

December 20, 2018

Mr. Scott Deyette New York State Department of Environmental Conservation Division of Environmental Remediation, BURC 625 Broadway Albany, New York 12233-7014

Re: National Grid Herkimer Former MGP Site

> NYSDEC Site No. V00471-6 Herkimer, New York 2018 Periodic Review Report

Dear Mr. Deyette:

Enclosed for your review is the 2018 Periodic Review Report (PRR) for the National Grid Herkimer MGP Site. The PRR pertains to the period from November 23, 2017 through November 23, 2018 and includes a brief report and Institutional Controls/Engineering Controls (IC/EC) Certification Form.

Please feel free to contact me at 315.428.5652 if you have any questions.

Sincerely,

for SPS

Steven P. Stucker, C.P.G. Lead Environmental Engineer

Reporting Period – November 23, 2017 through November 23, 2018

I. Introduction

A. Brief Site Summary –

The Herkimer Manufactured Gas Plant (MGP) Site (the Site) is located on an approximate 0.6 acre lot in Herkimer, New York (refer to Figure 1 Site Location Map). The site was owned by Niagara Mohawk (NM) and operated as a MGP facility approximately from 1890 to 1911, upon which time it was consolidated with the NM-owned Ilion MGP.

An investigation of the Site began in 2003 with an Initial Site Characterization/Interim Remedial Measure (IRM) Study performed by TRC. This study was followed by a Supplemental Site Characterization (TRC, 2005) and a Remedial Investigation (TRC, 2009). Pre-design investigations including Pre-design Activities in 2010 and a Groundwater Pumping Test in 2011 were conducted by O'Brien and Gere.

The site investigations identified impacted soils from MGP related activities. Soil samples were collected and analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semi-volatile organic compounds (SVOCs), metals and cyanide. The constituents of concern that were identified above Site Cleanup Objectives (SCOs) included VOCs (benzene, toluene, ethylbenzene, xylene (BTEX)) and SVOCs (polycyclic aromatic hydrocarbons (PAHs)). Cyanide and metals were not detected in soils at the Site above SCOs. The areas where soil exceeded SCOs also generally contained visual evidence of impacts in the form of non-aqueous phase liquid (NAPL), tar, or blebs of product. Groundwater samples indicated that groundwater in the northern portion of the Site had concentrations of BTEX and PAHs exceeding groundwater standards but did not require remedial action. Additionally, soil vapor and air samples collected at the Site indicated no significant levels of contamination.

The major areas of subsurface contamination were identified as the Holder Area and Petroleum Area. The Holder Area was located on the western side of the parcel in the vicinity of the former sub-grade octagonal brick gas holder (approximately 45 feet across), while the Petroleum Area was located in the center of the Site where the former fuel oil tanks and MGP facility were located. Both areas exhibited impacted soils and NAPL.

Approximately 4,350 cubic yards of MGP-related subsurface soils were excavated to an approximate depth of 12 ft. below ground surface (bgs) in the Holder Area and 16 ft. bgs in the Petroleum Area. These excavated soils were disposed off-site at a permitted facility. Following the excavation, a soil cover was installed to a minimum depth of two feet to allow for restricted-residential use of the Site. All fill material met the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d). Additionally,

Reporting Period – November 23, 2017 through November 23, 2018

the upper six inches of soil was of sufficient quality to maintain a vegetation layer. An Environmental Easement was developed to restrict land use and prevent future exposure to MGP-related residuals remaining at the Site. Lastly, a Site Management Plan (SMP) was developed to outline institutional and engineering controls, monitoring, and reporting at the Site.

- B. **Remedial Program Effectiveness** During the reporting period (November 23, 2017 to November 23, 2018), the long-term remedial objectives were met for the site.
- C. **Remedial Program Compliance** The major elements within the Institutional Control/Engineering Control(s) (IC/EC) Plan are in compliance.
- D. **Remedial Program Recommendations** It is recommended that no changes be made to the IC/EC Plan. It is recommended that an annual Periodic Review Report (PRR) be submitted. The next PRR submittal will cover the period November 24, 2018 to November 23, 2019.

