

2009 ANNUAL MONITORING REPORT

NIAGARA COUNTY REFUSE DISTRICT SITE

Wheatfield, Niagara County, New York

(NYSDEC Site No. 9-32-026)

SUBMITTED TO:



UNITED STATES
ENVIRONMENTAL PROTECTION
AGENCY



NEW YORK STATE
DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

SUBMITTED BY:

Niagara County Refuse District and PRP Group

PREPARED BY:

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February 2010

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Submitted To:

**The New York State Department
of Environmental Conservation
Division of Hazardous Waste Remediation**

and

United States Environmental Protection Agency

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SECTION 1

INTRODUCTION

1.1 INTRODUCTION

In accordance with the United States Environmental Protection Agency (USEPA) Record of Decision (USEPA, 1993), the United States District Court Consent Decree (USA, 1995), and the USEPA approved Operation, Maintenance, and Monitoring (OM&M) Manual (CRA, 2000), the Niagara County Refuse Site PRP Group performed a remedial action at the Niagara County Refuse Site (Site), Wheatfield, New York. The PRP Group is currently providing operations, maintenance, and monitoring (OM&M). This Annual Monitoring Report summarizes monitoring activities from January through December 2009.

The Site is a former municipal landfill comprised of approximately 60 acres, located along the eastern border of the Town of Wheatfield, New York, and the western border of the City of North Tonawanda, New York. The southern edge of the Site lies approximately 500 feet north of the Niagara River. A perimeter collection system (PCS) and a perimeter barrier system are used to prevent offsite contaminant migration. These systems began operation in November of 2000.

1.2 PROCEDURES

1.2.1 Groundwater Sampling

In accordance with the OM&M Manual (CRA, 2000), samples were collected from wells NCR-3S, NCR-4S, NCR-5S, and NCR-13S in December 2009. These four wells are screened in the shallow overburden materials. Groundwater sampling on an annual schedule commenced in 2006. Annual groundwater sampling is scheduled to continue for an undetermined time period, assuming that water level conditions permit collection of groundwater samples.

Each groundwater monitoring well was purged prior to sample collection by pumping five volumes of groundwater from the well using a dedicated bladder pump. Physical parameters including pH, temperature, conductivity, and turbidity of the purge water were periodically measured and recorded. In the event that a well could not supply enough water to complete the purging of five well volumes, the well was pumped dry on three consecutive days prior to sampling. All purge water was placed in an onsite wet-well.

Groundwater sampling began immediately at the completion of purging. A dedicated bladder pump was used to collect the groundwater samples. The discharge rate was first adjusted to approximately 100 milliliters per minute. The sample was then collected directly into the sample containers.

Groundwater samples were collected and analyzed for:

- Volatile organics using EPA method 8260;

- Semivolatile organics using EPA method 8270;
- Mercury using EPA method 245.1 and method SW-7470; and
- Inorganics using EPA method 200.7 and method SW-6010.

The groundwater samples were analyzed by TestAmerica Laboratories of Amherst, New York. A chain-of-custody (COC) accompanied the sample bottles from the laboratory, to the field, and back to the laboratory.

As noted in previous reports, due to slow recovery times and low water levels in the wells to be sampled after purging, collection of the required groundwater volume for all groundwater and quality assurance samples is often not possible. During the December 2009 sampling event, no issues were encountered due to low groundwater volume, and all samples were able to be collected.

A request was submitted to the USEPA and NYSDEC in 2005 to reduce the analytical parameters in each of the groundwater samples collected. The request proposed reducing groundwater laboratory analysis to five metals that have historically been identified as exceeding NYSDEC and USEPA groundwater standards in the shallow groundwater at the Site. The elimination of analysis for VOCs and SVOCs was also proposed. The USEPA agreed, after discussions with the NYSDEC and input from NYSDOH, to reduce the collection of VOCs and SVOCs to every two years beginning in 2006 (every other groundwater sampling event). The USEPA requested that metals continue to be analyzed for each groundwater sampling round. The basis for this decision was stated to be the significant residential growth around the Site in recent years.

1.2.2 Effluent Sampling

Groundwater from the perimeter collection system is discharged to the City of North Tonawanda treatment system without pre-treatment. A monitoring station in Wet Well A allows both the effluent water quality and the volume of effluent to be verified by the City of North Tonawanda. In compliance with the City of North Tonawanda Industrial Wastewater Discharge Permit, the effluent was sampled monthly through February 2007. A revised Industrial Wastewater Discharge Permit (Appendix A) was issued by the City of North Tonawanda. This permit became effective on February 28, 2007 and expires on April 1, 2010. The revised permit has a reduced analytical parameter list compared to the original permit, and a semi-annual sampling frequency. Semi-annual samples were collected in March and September 2009. The effluent samples are collected in compliance with the OM&M Manual (CRA, 2000) and are analyzed by the City of North Tonawanda. The sole purpose of these analyses is for compliance with the Industrial Wastewater Discharge Permit. A new Industrial Wastewater Discharge Permit covering the discharge of site groundwater after April 1, 2010, is currently in the process of being created and if available, will be included in the first quarter 2010 monitoring report.

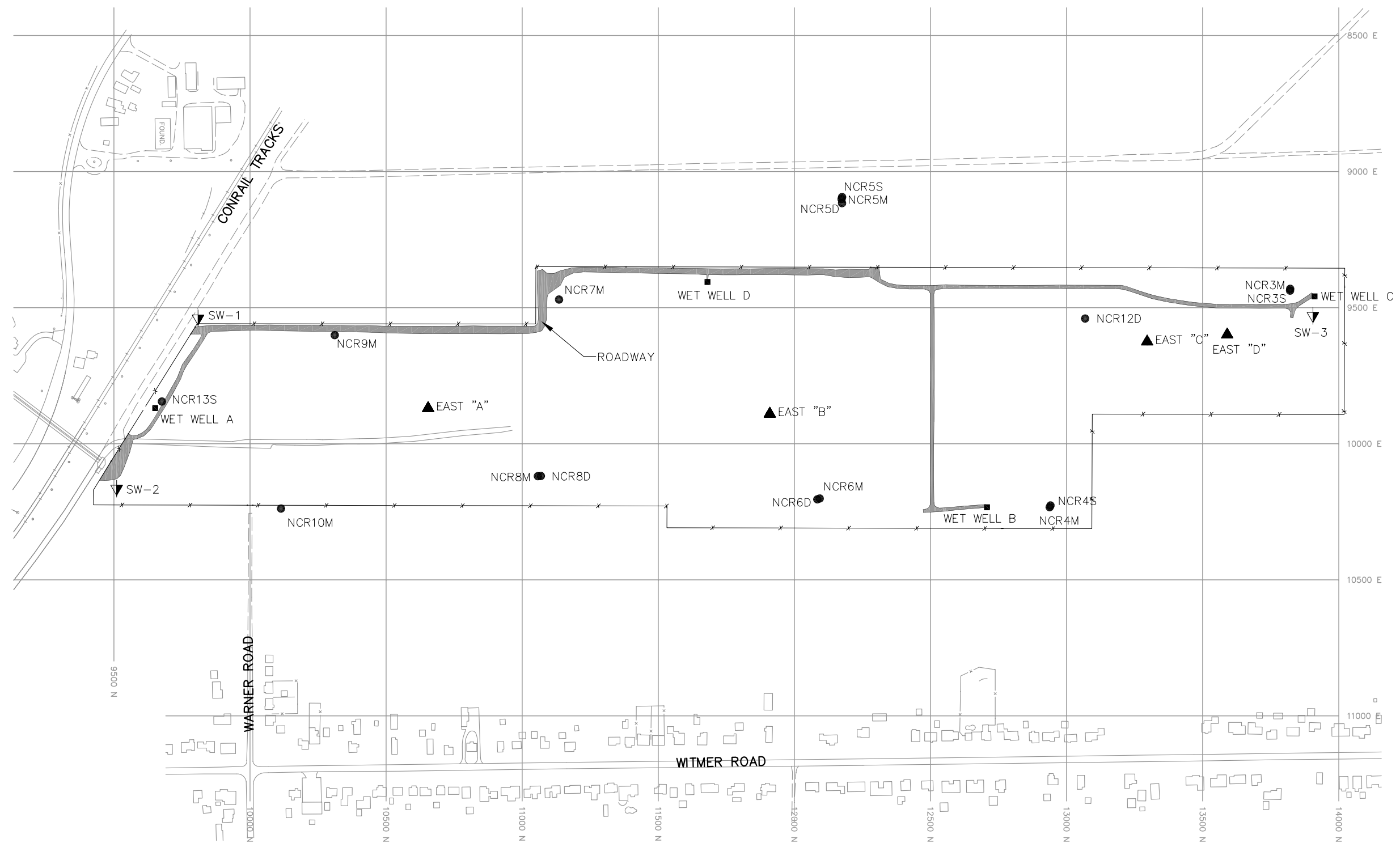
1.2.3 Water Levels

Water levels were measured in four monitoring well locations inside the limits of the landfill, and four wet well locations. Water level measurements were collected monthly

during 2009. The water levels were measured with an electronic water level indicator, and reported as an elevation above mean sea level. Figure 1.1 shows the locations of the water level monitoring points.

1.2.4 Site Inspections

The Site was inspected by O&M Enterprises, Inc. on a monthly basis, in accordance with procedures in the OM&M Manual. The perimeter collection system, offsite force main, wetlands, perimeter fence, drainage ditches, swale outlets, culverts, gas vents, wells, and landfill cap were visually inspected.



LEGEND

- | | |
|--------------|---|
| ▲ EAST "A" | WATER LEVEL MONITORING WELL LOCATION |
| ▼ SW-2 | SURFACE WATER MONITORING LOCATION |
| ■ WET WELL A | EFFLUENT MONITORING LOCATION |
| ● NCR13S | GROUNDWATER QUALITY MONITORING LOCATION |



FIGURE 1.1

NIAGARA COUNTY REFUSE SITE
WHEATFIELD, NEW YORK
SITE PLAN

PARSONS

180 LAWRENCE BELL DRIVE, SUITE 104, WILLIAMSVILLE, N.Y. 14221, PHONE: 716-633-7074

SECTION 2 RESULTS

2.1 ANALYTICAL RESULTS

2.1.1 Effluent Samples

Effluent samples were collected in March and September 2009 by O&M Enterprises, Inc. and analyzed by the City of North Tonawanda. The analytical results from these samples were used by the City to confirm that the effluent received from the Site met the criteria for acceptance by the City treatment system. All analytical results were found to be compliant with the discharge permit. A revised Industrial Wastewater Discharge Permit was issued by the City of North Tonawanda and is effective from February 28, 2007 through April 1, 2010. As seen in the revised permit, the analytical parameters and the sampling frequency have been reduced from the original permit. Effluent analytical results and the revised permit are presented in Appendix A. A new Industrial Wastewater Discharge Permit covering the discharge of site groundwater after April 1, 2010, is currently in the process of being created and if available, will be included in the first quarter 2010 monitoring report.

2.1.2 Groundwater Analytical Results

Analytical results for the sampling event during this reporting period are summarized in Table 2.1. The results were compared to NYSDEC ambient water quality standards (AWQS), NYSDOH maximum contaminant levels (MCLs), and USEPA MCLs (see Table 2.1). This reporting period includes months 99 to 110, since the start-up of the perimeter collection system in November 2000. The collection of quarterly and semi-annual groundwater samples has been completed as outlined in the OM&M Manual (CRA, 2000). Annual collection of groundwater samples began in 2006. Groundwater sample analytes are currently scheduled to include metals annually, and volatile organic and semivolatile organic parameters every two years, as approved by the USEPA (see Appendix B). The groundwater samples collected during this reporting period were analyzed for volatile organics, semivolatile organics, and metals.

The analytical results received from the laboratory are presented in Appendix C, along with the chain-of-custody (COC). A Sample Collection Data Sheet, which includes required and actual purge volumes, sample date, time, description, required analyses, and the COC number for each well, is included in Appendix C. This sheet also indicates which well was used to collect the matrix spike (MS) and the matrix spike duplicate (MSD). A sheet of well purging information, including pH, conductivity, turbidity, odor, comments, and well volumes, is also provided in Appendix C.

December 2009 Event

Monitoring wells NCR-3S, NCR-4S, NCR-5S, and NCR-13S were sampled on December 4, 2009. The locations of the monitoring wells are provided in Figure 1.1. The data validation report is presented in Appendix D.

Seventeen metals were identified in one or more of the groundwater samples. Typically, an average of approximately thirteen metals are detected. In general the detected values appeared to be consistent with ranges observed in previous sampling events. Seven metals have detections that are greater than historic high at the site. These metals include aluminum, barium, beryllium, calcium, cobalt, lead, and magnesium.

- Aluminum exceeded the NYSDEC AWQS in each of the four samples. In three of the wells sampled the current aluminum results exceed the historic high. Historically these wells have been above the NYSDEC AWQS standard.
- Copper was identified in each of the four samples above the NYSDEC AWQS. Typically, copper exceeds NYSDEC AWQS in two or more of the four groundwater samples.
- Iron was identified in each of the samples exceeding both the AWQS and the NYSDOH MCL. The Record of Decision (ROD) (USEPA, 1993) identifies iron as typically exceeding MCLs in the regional groundwater.
- Lead was found above the analytical detection limits in two of the four samples and exceeded NYSDEC AWQS, NYSDOH MCL, and USEPA MCL in one sample (NCR-4S). The concentration of lead in NCR-4S was 28.3 ug/L, exceeding the NYSDEC AWQS and NYSDOH MCL standards of 25 ug/L.
- Magnesium was identified in each of the four samples and exceeded the AWQS guidance value (not a standard) in each of the samples. One sample result for magnesium exceeded its historic high and has occasionally exceeded the NYSDEC AWQS guidance value in past events.
- Manganese was found in each of the four samples above the detection limits. One of the four samples exceeded the NYSDEC AWQS and the NYSDOH MCL, and has occasionally exceeded these values in past events.
- Sodium was found above the NYSDEC AWQS, the NYSDOH MCL, and USEPA MCL in three of the four samples. The Record of Decision (ROD) (USEPA, 1993) identifies sodium as typically exceeding MCLs in the regional groundwater.
- Other results show beryllium, which has not been previously detected at the site, at levels near the detection limit; cobalt, which also had limited past detections, found at levels near the detection limit; and calcium exceeded its historic high in two samples.

Groundwater analytical results were validated and reviewed by Parsons for usability (see Appendix D for the complete report). The laboratory data packages were found to be of good overall quality. Groundwater samples were collected, properly preserved, shipped under a COC record, and received at the laboratory within one day of sampling. Certain metals results were considered estimated, and flagged with a “J”, due to noncompliant matrix

spike recoveries. Metals sample results were considered usable following data validation. The metals results were 100% complete. Twelve detected metals results were considered estimated due to noncompliant matrix spike recoveries.

2.2 SITE INSPECTIONS

Monthly Site inspections were conducted between January and December 2009. During the inspections, the perimeter collection system, offsite force main, manholes, wet wells, landfill cap, wetlands, perimeter fence, drainage ditches, swale outlets, culverts, gas vents, and monitoring wells were each visually inspected. A summary of the inspection findings is included in Table 2.2. Copies of the Monthly Inspection Logs have been included in Appendix E.

Each of the inspections found the manholes and wet wells to be in good condition. Water levels in the wet wells were measured during each inspection visit. Examination of the landfill cap vegetative cover included checking for erosion, bare areas, washouts, leachate seeps, length of vegetation, and dead/dying vegetation. Additionally, during the examination of the landfill cap, the access roads were examined for bare areas, dead/dying vegetation, erosion, potholes/puddles, and obstructions. No surface erosion, bare spots, or leachate seeps were noted. The landfill cap was noted to be covered with snow during the January and February site inspections and the cover vegetation was noted to be low, typical for the early part of the year, during the March, April, and May site inspections. Tall vegetation was noted on the cap during the June, July, and September site inspections. The landfill cap was mowed in August.

Post-construction monitoring of the wetland replacement was performed annually between 2001 and 2005. Monitoring results indicated that the wetland creation was successful. Although the formal annual inspections are no longer required, monthly visual inspection of the wetlands will continue, to document general conditions.

The wetlands were visually examined during monthly inspections for growth and propagation of wetland species, dead/dying vegetation, presence of invasive species (i.e., purple loosestrife), change in water budget, and general conditions. No signs of damage to the wetlands due to loss of vegetation, or changes in the water budget, were observed during each of the inspections. Water levels in the wetlands were noted as slightly high in February, March, April, and December and slightly low in September. Typical winter vegetative conditions were observed from January through April, and again in November and December, and conditions were noted as good during the May through October inspections.

Approximately 40 feet of perimeter fence was damaged by a piece of farming equipment operating on an adjacent property. The Niagara County Sheriff's Department was called and responded but no report was completed. The adjacent property owner agreed to repair the damages and damages were repaired by a fencing contractor.

Overall the landfill system, including the perimeter fence, drainage ditches, swale outlets, culverts, gas vents, and monitoring wells were found to be in acceptable condition.

2.3 MAINTENANCE

Scheduled maintenance during this reporting period included:

- Replacement of the discharge hoses on wet well A and C.
- Replacement of the power lead on the pump in wet well A.
- Replacement of the motor starter on the pump in wet well A.
- Repairs to perimeter fence damage.
- Replacement of the pump, motor, and discharge hose in wet well B.
- Periodic pulling, cleaning, and reinstalling the pumps in the wet wells.
- Cutting tall grass, brush, and weeds along the inside of the perimeter fence line.
- Mowing the landfill cap.
- Installed a new hinge on outer well casing at East B.
- Repaired small hole in perimeter fence.

Occasional unscheduled maintenance at the landfill is required. During this reporting period, several items requiring unscheduled maintenance were addressed.

- On February 19, 20, and 21, the breaker was reset for the electrical power to wet well A.
- On June 18, a float control switch on wet well A was repaired.
- On October 9, the discharge pipe at wet well B was replaced.
- On November 6, National Grid gained site access through O&M Enterprises, Inc. in order to replace the electric meter for the site with a new meter that can be read remotely.

Maintenance Record Logs are included in Appendix F.

2.4 WATER LEVELS

Monthly water level measurements were collected to (1) ensure that water levels inside the landfill are lowered by the operation of the perimeter collection system; and (2) allow planning for groundwater sampling dates, when the maximum number of wells could be sampled. Water levels were collected from the wet wells, the piezometers (hydraulic monitoring locations) within the limits of the landfill, and the groundwater monitoring wells (see Figure 1.1). Water levels in the wet wells were collected during the monthly inspections and recorded on water level records (Appendix G). The water level data, including depths to water and elevations, are summarized on Table 2.3. During 2009, water levels were collected from the monitoring wells on a monthly basis. Water levels generally varied between 2.2 and 4.2 feet over the course of the year.

Table 2.1
Detected Analytes in Groundwater Samples
Niagara County Refuse Site
Wheatfield, Niagara County, New York

City of North Tonawanda WWTP 830 River Road North Tonawanda, NY C/O Niagara County Refuse Site Validated Groundwater Sampling Results December 2009		Sample ID: Lab Id: Source: SDG: Matrix: Sampled: Validated:				NCR-3S RSL0353-01 TAL-Buffalo RSL0353 WATER 12/4/2009 1/13/2010	NCR-4S RSL0353-02 TAL-Buffalo RSL0353 WATER 12/4/2009 1/13/2010	NCR-5S RSL0353-03 TAL-Buffalo RSL0353 WATER 12/4/2009 1/13/2010	NCR-13S RSL0353-06 TAL-Buffalo RSL0353 WATER 12/4/2009 1/13/2010
CAS NO.	COMPOUND	UNITS:							
	METALS								
7429-90-5	Aluminum	ug/L	100	-	-	2190 J	12300 J	6810 J	3750 J
7440-39-3	Barium	ug/L	1000	2000	2000	57.3	125	140	98
7440-41-7	Beryllium	ug/L	3 ⁺	4	4	0.2 J	0.7 J	0.2 J	0.3 J
7440-43-9	Cadmium	ug/L	5	5	5	0.4 J	0.9 J	ND	0.3 J
7440-70-2	Calcium	ug/L	-	-	-	148000 J	185000 J	90600 J	211000 J
7440-47-3	Chromium	ug/L	50	100	100	14.1	10.6	17.8	21.5
7440-48-4	Cobalt	ug/L	-	-	-	1.2 J	2.6 J	1.6 J	1 J
7440-50-8	Copper	ug/L	5	-	-	11.9	19.3	15.5	9.9 J
7439-89-6	Iron	ug/L	300 ^{>}	300 ^{>}	-	3550	56900	6130	5650
7439-92-1	Lead	ug/L	25	25	15	ND	28.3	6.7	ND
7439-95-4	Magnesium	ug/L	35000 ⁺	-	-	90400	61200	63500	73400
7439-96-5	Manganese	ug/L	300 ^{>}	300 ^{>}	-	48.4 J	310 J	99.7 J	22.5 J
7440-02-0	Nickel	ug/L	100	-	-	25.3	11.8	13.8	11.4
7440-09-7	Potassium	ug/L	-	-	-	3430	11500	2690	3820
7440-23-5	Sodium	ug/L	20000	20000	20000	11500 J	33400 J	26000 J	21800 J
7440-62-2	Vanadium	ug/L	14	-	-	4.6 J	7.1	11	9.1
7440-66-6	Zinc	ug/L	2000 ⁺	5000	-	28.2	1340	56.3	30.2

* = NYSDEC Ambient Water Quality Standards.

+ = Guidance value. ND = Not detected.

> = Sum of iron and manganese should not exceed
500 ug/L NYDEC or 300 ug/L NYSDOH.

J = Estimated value. - = No standard identified.

Boxed values exceed NYSDEC AWQS.

Bold values exceed NYSDOH maximum contaminant levels.

Shaded values exceed USEPA maximum contaminant level.

Table 2.2 Monthly Site Inspection Results

Inspection Item	Acceptable	Not Acceptable	Comments
Manholes	X		
Wet Wells	X		Water levels were measured monthly.
Wetlands	X		Continued growth of target vegetation. A slightly higher than normal water level was noted during the February, March, April, and December inspections. A slightly lower water level was noted during the September inspection. Normal winter conditions, expected for the time of year, were observed during the January through April and November and December inspections.
Perimeter Fence	X		Approximately 40 feet of fence was damage by farming equipment and has been repaired.
Condition of Roads	X		No erosion or other problems. Covered in snow during the January and February inspections.
Integrity of the Cap	X		No problems were noted in 2009. Covered in snow in January and February
Drainage Ditches/Swales	X		
Gas Venting System	X		
Wells	X		Water levels were measured monthly.
Culverts	X		
Vegetative Cover	X		The vegetative cover was covered in snow during the January and February inspections. Height of vegetation on the cap was noted as low during the March, April, and May inspections and noted as tall during the June, July, and September inspections. The cap was mowed after the August 2009 inspection.

