QUARTERLY DATA SUMMARY REPORT FIRST QUARTER 2018

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
DEPARMENT 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

April 2018

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TABLE OF CONTENTS

Page No.

SECTIO	ON 1 INTRODUCTION	1-1
1.1	Procedures 1.1.1 Effluent Sampling	1-1 1-1 1-1
SECTIO	ON 2 RESULTS	2-1
2.1	Effluent Samples	2-1
2.2	Groundwater Analytical Results	2-1
2.3	Water Levels	2-1
2.4	Site Inspections	2-1
2.5	Maintenance	2-2
2.6	OM&M Oversight	2-2
SECTIO	ON 3 SUMMARY AND CONCLUSIONS	3-1
SECTIO	ON 4 REFERENCES	4-1
	NDIX A CITY OF NORTH TONAWANDA INDUSTRIAL WASTEWATER CARGE PERMIT	
APPEN	NDIX B WATER LEVEL RECORDS	
APPEN	NDIX C MONTHLY INSPECTION LOGS	
A PPFN	IDIX D. COMPACT DISK CONTAINING REPORT	

TABLE OF CONTENTS

Page No.

LIST OF TABLES

	LIST OF TABLES	
Table 2.1	Quarterly Site Inspection Results Summary	. 2-3
	LIST OF FIGURES	
Figure 1.1	Site Plan	. 1-3

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 performing operations, maintenance, and monitoring (OM&M) in accordance with the USEPA-approved OM&M Manual (CRA, 2000). This data report summarizes the first quarter monitoring activities conducted from January through March 2018.

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 through April 1, 2019. The current permit has a reduced analytical chemical parameter list compared to the original permit, and a semi-annual sampling frequency. Prior to March 2007, samples were collected monthly. In the current reporting period (January through March 2018), an effluent sample was not collected. The next effluent sample is scheduled to be collected in April 2018.

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 April 2018.

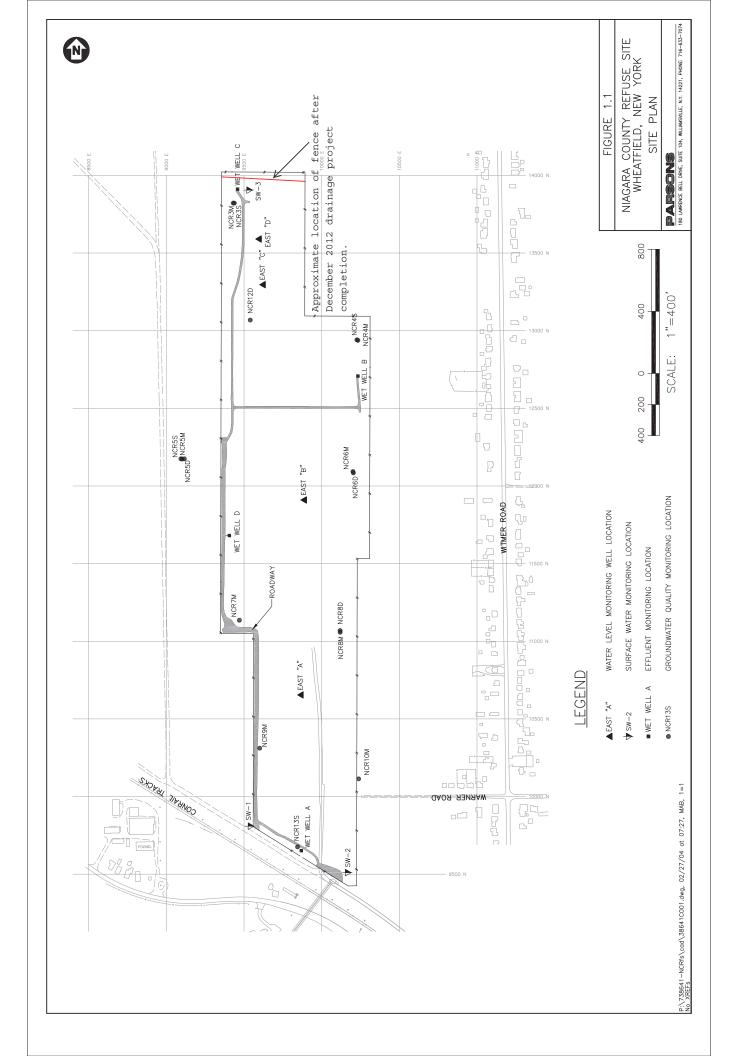
1.1.3 Water Level Measurements

Water levels were measured in January, February, and March 2018 at four observation well locations (Piezometers East A, East B, East C, and East D), four effluent monitoring locations (Wet Wells A, B, C, and D), and four monitoring well locations (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 January 17, February 13, and March 19, 2018. 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.

