AECOM Environment
2 Technology Park Drive, Westford, MA 01886-3140
T 978.589.3000 F 978.589.3100 www.aecom.com

September 21, 2009

Mr. David Szymanski
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, NY 12233-7011

RE: 2009 Periodic Review Report
Mineral Springs Road Former Manufactured Gas Plant Site

Dear Mr. Szymanski:

National Fuel Gas Distribution Corporation (NFG) completed construction on the remedial action for the Mineral Springs Road Former Manufactured Gas Plant (MGP) site in 2001. Since then, NFG has performed operations and maintenance (O&M) activities for the remedy in accordance with the O&M Plan for the project. Those activities have included preparation of annual O&M Reports, which have been submitted since 2002. Because of changes in NYSDEC reporting requirements, AECOM has prepared this Periodic Review Report (PRR) on behalf of NFG rather than an O&M Report to meet the reporting requirements of the O&M Plan.

1. Introduction

The former Mineral Spring MGP was built in the early 1920s and was operated until the 1960s. Coal and oil gasification wastes, particularly coal tar hydrocarbons and blue-stained purifier residuals, were generated during operation of the plant. Investigations have been performed to evaluate environmental conditions at the site. Those investigations identified impacts to soil and groundwater by MGP residues, including organic constituents, dense non-aqueous phase liquids (DNAPL), and cyanide. Remedial activities including excavation, capping, DNAPL recovery, and institutional controls have been performed since 1997 to address these impacts.

This PRR presents and evaluates the results of O&M activities performed at the Mineral Springs site over the past year and since the remedial action was completed in 2001. Those activities include annual inspections, groundwater and surface water monitoring, and maintenance and repair of engineering controls. Data collected during performance of these activities and an evaluation of the effectiveness of the remedy are presented below.

The results of that evaluation show that the remedial action has been operated in accordance with the provisions of the O&M Plan and that engineering and institutional controls remain intact and effective. The results of monitoring show that there have not been significant changes to concentrations of Constituents of Concern (COC) in groundwater. Monitoring also confirms there are no impacts to surface water.

Site inspection indicated that there were several locations where maintenance issues that needed to be addressed. Most of the needed maintenance or repairs have already been performed. Some additional maintenance to asphalt caps is still needed.

2. Site Overview

The Mineral Springs site lies in a flat, mixed industrial and residential area of West Seneca (and Buffalo), New York. The site is an active NFG service center. Figure 1 shows the facility layout.

The stratigraphy of the site consists of 4- to 8-feet of soil and fill, approximately 10-feet of a nearly continuous upper confining clay layer (UCL), 10- to 15-feet of groundwater bearing silt, sand, and gravel, a lower confining clay layer (LCL), and bedrock. Groundwater is typically encountered 5- to 12-feet below ground surface and seasonally fluctuates approximately 2 feet. Groundwater flow is generally to the northwest towards Mineral Springs Road, Calais Street, and the Buffalo River. Average groundwater velocity across the site is calculated to be approximately 0.06 feet per day.

The former Manufactured Gas Plant (MGP) was built in the early 1920's and was operated until the 1960's. Coal and oil gasification wastes, particularly coal tar hydrocarbons and blue-stained purifier residuals, were generated during operation of the plant. In 1990 and 1995, investigations and soil remediations were performed near an oil-water separator pit in the central area of the site. In 1997 and 1998, a Preliminary Site Assessment (PSA) and a follow-up PSA Addendum were conducted. The assessments concluded that soil and groundwater at the site were impacted by MGP residues including dense non-aqueous phase liquids (DNAPL) and cyanide.

An interim remedial measure, conducted in December 1997, removed 407 tons of purifier residuals near a transmission tower in the southwest corner of the site. On August 4th, 1998 National Fuel Gas submitted a Voluntary Cleanup Agreement (VCA) program application. VCA number B9-0538-98-08 was signed by NFG on June 2nd, 1999 and by NYSDEC on November 7th, 1999. A Remedial Design/ Work Plan was developed by NFG and NYSDEC. From May 2000, to June 2001, the Work Plan was implemented and the following remedial tasks were completed:

- Excavation and offsite disposal of 32,200 tons of contaminated soil, rubble, and purifier waste
- Construction of engineering controls including 130,890 square feet of asphalt cap, 76,144 square feet of geosynthetic cap, and 39,369 square feet of clay cap over areas where purifier waste was located
- Capping of hydrocarbon seeps within the Eastern Drainage Ditch, including construction of 640 linear feet of geosynthetic cap and 750 linear feet of clay cap
- Collection, treatment and disposal of 207,000 gallons of contaminated groundwater
- Installation of additional chain link security fencing around the site perimeter
- Implementation of site use and deed restrictions.

3. Evaluation of Remedy Performance, Effectiveness, and Protectiveness

The objectives of the remedial action performed at the Mineral Springs site include the following:

- Preventing human contact with COC in purifier waste, soil, and sediment
- Preventing human contact or ingestion of COC in groundwater
- Preventing leaching of COC from purifier waste to groundwater
- Preventing leaching of COC from coal tar impacted soil to surface water

Preventing human contact with COC was addressed by excavating soil and purifier waste; capping areas where purifier waste was left in place; capping coal tar residues in the Eastern Drainage Ditch; and implementing institutional controls to limit site use, prevent use of groundwater, and provide protection for excavation workers. The effectiveness of the remedial action in meeting these objectives is evaluated by performing an annual inspection to verify that engineering controls remain intact and that site use has not changed. The results of this year's inspection, described in the next section, identified routine maintenance issues that need to be addressed, but found that the caps remain in place and are intact and that the remedy is effective and protective.

Preventing leaching of COC to groundwater and surface water was addressed by excavating soil and purifier waste; capping areas where purifier waste was left in place; capping coal tar residues in the Eastern Drainage Ditch; and removing DNAPL. The effectiveness of the remedial action in meeting these objectives is evaluated by performing an annual inspection and by implementing a groundwater and surface monitoring program. As described above, the site inspection found that engineering controls remain intact and effective.

An evaluation of the groundwater and surface water monitoring results from data collected during the April 2009 sampling event are provided in the following sections.

Upgradient Site Perimeter

Well MW-17 is located on NFG property in the southeast corner of the site and monitors upgradient groundwater quality.

Other than total cyanide, MGP COCs are not typically present in detectable concentrations in the upgradient groundwater. The total cyanide concentration at MW-17 has ranged from below the method detection limit to 378 µg/L. When viewed over time, there appears to be a trend that total cyanide concentrations are higher when the groundwater elevations are higher, during the April sampling event. The total cyanide concentration was 279 µg/L during the April 2009 sampling event and was 144 µg/L during the September 08 sampling event. Free cyanide was detected at 5 µg/L during the April 2009 sampling event and was not detected during the September 2008 sampling event at MW-17.

Downgradient Site Perimeter

Wells MW-20 and MW-21 are located downgradient of the western boundary of the site on Calais Street. Wells MW-13, MW-14, MW-22, and MW-23 are located just inside the northern property boundary near Mineral Springs Road. These six "sentinel" wells monitor groundwater quality at the downgradient perimeter of the site. The sentinel wells are typically analyzed for total and free cyanide only. On an annual basis, MW-13 and MW-23 are also analyzed for BTEX and PAHs. Samples from these wells were not analyzed for organic constituents during the April 2009 event.

Low concentrations of benzene are occasionally detected at MW-13. BTEX and PAHs have not been detected in MW-13 or MW-23 in concentrations above NYSDEC groundwater standards. Off-site groundwater does not appear to be impacted by hydrocarbon COC from the Mineral Springs site.

All six of the sentinel wells contain, or have periodically contained, total cyanide in concentrations above the NYSDEC groundwater standard of 200 µg/L. Free cyanide has also occasionally been detected in the sentinel wells. Historically, the average downgradient perimeter concentration of total cyanide has ranged between 342 µg/L and 650 µg/L. The concentration of total cyanide in the sentinel wells ranged from 27 to 704 µg/L with an average value of 389 µg/L during the April 2009 event. Only two sentinel wells, MW-14 and MW-22, had detectable concentrations of free cyanide, 4.1 µ/L and 3.1 µ/L respectively.

On-site Purifier Residuals Impacted Areas

Wells MW-12 and MW-16 monitor groundwater quality at locations of known subsurface deposits of gas purifier residuals. These deposits were remediated by capping. Samples from these two wells are typically analyzed for total and free cyanide only.

