



Mr. Russell Huyck New York State Department of Environmental Conservation P.O. Box 296 Route 86 Raybrook, New York 12977

Re: Malone (Amsden Street) Former MGP Site Characterization Malone, New York

Dear Mr.Huyck:

Niagara Mohawk, a National Grid Company (Niagara Mohawk), is providing the enclosed letter which describes a limited soil sampling program completed on a parcel (the Kriff property) located adjacent to our Malone (Amsden Street) site. As described in the letter, the program was completed as part of a due diligence effort by Niagara Mohawk for possible acquisition of this adjacent parcel.

- <u>2</u>04

The results of the investigation indicated only limited PAH impacts in the shallow soils. It is important to note that historical records indicate multiple industrial uses on the Kriff property, including manufacture of rubber soles for shoes.

We look forward to discussing the overall site conditions in our upcoming on-site meeting on July 2^{nd} . Please contact me at (315) 428-5652 if you have any questions.

Sincerely,

Steven P. Stucker, C.P.G. Senior Analyst

Cc (letter only): William Holzhauer-National Grid Service Company Charles F. Willard-Niagara Mohawk, a National Grid Company Pat Collette-National Grid Service Company Doug Martin-TRC Deanna Ripstein-NYSDOH (w/enclosure) File (w/enclosure)



June 24, 2004

Mr. Steven Stucker Niagara Mohawk, A National Grid Company 300 Erie Boulevard West Syracuse, NY 13202

Subject: Soil Sampling Program Results Kriff Property, 33 Amsden Street, Malone, NY Site TRC Project No. 48278-1000-00010

Dear Steve:

This letter presents the final data summary for the limited soil sampling program conducted by TRC Environmental Corporation (TRC) performed at the request of Niagara Mohawk – A National Grid Company (Niagara Mohawk) at the Kriff property, located at 33 Amsden Street in the Village of Malone, New York. Below are presented a brief summary of the scope of work and the results of the soil sampling and analysis.

1.0 METHODS

TRC mobilized to the site on February 6, 2004 to perform a limited sampling of property soils as part of a due diligence effort for Niagara Mohawk. The one-day drilling and soil sampling program was performed concurrently with an asbestos/lead paint survey of the existing building, also conducted by TRC. Results of the asbestos/lead survey are presented in a separate report titled *Report, Investigative Survey for Asbestos Containing Materials, Lead Based Paint & Other Hazardous Material*, dated March 2004.

TRC contracted Lyon Drilling of Tully, New York to perform the snow clearing and drilling work. Following discussions with Larry Kriff and completion of utility clearance discussions with Village of Malone Department of Public Works representatives, TRC/Lyon Drilling initiated the access/snow clearing process to facilitate the drilling program. Primary utility concerns was an existing storm sewer which, according to DPW, extends beneath a portion of the Kriff building, to the identified outfall located approximately 250 feet to the northeast. A total of three boring locations were cleared; locations of these borings (SB-10, SB-11 and SB-12) are depicted on Figure 1, attached.

Access was achieved using a skid-steer loader to move snow out of the way and then to move the trailermounted rig into position. Final boring locations were adjusted due to field (snow) conditions, most notably SB-11, due to difficulty in moving the soil probe rig further north. However, final locations of the three borings are believed to adequately represent conditions around the rear and northern side of the existing building.

At each of the three sample locations, Lyon Drilling used its trailer-mounted, direct-push soil probe unit to perform the soil sampling. Continuous samples were collected at each boring, from ground surface to refusal, which ranged from 3.5 feet below ground surface (SB-11) to 18.5 feet (SB-10). Samples were logged to record observed soil types, apparent odors, moisture content, etc. and were screened with a Steven Stucker June 24, 2004 Page 2 of 4

portable photoionization detector (PID) to evaluate for the presence or absence of volatile organic compounds. Soil samples were collected from the 0 to 2 foot interval and in two of the three borings (SB-10 and SB-12), a deeper sample was collected from the zone exhibiting the highest PID reading. A total of five soil samples were collected and submitted to CHEMTECH, of Mountainside, New Jersey for analysis of benzene, toluene, ethyl benzene and xylenes (BTEX), polycyclic aromatic hydrocarbons (PAHs), Target Analyte List (TAL) metals, and total cyanide. The three shallow samples were also analyzed for polychlorinated biphenyls (PCBs).

