GRAFTECH INTERNATIONAL HOLDINGS INC.

2013 PERIODIC REVIEW REPORT

AND ANNUAL OPERATION, MAINTENANCE AND MONITORING (OM&M) REPORT

FOR THE CLOSED LANDFILL SITE

SWMF #32N03

(Formerly UCAR Carbon Company, Republic Site Registry No. 932035)

PER THE SITE OM&M PLAN

(Approved on 11/04/09)

January 29, 2014

2013 PERIODIC REVIEW REPORT AND OPERATION, MAINTENANCE AND MONITORING REPORT

For SWMF #32N03

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ENCLOSURES

1.0 INTRODUCTION AND SITE OVERVIEW

This Periodic Review Report (PRR) is being submitted for the GrafTech International Holdings Inc. (GTIH) (formerly UCAR Carbon Company Inc.) closed landfill facility, SWMF #32N03 (Registry No. 932035) ("Landfill"), under the provisions of the Division of Environmental Remediation (DER) Inactive Hazardous Waste Site Program. The Landfill is located in the Town of Niagara, Niagara County, State of New York, on Parcel # 130.20-1.1. The Landfill is located off of Hyde Blvd. behind the former UCAR Republic Plant. The Landfill was closed and capped in 1987. The Landfill property, which is 61.80 acres, of which 16.48 acres make up the cap, is secured by a metal fence with two (2) locked entrance gates. In 1997, the Landfill was reclassified by the state from Class 2a to a Class 4 Inactive Hazardous Waste Site. **There is no required Remedial Program or remedial objectives for this site**. The purpose of this PRR is to document GTIH's full implementation and compliance with the post-closure care procedures and institutional/engineering controls contained in the Operation, Monitoring and Maintenance (OM&M) Plan, which was approved by the state on November 4, 2009. The OM&M Plan specifies the routine inspection, maintenance, and groundwater monitor programs, and also describes the requirement for an approved Soil Management Plan (SMP) in the event that GTIH has future plans to excavate soil from the areas outside the footprint of the landfill. This PRR covers the period of January 1, 2013 through December 31, 2013.

2.0 SITE MANAGEMENT

For the report period specified above, GTIH has designated the Sr. Manager, Corporate Environmental Risk Management, to be responsible for managing the Landfill. This position is currently filled by Ms. Juanita M. Bursley, who is located at the Corporate Headquarters at 12900 Snow Road, Parma, Ohio 44130. In addition, GTIH had also contracted the services of Mr. Robert Bucci, a retired former GTIH manager, to act as the local point-of-contact for the Landfill. Mr. Bucci lived in the local Niagara Falls community, and had the responsibility for managing the day-to-day operations at the Landfill, including conducting the scheduled inspections, managing contractors to perform routine groundwater sampling and any needed maintenance and/or repairs at the site, responding to neighborhood requests, etc.

GTIH had to make other contractual arrangements mid-year with another local contractor, National Maintenance Contracting Corporation (NMCC), to provide these services when Mr. Bucci became seriously ill and could no longer provide these services. Ms. Bursley informed Mr. Brian Sadowski, Project Manager, of the NYSDEC Buffalo Office of this change by email on August 23, 2013.

Both Mr. Bucci and NMCC were also responsible for communicating to Ms. Bursley whenever any significant event took place that could have possibly prevented full conformance with the OM&M Plan, or for any other important matters concerning the Landfill outside the scope of this Plan. Ms. Bursley has been granted the authority by GTIH to requisition the necessary resources, so that appropriate corrective actions could then be promptly implemented to adequately address any identified deficiency and ensure full conformance with the provisions of the OM&M Plan.

3.0 INSPECTION AND MAINTENANCE

The following inspection and maintenance program requirements are included in the state-approved OM&M Plan. In agreement with Mr. Michael Hinton, NYSDEC Division of Environmental Remediation, Region 9, the annual OM&M compliance report is incorporated with this annual PRR.

NYSDEC conducted a site inspection of the Landfill on May 3, 2013. During this state inspection, the condition of the concrete surface seal and pad at monitoring well GW-7B was found to be deteriorated and in need of repair. Repairs were made and communicated to NYSDEC. This inspection had pre-dated the planned annual monitoring well inspection, which would have been conducted later in the year by GTIH's contractor; thus, the results of the state inspection indicated that the established annual frequency for the well inspections was inadequate to promptly identify and correct structural damage to the well installations.

Therefore, GTIH increased its inspections of the wells by including them in the weekly inspections starting in July 2013. GTIH also made a proposal to NYSDEC Division of Environmental Remediation, Region 9, to modify the current Landfill site inspection program to consist of weekly general and security inspections of the site, which would be focused on the general condition of the perimeter fence, locked gates and the cap, and to also include a quarterly monitoring well inspection (weather conditions permitting), thus increasing the frequency from the former annual schedule. GTIH also proposed to inspect the well installations for possible damage, in the event there was evidence found during a weekly inspection that the security systems had been breached and someone may have gained unauthorized access to the site.

GTIH also worked with the NYSDEC to revise the approved OM&M Plan to convert it to a full Site Management Plan (SMP) and incorporate the agreed upon modifications to both the Landfill general site, security and monitoring well inspection protocols. The proposed SMP was submitted to the NYSDEC for approval in December 2013; approval is pending as of the date of this PRR.

3.1 Weekly Inspection Program

Weekly visual inspections of the Landfill's security system (perimeter fence, gates and locks), the cap and the surrounding areas were conducted, as scheduled, and a record maintained on the standard inspection form. The weekly inspection form documents the date and time of the inspection, the inspector's name, and the condition of the fence, gates, lock and Landfill cap, specifically noting any identified deficiency. The weekly inspection record also documents any corrective action(s) taken. Any fence areas that were found damaged were also duly noted on the inspection map. Copies of these inspection records are available for review during state inspections or upon written request by NYSDEC.

3.2 Required New York State Department of Environmental Conservation (NYSDEC) Annual Inspection

As discussed above, from July 2013 through the end of the year, the weekly visual inspections of the Landfill site were expanded to also include the monitoring well system (condition of the outer casings, concrete seals and security locks). These additional inspections were recorded on the approved Annual Monitoring Well Inspection Form. A copy of the completed inspection forms for NMCC's inspections conducted on July 5, 2013, following the newly implemented combined inspection protocol, is provided in Enclosure 1 as an example.