Table 2.3
Niagara County Refuse Site
Water Level Measurements

Observation Point	Elevation	12/5/2000		1/8/2001		2/1/2001		3/8/2001		4/4/2001		5/8/2001		6/5/2001		7/2/2001		8/1/2001		9/5/2001		10/4/2001		11/5/2001		12/11/2001	
	Top of Casing (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	22.05	576.88	-	-	-	-	21.34	577.59	-	-	22.21	576.72	21.98	576.95	-	-	22.51	576.42	22.63	576.30	22.61	576.32	22.74	576.19	22.88	576.05
East "B"	596.23	19.12	577.11	-	-	-	-	19.35	576.88	-	-	19.23	577.00	19.30	576.93	-	-	20.50	575.73	19.44	576.79	19.22	577.01	19.36	576.87	19.44	576.79
East "C"	598.69	17.46	581.23	-	-	-	-	17.86	580.83	-	-	18.37	580.32	18.38	580.31	-	-	18.65	580.04	18.64	580.05	18.20	580.49	18.80	579.89	18.75	579.94
East "D"	593.20	11.10	582.10	-	-	-	-	12.45	580.75	-	-	12.86	580.34	12.79	580.41	-	-	13.00	580.20	12.8	580.40	12.24	580.96	12.74	580.46	12.94	580.26
WW A	-	2.50	-	2.67	-	2.33	-	1.13	-	2.29	-	1.83	-	2.17	-	1.58	-	1.83	-	-	-	1.83	-	2.33	-	2.08	-
WW B	-	2.20	-	2.42	-	1.96	-	1.09	-	1.79	-	2.17	-	1.92	-	1.50	-	2.00	-	1.92	-	1.58	-	1.50	-	2.08	-
WW C	-	1.50	-	2.42	-	1.70	-	0.92	-	2.04	-	2.00	-	1.67	-	1.33	-	2.08	-	2.33	-	1.25	-	2.00	-	1.58	-
WW D	-	1.70	-	-	-	1.50	-	0.99	-	1.08	-	1.50	-	1.33	-	2.0	-	1.25	-	2.25	-	2.00	-	2.08	-	1.33	-
NCR-3S	579.60	-	-	-	-	-	-	-	-	-	-	-	-	3.71	575.89	-	-	dry	-	dry	-	dry	-	5.10	574.50	4.64	574.96
NCR-4S	577.88	-	-	-	-	-	-	-	-	-	-	-	-	4.28	573.60	-	-	dry	-	dry	-	dry	-	4.51	573.37	3.92	573.96
NCR-5S	579.34	-	-	-	-	-	-	-	-	-	-	-	-	9.10	570.24	-	-	dry	-	dry	-	dry	-	dry	-	dry	-
NCR-13S	577.15	-	-	-	-	-	-	-	-	-	-	-	-	7.05	570.10	-	-	7.85	569.30	7.80	569.35	7.70	569.45	6.65	570.50	6.11	571.04

Observation Point	Elevation	1/2/2002		2/4/2002		3/4/2002		4/1/2002		5/3/2002		6/4/2002		7/2/2002		8/7/2002		9/6/2002		10/3/2002		11/7/2002		12/3/2002	
	Top of Casing (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	22.90	576.03	22.81	576.12	22.03	576.90	22.25	576.68	20.06	578.87	19.84	579.09	22.00	576.93	22.65	576.28	22.78	576.15	28.48	570.45	23.25	575.68	23.36	575.57
East "B"	596.23	19.63	576.60	19.39	576.84	19.46	576.77	19.49	576.74	19.44	576.79	20.59	575.64	19.56	576.67	19.40	576.83	19.40	576.83	19.46	576.77	19.35	576.88	-	-
East "C"	598.69	18.70	579.99	18.51	580.18	18.70	579.99	18.63	580.06	18.80	579.89	18.74	579.95	18.78	579.91	18.95	579.74	18.92	579.77	18.99	579.70	19.30	579.39	19.35	579.34
East "D"	593.20	13.16	580.04	12.95	580.25	13.3	579.90	13.35	579.85	13.50	579.70	13.73	579.47	13.74	579.46	13.81	579.39	13.58	579.62	14.01	579.19	13.2	580.00	13.54	579.66
WW A	-	1.17	-	2.17	-	1.67	-	2.00	-	2.00	-	2.17	-	1.50	-	2.50	-	1.83	-	1.50	-	1.42	-	2.00	-
WW B	-	1.00	-	2.00	-	1.25	-	1.33	-	1.67	-	2.00	-	1.58	-	1.67	-	1.42	-	1.33	-	1.17	-	1.25	-
WW C	-	1.50	-	1.42	-	1.58	-	1.50	-	1.83	-	1.25	-	1.67	-	2.17	-	1.50	-	1.33	-	1.25	-	1.50	-
WW D	-	1.50	-	1.00	-	1.42	-	1.17	-	1.58	-	1.50	-	1.92	-	2.00	-	1.67	-	2.00	-	1.33	-	1.50	-
NCR-3S	579.60	4.54	575.06	4.52	575.08	3.90	575.70	4.10	575.50	4.43	575.17	5.20	574.40	5.71	573.89	5.90	573.70	dry	-	5.91	573.69	dry	-	4.46	575.14
NCR-4S	577.88	3.71	574.17	3.70	574.18	3.80	574.08	3.66	574.22	3.75	574.13	4.02	573.86	4.45	573.43	dry	-	dry	-	dry	-	dry	-	3.95	573.93
NCR-5S	579.34	8.42	570.92	7.69	571.65	7.68	571.66	7.61	571.73	8.28	571.06	9.10	570.24	9.52	569.82	dry	-	dry	-	dry	-	dry	-	dry	-
NCR-13S	577.15	5.85	571.30	5.76	571.39	5.74	571.41	5.81	571.34	6.07	571.08	6.27	570.88	7.25	569.90	7.57	569.58	dry	-	7.78	569.37	dry	-	6.40	570.75

Notes:
- = measurement not collected.
dry = no water in well.

Table 2.3
Niagara County Refuse Site
Water Level Measurements

Observation Point	Elevation Top of Casing (ft. msl)	1/6/2003		2/5/2003		3/6/2003		4/2/2003		5/5/2003		6/5/2003		7/1/2003		8/1/2003		9/2/2003		10/8/2003		11/12/2003		12/6/2003	
		Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	23.48	575.45	23.51	575.42	23.65	575.28	23.75	575.18	23.81	575.12	23.25	575.68	23.11	575.82	23.25	575.68	23.41	575.52	23.35	575.58	23.71	575.22	23.85	575.08
East "B"	596.23	19.53	576.70	19.40	576.83	19.59	576.64	19.61	576.62	19.70	576.53	19.66	576.57	19.77	576.46	19.58	576.65	19.64	576.59	19.59	576.64	19.65	576.58	NA	-
East "C"	598.69	18.82	579.87	19.11	579.58	18.99	579.70	19.07	579.62	18.98	579.71	19.00	579.69	19.39	579.30	19.19	579.50	19.25	579.44	19.24	579.45	18.81	579.88	19.27	579.42
East "D"	593.20	13.24	579.96	13.52	579.68	13.7	579.50	13.88	579.32	14.15	579.05	14.07	579.13	14.31	578.89	14.04	579.16	14.04	579.16	13.97	579.23	13.64	579.56	14.02	579.18
WW A	-	1.42	-	1.25	-	1.50	-	1.42	-	1.58	-	1.33	-	1.33	-	1.17	-	1.42	-	1.33	-	2.00	-	1.33	-
WW B	-	1.08	-	1.17	-	1.67	-	1.17	-	0.75	-	1.25	-	1.42	-	1.50	-	1.50	-	1.17	-	1.42	-	1.67	-
WW C	-	1.33	-	1.50	-	1.25	-	1.33	-	1.50	-	1.42	-	1.00	-	1.08	-	1.08	-	1.08	-	1.00	-	1.67	-
WW D	-	1.42	-	1.67	-	1.08	-	1.25	-	1.50	-	1.50	-	1.25	-	1.58	-	1.33	-	1.50	-	1.58	-	1.50	-
NCR-3S	579.60	3.84	575.76	4.06	575.54	4.55	575.05	4.39	575.21	4.39	575.21	4.41	575.19	5.80	573.80	5.92	573.68	dry	-	dry	-	4.45	575.15	4.24	575.36
NCR-4S	577.88	2.91	574.97	-	-	-	-	3.65	574.23	3.60	574.28	2.65	575.23	4.05	573.83	3.98	573.90	dry	-	4.37	573.51	2.93	574.95	2.88	575.00
NCR-5S	579.34	7.95	571.39	8.69	570.65	8.11	571.23	7.66	571.68	8.58	570.76	8.08	571.26	9.26	570.08	10.12	569.22	10.95	568.39	dry	-	10.40	568.94	8.11	571.23
NCR-13S	577.15	5.89	571.26	5.54	571.61	6.16	570.99	6.05	571.10	6.13	571.02	6.11	571.04	7.21	569.94	7.48	569.67	7.59	569.56	7.77	569.38	6.35	570.80	6.07	571.08

Observation Point	Elevation Top of Casing (ft. msl)	1/2/2004		2/5/2004		3/1/2004		4/5/2004		5/4/2004		6/11/2004		7/10/2004		8/9/2004		9/8/2004		10/2/2004		11/4/2004		12/3/2004	
		Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	23.90	575.03	23.93	575.00	24.00	574.93	23.26	575.67	22.14	576.79	19.44	579.49	19.19	579.74	20.70	578.23	23.31	575.62	23.34	575.59	22.44	576.49	22.48	576.45
East "B"	596.23	19.83	576.40	NA	-	NA	-	19.60	576.63	19.65	576.58	19.81	576.42	19.75	576.48	19.85	576.38	19.68	576.55	19.53	576.70	17.51	578.72	17.49	578.74
East "C"	598.69	19.12	579.57	19.79	578.90	19.22	579.47	19.36	579.33	19.24	579.45	19.42	579.27	19.28	579.41	19.56	579.13	19.48	579.21	19.36	579.33	18.95	579.74	18.94	579.75
East "D"	593.20	13.9	579.30	14.52	578.68	14.11	579.09	14.05	579.15	14.25	578.95	14.5	578.70	14.4	578.80	14.64	578.56	14.3	578.90	14.18	579.02	14.05	579.15	14.01	579.19
WW A	-	1.58	-	1.17	-	2.17	-	0.75	-	1.25	-	1.50	-	1.25	-	1.25	-	1.33	-	1.25	-	1.42	-	1.67	-
WW B	-	1.33	-	NA	-	1.50	-	1.30	-	1.17	-	1.17	-	1.17	-	1.25	-	1.00	-	1.00	-	1.17	-	0.42	-
WW C	-	1.08	-	1.00	-	1.17	-	1.17	-	1.00	-	1.08	-	1.17	-	1.08	-	1.17	-	1.17	-	1.58	-	0.25	-
WW D	-	1.17	-	1.08	-	1.67	-	0.65	-	1.50	-	1.33	-	1.00	-	1.00	-	1.25	-	1.00	-	1.17	-	0.25	-
NCR-3S	579.60	4.11	575.49	4.21	575.39	3.19	576.41	4.09	575.51	3.37	576.23	4.92	574.68	dry	-	4.36	575.24	5.44	574.16	dry	-	2.42	577.18	3.06	576.54
NCR-4S	577.88	2.65	575.23	2.72	575.16	2.42	575.46	2.53	575.35	2.76	575.12	2.99	574.89	3.74	574.14	3.50	574.38	3.32	574.56	3.65	574.23	2.74	575.14	2.75	575.13
NCR-5S	579.34	7.53	571.81	8.34	571.00	7.01	572.33	7.10	572.24	7.99	571.35	8.80	570.54	9.20	570.14	9.40	569.94	9.20	570.14	9.28	570.06	9.90	569.44	7.27	572.07
NCR-13S	577.15	5.72	571.43	5.95	571.20	5.88	571.27	5.49	571.66	6.08	571.07	6.22	570.93	7.08	570.07	7.09	570.06	6.75	570.40	7.16	569.99	5.95	571.20	4.28	572.87

Notes:

- = measurement not collected.
dry = no water in well.

Table 2.3
Niagara County Refuse Site
Water Level Measurements

Observation Point	Elevation Top of Casing (ft. msl)	1/5/2005		2/3/2005		3/9/2005		4/2/2005		6/4/2005		7/6/2005		8/4/2005		9/3/2005		10/7/2005		12/10/2005	
		Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	24.20	574.73	21.21	577.72	19.45	579.48	22.21	576.72	22.19	576.74	23.24	575.69	23.49	575.44	23.57	575.36	24.07	574.86	24.47	574.46
East "B"	596.23	19.68	576.55	19.52	576.71	19.79	576.44	19.66	576.57	19.97	576.26	19.89	576.34	19.96	576.27	19.70	576.53	19.51	576.72	19.50	576.73
East "C"	598.69	19.60	579.09	19.42	579.27	19.33	579.36	19.15	579.54	19.71	578.98	19.76	578.93	19.57	579.12	19.51	579.18	19.65	579.04	19.39	579.30
East "D"	593.20	14.2	579.00	14.35	578.85	13.89	579.31	14.29	578.91	14.68	578.52	14.64	578.56	14.62	578.58	14.47	578.73	14.4	578.80	14.24	578.96
WW A	-	0.58	-	1.08	-	0.50	-	1.00	-	1.00	-	1.00	-	1.25	-	1.17	-	1.33	-	1.50	-
WW B	-	1.50	-	1.17	-	0.83	-	1.25	-	1.17	-	1.50	-	1.42	-	0.92	-	1.17	-	1.17	-
WW C	-	0.67	-	1.00	-	1.00	-	1.00	-	1.25	-	0.92	-	1.25	-	1.00	-	1.00	-	0.83	-
WW D	-	1.25	-	1.25	-	1.00	-	1.17	-	1.33	-	0.92	-	1.50	-	1.00	-	1.08	-	1.08	-
NCR-3S	579.60	1.82	577.78	3.39	576.21	3.11	576.49	1.50	578.10	5.93	573.67	dry	-	5.96	573.64	dry	-	5.63	573.97	4.21	575.39
NCR-4S	577.88	2.60	575.28	3.08	574.80	frozen	-	2.51	575.37	3.87	574.01	dry	-	dry	-	dry	-	3.69	574.19	2.99	574.89
NCR-5S	579.34	5.46	573.88	6.57	572.77	6.14	573.20	6.36	572.98	8.10	571.24	10.60	568.74	dry	-	dry	-	dry	-	8.17	571.17
NCR-13S	577.15	3.60	573.55	5.14	572.01	4.34	572.81	3.19	573.96	6.59	570.56	7.52	569.63	7.79	569.36	dry	-	7.21	569.94	6.06	571.09

Observation Point	Elevation Top of Casing (ft. msl)	1/13/2006		2/10/2006		3/3/2006		4/8/2006		5/1/2006		6/7/2006		7/14/2006		8/8/2006		9/18/2006		10/7/2006		11/3/2006		12/1/2006	
		Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	24.55	574.38	24.68	574.25	24.72	574.21	24.22	574.71	24.81	574.12	23.53	575.40	24.77	574.16	24.23	574.70	24.68	574.25	24.78	574.15	24.74	574.19	24.53	574.40
East "B"	596.23	19.45	576.78	19.85	576.38	19.87	576.36	19.86	576.37	21.10	575.13	19.80	576.43	19.79	576.44	19.84	576.39	19.51	576.72	19.80	576.43	19.86	576.37	18.80	577.43
East "C"	598.69	19.28	579.41	19.75	578.94	19.84	578.85	19.77	578.92	20.09	578.60	19.69	579.00	19.71	578.98	19.66	579.03	19.37	579.32	20.78	577.91	20.03	578.66	19.26	579.43
East "D"	593.20	14.15	579.05	14.48	578.72	14.44	578.76	14.46	578.74	14.74	578.46	14.87	578.33	14.83	578.37	14.71	578.49	14.45	578.75	14.95	578.25	14.67	578.53	14.45	578.75
WW A	-	1.17	-	1.17	-	1.17	-	1.00	-	1.25	-	1.25	-	1.00	-	1.17	-	1.17	-	1.17	-	1.08	-	1.33	-
WW B	-	0.83	-	1.17	-	0.92	-	1.08	-	1.08	-	1.08	-	1.25	-	1.00	-	0.83	-	0.92	-	1.00	-	0.83	-
WW C	-	0.92	-	1.00	-	1.00	-	1.08	-	1.08	-	1.00	-	1.25	-	1.00	-	0.83	-	1.00	-	0.92	-	0.67	-
WW D	-	1.08	-	1.00	-	0.92	-	0.92	-	1.00	-	1.17	-	0.92	-	0.92	-	0.92	-	1.00	-	1.00	-	1.00	-
NCR-3S	579.60	2.77	576.83	3.02	576.58	3.48	576.12	2.45	577.15	3.44	576.16	dry	-	dry	-	5.85	573.75	3.67	575.93	3.06	576.54	3.51	576.09	1.35	578.25
NCR-4S	577.88	2.83	575.05	2.91	574.97	3.30	574.58	2.72	575.16	3.26	574.62	4.31	573.57	4.59	573.29	dry	-	3.51	574.37	2.97	574.91	3.15	574.73	2.44	575.44
NCR-5S	579.34	7.43	571.91	7.96	571.38	8.58	570.76	7.91	571.43	8.79	570.55	8.97	570.37	dry	-	dry	-	dry	-	7.37	571.97	6.22	573.12	4.21	575.13
NCR-13S	577.15	5.78	571.37	5.99	571.16	6.08	571.07	5.84	571.31	6.15	571.00	7.33	569.82	7.57	569.58	7.69	569.46	6.36	570.79	5.72	571.43	4.33	572.82	2.77	574.38

Notes:
 - = measurement not collected.
 dry = no water in well.

Table 2.3
Niagara County Refuse Site
Water Level Measurements

Observation Point	Elevation Top of Casing (ft. msl)	1/19/2007		2/9/2007		3/10/2007		4/2/2007		5/4/2007		6/1/2007		7/2/2007		8/2/2007		9/17/2007		10/12/2007		11/1/2007		12/1/2007	
		Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	24.98	573.95	24.65	574.28	24.84	574.09	24.88	574.05	25.02	573.91	25.50	573.43	24.98	573.95	24.96	573.97	25.03	573.90	24.98	573.95	25.11	573.82	25.13	573.80
East "B"	596.23	19.38	576.85	19.56	576.67	-	-	19.98	576.25	20.07	576.16	19.78	576.45	19.86	576.37	19.85	576.38	19.81	576.42	19.50	576.73	19.52	576.71	19.59	576.64
East "C"	598.69	19.51	579.18	19.81	578.88	19.71	578.98	20.10	578.59	20.17	578.52	19.87	578.82	19.99	578.70	19.97	578.72	20.19	578.50	19.78	578.91	19.93	578.76	19.97	578.72
East "D"	593.20	14.38	578.82	14.68	578.52	14.82	578.38	15.24	577.96	15.09	578.11	15.1	578.10	15.19	578.01	15.11	578.09	15.16	578.04	14.64	578.56	14.8	578.40	14.86	578.34
WW A	-	1.17	-	1.08	-	1.25	-	1.08	-	1.25	-	1.17	-	1.00	-	0.83	-	0.67	-	1.00	-	0.92	-	1.00	-
WW B	-	1.00	-	1.00	-	0.67	-	1.17	-	0.75	-	0.92	-	0.83	-	0.83	-	0.83	-	0.92	-	1.08	-	1.17	-
WW C	-	0.83	-	0.83	-	0.67	-	0.83	-	0.83	-	0.83	-	0.67	-	0.50	-	0.67	-	0.50	-	1.00	-	1.08	-
WW D	-	1.00	-	0.83	-	1.00	-	0.83	-	0.83	-	1.00	-	0.83	-	1.00	-	0.75	-	0.83	-	1.00	-	1.00	-
NCR-3S	579.60	3.04	576.56	3.75	575.85	2.70	576.90	3.26	576.34	3.50	576.10	5.89	573.71	dry	-	dry	-	dry	-	dry	-	dry	-	dry	-
NCR-4S	577.88	2.94	574.94	3.42	574.46	2.80	575.08	2.93	574.95	3.19	574.69	3.90	573.98	dry	-	dry	-	dry	-	dry	-	dry	-	dry	-
NCR-5S	579.34	5.77	573.57	6.83	572.51	6.28	573.06	6.08	573.26	6.75	572.59	8.87	570.47	10.99	568.35	dry	-	dry	-	dry	-	dry	-	dry	-
NCR-13S	577.15	3.85	573.30	4.51	572.64	4.39	572.76	4.25	572.90	4.81	572.34	7.01	570.14	7.44	569.71	7.70	569.45	dry	-	7.72	569.43	7.75	569.40	dry	-

Observation Point	Elevation Top of Casing (ft. msl)	1/4/2008		2/8/2008		3/7/2008		4/4/2008		5/8/2008		6/5/2008		7/1/2008		8/7/2008		9/11/2008		10/9/2008		11/3/2008		12/5/2008	
		Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	25.31	573.62	25.22	573.71	25.27	573.66	25.37	573.56	25.39	573.54	25.46	573.47	25.49	573.44	25.44	573.49	25.50	573.43	25.41	573.52	25.39	573.54	25.41	573.52
East "B"	596.23	19.95	576.28	19.65	576.58	19.90	576.33	19.70	576.53	19.71	576.52	19.96	576.27	19.91	576.32	19.87	576.36	20.04	576.19	19.60	576.63	19.83	576.40	19.99	576.24
East "C"	598.69	20.30	578.39	19.97	578.72	20.26	578.43	19.85	578.84	19.99	578.70	20.18	578.51	20.20	578.49	20.13	578.56	20.44	578.25	20.03	578.66	20.20	578.49	20.20	578.49
East "D"	593.20	15.15	578.05	14.66	578.54	14.89	578.31	15.11	578.09	15.02	578.18	15.2	578.00	15.4	577.80	15.34	577.86	15.51	577.69	15.16	578.04	15.4	577.80	15.13	578.07
WW A	-	1.00	-	0.83	-	1.08	-	0.92	-	1.08	-	1.00	-	0.83	-	0.83	-	0.83	-	0.83	-	1.00	-	1.00	-
WW B	-	0.83	-	0.92	-	1.00	-	1.00	-	0.83	-	0.83	-	0.83	-	0.83	-	0.67	-	0.75	-	0.67	-	0.92	-
WW C	-	1.00	-	0.83	-	0.75	-	0.50	-	0.75	-	0.83	-	0.67	-	0.83	-	0.42	-	0.50	-	0.58	-	0.83	-
WW D	-	1.08	-	1.00	-	0.83	-	0.33	-	0.50	-	0.50	-	0.59	-	0.67	-	0.50	-	0.50	-	0.50	-	0.50	-
NCR-3S	579.60	3.46	576.14	3.29	576.31	3.56	576.04	3.21	576.39	4.17	575.43	dry	-	dry	-	3.81	575.79	dry	-	5.44	574.16	3.81	-	3.22	576.38
NCR-4S	577.88	3.06	574.82	2.82	575.06	2.89	574.99	2.59	575.29	2.91	574.97	3.61	574.27	4.53	573.35	3.43	574.45	4.27	573.61	3.90	573.98	3.17	574.71	3.52	574.36
NCR-5S	579.34	10.80	568.54	6.26	573.08	7.11	572.23	5.84	573.50	7.45	571.89	9.00	570.34	10.24	569.10	dry	-	dry	-	dry	-	7.75	571.59	6.24	573.10
NCR-13S	577.15	4.64	572.51	4.30	572.85	4.74	572.41	4.16	572.99	5.31	571.84	6.92	570.23	7.47	569.68	7.26	569.89	7.54	569.61	7.48	569.67	5.75	571.40	4.53	572.62

Notes:
 - = measurement not collected.
 dry = no water in well.