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SECTION 2

RESULTS

This section describes the results of the first quarter OM&M activities conducted in January, February, and March 2018. Activities during this quarter included water level measurements from observation wells and wet wells, and monthly 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 April 2018. The current City of North Tonawanda Industrial Wastewater Discharge Permit (March 31, 2016 through April 1, 2019) is 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 (CRA, 2000). Groundwater sample collection for the above-listed wells is planned for April 2018, assuming groundwater levels are adequate, and sufficient water is available for sampling within the wells. 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 January 10, February 13, and March 6, 2018. Water levels generally increased over the reporting period. Measured water levels were consistent with the levels observed in previous years between January and March.

2.4 SITE INSPECTIONS

A summary of the Site inspection findings is included in Table 2.1. The Site Inspection Logs have been included in Appendix C.

Each of the inspections found the manholes and wet wells to be in good condition. Water levels were 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, height of vegetation, and assessing the condition of the vegetation. No surface erosion or leachate seeps were noted. No issues were observed with the grass covering the landfill during the reporting period, and no actions were required. No dead or dying vegetation was noted on the landfill cap.

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Additionally, the access roads were examined for erosion, potholes/puddles, and obstructions. All aspects of the access roads that were examined were deemed acceptable during each of the inspections during the reporting period.

The wetlands were visually examined to assess the condition of the vegetation, change in water levels, and to observe general conditions. No issues were noted with the wetland vegetation during the inspections. The water level in the wetland was noted to be within the range expected during each of the inspections. No dead or dying wetland vegetation was noted during the site inspections. No issues were noted concerning the general condition of the wetlands during the inspections, with no action required, during each of the inspections during the reporting period.

No dead or dying vegetation was noted in the drainage ditches and swale outlets during the January through March Site inspections. No erosion or flow obstruction was observed and the condition of the erosion protection devices were in good condition.

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

No scheduled or unscheduled maintenance was required during the reporting period.

No major repairs were required during the reporting quarter.

2.6 OM&M OVERSIGHT

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

Table 2.1 **Quarterly Site Inspection Results Summary**

Inspection Item	Acceptable	Requires Action	Comments
Manholes	X		No issues were identified.
Wet Wells	X		Water levels were measured monthly.
Wetlands	X		Water levels were within the historical range. No dead or dying vegetation in the wetlands was noted during the monthly inspections.
Perimeter Fence	X		No damage was observed during the quarter.
Condition of Roads	X		No potholes were observed.
Integrity of the Cap	X		No erosion was observed. Vegetation length was normal height for time of year. No dead or dying vegetation was noted during the inspections.
Drainage Ditches/Swales	X		No dead or dying vegetation was noted in the ditches and swales during the site inspections.
Gas Venting System	X		No issues were identified.
Wells	X		Water levels were measured monthly.
Culverts	X		No issues were identified.
Other	X		No issues were identified 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.
- As specified in the OM&M Manual, annual groundwater monitoring commenced in 2006.
 Groundwater samples were not collected during this reporting period, and are currently scheduled to be collected in April 2018, 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 generally increased over the reporting period. Measured water levels were consistent with the levels observed in previous years between January and March.
- Wetlands vegetation was in a condition typical for the time of year during each of the monthly 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

CITY OF NORTH TONAWANDA 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, 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, 2016

To expire the 1st day of April, 2019

Will M. Dangon

William M. Davignon, Water Works Superintendent

Signed this 11th day of March, 2016

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
	рН	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.

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.

Sample Point	Parameter	Initial Monitoring Report	Subsequent Monitoring Reports
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
	рН	January 31, 2007	Semi-annual
	BOD	January 31, 2007	Semi-annual
	Total Suspended Solids	January 31, 2007	Semi-annual

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.

APPENDIX B WATER LEVEL RECORDS

WATER LEVEL RECORD

PROJECT NAME: NIAGARA COUNTY LOCATION: Wheatfield, New York

REFUSE SITE

DATE:

01/10/18 (MM DD YY)

CREW MEMBERS: ____Tony Manns

		Y		
		Top of Casing	Depth to	Water Level
Observation Well	Time of	Elevation	Water	Elevation
Observation vven	Measurement	A	В	А-В
		feet	feet	feet
EAST "A"	1548	598.93	26.45	572.48
EAST "B"	1547	596.23	Dry	596.23
EAST "C"	1527	598.69	21.02	577.67
EAST "D"	1551	593.20	15.41	577.79
NCR-3S	1520	579.60	4.69	574.91
NCR-4S	1532	577.88	3.52	574.36
NCR-5S	1510	579.34	7.11	572.23
NCR-13S	1450	577.15	5.27	571.88

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	1440		2' 6"
WW B	1544		3' 1"
WW C	1518		3' 4"
WW D	1504		2' 11"

