



**Study Area Characterization Work Plan Addendum Number 4  
Additional Field Investigation Activities in the Expedited Portion of the Study Area**

<b>Site Name and Location:</b>	Study Area, Corning, NY
<b>Order on Consent and Administrative Settlement:</b>	NYSDEC Project ID 851046
<b>Corning Incorporated Project Coordinator:</b>	Mike Ford
<b>NYSDEC Project Coordinator:</b>	Gregory B. MacLean
<b>Date:</b>	March 10, 2017

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**Introduction**

Weston Solutions, Inc. (WESTON®), on behalf of Corning Incorporated (Corning), has prepared this Work Plan Addendum Number 4 for expedited additional field investigation activities within a specific portion of the Study Area (Expedited Portion of the Study Area). This Work Plan Addendum Number 4 has been prepared to supplement the approved Study Area Characterization Work Plan (Work Plan; WESTON, June 2014 as amended and approved by the New York State Department of Environmental Conservation (NYSDEC)) being implemented pursuant to the Order on Consent and Administrative Settlement between NYSDEC and Corning (Order on Consent). The Study Area is bounded by Pyrex Street to the west, E. Pulteney Street to the north, Post Creek to the east and the Chemung River to the south.

NYSDEC has identified a portion of the Study Area where there are 66 residential properties for which previous sampling indicated there is no layer of fill material containing ash, brick and/or glass, and only a limited number of properties have surface soil concentrations above the NYSDEC Subpart 375-6 Remedial Program Residential Soil Cleanup Objectives (Residential SCOs). A layer of fill material is defined as non-native material containing ash, brick and/or glass with a thickness of greater than 1 inch. The 66 residential properties are herein referred to as the Expedited Portion of the Study Area<sup>1</sup> (see Figure 1, attached). Additional field investigation activities are being conducted under this Work Plan Addendum Number 4 to confirm results collected to date and provide NYSDEC with sufficient information to approve No Further Action at these properties, where applicable.

The investigation activities included in this Work Plan Addendum Number 4 supersede previous outstanding requirements for investigation activities at the properties included in the Expedited Portion of the Study Area.

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<sup>1</sup> There are eight properties contained within the boundary of the Expedited Portion of the Study Area, in addition to the 66 properties discussed herein, for which No Further Action has been proposed based on sampling results at these properties. The proposal for No Further Action at these eight properties has been previously submitted to NYSDEC and is not included in this Work Plan Addendum Number 4.



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Sampling activities will be performed using the methods and procedures described in Section 4.2, Appendix B (Community Air Monitoring Plan) and Appendix D (Standard Operating Procedures) of the Work Plan. Samples will be analyzed for the constituents discussed below using the methodologies described in Section 4.2.6 and Appendix C (Quality Assurance Project Plan) of the Work Plan.

Upon approval by NYSDEC, work under this Work Plan Addendum Number 4 will be performed as a supplemental scope of work pursuant to Section III.B.1 of the Order on Consent. Work under this Work Plan Addendum Number 4 will only be done on residential properties within the Expedited Portion of the Study Area where the property owner returns the access agreement within two weeks of NYSDEC's approval.

**Sampling Activities**

At 44 of the 66 residential properties located within the Expedited Portion of the Study Area, surface soil samples were collected at four locations. At six of the 66 residential properties located within the Expedited Portion of the Study Area, a combination of surface soil samples and soil boring samples were collected and no layer of fill material containing ash, brick and/or glass was observed. No samples have been collected at the remaining 16 of the 66 residential properties located within the Expedited Portion of the Study Area because no written consent to access was received.

NYSDEC has requested expedited sampling within the Expedited Portion of the Study Area. The expedited sampling will consist of:

1) collection of soil samples from soil borings at one in three of the total number of properties to confirm no layer of fill material containing ash, brick and/or glass is present in this area,

2) collection of surface soil samples at seven properties to confirm existing surface soil sample results and/or delineate surface soil areas with concentrations above the Residential SCOs, and

3) collection of surface soil samples at the properties where no sampling has been conducted to date (16 properties subject to receipt of written consent to access).

