1989, no official orders have been issued by the Pennsylvania Department of Environmental Protection (PADEP) or any other public regulatory agency to mandate corrective actions at the Property. The Pennsylvania Act 2 Land Recycling Program and Relief from Liability process has not been initiated, and a *Notice of Intent to Remediate* has not been completed. All work completed at the Property to date has been completed on a voluntary basis and has neither been required nor reviewed by the PADEP.



Contaminant concentrations in this report are compared to the PADEP's published Statewide Health Standard (SWHS) for screening purposes only; the SWHS is not currently being applied to the Property.

### 3.0 Environmental Investigation -- 2002 to January 2012

No known environmental assessment was completed during the closure of the three (3) USTs at the Property in 1988. The tanks were registered for closure with the PADEP after-the-fact by their owner, Coen Oil Company in 1989.

Environmental investigatory work was initiated in December 2002 by a prospective buyer of the Property. Flynn Environmental, Inc. (FEI) was contracted to perform a simple site assessment, whereby a backhoe was used to dig test holes across the property. FEI documented indications of "obvious, extensive petroleum impact" to soil and groundwater below the former dispenser island. A sample of the impacted water, *W-1*, was collected and submitted for laboratory analysis.

Subsequent characterization activities were completed between 2003 and 2006 by Coen Oil Company and their contracted consultants. An *Environmental Site Assessment* report prepared by Letterle & Associates (Letterle) dated May 2003 documented a preliminary receptor survey and soil and groundwater sampling at six (6) soil boring locations across the Property; exploratory digging by Precise Tank Modifications (PTM) in April 2004 confirmed that the USTs had been removed from the Property; and a *Phase II Site Characterization Report* (Letterle) dated January 2006 documented additional soil and groundwater sampling completed in conjunction with the installation of four (4) 4-inch diameter groundwater monitor wells.

In 2007, the Property was sold to the current owner, Ms. Luann Barron. Subsequent environmental sampling events were completed by contracted consultants Applied Geology and Environmental Science, Inc. (AGES) in 2008 and 2011. In January 2012, FEI was contracted to complete a *Limited Subsurface Investigation (LSI)*. The *LSI* was intended to better define the area of petroleum-contaminated soil known to exist at the Property, and to further investigate the possibility of unknown areas of contamination across the Property.

Figure 2 of this report illustrates the locations of samples collected between 2002 and January 2012; Table 1 includes comprehensive soil analytical data; and Table 2 includes comprehensive groundwater analytical data. Note: the validity of all data pre-dating 2012 is subject to the methodologies and reporting of the respective consultants.

#### 3.1 Summary of Soil Results – 2002 to January 2012

Soil containing detectable chemical constituents of gasoline was identified in the vicinity of the former dispenser island from two (2) to fourteen (14) feet below grade. Several chemicals of concern, or COCs, were measured at concentrations exceeding PADEP Statewide Health Standards. Soil sampled at *GB-5 4-6'*, *MW-4 2-4'*, *SB-4 6-8'*, *SB-5 4-8'* and *12-14'*, and *2B-1 4-8'* exceeded the Indoor Air Screening Levels as well as the Non-Residential Soil Leaching to Groundwater Medium-Specific Concentrations (MSCs) for several COCs. Soil sampled at *GB-2 6-8'* contained 2 COCs exceeding Soil to Indoor Air Screening Levels.



### 3.2 Summary of Groundwater Results - 2002 to January 2012

Groundwater containing elevated concentrations of multiple gasoline COCs has been documented at the site, and groundwater data indicate that a dissolved-phase contaminant plume exhibiting elevated COC concentrations has likely migrated beyond the Property's boundaries to the west and southwest. Maximum groundwater COC concentrations have been identified near the former dispenser island at sample locations *W-1*, *GB-5-W*, and *MW-4* and south of the former dispenser island at *MW-3*. Water sampled from *MW-3* has historically contained the Property's highest COC concentrations and in August 2011 contained concentrations of *benzene*, *toluene*, *ethylbenzene*, *total xylenes*, *naphthalene*, and *MTBE* above PADEP's Statewide Health Standard for Residential and Non-Residential sites. Water samples collected from *MW-1* and *MW-2* in 2011 contained no COCs exceeding the Standard.

### 3.3 Source of Contamination

The source of the contamination at the Property is believed to have been historic release(s) of gasoline from the former dispenser island location. No other areas of contamination have been identified at the Property.

## 4.0 REMEDIAL SOIL EXCAVATION

To address the soil and groundwater contamination, on August 30 and 31, 2012, FEI and Gregg Inc., excavated approximately 322 tons of petroleum-contaminated soil (PCS) from the vicinity of the former dispenser island. The PCS area was defined by previous soil sampling (discussed above) as is illustrated on Figure 3. The excavation was intended to remove the area of maximum soil contamination at the Property and thereby remove the primary contributing source for groundwater contamination. Photos are included in Appendix A which document the excavation activities.

The area was excavated down to shale bedrock at 14-15 feet below grade. An estimated total of 215 cubic yards (322 tons) of contaminated soil was removed from the impacted area and encapsulated in an aboveground stockpile to be treated on-site. Within the excavated area, the top 20-36 inches of soil was composed of gravel and mixed fill material and generally did not exhibit signs of petroleum impact; these soils were segregated to be re-used as backfill. Soils three (3) to nine (9) feet below grade generally exhibited indications of significant petroleum impact such as staining and strong odors; they were dug out and added to the contaminated soil pile for on-site treatment. Soils 10 to 14-15 feet below grade generally did not exhibit obvious visual indications of contamination, though they did exhibit variable degrees of petroleum odors. Therefore, soils from 10 to 14-15 feet below grade were dug within the excavation and completely turned-over so as to release any volatile organic compounds and introduce oxygen to the subsurface to facilitate *in situ* degradation of any remaining COCs.

A second area, adjacent to the northern extent of the primary excavation, was also excavated after an "orphan" tank was identified and removed. Exploratory digging was completed in the vicinity of the orphan tank across an area measuring 18 feet by 25 feet and 8 feet deep. No other tanks were discovered. Soil conditions in this area generally did not exhibit signs of obvious contamination. Soil samples *B-1* through *B-6* were collected from this area. Less than 2 tons of stained soil was removed from this area and added to the soil treatment stockpile.



Despite attempts to preserve MW-4 during digging, the monitor well was destroyed.

#### 4.1 Confirmatory Soil Sampling

A total of forty (40) soil samples were collected during the excavation activities. Soil sample locations are illustrated on Figure 3, and soil sample collection data are presented in Table 3.

Confirmatory soil samples were collected from the sidewalls and vertical extents of the excavation to document COC concentrations remaining in the subsurface at the Property. Soil samples designated *SW-1* through *SW-11* were collected from the sidewalls of the excavation at 10-foot intervals; their locations were biased toward areas of the walls exhibiting the most severe degrees of contamination. Eight (8) *SCRN-* samples were collected from 9 to 15.5 feet below grade to document the vertical extent of contamination. The remaining *SCRN-* samples were collected to characterize the soils being excavated.

The soil samples were collected using the trackhoe bucket. Each soil sample was split into two (2) representative portions. One portion of the split sample was placed into a zip-top baggie for field screening, while the other portion was placed into laboratory-supplied sample containers and preserved on ice for analysis. Each sample container was properly marked with the sample location, sample depth, date and time of collection. The samples were field-screened using a MiniRae PID. PID field screening values are tabulated on Table 3.

A total of nine (9) confirmatory soil samples were submitted for laboratory analysis (based on the volume of soil excavated per PA Code Chapter 250 §250.707(b)(1)(iii)(B) and the PADEP Land Recycling Program Technical Guidance Manual, Section IV(B)(5)(b)(i)(c)). The five (5) sidewall samples which registered the highest field screen readings (*SW-2*, *-4*, *-6*, *-7*, *-9*, and *-11*) were selected for analysis. Additionally, samples *SCRN-14*, *SCRN-15*, and *B-1* were analyzed to aid in defining the vertical extent of soil contamination. All samples were collected and analyzed by a PA-licensed laboratory for the COCs on PADEP's 2011 short list of unleaded gasoline parameters.

#### 4.2 Confirmatory Soil Analytical Results

Confirmatory soil sample analysis measured COC concentrations exceeding the SWHS Residential and Non-Residential Soil Leaching to Groundwater MSCs and / or the Soil to Indoor Air Screening Levels at four (4) of the nine (9) sample locations. Sample *SW-9*, which was collected from six (6) feet below grade along the south sidewall toward *MW-3*, contained the highest COC concentrations. COC concentrations exceeding the SWHS were also identified along the eastern (*SW-11*) and western (*SW-7*) sidewalls at 6 and 8 feet below grade, respectively. Samples collected from 9 and 13 feet below the former dispenser location (at *SCRN-15* and *-14*) and below the orphan tank (*B-1*) contained only trace COC concentrations, none of which exceeded the SWHS.

### 5.0 ON-SITE SOIL TREATMENT

Contaminated soil excavated from the source area was stockpiled on-site and treated using a combination of alternative cleanup technologies. The treatment approaches combined "Bio-Pile" and "Land Farming" techniques described in the technical guidance document published by the



federal Environmental Protection Agency (EPA): *How to Evaluate Alternative Cleanup Technologies for Underground Storage Tank Sites* (EPA 510-R 04-002, May 2004). The combined approach utilized natural biodegradation and mechanical agitation to reduce COC concentrations in the encapsulated stockpile.

### 5.1 The Soil Treatment Cell

An area measuring approximately 40 feet by 30 feet was graded level and surrounded with an earthen berm approximately 30 inches high. Heavy, black plastic (6mil) was spread across the entire bottom of the stockpiling / soil treatment area and over the berms to prevent any liquids from leeching through the stockpile into the subsurface. As contaminated soils were excavated and field-screened, they were added to the pile. The stockpiled soil was covered with 6mil plastic to allow for air movement below the plastic and to prevent rainwater or runoff from infiltrating the pile.

The estimated volume of the completed stockpile was 215 cubic yards. For the initial characterization of the stockpile, the two (2) samples of excavated soil which produced the highest PID readings during the excavation (*SCRN-10* and *SCRN-16*) were submitted for analysis.

### 5.2 90-Day Evaluation of the Treatment Cell

After 90 days, on November 29, 2012, Flynn personnel returned to the Property and collected soil samples from throughout the pile. Visual examination revealed minimal signs of obvious petroleum impact on the exposed soil. Samples were collected by advancing hand-augers from 0 to 6 feet into the pile (or until met with refusal) and collecting soil from the augered interval which exhibited the highest PID reading. If no obviously impacted soil was observed, soil was sampled from the maximum depth achieved. A total of eleven (11) samples (*SP-1* through *SP-11*) were collected from across the pile. Sample locations are illustrated on Figure 3; sample collection data are presented on Table 3.