Survey of the three new sample locations was conducted by Thew Associates. Due to time constraints and access considerations, the survey crew performed this work during the drilling program. A revised survey map was subsequently provided by Thew, as an addition to the plan developed previously developed for the adjacent MGP site investigation.

2.0 **RESULTS**

The following section summarizes the physical and chemical results of the soil sampling program. Borings on the Kriff property were designated sequential numbers from the previous borings performed during the previous Site Characterization study performed on the former Manufactured Gas Plant (MGP) site. Sample locations are depicted on Figure 1; summary data tables are provided as Table 1 (Organic compounds) and Table 2 (Inorganic compounds). Copy of the original laboratory data is provided as Attachment 1.

Boring SB-10

Soil boring SB-10 was advanced approximately 20 feet north of the existing Kriff building. Encountered geology consisted of approximately 17 feet of fill, consisting of silt, fine-to coarse sand, and gravel with varying amounts of ash, brick fragments, and other miscellaneous debris. A one-foot thick interval of an unidentified grey/white mottled granular material including shell-like fragments was noted at a depth of approximately 10 feet below ground surface. Native silt and sand was encountered at 17 feet bgs, with sampler refusal at 18.5 feet bgs, which was assumed to be bedrock based on other nearby drilling information.

Two analytical soil samples were collected from SB-10, a surficial sample from 0 to 2 feet and one from 9 to 11 feet, based on the highest PID detection (0.4 ppm). No distinct odors or other indications of potential contamination were noted in the boring. Samples were analyzed for BTEX, PAHs, TAL Metals and total cyanide; in addition, the shallow sample was also analyzed for PCBs.

Results of the lab analyses for the two soil samples collected from SB-10 were consistent with the physical findings (refer to Tables 1 and 2). BTEX compounds were not detected in either sample, however both samples yielded detectable concentrations of PAHs, some in exceedance of the NYSDEC Technical and Administrative Memorandum (TAGM) 4046 criteria. Total PAH concentration of 224 parts per million (ppm) were detected in the shallow sample, with a total PAH concentration of 4.6 ppm in the deeper sample. PCBs were not detected in the shallow sample that was analyzed. Metals concentrations were consistent with the nature of the fill material that was encountered in this area of the property.



Steven Stucker June 24, 2004 Page 3 of 4

Boring SB-11

Soil boring SB-11 was advanced along the southern property boundary, east of the existing building due to difficulty achieving access further to the north. Several attempts were made to advance the sampler, but refusal was encountered at a depth of 3.5 feet bgs, which appeared to be native bedrock or a large boulder. Due to the encountered conditions and time constraints, and upon concurrence with the client, it was determined to collect the one shallow soil sample and cease attempts in this location. Encountered geology consisted of several feet of mixed fill material consisting of brown/mottled silt, fine to coarse sand, with coal and ash fragments. The lower half foot contained some large quartz gravel. No odors or PID detections were noted in this sample.

One analytical soil sample was collected from the 0 to 2 foot interval. The sample was submitted to CHEMTECH to be analyzed for BTEX, PAHs, TAL Metals, total cyanide and PCBs. Results of the lab analyses for this sample were consistent with the physical findings (refer to Tables 1 and 2). BTEX compounds were not detected in either sample, however PAHs were detected at concentrations exceeding a number of NYSDEC TAGM criteria (Total PAH concentration of 902 ppm). PCBs were not detected in the shallow sample that was analyzed. Metals concentrations were consistent with the nature of the fill material that was encountered in this area of the property. A total cyanide concentration of 7.2 ppm was detected in the sample.