Table 2.3
Niagara County Refuse Site
Water Level Measurements

Observation Point	Elevation Top of Casing (ft. msl)	1/9/2009		2/5/2009		3/5/2009		4/3/2009		5/1/2009		6/4/2009		7/10/2009		8/12/2009		9/5/2009		10/9/2009		11/8/2009		12/4/2009	
		Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	25.34	573.59	25.54	573.39	25.60	573.33	25.42	573.51	25.64	573.29	25.66	573.27	25.62	573.31	25.51	573.42	25.52	573.41	25.45	573.48	25.63	573.30	25.53	573.40
East "B"	596.23	19.85	576.38	20.05	576.18	19.94	576.29	19.44	576.79	19.99	576.24	20.00	576.23	20.15	576.08	19.77	576.46	19.83	576.40	19.78	576.45	19.85	576.38	19.66	576.57
East "C"	598.69	20.22	578.47	20.56	578.13	20.20	578.49	19.36	579.33	20.35	578.34	20.55	578.14	20.51	578.18	20.33	578.36	20.30	578.39	20.04	578.65	20.45	578.24	20.30	578.39
East "D"	593.20	14.85	578.35	15.25	577.95	15.54	577.66	14.81	578.39	15.65	577.55	15.75	577.45	15.62	577.58	15.51	577.69	15.69	577.51	15.22	577.98	15.45	577.75	18.98	574.22
WW A	-	1.33	-	0.83	-	0.83	-	1.00	-	0.83	-	0.83	-	0.67	-	0.50	-	0.75	-	1.00	-	0.75	-	0.75	-
WW B	-	1.00	-	0.67	-	1.00	-	0.92	-	1.00	-	0.67	-	0.83	-	0.83	-	0.67	-	1.00	-	1.00	-	0.42	-
WW C	-	0.75	-	0.67	-	0.50	-	0.50	-	0.50	-	0.58	-	0.50	-	0.58	-	0.50	-	0.42	-	0.33	-	0.83	-
WW D	-	0.67	-	1.00	-	0.50	-	0.58	-	0.50	-	0.50	-	0.42	-	0.67	-	0.50	-	0.67	-	0.58	-	0.75	-
NCR-3S	579.60	2.97	576.63	4.11	575.49	3.55	576.05	2.20	577.40	3.48	576.12	dry	-	dry	-	3.66	575.94	dry	-	4.52	575.08	3.74	575.86	2.57	577.03
NCR-4S	577.88	2.90	574.98	3.19	574.69	3.36	574.52	2.39	575.49	2.90	574.98	dry	-	4.65	573.23	2.98	574.90	dry	-	3.49	574.39	3.15	574.73	2.78	575.10
NCR-5S	579.34	6.33	573.01	7.42	571.92	6.78	572.56	8.00	571.34	6.46	572.88	6.87	572.47	10.10	569.24	7.47	571.87	9.88	569.46	dry	-	9.78	569.56	5.92	573.42
NCR-13S	577.15	4.40	572.75	5.09	572.06	5.01	572.14	4.04	573.11	4.77	572.38	5.95	571.20	7.47	569.68	5.92	571.23	7.45	569.70	dry	-	6.16	570.99	4.27	572.88

Notes:

- = measurement not collected.

dry = no water in well.

SECTION 3

SUMMARY AND CONCLUSIONS

The following summary and conclusions were developed based on the data collected during this reporting period (January through December 2009):

- Volatile organic, semivolatile organic, and metals samples were collected in 2009. The analytical results were consistent with historical results. The annual groundwater samples scheduled for collection in November 2010 will be analyzed for metals only.
- Seventeen metals were identified in one or more of the groundwater samples. Typically, approximately thirteen metals are detected. Detected values appeared to be consistent with ranges observed in previous sampling events.
- Two effluent samples were collected in 2009. All analytical results were found to be compliant with the discharge permit. During 2009, compliance with the discharge permit was maintained.
- The landfill was inspected monthly and was appropriately maintained. Any needed repairs were addressed in a timely manner. Cover vegetation continues to be in good condition.
- Post-construction monitoring of the wetland replacement was performed annually between 2001 and 2005. Monitoring results indicated that the wetland creation was successful. Although the formal annual inspections are no longer required, monthly visual inspection of the wetlands will continue, to document general conditions. In 2009, the wetlands were documented to be in good condition.
- Water levels were collected from the wet wells, monitoring wells, and the locations on top of the landfill on a monthly basis in 2009. Water levels generally varied between 2.2 and 4.2 feet over the course of the year.
- The objectives of the groundwater monitoring program (to monitor the effectiveness of the perimeter collection system and the perimeter barrier system) have been met. The groundwater monitoring program provides data for demonstration of the effectiveness of the hydraulic containment, collection, and extraction of Site-related groundwater.

SECTION 4 REFERENCES

USEPA, 1993, Record of Decision, Niagara County Refuse Site, Wheatfield, Niagara County, New York; United States Environmental Protection Agency, September 1993.

USA, 1995, Consent Decree, Docket 946-849; United States Environmental Protection Agency, February 3, 1995.

CRA, 2000, Operations, Maintenance and Monitoring Manual for Niagara County Refuse District Site Remedial Construction, Wheatfield, Niagara County, New York; Conestoga-Rovers & Associates, December 2000.

Parsons, 2009, 2008 Annual Monitoring Report, Niagara County Refuse District Site; Parsons, February 2009.

APPENDIX A

CITY OF NORTH TONAWANDA INDUSTRIAL WASTEWATER DISCHARGE PERMIT AND COMPLIANCE SAMPLING RESULTS

Analytical Results: NIAGARA COUNTY REFUSE SITE 2009

PARAMETER	RESULT mg/l	RESULT mg/l	COMP.
pH (COMP.)	7.32	7.08	YES
COD	77	146	YES
SUSPENDED SOLIDS	14	30	YES
BOD	14	18	YES
PO4	0.19	0.14	YES
PHENOLS	< 0.011	< 0.010	YES
METALS			
ALUMINUM	0.087	0.351	YES
CHROMIUM	< 0.027	< 0.025	YES
LEAD	< 0.027	< 0.027	YES
NICKEL	< 0.026	< 0.025	YES
ZINC	0.046	0.128	YES
IRON	0.986	5.183	YES
MAGNESIUM	128.0	174.0	YES
MANGANESE	0.205	0.371	YES
SODIUM	105.0	386.0	YES
PURGEABLES			
Benzene	< 0.005	< 0.004	YES
Toluene	< 0.007	< 0.006	YES
Chlorobenzene	< 0.005	< 0.006	YES
Ethylbenzene	< 0.005	< 0.006	YES
Total Xylenes	< 0.015	< 0.017	YES
1,3 - Dichlorobenzene	< 0.005	< 0.005	YES
1,4-Dichlorobenzene	< 0.005	< 0.004	YES
1,2 - Dichlorobenzene	< 0.005	< 0.005	YES
Vinyl Chloride	< 0.006	< 0.004	YES
1,1-Dichloroethene	< 0.005	< 0.003	YES
Methylene chloride	< 0.005	< 0.005	YES
trans-1,2 Dichloroethene	< 0.005	< 0.004	YES
1,1-Dichloroethane	< 0.005	< 0.004	YES
Chloroform	< 0.006	< 0.005	YES
1,1,1-Trichloroethane	< 0.006	< 0.005	YES
Trichloroethene	< 0.005	< 0.005	YES
TOTAL FLOW (gallons)	9,070	1,850	
SAMPLE DATE	3/5/09 & 3/6/09	9/3/09 & 9/4/09	
Report prepared by: Willaim M. Davignon, Lab Director / Chemist			

CITY OF NORTH TONAWANDA
4/5/95
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

Permit Number: 2628010

In accordance with the provisions of the Clean Water Act as amended, all terms and conditions set forth in this permit, the City of North Tonawanda Local Sewer Use Ordinance and any applicable Federal, State or local laws or regulations, authorization is hereby granted to: Niagara County Department of Public Works

Engineering Department

59 Park Avenue

Lockport, New York 14094

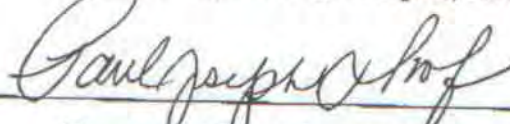
Classified by S.I.C. Number(s): N/A

for the discharge of: groundwater and other wastes generated during Remedial Action construction and implementation into the City of North Tonawanda Sewerage System.

This permit is granted in accordance with an application filed in the offices of the Treatment Plant Superintendent located at 830 River Road, and in conformity with specifications and other required data submitted in support of the above named application, all of which are filed with and considered part of this permit. This permit is also granted in accordance with discharge limitations and requirements, monitoring and reporting requirements, and all other conditions set forth in Parts I and II hereof.

Effective this 31st day of February, 2007

To expire the 1st day of April, 2010



Treatment Plant Superintendent

Signed this 31st day of January, 2007

PERMIT NUMBER: 2628010

Part I
Page of 4**PART I. SPECIFIC CONDITIONS****A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS**

During the period beginning the effective date of this permit and lasting until the expiration date, discharge from the permitted facility outfall(s) shall be limited and monitored by the permittee as specified below (Refer to attached map for sampling and monitoring sites).

Sample Point	Parameter	Discharge Limitations mg/l except pH Daily Max.	Sampling Period	Sampling Type
001	Total Flow		1 Sampling Day Monthly	continuous
2/	Aluminum	2.0	1 Sample Day semi-annual	24 hr comp.
	Lead	4.6	1 Sampling Day semi-annual	24 hr comp.
	Iron	10	1 Sampling Day semi-annual	24 hr comp.
2/	Magnesium	Monitor Only	1 Sampling Day semi-annual	24 hr comp.
2/	Sodium	Monitor Only	1 Sampling Day semi-annual	24 hr comp.
	pH	Monitor Only	1 Sampling Day semi-annual	grab
2/	BOD	Monitor Only	1 Sampling Day semi-annual	24 hr comp.
2/	Total Suspended Solids	Monitor Only	1 Sampling Day semi-annual	24 hr comp.

Part I
Page 1 of 4

B. DISCHARGE REPORTING REQUIREMENTS

[illegible]

PERMIT NUMBER: 2628010**Part I**
Page 4 of 4**PART I. SPECIFIC CONDITIONS****C. SPECIAL REQUIREMENTS**

- 1) This permit is written for a duration of three years. Upon renewal of this permit, all parameters will be re-evaluated to develop a parameter list based on chemical concentrations present in the extracted groundwater.
- 2) Frequency of monitoring is to be re-evaluated yearly..
- 3) All monitoring reports (initial and subsequent), are to be received by the Superintendent, no later than thirty (30) days after receipt of validated data.
- 4) It is required that the Permittee have a Site Operations Manual available at all times. All emergency phone numbers must be listed in an appropriate place for easy access by operations personnel. The permittee shall not discharge to the City of North Tonawanda sewerage treatment works during overflow conditions. The permittee is required to cease all pumping operations upon verbal request of the North Tonawanda Wastewater Treatment Plant Superintendent or his assigns. Pumping operations shall not recommence until approved by the North Tonawanda Wastewater Treatment Plant Superintendent or his assigns.
- 5) Analysts are required to use GC/MS method detection limits for most organics (if GC/MS is appropriate); GC/ECD for PCBS/Pesticides and GF method detection limits for metals (where GF is appropriate), as contained in attachment 5 of the NYSDEC TOGs 1.3.8 - New Discharges to Publicly Owned Treatment Works - dated 10/26/94.

APPENDIX B
CORRESPONDENCE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

NOV 21 2005

BY FEDEX

Mr. Eric Felter
Project Manager
Parsons
180 Lawrence Bell Drive, Suite 104
Williamsville, New York 14221

Re: Niagara County Refuse Site, Wheatfield, New York; Request for the Reduction of Analytical Parameters in Groundwater Samples

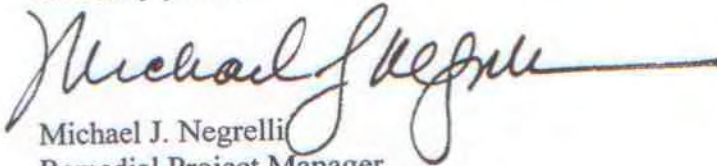
Dear Mr. Felter:

The U.S. Environmental Protection Agency (EPA) and New York State Department of Environmental Conservation (NYSDEC) have reviewed your letter dated October 3, 2005 prepared by Parsons on behalf of the Niagara County Refuse (NCR) Site PRP Group requesting a reduction in the analytical parameters in groundwater samples taken at the NCR site as part of the operation and maintenance program. The current analytical parameter list includes 2 volatiles, 4 semi-volatiles, and 16 metals which were determined to be constituents of interest at the site. Your proposal requests reducing the parameters to 5 metals, representing those constituents which have been measured above standards with some regularity in past sampling rounds. The sampling program, involving four monitoring wells, has been in effect since 2001 and your proposal reflects trends evident since the program was initiated. Sampling frequency is currently semi-annual (twice a year).

After discussing this matter with NYSDEC with input from the New York State Department of Health, our preference is that the sampling parameters remain the same for the time being. This is due to the significant residential growth around the site in recent years. After the current sampling round, samples are scheduled to be taken annually. EPA approves changing the current monitoring program only to the extent that the volatiles and semi-volatiles analysis can be conducted every two years while the metals analysis be conducted annually. EPA will, however, consider a further frequency reduction in the future as more data are collected.

Please call me at (212) 637-4278 if you have any questions on this matter.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Michael J. Negrelli", followed by a long horizontal line extending to the right.

Michael J. Negrelli
Remedial Project Manager
New York Remediation Branch

cc: J. Konsella - NYSDEC/Region 9
B. Sadowski - NYSDEC/Region 9

APPENDIX C
ANALYTICAL DATA

Analytical Report

Work Order: RSL0353

Project Description
Niagara County Refuse Site

For:

Paul Drof

North Tonawanda, City of
City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120



Lisa Shaffer For Amy Haag

Project Manager

lisa.shaffer@testamericainc.com

Wednesday, December 30, 2009

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exception to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project manager who has signed this report.

North Tonawanda, City of
City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120

Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

TestAmerica Buffalo Current Certifications

As of 1/27/2009

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA, NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana*	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA, CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP, SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA, CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	NELAP CWA, RCRA	68-00281
Tennessee	SDWA	02970
Texas*	NELAP CWA, RCRA	T104704412-08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SDWA	278
Washington*	NELAP CWA, RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA, RCRA	252

*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

North Tonawanda, City of
City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120

Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

CASE NARRATIVE

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

A pertinent document is appended to this report, 1 page, is included and is an integral part of this report.

Reproduction of this analytical report is permitted only in its entirety. This report shall not be reproduced except in full without the written approval of the laboratory.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.

North Tonawanda, City of
City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120

Work Order: RSL0353

Received: 12/04/09
Reported: 12/30/09 13:53

Project: Niagara County Refuse Site
Project Number: NO TONAW003

The requested project specific reporting limits listed below were less than lab standard quantitation limits but greater than or equal to the lab MDL. It must be noted that results reported below lab standard quantitation limits (PQL) may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

<u>Specific Method</u>	<u>Analyte</u>	<u>Units</u>	<u>Client RL</u>	<u>Lab PQL</u>
8260B	Benzene	ug/L	0.70	1.0
8270C	4-Methylphenol	ug/L	5.0	10

North Tonawanda, City of
City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120

Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

DATA QUALIFIERS AND DEFINITIONS

B	Analyte was detected in the associated Method Blank.
ID7	The analytes 3-Methylphenol and 4-Methylphenol coelute and can not be analytically separated. The reported concentration for 4-Methylphenol is a total concentration value rather than individual quantitated values.
J	Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
M1	The MS and/or MSD were outside the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
M7	The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
MHA	Due to high levels of analyte in the sample, the MS and /or MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
S14	Insufficient sample volume available. Actual volume used is reflected on the Sample Extraction Data page of report.
NR	Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

ADDITIONAL COMMENTS

Results are reported on a wet weight basis unless otherwise noted.

North Tonawanda, City of
City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120

Work Order: RSL0353

Received: 12/04/09
Reported: 12/30/09 13:53

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0353-01 (NCR-3S - Water)						Sampled: 12/04/09 13:00		Recvd: 12/04/09 15:45		
<u>Total Metals by SW 846 Series Methods</u>										
Aluminum	2.19		0.200	0.040	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Barium	0.0573		0.0020	0.0003	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Beryllium	0.0002	J	0.0020	0.0002	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Cadmium	0.0004	J	0.0010	0.0003	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Calcium	148		0.5	0.1	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Chromium	0.0141		0.0040	0.0009	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Cobalt	0.0012	J	0.0040	0.0006	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Copper	0.0119		0.0100	0.0013	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Iron	3.55		0.050	0.019	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Magnesium	90.4		0.200	NR	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Manganese	0.0484		0.0030	NR	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Nickel	0.0253		0.0100	0.0013	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Potassium	3.43		0.500	0.050	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Sodium	11.5		1.0	NR	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Vanadium	0.0046	J	0.0050	0.0011	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Zinc	0.0282		0.0100	0.0015	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B

Sample ID: RSL0353-02 (NCR-4S - Water)

Sampled: 12/04/09 13:35

Recvd: 12/04/09 15:45

Total Metals by SW 846 Series Methods

Aluminum	12.3		0.200	0.040	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Barium	0.125		0.0020	0.0003	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Beryllium	0.0007	J	0.0020	0.0002	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Cadmium	0.0009	J	0.0010	0.0003	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Calcium	185		0.5	0.1	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Chromium	0.0106		0.0040	0.0009	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Cobalt	0.0026	J	0.0040	0.0006	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Copper	0.0193		0.0100	0.0013	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Iron	56.9		0.050	0.019	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Lead	0.0283		0.0050	0.0030	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Magnesium	61.2		0.200	NR	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Manganese	0.310		0.0030	NR	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Nickel	0.0118		0.0100	0.0013	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Potassium	11.5		0.500	0.050	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Sodium	33.4		1.0	NR	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Vanadium	0.0071		0.0050	0.0011	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Zinc	1.34		0.0100	0.0015	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B

North Tonawanda, City of
City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120

Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0353-03 (NCR-5S - Water)						Sampled: 12/04/09 14:15		Recvd: 12/04/09 15:45		
<u>Total Metals by SW 846 Series Methods</u>										
Aluminum	6.81	J	0.200	0.040	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Barium	0.140		0.0020	0.0003	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Beryllium	0.0002		0.0020	0.0002	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Calcium	90.6	J	0.5	0.1	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Chromium	0.0178		0.0040	0.0009	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Cobalt	0.0016		0.0040	0.0006	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Copper	0.0155		0.0100	0.0013	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Iron	6.13		0.050	0.019	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Lead	0.0067		0.0050	0.0030	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Magnesium	63.5		0.200	NR	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Manganese	0.0997		0.0030	NR	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Nickel	0.0138		0.0100	0.0013	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Potassium	2.69		0.500	0.050	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Sodium	26.0		1.0	NR	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Vanadium	0.0110		0.0050	0.0011	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Zinc	0.0563		0.0100	0.0015	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B

Sample ID: RSL0353-06 (NCR-13S - Water)

Sampled: 12/04/09 15:00

Recvd: 12/04/09 15:45

Total Metals by SW 846 Series Methods

Aluminum	3.75		0.200	0.040	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Barium	0.0987		0.0020	0.0003	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Beryllium	0.0003	J	0.0020	0.0002	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Cadmium	0.0003	J	0.0010	0.0003	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Calcium	211		0.5	0.1	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Chromium	0.0215		0.0040	0.0009	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Cobalt	0.0010	J	0.0040	0.0006	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Copper	0.0099	J	0.0100	0.0013	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Iron	5.65		0.050	0.019	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Magnesium	73.4		0.200	NR	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Manganese	0.0225		0.0030	NR	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Nickel	0.0114		0.0100	0.0013	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Potassium	3.82		0.500	0.050	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Sodium	21.8		1.0	NR	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Vanadium	0.0091		0.0050	0.0011	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Zinc	0.0302		0.0100	0.0015	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B

North Tonawanda, City of
City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120

Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
NCR-3S	RSL0353-01	Water	12/04/09 13:00	12/04/09 15:45	
NCR-4S	RSL0353-02	Water	12/04/09 13:35	12/04/09 15:45	
NCR-5S	RSL0353-03	Water	12/04/09 14:15	12/04/09 15:45	
NCR-13S	RSL0353-06	Water	12/04/09 15:00	12/04/09 15:45	
NCR-6S	RSL0353-07	Water	12/04/09 15:10	12/04/09 15:45	
TRIP BLANK	RSL0353-08	Water	12/04/09	12/04/09 15:45	

North Tonawanda, City of
City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120

Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0353-01 (NCR-3S - Water)			Sampled: 12/04/09 13:00				Recvd: 12/04/09 15:45			

Volatile Organic Compounds by EPA 8260B

1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
1,2-Dichloroethane, Total	ND		2.0	0.70	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
1,2-Dichloropropane	ND		1.0	0.33	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
1,3-Dichloropropane	ND		1.0	0.21	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
2-Butanone (MEK)	ND		10	1.3	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.91	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Acetone	ND		25	1.3	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Benzene	ND		0.70	0.41	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Chlorobenzene	ND		5.0	0.32	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Ethylbenzene	ND		5.0	0.18	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Methylene Chloride	ND		5.0	0.44	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Tetrachloroethene	ND		5.0	0.36	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Toluene	ND		5.0	0.51	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Trichloroethane	ND		5.0	0.46	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Vinyl chloride	ND		2.0	0.24	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
Xylenes, total	ND		5.0	0.66	ug/L	1.00	12/15/09 18:14	DHC	9L15024	8260B
1,2-Dichloroethane-d4	101 %		Surr Limits: (66-137%)				12/15/09 18:14	DHC	9L15024	8260B
4-Bromofluorobenzene	104 %		Surr Limits: (73-120%)				12/15/09 18:14	DHC	9L15024	8260B
Toluene-d8	103 %		Surr Limits: (71-126%)				12/15/09 18:14	DHC	9L15024	8260B

Semivolatile Organics by GC/MS

1,2-Dichlorobenzene	ND		9.4	0.38	ug/L	1.00	12/10/09 07:44	MKP	9L07002	8270C
1,3-Dichlorobenzene	ND		9.4	0.45	ug/L	1.00	12/10/09 07:44	MKP	9L07002	8270C
1,4-Dichlorobenzene	ND		9.4	0.43	ug/L	1.00	12/10/09 07:44	MKP	9L07002	8270C
2-Methylphenol	ND		9.4	0.38	ug/L	1.00	12/10/09 07:44	MKP	9L07002	8270C
3-Methylphenol	ND	ID7	9.4	0.38	ug/L	1.00	12/10/09 07:44	MKP	9L07002	8270C
4-Methylphenol	ND	ID7	4.7	0.34	ug/L	1.00	12/10/09 07:44	MKP	9L07002	8270C
Phenol	ND		9.4	0.37	ug/L	1.00	12/10/09 07:44	MKP	9L07002	8270C
2,4,6-Tribromophenol	86 %		Surr Limits: (52-132%)				12/10/09 07:44	MKP	9L07002	8270C
2-Fluorobiphenyl	82 %		Surr Limits: (48-120%)				12/10/09 07:44	MKP	9L07002	8270C

North Tonawanda, City of
City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120

Work Order: RSL0353
Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
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Sample ID: RSL0353-01 (NCR-3S - Water) - cont.

Sampled: 12/04/09 13:00

Recvd: 12/04/09 15:45

Semivolatile Organics by GC/MS - cont.