The four (4) samples which produced the highest PID readings (*SP-3*, *-5*, *-8*, and *-9*) were submitted for analysis to evaluate the stockpile. Soil analytical results are reported on Table 1. Of the four (4) samples collected, only one sample (*SP-8*) contained any COC concentrations exceeding PADEP's Standard for On-Site Re-Use. Sample *SP-8* contained concentrations of *benzene*, *1,2,4-trimethylbenzene*, and *1,3,5-trimethylbenzene* which narrowly exceeded the Standard. Additional treatment time was recommended.

### 5.3 300-Day Evaluation of the Treatment Cell

After 300 days, on June 25, 2013, FEI and Gregg personnel returned to the Property and stirred the pile to promote degradation of the petroleum COCs. The soil pile was completely turned and moved (as illustrated on Figure 3) using a trackhoe. FEI inspected the soil pile and found only small pockets of soil which appeared to remain contaminated, from which samples *SP2-1* through *SP2-20* were collected. Four (4) of the twenty (20) samples (*SP2-4*, *-8*, *-9*, and *-17*) were submitted for analysis; each contained concentrations of *benzene*, *1,2,4-trimethylbenzene*, and *1,3,5-trimethylbenzene* above PADEP's Standard for Re-Use of Soil On-Site, therefore additional treatment time was recommended.



#### 5.4 400-Day Evaluation of the Treatment Cell

After 400 days, on October 3, 2013, FEI personnel returned to the Property and collected soil samples using the protocol established during the 90-day sampling event described above. Visual examination of the exposed soil revealed little or no signs of obvious petroleum impact. Eleven soil samples (*SP3-1* through *SP3-11*) were collected from across the soil pile as illustrated on Figure 3. The four samples which produced the highest field screening readings (*SP3-5*, *SP3-7*, *SP3-9*, and *SP3-11*) were submitted for laboratory analysis.

Field screening data indicated continued reduction of volatile organic vapors from the soil samples, as shown below:

Average PID Field Screen Readings of PCS	
During Excavation and Stockpiling	921 ppm
After 90 Days of Treatment	148 ppm
After 300 Days of Treatment	301 ppm
After 400 Days of Treatment	23 ppm

One sample, *SP3-7*, contained concentrations of *naphthalene*, *1,2,4-trimethylbenzene*, and *1,3,5-trimethylbenzene* above PADEP's Standard for Re-Use of Soil On-Site.

#### 5.5 PCS Treatment Conclusions

The on-site treatment of PCS appeared to effectively reduce concentrations of volatile organics and COCs from the majority of the soil pile. Benzene concentrations, in particular, were reduced to levels below PADEP action levels (max concentration during October 2013 sampling event = 0.3874 ppm compared to PADEP action level = 0.5 ppm).

In November 2013, the soil pile was transported off-site by Gregg, Inc. for disposal at a permitted fill / dump site owned and operated by Gregg, Inc. The fill / dump site is located on State Route 136 in Somerset Township, Washington County, Pennsylvania (see Appendix B).

#### 6.0 POST-EXCAVATION GROUNDWATER SAMPLING - 2013

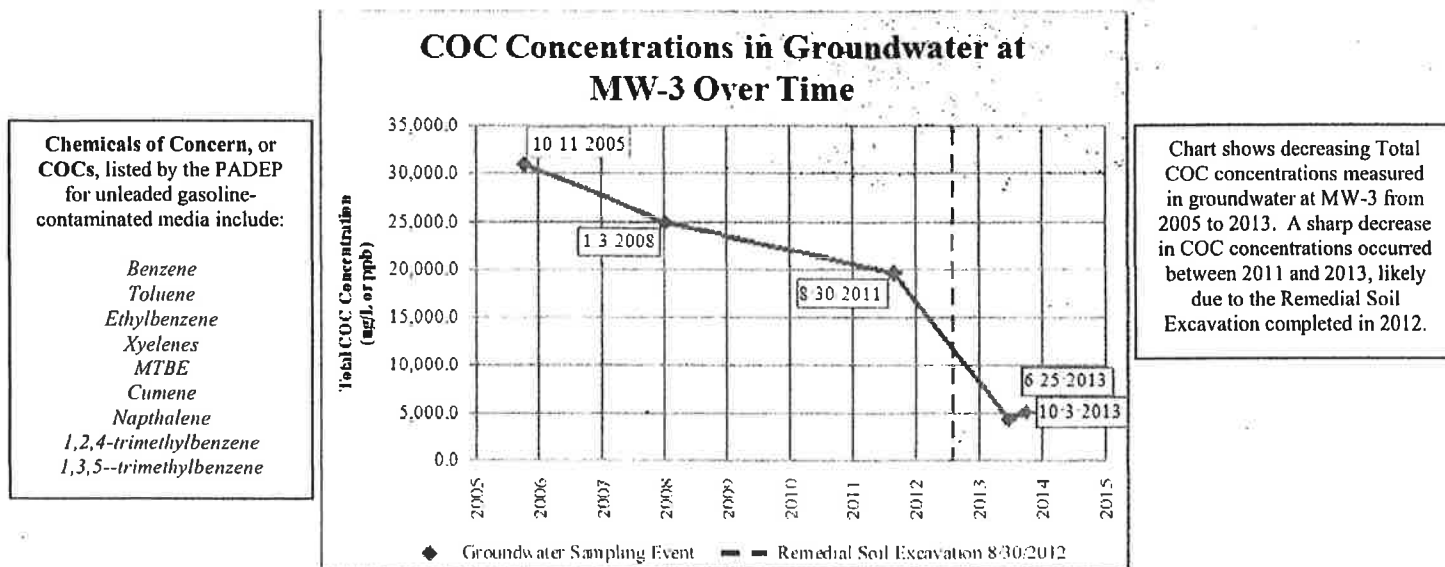
Groundwater was sampled following the remedial soil excavation in June and October 2013. Data from the sampling events was used to assess groundwater conditions following the removal of the source area soil and compare against pre-excavation contaminant levels.

During the June 2013 soil sampling event, monitor well *MW-3* was located, purged, and sampled. On October 3, 2013, all three (3) existing monitor wells, *MW-1*, *MW-2*, and *MW-3* were sampled and their water levels were gauged to calculate relative groundwater elevations. Groundwater analytical data are reported on Table 2. Elevation and purge data for the two sampling events are reported on Table 4.

Groundwater analytical results indicate that elevated COC concentrations remained at the location of *MW-3* in 2013. However, as illustrated on the chart on the following page, a significant decrease (74%) in COC concentrations had occurred since the previous sampling event in 2011. Concentrations of *benzene*, *ethylbenzene*, *naphthalene*, *1,2,4-trimethylbenzene*,



and 1,3,5-trimethylbenzene remain above the value for compliance with the SWHS at Non-Residential sites.



During the October 2013 sampling event, groundwater at *MW-1* remained free of measureable COC concentrations, and water sampled at *MW-2* measured only a minimal concentration of *MTBE*.

Groundwater elevation data collected October 2013 indicate that groundwater flows to the southwest across the site, as illustrated on Figure 3. These findings are consistent with earlier reports. It is therefore likely that contaminated groundwater has migrated beyond the Property's western boundary under Washington Road, though the extent is unknown. Based on data from *MW-2*, the groundwater plume does not appear to have likely migrated to the southern adjacent property.

## 7.0 SUMMARY & CONCLUSIONS

The excavation of PCS from the subsurface of the former dispenser island area in August 2012 appears to have been an effective approach at reducing contaminant concentrations at the Property. Post-excavation assessment data indicate that the excavation may have aided in reducing dissolved-phase groundwater contaminant concentrations by as much as 74%.

Sampling conducted during the 2012 excavation indicated that some amount of contaminated soil remains in the subsurface at the site beyond the extent of the excavation. The area in which contaminated soil likely remains in the subsurface at the Property is illustrated on Figure 4 as the Soil Area of Concern. As illustrated, the Soil Area of Concern lies well within the dimensions of the state right-of-way and local building set-back requirements, and therefore, may not affect the future redevelopment of the Property.

Groundwater data indicate that COC concentrations persist in the shallow water table below the southwestern portion of the Property. The data suggest that the contaminant plume extends west-



southwest under Washington Road. The plume's extent is unknown, but it does not appear to be migrating toward the southern adjacent property.

South Strabane Township requires all properties located within 1,000 feet of a water main to connect to the municipal water supply; therefore, any future development at the Property or nearby properties will be required to use the municipal water supply. However, the township does NOT prohibit the installation of groundwater wells or the use of groundwater. Therefore it is *possible though unlikely* that any neighboring properties are using the groundwater and may be or become affected. Groundwater at the Property should not be used for any purpose, neither potable nor non-potable.

A potential environmental liability remains at the Property, but under regulations pursuant to the Storage Tank Spill Prevention Act, the PADEP will not likely require any further work to be completed. At any time, the owner may pursue further clean-up goals for the Property or volunteer to enter the Act 2 Land Recycling Program.

The Act 2 Land Recycling Program would require extensive additional characterization (including the installation of additional groundwater monitor wells to define the vertical and horizontal extents of the groundwater plume, a detailed examination of the Property's hydrogeologic setting, and a full assessment of potential receptors and risks of exposure) and likely include additional remedial actions. This process could be very expensive, but the goal of the Act 2 process would be to achieve liability protection as described in Chapter 5 of Act 2 from any potential future lawsuits against the owner of the Property for damages caused by the contamination. Currently there are no known third-party damages.