3.3 Routine Maintenance and Repairs

The following maintenance and repair activities were conducted per the OM&M Plan:

a. Repairs were scheduled, as needed, with outside contractor(s) to timely correct any deficiencies discovered during the routine weekly general, security, cap and monitoring well inspections. These included numerous repairs to the perimeter security fencing.

b. Repairs were made to the concrete surface seal at monitoring well GW-7B, which was observed to be cracked during the NYSDEC inspection conducted on May 3, 1013. This inspection took place prior to GTIH's scheduled 2013 annual groundwater well inspection.
c. Mowing of the vegetative cover on the Landfill cap and the perimeter lawn of the Landfill, and other general care of the site were scheduled, as needed. The cap was mowed one time in 2013, which met the minimum requirement.
d. General clean-up of any debris found along the fence line and inside the site were performed, as needed, to keep the Landfill and surrounding area clear of any objectionable or unsightly materials.

3.4 Recordkeeping

All inspection records are being retained for a minimum period of three (3) years and copies will be made available to the state upon written request.

3.5 NYSDEC Inspections

As discussed previously in section 3.0, NYSDEC inspected the Landfill in May 2013, during which the condition of the concrete surface seal and pad at monitoring well GW-7B was found to be deteriorated and in need of repair. This inspection had pre-dated the planned annual monitoring well inspection, which would have been conducted later in the year. The needed repairs were made and then communicated to NYSDEC. Due to the results of the state inspection, GTIH increased the frequency of its well inspections by including them in the weekly inspections starting in July 2013 through December 2013, to ensure that any structural damage to the well installations could be promptly identified and corrected.

At GTIH's request during the prior May 2010 state inspection of the Landfill, NYSDEC subsequently verified from the Preliminary Site Assessment records that the Department had installed groundwater monitoring wells GW-10A and GW-10B, which are located outside the Landfill perimeter security fencing on neighboring property not owned by GTIH. This review confirmed that NYSDEC owns these two (2) wells and that GTIH is not responsible to either secure or maintain these wells, nor is required to include them in the Landfill's groundwater monitoring program covered under the current OM&M Plan.

4.0 GROUNDWATER MONITORING PROGRAM

4.1 Overview of the Annual Groundwater Monitoring Program for the Landfill

The Landfill was capped and closed in 1987. The groundwater monitoring well network at the Landfill site consists of eleven (11) on-site wells. The history of the groundwater monitoring requirements is as follows. Between 1987 and 2000, groundwater monitoring was conducted quarterly. Following their review of the collected groundwater quality data, the New York State Department of Environmental Conservation (NYSDEC), Division of Environmental Remediation and the Division of Solid and Hazardous Materials, approved a modified semi-annual sampling program in a letter dated January 18, 2000, in accordance with the requirements of 6 NYCRR Section 360 to monitor the effectiveness of the solid waste landfill closure in protecting groundwater quality. This new monitoring program was implemented from April 2000 to November 2005.

Following a subsequent review of the post-closure groundwater monitoring program and historical groundwater quality data, the NYSDEC Division of Environmental Remediation and the Division of Solid and Hazardous Materials agreed to a modified annual post-closure groundwater monitoring program, which was first implemented in the autumn of 2006.

Since that time, the new monitoring program consists of sampling a network of seven (7) of the eleven (11) on-site groundwater wells at the Landfill (specifically, BW-1, BW-2, BW-3, BW-4, MW-3, GW-8B and GW-9B); testing the collected samples by the specified EPA Methodologies for five (5) parameters (Volatile Organic Compounds (VOCs), Total and Dissolved Iron, Potassium and Zinc, Ammonia, Nitrite and Total Kjeldahl Nitrogen (TKN)); and conducting four (4) field measurements for Turbidity, Specific Conductance, pH and Temperature. A map of the Landfill showing the locations of the groundwater monitoring wells is provided in Enclosure 2.

Under the current monitoring program, one (1) sampling event must occur in every calendar year; scheduling of the sample collection is rotated every year between spring (every odd year) and autumn (every even year). Groundwater elevation measurements are also recorded during each annual sampling campaign. An Annual Monitoring Report is submitted every year to the NYSDEC within ninety (90) days of the sampling event in the required electronic format.

4.2 Summary of the 2013 Groundwater Sampling Campaign

The annual groundwater sampling campaign was conducted by GTIH's environmental consultant, Conestoga-Rovers & Associates (CRA), on May 3, 2013. Samples collected from the seven (7) wells were submitted to TestAmerica for analysis. Analytical test results were compared to the New York State Class GA water criteria and to the results of the historical monitoring data for the Landfill. The 2013 data were consistent with the historical data; therefore, **no discernible negative trend in groundwater quality was observed**.

The Annual Monitoring Report for the 2013 sampling campaign, including a written summary report by Conestoga-Rovers & Associates (CRA), a full copy of the laboratory's analytical reports, documentation of the quality assurance/quality control procedures and field logs, was prepared and submitted electronically to the state by CRA on behalf of GTIH on June 4, 2013. Mr. Bucci, GTIH's representative, subsequently submitted hard copies on June 5, 2013 to Ms. Mary McIntosh, Engineering Geologist II, NYSDEC, Division of Solid and Hazardous Materials, and to other state and local authorities.

Therefore, only a copy of CRA's Analytical Data Assessment and Full Validation Report, which includes a summary table of the 2013 analytical results, is included in Enclosure 3.

5.0 SOIL MANAGEMENT PLAN

The state has agreed that there is no requirement for a written soil management plan for this Landfill, because there are no immediate plans or anticipation of any future plans to excavate and/or remove soils from the property surrounding the Landfill footprint. However, should this situation change at any time in the future, GTIH must prepare and submit to the NYDEC for approval a written Soil Management Plan a minimum of thirty (30) days prior to commencing such excavation activities.

This plan would address the particulars of the planned project. In the event of an unlikely and unforeseen emergency event requiring that GTIH disturb the soils on-site, GTIH would follow all applicable OSHA regulations to protect the workers, would stage the removed soils as close to the excavation site as safely possible, and would contact the NYDEC within forty-eight (48) hours of this event.

