On July 15, 2011 soil testing was conducted at the Former Matt Petroleum Site, Leland Avenue, Utica, Oneida County. Sampling was performed to evaluate three (3) soil piles and the soil beneath the piles that remains following the spring of 2010 interim remedial measure. An excavator was used to perform test trenching in and beneath the soil piles. Samples were obtained from 0-1 foot below grade, 4-5 feet below grade and 8-9 feet below grade. A total of twelve (12) test pits were advanced. Five (5) test pits were advanced within the soil piles and seven (7) test pits were advanced in between the soil piles and to the north and south of the piles.

The three (3) soil piles are approximately 140 to 150 feet long, 50 to 75 feet wide and 8-10 feet high. The soil piles were created in March of 2010 and contain petroleum impacts soils that exhibited odors and/or visual staining but no free product. Test trenching conducted into the soil piles identified similar characteristics across all three piles. The top one foot of soil did not show any significant staining or odors. Soil below this layer is a mixture of gravel, rubble, brick, soils and debris, exhibiting petroleum odors or staining.

The test trenching conducted north, south and between the piles indicates that the soil types and contamination characteristics were similar to that found in the piles. The top one foot of soil did not exhibit strong evidence of contamination. Below this layer and to approximately 8 feet below grade various levels of petroleum impacts were noted. Visual and olfactory evidence of contamination was significant. A photoionization detector (PID) was utilized to evaluate each sample. PID readings ranged from ND to 600 ppm. When the underlying silt/clay unit was encountered the soils did not exhibit any significant visual or olfactory evidence of contamination. The area beneath the soil piles was also characterized as being lightly contaminated with no free product during the remedial investigation conducted as part of the Environmental Restoration Program.

Thirty six (36) samples were obtained from the piles and subsurface and were transmitted to Upstate laboratories in Syracuse for chemical analysis. Samples were analyzed by USEPA Method 8260 and 8270 for Volatile Organic Compounds (VOCs) and Semi-Volatile Organic Compounds (SVOCs) respectively.

Exceedances of SCOs were documented at four (4) test pit locations (TP-1, TP-2, TP-3 and TP-8) all exceedances of SCOs were documented in the interval of 1-2 feet below grade. Soil samples taken north, south and between the piles showed that the native clay and silt layer was commonly encountered between 8-9 feet below grade and the contamination was not penetrating this confining layer. The following table summarizes the analytical results:

Detected Constituents	Sample TP-1 Depth 1-2 feet below grade	Sample TP-2 Depth 1-2 feet below grade	Sample TP-3 Depth 1-2 feet below grade	Sample TP-8 Depth 1-2 feet below grade	Protection of Groundwater SCO[c] (ppm)
Benzo(a)anthracene	23	2.3	2	2.6	1
Benzo(a)pyrene	19	2.1	1.9	2	22
Benzo(b)fluoranthene	19	1.7	1.6	1.9	1.7
Benzo(k)fluoranthene	12	1.5	1.3	1.3	1.7
Chrysene	21	2.2	2	2.5	1
Dibenzo(a,h)anthracene	3.9	0.3	0.3	0.50	1000
Indeno(1,2,3-cd)pyrene	13	1.5	1.4	1.2	8.2

Although the analytical data has not shown significant exceedances of SCOs, visual and olfactory observations have show that the soil in the piles and beneath the piles are grossly contaminated and need to be remediated.

Cost Estimates:

Cubic Yards in Soil Piles – Approximately 8000 cubic yards
Cubic Yards that is clean and can be used for backfill 3000 cubic yards
Cubic Yards of soil beneath the Soil Piles that requires removal 8000 cubic yards.

Removal to the Former City of Utica Landfill Site:

Task	Yds	$/yd	Sub-Total
Remove and Stage clean soil from the top of each pile	3000	$6.50/yd	19500
Remove contaminated soils to City of Utica Landfill	5000	$18.00/yd	90000
Remove contaminated soils from beneath soil piles to City of Utica Landfill	8000	$20.00/yd	160000
Placement of clean soils back in excavation	3000	$6.50/yd	19500
Placement of clean imported backfill	5000	$12/yd	60000
Mulch both Matt Site and City of Utica Site			7500
Total			$356,500

Estimated time to implement program is 3-4 weeks.

On-Site Treatment Utilizing Mechanical Soil Turning

Based on Optech's Interim Remedial Action Report, dated May 28, 2010 the cost to conduct the mechanical soil turning program is estimated at $350,000 and would take three months to perform, during the summer season.

Off-Site Disposal at Permitted Solid Waste Facility

Task	Yds or Tons	$/yd or ton	Sub-Total
Remove and Stage clean soil from the top of each pile	3000	$6.50/yd	19500
Remove contaminated soils to Oneida Herkimer County Landfill	16,000yds or 24,000 tons.	$50/ton	1200000
Placement of clean soils back in excavation	3000	$6.50/yd	19500
Placement of clean imported backfill	5000	$12/yd	60000
Mulch both Matt Site and City of Utica Site			7500
			$1,306,500

Estimated time to implement program – 6-8 weeks.

A 20% contingency should be added to all cost estimates.