## FIGURES & TABLES

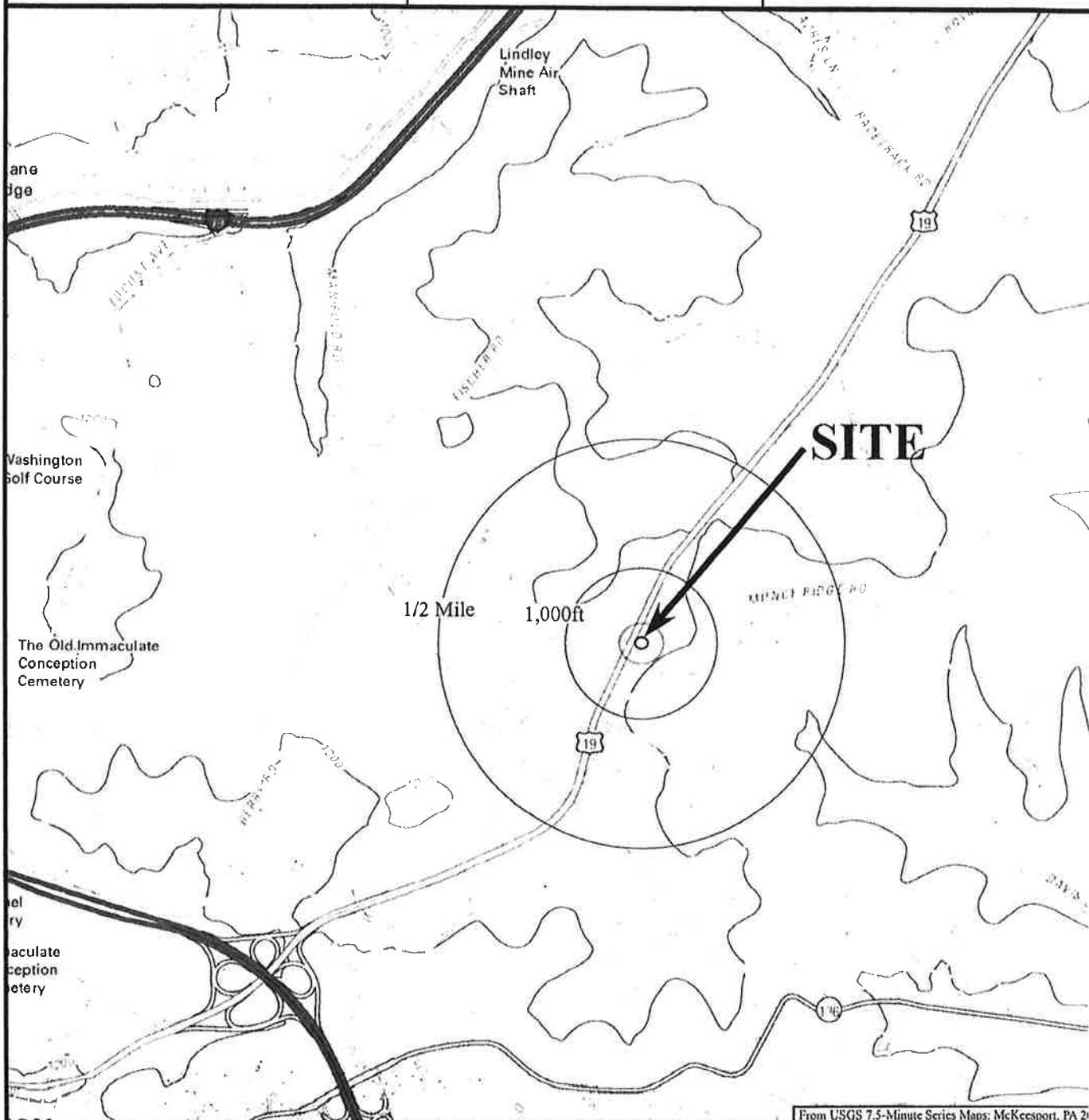
Figure 1	Site Location on USGS Topographic Map
Figure 2	Pre-Excavation Site Plan on 2010 Aerial Photo
Figure 3	Remedial Soil Excavation and On-Site Soil Treatment Sample Locations Showing 10/3/2013 Groundwater Flow
Figure 4	Post-Excavation Soil Area of Concern
Table 1	Soil Analytical Results
Table 2	Groundwater Analytical Results
Table 3	Soil Sample Collection and Field Screening Data
Table 4	Groundwater Elevation and Purge Data



**FORMER RUSH WOODFORD AMOCO**  
800 WASHINGTON ROAD  
WASHINGTON, PA 15301  
SOUTH STRABANE TOWNSHIP  
WASHINGTON COUNTY

**FIGURE 1**  
SITE LOCATION  
ON USGS TOPOGRAPHIC MAP

  
**FLYNN ENVIRONMENTAL, INC.**  
5640 WHIPPLE AVENUE, NW  
NORTH CANTON, OHIO 44720  
PHONE (330) 499-1000



From USGS 7.5-Minute Series Maps: McKeesport, PA 21

NORTH

1

Contour Interval = 40 feet

Scale: 1 inch = 2,000 feet

0' 2,000'

**SITE LOCATION**

40.196608°N, 80.209599°W

Elevation: 1,125 feet

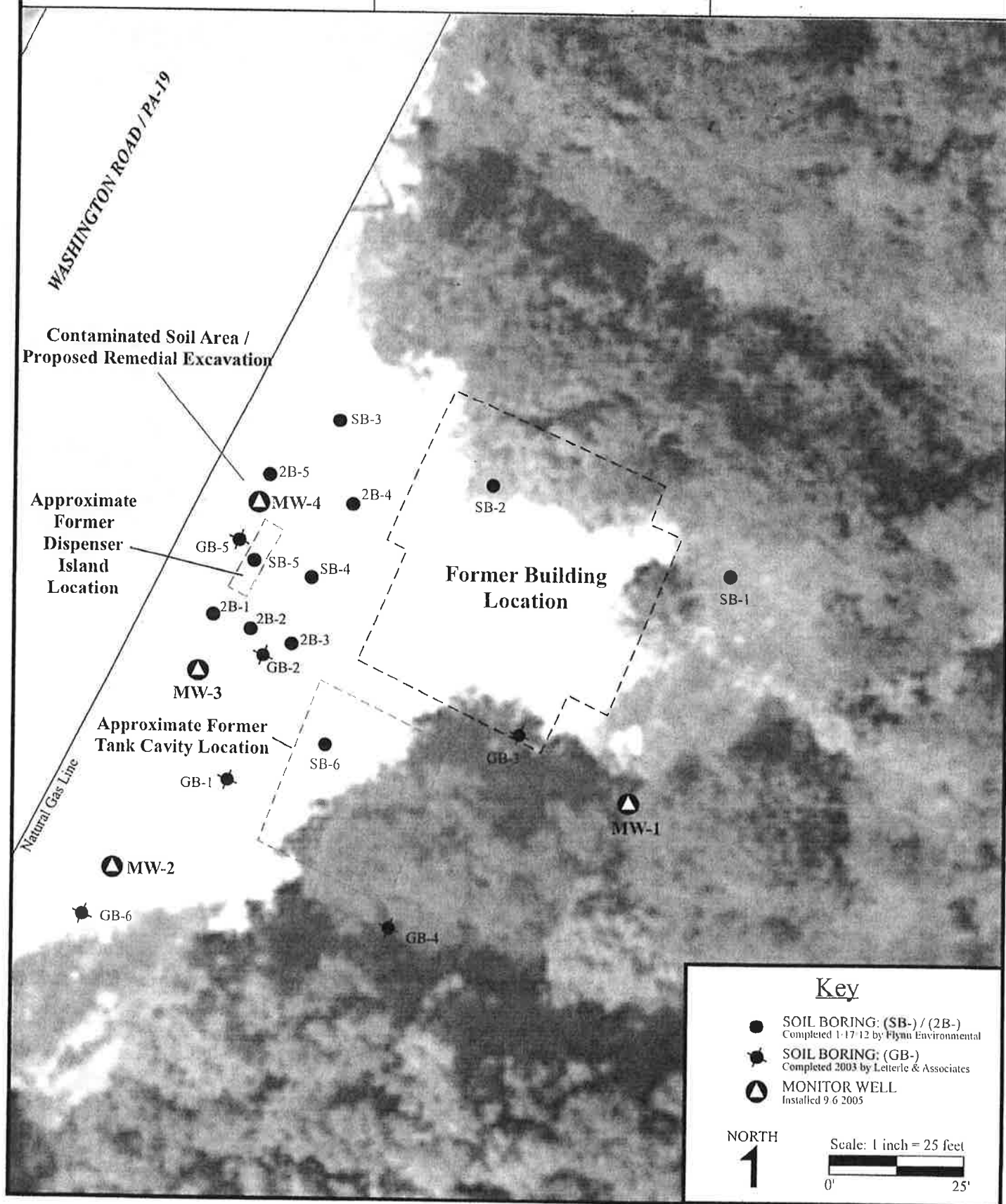


FORMER RUSH WOODFORD AMOCO  
800 WASHINGTON ROAD  
WASHINGTON, PA 15301  
SOUTH STRABANE TOWNSHIP  
WASHINGTON COUNTY

## FIGURE 2

PRE-EXCAVATION SITE PLAN  
ON 2010 AERIAL PHOTO

  
FLYNN ENVIRONMENTAL, INC.  
5640 WHIPPLE AVENUE, NW  
NORTH CANTON, OHIO 44720  
PHONE (330) 499-1000





**TABLE 1**  
**SOIL ANALYTICAL RESULTS**  
 John Barron Site (Former Rush Woodford Amoco)  
 800 Washington Road  
 Washington, Pennsylvania 15301

PARAMETER/ LOCATION	DATE	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	MTBE	CUMENE	NAPHTHALENE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE
<b>SOIL ANALYTICAL RESULTS (mg/kg)</b>										
GB-1 8-10'	3/19/2003	<0.220	<0.220	0.270	0.360	<0.220	0.410	0.640	N/A	N/A
GB-2 6-8'	3/19/2003	0.410	6.200	40.000	160.000	<0.410	4.000	12.000	N/A	N/A
GB-3 8-10'	3/19/2003	<0.210	<0.210	3.300	3.500	<0.210	0.980	1.800	N/A	N/A
GB-4 10-11.5'	3/19/2003	<0.220	<0.220	<0.220	<0.220	<0.220	<0.220	<0.220	N/A	N/A
GB-5 4-6'	3/19/2003	7.900	83.000	37.000	180.000	<1.9	4.500	9.200	N/A	N/A
GB-6 2-4'	3/19/2003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	N/A
MW-1 8-10'	9/6/2005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	N/A
MW-2 2-4'	9/6/2005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	N/A
MW-3 2-4'	9/6/2005	0.140	0.023	0.030	0.140	0.250	0.013	0.0071	N/A	N/A
MW-4 2-4'	9/6/2005	9.700	23.000	80.000	220.000	<0.0064	15.000	33.000	N/A	N/A
SB-1 6-8'	1/17/2012	<0.005942	<0.005942	<0.005942	<0.005942	N/A	<0.005942	<0.005942	<0.005942	<0.005942
SB-2 8-10'	1/17/2012	<0.005788	<0.005788	0.03936	<0.005788	N/A	0.02315	0.01389	0.1134	<0.005788
SB-3 0-4'	1/17/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SB-3 8-10'	1/17/2012	0.01422	0.02015	3.438	4.413	N/A	0.8653	4.884	13.28	5.18
SB-4 6-8'	1/17/2012	3.643	0.6095	20.04	59.49	N/A	3.315	7.003	51.87	17.57
SB-5 4-8'	1/17/2012	3.167	1.668	21.49	66.58	N/A	2.87	6.035	65.3	20.92
SB-5 12-14'	1/17/2012	1.433	0.1502	11.64	6.76	N/A	1.251	1.918	26.81	11.34
SB-6 6-8'	1/17/2012	<0.005796	0.01391	0.4614	1.153	N/A	0.08231	0.9506	2.539	0.8938
2B-1 4-8'	1/17/2012	1.306	51.48	63.4	276.3	N/A	10.03	22.5	181.3	65.69
<b>2012 REMEDIAL SOIL EXCAVATION - 8/30/2012</b>										
<b>Confirmatory Samples</b>										
SW-2	8/30/2012	0.3597	<0.005802	5.024	8.401	<0.005802	0.8471	5.512	19.030	7.078
SW-4	8/30/2012	0.3677	0.02084	5.700	3.942	0.006129	2.574	5.455	24.120	3.972
SW-6	8/30/2012	0.03461	0.04743	3.538	8.845	<0.006409	0.5820	1.769	15.000	4.102
SW-7	8/30/2012	0.6897	0.1009	18.280	27.360	<0.006304	3.240	9.368	33.540	16.140
SW-9	8/30/2012	0.6983	0.4643	14.370	14.260	<0.00360	5.317	10.630	109.400	16.920
						<0.006143	3.010	2.998	73.840	26.660



