

# SEMI-ANNUAL DATA SUMMARY REPORT

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## NIAGARA COUNTY REFUSE DISTRICT SITE

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Wheatfield, Niagara County, New York

(NYSDEC Site No. 9-32-026)

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SUBMITTED TO:



**UNITED STATES  
ENVIRONMENTAL PROTECTION  
AGENCY**



**NEW YORK STATE  
DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION**

SUBMITTED FOR:

**NIAGARA COUNTY REFUSE DISTRICT  
AND PRP GROUP**

PREPARED BY:

**PARSONS**

40 La Riviere Drive, Suite 350  
Buffalo, New York 14202  
(716) 541-0730 Fax (716) 541-0760

**July 2013**

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*Prepared For:*

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40 La Riviere Drive, Suite 350  
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**July 2013**

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# SECTION 1

## INTRODUCTION

The Niagara County Refuse Site Potentially Responsible Parties (PRP) Group completed a remedial action at the Niagara County Refuse Site (Site), Wheatfield, New York in 2000. The remedial action was conducted in accordance with the United States Environmental Protection Agency (USEPA) Record of Decision (USEPA, 1993) and the United States District Court Consent Decree (USEPA, 1995). The PRP Group is currently conducting operations, maintenance, and monitoring (OM&M) in accordance with the USEPA-approved OM&M Manual (CRA, 2000). This data report summarizes second quarter monitoring activities from April through June 2013.

### 1.1 PROCEDURES

#### 1.1.1 Effluent Sampling

The current Industrial Wastewater Discharge Permit (Appendix A) was issued by the City of North Tonawanda, and is effective from March 31, 2013 through April 1, 2016. The current permit has a reduced analytical parameter list compared to the original permit, and a semi-annual sampling frequency. Beginning in March 2007, effluent sampling frequency was modified to twice per year. In 2013, an effluent sample was collected on March 13 from Wet Well A, which receives water from the leachate collection system surrounding the landfill. Composite 24-hour samples were collected from Wet Well A using an automated sampler. The next effluent sample is scheduled to be collected in September 2013.

#### 1.1.2 Groundwater Sampling

Groundwater samples were not collected during this reporting period. In accordance with the approved OM&M Plan (CRA, 2000), the groundwater sampling frequency was decreased from a quarterly to a semi-annual basis in 2003, and from a semi-annual to an annual basis beginning in 2006. The next round of groundwater samples is scheduled to be collected in November 2013.