Concentrations of total cyanide at both wells typically exceed the groundwater standard. Both wells exceeded the groundwater standard during the April 2009 event with total cyanide concentrations of 472 and 531 µg/L, respectively. Free cyanide has also typically been detected in samples from both of these wells. It was detected in both well during the April 2009 event with concentrations of 4.1 µ/L in MW-12 and 5.5 µg/L in MW-16.

On-site Hydrocarbon Impacted Areas

Wells MW-7, MW-10, MW-11A, and MW-19 monitor on-site groundwater at locations downgradient of hydrocarbon-impacted subsurface soil. Samples from these wells are analyzed for BTEX and PAHs.

BTEX and PAH compounds are not typically detected in MW-10. BTEX in MW-11A and BTEX and naphthalene concentrations in MW-7 and MW-19 were in excess of groundwater standards in April 2009 and have fluctuated with apparent declines and rebounds over time. Naphthalene in MW-11A has generally declined since 2003.

Surface Water

Surface water samples are collected near the Calais Street storm sewer inlet (SW-01) and at the Eastern Drainage Ditch near the Class D Stream (SW-02). These surface sampling locations monitor the effectiveness of the Eastern Drainage Ditch Cap and also monitor the concentrations of COC in surface water downgradient of the Mineral Springs site.

BTEX and PAHs are not typically detected in the surface water samples and were not during the April 2009 event. Total cyanide is usually detected, though at concentrations well below standards. Total cyanide concentrations in samples collected from locations SW-01 and SW-02 were 25 and 16 µg/L, respectively during the April event. Free cyanide is often detected, also typically at low concentrations, with infrequent exceedances of the surface water standard. Free cyanide was not detected in either surface water sample during the April sampling event.

4. O&M Plan Compliance Report

The components of the O&M program for the Mineral Springs site include groundwater and surface water monitoring, DNAPL recovery, inspections, maintenance and repair of engineering controls, and reporting. Details of this program are described in the O&M Plan and summarized in Table 1. Table 2 summarizes the groundwater and surface water monitoring program.

O&M activities completed since the last report include the following:

- The annual site inspection performed on April 8, 2009
- Two groundwater and surface water monitoring rounds performed on April 28 and 29 and August 25 and 26, 2009 (The results of the August 2009 event were not available for the report)
- Operation of the DNAPL recovery system and removal of approximately 0.5 gallons of water containing DNAPL blebs in April 2009

- Submittal of the Groundwater and Surface Water Monitoring Report for the monitoring event performed in April 2009.
- Performance of maintenance activities to address issues identified during the annual inspection
- Re-inspection of the site on August 25, 2009.

During the annual inspection in April, observations of site conditions were recorded. The inspection checklist is included as Appendix B. Photographs taken during the inspection are included in Appendix C. An Institutional and Engineering Controls Certification Form is attached in Appendix D.

Site Inspection

Clay Caps

Clay caps, designated CC on Figure 1, are located southeast of Building 14 and in the Eastern Drainage Ditch north of the northern culvert and south of the southern culvert, designated EDD.

The clay cap southeast of Building 14 has been mowed periodically to prevent tree growth. No blue stained soils were observed during the inspection. Animal burrows were observed along the northern and western edge of the clay cap. A large hole was observed along the fence line, near the culvert. This hole may have been caused by water running along the outside of underground drainage pipe. Debris was noted at the entrance of the culvert south of building 14. Damage to the cable fence restricting access to the capped area was observed near Building 14. Between the April inspection and the re-inspection which took place in August, NFG repaired and reseeded the burrows, filled the large hole with gravel, and repaired the fence. NFG contracted with a pest control specialist to remove burrowing animals form the clay cap and other areas onsite. Between May 18 and 28, 40 animals were trapped and removed from the site.

In the clay-capped sections of the Eastern Drainage Ditch, no erosion, animal burrows, deep-rooted perennial plant species, or hydrocarbon sheen were observed.

Geomembrane Caps

Geomembrane caps, constructed of 40-mil HDPE and soil or stone cover, are located in the Eastern Swale and in the Eastern Drainage Ditch between the culverts. These caps are designated ESHC and EDD respectively.

The Eastern Swale cap has been mowed periodically. No plastic or geofabric, animal burrows, or blue-stained surface soil were visible. A few small animal holes and deer tracks were observed in this area. All were shallow and did not penetrate the cap. A few bare spots in the grass were observed during the April inspection, but had filled in by the time of the August re-inspection. Several ruts from wheeled equipment were observed in the western edge of the cap. The ruts were shallow and did not appear to damage the cap. Following the inspection, NFG filled the ruts and reseeded the areas. A cable fence was installed in the area to help restrict equipment access to the cap surface.

The Eastern Drainage Ditch cap includes an 18-inch diameter HDPE surface water drain pipe. The pipe flow was low at the time of observation. There was no erosion, animal burrows, deep-rooted perennial plant species, or hydrocarbon sheen observed. The “no dig” signage was in place.

Asphalt Caps

Asphalt caps are located south and east of Building 3, designated B3SAC and B3EAC respectively, and north and south of the Eastern Swale, designated ESNAC and ESSAC. The asphalt caps south and east of Building 3 had a few small open surface cracks. Significant cracking was present in a small area approximately 150 feet south of the southeast corner of Building 3. The asphalt caps to the north and south of the Eastern Swale had few small open surface cracks. The remainder of the cap areas were in good condition. The edges of all the caps have been mowed periodically.

Other Areas

Monitoring well MW-20, located at the end of Calais Street, had the curb box cover torn off at the time of the groundwater sampling in April. This was likely caused by a snow plow hitting it. Monitoring well MW-10, located near Building 10, had a 2 inch high lip of asphalt all the way around it (due to the asphalt cap installed as an IRM in 2008). This lip was observed to cause rain water to pool over the curb box cover. The riser pipe at monitoring well MW-7 was observed to be cracked. The crack is approximately 2-3 inches below the riser pipe surface. This crack was observed to let rain water into the well. Before implementation of the August 2009 monitoring event, the upper portions of the plastic casings of wells MW-7 and MW-20 and the surface casing of MW-10 were replaced. The final elevation of the top of casing of MW-20 was lowered by 0.24 inches. The elevations of the other two casings did not change.

Throughout the remainder of the site, no tar boils or blue-stained soils were observed. No hydrocarbon sheens were observed in the Class D Stream or the Eastern Drainage Ditch. The compacted backfill placed in the various former Tar Boils and Separator Pit excavations has been maintained as necessary to assure run-off control. These areas showed minimal ponding of surface water. The site perimeter security fence was observed to be intact.

Groundwater and Surface Water Monitoring

Groundwater and surface water monitoring results for the April 2009 monitoring event are presented in the groundwater and surface water monitoring report, prepared by AECOM and submitted to NYSDEC on June 9, 2009. A summary of groundwater and surface water analytical results for the period between 1995 and April 2009 is tabulated in Appendix A. Sampling locations are shown on Figure 1. Analytical data for samples collected in August 2009 are not available yet. A discussion of the results of monitoring in specific areas of the site is presented in the previous section.

Conclusions

Since the last O&M report, O&M activities described in the O&M Plan have been performed as specified and no deficiencies have been identified. All engineering and institutional controls are intact and remain effective. NFG has been prompt in making repairs and performing maintenance when significant issues have been identified. Limited repair and maintenance issues identified for the asphalt caps remain to be addressed.

The results of groundwater and surface water monitoring indicate that there have not been significant changes in groundwater concentrations of organic constituents or cyanide. Concentrations of cyanide in groundwater at the downgradient property boundary remain at concentrations somewhat higher than NYSDEC standards. Concentrations measured in sentinel wells are similar to the cyanide concentration measured in the upgradient well. Data collected in April 2009 support previous conclusions that organic constituents have not and will not migrate beyond the NFG property boundary.

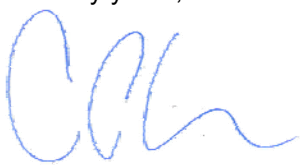
5. Overall PRR Conclusions and Recommendations

As discussed above, the O&M program is being implemented in accordance with the provisions of the O&M Plan. The results of the site inspection indicate that engineering and institutional controls remain intact and continue to be effective in meeting remedial objectives. The results of groundwater and surface water monitoring show that groundwater concentrations of COC remain about the same and that there are no impacts to surface water.