6.0 SOIL VAPOR MANAGEMENT

On February 8, 2007, NYDEC approved a modified Work Plan specifying the installation of four (4) soil vapor implants along the south fence line of the Landfill property in order to collect soil gas samples near the residences along Rhode Island Street. These implants were installed on March 8, 2007. On March 26 - 27, 2007, these implants were purged and sampled in accordance with the sample collection criteria in the approved Work Plan. The volume of collected soil vapor at each sampling location was insufficient to analyze the contents in the laboratory. The inability to draw soil vapor from any of the implants suggested that the clay soils are too tight to allow migration of vapors. In May 2007, GTIH submitted a Soil Intrusion Evaluation Report to NYSDEC, which concluded that there is no threat to neighboring residential properties, based on the results of the attempted March 2007 soil vapor sampling event, and recommended that no further action concerning vapor studies was warranted.

On December 28, 2008, the NYSDEC and the New York State Department of Health (NYS DOH) informed GTIH, in writing, that they had reviewed the submitted Soil Intrusion Evaluation Report for the Landfill and determined that the potential for soil vapor intrusion into neighboring homes and businesses had been satisfactorily evaluated. Furthermore, the agencies concurred with GTIH's recommendation that no further action is needed at this site regarding soil vapor intrusion. Therefore, no vapor intrusion monitoring program is required at this Landfill.

7.0 CONCLUSIONS AND RECOMMENDATIONS

All site inspections, monitoring and maintenance activities, and reporting requirements were implemented as required in the OM&M Plan for the Landfill during the certification period. The analytical data from the annual groundwater monitoring event are consistent with the historical data. Engineering controls and associated institutional controls are in place, are performing properly and remain effective. However, during a NYSDEC inspection of the Landfill conducted on May 3, 2013, the condition of the concrete surface seal and pad at one well was found to be deteriorated. This inspection pre-dated the planned annual monitoring well inspection, which was scheduled later in the year; thus, the results of the state inspection indicated that the established annual frequency for well inspections was inadequate to promptly identify and correct structural damage.

Based on this finding, GTIH increased its inspections of the monitoring wells on a temporary basis, by including them in the scheduled weekly inspections from August 2013 through December 2013. GTIH also proposed to NYSDEC a formal modification to the current Landfill site inspection program, to consist of weekly general and security inspections at the site, and a quarterly monitoring well inspection, both starting in 2014; this proposal was subsequently approved by the state. There were no other identified deficiencies in the approved institutional/engineering controls (IC/EC) at this site during the certification period, or any other recommended improvements to the approved OM&M Plan.

However, GTIH agreed to voluntarily modify the OM&M Plan to transition it to a full Site Management Plan (SMP) for this Landfill, in accordance with applicable chapters and subsections of the NYS Division of Environmental Remediation, Final DER-10 Technical Guidance for Site Investigation and Remediation (dated May 2010), and also to address past potentially confusing and duplicative reporting requirements. The SMP will also incorporate the improved inspection program discussed above. GTIH submitted several draft versions of the SMP to NYSDEC in 2012 and 2013 for its review and comment. In December 2013, GTIH subsequently submitted a final proposed SMP to NYSDEC for approval, which was revised to incorporate the prior comments received from the agency.

There are currently no required treatment or mitigation systems at this site, and no indication that any changes are needed. Based on this review, the remedy in place continues to be protective of public health and the environment. The completed IC/EC Certification form is attached in Enclosure 4.

Due to the following facts:

1) this Landfill is a Class 4 Inactive Hazardous Waste Site;

2) there is no required Remedial Program or remedial objectives; and

3) the monitoring program for the past twenty-six (26) years since closure of the site has identified no negative trends in the groundwater quality,

GTIH, therefore, recommends that compliance be maintained with the proposed SMP, pending NYSDEC approval, until thirty (30) years post-closure. An assessment should be made at that time to determine whether groundwater monitoring can be safely discontinued and/or other modifications made to the site management programs.

ENCLOSURE 1

Weekly and Annual Inspection Forms
(example dated July 5, 2013)

INSPECTION OF LANFILL FENCE & CAP & SURROUNDING AREA

Date	Time	Inspector
7-05-13	12:30	Kenny Mayes

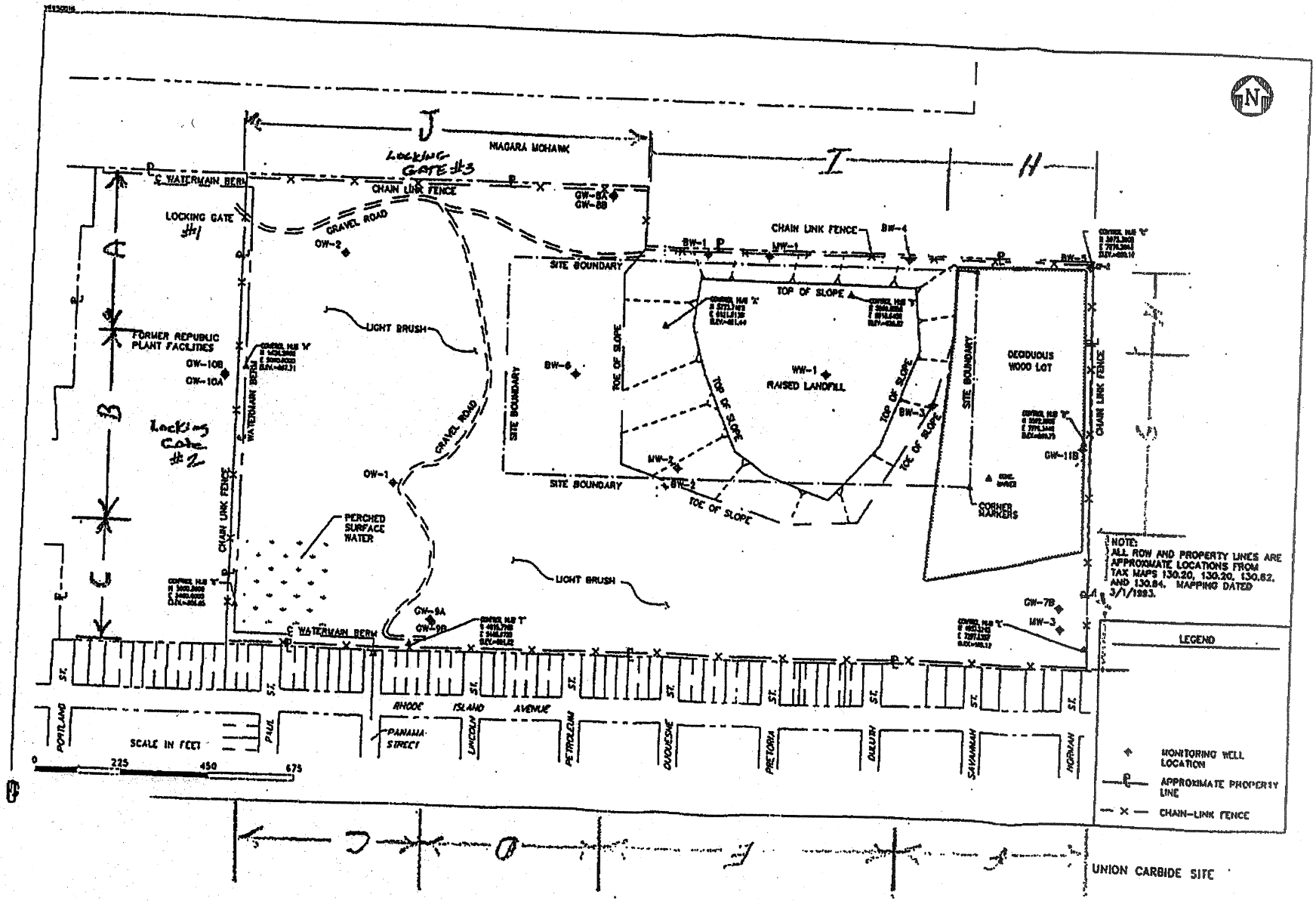
AREA	OK	DAMAGED	DATE REPAIRED	REMARKS
A	X			
B	X			
C	X			
D	X			
E	X			
F	X			
G	X			
H	X			
I	X			
J	X			