Total System Flow	Time of Measurement
000311	1445

Water Level Meter: NF07181

FP-3D

WATER LEVEL RECORD

REFUSE SITE

PROJECT NAME: NIAGARA COUNTY LOCATION: Wheatfield, New York

DATE:

02/13/18 (MM DD YY)

CREW MEMBERS: Tony Manns

				ç
		Top of Casing	Depth to	Water Level
Observation Well	Time of	Elevation	Water	Elevation
	Measurement	Α	В	A-B
		feet	feet	feet
EAST "A"	1109	598.93	26.48	572.45
EAST "B"	1112	596.23	Dry	596.23
EAST "C"	1055	598.69	19.87	578.82
EAST "D"	1125	593.20	14.41	578.79
NCR-3S	1129	579.60	4.43	575.17
NCR-4S	1101	577.88	3.19	574.69
NCR-5S	1025	579.34	7.18	572.16
NCR-13S	1041	577.15	5.32	571.83

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	1031		3' 1"
WW B	1104		2' 6"
ww c	1051		3' 4"
WW D	1045		2' 11"

Total System Flow	Time of Measurement
	ivicasurement
001045	1035

Water Level Meter: NF08335

FP-3D

WATER LEVEL RECORD

REFUSE SITE

PROJECT NAME: NIAGARA COUNTY LOCATION: Wheatfield, New York

DATE:

03/06/18 (MM DD YY)

CREW MEMBERS: ___ Tony Manns

Observation Well	Time of Measurement	Top of Casing Elevation A feet	Depth to Water B feet	Water Level Elevation A-B feet
EAST "A"	0908	598.93	271.13	327.80
EAST "B"	0914	596.23	Dry	596.23
EAST "C"	0934	598.69	21.24	577.45
EAST "D"	0940	593.20	15.93	577.27
NCR-3S	0946	579.60	4.42	575.18
NCR-4S	0929	577.88	3.13	574.75
NCR-5S	0900	579.34	6.76	572.58
NCR-13S	0843	577.15	5.04	572.11

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	0840		3' 5"
WW B	0918		2' 11"
WW C	0950		3' 1"
WW D	0849		3' 3"

Total System Flow	Time of
Total System Flow	Measurement
001695	0839

Water Level Meter: NF07181

FP-3D

APPENDIX C MONTHLY INSPECTION LOGS

g	LOCATION: Wheatfield, NY	DATE: 01/16/18 (MM DD YY)		Comments		None	None	None	None		None	None	None		None	None	none	None	None	None	
MONTHLY INSPECTION LOG				Action Required		None	None	None	None	•	None	None	None		None	None	None	None	None	None	The state of the s
MOM	PROJECT NAME: Niagara County Refuse Site		Tony Manns	Inspect For	Perimeter collection System/Off-Site Forcemain	- cover on securely	- condition of cover	- condition of inside of manhole	- flow conditions	-	- cover on securely	- condition of cover	- condition of inside of wet well		- erosion	- bare areas	- washouts	- leachate seeps	- length of vegetation	- dead/dying vegetation	
	PROJECT NAME: Niagē		INSPECTOR(S):	Item	1 Perimeter collection Sy	Manholes					Wet Wells			2 Landfill Cap	Vegetated Soil Cover		P P			- white the contraction of the c	FORM 1

Perimeter Fence - integrity of fence None None - integrity of gates None None None None - integrity of locks
--

MONTHLY INSPECTION LOG	ounty Refuse Site	DATE: 01/16/18 (MM DD YY)	Tony Manns	ect For Action Required	(par	liment buildup None	None None	- condition of erosion protection None	w obstructions None	- dead/dying vegetation None	- cable concrete/gabion mats None	d riprap	Jiment build-up None None	Ssion None None	- condition of erosion protection None	w obstructions None	act/damage None None	ks secure None
	ara County Refuse		Tony	Inspect For	ontinued)	- sediment buildup	- erosion	- condition of erc	- flow obstructions	- dead/dying veg	- cable concrete/	and riprap	- sediment build-up	- erosion	- condition of erc	- flow obstructions	- intact/damage	- locks secure
	PROJECT NAME: Niagara County Refuse Site		INSPECTOR(S):	Item	4 Other Site Systems (continued)	Drainage Ditches/	Swale Outlets	a second					Culverts	I Town			Gas Vents	Wells

	LOCATION: Wheatfield, NY	E: 02/13/18 (MM DD YY)		Comments		None	None	None	None	None	None	None		None	None	none	None	None	None	
MONTHLY INSPECTION LOG	7007	DATE:		Action Required		None	None	None	None	None	None	None		None	None	None	None	None	None	
MON	PROJECT NAME: Niagara County Refuse Site		Tony Manns	Inspect For	Perimeter collection System/Off-Site Forcemain	- cover on securely	- condition of cover	- condition of inside of manhole	- flow conditions	- cover on securely	- condition of cover	- condition of inside of wet well		- erosion	- bare areas	- washouts	- leachate seeps	- length of vegetation	- dead/dying vegetation	
	PROJECT NAME: Niag		INSPECTOR(S):	ltem	1 Perimeter collection 5	Manholes	>			Wet Wells	>		2 Landfill Cap	V Vegetated Soil Cover					>	