II. Site Overview

A. Site Location and Boundaries -

The Site is located in the City of Herkimer, County of Herkimer, New York (Figure 1 presents the site location map). The Site is an approximate 0.6-acre area bounded by West Smith Street to the north, William Street to the east, and by residential properties to the west and to the south (Figure 2 presents the site plan). Currently, the site is owned by an adjacent resident and is vacant and not fenced.

B. Regulatory History and Remedy Features –

The site was remediated in accordance with the multi-site Voluntary Consent Order (VCO) (NYSDEC, 2002) Index No. D0-0001-0011 Site #V00471, which was executed in 2002.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness

Reporting Period – November 23, 2017 through November 23, 2018

A. **Evaluation of Remedy Performance** – Annual visual inspections of the cover system are conducted on the Site. The remedy performance has been effective in protecting the public.

IV. IC/EC Plan Compliance Report

A. IC/EC Requirements and Compliance

1. IC/EC Controls

The ICs/ECs:

- Soil Cover System: Annual site inspection of the cover system includes identification of any damage to the cover.
- 2. IC/EC Goals Each goal is being met and/or working effectively.
- 3. **IC/EC Corrective Measures** No deficiencies were noted during the site inspections.
- 4. **IC/EC Conclusions/Recommendations** The EC program is in compliance and there are no recommendations for the program at this time.
- 5. **IC/EC Certification** Refer to PRR Form Attachment 1 for the certification.
- V. Monitoring Plan Compliance Report The annual inspection of the cover system was conducted on September 17, 2018.
- VI. Operation & Maintenance (O&M) Plan Compliance Report Not Applicable.
- VII. Overall PRR Conclusions and Recommendations
 - A. Compliance with Site Management Plan (SMP)
 - 1. **Requirements** All IC/EC Plan requirements were met during this reporting period.

Reporting Period – November 23, 2017 through November 23, 2018

- 2. **Exposure Pathways** There are no new completed exposure pathways resulting in unacceptable risk.
- 3. **Proposed Plans and Schedule to Meet Compliance** No plan proposed.
- B. **Performance and Effectiveness of the Remedy** The remedy as described in the Site Management Plan and executed by National Grid has been effective in meeting the program goals.
- C. **Future PRR Submittals** The frequency of PRR Submittals should remain annual. Therefore, the next PRR reporting period will cover November 24, 2018 through November 23, 2019.