2-Fluorophenol	41 %			Surr Limits: (20-120%)			12/10/09 07:44	MKP	9L07002	8270C
Nitrobenzene-d5	70 %			Surr Limits: (46-120%)			12/10/09 07:44	MKP	9L07002	8270C
Phenol-d5	28 %			Surr Limits: (16-120%)			12/10/09 07:44	MKP	9L07002	8270C
p-Terphenyl-d14	50 %			Surr Limits: (24-136%)			12/10/09 07:44	MKP	9L07002	8270C

Total Metals by SW 846 Series Methods

Aluminum	2.19		0.200	0.040	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Antimony	ND		0.0200	0.0068	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Barium	0.0573		0.0020	0.0003	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Beryllium	0.0002	J	0.0020	0.0002	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Cadmium	0.0004	J	0.0010	0.0003	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Calcium	148		0.5	0.1	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Chromium	0.0141		0.0040	0.0009	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Cobalt	0.0012	J	0.0040	0.0006	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Copper	0.0119		0.0100	0.0013	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Iron	3.55		0.050	0.019	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Lead	ND		0.0050	0.0030	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Magnesium	90.4		0.200	NR	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Manganese	0.0484		0.0030	NR	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Nickel	0.0253		0.0100	0.0013	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Potassium	3.43		0.500	0.050	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Selenium	ND		0.0150	0.0087	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Silver	ND		0.0030	0.0012	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Sodium	11.5		1.0	NR	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Thallium	ND		0.0200	0.0102	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Vanadium	0.0046	J	0.0050	0.0011	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Zinc	0.0282		0.0100	0.0015	mg/L	1.00	12/08/09 21:22	DAN	9L07054	6010B
Mercury	ND		0.0002	0.0001	mg/L	1.00	12/07/09 20:41	MXM	9L07033	7470A

North Tonawanda, City of
City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120

Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09

Reported: 12/30/09 13:53

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
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Sample ID: RSL0353-02 (NCR-4S - Water)

Sampled: 12/04/09 13:35

Recvd: 12/04/09 15:45

Volatile Organic Compounds by EPA 8260B

1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
1,2-Dichloropropane	ND		1.0	0.33	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
1,3-Dichloropropane	ND		1.0	0.21	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
2-Butanone (MEK)	ND		10	1.3	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.91	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Acetone	ND		25	1.3	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Benzene	ND		0.70	0.41	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Chlorobenzene	ND		5.0	0.32	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Ethylbenzene	ND		5.0	0.18	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Methylene Chloride	ND		5.0	0.44	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Tetrachloroethene	ND		5.0	0.36	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Toluene	ND		5.0	0.51	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Trichloroethene	ND		5.0	0.46	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Vinyl chloride	ND		2.0	0.24	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B
Xylenes, total	ND		5.0	0.66	ug/L	1.00	12/15/09 18:39	DHC	9L15024	8260B

1,2-Dichloroethane-d4	101 %	Surr Limits: (66-137%)	12/15/09 18:39	DHC	9L15024	8260B
4-Bromofluorobenzene	101 %	Surr Limits: (73-120%)	12/15/09 18:39	DHC	9L15024	8260B
Toluene-d8	100 %	Surr Limits: (71-126%)	12/15/09 18:39	DHC	9L15024	8260B

Semivolatile Organics by GC/MS

1,2-Dichlorobenzene	ND		9.4	0.38	ug/L	1.00	12/10/09 08:08	MKP	9L07002	8270C
1,3-Dichlorobenzene	ND		9.4	0.45	ug/L	1.00	12/10/09 08:08	MKP	9L07002	8270C
1,4-Dichlorobenzene	ND		9.4	0.43	ug/L	1.00	12/10/09 08:08	MKP	9L07002	8270C
2-Methylphenol	ND		9.4	0.38	ug/L	1.00	12/10/09 08:08	MKP	9L07002	8270C
3-Methylphenol	ND	ID7	9.4	0.38	ug/L	1.00	12/10/09 08:08	MKP	9L07002	8270C
4-Methylphenol	ND	ID7	4.7	0.34	ug/L	1.00	12/10/09 08:08	MKP	9L07002	8270C
Phenol	ND		9.4	0.37	ug/L	1.00	12/10/09 08:08	MKP	9L07002	8270C
2,4,6-Tribromophenol	86 %	Surr Limits: (52-132%)					12/10/09 08:08	MKP	9L07002	8270C
2-Fluorobiphenyl	76 %	Surr Limits: (48-120%)					12/10/09 08:08	MKP	9L07002	8270C

North Tonawanda, City of
City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120

Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0353-02 (NCR-4S - Water) - cont.						Sampled: 12/04/09 13:35		Recvd: 12/04/09 15:45		

Semivolatile Organics by GC/MS - cont.

2-Fluorophenol	37 %		Surr Limits: (20-120%)				12/10/09 08:08	MKP	9L07002	8270C
Nitrobenzene-d5	70 %		Surr Limits: (46-120%)				12/10/09 08:08	MKP	9L07002	8270C
Phenol-d5	26 %		Surr Limits: (16-120%)				12/10/09 08:08	MKP	9L07002	8270C
p-Terphenyl-d14	32 %		Surr Limits: (24-136%)				12/10/09 08:08	MKP	9L07002	8270C

Total Metals by SW 846 Series Methods

Aluminum	12.3		0.200	0.040	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Antimony	ND		0.0200	0.0068	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Barium	0.125		0.0020	0.0003	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Beryllium	0.0007	J	0.0020	0.0002	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Cadmium	0.0009	J	0.0010	0.0003	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Calcium	185		0.5	0.1	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Chromium	0.0106		0.0040	0.0009	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Cobalt	0.0026	J	0.0040	0.0006	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Copper	0.0193		0.0100	0.0013	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Iron	56.9		0.050	0.019	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Lead	0.0283		0.0050	0.0030	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Magnesium	61.2		0.200	NR	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Manganese	0.310		0.0030	NR	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Nickel	0.0118		0.0100	0.0013	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Potassium	11.5		0.500	0.050	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Selenium	ND		0.0150	0.0087	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Silver	ND		0.0030	0.0012	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Sodium	33.4		1.0	NR	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Thallium	ND		0.0200	0.0102	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Vanadium	0.0071		0.0050	0.0011	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Zinc	1.34		0.0100	0.0015	mg/L	1.00	12/08/09 21:27	DAN	9L07054	6010B
Mercury	ND		0.0002	0.0001	mg/L	1.00	12/07/09 20:42	MXM	9L07033	7470A

North Tonawanda, City of
City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120

Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0353-03 (NCR-5S - Water)						Sampled: 12/04/09 14:15		Recvd: 12/04/09 15:45		
Volatile Organic Compounds by EPA 8260B										
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
1,2-Dichloropropane	ND		1.0	0.33	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
1,3-Dichloropropane	ND		1.0	0.21	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
2-Butanone (MEK)	ND		10	1.3	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.91	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Acetone	ND		25	1.3	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Benzene	ND		0.70	0.41	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Chlorobenzene	ND		5.0	0.32	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Ethylbenzene	ND		5.0	0.18	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Methylene Chloride	ND		5.0	0.44	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Tetrachloroethene	ND		5.0	0.36	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Toluene	ND		5.0	0.51	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Trichloroethene	ND		5.0	0.46	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Vinyl chloride	ND		2.0	0.24	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
Xylenes, total	ND		5.0	0.66	ug/L	1.00	12/15/09 19:03	DHC	9L15024	8260B
1,2-Dichloroethane-d4	102 %		Surr Limits: (66-137%)				12/15/09 19:03	DHC	9L15024	8260B
4-Bromofluorobenzene	103 %		Surr Limits: (73-120%)				12/15/09 19:03	DHC	9L15024	8260B
Toluene-d8	103 %		Surr Limits: (71-126%)				12/15/09 19:03	DHC	9L15024	8260B
Semivolatile Organics by GC/MS										
1,2-Dichlorobenzene	ND		9.4	0.38	ug/L	1.00	12/10/09 08:33	MKP	9L07002	8270C
1,3-Dichlorobenzene	ND		9.4	0.45	ug/L	1.00	12/10/09 08:33	MKP	9L07002	8270C
1,4-Dichlorobenzene	ND		9.4	0.43	ug/L	1.00	12/10/09 08:33	MKP	9L07002	8270C
2-Methylphenol	ND		9.4	0.38	ug/L	1.00	12/10/09 08:33	MKP	9L07002	8270C
3-Methylphenol	ND	ID7	9.4	0.38	ug/L	1.00	12/10/09 08:33	MKP	9L07002	8270C
4-Methylphenol	ND	ID7	4.7	0.34	ug/L	1.00	12/10/09 08:33	MKP	9L07002	8270C
Phenol	ND		9.4	0.37	ug/L	1.00	12/10/09 08:33	MKP	9L07002	8270C
2,4,6-Tribromophenol	83 %		Surr Limits: (52-132%)				12/10/09 08:33	MKP	9L07002	8270C
2-Fluorobiphenyl	81 %		Surr Limits: (48-120%)				12/10/09 08:33	MKP	9L07002	8270C

North Tonawanda, City of
City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120

Work Order: RSL0353
Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
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Sample ID: RSL0353-03 (NCR-SS - Water) - cont.

Sampled: 12/04/09 14:15

Recvd: 12/04/09 15:45

Semivolatile Organics by GC/MS - cont.

2-Fluorophenol	39 %			Surr Limits: (20-120%)			12/10/09 08:33	MKP	9L07002	8270C
Nitrobenzene-d5	68 %			Surr Limits: (46-120%)			12/10/09 08:33	MKP	9L07002	8270C
Phenol-d5	29 %			Surr Limits: (16-120%)			12/10/09 08:33	MKP	9L07002	8270C
p-Terphenyl-d14	34 %			Surr Limits: (24-136%)			12/10/09 08:33	MKP	9L07002	8270C

Total Metals by SW 846 Series Methods

Aluminum	6.81		0.200	0.040	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Antimony	ND		0.0200	0.0068	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Barium	0.140		0.0020	0.0003	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Beryllium	0.0002	J	0.0020	0.0002	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Cadmium	ND		0.0010	0.0003	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Calcium	90.6		0.5	0.1	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Chromium	0.0178		0.0040	0.0009	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Cobalt	0.0016	J	0.0040	0.0006	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Copper	0.0155		0.0100	0.0013	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Iron	6.13		0.050	0.019	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Lead	0.0067		0.0050	0.0030	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Magnesium	63.5		0.200	NR	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Manganese	0.0997		0.0030	NR	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Nickel	0.0138		0.0100	0.0013	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Potassium	2.69		0.500	0.050	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Selenium	ND		0.0150	0.0087	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Silver	ND		0.0030	0.0012	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Sodium	26.0		1.0	NR	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Thallium	ND		0.0200	0.0102	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Vanadium	0.0110		0.0050	0.0011	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Zinc	0.0563		0.0100	0.0015	mg/L	1.00	12/08/09 21:32	DAN	9L07054	6010B
Mercury	ND		0.0002	0.0001	mg/L	1.00	12/07/09 20:44	MXM	9L07033	7470A

North Tonawanda, City of
City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120

Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
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Sample ID: RSL0353-06 (NCR-13S - Water)

Sampled: 12/04/09 15:00

Recvd: 12/04/09 15:45

Volatile Organic Compounds by EPA 8260B

1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
1,2-Dichloropropane	ND		1.0	0.33	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
1,3-Dichloropropane	ND		1.0	0.21	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
2-Butanone (MEK)	ND		10	1.3	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.91	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Acetone	ND		25	1.3	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Benzene	ND		0.70	0.41	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Chlorobenzene	ND		5.0	0.32	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Ethylbenzene	ND		5.0	0.18	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Methylene Chloride	ND		5.0	0.44	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Tetrachloroethene	ND		5.0	0.36	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Toluene	ND		5.0	0.51	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Trichloroethene	ND		5.0	0.46	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Vinyl chloride	ND		2.0	0.24	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B
Xylenes, total	ND		5.0	0.66	ug/L	1.00	12/15/09 20:16	DHC	9L15024	8260B

1,2-Dichloroethane-d4	101 %		Surr Limits: (66-137%)				12/15/09 20:16	DHC	9L15024	8260B
4-Bromofluorobenzene	102 %		Surr Limits: (73-120%)				12/15/09 20:16	DHC	9L15024	8260B
Toluene-d8	101 %		Surr Limits: (71-126%)				12/15/09 20:16	DHC	9L15024	8260B

Semivolatile Organics by GC/MS

1,2-Dichlorobenzene	ND		9.4	0.38	ug/L	1.00	12/10/09 08:57	MKP	9L07002	8270C
1,3-Dichlorobenzene	ND		9.4	0.45	ug/L	1.00	12/10/09 08:57	MKP	9L07002	8270C
1,4-Dichlorobenzene	ND		9.4	0.43	ug/L	1.00	12/10/09 08:57	MKP	9L07002	8270C
2-Methylphenol	ND		9.4	0.38	ug/L	1.00	12/10/09 08:57	MKP	9L07002	8270C
3-Methylphenol	ND	ID7	9.4	0.38	ug/L	1.00	12/10/09 08:57	MKP	9L07002	8270C
4-Methylphenol	ND	ID7	4.7	0.34	ug/L	1.00	12/10/09 08:57	MKP	9L07002	8270C
Phenol	ND		9.4	0.37	ug/L	1.00	12/10/09 08:57	MKP	9L07002	8270C
2,4,6-Tribromophenol	87 %		Surr Limits: (52-132%)				12/10/09 08:57	MKP	9L07002	8270C
2-Fluorobiphenyl	84 %		Surr Limits: (48-120%)				12/10/09 08:57	MKP	9L07002	8270C

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City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120

Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0353-06 (NCR-13S - Water) - cont.						Sampled: 12/04/09 15:00		Recvd: 12/04/09 15:45		

Semivolatile Organics by GC/MS - cont.

2-Fluorophenol	45 %			Surr Limits: (20-120%)			12/10/09 08:57	MKP	9L07002	8270C
Nitrobenzene-d5	74 %			Surr Limits: (46-120%)			12/10/09 08:57	MKP	9L07002	8270C
Phenol-d5	32 %			Surr Limits: (16-120%)			12/10/09 08:57	MKP	9L07002	8270C
p-Terphenyl-d14	69 %			Surr Limits: (24-136%)			12/10/09 08:57	MKP	9L07002	8270C

Total Metals by SW 846 Series Methods

Aluminum	3.75		0.200	0.040	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Antimony	ND		0.0200	0.0068	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Barium	0.0987		0.0020	0.0003	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Beryllium	0.0003	J	0.0020	0.0002	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Cadmium	0.0003	J	0.0010	0.0003	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Calcium	211		0.5	0.1	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Chromium	0.0215		0.0040	0.0009	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Cobalt	0.0010	J	0.0040	0.0006	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Copper	0.0099	J	0.0100	0.0013	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Iron	5.65		0.050	0.019	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Lead	ND		0.0050	0.0030	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Magnesium	73.4		0.200	NR	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Manganese	0.0225		0.0030	NR	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Nickel	0.0114		0.0100	0.0013	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Potassium	3.82		0.500	0.050	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Selenium	ND		0.0150	0.0087	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Silver	ND		0.0030	0.0012	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Sodium	21.8		1.0	NR	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Thallium	ND		0.0200	0.0102	mg/L	1.00	12/09/09 18:50	DAN	9L07054	6010B
Vanadium	0.0091		0.0050	0.0011	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Zinc	0.0302		0.0100	0.0015	mg/L	1.00	12/08/09 22:11	DAN	9L07054	6010B
Mercury	ND		0.0002	0.0001	mg/L	1.00	12/07/09 20:50	MXM	9L07033	7470A

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City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120

Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09

Reported: 12/30/09 13:53

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0353-07 (NCR-6S - Water)						Sampled: 12/04/09 15:10		Recvd: 12/04/09 15:45		
<u>Volatile Organic Compounds by EPA 8260B</u>										
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
1,2-Dichloropropane	ND		1.0	0.33	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
1,3-Dichloropropane	ND		1.0	0.21	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
2-Butanone (MEK)	ND		10	1.3	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.91	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Acetone	ND		25	1.3	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Benzene	ND		0.70	0.41	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Chlorobenzene	ND		5.0	0.32	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Ethylbenzene	ND		5.0	0.18	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Methylene Chloride	ND		5.0	0.44	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Tetrachloroethene	ND		5.0	0.36	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Toluene	ND		5.0	0.51	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Trichloroethene	ND		5.0	0.46	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Vinyl chloride	ND		2.0	0.24	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
Xylenes, total	ND		5.0	0.66	ug/L	1.00	12/15/09 20:40	DHC	9L15024	8260B
1,2-Dichloroethane-d4	100 %		Surr Limits: (66-137%)				12/15/09 20:40	DHC	9L15024	8260B
4-Bromofluorobenzene	100 %		Surr Limits: (73-120%)				12/15/09 20:40	DHC	9L15024	8260B
Toluene-d8	100 %		Surr Limits: (71-126%)				12/15/09 20:40	DHC	9L15024	8260B

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North Tonawanda, NY 14120

Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0353-08 (TRIP BLANK - Water)						Sampled: 12/04/09		Recvd: 12/04/09 15:45		
<u>Volatile Organic Compounds by EPA 8260B</u>										
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
1,2-Dichloropropane	ND		1.0	0.33	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
1,3-Dichloropropane	ND		1.0	0.21	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
2-Butanone (MEK)	ND		10	1.3	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.91	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Acetone	ND		25	1.3	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Benzene	ND		0.70	0.41	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Chlorobenzene	ND		5.0	0.32	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Ethylbenzene	ND		5.0	0.18	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Methylene Chloride	ND		5.0	0.44	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Tetrachloroethene	ND		5.0	0.36	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Toluene	ND		5.0	0.51	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Trichloroethene	ND		5.0	0.46	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Vinyl chloride	ND		2.0	0.24	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
Xylenes, total	ND		5.0	0.66	ug/L	1.00	12/15/09 21:05	DHC	9L15024	8260B
1,2-Dichloroethane-d4	103 %		Surr Limits: (66-137%)				12/15/09 21:05	DHC	9L15024	8260B
4-Bromofluorobenzene	104 %		Surr Limits: (73-120%)				12/15/09 21:05	DHC	9L15024	8260B
Toluene-d8	103 %		Surr Limits: (71-126%)				12/15/09 21:05	DHC	9L15024	8260B

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Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
Semivolatile Organics by GC/MS									
8270C	9L07002	RSL0353-01	1,060.00	mL	1.00	mL	12/07/09 16:00	LTT	3510C MB
8270C	9L07002	RSL0353-02	1,060.00	mL	1.00	mL	12/07/09 16:00	LTT	3510C MB
8270C	9L07002	RSL0353-03	1,060.00	mL	1.00	mL	12/07/09 16:00	LTT	3510C MB
8270C	9L07002	RSL0353-06	1,060.00	mL	1.00	mL	12/07/09 16:00	LTT	3510C MB
Total Metals by SW 846 Series Methods									
6010B	9L07054	RSL0353-01	50.00	mL	50.00	mL	12/08/09 11:00	KCW	3005A
6010B	9L07054	RSL0353-02	50.00	mL	50.00	mL	12/08/09 11:00	KCW	3005A
6010B	9L07054	RSL0353-03	50.00	mL	50.00	mL	12/08/09 11:00	KCW	3005A
6010B	9L07054	RSL0353-06	50.00	mL	50.00	mL	12/08/09 11:00	KCW	3005A
7470A	9L07033	RSL0353-01	30.00	mL	50.00	mL	12/07/09 13:30	MXM	7470A
7470A	9L07033	RSL0353-02	30.00	mL	50.00	mL	12/07/09 13:30	MXM	7470A
7470A	9L07033	RSL0353-03	30.00	mL	50.00	mL	12/07/09 13:30	MXM	7470A
7470A	9L07033	RSL0353-06	30.00	mL	50.00	mL	12/07/09 13:30	MXM	7470A
Volatile Organic Compounds by EPA 8260B									
8260B	9L15024	RSL0353-01	5.00	mL	5.00	mL	12/15/09 11:02	DHC	5030B MS
8260B	9L15024	RSL0353-02	5.00	mL	5.00	mL	12/15/09 11:02	DHC	5030B MS
8260B	9L15024	RSL0353-03	5.00	mL	5.00	mL	12/15/09 11:02	DHC	5030B MS
8260B	9L15024	RSL0353-06	5.00	mL	5.00	mL	12/15/09 11:02	DHC	5030B MS
8260B	9L15024	RSL0353-07	5.00	mL	5.00	mL	12/15/09 11:02	DHC	5030B MS
8260B	9L15024	RSL0353-08	5.00	mL	5.00	mL	12/15/09 11:02	DHC	5030B MS

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Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
Blank Analyzed: 12/15/09 (Lab Number:9L15024-BLK1, Batch: 9L15024)											
1,1,1,2-Tetrachloroethane			1.0	0.35	ug/L	ND					
1,1,1-Trichloroethane			1.0	0.26	ug/L	ND					
1,1,2-Trichloroethane			1.0	0.23	ug/L	ND					
1,1-Dichloroethane			1.0	0.38	ug/L	ND					
1,1-Dichloroethene			1.0	0.29	ug/L	ND					
1,2-Dichloroethane			1.0	0.21	ug/L	ND					
1,2-Dichloroethene, Total			2.0	0.70	ug/L	ND					
1,2-Dichloropropane			1.0	0.33	ug/L	ND					
1,3-Dichloropropane			1.0	0.21	ug/L	ND					
2-Butanone (MEK)			10	1.3	ug/L	ND					
2-Hexanone			5.0	1.2	ug/L	ND					
4-Methyl-2-pentanone (MIBK)			5.0	0.91	ug/L	ND					
Acetone			25	1.3	ug/L	ND					
Benzene			0.70	0.41	ug/L	ND					
Bromodichloromethane			1.0	0.39	ug/L	ND					
Bromoform			1.0	0.26	ug/L	ND					
Bromomethane			1.0	0.28	ug/L	ND					
Carbon disulfide			1.0	0.19	ug/L	ND					
Carbon Tetrachloride			1.0	0.27	ug/L	ND					
Chlorobenzene			5.0	0.32	ug/L	ND					
Dibromochloromethane			1.0	0.32	ug/L	ND					
Chloroethane			1.0	0.32	ug/L	ND					
Chloroform			1.0	0.34	ug/L	ND					
Chloromethane			1.0	0.35	ug/L	ND					
cis-1,3-Dichloropropene			1.0	0.36	ug/L	ND					
Ethylbenzene			5.0	0.18	ug/L	ND					
Methylene Chloride			5.0	0.44	ug/L	ND					
Styrene			1.0	0.18	ug/L	ND					
Tetrachloroethene			5.0	0.36	ug/L	ND					
Toluene			5.0	0.51	ug/L	ND					
trans-1,3-Dichloropropene			1.0	0.37	ug/L	ND					
Trichloroethene			5.0	0.46	ug/L	ND					
Vinyl chloride			2.0	0.24	ug/L	ND					
Xylenes, total			5.0	0.66	ug/L	ND					

Surrogate:

1,2-Dichloroethane-d4

ug/L

102

66-137

North Tonawanda, City of
City Hall Room 6, 216 Payne Ave
North Tonawanda, NY 14120

Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
Blank Analyzed: 12/15/09 (Lab Number:9L15024-BLK1, Batch: 9L15024)											
Surrogate:					ug/L		108	73-120			
4-Bromofluorobenzene											
Surrogate: Toluene-d8					ug/L		103	71-126			
LCS Analyzed: 12/15/09 (Lab Number:9L15024-BS1, Batch: 9L15024)											
1,1,1,2-Tetrachloroethane		25.0	5.0	0.35	ug/L	26.1	105	76-122			
1,1,1-Trichloroethane		25.0	5.0	0.26	ug/L	24.3	97	73-126			
1,1,2-Trichloroethane		25.0	5.0	0.23	ug/L	22.6	90	76-122			
1,1-Dichloroethane		25.0	5.0	0.38	ug/L	21.9	88	71-129			
1,1-Dichloroethene		25.0	5.0	0.29	ug/L	21.8	87	65-138			
1,2-Dichloroethane		25.0	5.0	0.21	ug/L	22.4	90	75-127			
1,2-Dichloroethene, Total		50.0	2.0	0.70	ug/L	44.9	90	72-124			
1,2-Dichloropropane		25.0	5.0	0.33	ug/L	22.7	91	76-120			
1,3-Dichloropropane		25.0	5.0	0.21	ug/L	22.2	89	75-120			
2-Butanone (MEK)		125	10	1.3	ug/L	111	89	57-140			
2-Hexanone		125	10	1.2	ug/L	117	94	65-127			
4-Methyl-2-pentanone (MIBK)		125	10	0.91	ug/L	116	92	71-125			
Acetone		125	10	1.3	ug/L	105	84	56-142			
Benzene		25.0	5.0	0.41	ug/L	22.0	88	71-124			
Bromodichloromethane		25.0	5.0	0.39	ug/L	22.8	91	80-122			
Bromoform		25.0	5.0	0.26	ug/L	23.8	95	66-128			
Bromomethane		25.0	5.0	0.28	ug/L	24.4	98	36-150			
Carbon disulfide		25.0	5.0	0.19	ug/L	20.2	81	59-134			
Carbon Tetrachloride		25.0	5.0	0.27	ug/L	25.2	101	72-134			
Chlorobenzene		25.0	5.0	0.32	ug/L	22.2	89	72-120			
Dibromochloromethane		25.0	5.0	0.32	ug/L	22.7	91	75-125			
Chloroethane		25.0	5.0	0.32	ug/L	25.5	102	69-136			
Chloroform		25.0	5.0	0.34	ug/L	22.5	90	73-127			
Chloromethane		25.0	5.0	0.35	ug/L	21.9	88	49-142			
cis-1,3-Dichloropropene		25.0	5.0	0.36	ug/L	23.5	94	74-124			
Ethylbenzene		25.0	5.0	0.18	ug/L	22.4	90	77-123			
Methylene Chloride		25.0	5.0	0.44	ug/L	20.9	84	57-132			
Styrene		25.0	5.0	0.18	ug/L	23.9	96	70-130			
Tetrachloroethene		25.0	5.0	0.36	ug/L	22.2	89	74-122			
Toluene		25.0	5.0	0.51	ug/L	22.0	88	70-122			
trans-1,3-Dichloropropene		25.0	5.0	0.37	ug/L	23.8	95	72-123			
Trichloroethene		25.0	5.0	0.46	ug/L	23.5	94	74-123			
Vinyl chloride		25.0	5.0	0.24	ug/L	22.0	88	65-133			