GATE	OK	DAMAGED	DATE REPAIRED	REMARKS
1	X			
2	X			
3	X			

COMMENTS:

CAP CONDITION COMMENTS: **(Checking for erosion)**

SUROUNDING AREA:


NIAGARA MOHAWK
LOCKING GATE #3
C WATERMAIN BERM
CHAIN LINK FENCE
LOCKING GATE #1
GRAVEL ROAD
GW-2
GW-8A
GW-8B
BW-1
MW-1
BW-4
SITE BOUNDARY
TOP OF SLOPE
LIGHT BRUSH
FORMER REPUBLIC PLANT FACILITIES
GW-10B
GW-10A
BW-6
TOE OF SLOPE
WW-1
RAISED LANDFILL
DECIDUOUS WOOD LOT
BW-3
BW-2
BW-5
GW-11B
CORNER MARKERS
LOCKING GATE #2
GW-1
PERCHED SURFACE WATER
GW-9A
GW-9B
GW-7B
MW-3
NOTE:
ALL ROW AND PROPERTY LINES ARE APPROXIMATE LOCATIONS FROM TAX MAPS 130.20, 130.20, 130.82, AND 130.84. MAPPING DATED 3/1/1983.
LEGEND
MONITORING WELL LOCATION
APPROXIMATE PROPERTY LINE
CHAIN-LINK FENCE
SCALE IN FEET
0
225
450
675
PORTLAND ST.
PAUL ST.
RHODE ISLAND AVENUE
PANAMA STREET
LINCOLN ST.
PETROLEUM ST.
DUQUESNE ST.
PRETORIA ST.
OKLAHOMA ST.
SAVANNAH ST.
NORMAN ST.
UNION CARBIDE SITE

APPENDIX B

ANNUAL MONITORING WELL INSPECTION

ID WELL NUMBER	WELL ID TAG INTACT YES/NO	LOCK CONDITION	OUTER CASING CONDITION	CONCRETE SEAL CONDITION	COMMENTS
MW1-78	Yes	Locked	Good	Good	
MW2-78	↓	↓	↓	↓	
MW3-79	↓	↓	↓	↓	
BW1-86	↓	↓	↓	↓	
BW2-86	↓	↓	↓	↓	
BW3-86	↓	↓	↓	↓	
BW4-86	↓	↓	↓	↓	
BW5-86	↓	↓	↓	↓	
BW6-86	↓	↓	↓	↓	
WW1-86	↓	↓	↓	↓	
OW1-88	↓	↓	↓	↓	
OW2-88					