VIII. Additional Guidance – Not needed.

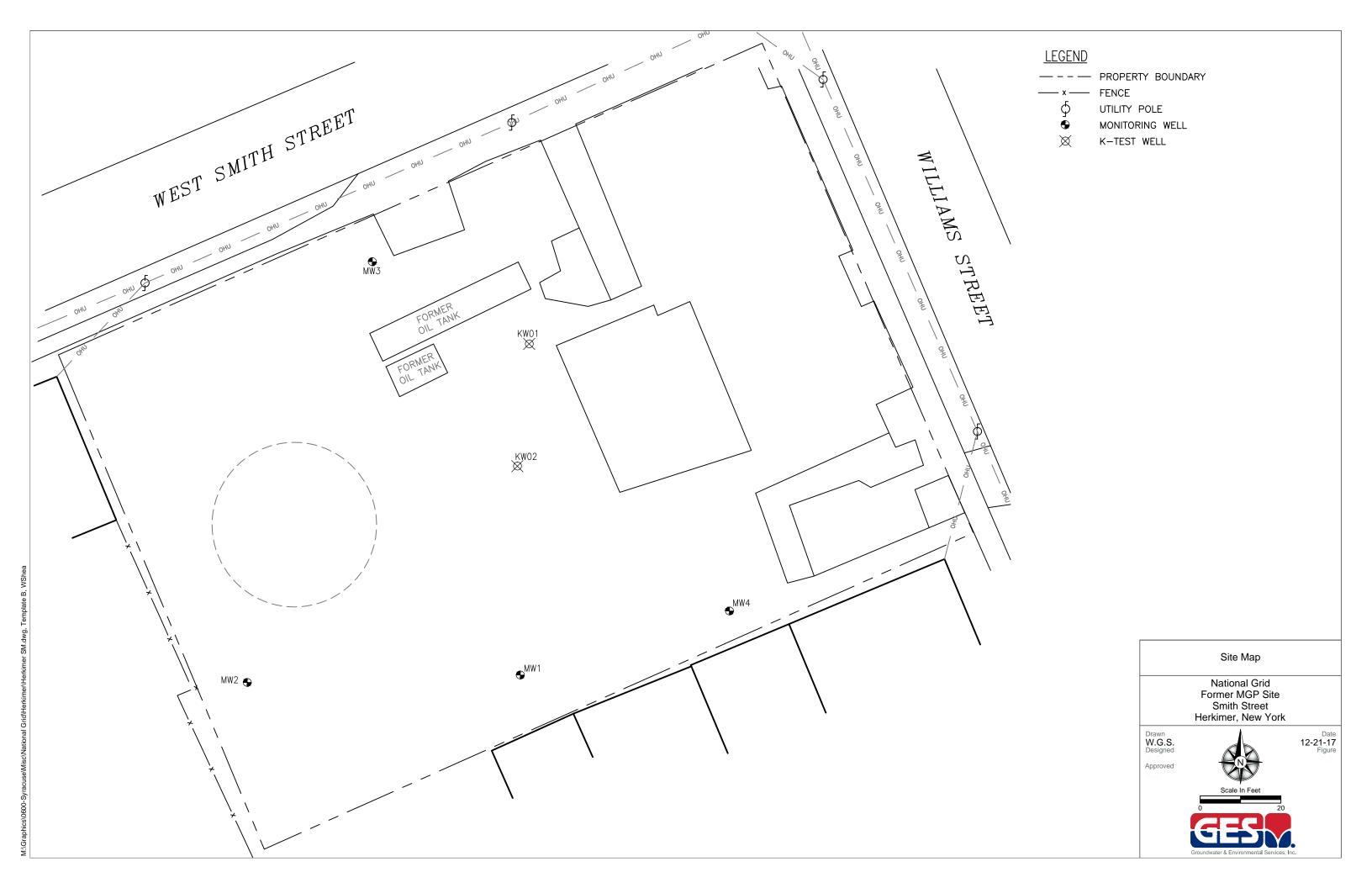
Reporting Period – November 23, 2017 through November 23, 2018

REFERENCES

O'Brien & Gere, 2016. "NM – Herkimer Smith St. MGP Site, Site Management Plan", April 2016.

Quadrangle Location

M:\Graphics\0600-Syracuse\Misc\National Grid\Herkimer\Herkimer SLM.dwg, Template SLM, WShea



Field Inspection Report Smith Street Former MGP Site Herkimer, New York

Date:	12/6/2018	Herkimer, New York	Time:	11:30
Technician:	TB		Weather:	Cloudy 35

Vegetated Cover Areas									
Soil Above Geotextile	GOOD	OOD FAIR		DAMAGED	COMMENTS:				
Signs of Burrowing Animals?	YES		NO		COMMENTS:				
Signs of Erosion?	YES		NO		COMMENTS:				
Vegetative Growth	GOOD	DOD FA		POOR	COMMENTS:				
Vegetative Coverage	Established >	>80%	Established <80%		COMMENTS:				
Agricultural or Vegetable Gardens	YES		NO		COMMENTS:				
Site Been Mowed	YES		NO		COMMENTS:				
Litter	NONE	NE MIN		SIGNIFICANT	COMMENTS:				

Drainage Facilities									
Ponding or Standing Water?	YES			NO	COMMENTS:				
Sediment or debris within the site?	NONE	MIN	IOR	SIGNIFICANT	COMMENTS:				
Evidence of Sediment Release from Site?	YES		NO		COMMENTS:				
Condition of Erosion Controls?	GOOD	FA	ΝR	POOR	COMMENTS:				

General Comments:

FIELD INSPECTION REPORT

Smith Street Former MGP Site Herkimer, New York

Date:	9/17/2018	Horkinor, Now York	Time:	14:15
Technician:	KL		Weather:	PC 82

Vegetated Cover Areas									
Soil Above Geotextile	GOOD	FAIR		DAMAGED	COMMENTS:				
Signs of Burrowing Animals?	YES	YES		NO	COMMENTS:				
Signs of Erosion?	YES		NO		COMMENTS:				
Vegetative Growth	GOOD	F.A	NR	POOR	COMMENTS:				
Vegetative Coverage	Established >	80%	Established <80%		COMMENTS:				
Agricultural or Vegetable Gardens	YES		NO		COMMENTS:				
Site Been Mowed	YES			NO	COMMENTS:				
Litter	NONE	MIN	IOR	SIGNIFICANT	COMMENTS:				

Drainage Facilities									
Ponding or Standing Water?	YES		NO		COMMENTS:				
Sediment or debris within the site?	NONE	MIN	IOR	SIGNIFICANT	COMMENTS:				
Evidence of Sediment Release from Site?	YES		NO		COMMENTS:				
Condition of Erosion Controls?	GOOD	FA	ΝR	POOR	COMMENTS:				

General Comments:

FIELD INSPECTION REPORT

Smith Street Former MGP Site
Herkimer New York

Date:	6/22/2018	nerkiller, New Tork	Time:	11:15
Technician:	KL		Weather:	Sunny 70

Vegetated Cover Areas									
Soil Above Geotextile	GOOD	F.A	ΝR	DAMAGED	COMMENTS:				
Signs of Burrowing Animals?	YES	YES		NO	COMMENTS:				
Signs of Erosion?	YES		NO		COMMENTS:				
Vegetative Growth	GOOD	F.A	ΝR	POOR	COMMENTS:				
Vegetative Coverage	Established >	·80%	Established <80%		COMMENTS:				
Agricultural or Vegetable Gardens	YES		NO		COMMENTS:				
Site Been Mowed	YES		NO		COMMENTS:				
Litter	NONE	MIN	IOR	SIGNIFICANT	COMMENTS:				

Drainage Facilities									
Ponding or Standing Water?	YES		NO		COMMENTS:				
Sediment or debris within the site?	NONE	MIN	IOR	SIGNIFICANT	COMMENTS:				
Evidence of Sediment Release from Site?	YES		NO		COMMENTS:				
Condition of Erosion Controls?	GOOD	FA	ΝR	POOR	COMMENTS:				

General Comments:

FIELD INSPECTION REPORT

Smith Street Former MGP Site
Herkimer New York

Date:	3/22/2018	nerkiller, New Tork	Time:	12:30
Technician:	KL		Weather:	Sunny 39

Vegetated Cover Areas								
Soil Above Geotextile	GOOD	F <i>A</i>	NR	DAMAGED	COMMENTS:			
Signs of Burrowing Animals?	YES	YES		NO	COMMENTS:			
Signs of Erosion?	YES		NO		COMMENTS:			
Vegetative Growth	GOOD FA		NR	POOR	COMMENTS:			
Vegetative Coverage	Established >	80%	Established <80%		COMMENTS:			
Agricultural or Vegetable Gardens	YES		NO		COMMENTS:			
Site Been Mowed	YES		NO		COMMENTS: snow covered			
Litter	NONE	MIN	IOR	SIGNIFICANT	COMMENTS:			

Drainage Facilities									
Ponding or Standing Water?	YES		NO		COMMENTS:				
Sediment or debris within the site?	NONE	MIN	IOR	SIGNIFICANT	COMMENTS:				
Evidence of Sediment Release from Site?	YES		NO		COMMENTS:				
Condition of Erosion Controls?	GOOD	FA	ΝR	POOR	COMMENTS:				

General Comments:



Enclosure 2 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Site Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form