Boring SB-12

Soil boring SB-12 was advanced approximately 20 feet northeast of the existing Kriff building, in an assumed downgradient location from the potential former location of an underground gasoline tank (determined from historic Sanborn Fire Insurance Company maps). Encountered geology consisted of approximately 8.5 feet of fill, consisting of silt, fine-to coarse sand, and gravel with varying amounts of coal fragments, ash, brick fragments, and other miscellaneous debris. Native silt and sand was encountered at below 8.5 feet, extending to approximately 13 feet bgs where sampler refusal was encountered. Weathered sandstone fragments were noted in the tip of the sampler from this depth, indicating bedrock had been encountered.

Two analytical samples were collected from SB-12, a surficial sample from 0 to 2 feet and one from 9 to 11 feet, based on the highest PID detection (0.7 ppm), in proximity to the inferred water table. No distinct odors or other indications of potential contamination were noted in the boring. Samples were analyzed for BTEX, PAHs, TAL Metals and Total cyanide; in addition, the shallow sample was also analyzed for PCBs.

Results of the lab analyses for the two soil samples were consistent with the physical findings (refer to Tables 1 and 2). BTEX compounds were not detected in either sample, however the shallow sample yielded detectable concentrations of PAHs at relatively low levels, some in exceedance of the TAGM 4046 criteria. Total PAH concentration of 224 parts per million (ppm) were detected in the shallow sample, with a total PAH concentration of 4.6 ppm in the deeper sample. PCBs were not detected in the shallow sample that was analyzed. Metals concentrations were consistent with the nature of the fill material that was encountered in this area of the property. Low total cyanide concentrations (0.9 to 1.4 ppm) were detected in the samples.



Steven Stucker June 24, 2004 Page 4 of 4

3.0 CONCLUSIONS

In summary, no significant indications of subsurface contamination were noted in the completed soil borings, although substantial fill material was noted throughout the area. Presence of this fill material is consistent with available information relating to historical development of the site and vicinity, including widespread presence of coal fragments and ash within the fill unit. No specific MGP-related impacts (i.e., tars, petroleum products, purifier waste) were noted on the Kriff property. Detected concentrations of constituents of concern indicated the presence of PAHs and various metals, at concentrations that are consistent with this type of widespread fill. Concentrations of these compounds were greatest in the sample collected at SB-11, which was located on the site's southern boundary, although no physical indications of contamination were noted in this sample

If you have any questions or comments regarding the work performed or the results discussed herein, please let me know.

Sincerely, TRC ENVIRONMENTAL CORPORATION

dougla & Martin

Douglas A. Martin Project Manager

Attachments

Boring Logs Data Tables Site Plan





BORING LOG: SB-10

.

.

Project Name: Malone/Kriff Property					Drilling Company: Lyon Drilling	SB-10	
Project Number: 40478-1000-00010					Drillers: Harry Lyon	Date Started:	02/26/04
Project Location: Malone, NY					TRC Inspector: D. Martin	Date Completed:	02/26/04
Boring/Well Location: Kriff Property/ north of building				ouilding	Mrthod: Direct Push/ Lyon LM-1		
Depth	Recovery	Blow	PID				T
(feet)	(feet)	Counts	(ppm)	reet	Description		Lithology
						<u></u>	0
0-3	3	NA	0	0-3	Med. Brown to black fine to coarse Sand, Silt, occ. L	enses of ash,	
							2
3-7	2.5	NA	0	0-2.5	Tan to blk. Silt, gravel, brick and mortar fragments, la	rge root, ash, plastic	
					and glass, moist, no odor [FILL]		
							7
7-11	3	NA	0	0-2	Med. to dark brown fine Sand and Silt, moist, no odor	[FILL}	
			0.4	2-3	Grey/white mottled granular material w/ shell-like frag	ments (rust-colored	
							11
11-15	1.5	NA	0-0.3	1.5	SAA, rock fragment in sampler tip, no odor [FILL]		
							15
15-18.5	1.5	NA	0.2	0.2	SAA, no odor [FILL]		
				0.2-1.5	Med. brown Silt, some fine Sand, saturated, no odor		
					[Native Soli] Sampler lefusar at 16.5.		18
							18.5
					·		
					Soil Samples:		
					SB-10(0-2) [BTEX/ PAHs/ CN/ PCBs/ TAL Metals]		
					SB-10(9-11) [BTEX/ PAHs/ CN/ TAL Metals]		