Several maintenance issues related to the caps installed during the remedial action were identified during the April site inspection. Most of those were addressed prior to the time the site was re-inspected in August. A few small areas in asphalt caps near Building 3 and the Eastern Swale showed cracking. These areas should be repaired. It is recommended that NFG should reseal all asphalt caps. NFG is currently in the process of hiring a contractor to repair cracks and seal the asphalt caps.

Please call me with questions at 518-951-2288.

Sincerely yours,



Thomas P. Clark, P.E.
Senior Engineer

cc: C. Burke – NFG
T. Alexander – NFG
M. Doster – NYSDEC
G. Litwin – NYSDOH
C. O'Connor – NYSDOH
R. Kennedy – Hogdson Russ LLP
J. Lloyd - AECOM

Tables

Table 1
Operations, Maintenance, and Monitoring Scope of Work
Mineral Springs Former MGP Site

	Frequency	Description	Notes
Groundwater and Surface Water Monitoring	Twice a year	Groundwater and surface water monitoring as specified in Table 2. Monitoring takes place in April or May and July or August.	Scope in 2002 included monitoring three times a year. The frequency was modified in 2003 with NYSDEC approval.
DNAPL Recovery	Twice a year	DNAPL recovery from well RTW-1.	
Site Inspections	Annual	Inspection of the following: • Clay, geomembrane, and asphalt caps • Ground surface for signs of tar or purifier residues • Fencing • Stream	
Maintenance and Repair	As needed	Activities determined based on inspection results	
Reporting	Twice a year	Groundwater Monitoring Report	
	Annually	O&M Report	

Table 2
Water Sampling Summary Table
Mineral Springs Former MGP Site

Location	Cyanide, Total USEPA SW846 9012A	Cyanide, Free ASTM 04282-89	BTEX USEPA SW846 8260B	PAHs USEPA SW846 8270C	Water Elevation	Benchmark Elevation (top of PVC casing)
Upgradient Site Perimeter						
MW-17	X	X	X	X	X	587.28
Downgradient Site Perimeter						
MW-13	X	X	annually	annually	X	591.85
MW-14	X	X			X	589.81
MW-15					X	590.93
MW-20	X	X			X	587.3
MW-21	X	X			X	587.88
MW-22	X	X			X	592.5
MW-23	X	X	annually	annually	X	589.28
Onsite Purifier Residuals Impacted Areas						
MW-12	X	X		X	X	591.4
MW-16	X	X		X	X	588.99
Onsite Hydrocarbon Impacted Areas						
MW-07	X	X	X		X	587.26
MW-10	X	X	X		X	587.61
MW-11	X	X	X		X	590.03
MW-19	X	X	X		X	589.83
Onsite Surface Water						
SW-01	X	X	X	X	X	top of headwall=587.0
SW-02	X	X	X	X		
QAIQC Samples (frequency)						
Trip Blank			X			(one per shipment)
Field Duplicate	X	X	X	X		(one per event)
Equipment Blank	X	X	X	X		(one per event)
DNAPL Recovery						
RTW-1					(purge well of accumulated DNAPL)	
Total	13	13	10 or 12	9 or 11	15	
Container, Preservative	500ml plastic, NaOH	1 L plastic amber, NaOH	40mL VOA vial, HCl (x2)	1 L glass amber, NP (x2)		

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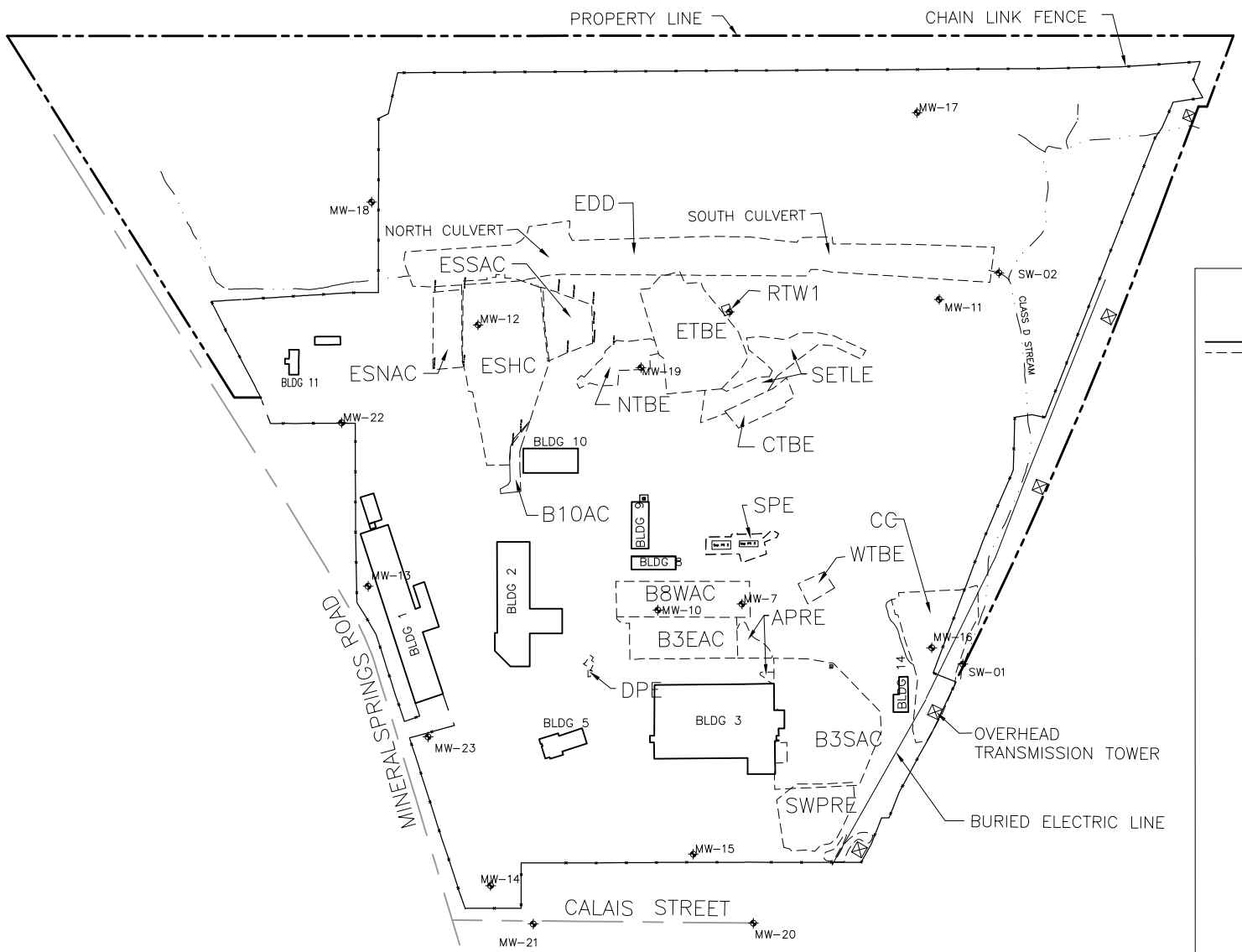
Figures



200 0 400

1"=400'

LEGEND

	EXISTING STRUCTURE
	REMEDIAL CONSTRUCTION
	MONITORING WELLS
APRE	ADDITIONAL PURIFIER RESIDUALS EXCAVATION
B3EAC	BUILDING 3 EAST ASPHALT CAP
B3SAC	BUILDING 3 SOUTH ASPHALT CAP
B8WAC	BUILDING 8 WEST ASPHALT CAP
B10AC	BUILDING 10 ASPHALT CAP
CC	CLAY CAP
CTBE	CENTRAL TAR BOILS EXCAVATION
DPE	DIESEL PAD EXCAVATION
EDD	EASTERN DRAINAGE DITCH
ESHC	EASTERN SWALE HDPE CAP
ESNAC	EASTERN SWALE NORTH ASPHALT CAP
ESSAC	EASTERN SWALE SOUTH ASPHALT CAP
ETBE	EASTERN TAR BOILS EXCAVATION
NTBE	NORTHERN TAR BOILS EXCAVATION
RTW1	RECOVERY TEST WELL AND DNAPL SHED
SETLE	SOUTHEASTERN TAR LENSES EXCAVATION
SPE	SEPARATOR PITS EXCAVATION
SWPRE	SOUTHWEST RESIDUALS EXCAVATION
WTBE	WESTERN TAR BOILS EXCAVATION