SCRN-10	8/30/2012	0.01403	0.03174	2.440	3.305	0.000107	0.1294	1.487	2.455	1.415
SCRN-16	8/30/2012	0.04112	0.1935	0.5115	2.697	<0.006047	0.1294	1.487	2.455	1.415

**Samples Representing Contaminated Soil Pile Following 90 Days of On-Site Treatment - 11/29/2012**

SP-3	11/29/2012	<0.006369	0.1465	0.2089	1.503	<0.006369	0.03057	0.3057	1.325	0.4968
SP-5	11/29/2012	<0.006460	0.01938	5.181	7.855	<0.006460	0.4328	4.690	3.269	4.044
SP-8	11/29/2012	<b>0.5197</b>	1.063	12.070	13.160	<0.006579	4.803	5.553	<b>68.550</b>	<b>9.342</b>
SP-9	11/29/2012	<0.006075	<0.006075	<0.006075	0.03888	<0.006075	<0.006075	0.05954	0.1871	0.05346

**Samples Representing Contaminated Soil Pile Following 300 Days of On-Site Treatment - 6/25/2013**

SP2-4	6/25/2013	0.2614	1.095	12.570	38.840	<0.006224	3.112	10.460	<b>82.530</b>	<b>12.570</b>
SP2-8	6/25/2013	<b>5.452</b>	71.270	24.930	117.400	<0.006491	3.375	13.370	<b>60.630</b>	<b>17.530</b>
SP2-9	6/25/2013	0.01532	0.08425	6.062	12.530	<0.005471	3.458	8.119	<b>118.300</b>	<b>28.340</b>
SP2-17	6/25/2013	0.2723	7.546	36.300	83.880	<0.006483	9.270	18.670	<b>136.300</b>	<b>47.970</b>

**Samples Representing Contaminated Soil Pile Following 400 Days of On-Site Treatment - 10/3/2013**

SP3-5	10/3/2013	0.3874	1.275	1.178	3.542	<0.006248	0.1900	0.8548	4.309	1.381
SP3-7	10/3/2013	0.1449	0.9386	6.712	73.700	<0.006300	4.471	<b>10.620</b>	<b>160.100</b>	<b>62.620</b>
SP3-9	10/3/2013	<0.005902	<0.005902	0.09596	0.06445	<0.005902	0.03624	0.03116	0.2998	0.1105
SP3-11	10/3/2013	<0.005878	<0.005878	<0.005878	<0.005878	<0.005878	<0.005878	<0.005878	<0.005878	<0.005878

**PADEP UST CLOSURE ACTION LEVELS (2011) FOR NON-RESIDENTIAL SITES (mg/kg)**

Unsaturated Soil Standard / Action Level	0.5	100	70	1,000	2	2,500	25	35	9.3
**Standard for Reuse of Soil On-site	0.5	100	70	1,000	2	350	10	6.2	5.3

**2011 PADEP STATEWIDE HEALTH STANDARD NON-RESIDENTIAL SOIL MEDIUM-SPECIFIC CONCENTRATIONS & SCREENING LEVELS (mg/kg)**

Unsaturated Soil Leaching to Groundwater MSC	Used Aquifer	0.5	100	70	1,000	2	2,500	25	35	9.3
	Non-Use Aquifer	50	10,000	7,000	10,000	20	10,000	7,500	3,500	9.3
Direct Contact	(0-2')	290	10,000	10,000	8,000	3,200	10,000	56,000	560	480
	(2-15')	330	10,000	10,000	9,100	3,700	10,000	190,000	640	550
Soil to Indoor Air Screening		0.63	110	9.5	77	86	360	NOC	29	6.4

All soil results are reported in milligrams per kilogram (mg/kg), or parts per million. **Bold** exceeded the applicable regulatory action level. **Excavated** - excavated and stockpiled.

**2011 PADEP UST Closure Action Levels for Non-Residential Sites** are from Pennsylvania Department of Environmental Protection (PADEP), Division of Storage Tanks, Technical Document: Closure Requirements for Underground Storage Tank Systems, effective April 1, 1998, Attachment 5, Standards/Action Levels for Confirmatory Samples Collected at Closure Site Assessments, rev. 5/2011.

**2011 PADEP Statewide Health Standard Non-Residential Soil Medium-Specific Concentrations & Screening Levels** are Non-Residential Direct Contact or Soil to Groundwater Numeric Values for Used Aquifers from PA Code Title 25, Chapter 250, Appendix A, Table 3A&B, Soil to indoor air screening values from the Land Recycling Program Technical Guidance Manual Document #253-0300-100 Section IV A.4, Table 4



**TABLE 3**  
**SOIL SAMPLE COLLECTION AND FIELD SCREENING DATA**  
 John Barron Site (FORMER RUSH WOODFORD AMOCO)  
 800 Washington Road  
 Washington, Pennsylvania 15301

SAMPLE ID	DESCRIPTION / LOCATION	SOIL ACTION	TIME/DATE	DEPTH (feet)	PID (ppm)
<b>Collected During Excavation and Stockpiling of Soil - 8/30-31/2012</b>					
SCRN-1	Cavity floor , near southern extent.	Soil turned and left in-place	9:05 / 8/30/2012	9.5	62
SW-10 (SCRN-2)	South sidewall	Sampled and left in-place	9:10 / 8/30/2012	5.5	240
SW-9* (SCRN-3)	South sidewall	South sidewall	9:12 / 8/30/2012	6	500
SCRN-4	South of dispenser area	To Clean Soil Pile then re-used as Fill	9:30 / 8/30/2012	2	10
SCRN-5	North of dispenser area	Stockpiled for on-site treatment	10:00 / 8/30/2012	4	500
SCRN-6	Near southern end of former dispenser island	Stockpiled for on-site treatment	10:18 / 8/30/2012	3	1,284
SCRN-7	Southern end of former dispenser island	Stockpiled for on-site treatment	10:20 / 8/30/2012	4	1,225
SCRN-8	South of dispenser area	Stockpiled for on-site treatment	10:24 / 8/30/2012	5	1,178
SCRN-9	South of dispenser area	Stockpiled for on-site treatment	10:30 / 8/30/2012	8	355
SCRN-10*	West of dispenser area	Stockpiled for on-site treatment	10:35 / 8/30/2012	6	1,330
SCRN-11	Below former dispenser island	Soil turned and left in-place	10:40 / 8/30/2012	9	75
SCRN-12	West of dispenser area	Stockpiled for on-site treatment	10:50 / 8/30/2012	9	350
SCRN-13	West of dispenser area	Stockpiled for on-site treatment	10:58 / 8/30/2012	9	338
SCRN-14*	West of dispenser area	Soil turned and left in-place	11:15 / 8/30/2012	13	65
SCRN-15*	South of dispenser area	Soil turned and left in-place	11:20 / 8/30/2012	10	76
SCRN-16*	East of dispenser area	Stockpiled for on-site treatment	11:30 / 8/30/2012	4	1,428
SCRN-17	Near northern end of former dispenser island	Stockpiled for on-site treatment	11:35 / 8/30/2012	5	1,381
SCRN-18	Near northern end of former dispenser island	Soil turned and left in-place	11:50 / 8/30/2012	9	131
SCRN-19	Near northern end of former dispenser island	Soil turned and left in-place	12:05 / 8/30/2012	9	130
SCRN-20	Near northern end of former dispenser island	Soil turned and left in-place	12:10 / 8/30/2012	12	430
SCRN-21	North of dispenser area, Shale below soil	Stockpiled for on-site treatment	12:15 / 8/30/2012	14	1,608
SCRN-22	North of dispenser area, Shale below soil	Left in-place	12:20 / 8/30/2012	15	1,500
SCRN-23	Cavity floor, clay above shale at near northern extent	Left in-place	13:30 / 8/30/2012	15.5	68
SW-1	East sidewall	Sampled and left in-place	13:45 / 8/30/2012	8	456
SW-2*	East sidewall	Sampled and left in-place	13:47 / 8/30/2012	8	1,137
SW-3	North sidewall	Sampled and left in-place	13:50 / 8/30/2012	8	730
SW-4*	North sidewall	Sampled and left in-place	13:53 / 8/30/2012	8	1,032
SW-5	Northeast corner sidewall	Sampled and left in-place	13:57 / 8/30/2012	8	954
SW-6*	West sidewall	Sampled and left in-place	14:00 / 8/30/2012	8	983
SW-7*	West sidewall	Sampled and left in-place	14:03 / 8/30/2012	8	970
SW-8	West sidewall	Sampled and left in-place	14:50 / 8/30/2012	6	664
SW-11*	East sidewall	Sampled and left in-place	15:00 / 8/30/2012	8	1,340
CSP-1	Clean soil pile	Sampled and re-used as Fill.	14:10 / 8/30/2012	-	25
CSP-2	Clean soil pile	Sampled and re-used as Fill.	14:15 / 8/30/2012	-	12
B-1*	Below orphan tank	Sampled and left in-place	8:40 / 8/31/2012	11	20
B-2	West of orphan tank	Stockpiled for on-site treatment	8:45 / 8/31/2012	8	80
B-3	East of orphan tank	Sampled and left in-place	8:47 / 8/31/2012	7	18
R-4	Sidewall West of Orphan Tank	Sampled and left in-place	8:40 / 8/31/2012	7	7