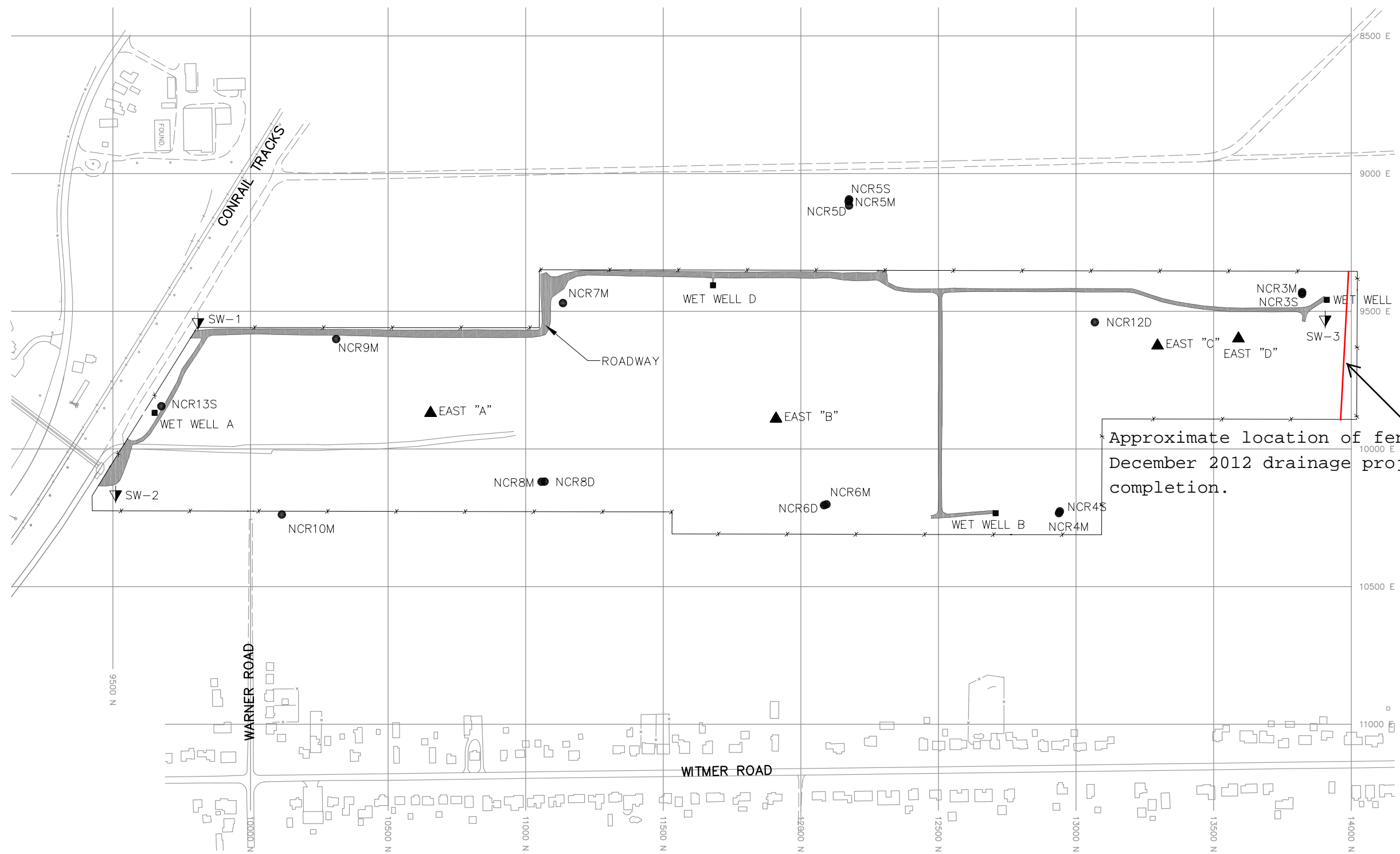
#### 1.1.3 Water Level Measurements

Water levels were measured during monthly Site inspections in April, May, and June 2013. Water levels were measured in four observation wells (piezometers East A, East B, East C, and East D), four effluent monitoring locations (Wet Wells A, B, C, and D), and four monitoring wells (NCR-3S, NCR-4S, NCR-5S, and NCR-13S). 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.

#### 1.1.4 Site Inspections

Monthly Site inspections were conducted on April 5, May 7, and June 5, 2013. During the Site inspections, the manholes, wet wells, landfill cap, wetlands, perimeter fence,

drainage ditches, swale outlets, culverts, gas vents, and monitoring wells were each 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



SCALE: 1"=400'

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**

This section describes the results of the second quarter OM&M activities conducted from April through June 2013. Activities during this quarter included water level measurements, mowing around wells and the perimeter fence, wet well pump and discharge hose replacement, fixing holes in the perimeter fence, and Site inspections.

#### **2.1 EFFLUENT SAMPLES**

No effluent samples were required to be collected under the discharge permit during the reporting period. The next effluent sampling is scheduled to be collected in September 2013. The current City of North Tonawanda Industrial Wastewater Discharge Permit (March 31, 2013 through April 1, 2016) has been included in Appendix A.

#### **2.2 GROUNDWATER ANALYTICAL RESULTS**

Monitoring wells NCR-3S, NCR-4S, NCR-5S, and NCR-13S were not sampled during this reporting quarter, based on the current annual groundwater sampling schedule specified in the OM&M Manual. Groundwater sample collection is planned for November 2013, assuming groundwater levels are adequate. The locations of the monitoring wells are provided in Figure 1.1.

#### **2.3 WATER LEVELS**

Results of water level measurements collected during this reporting period are presented in Appendix B. Water levels were collected from the monitoring locations on April 4, May 7, and June 5, 2013. Water levels in the monitoring wells generally increased over the reporting quarter. Measured water levels were consistent with levels observed in previous years between April and June.