AECOM

MINERAL SPRINGS ROAD FORMER MGP SITE

04870-026-400

SITE PLAN

DATE: 09/10/09 | DRWN: RCW/WFD

FIGURE 1

Appendix A

Groundwater and Surface Water Monitoring Results

MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09
Benzene	3320	1210	4900		5100	5200	4800	3900	3300	2700	2200	3000	2100	1900	3200	2800	2000	1700	2800	2000	2900	2600	2000	1900	490	1100	780
Toluene	389	20	750		2000	2700	2500	3400	1700	1500	1200	1400	1200	930	1700	1800	1300	930	1100	840	1100	570	620	100	270	590	420
Ethylbenzene	2400	410	2900		3700	3600	3300	2000	2100	2300	1900	2200	1900	1900	2700	2500	2500	1800	2700	2200	3100	2500	2500	2000	410	1500	1100
Xylene (sum of isomers)	1038	63	1200		1800	1900	1800	1600	1100	1200	1100	1100	1100	1000	1400	1200	1400	1000	1600	1300	1800	1500	1400	1100	270	910	820
Total BTEX	7147	1703	9750		12600	13400	12400	10900	8200	7700	6400	7700	6300	5730	9000	8300	7200	5430	8200	6340	8900	7170	6520	5100	1440	4100	3120
Naphthalene	3270	3000	2400		4100	5900	3400	3400	3600	2200	2600	5000	3100	3800	3200	3700	2700	4600	3500	3600	3000	3600	3700	3100	430	1000	1600
Acenaphthylene	nd	nd	nd		nd	nd	nd	2.2	nd	nd	nd	nd	nd	nd	nd	nd	3	nd	nd	nd	nd	nd	nd	nd	2.5	nd	0.63
Acenaphthene	240	150	180		180	180	150	140	160	80	120	150	nd	160	120	160	180	160	130	220	120	130	nd	130	19	69	32
Fluorene	nd	28	45		nd	nd	nd	28	nd	nd	nd	33	nd	nd	27	nd	42	nd	24	46	32	24	nd	25	7.6	13	6.4
Phenanthrene	nd	nd	37		nd	nd	nd	32	nd	nd	nd	30	nd	nd	nd	nd	38	nd	nd	nd	33	28	nd	25	2.5	12	4.3
Anthracene	nd	nd	nd		nd	nd	nd	3.6	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	5.4	3.9	nd	3	2.5	1.5	nd
Fluoranthene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Pyrene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)Anthracene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Chrysene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(b)Fluoranthene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)Fluoranthene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)Pyrene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)Pyrene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzo(a,h)Anthracene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.47	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)Perylene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene							180	190	200	100	180	230	nd	280	170	270	320	300	230	400	350	250	270	230	24	120	73
Total PAHs	3510	3178	2662		4280	6080	3730	3796	3960	2380	2900	5443	3100	4240	3517	4130	3283	5060	3884	4266	3541	4036	3970	3513	488	1215.5	1716.33
Cyanide, total (Exygen)			189																								
Cyanide, total (Clarkson Univ.)																											
Cyanide, free (Exygen)																											
Cyanide, free (Clarkson Univ.)																											
Water Elevation (feet)			580.13	581.68	579.84	581.70	581.50	579.98	580.58	582.01	580.96	580.26	581.66	580.31	580.32	582.45	581.24	581.36	582.28	579.76	581.90	579.24	582.58	578.21	581.99	580.83	581.93

MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09
Benzene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	1.2	nd	nd	nd	nd	nd	0.83	nd	nd	nd	nd	nd	nd	nd	nd
Toluene	nd	nd	nd		nd	nd	nd	nd	nd	0.89	nd	nd	0.81	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	0.9	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.3	nd	nd	nd
Xylene (sum of isomers)	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.66	nd	nd	nd
Total BTEX	0	0	0		0	0	0	0	0	0.89	0	0	2.91	0	0	0	0	0	0.83	0	0	0	0	1.96	0	0	0
Naphthalene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	2.1	nd	nd	nd	nd	nd	nd	0.78	nd	43	nd	nd	2.3	nd	nd	nd
Acenaphthylene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluorene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluoranthene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Pyrene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)Anthracene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Chrysene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(b)Fluoranthene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)Fluoranthene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)Pyrene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)Pyrene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzo(a,h)Anthracene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)Perylene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene							nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	3.8	nd	nd	nd	nd	nd	nd
Total PAHs	0	0	0		0	0	0	0	0	0	0	2.1	0	0	0	0	0	0	0.78	0	46.8	0	0	2.3	0	0	0
Cyanide, total (Exygen)			334																								
Cyanide, total (Clarkson Univ.)																											
Cyanide, free (Exygen)																											
Cyanide, free (Clarkson Univ.)																											
Water Elevation (feet)			579.87	581.44	579.33	581.19	581.07	579.64	580.10	581.61	580.51	579.51	581.23	579.93	579.16	581.92	580.80	580.90	581.78	579.53	581.15	580.04	582.06	578.19	581.51	580.45	581.10

MW-11 / MW-11A	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09
Benzene			35		nd	nd	nd	nd		nd	nd	nd	nd	350	80	50	270	150	140	250	67	140	100	180	230	210	190
Toluene			17		nd	nd	nd	68		nd	3.8	nd	nd	230	1.2	0.7	35	nd	1.2	7	0.56	1.2	0.99	nd	5.5	nd	nd
Ethylbenzene			94		nd	nd	nd	nd		nd	nd	nd	nd	650	3.5	6.9	30	5.4	9.6	38	2.5	8.7	2.8	5.5	69	71	67
Xylene (sum of isomers)			83		7	nd	nd	nd		nd	nd	nd	nd	410	9.1	9.2	38	16	16	30	8.1	14	5.5	29	41	30	24
Total BTEX			229		7	0	0	68		0	4	0	0	1640	94	67	373	171	167	325	78	164	109	215	346	311	281
Naphthalene			140		12	nd	nd	nd		nd	nd	nd	nd	150	130	nd	39	31	nd	20	2.9	nd	nd	0.79	7.1	2.5	4.1
Acenaphthylene			9		2	nd	nd	nd		nd	nd	nd	nd	12	8.4	nd	7.9	9.4	2.8	8.9	5.1	nd	5.8	0.93	6.9	3.4	3.7
Acenaphthene			7		nd	nd	nd	nd		nd	nd	nd	nd	4.4	3.1	1.2	4.5	5.9	4.5	5.6	nd	nd	nd	2.7	5.6	5	4.1
Fluorene			nd		nd	nd	nd	nd		nd	nd	nd	nd	2.2	nd	nd	1.9	2.3	1.3	1.7	1.5	nd	nd	nd	5.1	0.86	0.89
Phenanthrene			nd		nd	nd	nd	nd		nd	nd	nd	nd	2.7	2.2	nd	3.7	6.4	nd	2	nd	nd	nd	nd	1.5	nd	nd
Anthracene			nd		nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	0.5	1.6	nd	nd	nd	nd	nd	nd	2.2	nd	nd
Fluoranthene			nd		nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	0.3	nd	nd	nd	nd	0.57	nd	nd	0.32
Pyrene			nd		nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	0.3	0.73	0.46	0.33	nd	nd	nd	1.2	nd	nd	0.36
Benzo(a)Anthracene			nd		nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Chrysene			nd		nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(b)Fluoranthene			nd		nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)Fluoranthene			nd		nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)Pyrene			nd		nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)Pyrene			nd		nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzo(a,h)Anthracene			nd		nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)Perylene			nd		nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene							nd	nd		nd	nd	nd	nd	31	4.4	nd	0.26	nd	nd	0.15	nd	nd	nd	nd	nd	nd	nd
Total PAHs			156		14	0	0	0		0	0	0	0	202	148	1	58	57	9	39	10	0	6	6	28	11.76	13.47
Cyanide, total (Exygen)			1040						1340																		
Cyanide, total (Clarkson Univ.)																											
Cyanide, free (Exygen)									nd																		
Cyanide, free (Clarkson Univ.)																											
Water Elevation (feet)			580.28	582.26	579.82	583.55	583.85	579.28	581.30	583.85	581.32	581.03	582.97	580.70	581.11	583.03	581.54	581.87	582.74	580.09	582.38	580.78	583.07	578.46	582.43	581.32	582.35

MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09
Benzene			17																								
Toluene			nd																								
Ethylbenzene			nd																								
Xylene (sum of isomers)			nd																								
Total BTEX			17																								
Naphthalene			nd																								
Acenaphthylene			nd																								
Acenaphthene			nd																								
Fluorene			nd																								
Phenanthrene			nd																								
Anthracene			nd																								
Fluoranthene			nd																								
Pyrene			nd																								
Benzo(a)Anthracene			nd																								
Chrysene			nd																								
Benzo(b)Fluoranthene			nd																								
Benzo(k)Fluoranthene			nd																								
Benzo(a)Pyrene			nd																								
Indeno(1,2,3-cd)Pyrene			nd																								
Dibenzo(a,h)Anthracene			nd																								
Benzo(g,h,i)Perylene			nd																								
2-Methylnaphthalene																											
Total PAHs			0																								
Cyanide, total (Exygen)			375		294	380	434	1840	393	522	2020	438	440	384	437	134	458	514	2110								
Cyanide, total (Clarkson Univ.)																	461	491	425	413	440	415	459	454	473	550	472
Cyanide, free (Exygen)						nd	nd	nd	nd	nd	58	7	nd	88	57	19	6	5	817								
Cyanide, free (Clarkson Univ.)																6.7	nd	nd	3.3	2.9	2.6	nd	nd	6.8	25	7.2	4.1
Water Elevation (feet)			579.45	581.07	578.98	580.90	580.72	579.30	579.54	581.40	580.30	579.29	580.82	579.59	579.75	581.55	580.39	580.51	581.48	579.27	580.96	579.78	581.88	578.7	581.25	580.16	581.10

Mineral Springs

All units ug/L

MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09
Benzene			4	nd								1.8			3.7			1.2				1.9		2.1	nd		
Toluene			nd	nd								nd			nd			nd				nd		nd	nd		
Ethylbenzene			nd	nd								nd			nd			nd				nd		0.38	nd		
Xylene (sum of isomers)			nd	nd								nd			nd			nd				nd		nd	nd		
Total BTEX			4	0								1.8			3.7			1.2				1.9		2.48	0		
Naphthalene			nd									nd			nd			nd				2.8		0.88	nd		
Acenaphthylene			nd									nd			nd			nd				nd		nd	nd		
Acenaphthene			nd									nd			nd			nd				nd		nd	nd		
Fluorene			nd									nd			nd			nd				nd		nd	nd		
Phenanthrene			nd									nd			nd			nd				nd		nd	nd		
Anthracene			nd									nd			nd			nd				nd		nd	nd		
Fluoranthene			nd									nd			nd			nd				nd		nd	nd		
Pyrene			nd									nd			nd			nd				nd		nd	nd		
Benzo(a)Anthracene			nd									nd			nd			nd				nd		nd	nd		
Chrysene			nd									nd			nd			nd				nd		nd	nd		
Benzo(b)Fluoranthene			nd									nd			nd			nd				nd		nd	nd		
Benzo(k)Fluoranthene			nd									nd			nd			nd				nd		nd	nd		
Benzo(a)Pyrene			nd									nd			nd			nd				nd		nd	nd		
Indeno(1,2,3-cd)Pyrene			nd									nd			nd			nd				nd		nd	nd		
Dibenzo(a,h)Anthracene			nd									nd			nd			nd				nd		nd	nd		
Benzo(g,h,i)Perylene			nd									nd			nd			nd				nd		nd	nd		
2-Methylnaphthalene												nd			nd			nd				nd		nd	nd		
Total PAHs			0									0			0			0				2.8		0.88	0		
Cyanide, total (Exygen)			323		356	280	129	465	716	nd	157	399	142	423	528	175	108	280	103									
Cyanide, total (Clarkson Univ.)																	145	234	55	363	61	300	3	664	54	467	27
Cyanide, free (Exygen)						nd	33	119	nd	nd	96	13	nd	51	22	22	nd	nd	45								
Cyanide, free (Clarkson Univ.)																5.3	nd	nd	nd	3	nd	nd	nd	5.3	2.3	8.2	nd
Water Elevation (feet)			578.17	579.72	577.70	579.47	579.28	577.91	578.23	579.90	578.80	577.83	579.23	578.13	578.18	579.78	578.69	578.80	579.87	577.95	579.42	578.30	580.29	577.3	579.65	578.95	579.44

MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09
Benzene			nd																								
Toluene			nd																								
Ethylbenzene			nd																								
Xylene (sum of isomers)			nd																								
Total BTEX			0																								
Naphthalene			nd																								
Acenaphthylene			nd																								
Acenaphthene			nd																								
Fluorene			nd																								
Phenanthrene			nd																								
Anthracene			nd																								
Fluoranthene			nd																								
Pyrene			nd																								
Benzo(a)Anthracene			nd																								
Chrysene			nd																								
Benzo(b)Fluoranthene			nd																								
Benzo(k)Fluoranthene			nd																								
Benzo(a)Pyrene			nd																								
Indeno(1,2,3-cd)Pyrene			nd																								
Dibenzo(a,h)Anthracene			nd																								
Benzo(g,h,i)Perylene			nd																								
2-Methylnaphthalene																			broken								
Total PAHs			0																no sample								
Cyanide, total (Exygen)			644		427	800	914	378	449	886	416	487	664	962	583	nd	503	537									
Cyanide, total (Clarkson Univ.)																	514	571		423	305	281	404	422	374	486	425
Cyanide, free (Exygen)						nd	nd	nd	nd	nd	17	12	nd	9	7	nd	14	13									
Cyanide, free (Clarkson Univ.)																nd	nd	nd		nd	nd	nd	nd	nd	4	2.5	4.1
Water Elevation (feet)			577.36	579.19	577.03	578.44	578.21	577.21	577.31	578.56	577.61	576.76	577.92	577.23	577.11	578.15	577.55	577.46		577.07	577.99	577.29	577.89	577.43	577.87	576.48	577.57

MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09
Benzene			nd																								
Toluene			nd																								
Ethylbenzene			nd																								
Xylene (sum of isomers)			nd																								
Total BTEX			0																								
Naphthalene			nd																								
Acenaphthylene			nd																								
Acenaphthene			nd																								
Fluorene			nd																								
Phenanthrene			nd																								
Anthracene			nd																								
Fluoranthene			nd																								
Pyrene			nd																								
Benzo(a)Anthracene			nd																								
Chrysene			nd																								
Benzo(b)Fluoranthene			nd																								
Benzo(k)Fluoranthene			nd																								
Benzo(a)Pyrene			nd																								
Indeno(1,2,3-cd)Pyrene			nd																								
Dibenzo(a,h)Anthracene			nd																								
Benzo(g,h,i)Perylene			nd																								
2-Methylnaphthalene																											
Total PAHs			0																								
Cyanide, total (Exygen)			78.8																								
Cyanide, total (Clarkson Univ.)																											
Cyanide, free (Exygen)																											
Cyanide, free (Clarkson Univ.)																											
Water Elevation (feet)			579.11	579.81	578.70	580.15	580.55	578.98	579.49	580.98	579.48	578.88	580.40	579.11	579.30	581.04	579.99	---	580.54	579.45	580.54	579.36	---	577.89	580.60	579.65	580.61

MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09			
Benzene			nd																											
Toluene			nd																											
Ethylbenzene			nd																											
Xylene (sum of isomers)			nd																											
Total BTEX			0																											
Naphthalene			nd																											
Acenaphthylene			nd																											
Acenaphthene			nd																											
Fluorene			nd																											
Phenanthrene			nd																											
Anthracene			nd																											
Fluoranthene			nd																											
Pyrene			nd																											
Benzo(a)Anthracene			nd																											
Chrysene			nd																											
Benzo(b)Fluoranthene			nd																											
Benzo(k)Fluoranthene			nd																											
Benzo(a)Pyrene			nd																											
Indeno(1,2,3-cd)Pyrene			nd																											
Dibenzo(a,h)Anthracene			nd																											
Benzo(g,h,i)Perylene			nd																											
2-Methylnaphthalene																														
Total PAHs			0																											
Cyanide, total (Exygen)			346		459	360	214	214	138	174	23	187	203	130	220	254	297	293	307											
Cyanide, total (Clarkson Univ.)																	332	297	305	299	266	368	317	429	467	540	531			
Cyanide, free (Exygen)						nd	nd	147	nd	nd	17	13	nd	89	20	95	12	104	nd											
Cyanide, free (Clarkson Univ.)																3.4	2.8	nd	nd	nd	nd	nd	nd	4	6.9	5.0	5.5			
Water Elevation (feet)			580.17	581.49	579.66	581.81	581.59	580.06	580.77	582.08	580.23	580.34	581.92	580.42	580.95	582.83	581.35	581.72	581.08	579.91	582.14	580.56	582.87	578.25	581.82	581.7	582.26			

MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09
Benzene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.32	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Toluene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.1	nd	nd	nd
Xylene (sum of isomers)				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.63	nd	nd	nd
Total BTEX				0	0	0	0	0	0	0	0	0	0	0	0	0.32	0	0	0	0	0	0	0	1.73	0	0	0
Naphthalene				nd	nd	nd	nd	3	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthylene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluorene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluoranthene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Pyrene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)Anthracene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Chrysene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(b)Fluoranthene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)Fluoranthene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)Pyrene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)Pyrene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzo(a,h)Anthracene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)Perylene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene							nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total PAHs				0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyanide, total (Exygen)				34	nd	27	65	38	74	185	127	108	185	50	66	378	106	160	217								
Cyanide, total (Clarkson Univ.)																	142	162	260	161	263	183	369	148	285	144	279
Cyanide, free (Exygen)						nd	13	nd	nd	nd	nd	nd	nd	16	nd	nd	nd	nd	61								
Cyanide, free (Clarkson Univ.)																nd	nd	nd	nd	nd	5.2	nd	nd	nd	5.9	nd	5.0
Water Elevation (feet)				582.36	579.73	581.90	581.96	580.12	580.88	582.38	579.86	580.48	582.01	580.46	580.96	582.40	581.27	581.72	582.71	579.96	582.14	580.62	582.87	578.36	583.02	581.13	582.30

MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02
Benzene				nd	nd	nd	nd	nd	nd	nd
Toluene				nd	nd	nd	nd	1.1	nd	nd
Ethylbenzene				nd	nd	nd	nd	nd	nd	nd
Xylene (sum of isomers)				nd	nd	nd	nd	nd	nd	nd
Total BTEX				0	0	0	0	1.1	0	0
Naphthalene				nd	nd	nd	nd	nd	nd	nd
Acenaphthylene				nd	nd	nd	nd	nd	nd	nd
Acenaphthene				nd	nd	nd	nd	nd	nd	nd
Fluorene				nd	nd	nd	nd	nd	nd	nd
Phenanthrene				nd	nd	nd	nd	nd	nd	nd
Anthracene				nd	nd	nd	nd	nd	nd	nd
Fluoranthene				nd	nd	nd	nd	nd	nd	nd
Pyrene				nd	nd	nd	nd	nd	nd	nd
Benzo(a)Anthracene				nd	nd	nd	nd	nd	nd	nd
Chrysene				nd	nd	nd	nd	nd	nd	nd
Benzo(b)Fluoranthene				nd	nd	nd	nd	nd	nd	nd
Benzo(k)Fluoranthene				nd	nd	nd	nd	nd	nd	nd
Benzo(a)Pyrene				nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)Pyrene				nd	nd	nd	nd	nd	nd	nd
Dibenzo(a,h)Anthracene				nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)Perylene				nd	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene							nd	nd	nd	nd
Total PAHs				0	0	0	0	0	0	0
Cyanide, total (Exygen)				nd	nd	nd	13	nd	nd	nd
Cyanide, total (Clarkson Univ.)										
Cyanide, free (Exygen)						nd	nd	24	nd	nd
Cyanide, free (Clarkson Univ.)										
Water Elevation (feet)				585.46	582.65	585.06	585.40	583.84	583.84	582.74

MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09
Benzene					4700	5700	6000	4600	4700	4800	3800	4200	4600		5300	4900	6000	5800	7500	5800	5800	5600	6700	4500	5200	3700	3700
Toluene					nd	nd	nd	160	nd	nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene					nd	280	260	nd	nd	160	150	140	170		130	170	330	180	350	270	260	200	220	100	210	120	180
Xylene (sum of isomers)					1500	2200	1500	930	660	580	470	540	560		400	440	1000	660	950	770	730	810	710	470	780	510	470
Total BTEX					6200	8180	7760	5690	5360	5540	4420	4880	5330		5830	5510	7330	6640	8800	6840	6790	6610	7630	5070	6190	4330	4350
Naphthalene					1900	2200	2200	2000	2100	2300	2000	2100	2400	2100	2000	2700	2900	2800	3000	2600	2800	3600	3100	4600	4100	2600	3600
Acenaphthylene					nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene					nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.5	nd	nd
Fluorene					nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene					nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene					nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluoranthene					nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Pyrene					nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)Anthracene					nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Chrysene					nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(b)Fluoranthene					nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)Fluoranthene					nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)Pyrene					nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)Pyrene					nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzo(a,h)Anthracene					nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)Perylene					nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene							nd	0.82	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	5.5	4.8	nd	5.5	4.7	3.5	6.2
Total PAHs					1900	2200	2200	2001	2100	2300	2000	2100	2400	2100	2000	2700	2900	2800	3000	2600	2806	3605	3100	4606	4106	2603.5	3606.2
Cyanide, total (Exygen)					1100																						
Cyanide, total (Clarkson Univ.)																											
Cyanide, free (Exygen)																											
Cyanide, free (Clarkson Univ.)																											
Water Elevation (feet)					577.43	581.36	581.13	579.63	580.12	581.73	579.73	579.83	581.24	580.01	580.19	582.00	580.79	580.98	581.90	579.57	581.42	580.15	582.26	578.2	581.6	580.52	581.46

Mineral Springs

All units ug/L

MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09
Benzene					nd																						
Toluene					nd																						
Ethylbenzene					nd																						
Xylene (sum of isomers)					nd																						
Total BTEX					0																						
Naphthalene					nd																						
Acenaphthylene					nd																						
Acenaphthene					nd																						
Fluorene					nd																						
Phenanthrene					nd																						
Anthracene					nd																						
Fluoranthene					nd																						
Pyrene					nd																						
Benzo(a)Anthracene					nd																						
Chrysene					nd																						
Benzo(b)Fluoranthene					nd																						
Benzo(k)Fluoranthene					nd																						
Benzo(a)Pyrene					nd																						
Indeno(1,2,3-cd)Pyrene					nd																						
Dibenzo(a,h)Anthracene					nd																						
Benzo(g,h,i)Perylene					nd																						
2-Methylnaphthalene																											
Total PAHs					0																						
Cyanide, total (Exygen)					344	450	295	439	46	455	361	8	506	399	21	501	242	387	644								
Cyanide, total (Clarkson Univ.)																	242	444	402	160	429	172	469	337	494	115	418
Cyanide, free (Exygen)						nd	13	nd	nd	nd	10	9	nd	44	14	nd	nd	53	13								
Cyanide, free (Clarkson Univ.)																nd	nd	nd	nd	nd	nd	nd	nd	2.6	3.2	nd	nd
Water Elevation (feet)					576.67	579.24	578.86	576.76	577.15	579.20	577.49	576.60	578.34	576.90	577.16	578.96	577.42	577.82	578.82	576.60	578.20	577.07	579.03	575.78	578.43	577.4	578.78

MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09
Benzene					nd																						
Toluene					nd																						
Ethylbenzene					nd																						
Xylene (sum of isomers)					nd																						
Total BTEX					0																						
Naphthalene					nd																						
Acenaphthylene					nd																						
Acenaphthene					nd																						
Fluorene					nd																						
Phenanthrene					nd																						
Anthracene					nd																						
Fluoranthene					nd																						
Pyrene					nd																						
Benzo(a)Anthracene					nd																						
Chrysene					nd																						
Benzo(b)Fluoranthene					nd																						
Benzo(k)Fluoranthene					nd																						
Benzo(a)Pyrene					nd																						
Indeno(1,2,3-cd)Pyrene					nd																						
Dibenzo(a,h)Anthracene					nd																						
Benzo(g,h,i)Perylene					nd																						
2-Methylnaphthalene																											
Total PAHs					0																						
Cyanide, total (Exygen)					511	560	898	558	535	756	674	670	637	708	569	714	741	740	664								
Cyanide, total (Clarkson Univ.)																	749	709	688	545	404	448	574	560	543	417	485
Cyanide, free (Exygen)						nd	14	nd	nd	24	12	13	nd	11	nd	nd	nd	7	20								
Cyanide, free (Clarkson Univ.)																nd	nd	nd	nd	2.6	nd	nd	nd	nd	18.5	4.2	nd
Water Elevation (feet)					576.51	578.08	577.68	576.55	576.58	578.03	576.97	576.28	575.32	576.55	576.42	577.70	576.86	576.85	577.71	576.38	577.28	576.75	578.38	576.79	577.42	576.94	577.35

MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09
Benzene					6																						
Toluene					nd																						
Ethylbenzene					nd																						
Xylene (sum of isomers)					nd																						
Total BTEX					6																						
Naphthalene					nd																						
Acenaphthylene					nd																						
Acenaphthene					nd																						
Fluorene					nd																						
Phenanthrene					nd																						
Anthracene					nd																						
Fluoranthene					nd																						
Pyrene					nd																						
Benzo(a)Anthracene					nd																						
Chrysene					nd																						
Benzo(b)Fluoranthene					nd																						
Benzo(k)Fluoranthene					nd																						
Benzo(a)Pyrene					nd																						
Indeno(1,2,3-cd)Pyrene					nd																						
Dibenzo(a,h)Anthracene					nd																						
Benzo(g,h,i)Perylene					nd																						
2-Methylnaphthalene																											
Total PAHs					0																						
Cyanide, total (Exygen)					487	600	1010	734	460	703	1570	467	604	560	1080	741	504	803	941								
Cyanide, total (Clarkson Univ.)																	676	759	628	534	587	540	642	641	666	785	704
Cyanide, free (Exygen)						nd	nd	201	nd	nd	49	231	267	88	49	132	nd	207	99								
Cyanide, free (Clarkson Univ.)																nd	8	nd	3.1	2.4	nd	nd	nd	4.3	5.9	3.3	3.1
Water Elevation (feet)					578.80	580.70	580.51	579.09	579.50	581.25	580.05	579.10	580.62	579.42	579.47	581.27	580.05	580.22	581.28	579.13	580.69	579.60	581.75	578.02	581.03	579.93	580.86

Mineral Springs

All units ug/L

MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09
Benzene						nd						nd			nd			nd				nd				nd	
Toluene						nd						nd			nd			nd				nd				nd	
Ethylbenzene						nd						nd			nd			nd				nd				nd	
Xylene (sum of isomers)						nd						nd			nd			nd				nd				nd	
Total BTEX						0						0			0			0				0				0	
Naphthalene						nd						nd			nd			nd				3.6				nd	
Acenaphthylene						nd						nd			nd			nd				nd				nd	
Acenaphthene						nd						nd			nd			nd				nd				nd	
Fluorene						nd						nd			nd			nd				nd				nd	
Phenanthrene						nd						nd			nd			nd				nd				nd	
Anthracene						nd						nd			nd			nd				nd				nd	
Fluoranthene						nd						nd			nd			nd				nd				nd	
Pyrene						nd						nd			nd			nd				nd				nd	
Benzo(a)Anthracene						nd						nd			nd			nd				nd				nd	
Chrysene						nd						nd			nd			nd				nd				nd	
Benzo(b)Fluoranthene						nd						nd			nd			nd				nd				nd	
Benzo(k)Fluoranthene						nd						nd			nd			nd				nd				nd	
Benzo(a)Pyrene						nd						nd			nd			nd				nd				nd	
Indeno(1,2,3-cd)Pyrene						nd						nd			nd			nd				nd				nd	
Dibenzo(a,h)Anthracene						nd						nd			nd			nd				nd				nd	
Benzo(g,h,i)Perylene						nd						nd			nd			nd				nd				nd	
2-Methylnaphthalene												nd			nd			nd				nd				nd	
Total PAHs						0						0			0			0				3.6				0	
Cyanide, total (Exygen)						480	658	469	654	480	425	728	356	620	729	587	446	437	274									
Cyanide, total (Clarkson Univ.)																	493	560	359	325	267	321	326	374	252	344	276	
Cyanide, free (Exygen)						nd	nd	nd	nd	nd	12	10	nd	15	6	5	9	5	57									
Cyanide, free (Clarkson Univ.)																nd	nd	nd	nd	nd	nd	nd	nd	nd	3.2	11.7	nd	
Water Elevation (feet)						578.66	578.30	577.40	577.58	578.69	577.83	577.18	578.11	577.40	577.29	578.54	577.83	577.91	578.61	577.44	578.19	577.63	578.95	577.19	578.37	577.83	578.16	

SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09
Benzene			nd				nd	nd	nd	nd	nd	nd	nd	nd	nd	0.44	nd	nd	nd	nd	nd	nd	nd	Dry	nd	nd	nd
Toluene			nd				nd	nd	nd	nd	2	nd	nd	nd	nd	0.38	nd	nd	nd	0.47	nd	nd	nd		nd	nd	nd
Ethylbenzene			nd				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.23	nd		nd	nd	nd
Xylene (sum of isomers)			nd				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Total BTEX			0				0	0	0	0	2	0	0	0	0	0.82	0	0	0	0.47	0	0.23	0		0	0	0
Naphthalene			nd				nd	2.9	nd	nd	nd	1.6	nd	nd	nd	nd	nd	nd	nd	nd	32	nd	nd		2.3	nd	nd
Acenaphthylene			nd				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Acenaphthene			nd				nd	1.1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Fluorene			nd				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Phenanthrene			nd				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Anthracene			nd				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Fluoranthene			nd				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.5	nd	nd	nd		nd	nd	nd
Pyrene			nd				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.4	nd	nd	nd		nd	nd	nd
Benzo(a)Anthracene			nd				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Chrysene			nd				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Benzo(b)Fluoranthene			nd				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Benzo(k)Fluoranthene			nd				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Benzo(a)Pyrene			nd				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Indeno(1,2,3-cd)Pyrene			nd				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Dibenzo(a,h)Anthracene			nd				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Benzo(g,h,i)Perylene			nd				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
2-Methylnaphthalene							nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Total PAHs			0				0	4	0	0	0	1.6	0	0	0	0	0	0	0	0.9	32	0	0		2.3	0	0
Cyanide, total (Exygen)			12.2				21	55	35	8	405	21	13	88	36	989	40	38	9								
Cyanide, total (Clarkson Univ.)																	46	53	10	5	4	24	nd		14	5	25
Cyanide, free (Exygen)							nd	16	nd	nd	29	6	nd	10	nd	86	6	19	nd								
Cyanide, free (Clarkson Univ.)																98.1	nd	nd	3.2	2.4	2.3	2.4	5		nd	nd	nd
Water Elevation (feet)					579.80	580.40	580.10	580.00	580.10	581.00	579.60	579.80	580.70	581.40	582.00	582.30	580.60	581.30	581.30	579.90	581.60	580.20	582.80		581.57	581.80	581.55

Mineral Springs

All units ug/L

SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09
Benzene			nd		nd	6	2	nd	nd	1.2	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	Dry	nd	nd	nd
Toluene			nd		nd	8	2	nd	nd	0.25	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Ethylbenzene			nd		nd	15	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Xylene (sum of isomers)			nd		nd	24	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Total BTEX			0		0	53	4	0	0	1.45	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
Naphthalene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		0.94	nd	nd
Acenaphthylene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Acenaphthene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Fluorene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Phenanthrene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Anthracene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Fluoranthene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Pyrene			nd		nd	nd	nd	0.77	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Benzo(a)Anthracene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Chrysene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Benzo(b)Fluoranthene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Benzo(k)Fluoranthene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Benzo(a)Pyrene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Indeno(1,2,3-cd)Pyrene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Dibenzo(a,h)Anthracene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Benzo(g,h,i)Perylene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
2-Methylnaphthalene							nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd	nd
Total PAHs			0		0	0	0	0.77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0.94	0	0
Cyanide, total (Exygen)			77.5		nd	380	121	nd	7	130	nd	1440	17	30	62	48	nd	24	nd									
Cyanide, total (Clarkson Univ.)																	nd	50	nd	nd	3	nd	nd		86	86	16
Cyanide, free (Exygen)						111	nd	nd	nd	16	nd	42	nd	nd	nd	20	nd	12	nd									
Cyanide, free (Clarkson Univ.)																19.2	nd	6.2	nd	nd	2.3	nd	8.6		50.7	10.1	nd
Water Elevation (feet, approximate)					580.3	580.9	580.6	580.5	580.6	581.5	580.1	580.3	581.1	581.8	582.4	582.7	581.0	581.7	581.7	580.3	582.0	580.6	583.2		---	---	---

Appendix B

Annual Site Inspection Form

Annual Site Inspection Form

Mineral Springs Road Former MGP

Inspection by: Thomas Clark Affiliation: AECOM, In

Signature: Date: April 8, 2009 (inspection date)

ASPHALT CAP SOUTH OF BUILDING #3

Cracks or ruts ?	(Yes)	No
Erosion at edges ?	Yes	(No)
Blue-stained soil ?	Yes	(No)

Comments:

Observed a few small cracks in pavement. A small area with significant cracking was also identified

ASPHALT CAP EAST OF BUILDING #3

Cracks or ruts ?	(Yes)	No
Erosion at edges ?	Yes	(No)
Blue-stained soil ?	Yes	(No)

Comments:

Observed a few small cracks in pavement.