NYSDEC WELLS

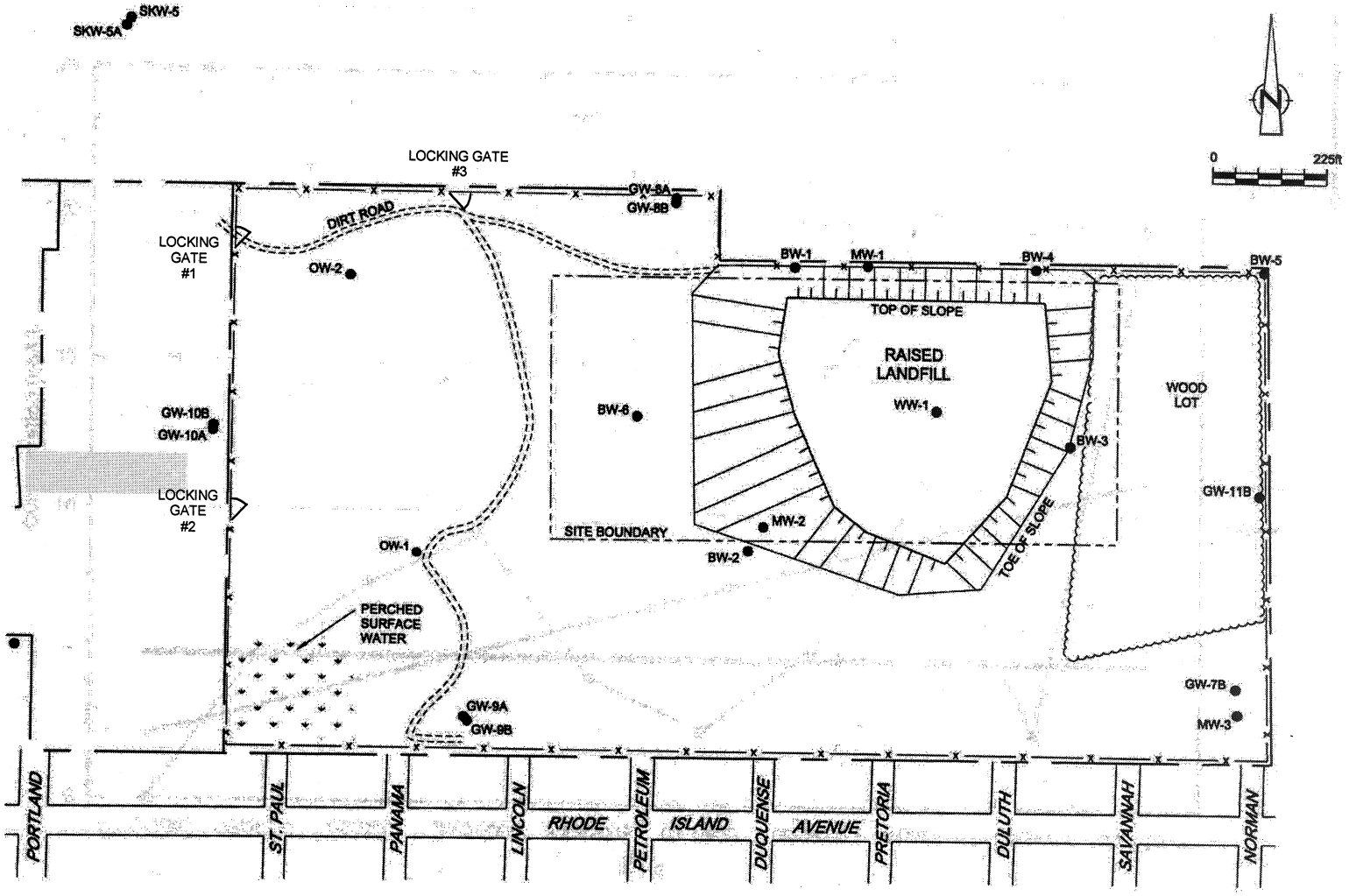
(INSTALLED SEPT/OCT 93)

ID WELL NUMBER	WELL ID TAG INTACT YES/NO	LOCK CONDITION	OUTER CASING CONDITION	CONCRETE SEAL CONDITION	COMMENTS
GW7B-93	Yes	Locked	Good	Good	
GW8A-93	↓	↓	↓	↓	
GW8B-93	↓	↓	↓	↓	
GW9A-93	↓	↓	↓	↓	
GW9B-93	↓	↓	↓	↓	
GW11B-93	↓	↓	↓	↓	

ENTIRE CAP MOWED: NO

ENCLOSURE 2

Site Plan Map Showing Locations of Groundwater Monitoring Wells, Fencing and Locking Gates



LEGEND

PROPERTY LINE

FENCE

WW-1 MONITORING WELL LOCATION

figure 1

SITE PLAN AND MONITORING WELL LOCATIONS
UCAR SWMF
Niagara Falls, New York

05513-00(PRES001)GN-WA001 FEB 26/2013

ENCLOSURE 3

CRA Analytical Data Assessment and Full Validation, Annual Groundwater Monitoring Program for May 2013 Sampling Event (Conestoga-Rovers & Associates, Internal Memorandum to Jim Kay, dated June 3, 2013)

CONESTOGA-ROVERS & ASSOCIATES

2055 Niagara Falls Blvd., Suite #3
Niagara Falls, New York 14304
Telephone: (716) 297-6150 Fax: (716) 297-2265
www.CRAworld.com

MEMORANDUM

TO: Jim Kay

REF. NO.: 005513

FROM: Deb Andrasko/eew-9

DATE: June 3, 2013

E-Mail and Hard Copy if Requested

RE: Analytical Data Assessment and Full Validation
Annual Groundwater Monitoring Program
UCAR Carbon Company, Inc.
Niagara Falls, New York
May 2013

INTRODUCTION

The following document details an assessment and validation of analytical results for groundwater samples collected in support of the annual monitoring program at the UCAR Carbon Site in Niagara Falls, New York (Site) during May 2013. Samples were submitted to TestAmerica Laboratory, located in Buffalo, NY. A sample collection and analysis summary is presented in Table 1. A summary of the analytical methodology is presented in Table 2. The validated analytical results are summarized in Table 3.

Evaluation of the data was based on information obtained from the finished data sheets, raw data, chain of custody forms, calibration data, blank data, duplicate data, recovery data from surrogate spikes, laboratory control samples (LCS), and matrix spikes; and field quality assurance/quality control (QA/QC) samples . The assessment of analytical and in-house data included checks for: data consistency (by observing comparability of duplicate analyses); adherence to accuracy and precision criteria; transmittal errors; and anomalously high and low parameter values.

The quality assurance/quality control (QA/QC) criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 2 and the documents entitled:

i) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540/R-99-008, October 1999

ii) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", USEPA 540/R-94-013, February 1994

These will subsequently be referred to as the "Guidelines".

Full Contract Laboratory Program (CLP) equivalent raw data deliverables were provided by the laboratory. The data quality assessment and validation presented in the following subsections were performed based on the sample results, supporting quality assurance/quality control (QA/QC) and all raw data provided.

SAMPLE HOLDING TIME AND PRESERVATION

The sample holding time criteria for the analyses are summarized in Table 2. Sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were prepared and analyzed within the required holding times.

All samples were properly preserved and delivered on ice and stored by the laboratory at the required temperature (0-6°C).

GAS CHROMATOGRAPHY/MASS SPECTROMETER (GC/MS) – TUNING AND MASS CALIBRATION (INSTRUMENT PERFORMANCE CHECK) – VOLATILE ORGANIC COMPOUNDS (VOCS)

GC/MS

Prior to analysis, GC/MS instrumentation is tuned to ensure optimization over the mass range of interest. To evaluate instrument tuning, the volatile organic compound (VOC) method requires the analysis of specific tuning compound bromofluorobenzene (BFB). The resulting spectra must meet the criteria cited in the methods before analysis is initiated. Analysis of the tuning compound must then be repeated every 12 hours throughout sample analysis to ensure the continued optimization of the instrument.

Tuning compounds were analyzed at the required frequency throughout the volatile analysis periods. All tuning criteria were met, indicating that proper optimization of the instrumentation was achieved.