MONTHLY INSPECTION LOG	PROJECT NAME: Niagara County Refuse Site	DATE: 02/13/18 (MM DD YY)	OR(S): Tony Manns	Inspect For Action Required Comments	Cap (continued)	oads - bare areas, dead/dying veg. None	- erosion None	- potholes or puddles None	- obstruction None	s (Area "F")	- dead/dving vegetation None	ن د	- general conditions of wetlands None	te Systems	er Fence - Integrity of fence None None None None None	locks	ondition of signs
	PROJECT NAME: Nia		INSPECTOR(S):	Item	2 Landfill Cap (continued)	Access Roads				3 Wetlands (Area "F")				4 Other Site Systems	V Perimeter Fence		

	MONTH	MONTHLY INSPECTION LOG		
PROJECT NAME: Niagara County	agara County Refuse Site	_	LOCATION: Wheatfield, NY	
			DATE: 02/13/18 (MM DD YY)	
INSPECTOR(S):	Tony Manns			
Item	Inspect For	Action Required	Comments	
4 Other Site Systems (continued)	continued)			****
Varinage Ditches/	- sediment buildup	None	None	
Swale Outlets	- erosion	None	None	P. S.
>	- condition of erosion protection	None	None	
>	- flow obstructions	None	None	
	- dead/dying vegetation	None	None	1
>	- cable concrete/gabion mats	None	None	
	and riprap			
Culverts	- sediment build-up	None	None	
	- erosion	None	None	
	- condition of erosion protection	None	None	
>	- flow obstructions	None	None	
Gås Vents	- intact/damage	None	None	
Wells	- locks secure	None	None	
FORM 1				

	MONT	MONTHLY INSPECTION LOG	
PROJECT NAME: Niag	PROJECT NAME: Niagara County Refuse Site	07	LOCATION: Wheatfield, NY
		DA	DATE: 03/19/18 (MM DD YY)
INSPECTOR(S):	Tony Manns		
Item	Inspect For	Action Required	Comments
1 Perimeter collection S	Perimeter collection System/Off-Site Forcemain		
Manholes	- cover on securely	None	None
	- condition of cover	None	None
	- condition of inside of manhole	None	None
>	- flow conditions	None	None
wet Wells	- cover on securely	None	None
	- condition of cover	None	None
	- condition of inside of wet well	None	None
H3 Pr			
Vegetated Soil Cover	- erosion	None	None
	- bare areas	None	None
>	- washouts	None	none
	- leachate seeps	None	None
	- length of vegetation	None	None
	- dead/dying vegetation	None	None

	HUOM	MONTHLY INSPECTION LOG	
PROJECT NAME: Nia	PROJECT NAME: Niagara County Refuse Site		LOCATION: Wheatfield, NY
·			DATE: 03/19/18 (MM DD YY)
INSPECTOR(S):	Tony Manns		
Item	Inspect For	Action Required	Comments
2 Landfill Cap (continued)	led)		
Access Roads	- bare areas, dead/dying veg.	None	None
	- erosion	None	None
	- potholes or puddles	None	None
	- obstruction	None	None
3 Wetlands (Area "F")			
	- dead/dying vegetation	None	None
	- change in water budget	None	None
>	- general conditions of wetlands	None	None
4 Other Site Systems			
Perimeter Fence	- integrity of fence	None	None
	- integrity of gates	None	None
	- integrity of locks	None	None
	- placement and condition of signs	None	None
FORM 1			

	LOCATION: Wheatfield, NY	E: 03/19/18 (MM DD YY)		Comments		None	None	None	None	None	None		Sone	None	None	None	None	None	ger
MONTHLY INSPECTION LOG	LOCA	DATE:		Action Required		None	None	None	None	None	None		None	None	None	None	None	None	
MONT	PROJECT NAME: Niagara County Refuse Site		Tony Manns	Inspect For	continued)	- sediment buildup	- erosion	- condition of erosion protection	- flow obstructions	- dead/dying vegetation	- cable concrete/gabion mats	and riprap	- sediment huild-un	- erosion	- condition of erosion protection	- flow obstructions	- intact/damage	- locks secure	
	PROJECT NAME: Nia		INSPECTOR(S):	Item	4 Other Site Systems (continued		Swale Outlets			\ >			Calverte				Gás Vents	Wells]

APPENDIX D

COMPACT DISK CONTAINING REPORT