**Collected From Contaminated Soil Pile to Evaluate 90 Day On-Site Treatment - 11/29/2012**

SP-1	North-East area of pile	none	10:45 / 11/29/2012	3	82
SP-2	North-Middle area of pile	none	10:53 / 11/29/2012	6	92
SP-3*	North-West area of pile	none	11:05 / 11/29/2012	4	179
SP-4	Middle-East area of pile	none	11:15 / 11/29/2012	3	25
SP-5*	Middle-Middle area of pile	none	11:20 / 11/29/2012	1	143
SP-6	Middle-West area of pile	none	11:25 / 11/29/2012	2.5	101
SP-7	South-East area of pile	none	11:35 / 11/29/2012	3	26
SP-8*	South-Middle area of pile	none	11:45 / 11/29/2012	6	806
SP-9*	South-West area of pile	none	11:55 / 11/29/2012	3	125
SP-10	South end of pile	none	12:05 / 11/29/2012	3	14
SP-11	North end of pile	none	12:15 / 11/29/2012	2	61

**Collected From Contaminated Soil Pile to Evaluate 300 Day On-Site Treatment - 6/25/2013**

SP2-1	Stained soil from bottom of pile	Agitated and moved to top of new pile	9:10 / 6/25/2013	N/A	323
SP2-2	Stained soil from bottom of pile	Agitated and moved to top of new pile	9:20 / 6/25/2013	N/A	494
SP2-3	Stained soil from bottom of pile	Agitated and moved to top of new pile	9:27 / 6/25/2013	N/A	130
SP2-4*	Stained soil from bottom of pile	Agitated and moved to top of new pile	9:33 / 6/25/2013	N/A	708
SP2-5	Stained soil from bottom of pile	Agitated and moved to top of new pile	9:36 / 6/25/2013	N/A	33
SP2-6	Stained soil from bottom of pile	Agitated and moved to top of new pile	9:42 / 6/25/2013	N/A	4
SP2-7	Stained soil from bottom of pile	Agitated and moved to top of new pile	9:47 / 6/25/2013	N/A	147
SP2-8*	Stained soil from bottom of pile	Agitated and moved to top of new pile	9:52 / 6/25/2013	N/A	968
SP2-9*	Stained soil from bottom of pile	Agitated and moved to top of new pile	9:56 / 6/25/2013	N/A	543
SP2-10	Stained soil from bottom of pile	Agitated and moved to top of new pile	10:00 / 6/25/2013	N/A	119
SP2-11	Stained soil from bottom of pile	Agitated and moved to top of new pile	10:03 / 6/25/2013	N/A	240
SP2-12	Stained soil from bottom of pile	Agitated and moved to top of new pile	10:05 / 6/25/2013	N/A	205
SP2-13	Stained soil from bottom of pile	Agitated and moved to top of new pile	10:08 / 6/25/2013	N/A	36
SP2-14	Stained soil from bottom of pile	Agitated and moved to top of new pile	10:10 / 6/25/2013	N/A	131
SP2-15	Stained soil from bottom of pile	Agitated and moved to top of new pile	10:15 / 6/25/2013	N/A	315
SP2-16	Stained soil from bottom of pile	Agitated and moved to top of new pile	10:18 / 6/25/2013	N/A	177
SP2-17*	Stained soil from bottom of pile	Agitated and moved to top of new pile	10:21 / 6/25/2013	N/A	1,095
SP2-18	Stained soil from bottom of pile	Agitated and moved to top of new pile	10:24 / 6/25/2013	N/A	139
SP2-19	Stained soil from bottom of pile	Agitated and moved to top of new pile	10:28 / 6/25/2013	N/A	110
SP2-20	Stained soil from bottom of pile	Agitated and moved to top of new pile	10:32 / 6/25/2013	N/A	105

**Collected From Contaminated Soil Pile to Evaluate 400 Day On-Site Treatment - 10/3/2013**

SP3-1	South end of pile	none	12:15 / 10/3/2013	2.5	0
SP3-2	South-East area of pile	none	12:25 / 10/3/2013	2	0
SP3-3	South-West area of pile	none	12:35 / 10/3/2013	1.5	3
SP3-4	South-Middle area of pile	none	12:48 / 10/3/2013	6	2
SP3-5*	Middle-Middle area of pile	none	13:05 / 10/3/2013	4	33
SP3-6	Middle-East area of pile	none	13:45 / 10/3/2013	3	5
SP3-7*	Middle-West area of pile	none	13:55 / 10/3/2013	3.5	127
SP3-8	North-East area of pile	none	14:10 / 10/3/2013	3.5	4
SP3-9*	North-Middle area of pile	none	14:25 / 10/3/2013	4	64
SP3-10	North-West area of pile	none	14:40 / 10/3/2013	2.5	0
SP3-11*	North end of pile	none	15:10 / 10/3/2013	3	12

**BOLD\*** Sample submitted to laboratory for PA Unleaded Analysis; GRAY - Stock-piled for on-site treatment.



**TABLE 4**  
**GROUNDWATER ELEVATION AND PURGE DATA**

Former Rush Woodford Amoco  
800 Washington Road  
Washington, Pennsylvania 15301

WELL ID	RELATIVE TOP-OF-CASING ELEVATION	TOTAL DEPTH (ft)	WELL DIAMETER (in)	DATE	DEPTH TO WATER (ft)	RELATIVE GROUND-WATER ELEVATION	AMOUNT PURGED (gallons)
MW-1	103.36	24	4	6/25/2013	NR	-	7 / dry
				10/3/2013	10.60	92.76	7 / dry
MW-2	100.00	23	4	10/3/2013	17.11	82.89	4.75 / dry
MW-3	99.82	20	4	10/3/2013	10.72	89.10	5.25 / dry

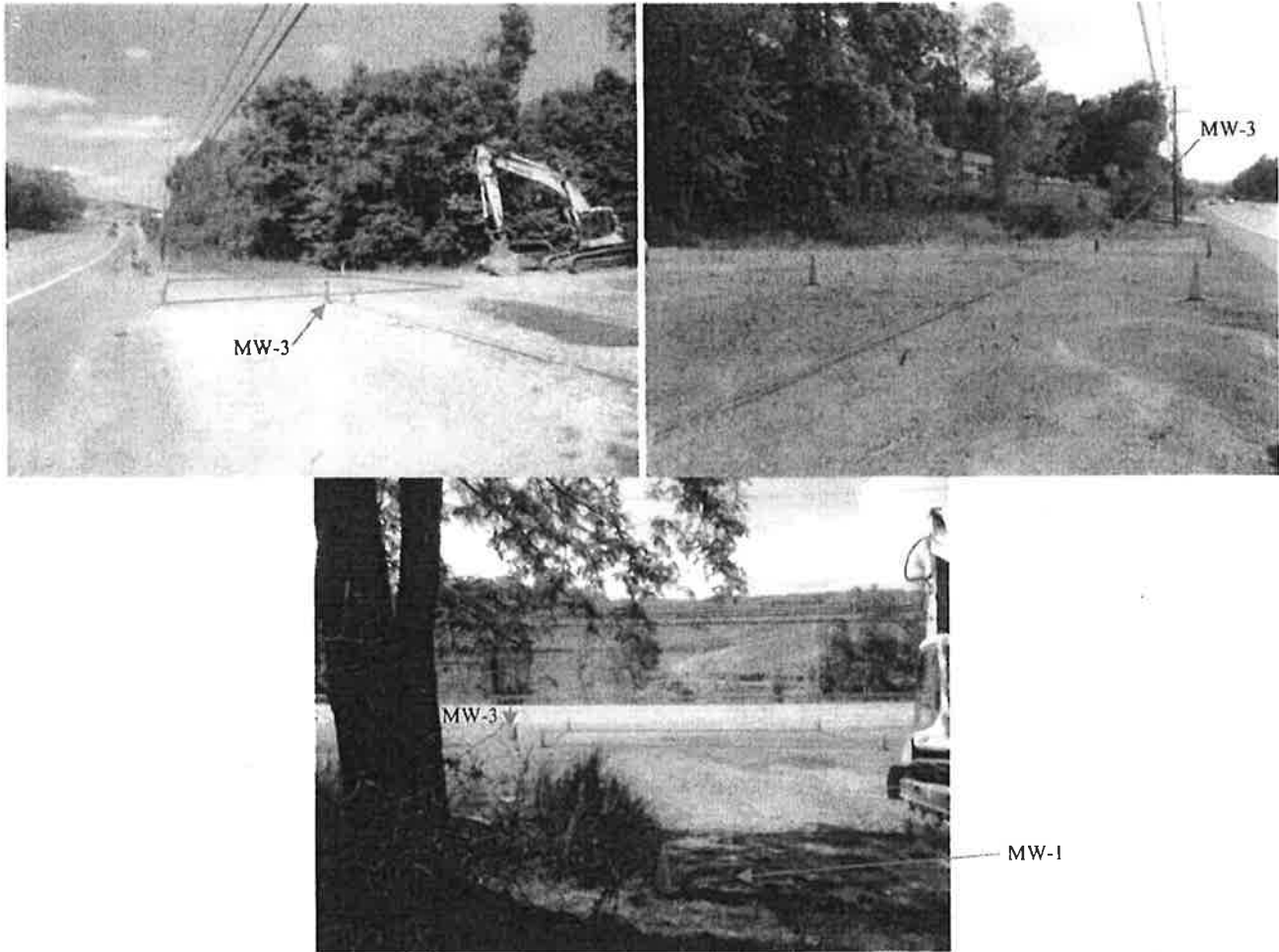


## **Appendix A**

### **Photographic Documentation of 2012 Remedial Activities**





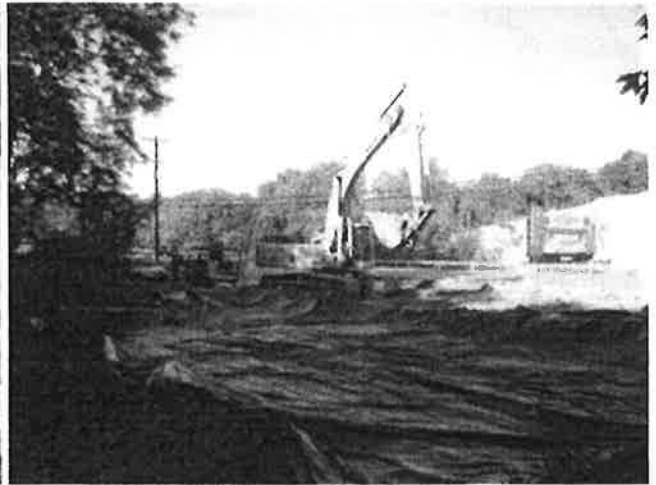


**Photos 1,2&3 (8/29/2012):** Overview of Property prior to commencement of excavation activities: cones mark the corners of the proposed excavation area, and orange lines were added to illustrate the area. The locations of existing groundwater monitoring wells MW-1 and MW-3 are also shown. Top left shows view looking north along Washington Road; top right shows view looking south; bottom shows view looking west.