#### **2.4 SITE INSPECTIONS**

A summary of the Site inspection findings is included in Table 2.1. Copies of the Site Inspection Logs are included in Appendix C.

Each of the inspections found the manholes to be in good condition. Depth of water was measured in the wet wells during the inspections and recorded on the water level records.

Examination of the landfill cap vegetative cover included checking for erosion, bare areas, wash-outs, leachate seeps, and vegetation height and condition. No surface erosion or leachate seeps were noted. The grass covering the landfill was noted as short during the April inspection and tall in June.

Additionally, during the examination of the landfill cap, the access roads were examined for erosion, potholes/puddles, and obstructions. All aspects of the access roads



that were examined were deemed acceptable. The vegetation within the drainage ditches and swale outlets was checked during each of the site inspections. Conditions normal for early spring were noted during the April inspection. All other aspects of the drainage ditches and swale outlets were deemed acceptable during the quarter.

The wetlands were visually examined to assess the condition of the vegetation, change in water levels, and to observe general conditions. In April, the wetland vegetation was noted to be in a typical condition for spring. During the May and June inspections, they were in good condition. A normal water level was noted in the wetland area during the April and June site inspections and low during the May inspection.

All other parts of the landfill system which were examined, including the culverts, and gas vents, were found to be in acceptable condition during the reporting period.

## **2.5 MAINTENANCE**

Scheduled maintenance during the reporting period included replacing the pump in WWC on April 16, mowing inside the fence line and the walking paths to observation and monitoring wells on May 21, May 22, and June 25 and repairing holes in the perimeter fence on May 23. Copies of the Maintenance Record Logs have been included in Appendix D.

Unscheduled maintenance during the reporting period included replacing a leaking discharge hose in WWA on April 10 and replacing the pump at Wet Well C on April 15.

No major repairs were required during the reporting period.

## **2.6 OM&M OVERSIGHT**

Parsons' Quality Assurance (QA) work included periodic oversight of OM&M activities by O&M Enterprises, Inc., review of monthly inspection and monitoring data, and periodic communications with O&M Enterprises. Upon completion of work performed by O&M Enterprises, routine activity report forms were completed. Parsons reviewed the report forms for completeness, and recorded problems, if any, on the forms (Appendices B, C, and D).

**Table 2.1**  
**Quarterly Site Inspection Results Summary**

<b>Inspection Item</b>	<b>Acceptable</b>	<b>Requires Action</b>	<b>Comments</b>
Manholes	X		
Wet Wells	X		Water levels were measured monthly.
Wetlands	X		Water level was noted to be normal during the April and June inspections and low in May. Water levels were within the historical range. Wetland vegetation was noted as normal for spring during the April inspection.
Perimeter Fence	X		Three holes were identified in May and promptly repaired.
Condition of Roads	X		No potholes were observed.
Integrity of the Cap	X		No erosion was observed. Vegetation was noted as short in April and tall in June.
Drainage Ditches/Swales	X		The vegetation in the drainage ditches and swales was noted to be in a condition typical for spring during the April site inspections and normal in May and June.
Gas Venting System	X		
Wells	X		Water levels were measured monthly.
Culverts	X		
Other	X		No issues were identified during the reporting period with any other aspects of the site.

## SECTION 3

### SUMMARY AND CONCLUSIONS

The following summary and conclusions were developed based on the data collected during this reporting period:

- The landfill was inspected monthly and was appropriately maintained. No major repairs were required during the reporting period. Typically, repairs are made as necessary following identification of problems or maintenance needs.
- As specified in the OM&M Manual, annual groundwater monitoring commenced in 2006. Groundwater samples are currently scheduled to be collected in November 2013, assuming sufficient groundwater is available in the wells.
- Water levels were measured in the wet wells, monitoring wells, and the observation wells on the landfill on a monthly basis. Water levels in the monitoring wells generally increased during the reporting period. Measured water levels were consistent with levels observed in previous years between April and June.
- Wetlands vegetation was typical of spring conditions during the April inspections and was in good condition during the May and June inspections. The wetlands vegetation will continue to be visually assessed during the monthly site inspections.