GC/MS INITIAL CALIBRATION – VOCS

To quantify compounds of interest in samples, calibration of the GC/MS over a specific concentration range must be performed. Initially, a five-point calibration curve containing all compounds of interest is analyzed to characterize instrument response for each analyte over a specific concentration range. Linearity of the calibration curve and instrument sensitivity are evaluated against the following criteria:

i) All relative response factors (RRFs) must be greater than or equal to 0.05.

ii) The percent relative standard deviation (RSD) values must not exceed 30.0 percent or a minimum correlation coefficient (R) of 0.995 and minimum coefficient of determination (R^2) of 0.99 if linear and quadratic equation calibration curves, respectively, are used.

The initial calibration data for VOCs was reviewed. All compounds met the above criteria for sensitivity and linearity.

GC/MS CONTINUING CALIBRATION – VOCS

To ensure that instrument calibration is acceptable throughout the sample analysis period, continuing calibration standards must be analyzed and compared to the initial calibration curve every 12 hours.

The following criteria were employed to evaluate continuing calibration data:

i) All RRF values must be greater than or equal to 0.05.
ii) Percent difference (%D) values must not exceed 25 percent.

Calibration standards were analyzed at the required frequency, and the results met the above criteria for instrument sensitivity and stability.

INITIAL CALIBRATION – INORGANIC ANALYSES

Initial calibration of the instruments ensures that they are capable of producing satisfactory quantitative data at the beginning of a series of analyses. For Inductively Coupled Plasma (ICP) analysis, a calibration blank and at least one standard must be analyzed at each wavelength to establish the analytical curve. For instrumental general chemistry analyses, a calibration blank and a minimum of five standards must be analyzed to establish the analytical curve and resulting correlation coefficients must be 0.995 or greater.

After the analyses of the calibration curves, an initial calibration verification (ICV) standard must be analyzed to verify the analytical accuracy of the calibration curves. All analyte recoveries from the analyses of the ICVs must be within the following control limits.

Analytical Method	*Parameter*	*Control Limits*
ICP/AA	Metals	90 - 110%
Instrumental Wet Chemistry	Ammonia, Nitrite, TKN	85 - 115%

Upon review of the data, it was determined that the calibration curves and ICVs were analyzed at the proper frequencies and that all of the above-specified criteria were met. The laboratory effectively demonstrated that the instrumentation used for metals and instrument general chemistry analyses was properly calibrated prior to sample analyses.

CONTINUING CALIBRATION – INORGANIC ANALYSES

To ensure that instrument calibration is acceptable throughout the sample analysis period, continuing calibration verification (CCV) standards are analyzed on a regular basis. Each CCV is deemed acceptable if all analyte recoveries are within the control limits specified above for the ICVs. If some of the CCV analyte recoveries are outside the control limits, samples analyzed before and after the CCV, up until the previous and proceeding CCV analyses, are affected.

For this study, CCVs were analyzed at the proper frequency. All analyte recoveries reported for the CCVs were within the specified limits.

CONTRACT REQUIRED DETECTION LIMIT (CRDL) STANDARD ANALYSES

To verify the linearity of the ICP calibration near the detection limit, a standard is analyzed which contains the ICP analytes at specified concentrations. This standard must be analyzed at the beginning and end of each sample analysis run or a minimum of twice per 8-hour period.

All CRDL recoveries were acceptable.

LABORATORY BLANK ANALYSES

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures. Additionally, initial and continuing calibration blanks (ICBs/CCBs) are routinely analyzed after each ICV/CCV for the inorganic parameters.

For this study, laboratory method blanks were analyzed at a minimum frequency of one per 20 investigative samples and/or one per analytical batch.

Organic Analyses

All method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation.

Inorganic Analyses

Upon review of the ICBs, CCBs, and method blanks, it was noted that an iron concentration was observed in the metals ICB above the method detection limit (MDL). Most investigative samples associated with the low level detection reported had concentrations significantly greater than the associated ICB concentration. These sample results were not impacted by the contamination detected. Associated positive sample results with similar concentrations to the level reported in the blank were qualified as non-detect (see Table 4).

SURROGATE SPIKE RECOVERIES

In accordance with the methods employed, all samples, blanks and QC samples analyzed for VOCs are spiked with surrogate compounds prior to sample analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for VOC determinations were spiked with three surrogate compounds prior to sample analysis. All surrogate recoveries were within the laboratory control limits.

INTERNAL STANDARDS (IS) ANALYSES

Internal standard data were evaluated for all VOC sample analyses.

To ensure that changes in the GC/MS sensitivity and response do not affect sample analysis results, internal standard compounds are added to each sample prior to analysis. All results are then calculated as a ratio of the internal standard responses.

The sample internal standard results were evaluated against the following criteria:

i) The retention time of the internal standard must not vary more than ±30 seconds from the associated calibration standard.
ii) Internal standard area counts must not vary by more than a factor of two (-50 percent to +100 percent) from the associated calibration standard.

All internal standard recoveries and retention times met the above criteria.

LABORATORY CONTROL SAMPLE (LCS) ANALYSES

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

For this study, LCSs were analyzed at a minimum frequency of one per 20 investigative samples and/or one per analytical batch.

Organic Analyses
The LCS contained representative compounds of interest. All LCS recoveries were within the laboratory control limits, demonstrating acceptable analytical accuracy.

Inorganic Analyses
The LCS contained all analytes of interest. LCS recoveries were assessed per the "Guidelines". All LCS recoveries were within the control limits, demonstrating acceptable analytical accuracy.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) ANALYSES

To evaluate the effects of sample matrices on the extraction or digestion process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS/MSD samples. The relative percent difference (RPD) between the MS and MSD is used to assess analytical precision. If the original sample concentration is significantly greater than the spike concentration, the recovery is not assessed.

MS/MSD analyses were performed as specified in Table 1.

Organic Analyses
The MS/MSD samples were spiked with representative compounds. All percent recoveries and RPD values were within the laboratory (method) control limits, demonstrating acceptable analytical accuracy and precision.

Inorganic Analyses

The MS/MSD samples were spiked with the analytes of interest and the results were evaluated using the "Guidelines". All percent recoveries and RPD values were within the control limits with the exception of a slightly low ammonia MS recovery. All associated sample results were judged acceptable without qualification based on the good MSD recovery and the minimal exceedance of the MS recovery.