ASPHALT CAP NORTH OF EASTERN SWALE

Cracks or ruts ?	(Yes)	No
Erosion at edges ?	Yes	(No)
Blue-stained soil ?	Yes	(No)

Comments:

Observed a few small cracks in pavement.

ASPHALT CAP SOUTH OF EASTERN SWALE

Cracks or ruts ?	(Yes)	No
Erosion at edges ?	Yes	(No)
Blue-stained soil ?	Yes	(No)

Comments:

Observed a few small cracks in pavement.

HDPE/SOIL CAP IN EASTERN SWALE

Cracks or ruts ?	(Yes)	No
Erosion at edges ?	Yes	(No)
Blue-stained soil ?	Yes	(No)

Comments:

Observed rutting in several areas.

CLAY CAP BEHIND BUILDING #14

Animal dens ?	(Yes)	No
Erosion ?	(Yes)	No
Trees ?	Yes	(No)
Blue-stained soil ?	Yes	(No)

Comments:

Observed several animal burrows on or near cap. Large hole identified next to cap.

EASTERN DRAINAGE DITCH

Animal dens ?	Yes	(No)
Erosion ?	Yes	(No)
Trees ?	Yes	(No)
Blue-stained soil ?	Yes	(No)
Hydrocarbon sheen ?	Yes	(No)
Inadequate Signage ?	Yes	(No)
Trash / Debris ?	Yes	(No)

Comments:

BACKFILLED EXCAVATIONS

Excessive settlement ?	Yes	(No)
Ponding of surface water ?	Yes	(No)
Tar boils ?	Yes	(No)
Blue-stained soil ?	Yes	(No)

Comments:

CLASS D STREAM

Hydrocarbon sheen ?	Yes	(No)

Comments:

SITE FENCE

Damage / Holes ?	Yes	(No)

Comments:

Appendix C

Photographs

AECOM

PHOTOGRAPHIC LOG

Client Name: National Fuel Gas Distribution Corp.	**Site Location:** 365 Mineral Springs Road, Buffalo, New York	**Project No.** 04870-026-400

Photo No. 1	**Date:** 04/08/09

Direction Photo Taken:

From South

Description:

Crack in Eastern Swale Northern Asphalt Cap

Photo No. 2	**Date:** 04/08/09

Direction Photo Taken:

From East

Description:

Rutting in Eastern Swale HDPE Cap

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
National Fuel Gas Distribution Corp.	365 Mineral Springs Road, Buffalo, New York	04870-026-400

Photo No.	Date:
3	04/08/09

Direction Photo Taken:

From South

Description:

Rutting in Eastern Swale HDPE Cap

Photo No.	Date:
4	04/08/09

Direction Photo Taken:

From North

Description:

Eastern Drainage Ditch

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
National Fuel Gas Distribution Corp.	365 Mineral Springs Road, Buffalo, New York	04870-026-400

Photo No.	Date:
5	04/08/09

Direction Photo Taken:

From South

Description:

Animal burrow in Building 14 Clay Cap

Photo No.	Date:
6	04/08/09

Direction Photo Taken:

From North

Description:

Hole next to Building 14 Clay Cap

AECOM

PHOTOGRAPHIC LOG

Client Name: National Fuel Gas Distribution Corp.	**Site Location:** 365 Mineral Springs Road, Buffalo, New York	**Project No.** 04870-026-400

Photo No.	**Date:**
7	04/08/09

Direction Photo Taken:

From North

Description:

Area of cracking on Building 3 South Asphalt Cap.

Appendix D

Institutional and Engineering Controls Certification Form

Enclosure 1
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **V00195**

Site Name **Mineral Springs Works**

Site Address: 365 Mineral Springs Road Zip Code: 14210

City/Town: West Seneca

County: Erie

Allowable Use(s) (if applicable, does not address local zoning): Commercial and Industrial

Site Acreage: 93.8 acres based on survey

Verification of Site Details **Box 2**

	YES	NO
1. Are the Site Details above, correct?	☐	☑
If NO, are changes handwritten above or included on a separate sheet?	☑	
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment since the initial/last certification?	☐	☑
If YES, is documentation or evidence that documentation has been previously submitted included with this certification?	☐	
3. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property since the initial/last certification?	☐	☑
If YES, is documentation (or evidence that documentation has been previously submitted) included with this certification?	☐	
4. If use of the site is restricted, is the current use of the site consistent with those restrictions?	☑	☐
If NO, is an explanation included with this certification?	☐	
5. For non-significant-threat Brownfield Cleanup Program Sites subject to ECL 27-1415.7(c), has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	☐ Not Applicable
If YES, is the new information or evidence that new information has been previously submitted included with this Certification?	☐	
6. For non-significant-threat Brownfield Cleanup Program Sites subject to ECL 27-1415.7(c), are the assumptions in the Qualitative Exposure Assessment still valid (must be certified every five years)?	☐	☐ Not Applicable

SITE NO. V00195

Box 3

Description of Institutional Controls

Parcel	Institutional Control
S_B_L Image: **123.16-2-8**	Ground Water Use Restriction Landuse Restriction

Box 4

Description of Engineering Controls

Parcel	Engineering Control
S_B_L Image: **123.16-2-8**	Cover System Fencing/Access Control

Attach documentation if IC/ECs cannot be certified or why IC/ECs are no longer applicable. (See instructions)

Control Description for Site No. V00195

Parcel: 123.16-2-8

i. All identified capped areas shall continue to be protective of public health and the environment, and shall continue to be maintained and monitored to be consistent with industrial/commercial use.

ii. The owner of the Property shall prohibit the Property from ever being used for purposes other than for an industrial/commercial operation, office, warehouse and garage facility and for the services associated with such use without the express written waiver of such prohibition by the Relevant Agency.

iii. The owner of the Property shall prohibit the use of the groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Relevant Agency.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted

YES	NO
☑	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
Not Applicable	
☐	☐

3. If this site has an Operation and Maintenance (O&M) Plan (or equivalent as required in the Decision Document);

   I certify by checking "YES" below that the O&M Plan Requirements (or equivalent as required in the Decision Document) are being met.

YES	NO
☑	☐

4. If this site has a Monitoring Plan (or equivalent as required in the remedy selection document);

   I certify by checking "YES" below that the requirements of the Monitoring Plan (or equivalent as required in the Decision Document) is being met.

YES	NO
Not Applicable	
☐	☐

IC CERTIFICATIONS
SITE NO. V00195

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 2 and/or 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I James D. Ramsdell at NFGDC, 6363 Main St., Williamsville, NY,
print name print business address

am certifying as Senior Vice Pres., National Fuel Gas Distribution Corp. (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner or Remedial Party Rendering Certification Date 9/11/09

IC/EC CERTIFICATIONS

Box 7

QUALIFIED ENVIRONMENTAL PROFESSIONAL (QEP) SIGNATURE

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Thomas P. Clark at AECOM, 2 Technology Park Dr., Westford MA 01886,
print name print business address

am certifying as a Qualified Environmental Professional for the National Fuel Gas Distribution Corp.

(Owner or Remedial Party) for the Site named in the Site Details Section of this form.

STATE OF NEW YORK
THOMAS P. CLARK
085258
LICENSED PROFESSIONAL ENGINEER

Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification | Stamp (if Required) | Date 9/16/09