## **SECTION 4**

### **REFERENCES**

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

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

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

**APPENDIX A**

**CITY OF NORTH TONAWANDA INDUSTRIAL WASTEWATER  
DISCHARGE PERMIT AND CHAIN-OF-CUSTODY**

**CITY OF NORTH TONAWANDA  
INDUSTRIAL WASTEWATER DISCHARGE PERMIT**

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**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, NY 14094

Site: Niagara County Refuse Site

Witmer Road

Town of Wheatfield, NY 14120

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

for the discharge of ground water 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 Water/Wastewater 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 March, 2013**

**To expire the 1st day of April, 2016**



**David A. Scott, Water Works Superintendent**

Signed this 4th day of March, 2013

**PERMIT NUMBER: 2628011****Part I  
Page 2 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).

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

**PERMIT NUMBER: 2628011****Part I  
Page 3 of 4****PART I. SPECIFIC CONDITIONS****B. DISCHARGE MONITORING AND REPORTING REQUIREMENTS**

During the period beginning the effective date of this permit and lasting until the expiration date, discharge monitoring results shall be summarized and reported by the permittee no later than the days specified below.

<b>Sample Point</b>	<b>Parameter</b>	<b>Initial Monitoring Report</b>	<b>Subsequent Monitoring Reports</b>
001	Total Flow	January 31, 2007	Semi-annual
	Lead	January 31, 2007	Semi-annual
	Iron	January 31, 2007	Semi-annual
	Magnesium	January 31, 2007	Semi-annual
	Sodium	January 31, 2007	Semi-annual
	pH	January 31, 2007	Semi-annual
	BOD	January 31, 2007	Semi-annual
	Total Suspended Solids	January 31, 2007	Semi-annual



**PERMIT NUMBER: 2628011****Part I  
Page 4 of 4****PART I. SPECIFIC CONDITIONS****C. SPECIAL REQUIREMENTS**

- 1) This permit is written for a duration of three (3) 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 into the City of North Tonawanda sewerage treatment works during WWTP overflow conditions. The Permittee is required to cease all pumping operations upon verbal request of the North Tonawanda Water/Wastewater Superintendent or his designee. Pumping operations shall not recommence until approval by the North Tonawanda Water/Wastewater Superintendent or his designee.
- 5) Analysts are required to use GC/MS method detection limits for most organics (if GC/MS is appropriate); GC/ECD for PCB's/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.

CITY OF NORTH TONAWANDA WATER WORKS  
WASTEWATER DEPARTMENT  
830 RIVER ROAD  
NORTH TONAWANDA, NEW YORK 14120  
PHONE: (716) 695 - 8560  
FAX: (716) 695 - 8563

David A. Scott  
Superintendent



Dennis F. Molnar  
Chief Operator

John C. Maurer  
Maintenance Supervisor

William M. Davignon  
Lab Director/Chemist

**CHAIN OF CUSTODY**  
Sampling Record  
NIAGARA COUNTY REFUSE SITE

DATE: March 13 & 14, 2013

SITE NAME: NIAGARA COUNTY REFUSE SITE

NAME (Signature) Richard C Becken

NAME (Print) Richard C Becken

SPL #	SAMPLE NAME	DATE	TIME	SAMPLE LOCATION	SAMPLE TYPE	#OF BTLS
01	31313RCBEFF	3/13-3/14/13	0800-0800	West Well A	wet chemistry	1
02	31313RCBEFF	3/13-3/14/13	0800-0800	wet well A	volatiles	6

**FLOWS:** FINAL METER READING 729,000  
INITIAL METER READING 707,000  
~~MONTHLY~~ <sup>daily</sup> FLOW 21,000

RELINQUISHED BY: Richard C Becken

RECEIVED BY: William M Davignon

DATE: 3/14/13

TIME: 3/14/13

## EFFLUENT SAMPLING • SAMPLE COLLECTION DATA SHEET

PROJECT NAME: NIAGARA COUNTY REFUSE SITE

SAMPLE LOCATION: WETWELL A

SAMPLING CREW MEMBERS: Richard Becken

DATE OF SAMPLE COLLECTION: 05/13/13  
(M M D D Y Y)