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Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds by EPA 8260B											
LCS Analyzed: 12/15/09 (Lab Number:9L15024-BS1, Batch: 9L15024)											
Xylenes, total		75.0	5.0	0.66	ug/L	67.2	90	76-122			
Surrogate:					ug/L		100	66-137			
1,2-Dichloroethane-d4					ug/L		107	73-120			
Surrogate:					ug/L						
4-Bromofluorobenzene					ug/L		99	71-126			
Surrogate: Toluene-d8					ug/L						
Matrix Spike Analyzed: 12/15/09 (Lab Number:9L15024-MS1, Batch: 9L15024)											
QC Source Sample: RSL0353-03											
1,1,1,2-Tetrachloroethane	ND	25.0	5.0	0.35	ug/L	26.8	107	76-122			
1,1,1-Trichloroethane	ND	25.0	5.0	0.26	ug/L	28.0	112	73-126			
1,1,2-Trichloroethane	ND	25.0	5.0	0.23	ug/L	24.6	98	76-122			
1,1-Dichloroethane	ND	25.0	5.0	0.38	ug/L	26.7	107	71-129			
1,1-Dichloroethene	ND	25.0	5.0	0.29	ug/L	28.5	114	65-138			
1,2-Dichloroethane	ND	25.0	5.0	0.21	ug/L	24.3	97	75-127			
1,2-Dichloroethene, Total	ND	50.0	2.0	0.70	ug/L	53.8	108	72-124			
1,2-Dichloropropane	ND	25.0	5.0	0.33	ug/L	26.1	104	76-120			
1,3-Dichloropropane	ND	25.0	5.0	0.21	ug/L	24.5	98	75-120			
2-Butanone (MEK)	ND	125	10	1.3	ug/L	129	103	57-140			
2-Hexanone	ND	125	10	1.2	ug/L	132	106	65-127			
4-Methyl-2-pentanone (MIBK)	ND	125	10	0.91	ug/L	132	105	71-125			
Acetone	ND	125	10	1.3	ug/L	126	101	56-142			
Benzene	ND	25.0	5.0	0.41	ug/L	26.2	105	71-124			
Bromodichloromethane	ND	25.0	5.0	0.39	ug/L	23.8	95	80-122			
Bromoform	ND	25.0	5.0	0.26	ug/L	22.2	89	66-128			
Bromomethane	ND	25.0	5.0	0.28	ug/L	28.3	113	36-150			
Carbon disulfide	ND	25.0	5.0	0.19	ug/L	26.3	105	59-134			
Carbon Tetrachloride	ND	25.0	5.0	0.27	ug/L	29.0	116	72-134			
Chlorobenzene	ND	25.0	5.0	0.32	ug/L	24.5	98	72-120			
Dibromochloromethane	ND	25.0	5.0	0.32	ug/L	23.1	92	75-125			
Chloroethane	ND	25.0	5.0	0.32	ug/L	41.0	164	69-136			M7
Chloroform	ND	25.0	5.0	0.34	ug/L	25.9	104	73-127			
Chloromethane	ND	25.0	5.0	0.35	ug/L	28.1	112	49-142			
cis-1,3-Dichloropropene	ND	25.0	5.0	0.36	ug/L	23.4	94	74-124			
Ethylbenzene	ND	25.0	5.0	0.18	ug/L	25.3	101	77-123			
Methylene Chloride	ND	25.0	5.0	0.44	ug/L	24.9	100	57-132			
Styrene	ND	25.0	5.0	0.18	ug/L	25.2	101	70-130			
Tetrachloroethene	ND	25.0	5.0	0.36	ug/L	26.1	104	74-122			
Toluene	ND	25.0	5.0	0.51	ug/L	25.4	102	70-122			

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www.testamericainc.com

North Tonawanda, City of
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North Tonawanda, NY 14120

Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
<u>Volatile Organic Compounds by EPA 8260B</u>											
Matrix Spike Analyzed: 12/15/09 (Lab Number: 9L15024-MS1, Batch: 9L15024)											
QC Source Sample: RSL0353-03											
trans-1,3-Dichloropropene	ND	25.0	5.0	0.37	ug/L	22.8	91	72-123			
Trichloroethene	ND	25.0	5.0	0.46	ug/L	26.8	107	74-123			
Vinyl chloride	ND	25.0	5.0	0.24	ug/L	29.3	117	65-133			
Xylenes, total	ND	75.0	5.0	0.66	ug/L	74.2	99	76-122			
Surrogate:					ug/L		101	66-137			
1,2-Dichloroethane-d4					ug/L		104	73-120			
Surrogate:					ug/L		102	71-126			
4-Bromofluorobenzene					ug/L						
Surrogate: Toluene-d8					ug/L						
Matrix Spike Dup Analyzed: 12/15/09 (Lab Number: 9L15024-MSD1, Batch: 9L15024)											
QC Source Sample: RSL0353-03											
1,1,1,2-Tetrachloroethane	ND	25.0	5.0	0.35	ug/L	27.1	108	76-122	0.9	20	
1,1,1-Trichloroethane	ND	25.0	5.0	0.26	ug/L	28.4	114	73-126	1	15	
1,1,2-Trichloroethane	ND	25.0	5.0	0.23	ug/L	24.3	97	76-122	1	15	
1,1-Dichloroethane	ND	25.0	5.0	0.38	ug/L	26.7	107	71-129	0.2	20	
1,1-Dichloroethene	ND	25.0	5.0	0.29	ug/L	28.6	115	65-138	0.6	16	
1,2-Dichloroethane	ND	25.0	5.0	0.21	ug/L	24.0	96	75-127	1	20	
1,2-Dichloroethane, Total	ND	50.0	2.0	0.70	ug/L	53.7	107	72-124	0.09	20	
1,2-Dichloropropane	ND	25.0	5.0	0.33	ug/L	25.9	104	76-120	0.5	20	
1,3-Dichloropropane	ND	25.0	5.0	0.21	ug/L	24.3	97	75-120	0.6	20	
2-Butanone (MEK)	ND	125	10	1.3	ug/L	125	100	57-140	3	20	
2-Hexanone	ND	125	10	1.2	ug/L	128	102	65-127	4	15	
4-Methyl-2-pentanone (MIBK)	ND	125	10	0.91	ug/L	127	102	71-125	3	35	
Acetone	ND	125	10	1.3	ug/L	121	97	56-142	4	15	
Benzene	ND	25.0	5.0	0.41	ug/L	26.0	104	71-124	0.6	13	
Bromodichloromethane	ND	25.0	5.0	0.39	ug/L	24.0	96	80-122	0.9	15	
Bromoform	ND	25.0	5.0	0.26	ug/L	22.1	88	66-128	0.3	15	
Bromomethane	ND	25.0	5.0	0.28	ug/L	32.4	130	36-150	14	15	
Carbon disulfide	ND	25.0	5.0	0.19	ug/L	26.7	107	59-134	1	15	
Carbon Tetrachloride	ND	25.0	5.0	0.27	ug/L	29.7	119	72-134	2	15	
Chlorobenzene	ND	25.0	5.0	0.32	ug/L	24.4	98	72-120	0.4	25	
Dibromochloromethane	ND	25.0	5.0	0.32	ug/L	23.4	94	75-125	1	15	
Chloroethane	ND	25.0	5.0	0.32	ug/L	39.8	159	69-136	3	15	M7
Chloroform	ND	25.0	5.0	0.34	ug/L	26.0	104	73-127	0.08	20	
Chloromethane	ND	25.0	5.0	0.35	ug/L	28.0	112	49-142	0.6	15	
cis-1,3-Dichloropropene	ND	25.0	5.0	0.36	ug/L	23.7	95	74-124	1	15	

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City Hall Room 6, 216 Payne Ave
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Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds by EPA 8260B											
Matrix Spike Dup Analyzed: 12/15/09 (Lab Number: 9L15024-MSD1, Batch: 9L15024)											
QC Source Sample: RSL0353-03											
Ethylbenzene	ND	25.0	5.0	0.18	ug/L	25.2	101	77-123	0.6	15	
Methylene Chloride	ND	25.0	5.0	0.44	ug/L	24.8	99	57-132	0.3	15	
Styrene	ND	25.0	5.0	0.18	ug/L	24.9	100	70-130	1	20	
Tetrachloroethene	ND	25.0	5.0	0.36	ug/L	25.8	103	74-122	1	20	
Toluene	ND	25.0	5.0	0.51	ug/L	25.1	100	70-122	1	15	
trans-1,3-Dichloropropene	ND	25.0	5.0	0.37	ug/L	23.0	92	72-123	1	15	
Trichloroethene	ND	25.0	5.0	0.46	ug/L	26.8	107	74-123	0.07	16	
Vinyl chloride	ND	25.0	5.0	0.24	ug/L	29.0	116	65-133	1	15	
Xylenes, total	ND	75.0	5.0	0.66	ug/L	74.5	99	76-122	0.4	16	
Surrogate:					ug/L		101	66-137			
1,2-Dichloroethane-d4					ug/L		105	73-120			
Surrogate:					ug/L						
4-Bromofluorobenzene					ug/L		102	71-126			
Surrogate: Toluene-d8					ug/L						

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Semivolatile Organics by GC/MS											
Blank Analyzed: 12/10/09 (Lab Number:9L07002-BLK1, Batch: 9L07002)											
1,2-Dichlorobenzene			10	0.40	ug/L	ND					
1,3-Dichlorobenzene			10	0.48	ug/L	ND					
1,4-Dichlorobenzene			10	0.46	ug/L	ND					
2-Methylphenol			10	0.40	ug/L	ND					
3-Methylphenol			10	0.40	ug/L	ND					ID7
4-Methylphenol			5.0	0.36	ug/L	ND					ID7
Phenol			10	0.39	ug/L	ND					
Surrogate:					ug/L		97	52-132			
2,4,6-Tribromophenol					ug/L		94	48-120			
Surrogate:					ug/L		56	20-120			
2-Fluorobiphenyl					ug/L		91	46-120			
2-Fluorophenol					ug/L		39	16-120			
Surrogate:					ug/L		94	24-136			
Nitrobenzene-d5					ug/L						
Surrogate: Phenol-d5					ug/L						
Surrogate:					ug/L						
p-Terphenyl-d14					ug/L						
LCS Analyzed: 12/10/09 (Lab Number:9L07002-BS1, Batch: 9L07002)											
1,2,4-Trichlorobenzene		100	10	0.44	ug/L	73.8	74	40-120			
1,2-Dichlorobenzene			10	0.40	ug/L	ND		33-120			
1,3-Dichlorobenzene			10	0.48	ug/L	ND		28-120			
1,4-Dichlorobenzene		100	10	0.46	ug/L	62.0	62	32-120			
1,4-Dioxane			10	1.1	ug/L	ND		11-120			
2-Methylphenol			10	0.40	ug/L	ND		39-120			
3-Methylphenol			10	0.40	ug/L	ND		39-120			ID7
4-Methylphenol			5.0	0.36	ug/L	ND		36-120			ID7
Hexachlorobutadiene			10	0.68	ug/L	ND		30-120			
Naphthalene			10	0.76	ug/L	ND		48-120			
Pentachloroethane			10	0.47	ug/L	ND		70-130			
Phenol		100	10	0.39	ug/L	32.5	32	17-120			
Surrogate:					ug/L		94	52-132			
2,4,6-Tribromophenol					ug/L		82	48-120			
Surrogate:					ug/L		47	20-120			
2-Fluorobiphenyl					ug/L		75	46-120			
2-Fluorophenol					ug/L		34	16-120			
Surrogate:					ug/L		86	24-136			
Nitrobenzene-d5					ug/L						
Surrogate: Phenol-d5					ug/L						
Surrogate:					ug/L						
p-Terphenyl-d14					ug/L						

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
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Semivolatile Organics by GC/MS

Matrix Spike Analyzed: 12/10/09 (Lab Number:9L07002-MS1, Batch: 9L07002)

QC Source Sample: RSL0353-03

1,2,4-Trichlorobenzene	ND	94.3	9.4	0.42	ug/L	78.4	83	40-120			
1,2-Dichlorobenzene	ND		9.4	0.38	ug/L	ND		33-120			
1,3-Dichlorobenzene	ND		9.4	0.45	ug/L	ND		28-120			
1,4-Dichlorobenzene	ND	94.3	9.4	0.43	ug/L	67.8	72	32-120			
1,4-Dioxane	ND		9.4	1.0	ug/L	ND		11-120			
2-Methylphenol	ND		9.4	0.38	ug/L	ND		39-120			
3-Methylphenol	ND		9.4	0.38	ug/L	ND		39-120			ID7
4-Methylphenol	ND		4.7	0.34	ug/L	ND		36-120			ID7
Hexachlorobutadiene	ND		9.4	0.64	ug/L	ND		30-120			
Naphthalene	ND		9.4	0.72	ug/L	ND		48-120			
Pentachloroethane	ND		9.4	0.44	ug/L	ND		70-130			
Phenol	ND	94.3	9.4	0.37	ug/L	31.8	34	17-120			
Surrogate: 2,4,6-Tribromophenol					ug/L		101	52-132			
Surrogate: 2-Fluorobiphenyl					ug/L		91	48-120			
Surrogate: 2-Fluorophenol					ug/L		49	20-120			
Surrogate: Nitrobenzene-d5					ug/L		83	46-120			
Surrogate: Phenol-d5					ug/L		35	16-120			
Surrogate: p-Terphenyl-d14					ug/L		44	24-136			

Matrix Spike Dup Analyzed: 12/10/09 (Lab Number:9L07002-MSD1, Batch: 9L07002)

QC Source Sample: RSL0353-03

1,2,4-Trichlorobenzene	ND	94.3	9.4	0.42	ug/L	67.9	72	40-120	14	30	
1,2-Dichlorobenzene	ND		9.4	0.38	ug/L	ND		33-120		29	
1,3-Dichlorobenzene	ND		9.4	0.45	ug/L	ND		28-120		37	
1,4-Dichlorobenzene	ND	94.3	9.4	0.43	ug/L	59.1	63	32-120	14	36	
1,4-Dioxane	ND		9.4	1.0	ug/L	ND		11-120		50	
2-Methylphenol	ND		9.4	0.38	ug/L	ND		39-120		27	
3-Methylphenol	ND		9.4	0.38	ug/L	ND		39-120		30	ID7
4-Methylphenol	ND		4.7	0.34	ug/L	ND		36-120		24	ID7
Hexachlorobutadiene	ND		9.4	0.64	ug/L	ND		30-120		44	
Naphthalene	ND		9.4	0.72	ug/L	ND		48-120		29	
Pentachloroethane	ND		9.4	0.44	ug/L	ND		70-130		20	
Phenol	ND	94.3	9.4	0.37	ug/L	27.7	29	17-120	14	34	
Surrogate: 2,4,6-Tribromophenol					ug/L		91	52-132			

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Reported: 12/30/09 13:53

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Semivolatile Organics by GC/MS											

Matrix Spike Dup Analyzed: 12/10/09 (Lab Number: 9L07002-MSD1, Batch: 9L07002)

QC Source Sample: RSL0353-03

Surrogate:					ug/L		81	48-120			
2-Fluorobiphenyl											
Surrogate:					ug/L		42	20-120			
2-Fluorophenol											
Surrogate:					ug/L		74	46-120			
Nitrobenzene-d5											
Surrogate: Phenol-d5					ug/L		31	16-120			
Surrogate:					ug/L		36	24-136			
p-Terphenyl-d14											

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Work Order: RSL0353
Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
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Total Metals by SW 846 Series Methods

Blank Analyzed: 12/07/09 (Lab Number:9L07033-BLK1, Batch: 9L07033)

Mercury			0.0002	0.0001	mg/L	ND					
---------	--	--	--------	--------	------	----	--	--	--	--	--

LCS Analyzed: 12/07/09 (Lab Number:9L07033-BS1, Batch: 9L07033)

Mercury		0.00667	0.0002	0.0001	mg/L	0.00660	99	80-120			
---------	--	---------	--------	--------	------	---------	----	--------	--	--	--

Matrix Spike Analyzed: 12/07/09 (Lab Number:9L07033-MS1, Batch: 9L07033)

QC Source Sample: RSL0353-03

Mercury	ND	0.00667	0.0002	0.0001	mg/L	0.00592	89	75-125			
---------	----	---------	--------	--------	------	---------	----	--------	--	--	--

Matrix Spike Dup Analyzed: 12/07/09 (Lab Number:9L07033-MSD1, Batch: 9L07033)

QC Source Sample: RSL0353-03

Mercury	ND	0.00667	0.0002	0.0001	mg/L	0.00642	96	75-125	8	20	
---------	----	---------	--------	--------	------	---------	----	--------	---	----	--

Total Metals by SW 846 Series Methods

Blank Analyzed: 12/08/09 (Lab Number:9L07054-BLK1, Batch: 9L07054)

Aluminum			0.200	0.040	mg/L	ND					
Antimony			0.0200	0.0068	mg/L	ND					
Barium			0.0020	0.0003	mg/L	ND					
Beryllium			0.0020	0.0002	mg/L	ND					
Cadmium			0.0010	0.0003	mg/L	ND					
Calcium			0.5	0.1	mg/L	ND					
Chromium			0.0040	0.0009	mg/L	ND					
Cobalt			0.0040	0.0006	mg/L	ND					
Copper			0.0100	0.0013	mg/L	ND					
Iron			0.050	0.019	mg/L	ND					
Lead			0.0050	0.0030	mg/L	ND					
Magnesium			0.200	NR	mg/L	ND					
Manganese			0.0030	NR	mg/L	ND					B
Nickel			0.0100	0.0013	mg/L	ND					
Potassium			0.500	0.050	mg/L	ND					
Selenium			0.0150	0.0087	mg/L	ND					
Silver			0.0030	0.0012	mg/L	ND					
Sodium			1.0	NR	mg/L	ND					
Thallium			0.0200	0.0102	mg/L	ND					
Vanadium			0.0050	0.0011	mg/L	ND					
Zinc			0.0100	0.0015	mg/L	ND					

LCS Analyzed: 12/08/09 (Lab Number:9L07054-BS1, Batch: 9L07054)

Aluminum		10.0	0.200	0.040	mg/L	9.35	94	80-120			
Antimony		0.200	0.0200	0.0068	mg/L	0.195	98	80-120			

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Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
---------	---------------	-------------	----	-----	-------	--------	-------	--------------	-------	-----------	-----------------

Total Metals by SW 846 Series Methods

LCS Analyzed: 12/08/09 (Lab Number:9L07054-BS1, Batch: 9L07054)

Barium		0.200	0.0020	0.0003	mg/L	0.196	98	80-120			
Beryllium		0.200	0.0020	0.0002	mg/L	0.188	94	80-120			
Cadmium		0.200	0.0010	0.0003	mg/L	0.190	95	80-120			
Calcium		10.0	0.5	0.1	mg/L	9.69	97	80-120			
Chromium		0.200	0.0040	0.0009	mg/L	0.191	95	80-120			
Cobalt		0.200	0.0040	0.0006	mg/L	0.193	96	80-120			
Copper		0.200	0.0100	0.0013	mg/L	0.192	96	80-120			
Iron		10.0	0.050	0.019	mg/L	9.27	93	80-120			
Lead		0.200	0.0050	0.0030	mg/L	0.196	98	80-120			
Magnesium		10.0	0.200	NR	mg/L	9.70	97	80-120			
Manganese		0.200	0.0030	NR	mg/L	0.189	95	80-120			
Nickel		0.200	0.0100	0.0013	mg/L	0.190	95	80-120			
Potassium		10.0	0.500	0.050	mg/L	9.89	99	80-120			
Selenium		0.200	0.0150	0.0087	mg/L	0.194	97	80-120			
Silver		0.0500	0.0030	0.0012	mg/L	0.0476	95	80-120			
Sodium		10.0	1.0	NR	mg/L	9.60	96	80-120			
Thallium		0.200	0.0200	0.0102	mg/L	0.196	98	80-120			
Vanadium		0.200	0.0050	0.0011	mg/L	0.193	96	80-120			
Zinc		0.200	0.0100	0.0015	mg/L	0.193	96	80-120			

Matrix Spike Analyzed: 12/08/09 (Lab Number:9L07054-MS1, Batch: 9L07054)

QC Source Sample: RSL0353-03

Aluminum	6.81	10.0	0.200	0.040	mg/L	18.6	118	75-125			
Antimony	ND	0.200	0.0200	0.0068	mg/L	0.190	95	75-125			
Barium	0.140	0.200	0.0020	0.0003	mg/L	0.368	114	75-125			
Beryllium	0.000250	0.200	0.0020	0.0002	mg/L	0.196	98	75-125			
Cadmium	ND	0.200	0.0010	0.0003	mg/L	0.194	97	75-125			
Calcium	90.6	10.0	0.5	0.1	mg/L	111	201	75-125			MHA
Chromium	0.0178	0.200	0.0040	0.0009	mg/L	0.225	104	75-125			
Cobalt	0.00165	0.200	0.0040	0.0006	mg/L	0.199	99	75-125			
Copper	0.0155	0.200	0.0100	0.0013	mg/L	0.220	102	75-125			
Iron	6.13	10.0	0.050	0.019	mg/L	18.6	125	75-125			
Lead	0.00666	0.200	0.0050	0.0030	mg/L	0.205	99	75-125			
Magnesium	63.5	10.0	0.200	NR	mg/L	75.3	118	75-125			
Manganese	0.0997	0.200	0.0030	NR	mg/L	0.364	132	75-125			MHA
Nickel	0.0138	0.200	0.0100	0.0013	mg/L	0.214	100	75-125			
Potassium	2.69	10.0	0.500	0.050	mg/L	13.1	104	75-125			
Selenium	ND	0.200	0.0150	0.0087	mg/L	0.199	99	75-125			

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Work Order: RSL0353

Project: Niagara County Refuse Site
Project Number: NO TONAW003

Received: 12/04/09
Reported: 12/30/09 13:53

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
---------	---------------	-------------	----	-----	-------	--------	-------	--------------	-------	-----------	-----------------

Total Metals by SW 846 Series Methods

Matrix Spike Analyzed: 12/08/09 (Lab Number:9L07054-MS1, Batch: 9L07054)

QC Source Sample: RSL0353-03

Silver	ND	0.0500	0.0030	0.0012	mg/L	0.0499	100	75-125			
Sodium	26.0	10.0	1.0	NR	mg/L	33.8	78	75-125			
Thallium	ND	0.200	0.0200	0.0102	mg/L	0.208	104	75-125			
Vanadium	0.0110	0.200	0.0050	0.0011	mg/L	0.214	102	75-125			
Zinc	0.0563	0.200	0.0100	0.0015	mg/L	0.266	105	75-125			