**Photo 4 (8/30/2012):** Preparation of the stockpiling / soil treatment area: an area measuring approximately 40 feet by 30 feet was graded level and surrounded with an earthen berm approximately 30 inches high.





**Photos 5&6 (8/30/2012):** 6mil plastic was laid across the entire bottom of the stockpiling / soil treatment area and up the berms to contain any liquids from leeching through the stockpile into the subsurface.



**Photo 7 (8/30/2012):** To commence excavation activities, the top 20-36 inches of gravel and clean material from the proposed area were removed. Some of this material was used to create a berm between the excavation and Washington Road; the remaining material was added to the "presumably clean soil pile".



**Photo 8 (8/30/2012):** The western extent of the excavation was moved 4-6 feet to the east due to proximity to utilities near the edge of the highway.





**Photos 9&10 (8/30/2012):** Soils 3 to 9 feet below grade across the excavation generally exhibited indications of significant petroleum impact such as staining and strong vapors; they were dug out and added to the contaminated soil pile for on-site treatment.



**Photo 11 (8/30/2012):** Soils 9 to 14 feet below grade generally did not exhibit obvious visual indications of contamination, though they did exhibit variable degrees of petroleum vapors. Therefore, soils from 10 to 14 feet below grade were dug within the excavation and completely turned over so as to release any volatile organic compounds and introduce oxygen to the subsurface to facilitate in situ remediation of soils remaining at the Site.



**Photo 12 (8/30/2012):** Soil samples were collected from the sidewalls of the excavation at 10-foot intervals with a bias toward the most obviously contaminated.





**Photo 12 (8/30/2012):** On-site soil treatment pile prior to being covered with 6mil plastic.



**Photos 13,14, 15&16 (8/31/2012):** An unregulated steel UST of approximately 550-gallon capacity was discovered north of the primary excavation area by following a steel product line from the former dispenser island. The tank contained water free of any signs of petroleum product, which was evacuated by Environmental Specialists, Inc. The tank was removed and exploratory digging was completed to a depth of 8 feet below grade in the area north of the primary excavation area. Soil screening samples were collected throughout the area. No additional tanks were encountered.





**Photos 17&18 (8/31/2012):** The excavation cavity was backfilled with clean soil material borrowed from elsewhere on the Property.

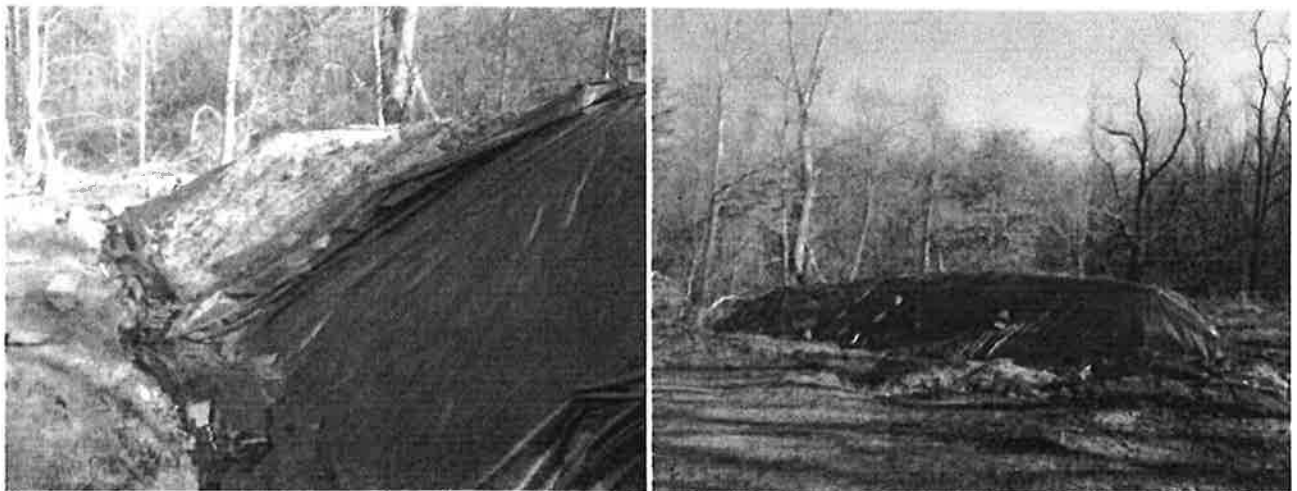


**Photos 19&20 (8/31/2012):** The stockpiled soil was covered with 6mil plastic to allow for air movement below the plastic and to prohibit rainwater or runoff to infiltrate the pile.





**Photos 21, 22, & 23 (11/29/2012):** 90 days following the excavation, 11 samples were collected from across the soil pile using hand augers to assess contaminant levels remaining in the treated soil.



**Photos 24&25 (11/29/2012):** The pile was partially uncovered and visual assessment of soil conditions was noted. After soil samples had been collected, the pile was completely covered and secured.

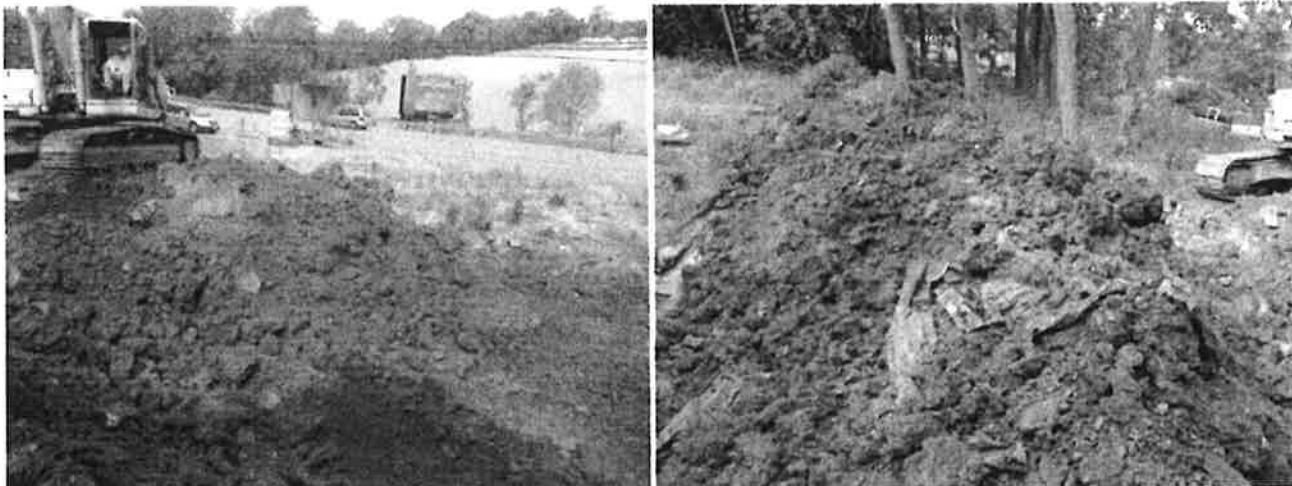




**Photos 26&27 (6/25/2013):** The soil pile appeared free of visual signs of contamination before it was completely turned and moved to Treatment Cell Location B.



**Photo 28 (6/25/2013):** Showing the preparation of Treatment Cell Location B immediately east of Location A, prior to movement of the soil pile.



**Photos 29&30 (6/25/2013):** The vast majority of the soil appeared free of any signs of petroleum impact, and areas obviously petroleum-impacted appeared only as small pockets. As the pile was moved, only samples of soil exhibiting staining were collected. A total of 20 samples were collected (*SP2-1* through *SP2-20*), and the four samples which produced the highest field-screenings were submitted for analysis.





**Photo 31 (6/25/2013):** After the soil pile had been completely turned and moved, it was completely covered with 6mil plastic and secured.



**Photos 32&33 (10/3/2013):** The soil pile was uncovered for visual inspection after 400 days of on-site treatment, and 11 samples were collected using a hand auger. The majority of the soil pile appeared to be free of obvious signs of petroleum contamination.



**Photo 34 (10/3/2013):** After the soil pile had been sampled, it was completely re-covered with 6mil plastic and secured.



**Appendix B**

Gregg, Inc. Fill Site S.R. 136



# **EROSION AND SEDIMENT CONTROL PLAN**

**FOR  
GREGG, INC. FILL SITE  
S.R. 136**

**SOMERSET TOWNSHIP  
WASHINGTON COUNTY, PENNSYLVANIA**

**FEBRUARY 2011**

**THIS PLAN HAS BEEN REVIEWED  
for the Department of Environmental Protection**

By: Shannon M. [Signature]

Date: 4/5/11

and determined to adequately satisfy the purpose  
and requirements of 25 PA Code Chapter 102, to  
minimize the potential for accelerated erosion  
and sedimentation to the waters of the  
Commonwealth.

Prepared by:  
**WIDMER ENGINEERING INC**  
61 East Wheeling Street  
Washington, Pennsylvania 15301  
Telephone: (724) 228-1550  
Fax: (724) 228-7057



ASSIGNMENT

WITNESSETH this Assignment dated this 7 day of September, 2007, entered into by and between JANET KEYSER, ADMINISTRATRIX D.B.N.C.T.A. of the ESTATE OF RUSH WOODFORD, JR., a/k/a RUSH WOODFORD, DECEASED ("Woodford"),

AND

JOHN BARRON, JR. ("John"),

AND

LUANN M. BARRON ("Luann").

WHEREAS, Woodford and John entered into an Agreement of Sale and Purchase dated May 29, 2007, by which they, respectively, were the Seller and Buyer relating to a certain parcel of land situate in South Strabane Township, Washington County, Pennsylvania, being more particularly described in Exhibit "A" attached hereto and made a part hereof ("Agreement of Sale"); and

WHEREAS, Woodford and Coen Oil Company entered into Remediation Cost Allocation Agreement dated the \_\_\_\_ day of November, 2003, a true and correct copy of which is attached hereto and marked as Exhibit "B" and made a part hereof ("Remediation Cost Allocation Agreement"); and

WHEREAS, all parties to this Assignment wish to memorialize the assignment of the Agreement of Sale and Remediation Cost Allocation Agreement, as hereinafter set forth.

NOW, THEREFORE, intending to be legally bound hereby and in consideration of the mutual covenants herein contained, the parties hereto covenant and agree as follows:

1. The "Whereas" recital paragraphs are incorporated herein by reference.



2. John does hereby transfer and assign to Luann the Agreement of Sale, and Luann does hereby, jointly and severally with John, agree to assume and fully discharge all the obligations of John under all the terms and conditions of said Agreement of Sale.