Sample Time: 0800

Sample ID Number: 31313RCSEFF

pH	<u>7.1</u>	<u>6.9</u>	<u>7.25</u>
----	------------	------------	-------------

Temperature	<u>56.1</u>	<u>57.3</u>	<u>57.0</u>
-------------	-------------	-------------	-------------

Conductivity	<u>3.40</u>	<u>3.46</u>	<u>3.61</u>
--------------	-------------	-------------	-------------

Turbidity	<u>5.1</u>	<u>4.8</u>	<u>6.3</u>
-----------	------------	------------	------------

Instantaneous Flow Velocity:

Total Flow:

Sample Description: semi annual effluent

Analysis Required: volatiles + wet chemistry

Chain-of-Custody Number: none

Shipping Manifest Number: none

Additional Comments:

<u>final meter reading</u>	<u>728,000</u>
<u>initial meter reading</u>	<u>707,000</u>
<u>daily flow</u>	<u>21,000</u>

FP-7C

**APPENDIX B**  
**WATER LEVEL RECORDS**

## WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY  
REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 4/5/2013  
(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	26.64	572.29
EAST "B"	11:45	596.23	15.82	580.41
EAST "C"	11:25	598.69	20.79	577.9
EAST "D"	11:05	593.20	15.85	577.35
NCR-3S	10:25	579.60	4.25	575.35
NCR-4S	9:45	577.88	3.16	574.72
NCR-5S	10:50	579.34	7.25	572.09
NCR-13S	8:35	577.15	5.81	571.34

### WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	8:45		~12"
WW B	9:55		~6"
WW C	10:15		~8"
WW D	9:15		~6"

Total System Flow	Time of Measurement
919000	8:45

FP-3D

## WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY  
REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 5/7/2013  
(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"	11:10	598.93	26.65	572.28
EAST "B"	11:30	596.23	16.06	580.17
EAST "C"	11:45	598.69	20.84	577.85
EAST "D"	12:05	593.20	16.09	577.11
NCR-3S	10:15	579.60	5.1	574.50
NCR-4S	10:45	577.88	3.75	574.13
NCR-5S	10:50	579.34	7.65	571.69
NCR-13S	14:00	577.15	6.78	570.37

### WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	13:55		~6"
WW B	10:55		~5"
WW C	10:20		~5"
WW D	14:20		~5"

Total System Flow	Time of Measurement
1022	13:55

FP-3D

## WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY  
REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 6/5/2013  
(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"	11:10	598.93	26.65	572.28
EAST "B"	11:25	596.23	18.99	577.24
EAST "C"	11:50	598.69	20.98	577.71
EAST "D"	12:10	593.20	16.11	577.09
NCR-3S	9:50	579.60	4.21	575.39
NCR-4S	10:10	577.88	3.14	574.74
NCR-5S	10:50	579.34	7.63	571.71
NCR-13S	8:55	577.15	5.33	571.82

### WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	8:50		~10"
WW B	10:25		~4"
WW C	9:35		~6"
WW D	9:10		~4"

Total System Flow	Time of Measurement
11415	8:50

FP-3D

**APPENDIX C**  
**MONTHLY INSPECTION LOGS**



### MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 4/5/2013  
(MM DD YY)

INSPECTOR(S): RC Becken

<i>Item</i>	<i>Inspect For</i>	<i>Action Required</i>	<i>Comments</i>	
<b>1 Perimeter collection System/Off-Site Forcemain</b>				
<input type="checkbox"/>	Manholes	- cover on securely	<u>none</u>	<u>yes</u>
		- condition of cover	<u>none</u>	<u>good</u>
		- condition of inside of manhole	<u>none</u>	<u>good</u>
		- flow conditions	<u>none</u>	<u>no apparent flow</u>
<input type="checkbox"/>	Wet Wells	- cover on securely	<u>none</u>	<u>yes</u>
		- condition of cover	<u>none</u>	<u>good</u>
		- condition of inside of wet well	<u>none</u>	<u>good</u>
<b>2 Landfill Cap</b>				
<input type="checkbox"/>	Vegetated Soil Cover	- erosion	<u>none</u>	<u>none</u>
		- bare areas	<u>none</u>	<u>none</u>
		- washouts	<u>none</u>	<u>none</u>
		- leachate seeps	<u>none</u>	<u>none</u>
		- length of vegetation	<u>none</u>	<u>short</u>
		- dead/dying vegetation	<u>none</u>	<u>typical for early April</u>

### MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 4/5/2013  
(MM DD YY)

INSPECTOR(S): RC Becken

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

### MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 4/5/2013  
(MM DD YY)

INSPECTOR(S): RC Becken

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

### MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 5/7/2013  
(MM DD YY)

INSPECTOR(S): RC Becken

<i>Item</i>	<i>Inspect For</i>	<i>Action Required</i>	<i>Comments</i>	
<b>1 Perimeter collection System/Off-Site Forcemain</b>				
<input type="checkbox"/>	Manholes	- cover on securely	<u>none</u>	<u>yes</u>
		- condition of cover	<u>none</u>	<u>good</u>
		- condition of inside of manhole	<u>none</u>	<u>good</u>
		- flow conditions	<u>none</u>	<u>no apparent flow</u>
<input type="checkbox"/>	Wet Wells	- cover on securely	<u>none</u>	<u>yes</u>
		- condition of cover	<u>none</u>	<u>good</u>
		- condition of inside of wet well	<u>none</u>	<u>good</u>
<b>2 Landfill Cap</b>				
<input type="checkbox"/>	Vegetated Soil Cover	- erosion	<u>none</u>	<u>none</u>
		- bare areas	<u>none</u>	<u>no</u>
		- washouts	<u>none</u>	<u>none</u>
		- leachate seeps	<u>none</u>	<u>none</u>
		- length of vegetation	<u>none</u>	<u>starting to grow</u>
		- dead/dying vegetation	<u>none</u>	<u>none</u>

### MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 5/7/2013  
(MM DD YY)

INSPECTOR(S): RC Becken

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

### MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 5/7/2013  
(MM DD YY)

INSPECTOR(S): RC Becken

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

### MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 6/5/2013  
(MM DD YY)

INSPECTOR(S): RC Becken

<i>Item</i>	<i>Inspect For</i>	<i>Action Required</i>	<i>Comments</i>	
<b>1 Perimeter collection System/Off-Site Forcemain</b>				
<input type="checkbox"/>	Manholes	- cover on securely	<u>none</u>	<u>yes</u>
		- condition of cover	<u>none</u>	<u>good condition</u>
		- condition of inside of manhole	<u>none</u>	<u>good condition</u>
		- flow conditions	<u>none</u>	<u>no apparent flow</u>
<input type="checkbox"/>	Wet Wells	- cover on securely	<u>none</u>	<u>yes</u>
		- condition of cover	<u>none</u>	<u>good condition</u>
		- condition of inside of wet well	<u>none</u>	<u>good condition</u>
<b>2 Landfill Cap</b>				
<input type="checkbox"/>	Vegetated Soil Cover	- erosion	<u>none</u>	<u>none</u>
		- bare areas	<u>none</u>	<u>none</u>
		- washouts	<u>none</u>	<u>none</u>
		- leachate seeps	<u>none</u>	<u>none</u>
		- length of vegetation	<u>none</u>	<u>tall</u>
		- dead/dying vegetation	<u>none</u>	<u>none</u>

### MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 6/5/2013  
(MM DD YY)

INSPECTOR(S): RC Becken

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



### MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 6/5/2013  
(MM DD YY)

INSPECTOR(S): RC Becken

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

**APPENDIX D**  
**MAINTENANCE RECORD LOGS**

## MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becken

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1. Date 4/10/2013

Time 1000

Scheduled/Unscheduled: unscheduled

Type of Maintenance Performed: repair discharge hose on wet well A

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2. Company Performing Maintenance \_\_\_\_\_

Name: O&M Enterprises, Inc.