Matrix Spike Dup Analyzed: 12/08/09 (Lab Number:9L07054-MSD1, Batch: 9L07054)

QC Source Sample: RSL0353-03

Aluminum	6.81	10.0	0.200	0.040	mg/L	18.7	119	75-125	0.4	20	
Antimony	ND	0.200	0.0200	0.0068	mg/L	0.193	96	75-125	1	20	
Barium	0.140	0.200	0.0020	0.0003	mg/L	0.365	113	75-125	0.8	20	
Beryllium	0.000250	0.200	0.0020	0.0002	mg/L	0.197	98	75-125	0.5	20	
Cadmium	ND	0.200	0.0010	0.0003	mg/L	0.195	97	75-125	0.6	20	
Calcium	90.6	10.0	0.5	0.1	mg/L	108	175	75-125	2	20	MHA
Chromium	0.0178	0.200	0.0040	0.0009	mg/L	0.224	103	75-125	0.3	20	
Cobalt	0.00165	0.200	0.0040	0.0006	mg/L	0.200	99	75-125	0.4	20	
Copper	0.0155	0.200	0.0100	0.0013	mg/L	0.221	103	75-125	0.4	20	
Iron	6.13	10.0	0.050	0.019	mg/L	18.5	124	75-125	0.6	20	
Lead	0.00666	0.200	0.0050	0.0030	mg/L	0.207	100	75-125	0.8	20	
Magnesium	63.5	10.0	0.200	NR	mg/L	73.7	102	75-125	2	20	
Manganese	0.0997	0.200	0.0030	NR	mg/L	0.360	130	75-125	0.9	20	MHA
Nickel	0.0138	0.200	0.0100	0.0013	mg/L	0.215	101	75-125	0.4	20	
Potassium	2.69	10.0	0.500	0.050	mg/L	13.1	104	75-125	0.05	20	
Selenium	ND	0.200	0.0150	0.0087	mg/L	0.204	102	75-125	2	20	
Silver	ND	0.0500	0.0030	0.0012	mg/L	0.0501	100	75-125	0.5	20	
Sodium	26.0	10.0	1.0	NR	mg/L	33.1	71	75-125	2	20	M1
Thallium	ND	0.200	0.0200	0.0102	mg/L	0.212	106	75-125	2	20	
Vanadium	0.0110	0.200	0.0050	0.0011	mg/L	0.214	101	75-125	0.2	20	
Zinc	0.0563	0.200	0.0100	0.0015	mg/L	0.265	104	75-125	0.3	20	

GROUNDWATER SAMPLING • SAMPLE COLLECTION DATA SHEET

PROJECT NAME:

NIAGARA COUNTY REFUSE SITE

SAMPLING CREW MEMBERS:

Richard C. Becken

DATE OF SAMPLE COLLECTION:

1/20/09
(M M D D Y Y)

Sample I.D. Number	Well Number	Well Volume (Gallons)	Volume Purged (Gallons)	Sample Time	Sample Description	Analysis Required	Chain-of-Custody Number	Shipping Manifest Number
NCR-3S	NCR 3S	.54	~1.25	1300	Groundwater monitoring well	VOC, semi-VOC, T. Metals	149800	NA
NCR-4S	NCR 4S	.36	~.9	1335	Groundwater monitoring well	"		NA
NCR-5S	NCR 5S	.86	~1.6	1415	Groundwater monitoring well	"		NA
NCR-13S	NCR 13S	.57	~1.3	1500	Groundwater monitoring well	"		NA
NCR-5S	(MS/MSD) *			1415				
NCR-6S	(Duplicate) *			1540				
	NCR-3S							
	(Rinse Blank) *							

Note: * QA/QC sample (see QAPP for explanation of how to collect and label these samples). Collect MS/MSD and duplicate from one of the four monitoring wells listed above. Create a unique sample ID for the blind duplicate using NCR 6S for the well number. Write the name of the well where the MS/MSD and duplicate were actually collected in the well number boxes under "MS/MSD" and "Duplicate" above.

Additional Comments:

FP-5A

WELL PURGING INFORMATION

SITE/PROJECT NAME: Niagara County Refuse Site

DATE: 11/20/09 (MM DD YY)

CREW MEMBERS: RC Becken

PURGING METHOD: Dedicated Bladder Pump

WELL NUMBER: NCR-48

ONE WELL VOLUME: .36 gallons

FIVE WELL VOLUMES: 1.8 gallons

(See Section 4.2.4.1 of the OM&M Manual and Table FP-4.1 to calculate well volumes based on current water levels.)

WELL VOLUME	1	2	3	4	5	TOT/AVG
VOLUME PURGED (total)	~.4	~.9				
pH	6.37	6.31				
TEMPERATURE	42.4	46.1				
CONDUCTIVITY	0.97	1.12				
TURBIDITY	1000 ÷	835				
COLOR	brown	tan				
ODOR	none	none				
COMMENTS	well dry after ~.3 gal	well dry				

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE PROTOCOLS

12/4/09 Richard C Becken

DATE

PRINT NAME

Richard C Becken

SIGNATURE

FP-4C

WELL PURGING INFORMATION

SITE/PROJECT NAME: Niagara County Refuse Site

DATE: 11/20/09 (MM DD YY)

CREW MEMBERS: RC Becker

PURGING METHOD: Dedicated Bladder Pump

WELL NUMBER: NCR-55

ONE WELL VOLUME: 0.86 gallons

FIVE WELL VOLUMES: 4.3 gallons

(See Section 4.2.4.1 of the OM&M Manual and Table FP-4.1 to calculate well volumes based on current water levels.)

WELL VOLUME	1	2	3	4	5	TOT/AVG
VOLUME PURGED (total)	~.85	~1.6				
pH	6.43	6.47				
TEMPERATURE	46.5	48.6				
CONDUCTIVITY	0.92	0.74				
TURBIDITY	21.3	856				
COLOR	clear	tan				
ODOR	none	none				
COMMENTS		well dry				

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE PROTOCOLS

12/4/09
DATE

Richard C Becker
PRINT NAME

Richard C Becker
SIGNATURE

FP-4C

WELL PURGING INFORMATION

SITE/PROJECT NAME: Niagara County Refuse Site

DATE: 11/20/09 (MM DD YY)

CREW MEMBERS: RC Becken

PURGING METHOD: Dedicated Bladder Pump

WELL NUMBER: NCR-13 S

ONE WELL VOLUME: .57 gallons

FIVE WELL VOLUMES: 2.85 gallons

(See Section 4.2.4.1 of the OM&M Manual and Table FP-4.1 to calculate well volumes based on current water levels.)

WELL VOLUME	1	2	3	4	5	TOT/AVG
VOLUME PURGED (total)	~.57	~1.3				
pH	6.18	6.5				
TEMPERATURE	46.8	47.0				
CONDUCTIVITY	1.33	1.16				
TURBIDITY	31.9	12.85				
COLOR	clear	clear				
ODOR	none	none				
COMMENTS	well dry at ~.7 gal	well dry				

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE PROTOCOLS

12/04/09
DATE

Richard C Becken
PRINT NAME

Richard C Becken
SIGNATURE

FP-4C

WELL PURGING INFORMATION

SITE/PROJECT NAME: Niagara County Refuse Site

DATE: 11/20/09 (MM DD YY)

CREW MEMBERS: RC Becken

PURGING METHOD: Dedicated Bladder Pump

WELL NUMBER: NCR-35

ONE WELL VOLUME: 0.54 gallons

FIVE WELL VOLUMES: 2.7 gallons

(See Section 4.2.4.1 of the OM&M Manual and Table FP-4.1 to calculate well volumes based on current water levels.)

WELL VOLUME	1	2	3	4	5	TOT/AVG
VOLUME PURGED (total)	~.54	~1.20				
pH	5.75	6.87				
TEMPERATURE	45.9	51.9				
CONDUCTIVITY	1.27	1.22				
TURBIDITY	15.8	13.57				
COLOR	almost clear	clear				
ODOR	none	none				
COMMENTS	well dry at .7 gal	well dry ~1.25				

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE PROTOCOLS

12/04/09 Richard C Becken

Richard C Becken

DATE

PRINT NAME

SIGNATURE

FP-4C

APPENDIX D

DATA VALIDATION REPORT

**DATA USABILITY SUMMARY REPORT
FOR
NIAGARA COUNTY REFUSE SITE**

Prepared By:

PARSONS

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Syracuse, NY 13212
Phone: (315) 451-9560
Fax: (315) 451-9570

JANUARY 2010

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LIST OF ATTACHMENTS

ATTACHMENT A - VALIDATED LABORATORY DATA

SECTION 1

DATA USABILITY SUMMARY

Groundwater samples were collected from the Niagara County Refuse site in North Tonawanda, New York on December 4, 2009. Analytical results from these samples were validated and reviewed by Parsons for usability with respect to the following requirements:

- Work Plan, and
- USEPA Region II Standard Operating Procedures (SOPs) for organic and inorganic data review.

The analytical laboratory for this project was Test America Laboratory (TAL) in Buffalo, New York. This laboratory is certified to conduct project analyses through the National Environmental Laboratory Accreditation Program (NELAP).

1.1 LABORATORY DATA PACKAGES

The laboratory data package turnaround time, defined as the time from sample receipt by the laboratory to receipt of the analytical data packages by Parsons, was 28 days on average for the groundwater samples.

The data packages received from TAL were paginated, complete, and overall were of good quality. Comments on specific quality control (QC) and other requirements are discussed in detail in the attached data validation report in Section 2.

1.2 SAMPLING AND CHAIN-OF-CUSTODY

Groundwater samples were collected, properly preserved, shipped under a COC record, and received at TAL within one day of sampling. All samples were received intact and in good condition at TAL.

1.3 LABORATORY ANALYTICAL METHODS

Groundwater samples were collected from the site and analyzed for volatile organic compounds (VOCs), certain semivolatile organic compounds (SVOCs), and metals. Summaries of issues concerning these laboratory analyses are presented in Subsections 1.3.1 through 1.3.3. The data qualifications resulting from the data validation review and statements on the laboratory analytical precision, accuracy, representativeness, completeness, and comparability (PARCC) are discussed for each analytical method in Section 2. The laboratory data were reviewed and may be qualified with the following validation flags:

- "U" - not detected at the value given,
- "UJ" - estimated and not detected at the value given,
- "J" - estimated at the value given,
- "N" - presumptive evidence at the value given, and
- "R" - unusable value.

The validated laboratory data were tabulated and are presented in Attachment A.

1.3.1 Volatile Organic Analysis

Groundwater samples collected from the site were analyzed for target compound list (TCL) VOCs using the USEPA SW-846 8260B analytical method. The reported results for the TCL VOC samples did not require qualification resulting from data validation. The reported TCL VOC analytical results were 100% complete (i.e., usable) for the groundwater data presented by TAL. PARCC requirements were met.

1.3.2 Semivolatile Organic Analysis

Groundwater samples collected from the site were analyzed for certain SVOCs using the USEPA SW-846 8270C analytical method. The SVOC samples did not require qualification resulting from data validation. The reported SVOC analytical results were 100% complete (i.e., usable) for the groundwater data presented by TAL. PARCC requirements were met.

1.3.3 Metals Analysis

Groundwater samples collected from the site were analyzed for target analyte list metals using the USEPA SW-846 6010B/7470A analytical methods. Certain metals results were considered estimated based upon matrix spike recoveries and serial dilutions. All of the metals data were considered usable and 100% complete for the groundwater data presented by TAL. PARCC requirements were met.

SECTION 2

DATA VALIDATION REPORT

2.1 GROUNDWATER DATA

Data review has been completed for data packages generated by TAL containing groundwater samples collected from the Niagara County Refuse site. The specific samples contained in these data packages, the analyses performed, and a usability summary, are presented in Table 2.1-1. All of these samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory. The validated laboratory data are presented in Attachment A.

Data validation was performed for all samples in accordance with the most current editions of the USEPA Region II SOPs for organic and inorganic data review. This data validation and usability report is presented by analysis type.

2.1.1 TCL Volatiles

The following items were reviewed for compliancy in the volatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Matrix spike blank (MSB) recoveries
- Laboratory method blank contamination and trip blank contamination
- Instrument performance
- Sample result verification and identification
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of MS/MSD precision and accuracy.

MS/MSD Precision and Accuracy

All precision (relative percent difference; RPD) and accuracy (percent recovery; %R) measurements were acceptable and within QC limits for all spiked compounds of designated project samples with the exception of the high accuracy results for

chloroethane (164%R/159%R; QC limit 69-136%R) during the spiked analyses of sample NCR-5S. Since this compound was not detected in the parent sample, validation qualification was not required.

Usability

All TCL volatile sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness and comparability. The TCL volatile data presented by TAL were 100% complete (i.e., usable) for groundwater. The validated TCL volatile laboratory data are tabulated and presented in Attachment A.

2.1.2 Semivolatiles

The following items were reviewed for compliance in the semivolatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- MSB recoveries
- Laboratory method blank contamination
- Instrument performance
- Sample result verification and identification
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols.

Usability

All semivolatile sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness and comparability. The semivolatile data presented by TAL were 100% complete (i.e., usable). The validated semivolatile laboratory data are tabulated and presented in Attachment A.

2.1.3 Metals

The following items were reviewed for compliancy in the metals analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration and laboratory preparation blank contamination
- Inductively coupled plasma (ICP) interference check sample (ICS)
- Matrix spike recoveries
- Laboratory duplicate precision
- Laboratory control sample
- ICP serial dilution
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of matrix spike recoveries and serial dilutions.

Matrix Spike Recoveries

All matrix spike (MS) recoveries were compliant and within QC acceptance limits with the exception of the low MS recovery for sodium (71%R; QC limit 75-125%R) and the high MS recoveries for calcium (201%R, 175%R; QC limit 75-125%R) and manganese (132%R, 130%R; QC limit 75-125%R) associated with all samples. Therefore, all sodium results were considered estimated, possibly biased low, with the positive results qualified “J” and nondetected results qualified “UJ” for the affected samples. Positive calcium and manganese results were considered estimated, possibly biased high, and qualified “J” for the affected samples.

Serial Dilutions

All serial dilutions results were compliant and within the QC limit with the exception of the serial dilution for aluminum. Therefore, positive aluminum results were considered estimated and qualified “J”.

Usability

All metals sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The metals data presented by TAL were 100% complete with all metals data considered valid and usable. The validated metals laboratory data are tabulated and presented in Attachment A.

TABLE 2.1-1
SUMMARY OF SAMPLE ANALYSES AND USABILITY
NIAGARA COUNTY REFUSE SITE

<u>SAMPLE ID</u>	<u>MATRIX</u>	<u>SAMPLE DATE</u>	<u>TCL VOCs</u>	<u>SVOCs</u>	<u>METALS</u>
NCR-3S	Water	1/11/08	OK	OK	OK
NCR-4S	Water	1/11/08	OK	OK	OK
NCR-5S	Water	1/11/08	OK	OK	OK
NCR-13S	Water	1/11/08	OK	OK	OK
FIELD DUP	Water	1/11/08	OK		
TRIP BLANK	Water	1/11/08	OK		
TOTAL SAMPLES			6	4	4

NOTES: OK - Sample analysis considered valid and usable.

ATTACHMENT A
VALIDATED LABORATORY DATA

			Dup of NCR-3S					
City of North Tonawanda WWTP 830 River Road North Tonawanda, NY C/O Niagara County Refuse Site Groundwater Sampling Event December 2009		Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	NCR-3S RSL0353-01 TAL-Buffalo RSL0353 WATER 12/4/2009 1/13/2010	NCR-6S RSL0353-07 TAL-Buffalo RSL0353 WATER 12/4/2009 1/13/2010	NCR-4S RSL0353-02 TAL-Buffalo RSL0353 WATER 12/4/2009 1/13/2010	NCR-5S RSL0353-03 TAL-Buffalo RSL0353 WATER 12/4/2009 1/13/2010	NCR-13S RSL0353-06 TAL-Buffalo RSL0353 WATER 12/4/2009 1/13/2010	TRIP BLANK RSL0353-08 TAL-Buffalo RSL0353 WATER 12/4/2009 1/13/2010
CAS NO.	COMPOUND	UNITS:						
	VOLATILES							
71-55-6	1,1,1-Trichloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
79-00-5	1,1,2-Trichloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
75-34-3	1,1-Dichloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
75-35-4	1,1-Dichloroethene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
107-06-2	1,2-Dichloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
540-59-0	1,2-Dichloroethene (total)	ug/L	2 U	2 U	2 U	2 U	2 U	2 U
78-87-5	1,2-Dichloropropane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
142-28-9	1,3-Dichloropropane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
78-93-3	2-Butanone	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
591-78-6	2-Hexanone	ug/L	5 U	5 U	5 U	5 U	5 U	5 U
108-10-1	4-Methyl-2-pentanone	ug/L	5 U	5 U	5 U	5 U	5 U	5 U
67-64-1	Acetone	ug/L	25 U	25 U	25 U	25 U	25 U	25 U
71-43-2	Benzene	ug/L	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
75-27-4	Bromodichloromethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
75-25-2	Bromoform	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
74-83-9	Bromomethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
75-15-0	Carbon Disulfide	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
56-23-5	Carbon tetrachloride	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
108-90-7	Chlorobenzene	ug/L	5 U	5 U	5 U	5 U	5 U	5 U
75-00-3	Chloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
67-66-3	Chloroform	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
74-87-3	Chloromethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
10061-01-5	cis-1,3-Dichloropropene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
124-48-1	Dibromochloromethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
100-41-4	Ethylbenzene	ug/L	5 U	5 U	5 U	5 U	5 U	5 U
75-09-2	Methylene chloride	ug/L	5 U	5 U	5 U	5 U	5 U	5 U
100-42-5	Styrene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
127-18-4	Tetrachloroethene	ug/L	5 U	5 U	5 U	5 U	5 U	5 U
108-88-3	Toluene	ug/L	5 U	5 U	5 U	5 U	5 U	5 U
10061-02-6	trans-1,3-Dichloropropene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
79-01-6	Trichloroethene	ug/L	5 U	5 U	5 U	5 U	5 U	5 U
75-01-4	Vinyl chloride	ug/L	2 U	2 U	2 U	2 U	2 U	2 U
1330-20-7	Total Xylenes	ug/L	5 U	5 U	5 U	5 U	5 U	5 U
	SEMIVOLATILES							
95-50-1	1,2-Dichlorobenzene	ug/L	9.4 U		9.4 U	9.4 U	9.4 U	
541-73-1	1,3-Dichlorobenzene	ug/L	9.4 U		9.4 U	9.4 U	9.4 U	
106-46-7	1,4-Dichlorobenzene	ug/L	9.4 U		9.4 U	9.4 U	9.4 U	
95-48-7	2-Methylphenol	ug/L	9.4 U		9.4 U	9.4 U	9.4 U	
108-39-4	3-Methylphenol	ug/L	9.4 U		9.4 U	9.4 U	9.4 U	
106-44-5	4-Methylphenol	ug/L	4.7 U		4.7 U	4.7 U	4.7 U	
108-95-2	Phenol	ug/L	9.4 U		9.4 U	9.4 U	9.4 U	
	METALS							
7429-90-5	Aluminum	ug/L	2190 J		12300 J	6810 J	3750 J	
7440-36-0	Antimony	ug/L	20 U		20 U	20 U	20 U	
7440-39-3	Barium	ug/L	57.3		125	140	98.7	
7440-41-7	Beryllium	ug/L	0.2 J		0.7 J	0.2 J	0.3 J	
7440-43-9	Cadmium	ug/L	0.4 J		0.9 J	1 U	0.3 J	
7440-70-2	Calcium	ug/L	148000 J		185000 J	90600 J	211000 J	
7440-47-3	Chromium	ug/L	14.1		10.6	17.8	21.5	
7440-48-4	Cobalt	ug/L	1.2 J		2.6 J	1.6 J	1 J	
7440-50-8	Copper	ug/L	11.9		19.3	15.5	9.9 J	
7439-89-6	Iron	ug/L	3550		56900	6130	5650	
7439-92-1	Lead	ug/L	5 U		28.3	6.7	5 U	
7439-95-4	Magnesium	ug/L	90400		61200	63500	73400	
7439-96-5	Manganese	ug/L	48.4 J		310 J	99.7 J	22.5 J	
7440-02-0	Nickel	ug/L	25.3		11.8	13.8	11.4	
7440-09-7	Potassium	ug/L	3430		11500	2690	3820	
7782-49-2	Selenium	ug/L	15 U		15 U	15 U	15 U	
7440-22-4	Silver	ug/L	3 U		3 U	3 U	3 U	
7440-23-5	Sodium	ug/L	11500 J		33400 J	26000 J	21800 J	
7440-28-0	Thallium	ug/L	20 U		20 U	20 U	20 U	
7440-62-2	Vanadium	ug/L	4.6 J		7.1	11	9.1	
7440-66-6	Zinc	ug/L	28.2		1340	56.3	30.2	
7439-97-6	Mercury	ug/L	0.2 U		0.2 U	0.2 U	0.2 U	

APPENDIX E
MONTHLY INSPECTION LOGS

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S):

RC BeckerDATE: 01 09 09
(MM DD YY)

Item	Inspect For	Action Required	Comments
1. Perimeter Collection System/Off-Site Forcemain			
<div>Manholes</div> <div> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div>	- cover on securely	<u>yes</u>	
	- condition of cover	<u>good</u>	
	- condition of inside of manhole	<u>good</u>	
	- flow conditions	<u>very low flow</u>	
<div>Wet Wells</div> <div> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div>	- cover on securely	<u>yes</u>	
	- condition of cover	<u>good</u>	
	- condition of inside of wet well	<u>good</u>	
2. Landfill Cap			
<div>Vegetated Soil Cover</div> <div> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div>	- erosion	<u>none</u>	
	- bare areas	<u>none</u>	
	- washouts	<u>none</u>	
	- leachate seeps	<u>none</u>	
	- length of vegetation	<u>show covered</u>	
	- dead/dying vegetation	<u>winter kill</u>	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): RC Becker

DATE: 10/10/09
(MM DD YY)

Item	Inspect For	Action Required	Comments
2. Landfill Cap (continued)			
Access Roads	- bare areas, dead/dying veg. - erosion - potholes or puddles - obstruction	<u>sand covered</u> <u>none</u> <u>none</u> <u>none</u>	
3. Wetlands (Area "F")	- dead/dying vegetation - change in water budget - general condition of wetlands	<u>winter kill</u> <u>normal</u> <u>good</u>	
4. Other Site Systems			
Perimeter Fence	- integrity of fence - integrity of gates - integrity of locks - placement and condition of signs	<u>good</u> <u>good</u> <u>good</u> <u>good</u>	

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): RC Becker

DATE: 01/09/09
(MM DD YY)

Item	Inspect For	Action Required	Comments
4. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Other Site Systems (continued)		
Drainage Ditches/ Swale Outlets	- sediment build-up	<u>none</u>	
	- erosion	<u>none</u>	
	- condition of erosion protection	<u>good</u>	
	- flow obstructions	<u>snow</u>	
	- dead/dying vegetation	<u>winter kill</u>	
Culverts	- cable concrete/gabion mats and riprap	<u>good</u>	
	- sediment build-up	<u>none</u>	
	- erosion	<u>none</u>	
	- condition of erosion protection	<u>good</u>	
	- flow obstructions	<u>snow</u>	
Gas Vents Wells	- intact / damage	<u>intact</u>	
	- locks secure	<u>yes</u>	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S):

RCF
BakerDATE: 02/05/07
(MM DD YY)

Item

Inspect For

Action Required

Comments

1. Perimeter Collection System/Off-Site Forcemain

Manholes

- cover on securely
- condition of cover
- condition of inside of manhole
- flow conditions

yes

good

good

no flow

Wet Wells

- cover on securely
- condition of cover
- condition of inside of wet well

yes

good

good

2. Landfill Cap

Vegetated Soil Cover

- erosion
- bare areas
- washouts
- leachate seeps
- length of vegetation
- dead/dying vegetation

none

none snow covered

none snow covered

none

snow covered

winter kill

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): R. F. Feller

DATE: 02/05/09
(MM DD YY)

Item	Inspect For	Action Required	Comments
2. Landfill Cap (continued)			
Access Roads	- bare areas, dead/dying veg. - erosion - potholes or puddles - obstruction	<u>snow covered</u> <u>none</u> <u>none</u> <u>snow</u>	
3. Wetlands (Area "F")	- dead/dying vegetation - change in water budget - general condition of wetlands	<u>winter kill</u> <u>slightly above normal</u> <u>good</u>	
4. Other Site Systems			
Perimeter Fence	- integrity of fence - integrity of gates - integrity of locks - placement and condition of signs	<u>good</u> <u>good</u> <u>good</u> <u>good</u>	

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): P. Becker

DATE: 02/05/07
(MM DD YY)

Comments

Action Required

Inspect For

Item

4. Other Site Systems (continued)

Drainage Ditches/
Swale Outlets

- sediment build-up

- erosion

- condition of erosion protection

- flow obstructions

- dead/dying vegetation

- cable concrete/gabion mats and
riprap

Culverts

- sediment build-up

- erosion

- condition of erosion protection

- flow obstructions

Gas Vents

- intact / damage

Wells

- locks secure

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S):

R. C. Barker

DATE: 03/05/07
(MM DD YY)

Item	Inspect For	Action Required	Comments
1. Perimeter Collection System/Off-Site Forcemain			
Manholes	- cover on securely	<i>yes</i>	
	- condition of cover	<i>good</i>	
	- condition of inside of manhole	<i>good</i>	
	- flow conditions	<i>no apparent flow</i>	
Wet Wells	- cover on securely	<i>yes</i>	
	- condition of cover	<i>good</i>	
	- condition of inside of wet well	<i>good</i>	
2. Landfill Cap			
Vegetated Soil Cover	- erosion	<i>none</i>	
	- bare areas	<i>none</i>	
	- washouts	<i>none</i>	
	- leachate seeps	<i>none</i>	
	- length of vegetation	<i>short winter kill</i>	
	- dead/dying vegetation	<i>winter kill</i>	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 03/05/09
(MM DD YY)

INSPECTOR(S): RC Becker

Comments

Action Required

Inspect For

2. Landfill Cap (continued)

--	--	--	--

Access Roads

- bare areas, dead/dying veg.