Site Name NM - Herkimer Smith St. MGP Site Address: Smith & William Zip Code: 13350 City/Town: Herkimer County: Herkimer Site Acreage: 0.6 Reporting Period: November 23, 2017 to November 23, 2018 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? Restricted-Residential, Commercial, and 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.	Sit	Site Details e No. V00471	Box 1	
City/Town: Herkimer County: Herkimer Cou	Sit	e Name NM - Herkimer Smith St. MGP		
November 23, 2018 YES NO I. 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. Is the site currently undergoing development? Box 2 YES NO 3. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial 7. Are all ICs/ECs in place and functioning as designed? X 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.	City	y/Town: Herkimer unty: Herkimer		
If NO, include handwritten above or on a separate sheet. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? 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. Is the site currently undergoing development? Box 2 YES NO Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial 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.	₹e			
If NO, include handwritten above or on a separate sheet. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? 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. Is the site currently undergoing development? Box 2 YES NO Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial 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.			YES	NO
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 S. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial 7. Are all ICs/ECs in place and functioning as designed? X 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.	×	Is the information above correct?	X	
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? 4. 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? 5. Is the current site use consistent with the use(s) listed below? 7. Restricted-Residential, Commercial, and Industrial 7. Are all ICs/ECs in place and functioning as designed? 8. 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. 8. Corrective Measures Work Plan must be submitted along with this form to address these issues.		If NO, include handwritten above or on a separate sheet.		
(see 6NYCRR 375-1.11(d))? 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. Is the site currently undergoing development? Box 2 YES NO Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial Are all ICs/ECs in place and functioning as designed? X 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.	2.			X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form. Is the site currently undergoing development? Box 2 YES NO Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial Are all ICs/ECs in place and functioning as designed? X 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. Corrective Measures Work Plan must be submitted along with this form to address these issues.				X
that documentation has been previously submitted with this certification form. Is the site currently undergoing development? Box 2 YES NO Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial 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. Corrective Measures Work Plan must be submitted along with this form to address these issues.	÷			X
Box 2 YES NO Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial Are all ICs/ECs in place and functioning as designed? X 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. Corrective Measures Work Plan must be submitted along with this form to address these issues.			22	
YES NO Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial 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. Corrective Measures Work Plan must be submitted along with this form to address these issues.	i,	Is the site currently undergoing development?		X
YES NO Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial 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. Corrective Measures Work Plan must be submitted along with this form to address these issues.				
Restricted-Residential, Commercial, and Industrial 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. Corrective Measures Work Plan must be submitted along with this form to address these issues.			Box 2	
Restricted-Residential, Commercial, and Industrial 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. Corrective Measures Work Plan must be submitted along with this form to address these issues.		Tip Control of the Co	YES	NO
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. Corrective Measures Work Plan must be submitted along with this form to address these issues.	*		X	
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue. Corrective Measures Work Plan must be submitted along with this form to address these issues.	Ŧ	Are all ICs/ECs in place and functioning as designed?	X	
		DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.		
	4 C	Corrective Measures Work Plan must be submitted along with this form to address th	iese issi	ues.
	21-	nature of Owner, Remedial Party or Designated Representative Date		

SITE NO. V00471 Box 3

Description of Institutional Controls

<u>Parcel</u>

<u>Owner</u>

120.33-3-3

Mark Netti

Institutional Control

Ground Water Use Restriction Soil Management Plan Landuse Restriction Building Use Restriction Site Management Plan IC/EC Plan

Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- 1. requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls;
- 2. allows the use and development of the controlled property for restricted-residential, commercial, and industrial uses (subject to local zoning laws);
- 3. restricts the use of groundwater as a source of potable or process water without necessary water quality treatment as determined by NYSDOH or County DOH;
- 4. prohibits agriculture or vegetable gardens on the controlled property; and
- 5. requires compliance with the Site Management Plan.

Box 4

Description of Engineering Controls

Parcel

Engineering Control

120.33-3-3

Cover System

A site cover is required to allow for restricted-residential use of the site. The site cover consists of either structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer.

agent for National Grid

IC CERTIFICATIONS SITE NO. V00471

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.

Gerald H. Cresap, PE	5 Technology Place, Suite 4, East Syracuse, NY		
print name	print business address		
am certifying as agent for National Grid	(Owner or Remedial Party)		
for the Site named in the Site Details Section Signature of Owner, Remedia Party, or Desi Rendering Certification	12-20-18		