Address: 7134 Marigold Dr.

North Tonawanda, NY 14120

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Contact Name: Rick Becken

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3. Methods Used:

pulled pump and repaired discharge hose then reinstalled pump

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Description of Material Removed:

none

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Problems/Comments:

None

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4/10/2013  
DATE

RC Becken  
INSPECTOR

INSPECTOR'S SIGNATURE

## MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becken

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1. Date 4/15/2013

Time 1030

Scheduled/Unscheduled: Unscheduled

Type of Maintenance Performed: change pump/motor in wwC

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2. Company Performing Maintenance

Name: O&M Enterprises

Address: 7134 Marigold Dr

N. Tonawanda NY 14120

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Contact Name: Rick Becken

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3. Methods Used:

removed old pump and motor and replaced with spare pump and motor

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Description of Material Removed:

none

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Problems/Comments:

none

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4/15/2013  
DATE

RC Becken  
INSPECTOR

INSPECTOR'S SIGNATURE

**MAINTENANCE RECORD LOG**

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becken

1. Date 4/16/2013  
Time 800  
Scheduled/Unscheduled: Scheduled  
Type of Maintenance Performed: change pump/motor in wwC

2. Company Performing Maintenance \_\_\_\_\_  
Name: O&M Enterprises  
Address: 7134 Marigold Dr  
N. Tonawanda NY 14120  
Contact Name: Rick Becken

3. Methods Used:  
Removed old pump and motor that was installed yesterday and installed a new pump and motor.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Description of Material Removed:  
pump and motor  
\_\_\_\_\_  
\_\_\_\_\_

Problems/Comments:  
none  
\_\_\_\_\_  
\_\_\_\_\_

4/16/2013                  RC Becken  
DATE                                  INSPECTOR                                  INSPECTOR'S SIGNATURE

## MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becken

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1. Date 5/21/2013

Time

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: mowing

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2. Company Performing Maintenance

Name: O&M Enterprises, Inc.

Address: 7134 Marigold Dr

North Tonawanda, NY

Contact Name: Rick Becken

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3. Methods Used:

mowed around perimeter fence and wells

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Description of Material Removed:

none

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Problems/Comments:

none

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DATE

INSPECTOR

INSPECTOR'S SIGNATURE

5/21/2013 RC Becken

FORM 2

## MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becken

1. Date 5/22/2013

Time 900

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: mow around perimeter fence and wells

2. Company Performing Maintenance \_\_\_\_\_

Name: O&M Enterprises

Address: 7134 Marigold Dr

N. Tonawanda NY 14120

Contact Name: Rick Becken

3. Methods Used:

tractor and mower

Description of Material Removed:

none

Problems/Comments:

found three holes in fence

5/22/2013  
DATE

RC Becken  
INSPECTOR

\_\_\_\_\_  
INSPECTOR'S SIGNATURE

## MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becken

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1. Date 5/23/2013

Time 915

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: repair three holes cut in perimeter fence

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2. Company Performing Maintenance

Name: O&M Enterprises

Address: 7134 Marigold Dr

N. Tonawanda NY 14120

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Contact Name: Rick Becken

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3. Methods Used:

hand tools

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Description of Material Removed:

none

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Problems/Comments:

none

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5/23/2013  
DATE

RC Becken  
INSPECTOR

INSPECTOR'S SIGNATURE



**MAINTENANCE RECORD LOG**

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becken

1. Date 6/25/2013  
Time 8:15  
Scheduled/Unscheduled: Scheduled  
Type of Maintenance Performed: mowing grass around perimeter and wells

2. Company Performing Maintenance \_\_\_\_\_  
Name: O&M Enterprises, Inc.  
Address: 7134 Marigold Dr.  
North Tonawanda, NY  
Contact Name: Rick Becken

3. Methods Used:  
tractor and mower

Description of Material Removed:  
none

Problems/Comments:  
none

6/25/2013      RC Becken  
DATE                                      INSPECTOR                                      INSPECTOR'S SIGNATURE

**APPENDIX E**

**COMPACT DISK CONTAINING REPORT**