3. Woodford does hereby assign to Luann, and John and Luann hereby jointly and severally agree to assume all obligations of Woodford under said Remediation Cost Allocation Agreement.

4. This Assignment shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, successors and assigns.

WITNESS:

John A. Rade  
Patrick C. Dennis  
as to both - }

ESTATE OF RUSH WOODFORD, JR.  
a/k/a RUSH WOODFORD, DECEASED

By: Janet Keyser  
Janet Keyser, Administratrix D.B.N.C.T.A.  
John Barron Jr  
John Barron, Jr.  
Luann M Barron  
Luann M. Barron



## ACKNOWLEDGMENT

COMMONWEALTH OF PENNSYLVANIA     )  
  )  
COUNTY OF WASHINGTON            )     SS:

On this, the 7<sup>th</sup> day of September, 2007, before me, a Notary Public, the undersigned officer, personally appeared JANET KEYSER, ADMINISTRATRIX D.B.N.C.T.A. of the ESTATE OF RUSH WOODFORD, JR., a/k/a RUSH WOODFORD, DECEASED, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that she executed the same for the purposes therein contained.

In Witness Whereof, I hereunto set my hand and official seal.

Joan A. Murray  
Notary Public

COMMONWEALTH OF PENNSYLVANIA

Notarial Seal  
Judith A. Murray, Notary Public  
City Of Washington, Washington County  
My Commission Expires June 26, 2011

Member, Pennsylvania Association of Notaries



COMMONWEALTH OF PENNSYLVANIA  
Notarial Seal  
Judith A. Murray, Notary Public  
City of Washington, Washington County  
My Commission Expires June 26, 2011  
Member, Pennsylvania Association of Notaries



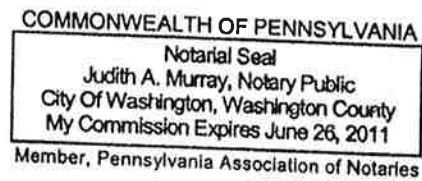
## ACKNOWLEDGMENT

COMMONWEALTH OF PENNSYLVANIA     )  
   )  
COUNTY OF WASHINGTON                     )     ss:

On this, the 7<sup>th</sup> day of September, 2007, before me, a Notary Public, the undersigned officer, personally appeared LUANN M. BARRON, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In Witness Whereof, I hereunto set my hand and official seal.

Justin A. Murray  
Notary Public



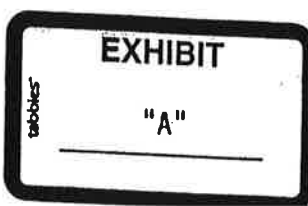


**ALL** that certain parcel of land situate in South Strabane Township, Washington County, Pennsylvania, being more particularly bounded and described as follows:

**BEGINNING** at a point in the center of Hill Church Road (which point is 100 feet North 23° 22' East from an original farm corner); thence by the center of the said road, North 23° 22' East 200 feet to a point; thence leaving the road by land now or formerly of James S. Arthur, South 57° 32' East 508.1 feet to a point on the West side of a 30 foot lane; thence by same lane South 32° 16' West 200 feet to a point; thence by land now or formerly of James S. Arthur, North 57° 12' West 477.5 feet to the place of beginning.

**CONTAINING** 2.245 Acres, more or less.

**BEING TAX PARCEL NO. 600-001-01-02-0022-00.**





## REMEDATION COST ALLOCATION AGREEMENT

THIS REMEDIATION COST ALLOCATION AGREEMENT (this "Agreement") is made and entered into this \_\_\_\_ day of November, 2003, by and between COEN OIL COMPANY, a Pennsylvania corporation ("Coen Oil"), and ~~HAROLD D.~~ KEYSER, being, and acting in his capacity as, the sole executor of the Estate of Rush Woodford, Jr., deceased (such Estate being hereinafter referred to as "Owner" and such executor as the "Executor").

her

Administratrix d.b.n.c.a.

WITNESSETH:

JANET

JK

WHEREAS, Owner is the complete, sole and exclusive Owner in fee simple of a certain parcel of real property, formerly operated as a service station under the name Rush Woodford Amoco (now closed) bearing Facility Identification Number 6-309698, that is located at 800 Washington Road, Washington, Pennsylvania, being the same parcel of land conveyed to Rush Woodford and Mary Woodford, husband and wife, and Rush Woodford, Jr., by the deed of W. Frank Frye and Dora K. Frye, husband and wife, dated September 13, 1952, of record in Deed Book Volume 842, Page 508 (the "Property"); and

WHEREAS, Rush Woodford died on February 11, 1975, and Mary Woodford, as the surviving tenant in a tenancy by the entireties, died on January 9, 1977, and by an Adjudication and Decree and Schedule of Distribution dated September 14, 1977, the one-half (1/2) interest of Mary Woodford was awarded to Rush Woodford, Jr., who died on June 16, 2002, and in the proceedings in the Office of the Register of Wills of Washington County, Pennsylvania at No. 63-02-0779, Harold D. Keyser was appointed the Executor of the Estate of Rush Woodford, Jr.; and Janet Keyser was subsequently appointed Administratrix, d.b.n.c.a. of the Estate; and

JK

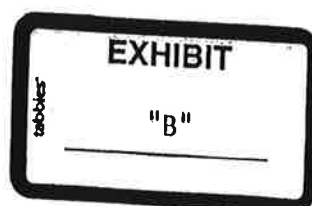
WHEREAS, Coen Oil was a supplier of petroleum products to Rush Woodford Amoco during certain periods of its operation and in such role owned three (3) certain underground storage tanks located on the Property, consisting of a 1,000 gallon gasoline tank, a 2,000 gallon gasoline tank, and a 1,000 kerosene tank (collectively, the "Tanks"); and

WHEREAS, the Tanks have been taken out of service and filled with an inert substance but remain in place below the surface of the Property; and

WHEREAS, the Tanks have been identified through limited investigation as a potential source of certain leakage of petroleum substances into the soil of the Property; and

WHEREAS, Coen Oil and Owner mutually desire that the Tanks and certain soil in the vicinity of the Tanks be removed from the Property and that certain other actions be taken to characterize the conditions of the Property and undertake remedial activities, as described herein; and

WHEREAS, Coen Oil wishes to gain access to the Property for the Contractor (as defined herein) and itself, and Owner is willing to grant the Contractor and Coen Oil access to the Property, for the purposes described above, and Owner is willing to comply with the





provisions of this Agreement, including the Deed Restrictions (as defined herein) when executed and delivered.

NOW, THEREFORE, for and in consideration of the premises and the mutual covenants herein contained, and intending to be legally bound hereby, Coen Oil and Owner hereby agree as follows:

### **AGREEMENT:**

**Section 1. Scope of Work.** Coen Oil and Owner shall jointly and severally engage Letterle & Associates, LLC (the "Contractor") to perform the work (the "Work") on the Property specified in Phase 1 (Tank Closure/Soil Removal) and, if necessary (as further discussed herein), Phase 2 (Site Characterization), of the scope of work set forth on **Exhibit A** hereto (the "Scope of Work"). Such engagement shall be for a guaranteed price not to exceed the combined totals set forth in the Statement of Work for Phase 1 (Tank Closure/Soil Removal) and Phase 2 (Site Characterization). Notwithstanding such joint and several engagement of the Contractor by Coen Oil and Owner, Coen Oil shall have sole and exclusive direction over the Contractor in the performance of the Work, as qualified herein. The Work constituting Phase 2 (Site Characterization) of the Scope of Work shall be performed only if Coen Oil and Owner mutually determine that such Phase 2 (Site Characterization) is necessary. The Work shall be limited solely to the Scope of Work. The Contractor may subcontract such portions of the Work to responsible subcontractors, acceptable to both of Owner and Coen Oil, as the Contractor deems necessary or appropriate. Neither Owner nor Coen Oil shall have responsibility or liability to the other for the acts or omissions of the Contractor or its subcontractors or for any warranties as to the quality or completeness of the Work. Both of Owner and Coen Oil shall have the right to inspect the Work and monitor the performance thereof; **provided, however**, that no such inspection or monitoring shall be deemed an assumption by either of Owner or Coen Oil of any responsibility for the quality or completeness of the Work or any acts or omissions of the Contractor in the performance thereof. Each of Coen Oil and Owner, as the case may be, shall execute and deliver such documents required of them by any governmental authority as may be required for the performance of the Work, including, without limitation, any registrations as may be required with respect to the removal of the Tanks or any of them. The Contractor shall be required to obtain and maintain in effect throughout the course of the Work reasonable insurance coverage with respect to the Work, naming each of Coen Oil, Owner and the Executor as additional insureds, and shall be required to furnish to Coen Oil and Owner a certificate of insurance reflecting such coverage and additional insureds prior to the commencement of the Work.

**Section 2. Responsibility for Fees, Costs and Expenses of Work.** Notwithstanding Coen Oil's and Owner's engagement of the Contractor jointly and severally pursuant to **Section 1** hereof, as between Coen Oil and Owner, they shall be responsible to one another for the Contractor's fees, costs and expenses as follows: (a) Coen Oil shall be responsible for seventy-five percent (75%) of the Contractor's fees, costs and expenses incurred in connection with Phase 1 (Tank Closure/Soil Removal) of the Scope of Work (except as limited below), and Owner shall be responsible for twenty-five percent (25%) of the Contractor's fees, costs and expenses incurred in connection with Phase 1 (Tank Closure/Soil Removal) of the Scope of Work (except as limited below); and (b) Coen Oil shall be responsible for fifty percent (50%) of



the Contractor's fees, costs and expenses incurred in connection with Phase 2 (Site Characterization) of the Scope of Work (except as limited below), and Owner shall be responsible for fifty percent (50%) of the Contractor's fees, costs and expenses incurred in connection with Phase 2 (Site Characterization) of the Scope of Work (except as limited below). Notwithstanding the foregoing, Coen Oil's total financial responsibility with respect to Phase 1 (Tank Closure/Soil Removal) of the Scope of Work shall not exceed Nine Thousand Six Hundred Thirty-Two Dollars and Twenty-Five Cents (\$9,632.25), and Coen Oil's total financial responsibility with respect to Phase 2 (Site Characterization) of the Scope of Work shall not exceed Six Thousand Three Hundred and Thirty-One Dollars and Fifty Cents (\$6,331.50). Also notwithstanding the foregoing, Owner's total financial responsibility with respect to Phase 1 (Tank Closure/Soil Removal) of the Scope of Work shall not exceed Three Thousand Two Hundred Ten Dollars and Seventy-Five Cents (\$3,210.75), and Owner's total financial responsibility with respect to Phase 2 (Site Characterization) of the Scope of Work shall not exceed Six Thousand Three Hundred Thirty-One Dollars and Fifty Cents (\$6,331.50). The respective responsibilities of Owner and Coen Oil for the fees, costs and expenses of the Contractor shall not limit or otherwise affect their respective rights set forth in Section 1 hereof. Each of Coen Oil and Owner shall timely pay their respective portions of the Contractor's fees, costs and expenses as they become due.