- erosion

- potholes or puddles

- obstruction

none

none

none

none

3. Wetlands (Area "F")

- dead/dying vegetation

- change in water budget

- general condition of wetlands

winter kill

slightly higher than normal

good

4. Other Site Systems

Perimeter Fence

- integrity of fence

- integrity of gates

- integrity of locks

- placement and condition of signs

good

good

good

good

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): RC Baker

DATE: 03/05/07
(MM DD YY)

Item	Inspect For	Action Required	Comments
4. Other Site Systems (continued)			
Drainage Ditches/ Swale Outlets	- sediment build-up	<u>none</u>	
	- erosion	<u>none</u>	
	- condition of erosion protection	<u>good</u>	
	- flow obstructions	<u>good</u>	
	- dead/dying vegetation	<u>winter kill</u>	
	- cable concrete/gabion mats and riprap	<u>good condition</u>	
Culverts	- sediment build-up	<u>none</u>	
	- erosion	<u>none</u>	
	- condition of erosion protection	<u>good</u>	
	- flow obstructions	<u>none</u>	
Gas Vents Wells	- intact / damage	<u>intact</u>	
	- locks secure	<u>yes</u>	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): *R. C. Baker*

DATE: 014/03/2017

(MM DD YY)

Comments

Action Required

1. Perimeter Collection System/Off-Site Forcemain

Item

Inspect For

Action Required

Manholes	- cover on securely	OK
	- condition of cover	good
	- condition of inside of manhole	good
	- flow conditions	OK

Wet Wells	- cover on securely	OK
	- condition of cover	good
	- condition of inside of wet well	good

2. Landfill Cap

Vegetated Soil Cover	- erosion	none
	- bare areas	none
	- washouts	none
	- leachate seeps	none
	- length of vegetation	short
	- dead/dying vegetation	winter kill

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): Bob Belton

DATE: 07/03/97
(MM DD YY)

Item	Inspect For	Action Required	Comments
2. Landfill Cap (continued)			
Access Roads	- bare areas, dead/dying veg.	<u>none</u>	
	- erosion	<u>none</u>	
	- potholes or puddles	<u>none</u>	
	- obstruction	<u>none</u>	
3. Wetlands (Area "P")	- dead/dying vegetation	<u>winter kill</u>	
	- change in water budget	<u>high</u>	
	- general condition of wetlands	<u>good</u>	
4. Other Site Systems			
Perimeter Fence	- integrity of fence	<u>good</u>	
	- integrity of gates	<u>good</u>	
	- integrity of locks	<u>good</u>	
	- placement and condition of signs	<u>good</u>	

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): RC Becker

DATE: 04/03/09
(MM DD YY)

Item	Inspect For	Action Required	Comments
4. <input type="checkbox"/>	Other Site Systems (continued)		
<input type="checkbox"/>	Drainage Ditches/ Swale Outlets		
<input type="checkbox"/>	- sediment build-up	<u>none</u>	
<input type="checkbox"/>	- erosion	<u>none</u>	
<input type="checkbox"/>	- condition of erosion protection	<u>good</u>	
<input type="checkbox"/>	- flow obstructions	<u>none</u>	
<input type="checkbox"/>	- dead/dying vegetation	<u>winterkill</u>	
<input type="checkbox"/>	- cable concrete/gabion mats and riprap	<u>good</u>	
<input type="checkbox"/>			
<input type="checkbox"/>	Culverts		
<input type="checkbox"/>	- sediment build-up	<u>none</u>	
<input type="checkbox"/>	- erosion	<u>none</u>	
<input type="checkbox"/>	- condition of erosion protection	<u>good</u>	
<input type="checkbox"/>	- flow obstructions	<u>none</u>	
<input type="checkbox"/>			
<input type="checkbox"/>	Gas Vents		
<input type="checkbox"/>	- intact / damage	<u>intact</u>	
<input type="checkbox"/>	Wells		
<input type="checkbox"/>	- locks secure	<u>yes</u>	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S):

R. Becken

DATE:

05/07/01
(MM DD YY)

Item	Inspect For	Action Required	Comments
1. Perimeter Collection System/Off-Site Foremain			
Manholes	- cover on securely - condition of cover - condition of inside of manhole - flow conditions	<i>yes</i> <i>good</i> <i>good</i> <i>no apparent flow</i>	
Wet Wells	- cover on securely - condition of cover - condition of inside of wet well	<i>yes</i> <i>good</i> <i>good</i>	
2. Landfill Cap			
Vegetated Soil Cover	- erosion - bare areas - washouts - leachate seeps - length of vegetation - dead/dying vegetation	<i>none</i> <i>none</i> <i>none</i> <i>none</i> <i>short</i> <i>yes</i>	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): RC Barken

DATE: 10/10/19
(MM DD YY)

Item	Inspect For	Action Required	Comments
2. Landfill Cap (continued)			
Access Roads	- bare areas, dead/dying veg. - erosion - potholes or puddles - obstruction	<u>yes</u> <u>none</u> <u>none</u> <u>none</u>	
3. Wetlands (Area "F")	- dead/dying vegetation - change in water budget - general condition of wetlands	<u>yes</u> <u>normal</u> <u>good</u>	
4. Other Site Systems			
Perimeter Fence	- integrity of fence - integrity of gates - integrity of locks - placement and condition of signs	<u>good</u> <u>good</u> <u>good</u> <u>good</u>	

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION:

Wheatfield, New York

INSPECTOR(S):

Ri Becker

DATE:

08/01/09
(MM DD YY)

Item	Inspect For	Action Required	Comments
4. <input type="checkbox"/>	Other Site Systems (continued)		
<input type="checkbox"/>	Drainage Ditches/ Swale Outlets		
<input type="checkbox"/>	- sediment build-up	<u>none</u>	
<input type="checkbox"/>	- erosion	<u>none</u>	
<input type="checkbox"/>	- condition of erosion protection	<u>good</u>	
<input type="checkbox"/>	- flow obstructions	<u>none</u>	
<input type="checkbox"/>	- dead/dying vegetation	<u>yes</u>	
<input type="checkbox"/>	- cable concrete/gabion mats and riprap	<u>good condition</u>	
<input type="checkbox"/>			
<input type="checkbox"/>	Culverts		
<input type="checkbox"/>	- sediment build-up	<u>none</u>	
<input type="checkbox"/>	- erosion	<u>none</u>	
<input type="checkbox"/>	- condition of erosion protection	<u>good</u>	
<input type="checkbox"/>	- flow obstructions	<u>none</u>	
<input type="checkbox"/>			
<input type="checkbox"/>	Gas Vents		
<input type="checkbox"/>	- intact /damage	<u>intact</u>	
<input type="checkbox"/>	Wells		
<input type="checkbox"/>	- locks secure	<u>yes</u>	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): RC Becken

DATE: 06/04/09
(MM DD YY)

Comments

Action Required

Inspect For

1. Perimeter Collection System/Off-Site Forcemain

Manholes

- cover on securely
- condition of cover
- condition of inside of manhole
- flow conditions

yes

good

good

no apparent flow

Wet Wells

- cover on securely
- condition of cover
- condition of inside of wet well

yes

good

good

2. Landfill Cap

Vegetated Soil Cover

- erosion
- bare areas
- washouts
- leachate seeps
- length of vegetation
- dead/dying vegetation

none

none

none

none

full

none

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): R. C. Becker

DATE: 01/01/01
(MM DD YY)

Item	Inspect For	Action Required	Comments
2. Landfill Cap (continued)			
Access Roads	- bare areas, dead/dying veg. - erosion - potholes or puddles - obstruction	<u>none</u> <u>none</u> <u>none</u> <u>none</u>	
3. Wetlands (Area "F")	- dead/dying vegetation - change in water budget - general condition of wetlands	<u>none</u> <u>average</u> <u>good</u>	
4. Other Site Systems			
Perimeter Fence	- integrity of fence - integrity of gates - integrity of locks - placement and condition of signs	<u>waiting for repair</u> <u>good</u> <u>good</u> <u>good</u>	

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): R. Becken

DATE: 06/04/09
(MM DD YY)

Item	Inspect For	Action Required	Comments
4. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Other Site Systems (continued)		
Drainage Ditches/ Swale Outlets	- sediment build-up - erosion - condition of erosion protection - flow obstructions - dead/dying vegetation - cable concrete/gabion mats and riprap	<u>none</u> <u>none</u> <u>good</u> <u>none</u> <u>none</u> <u>good</u>	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Culverts	<u>none</u> <u>none</u> <u>good</u> <u>none</u>	
<input type="checkbox"/> <input type="checkbox"/>	Gas Vents Wells	<u>intact</u> <u>yes</u>	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S):

Richard C Becker

DATE: 07/10/99
(MM DD YY)

Item

Inspect For

Action Required

Comments

1. Perimeter Collection System/Off-Site Forcemain

Manholes

- cover on securely

- condition of cover

- condition of inside of manhole

- flow conditions

OK - yes

good

good

no flow

Wet Wells

- cover on securely

- condition of cover

- condition of inside of wet well

yes

good

good

2. Landfill Cap

Vegetated Soil Cover

- erosion

- bare areas

- washouts

- leachate seeps

- length of vegetation

- dead/dying vegetation

none

no

no

no

fair

none

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 07/18/09
(MM DD YY)

INSPECTOR(S): RC Becker

Item	Inspect For	Action Required	Comments
2. Landfill Cap (continued)			
Access Roads	- bare areas, dead/dying veg.	no	
	- erosion	no	
	- potholes or puddles	no	
	- obstruction	none	
3. Wetlands (Area "F")	- dead/dying vegetation	no	
	- change in water budget	not met	
	- general condition of wetlands	good	
4. Other Site Systems			
Perimeter Fence	- integrity of fence	good	
	- integrity of gates	good	
	- integrity of locks	good	
	- placement and condition of signs	good	

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): DC Baker

DATE: 07/10/09
(MM DD YY)

Item

Inspect For

Action Required

Comments

4. Other Site Systems (continued)

Drainage Ditches/
Swale Outlets

- sediment build-up

- erosion

- condition of erosion protection

- flow obstructions

- dead/dying vegetation

- cable concrete/gabion mats and
riprap

Culverts

- sediment build-up

- erosion

- condition of erosion protection

- flow obstructions

Gas Vents

- intact / damage

Wells

- locks secure

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site LOCATION: Wheatfield, New York

INSPECTOR(S): RC Borken

DATE: 08/12/09
(MM DD YY)

Comments

Action Required

1. Perimeter Collection System/Off-Site Forcemain

Manholes	Inspect For	Action Required	Comments
<input type="checkbox"/>	- cover on securely	<u>OK</u>	
<input type="checkbox"/>	- condition of cover	<u>good</u>	
<input type="checkbox"/>	- condition of inside of manhole	<u>good</u>	
<input type="checkbox"/>	- flow conditions	<u>no flow</u>	

Wet Wells

<input type="checkbox"/>	- cover on securely	<u>yes</u>	
<input type="checkbox"/>	- condition of cover	<u>good</u>	
<input type="checkbox"/>	- condition of inside of wet well	<u>good</u>	

2. Landfill Cap

Vegetated Soil Cover	Inspect For	Action Required	Comments
<input type="checkbox"/>	- erosion	<u>none</u>	
<input type="checkbox"/>	- bare areas	<u>none</u>	
<input type="checkbox"/>	- washouts	<u>none</u>	
<input type="checkbox"/>	- leachate seeps	<u>none</u>	
<input type="checkbox"/>	- length of vegetation	<u>medium to long</u>	
<input type="checkbox"/>	- dead/dying vegetation	<u>none</u>	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 01/20/07
(MM DD YY)

INSPECTOR(S): DC Baker

Comments

Action Required

Inspect For

Item

2. Landfill Cap (continued)

Access Roads

- bare areas, dead/dying veg.
- erosion
- potholes or puddles
- obstruction

none
none
none
none

3. Wetlands (Area "F")

- dead/dying vegetation
- change in water budget
- general condition of wetlands

none
normal water level
good

4. Other Site Systems

Perimeter Fence

- integrity of fence
- integrity of gates
- integrity of locks
- placement and condition of signs

good
good
good
good

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

08	12	09
(MM)	(DD)	(YY)

INSPECTOR(S):

Item	Inspect For	Action Required	Comments
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4. Other Site Systems (continued)

Drainage Ditches/
Swale Outlets

- sediment build-up
- erosion

- erision

- condition of erosion protection

- flow obstructions

- dead/dying vegetation

- cable concrete/gabion mats and riprap

Culverts

- sediment build-up

- erosion

- condition of erosion protection

- flow obstructions

Gas Vents

- intact / damage

Wells

- locks secure

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S):

R.C. Barker

DATE: 09/05/09
(MM DD YY)

Item

Inspect For

Action Required

Comments

1. Perimeter Collection System/Off-Site Forcemain

Manholes

- cover on securely
- condition of cover
- condition of inside of manhole
- flow conditions

yes
good
good
no flow

Wet Wells

- cover on securely
- condition of cover
- condition of inside of wet well

yes
good
good

2. Landfill Cap

Vegetated Soil Cover

- erosion
- bare areas
- washouts
- leachate seeps
- length of vegetation
- dead/dying vegetation

none
none
none
none
tall
no

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S):

R. Belke

DATE: 03/05/09
(MM DD YY)

Item

Inspect For

Action Required

Comments

2. Landfill Cap (continued)

Access Roads

- bare areas, dead/dying veg.

- erosion

- potholes or puddles

- obstruction

none

none

none

none

3. Wetlands (Area "F")

- dead/dying vegetation

- change in water budget

- general condition of wetlands

none

lower

good

4. Other Site Systems

Perimeter Fence

- integrity of fence

- integrity of gates

- integrity of locks

- placement and condition of signs

good

good

good

good

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 07/05/97
(MM DD YY)

INSPECTOR(S):

RC Becker

Item	Inspect For	Action Required	Comments
4. <input type="checkbox"/>	Other Site Systems (continued)		
<input type="checkbox"/>	Drainage Ditches/ Swale Outlets		
<input type="checkbox"/>	- sediment build-up	none	
<input type="checkbox"/>	- erosion	none	
<input type="checkbox"/>	- condition of erosion protection	good	
<input type="checkbox"/>	- flow obstructions	none	
<input type="checkbox"/>	- dead/dying vegetation	none	
<input type="checkbox"/>	- cable concrete/gabion mats and riprap	good condition	
<input type="checkbox"/>			
<input type="checkbox"/>	Culverts		
<input type="checkbox"/>	- sediment build-up	none	
<input type="checkbox"/>	- erosion	none	
<input type="checkbox"/>	- condition of erosion protection	good	
<input type="checkbox"/>	- flow obstructions	none	
<input type="checkbox"/>			
<input type="checkbox"/>	Gas Vents		
<input type="checkbox"/>	- intact / damage	good condition	
<input type="checkbox"/>	Wells	yes	
<input type="checkbox"/>	- locks secure		

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): R. C. Baker

DATE: 11/6/09
(MM DD YY)

Item	Inspect For	Action Required	Comments
1. Perimeter Collection System/Off-Site Foremain			
Manholes	- cover on securely	<u>yes</u>	
	- condition of cover	<u>good</u>	
	- condition of inside of manhole	<u>good</u>	
	- flow conditions	<u>no apparent flow</u>	
Wet Wells	- cover on securely	<u>yes</u>	
	- condition of cover	<u>good</u>	
	- condition of inside of wet well	<u>good</u>	
2. Landfill Cap			
Vegetated Soil Cover	- erosion	<u>none</u>	
	- bare areas	<u>none</u>	
	- washouts	<u>none</u>	
	- leachate seeps	<u>none</u>	
	- length of vegetation	<u>short</u>	
	- dead/dying vegetation	<u>no</u>	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site LOCATION: Wheatfield, New York

DATE: 11/09/09
(MM DD YY)

INSPECTOR(S): RC Boken

Comments

Action Required

2. Landfill Cap (continued)

Access Roads

- bare areas, dead/dying veg.

- erosion

- potholes or puddles

- obstruction

no

no

no

none

3. Wetlands (Area "F")

- dead/dying vegetation

- change in water budget

- general condition of wetlands

no

normal

good

4. Other Site Systems

Perimeter Fence

- integrity of fence

- integrity of gates

- integrity of locks

- placement and condition of signs

good

good

good

OK

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S):

R. C. Becker

DATE: 11/01/09
(MM DD YY)

Item

Inspect For

Action Required

Comments

4. Other Site Systems (continued)

Drainage Ditches/
Swale Outlets

- sediment build-up

- erosion

- condition of erosion protection

- flow obstructions

- dead/dying vegetation

- cable concrete/gabion mats and
riprap

none
none
good
none
no
good condition

Culverts

- sediment build-up

- erosion

- condition of erosion protection

- flow obstructions

none
none
good
none

Gas Vents

- intact / damage

Wells

- locks secure

intact / good
yes

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S):

Richard Becken

DATE:

11	07	09
(MM	DD	YY)

Comments

Action Required

Inspect For

1. Perimeter Collection System/Off-Site Foremain

--	--	--	--	--

Manholes

- cover on securely
- condition of cover
- condition of inside of manhole
- flow conditions

yes
good
good
good

--	--	--	--	--

Wet Wells

- cover on securely
- condition of cover
- condition of inside of wet well

yes
good
good

2. Landfill Cap

--	--	--	--	--

Vegetated Soil Cover

- erosion
- bare areas
- washouts
- leachate seeps
- length of vegetation
- dead/dying vegetation

none
none
none
none
short
no

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S):

Richard Becker

DATE: 11/10/17
(MM DD YY)

Item	Inspect For	Action Required	Comments
2. Landfill Cap (continued)			
Access Roads	- bare areas, dead/dying veg.	<i>none</i>	
	- erosion	<i>none</i>	
	- potholes or puddles	<i>none</i>	
	- obstruction	<i>none</i>	
3. Wetlands (Area "F")	- dead/dying vegetation	<i>winter kill</i>	
	- change in water budget	<i>normal</i>	
	- general condition of wetlands	<i>good</i>	
4. Other Site Systems			
Perimeter Fence	- integrity of fence	<i>good</i>	
	- integrity of gates	<i>good</i>	
	- integrity of locks	<i>good</i>	
	- placement and condition of signs	<i>good</i>	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S):

Richard Becker

DATE: 11/10/79
(MM DD YY)

Item	Inspect For	Action Required	Comments
4. <input type="checkbox"/>	Other Site Systems (continued)		
<input type="checkbox"/>	Drainage Ditches / Swale Outlets		
<input type="checkbox"/>	- sediment build-up	<u>none</u>	
<input type="checkbox"/>	- erosion	<u>none</u>	
<input type="checkbox"/>	- condition of erosion protection	<u>good</u>	
<input type="checkbox"/>	- flow obstructions	<u>none</u>	
<input type="checkbox"/>	- dead / dying vegetation	<u>none</u>	
<input type="checkbox"/>	- cable concrete / gabion mats and riprap	<u>good</u>	
<input type="checkbox"/>			
<input type="checkbox"/>	Culverts		
<input type="checkbox"/>	- sediment build-up	<u>none</u>	
<input type="checkbox"/>	- erosion	<u>none</u>	
<input type="checkbox"/>	- condition of erosion protection	<u>good</u>	
<input type="checkbox"/>	- flow obstructions	<u>none</u>	
<input type="checkbox"/>			
<input type="checkbox"/>	Gas Vents		
<input type="checkbox"/>	- intact / damage	<u>intact</u>	
<input type="checkbox"/>	Wells		
<input type="checkbox"/>	- locks secure	<u>yes</u>	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): Rc Becken

DATE: 11/21/04
(MM DD YY)

Item	Inspect For	Action Required	Comments
1. Perimeter Collection System/Off-Site Foremain			
Manholes	- cover on securely	OK	
	- condition of cover	OK	
	- condition of inside of manhole	OK	
	- flow conditions	no flow	
Wet Wells	- cover on securely	OK	
	- condition of cover	OK	
	- condition of inside of wet well	OK	
2. Landfill Cap			
Vegetated Soil Cover	- erosion	none	
	- bare areas	none	
	- washouts	none	
	- leachate seeps	none	
	- length of vegetation	short	
	- dead/dying vegetation	winter kill	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): RC Becken

DATE: 11/20/49
(MM DD YY)

Item	Inspect For	Action Required	Comments
2. Landfill Cap (continued)			
Access Roads	- bare areas, dead/dying veg. - erosion - potholes or puddles - obstruction	none none yes none	
3. Wetlands (Area "F")	- dead/dying vegetation - change in water budget - general condition of wetlands	winter kill high good	
4. Other Site Systems			
Perimeter Fence	- integrity of fence - integrity of gates - integrity of locks - placement and condition of signs	good good good good	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): R. C. Bouten

DATE: 11/20/40/97
(MM DD YY)

Comments

Action Required

Inspect For

4. Other Site Systems (continued)

- Drainage Ditches/
Swale Outlets
 - sediment build-up
 - erosion
 - condition of erosion protection
 - flow obstructions
 - dead/dying vegetation
 - cable concrete/gabion mats and riprap

- Culverts
 - sediment build-up
 - erosion
 - condition of erosion protection
 - flow obstructions

- Gas Vents
 - intact / damage
- Wells
 - locks secure

FORM 1

APPENDIX F

MAINTENANCE RECORD LOGS

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS:

RC Becker

1. Date: 02/09/09 (MM DD YY)

Time: 1300 (HH mm)

Scheduled/Unscheduled:

scheduled

Type of Maintenance Performed:

replace discharge hose on WWA pump

2. Company Performing Maintenance

Name:

Dim Enterprises

Address:

7134 Marquid Dr.

North Tonawanda, NY 14120

Contact Name:

Richard C Becker

3. Methods Used:

pulled pump replaced hose, returned pump to well

Description of Material Removed:

hose

Problems/Comments:

none

2/10/09

DATE

Richard C Becker

INSPECTOR

Richard C Becker

INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: Chad Becker

1. Date: 021909 (MM DD YY)

Time: 1520 (HH mm)

Scheduled/Unscheduled: unscheduled

Type of Maintenance Performed: electric tripped on WWA pump

2. Company Performing Maintenance

Name: O-M Enterprises Inc.