ICP SERIAL DILUTION

The serial dilution determines whether significant physical or chemical interferences exist due to sample matrix. A minimum of one per 20 investigative samples or at least one per analytical batch must be analyzed at a five-fold dilution. For samples with sufficient analyte concentrations, the serial dilution results must agree within 10 percent of the original results.

A serial dilution was performed on the MS/MSD sample. All results met the criteria above.

ICP INTERFERENCE CHECK SAMPLE ANALYSIS (ICS)

To verify that the laboratory has established proper inter-element and background correction factors, ICSs are analyzed. These samples contain high concentrations of aluminum, calcium, magnesium and iron and are analyzed at the beginning and end of each sample analysis period. The ICSs are evaluated against recovery control limits of 80 to 120 percent.

ICS analysis results were evaluated for all samples using the criteria in the "Guidelines". All ICS recoveries and results were acceptable.

FIELD QA/QC SAMPLES

The field QA/QC consisted of one trip blank sample and one field duplicate sample set.

Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, one trip blank was collected and submitted to the laboratory for VOC analysis. All results were non-detect for the compounds of interest.

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, one field duplicate sample was collected and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with these duplicate samples must be less than 50 and 100 percent for water and soil samples, respectively. If the reported concentration in either the investigative sample or its duplicate is less than five times the reporting limit (RL), the evaluation criteria is one or two times the RL value for water and soil samples, respectively.

All field duplicate results were within acceptable agreement, demonstrating good sampling and analytical precision with the exception of the total iron analyses. A summary of the qualified sample results is presented in Table 5.

ANALYTE REPORTING

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each analyte. Positive analyte detections less than the practical quantitation limit (PQL) but greater than the method detection limit (MDL) were qualified as estimated (J) in Table 3 unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the PQL in Table 3.

TARGET COMPOUND IDENTIFICATION

To minimize erroneous compound identification during organic analyses, qualitative criteria including compound retention time and mass spectra (if applicable) were evaluated according to the identification criteria established by the methods. The samples identified in Table 1 were reviewed. The organic compounds reported adhered to the specified identification criteria.

CONCLUSION

Based on this assessment, the data produced by TestAmerica were found to exhibit acceptable levels of accuracy and precision based on the provided information and may be used with the qualifications noted.

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
ANNUAL GROUNDWATER MONITORING PROGRAM
UCAR CARBON COMPANY, INC.
NIAGARA FALLS, NEW YORK
MAY 2013

				Parameters					
Sample I.D.	*Location I.D.*	*Collection Date (mm/dd/yy)*	*Collection Time (hr:min)*	*VOCs*	*SSPL Metals-total and dissolved*	*TKN*	*Nitrite*	*Ammonia*	*Comments*
WG-5513-050313-001	GW-9B	05/03/13	10:50	X	X	X	X	X	MS/MSD
WG-5513-050313-002	MW-3	05/03/13	11:45	X	X	X	X	X	
WG-5513-050313-003	BW-2	05/03/13	12:30	X	X	X	X	X	
WG-5513-050313-004	BW-2	05/03/13	13:30	X	X	X	X	X	Field Duplicate of WG-5513-050313-003
WG-5513-050313-005	BW-3	05/03/13	13:35	X	X	X	X	X	
WG-5513-050313-006	BW-4	05/03/13	14:20	X	X	X	X	X	
WG-5513-050313-007	BW-1	05/03/13	15:00	X	X	X	X	X	
WG-5513-050313-008	GW-8B	05/03/13	15:35	X	X	X	X	X	
TB-5513-050313	-	05/03/13	-	X					Trip blank

Notes:
'- Not applicable.
TKN Total Kjeldahl Nitrogen.
SSPL Site specific parameter list.
VOCs Volatile organic compounds.
MS Matrix spike.
MSD Matrix spike duplicate.

TABLE 2

SUMMARY OF ANALYTICAL METHODS
ANNUAL GROUNDWATER MONITORING PROGRAM
UCAR CARBON COMPANY, INC.
NIAGARA FALLS, NEW YORK
MAY 2013

Parameter	*Method*
TCL VOCs	SW-846 8260B[1]
Iron, Potassium and Zinc (total and dissolved)	SW-846 6010B[1]
Nitrite	EPA 353.2[2]
Ammonia	EPA 350.1[2]
Total Kjeldahl Nitrogen	EPA 351.2[2]

Notes:

(1) "Test Methods for Solid Waste/Physical Chemical Methods," SW-846, 3rd Edition, September 1986 (with all subsequent revisions).

(2) "Methods for Chemical Analysis of Water and Wastes", United States Environmental Protection Agency [USEPA] 600/4-79-220, March 1983 (with all subsequent revisions).

TCL Target Compound List.

VOCs Volatile Organic Compounds.

TABLE 3

ANALYTICAL RESULTS SUMMARY
ANNUAL GROUNDWATER MONITORING PROGRAM
UCAR CARBON COMPANY, INC.
NIAGARA FALLS, NEW YORK
MAY 2013

	Location:	*BW-1*	*BW-2*	*BW-2*	*BW-3*
	Sample Name:	*WG-5513-050313-007*	*WG-5513-050313-003*	*WG-5513-050313-004*	*WG-5513-050313-005*
	Sample Date:	*5/3/2013*	*5/3/2013*	*5/3/2013 (Duplicate)*	*5/3/2013*
	Units				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	0.71 J
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	10 U	10 U	10 U	10 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	13	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.7
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 3

ANALYTICAL RESULTS SUMMARY
ANNUAL GROUNDWATER MONITORING PROGRAM
UCAR CARBON COMPANY, INC.
NIAGARA FALLS, NEW YORK
MAY 2013