BORING LOG: SB-11

•

Project Name: Malone/Kriff Property Project Number: 40478-1000-00010					Drilling Company: Lyon Drilling	Boring/Well:	SB-11	
					Drillers: Harry Lyon	Date Started:	1: 02/26/04	
Project Location: Malone, NY					TRC Inspector: D. Martin	Date Completed:	02/26/04	
Boring/We	II Location:	Kriff Propert	y/ SE boun	dary	Mrthod: Direct Push/ Lyon LM-1			
Depth (feet)	Recovery (feet)	Blow Counts	PiD (ppm)	Feet	Description		Lithology	
0-3.5	2.2	NA	0	0-3.5	Brown silt (mottled), some fine to coarse Sa occasional large quartz gravel in lower 0.5', Sampler refusal at 3.5'.	ind, coal frags, ash, moist, no odor [FiLL]	3 3.5	
					Soil Samples: SB-11(0-2) [BTEX/ PAHs/ CN/ PCBs/ TAL	Metals]		

BORING LOG: SB-12

Project Name: Malone/Kriff Property Drilling Company: Lyon Drilling Boring/Well: SB-12 Project Number: 40478-1000-00010 Drillers: Harry Lyon Date Started: 02/26/04 Project Location: Malone, NY TRC Inspector: D. Martin Date Completed: 02/26/04 Boring/Well Location: Kriff Property/ NE of building Mrthod: Direct Push/ Lyon LM-1 Depth Recovery Blow PID Feet Description Lithology (feet) Counts (feet) (ppm) 0 Tan to black Sand, Silt, ash, coal fragments, plastic, brick frags., black 0-3 2.3 NA 0 0-2.3 coal fines in shoe, moist, no odor [FILL] SAA, very moist, no odor [FILL] 0.2 0-1 3-7 1 NA SAA [FILL] 7-11 2,9 NA 0 0-0.3 Tan Silt, some fine Sand, trace Clay, trace Gravel, saturated [Native soil] 0.7 0.3-1.5 11 SAA, with occasional weathered sandstone fragments (weathered rock in 11-13 1.2 NA 0.2 0-1.2 sampler tip). Refusal at 13'. 13 · •]

Soil Samples:

SB-12(0-2) [BTEX/ PAHs/ CN/ PCBs/ TAL Metals] SB-12(9-11) [BTEX/ PAHs/ CN/ TAL Metals]

TABLE 1 Soil Sample Results - Organic Compounds (mg/Kg) Kriff Property - Malone, NY