**Section 3. Grant of Access; Cooperation of Owner.** Owner hereby grants unto each of the Contractor, Coen Oil, and their respective employees, authorized representatives, agents, invitees, consultants and contractors a non-exclusive right of access to and ingress and egress from, through, upon, across and over the Property for the purpose of conducting, inspecting and monitoring the Work. Owner shall provide full cooperation, support and access to the Property to Coen Oil, its employees, authorized representatives, agents, invitees, consultants and contractors in their performance of the Work and exercise of rights under this Agreement. Owner shall not interfere with the performance of the Work.

**Section 4. Deed Restrictions; Covenant Not to Use Groundwater.** Owner covenants and agrees to execute and deliver to Coen Oil, not less than ten (10) days after receipt of a written request from Coen Oil (if Coen Oil should so request, as further discussed herein), an amended or confirmatory deed containing a prohibition on the use of groundwater from the Property and the extraction or withdrawal of groundwater from the Property (the "Deed Restrictions"), and hereby authorizes Coen Oil to record the amended or confirmatory deed containing the Deed Restrictions in the Office of the Recorder of Deeds of Washington County, Pennsylvania. Coen Oil shall have the right, at its sole and exclusive discretion, but not the obligation, to require Owner to execute and deliver the Deed Restrictions. The Deed Restrictions, if and when so recorded, shall run with the land and bind Owner and all subsequent owners and users of the Property. Owner further covenants and agrees (a) that it shall not use or withdraw groundwater from the Property prior to its execution and delivery of the amended or confirmatory deed containing the Deed Restrictions; and (b) to fully, faithfully, diligently and timely comply with, adhere to the requirements of, and enforce the Deed Restrictions if and when executed.

**Section 5. Transfer of Interests in Property and Lease of Property.** Owner shall not transfer its interests in the Property or any portion thereof, or any of them, or lease any portion of the Property, without providing Coen Oil with written notice of its intent to do so (including the



name and address of the proposed transferee or lessee) not less than sixty (60) days in advance of the consummation of such transfer or lease. Owner shall furnish a copy of this Agreement and the amended or confirmatory deed containing the Deed Restrictions (if any) to any proposed transferee or lessee in advance of execution of any agreement to transfer its interests in the Property or lease any part of the Property.

Upon successful completion of the agreed upon scope of work as provided in Section 1,

**Section 6. Release.** Owner hereby fully and forever releases, remises, acquits and discharges Coen Oil and each of its parents, subsidiaries, affiliates, divisions, predecessors, successors, assigns, directors, officers, shareholders, employees, agents, attorneys, consultants, contractors and representatives from, and surrenders and waives, any and all claims, demands and actions that Owner ever had, now has, or may ever have in the future against them, either directly or indirectly, as to any (a) loss of profits that Owner has experienced or may experience in connection with any failure to agree to or consummate any sale or lease of the Property contemplated prior hereto; (b) diminution of value with respect to the Property in connection with the conduct of the Work and the imposition of the Deed Restrictions; and (c) environmental conditions affecting the Property that are not directly attributable to the Tanks.

**Section 7. Term.** This Agreement shall be effective as of the date hereof first set forth above, and this Agreement, and the Deed Restrictions, if and when executed and delivered to Coen Oil, shall remain in effect forever.

**Section 8. Authority of Owner.** Owner represents and warrants that: (a) on the date of this Agreement, it is the complete, sole and exclusive owner in fee simple of the entire Property, and it has the exclusive right and authority to execute, deliver and perform this Agreement and the amended or confirmatory deed containing the Deed Restrictions; (b) ~~Harold D.~~ Keyser is the duly appointed, serving and sole ~~Executor~~ of the Estate of Rush Woodford, Jr. and has the exclusive right and authority to act on behalf of the Estate of Rush Woodford, Jr. in legal matters, including, without limitation, Owner's execution, delivery and performance of this Agreement and the amended or confirmatory deed containing the Deed Restrictions (if any); and (c) no consents or approvals of any third parties shall be required in order for Owner to enter into this Agreement and make it a binding obligation on Owner or for ~~Harold D.~~ Keyser, as the ~~Executor~~, to execute and deliver this Agreement on behalf of Owner.

**Section 9. Authority of Coen Oil.** Coen Oil represents and warrants that on the date of this Agreement, it has the right and authority to execute, deliver and perform this Agreement.

**Section 10. No Inference of Responsibility.** Each of Coen Oil and Owner acknowledge and agree that the understandings represented by this Agreement represent an amicable resolution of matters of mutual interest, and that none of their respective commitments or agreements contained herein are intended or should be construed as an acknowledgment, admission or inference of responsibility or liability with respect to the condition of the Property or any contamination thereof or the Tanks.

**Section 11. Choice of Law.** Interpretation of and performance under the terms and conditions of this Agreement shall be governed by the laws of the Commonwealth of Pennsylvania without regard to its provisions regarding conflicts of law.



**Section 12. Entire Agreement; Amendment; Waiver.** This Agreement, of which the prefatory clauses set forth before Section 1 hereof and Exhibit A attached hereto are integral parts and are hereby fully incorporated herein, and including the Deed Restrictions, when executed and delivered to Coen Oil, embodies the entire agreement and understanding between Coen Oil and Owner as to the subject matter hereof, and any and all prior or contemporaneous proposals, negotiations, agreements, commitments and representations, oral or written, are merged herein. All representations, warranties, agreements and obligations of the parties hereto shall survive the execution, delivery and recordation of the Deed Restrictions. This Agreement cannot be amended or modified except by means of a written document executed by Coen Oil and Owner subsequent to the date hereof that states that it is intended to amend this Agreement. The failure of Owner or Coen Oil to insist on strict performance of any provision of this Agreement or to exercise any right, power or remedy upon a breach hereof shall not constitute a waiver of any provision of this Agreement or limit their rights thereafter to enforce any provision of this Agreement or exercise any right hereunder.

**Section 13. Binding Effect.** This Agreement shall jointly and severally extend to, and shall be binding upon and shall inure to the obligation and benefit of, Owner and Coen Oil and each of their collective and respective dependents, heirs, executors, administrators, estates, legal representatives, successors and assigns, including, with respect to Owner, all parties to which it transfers its interests in the Property.

**Section 14. Notices.** All notices required or permitted under the Agreement shall be in writing and shall be delivered by first class registered U.S. mail, return receipt requested, or by overnight courier providing written verification of receipt, and shall be deemed given and received at the conclusion of the third (3<sup>rd</sup>) business day after dispatch, if by mail, and when actually received, if by courier. Notice addresses for the parties shall be the following or any other address as to which one party has given the other party notice pursuant hereto:


If to Coen Oil:

Coen Oil Company  
1100 West Chestnut St.  
Washington, PA 15301  
Attention: Andrew M. McIlvaine  
President

With a copy to:

Babst, Calland, Clements and Zomnir, P.C.  
Two Gateway Center  
8<sup>th</sup> Floor  
Pittsburgh, PA 15222  
Attention: Joseph K. Reinhart, Esq.

If to Owner:

  
~~Harold D.~~ Janet  
Keyser  
P.O. Box 23  
Venetia, PA 15367

With a copy to:

Stephen C. Smith, Esq.  
Steptoe & Johnson PLLC  
P.O. Box 751  
Wheeling, WV 26003

And a copy to:

John A. Rodgers, Esq.  
Peacock, Keller & Ecker, LLP  
70 East Beau St.  
Washington, PA 15301



Section 15. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which, when taken together, shall be deemed to constitute one and the same instrument.

IN WITNESS WHEREOF, this Agreement has been executed the day and year first set forth above.

ATTEST:

COEN OIL COMPANY

By: James Schol  
Name: James Schol

By: Andrew M. McIlvaine  
Andrew M. McIlvaine  
President

WITNESS:

ESTATE OF RUSH WOODFORD, JR.

By: \_\_\_\_\_  
Name: \_\_\_\_\_

By: Janet Keyser JK  
Janet Harold D. Keyser  
Executor Administrator, de facto



**EXHIBIT A**  
**SCOPE OF WORK**

**Former Rush Woodford Amoco  
Washington, Pennsylvania**

Task Description	Category	Quantity	Cost	Subtotal	Total
<b>Phase 1 -Tank Closure/Soil Removal</b>					
Coordinate Utility Mark-out	Geologist	0.5	\$75	\$38	
Field Work Preparation	Geologist	1	\$65	\$65	
Tank/Soil Removal Oversight	Geologist	10	\$70	\$700	
Tank/Soil Excavation (estimated)	Contractor	1	\$5,000	\$5,000	
Project Management and Coordination	Pr. Manager	1	\$85	\$85	
Analytical - Soil Samples (3/tank & 3/PI & Line)	Laboratory	18	\$60	\$1,080	
Analytical - Soil Disposal Samples	Laboratory	3	\$150	\$450	
Disposal Coordination	Pr. Manager	1	\$85	\$85	
Soil Disposal (estimated ~ 60 cubic yds/75 tons)	Contractor	1	\$3,500	\$3,500	
Backfill - gravel (estimated)	Contractor	1	\$1,500	\$1,500	
Photoionization Detector	Rental	2	\$95	\$190	
Vehicle	Rental	2	\$75	\$150	
<b>Phase 1 Total</b>					<b>\$12,843</b>

**Phase 2 - Site Characterization (If Necessary)**

<b>Monitor Well Installation</b>					
Coordinate Utility Mark-out	Geologist	0.5	\$75	\$38	
Field Work Preparation	Geologist	1	\$65	\$65	
Install Monitor Wells (4 wells)	Contractor	4	\$1,200	\$4,800	
Well Installation Oversight	Geologist	12	\$70	\$840	
Project Management and Coordination	Pr. Manager	1	\$85	\$85	
Analytical - Soil Samples	Laboratory	8	\$60	\$480	
Disposal Coordination	Pr. Manager	1	\$85	\$85	
Soil Drum Disposal	Contractor	6	\$65	\$390	
Photoionization Detector	Rental	2	\$95	\$190	
Interface Probe	Rental	2	\$95	\$190	
Vehicle	Rental	2	\$75	\$150	
					<b>\$7,313</b>