Address: 7134 Manicoid Dr.
North Tonawanda, NY 14120

Contact Name: Rick Becker

3. Methods Used:

reset breaker

Description of Material Removed:

none

Problems/Comments:

none

2/19/09
DATE

Chad Becker
INSPECTOR

[Signature]
INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: Chad Boeken

1. Date: 02/20/09 (MM DD YY)

Time: 1430 (HH mm)

Scheduled/Unscheduled: unscheduled

Type of Maintenance Performed: electric tripped on WWA pump

2. Company Performing Maintenance

Name: Dim Enterprises Inc.

Address: 7134 Manigault Dr.
North Tonawanda, NY 14120

Contact Name: Pick Boeken

3. Methods Used:

reset breaker

Description of Material Removed:

none

Problems/Comments:

none

2/20/09

DATE

Chad Boeken

INSPECTOR

[Signature]

INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: Chad Becker

1. Date: 02/21/09 (MM DD YY)

Time: 0900 (HH mm)

Scheduled/Unscheduled: unscheduled

Type of Maintenance Performed: electric breaker tripped on WWA

2. Company Performing Maintenance

Name: Dim Enterprises Inc

Address: 7134 Marigold Dr

North Tonawanda, NY 14120

Contact Name: Rick Becker

3. Methods Used:

reset breaker, pulled pump up several inches to get to of
pump out of the water!

Description of Material Removed:

none

Problems/Comments:

none

2/21/09

DATE

Chad Becker

INSPECTOR

[Signature]

INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becker

1. Date: 030509 (MM DD YY)

Time: 1245 (HH mm)

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: replace power lead on pump for WWA

2. Company Performing Maintenance

Name: OEM Enterprises Inc.

Address: 7134 Manifold Dr.
North Tonawanda, NY 14120

Contact Name: Rick Becker

3. Methods Used:

pulled pump, replaced power lead and pump cylinder
replaced pump

Description of Material Removed:

power lead and stainless steel pump cylinder

Problems/Comments:

none

3/5/09
DATE

Richard C. Becker
INSPECTOR

Richard C. Becker
INSPECTOR'S SIGNATURE

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS:

RC Becker

1. Date: 03/16/09 (MM DD YY)

Time: 1430 (HH mm)

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: switch motor starters on wet well A

2. Company Performing Maintenance

Name: D+M Enterprises Inc.

Address: 7134 Mangold Dr.

North Tonawanda, NY 14120

Contact Name: Richard C. Becker

3. Methods Used:

disconnected motor power lead from well power box #B and
reconnected to well power box A

Description of Material Removed:

none

Problems/Comments:

none

3/16/09

DATE

Richard C Becker

INSPECTOR

Richard C Becker

INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becken

1. Date: 04/09/09 (MM DD YY)

Time: 0930 (HH mm)

Scheduled/Unscheduled: unscheduled

Type of Maintenance Performed: repair discharge hose

2. Company Performing Maintenance

Name: O+M Enterprises, Inc.

Address: 7134 Manigold Dr.
North Tonawanda, NY 14120

Contact Name: Rick Becken

3. Methods Used:

cut bad section of hose replaced hose end and reconnected
to discharge pipe

Description of Material Removed:

none

Problems/Comments:

none

4/9/09

DATE

Richard C Becken

INSPECTOR

Richard C Becken

INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becken

1. Date: 05/14/09 (MM DD YY)

Time: 1230 (HH mm)

Scheduled/Unscheduled: unscheduled

Type of Maintenance Performed: temp: repair of fence

2. Company Performing Maintenance

Name: DM Enterprises, Inc

Address: 7154 Manigault Dr.

North Tonawanda, NY 14120

Contact Name: Rick Becken

3. Methods Used:

Found farmer had pulled fence down with his farm equipment while tilling soil in field. Called Niagara County sheriff who responded he called farmer D. Milleville who found out that one of his employees had done it and not told anyone. D. Milleville (310-4004) told me he would contact his insurance carrier to get the fence repaired

Description of Material Removed:

none. I tried to fix the fence back up the best I could to secure the area, but fence is twisted and bent up badly and two fence posts were bent over at ground level.

Problems/Comments:

I will visit site more frequently until fence is repaired

5/14/09

DATE

Richard C Becken

INSPECTOR

Richard C Becken

INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS:

F. J. Becken

1. Date:

0	6	1	1	0	0
---	---	---	---	---	---

 (MM DD YY)

Time:

0	9	0	0
---	---	---	---

 (HH mm)

Scheduled/Unscheduled: Scheduled

Type of Maintenance Performed: move perimeter of landfill

2. Company Performing Maintenance

Name: DIM Enterprises, Inc.

Address: 7134 Margold Dr.
North Tonawanda, NY 14120

Contact Name: Richard C. Becken

3. Methods Used:

Tractor/mower - moved perimeter around wells and several
paths between wells.

Description of Material Removed:

none

Problems/Comments:

none

6/11/00
DATE

Richard C. Becken
INSPECTOR

[Signature]
INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: R. Becken

1 Date: 061807 (MM DD YY)

Time: 1700 (HH mm)

Scheduled/Unscheduled: unscheduled

Type of Maintenance Performed: well pump float switch check

2. Company Performing Maintenance

Name: D+M Enterprises Inc.

Address: 7134 Main St.
North Tonawanda, NY 14120

Contact Name: Richard Becken

3. Methods Used:

more conduct that float ~~switch~~ switches are attached to
to free Temporal float

Description of Material Removed:

none

Problems/Comments:

none

6/18/09
DATE

Richard C. Becken
INSPECTOR

[Signature]
INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becker

1. Date: 07/16/09 (MM DD YY)

Time: 1150 (HH mm)

Scheduled/Unscheduled: Scheduled

Type of Maintenance Performed: pulled, cleaned + checked well pump wet well

2. Company Performing Maintenance

Name: O&M Enterprises Inc

Address: 7134 Marigold Dr.

North Tonawanda, NY 14120

Contact Name: Rick Becker

3. Methods Used:

pulled pump, cleaned pump exterior, check wiring, pump, motor +
hose, reinstalled

Description of Material Removed:

none

Problems/Comments:

none

7/16/09

DATE

Richard C Becker

INSPECTOR

Richard C Becker

INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becken

1. Date: 07/17/09 (MM DD YY)

Time: 1300 (HH mm)

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: pulled, cleaned + checked well pump Wet Well B

2. Company Performing Maintenance

Name: ORM Enterprises Inc.

Address: 7134 Marigold Dr.

North Tonawanda, NY 14120

Contact Name: Rick Becken

3. Methods Used:

pulled pump, cleaned pump exterior, checked wiring, pump + motor
discharge hose, reinstalled

Description of Material Removed:

none

Problems/Comments:

none

7/17/09

DATE

Richard C Becken

INSPECTOR

Richard C Becken

INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: Bill John

1. Date: 07/18/09 (MM DD YY)

Time: 0900 (HH mm)

Scheduled/Unscheduled: Scheduled

Type of Maintenance Performed: repair fence

2. Company Performing Maintenance

Name: Woodsmith Fence Corp

Address: 5679 Tonawanda Creek Rd
Lockport, NY 14094

Contact Name: Bill

3. Methods Used:

cut out damaged fence, removed damaged posts
replaced posts + fence

Description of Material Removed:

damaged posts, fence

Problems/Comments:

none

7/18/09

DATE

Richard C Becker

INSPECTOR

Richard C Becker

INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: Bill + John

1. Date: 07/21/09 (MM DD YY)

Time: 0800 (HH mm)

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: repair fence

2. Company Performing Maintenance

Name: Woodsmith Fence Corp

Address: 5679 Tonawanda Creek Road
Lockport, NY 14094

Contact Name: Bill

3. Methods Used:

repaired fence

Description of Material Removed:

several bent posts

Problems/Comments:

none

7/27/09
DATE

Richard C. Becken
INSPECTOR

Richard C. Becken
INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becken

1. Date: 08/12/09 (MM DD YY)

Time: 0900 (HH mm)

Scheduled/Unscheduled: mowed grass

Type of Maintenance Performed: Scheduled

2. Company Performing Maintenance

Name: O+M Enterprises

Address: 7134 Margold Dr.

North Tonawanda, NY 14120

Contact Name: RC Becken

3. Methods Used:

tractor with mower

Description of Material Removed:

none

Problems/Comments:

none

8/12/09

DATE

Richard C Becken

INSPECTOR

RC Becken

INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becken

1. Date: 08/12/07 (MM DD YY)

Time: 1200 (HH mm)

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: changed pump, motor + discharged hose
ordered float switches (4)

2. Company Performing Maintenance

Name: O+M Enterprises Inc.

Address: 7134 Monigol Dr.

North Tonawanda, NY 14120

Contact Name: Rick Becken

3. Methods Used:

pulled pump installed new pump + motor

Description of Material Removed:

none

Problems/Comments:

none

8/12/07

DATE

Rick Becken

INSPECTOR

Rick C Becken

INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: Richard C. Becken

1. Date: 10/09/09 (MM DD YY)

Time: 1300 (HH mm)

Scheduled / Unscheduled: unscheduled

Type of Maintenance Performed: repair wet well B pump

2. Company Performing Maintenance

Name: O&M Enterprises, Inc.

Address: 7134 Marigold Drive
North Tonawanda, NY 14120

Contact Name: Richard C. Becken

3. Methods Used:

pulled pump, cleaned pump, changed discharge pipe
which had corroded and had a hole in it

Description of Material Removed:

2" pipe nipple

Problems / Comments:

none

10/09/09

DATE

Richard C. Becken

INSPECTOR

Richard C. Becken

INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: Richard C. Becken

1. Date: 10/12/09 (MM DD YY)

Time: 1100 (HH mm)

Scheduled/Unscheduled:

scheduled

Type of Maintenance Performed: reinstall well casing top on East B

2. Company Performing Maintenance

Name: O&M Enterprises, Inc.

Address: 7134 Marigold Drive

North Tonawanda, NY 14120

Contact Name: Richard C. Becken

3. Methods Used:

installed new stainless steel hinge on top of well casing

Description of Material Removed:

none

Problems/Comments:

none

10/12/09

DATE

Richard C. Becken

INSPECTOR

Richard C. Becken

INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: Richard C. Becken

1. Date: 10/12/09 (MM DD YY)

Time: 1000 (HH mm)

Scheduled/Unscheduled: Scheduled

Type of Maintenance Performed: repair small hole in perimeter fence

2. Company Performing Maintenance

Name: O&M Enterprises, Inc.

Address: 7134 Marigold Drive
North Tonawanda, NY 14120

Contact Name: Richard C. Becken

3. Methods Used:

weaved wire together

Description of Material Removed:

none

Problems/Comments:

none

10/12/09
DATE

Richard C. Becken
INSPECTOR

Richard C. Beck
INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: Richard C. Becken

1. Date:

1	1	0	6	0	9
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 (MM DD YY)

Time:

1	6	3	0
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 (HH mm)

Scheduled/Unscheduled: unscheduled

Type of Maintenance Performed: met National Grid to replace electric meter

2. Company Performing Maintenance

Name: O&M Enterprises, Inc.

Address: 7134 Marigold Drive
North Tonawanda, NY 14120

Contact Name: Richard C. Becken

3. Methods Used:

National Grid employee changed electric meter, the new meter is a
remote read meter so they no longer need to enter the site to get
a reading

Description of Material Removed:

old meter


Problems/Comments.

none

11/06/09
DATE

Richard C. Becken

INSPECTOR



INSPECTOR'S SIGNATURE

FORM 2

APPENDIX G
WATER LEVEL RECORDS

WATER LEVEL RECORD

PROJECT NAME: Niagara County Refuse Site LOCATION: Wheatfield, New York

DATE: 01/09/09
(MM DD YY)

CREW MEMBERS: Richard C. Becken

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
East "A"	11:45	598.93	25.34	573.59
East "B"	11:25	596.23	19.85	576.38
East "C"	10:55	598.69	20.22	578.47
East "D"	10:35	593.20	14.85	578.35
NCR-3S	9:45	579.60	2.97	576.63
NCR-4S	10:50	591.88	2.9	588.98
NCR-5S	9:15	597.34	6.33	591.01
NCR-13S	12:15	593.13	4.4	588.73

Wet Wells

			Depth of water	
WWA	12:30		~16"	
WWB	10:15		~12"	
WWC	9:55		~9"	
WWD	9:30		~8"	

Total System Flow	Time of Measurement
43712850	12:30

FORM 16

WATER LEVEL RECORD

PROJECT NAME: NIAGARA COUNTY
REFUSE SITE

LOCATION: Wheatfield, New York

DATE: 02/05/09
(MM DD YY)

CREW MEMBERS: RC Becken

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	12:00	598.93	25.54	5 7 3 . 3 9
EAST "B"	12:15	596.23	20.05	5 7 6 . 1 8
EAST "C"	12:35	598.69	20.56	5 7 8 . 1 3
EAST "D"	12:40	593.20	15.25	5 7 7 . 9 5
NCR-3S	10:45	579.60	4.11	5 7 5 . 4 9
NCR-4S	11:00	591.88	3.19	5 8 8 . 6 9
NCR-5S	9:00	597.34	7.42	5 8 9 . 9 2
NCR-13S	9:20	593.13	5.09	5 8 8 . 0 4

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	11:50		~10"
WW B	11:30		~8"
WW C	10:25		~8"
WW D	10:05		~12"

Total System Flow	Time of Measurement
44029190	11:50

FP-3D

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY
REFUSE SITE*

LOCATION: *Wheatfield, New York*

DATE:

3/5/2009

MMDDYY

CREW MEMBERS: *RC Becken*

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	11:55	598.93	25.6	573.33
EAST "B"	12:15	596.23	19.94	576.29
EAST "C"	12:25	598.69	20.2	578.49
EAST "D"	12:40	593.20	15.54	577.66
NCR-3S	9:50	579.60	3.55	576.05
NCR-4S	9:15	591.88	3.36	588.52
NCR-5S	11:30	597.34	6.78	590.56
NCR-13S	10:35	593.13	5.01	588.12

WET WELLS

Wet Well	Time of Measurement		Depth of Water
WW A	10:45		~10"
WW B	9:55		~12"
WW C	9:25		~6"
WW D	10:15		~6"

Total System Flow	Time of Measurement
44684020	10:45

FORM 16

WATER LEVEL RECORD

PROJECT NAME: NIAGARA COUNTY
REFUSE SITE

LOCATION: Wheatfield, New York

DATE:

4/3/2009

MMDDYY

CREW MEMBERS: RC Becken

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	12:55	598.93	25.42	573.33
EAST "B"	12:15	596.23	19.44	576.29
EAST "C"	12:25	598.69	19.36	578.49
EAST "D"	12:40	593.20	14.81	577.66
NCR-3S	11:00	579.60	2.2	576.05
NCR-4S	11:45	591.88	2.39	588.52
NCR-5S	12:00	597.34	8	590.56
NCR-13S	10:35	593.13	4.04	588.12

WET WELLS

Wet Well	Time of Measurement		Depth of Water
WW A	10:00		~12"
WW B	11:25		~11"
WW C	10:45		~6"
WW D	10:15		~7"

Total System Flow	Time of Measurement
45203230	10:00

FORM 16

WATER LEVEL RECORD

PROJECT NAME: NIAGARA COUNTY
REFUSE SITE

LOCATION: Wheatfield, New York

DATE:

0	5	0	1	0	9
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(M M D D Y Y)

CREW MEMBERS: RC Becken

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	10:55	598.93	25.64	5 7 3 . 2 9
EAST "B"	11:25	596.23	19.99	5 7 6 . 2 4
EAST "C"	11:55	598.69	20.35	5 7 8 . 3 4
EAST "D"	12:20	593.20	15.65	5 7 7 . 5 5
NCR-3S	10:00	579.60	3.48	5 7 6 . 1 2
NCR-4S	10:30	591.88	2.9	5 8 8 . 9 8
NCR-5S	9:15	597.34	6.46	5 9 0 . 8 8
NCR-13S	9:35	593.13	4.77	5 8 8 . 3 6

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	9:15		~10"
WW B	10:45		~12"
WW C	10:10		~6"
WW D	9:40		~6"

Total System Flow	Time of Measurement
459770200	9:15

FP-3D

WATER LEVEL RECORD

PROJECT NAME: NIAGARA COUNTY
REFUSE SITE

LOCATION: Wheatfield, New York

DATE:

0	6	0	4	0	9
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(MM D D Y Y)

CREW MEMBERS: RC Becken

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	10:40	598.93	25.66	5 7 3 . 2 7
EAST "B"	11:25	596.23	20	5 7 6 . 2 3
EAST "C"	12:00	598.69	20.55	5 7 8 . 1 4
EAST "D"	12:20	593.20	15.75	5 7 7 . 4 5
NCR-3S	9:50	579.60	dry	
NCR-4S	10:15	591.88	dry	
NCR-5S	9:05	597.34	6.87	5 9 0 . 4 7
NCR-13S	9:25	593.13	5.95	5 8 7 . 1 8

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	9:15		~10"
WW B	10:45		~8"
WW C	10:10		~7"
WW D	9:40		~6"

Total System Flow	Time of Measurement
46272300	9:20

FP-3D

WATER LEVEL RECORD

PROJECT NAME: NIAGARA COUNTY
REFUSE SITE

LOCATION: Wheatfield, New York

DATE:

0	7	1	0	0	9
(M M D D Y Y)					

CREW MEMBERS: RC Becken

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	11:50	598.93	25.62	5 7 3 . 2 7
EAST "B"	12:15	596.23	20.15	5 7 6 . 2 3
EAST "C"	12:35	598.69	20.51	5 7 8 . 1 4
EAST "D"	12:55	593.20	15.62	5 7 7 . 4 5
NCR-3S	10:45	579.60	dry	
NCR-4S	11:10	591.88	4.65	
NCR-5S	11:30	597.34	10.1	5 9 0 . 4 7
NCR-13S	10:10	593.13	7.47	5 8 7 . 1 8

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	10:00		~8"
WW B	11:00		~10"
WW C	10:30		~6"
WW D	10:20		~5"

Total System Flow	Time of Measurement
463354	10:00

FP-3D

WATER LEVEL RECORD

PROJECT NAME: Niagara County Refuse Site LOCATION: Wheatfield, New York

DATE: 08/12/09
(MM DD YY)

CREW MEMBERS: Richard C. Becken

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
East "A"	1255	598.93	25.51	573.47
East "B"	1230	516.23	19.77	376.46
East "C"	1155	598.69	20.33	578.36
East "D"	1140	593.20	15.51	577.69
NCR-3S	1025	579.60	3.66	575.94
NCR-4S	1050	591.88	2.98	588.90
NCR-5S	1120	597.34	7.47	589.87
NCR-13S	1445	593.13	5.92	587.21

Wet Wells

WWA	1500	depth of water 6"		
WWB	1055	10"		
WWC	1000	7"		
WWD	0900	8"		

Total System

Time of

Flow

Measurement

46489700	1500

FORM 16

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY
REFUSE SITE*

LOCATION: Wheatfield, New York

DATE:

0	9	0	5	0	9
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(M M D D Y Y)

CREW MEMBERS: RC Becken

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	11:25	598.93	25.52	5 7 3 . 4 1
EAST "B"	11:50	596.23	19.83	5 7 6 . 4 0
EAST "C"	12:15	598.69	20.3	5 7 8 . 3 9
EAST "D"	12:40	593.20	15.69	5 7 7 . 5 1
NCR-3S	10:00	579.60	dry	
NCR-4S	10:30	591.88	dry	
NCR-5S	9:30	597.34	9.88	5 8 7 . 4 6
NCR-13S	11:00	593.13	7.45	5 8 5 . 6 8

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	9:00		~9"
WW B	10:45		~8"
WW C	9:45		~6"
WW D	9:15		~6"

Total System Flow	Time of Measurement
46566675	10:00

FP-3D

WATER LEVEL RECORD

PROJECT NAME: NIAGARA COUNTY
REFUSE SITE

LOCATION: Wheatfield, New York

DATE:

1	0	0	9	0	9
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(M M D D Y Y)

CREW MEMBERS: RC Becken

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	11:55	598.93	25.45	5 7 3 . 4 8
EAST "B"	12:15	596.23	19.78	5 7 6 . 4 5
EAST "C"	12:35	598.69	20.04	5 7 8 . 6 5
EAST "D"	12:50	593.20	15.22	5 7 7 . 9 8
NCR-3S	10:00	579.60	4.52	5 7 6 . 1 1
NCR-4S	10:55	591.88	3.49	5 8 8 . 3 9
NCR-5S	11:20	597.34	dry	
NCR-13S	11:35	593.13	dry	

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	9:00		~12"
WW B	10:25		~12"
WW C	9:45		~5"
WW D	9:25		~8"

Total System Flow	Time of Measurement
46605320	9:00

FP-3D

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY
REFUSE SITE*

LOCATION: Wheatfield, New York

DATE:

1	1	0	8	0	9
(M M D D Y Y)					

CREW MEMBERS: RC Becken

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	12:55	598.93	25.63	5 7 3 . 3 0
EAST "B"	13:15	596.23	19.85	5 7 6 . 3 8
EAST "C"	13:35	598.69	20.45	5 7 8 . 2 4
EAST "D"	13:50	593.20	15.45	5 7 7 . 7 5
NCR-3S	11:00	579.60	3.74	5 7 5 . 8 6
NCR-4S	11:55	591.88	3.15	5 8 8 . 7 3
NCR-5S	12:20	597.34	9.78	5 8 7 . 5 6
NCR-13S	12:35	593.13	6.16	5 8 6 . 9 7

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	10:00		~9"
WW B	11:25		~12"
WW C	10:45		~4"
WW D	10:25		~7"

Total System Flow	Time of Measurement
46730745	10:00

FP-3D

WATER LEVEL RECORD

PROJECT NAME: NIAGARA COUNTY
REFUSE SITE

LOCATION: Wheatfield, New York

DATE:

1	2	0	4	0	9
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(MM D D Y Y)

CREW MEMBERS: RC Becken

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B	
		feet	feet	feet	
EAST "A"	11:45	598.93	25.53	5 7 3 .	4 0
EAST "B"	12:00	596.23	19.66	5 7 6 .	5 7
EAST "C"	12:10	598.69	20.3	5 7 8 .	3 9
EAST "D"	12:25	593.20	18.98	5 7 4 .	2 2
NCR-3S	7:15	579.60	2.57	5 7 7 .	0 3
NCR-4S	7:45	591.88	2.78	5 8 9 .	1 0
NCR-5S	8:25	597.34	5.92	5 9 1 .	4 2
NCR-13S	9:20	593.13	4.27	5 8 8 .	8 6

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	11:00		~9"
WW B	11:15		~5"
WW C	8:35		~10"
WW D	10:25		~9"

Total System Flow	Time of Measurement
47308225	11:00

FP-3D