	Soil Boring	SB-10		SB-10		SB-11		SB-12		SB-12	
	Sample ID Denth (ff bos)	SB-100-2		SB-109-11 9-11		SB-110-2 0-2		SB-120-2		SB-129-11 9-11	
Analyte	Deptin (n. Dgs) Date	2/26/04		2/26/04		2/26/04		2/26/04		2/26/04	
-	Units	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Volatile Organic Compounds (BTE	EX)				<u></u>	<u></u>					
Benzene	•	0.0012	U	0.0012	U	0.0011	U	0.0012	U	0.0011	U
Toluene		0.0013	Ū	0.0013	Ū	0.0013	Ū	0.0013	Ū	0.0013	U
Ethyl Benzene		0.0012	U	0.0012	υ	0.0011	U	0.0012	U	0.0011	U
m/p-Xylenes		0.0033	U	0.0033	U	0.0032	U	0.0033	U	0.0032	: U
o-Xylene		0.0013	U	0.0013	U	0.0013	U	0.0013	U	0.0013	U
Polycyclic Aromatic Hydrocarbon	s (PAHs)										
Naphthalene		0.9	U	0.046	U	29	J	0.046	U	0.044	U
Acenaphthylene		0.9	U	0.046	υ	40		0.15	J	0.044	U
Acenaphthene		3.1	J	0.046	U	9.2	J	0.046	U	0.044	U
Fluorene		5.3	J	0.043	U	31	J	0.043	U	0.041	U
Phenanthrene		29		0.3	J	160		0.42		0.037	U
Anthracene		12		0.075	J	52		0.12	J	0.049	U
Fluoranthene		44		0.76		150		1.6		0.037	U
Pyrene		35		0.67		130		1.4		0.037	U
Benzo(a)anthracene		19		0.44		52		0.96		0.037	U
Chrysene		18		0.49		49		1		0.06	U
Benzo(b)fluoranthene		21		0.58		61		1.6		0.037	U
Benzo(k)fluoranthene		9.9		0.28	J	28	J	0.81		0.097	U
Benzo(a)pyrene		17		0.5		60		1.3		0.056	U
Indeno(1,2,3-cd)pyrene		5.4	J	0.24	J	23	J	0.46		0.06	U
Dibenz(a,h)anthracene		1.1	U	0.059	U	5.6	U	0.058	U	0.056	U
Benzo(g,h,i)perylene		5.5	J	0.26	J	28	J	0.55		0.049	U
Total PAHs		224.2		4.595		902.2		10.37		0	
Polychlorinated Biphenyls (PCBs)											
Aroclor-1016		0.038	U	NA		0.038	U	0.039	U	NA	
Aroclor-1221		0.078	U	NA		0.077	υ	0.078	U	NA	
Aroclor-1232		0.038	U	NA		0.038	U	0.039	U	NA	
Aroclor-1242		0.038	U	NA		0.038	U	0.039	U	NA	· 1
Aroclor-1248		0.038	U	NA		0.038	U	0.039	U	NA	
Aroclor-1254		0.038	U	NA		0.038	U	0.039	U	NA	
Aroclor-1260		0.038	U	NA		0.038	<u> </u>	0.039	U	NA	

Notes:

Bold indicates exceedance of NYSDEC TAGM criterion

U: The compound was not detected at the indicated concentration.

B: Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero.

B: The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P: For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

NA: Not analyzed.

TABLE 2Soil Sample Results - Inorganic Compounds (mg/Kg)Kriff Property - Malone, NY

	Soil Boring	SB-10	SB-10	SB-11	SB-12	SB-12
	Sample ID	SB-100-2	SB-109-11	SB-110-2	SB-120-2	SB-129-11
Analyte	Depth (ft bgs)	0-2	9-11	0-2	0-2	9-11
	Sampling Date	2/26/04	2/26/04	2/26/04	2/26/04	2/26/04
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Aluminum	í	4610	4390	4270	3260	4020
Antimony		1.1 J	0.98 U	2.9 J	4.4 J	0.96 U
Arsenic	}	3.5	3.7	2.5	4.3	2.3
Barium		54.3	105	46.2	78.9	31.4 J
Beryllium	}	0.24 J	0.29 J	0.20 J	0.23 J	0.21 J
Cadmium		0.52 J	0.23 U	0.23 U	0.24 J	0.23 U
Calcium	ļ	11200	11300	11600	6820	2150
Chromium		7.1	5.4	6.1	5.6	6.5
Cobalt		4.2 J	4.2 J	3.6 J	3.5 J	4.7 J
Copper		45.9	61.3	12.5	30.5	7.9
Iron		8250	6510	8200	7170	9170
Lead		82.2	77.8	47.0	109	5.4
Magnesium		5250	2550	3970	3010	1360
Manganese		272	234	251	178	357
Mercury		0.11 U	0.22	0.14	0.12 U	0.11 U
Nickel	ļ	8.1 J	9.4	6.5 J	7.3 J	9.0 J
Potassium		349 J	419 J	368 J	460 J	423 J
Selenium		0.61 U	0.61 U	0.60 U	0.59 U	0.60 U
Silver		0.85 J	0.90 J	0.79 J	0.64 J	0.93 J
Sodium		126 J	259 J	190 J	180 J	117 J
Thallium	ļ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium		11.1 J	11.6 J	10.4 J	11.2 J	12.7
Zinc		102	135	97.5	130	36.4
Cyanide	Í	2.30	0.73	7.20	0.88	1.40

Notes:

Bold indicates exceedance of NYSDEC TAGM criterion.

U: The compound was not detected at the indicated concentration.

B: The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

NA: Not analyzed.