	Location:	*BW-1*	*BW-2*	*BW-2*	*BW-3*
	Sample Name:	*WG-5513-050313-007*	*WG-5513-050313-003*	*WG-5513-050313-004*	*WG-5513-050313-005*
	Sample Date:	*5/3/2013*	*5/3/2013*	*5/3/2013 (Duplicate)*	*5/3/2013*
	Units				
Volatile Organic Compounds (continued)					
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	6.0
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Metals					
Iron	µg/L	2400	5200 J	2900 J	1300
Iron (dissolved)	µg/L	1500	1100	1100	650
Potassium	µg/L	8400	6200	6200	1800
Potassium (dissolved)	µg/L	8100	6200	6200	1700
Zinc	µg/L	2600	790	480	390
Zinc (dissolved)	µg/L	5.6 J	7.5 J	10	290
Wet Chemistry					
Ammonia	µg/L	890	410	410	87
Nitrite (as N)	µg/L	50 U	50 U	50 U	50 U
Total kjeldahl nitrogen (TKN)	µg/L	1600	710	740	200 U

TABLE 3

ANALYTICAL RESULTS SUMMARY
ANNUAL GROUNDWATER MONITORING PROGRAM
UCAR CARBON COMPANY, INC.
NIAGARA FALLS, NEW YORK
MAY 2013

	Location:	*BW-4*	*GW-8B*	*GW-9B*	*MW-3*
	Sample Name:	*WG-5513-050313-006*	*WG-5513-050313-008*	*WG-5513-050313-001*	*WG-5513-050313-002*
	Sample Date:	*5/3/2013*	*5/3/2013*	*5/3/2013*	*5/3/2013*
	Units				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	3.7 J	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	4.0	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	40 U	10 U	10 U	10 U
2-Hexanone	µg/L	20 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	20 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	40 U	10 U	10 U	10 U
Benzene	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	6.8	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	1300	20	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	4.0 U	1.0 U	1.0 U	1.0 U

TABLE 3

ANALYTICAL RESULTS SUMMARY
ANNUAL GROUNDWATER MONITORING PROGRAM
UCAR CARBON COMPANY, INC.
NIAGARA FALLS, NEW YORK
MAY 2013

	Location:	*BW-4*	*GW-8B*	*GW-9B*	*MW-3*
	Sample Name:	*WG-5513-050313-006*	*WG-5513-050313-008*	*WG-5513-050313-001*	*WG-5513-050313-002*
	Sample Date:	*5/3/2013*	*5/3/2013*	*5/3/2013*	*5/3/2013*
	Units				
Volatile Organic Compounds (continued)					
Tetrachloroethene	µg/L	92	1.0 U	1.0 U	1.0 U
Toluene	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	7.3	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	4.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	510	7.2	1.0 U	1.0 U
Vinyl chloride	µg/L	240	3.8	1.0 U	1.0 U
Xylenes (total)	µg/L	8.0 U	2.0 U	2.0 U	2.0 U
Metals					
Iron	µg/L	7600	250 U	240 U	12000
Iron (dissolved)	µg/L	4400	190 U	170 U	670
Potassium	µg/L	17600	5400	4600	4600
Potassium (dissolved)	µg/L	16800	5300	4700	2400
Zinc	µg/L	2000	990	4.8 J	46
Zinc (dissolved)	µg/L	270	460	7.3 J	2.1 J
Wet Chemistry					
Ammonia	µg/L	3400	65	460	45
Nitrite (as N)	µg/L	21 J	50 U	50 U	50 U
Total kjeldahl nitrogen (TKN)	µg/L	3800	200 U	770	2200

Notes:
J Estimated concentration.
U Not detected; associated reporting limit is estimated.

TABLE 4

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE INSTRUMENT BLANKS
ANNUAL GROUNDWATER MONITORING PROGRAM
UCAR CARBON COMPANY, INC.
NIAGARA FALLS, NEW YORK
MAY 2013

Parameter	*Analyte*	*Blank ID*	*Analysis Date*	*Blank Result*	*Associated Analytes*	*Sample ID*	*Original Result*	*Qualified Result*	*Units*
Metals	Iron	ICB	05/06/13	0.0605	Iron (dissolved)	WG-5513-050313-001	170	170 U	µg/L
					Iron	WG-5513-050313-001	240	240 U	µg/L
					Iron (dissolved)	WG-5513-050313-008	190	190 U	µg/L
					Iron	WG-5513-050313-008	250	250 U	µg/L

Notes:
ICB Initial calibration blank.
U Not detected at the associated reporting limit.

TABLE 5

QUALIFIED SAMPLE DATA DUE TO VARIABILITY IN FIELD DUPLICATE RESULTS
ANNUAL GROUNDWATER MONITORING PROGRAM
UCAR CARBON COMPANY, INC.
NIAGARA FALLS, NEW YORK
MAY 2013

Parameter	*Analyte*	*RPD*	*Sample ID*	*Qualified Result*	*Field Duplicate Sample ID*	*Qualified Result*	*Units*
Metals	Iron (total)	57	WG-5513-050313-003	5200 J	WG-5513-050313-004	2900 J	µg/L

Notes:
J Estimated concentration.
RPD Relative percent difference.

ENCLOSURE 4

Institutional and Engineering Controls Certification Form

Enclosure 2

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

Site Details **Box 1**

Site No. 932035

Site Name GrafTech International Holdings Inc.

Site Address: Hyde Park Boulevard Zip Code: 14303
City/Town: Niagara
County: Niagara
Site Acreage: 61.8

Reporting Period: January 1, 2013 to December 31, 2013

	YES	NO
1. Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Industrial	☒	☐
7. Are all ICs/ECs in place and functioning as designed?	☒	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

N/A
Signature of Owner, Remedial Party or Designated Representative

Date

SITE NO. 932035 Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
130.20-1-1	GrafTech International Holdings Inc.	O&M Plan
		Monitoring Plan

Per the revised OM&M Plan dated November 4, 2009, groundwater monitoring and landfill cap maintenance is required.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
130.20-1-1	Fencing/Access Control
	Cover System

Constructed cover system and closed under Division of Materials Management Part 360.

Periodic Review Report (PRR) Certification Statements

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

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

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☒	☐

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

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

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

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

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

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

YES	NO
☒	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

N/A

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 932035

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Peter J Bernard at 12900 SNOW RD, PARMA, OH. 44130
print name print business address

am certifying as OWNER (Owner or Remedial Party)

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

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

1/29/14
Date

IC/EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

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

I, JUANITA M. BURSLEY (print name) at 12900 SNOW RD., PARMA, OH. 44130 (print business address)

am certifying as a Qualified Environmental Professional for the OWNER (Owner or Remedial Party)

Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification	Stamp (Required for PE)	Date
Juanita M. Bursley	N/A	1/29/14