See Table 1 attached to this Work Plan Addendum Number 4 for a list of the 66 properties in the Expedited Portion of the Study Area and the planned sampling activities at each property.



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*Written Consent to Access:*

Written consent to access from individual property owners will be needed prior to conducting the surface soil sampling activities. To ensure that the field work can be conducted expeditiously, safely, and with minimal impact to the community, field work will be scheduled after receipt of a majority of the written consents to access.

*Surface Soil Sampling Activities:*

At 10 properties in the Expedited Portion of the Study Area surface soil samples (0 to 2 in bgs excluding the ground cover or sod layer) will be collected to confirm existing surface soil sample results and/or delineate surface soil areas with concentrations above the Residential SCOs. Samples will be analyzed as described in Table 1, attached.

At 16 properties where no sampling has been conducted, surface soil samples (0 to 2 in bgs excluding the ground cover or sod layer) will be collected. The locations of the surface soil samples will be determined in the field, generally positioned to focus on play areas, adjacent to walkways or areas of high foot-traffic, garden areas, bare soil areas, or areas near visually distressed soils. Samples will be analyzed as described in Table 1, attached.

Surface soil samples will be collected using a hand-held steel soil auger, or a hand-held scoop using methods and procedures described in Section 4.2 and Appendix D (Standard Operating Procedures) of the Work Plan.

*Soil Boring Sampling Activities:*

Soil borings will be advanced at one in three of the total number of properties in the Expedited Portion of the Study Area to confirm no layer of fill material containing ash, brick and/or glass is present in this area. Soil boring sampling has previously been conducted at six of the 66 properties in the Expedited Portion of the Study Area, and 18 additional properties, identified in Table 1 attached, have been selected for soil boring sampling to provide an even distribution of subsurface data throughout the Expedited Portion of the Study Area.

At each of the 18 properties identified, one soil boring will be installed to a depth of approximately 15 ft bgs. Soil borings will be advanced via Geoprobe using methods described in Section 4.2.3 and Appendix D (Standard Operating Procedures) of the Work Plan. Samples will be collected from the soil borings installed via Geoprobe using a 2-inch diameter, 4-foot-long, macrocore sampler in accordance with Section 4.2.3 of the Work Plan.



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If a layer of fill material containing ash, brick and/or glass is observed in the soil boring at the property, two to four additional soil borings will be installed to a depth of approximately 15 ft bgs within the boundaries of the same property to delineate the horizontal extent of the layer of fill material.

In addition, up to three soil samples will be collected per boring where a layer of fill material is encountered: one from the soil at 2 in to 2 ft bgs excluding the ground cover or sod layer if present above the layer of fill material; one from the layer of fill material; and one from the native material beneath the layer of fill material. Samples will be analyzed for Target Analyte List (TAL) metals plus mercury, Target Compound List (TCL) semi-volatile organic compounds (SVOCs) as listed in Table 4-3 of the Work Plan, and Toxicity Characteristic Leaching Procedure (TCLP) Resource Conservation Recovery Act (RCRA) metals.

In borings where no layer of fill material is encountered, two soil samples will be collected per boring; one from the soil at 2 in to 2 ft bgs excluding the ground cover or sod layer and one sample of the native material at depth. Samples will be analyzed for TAL metals plus mercury.

**Schedule**

The characterization activities described in this Work Plan Addendum 4 will be scheduled following receipt of NYSDEC's approval of Work Plan Addendum 4. The anticipated project schedule is provided in Figure 2, attached to this Work Plan Addendum Number 4.

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A handwritten signature in black ink, appearing to read "John Sontag, Jr.", written over a horizontal line.

John Sontag, Jr.  
Client Services Manager



**Table 1**  
**Expedited Portion of the Study Area Sampling**  
**Study Area, Corning, NY**

<b>Residential Property Code</b>	<b>Surface Soil Samples Collected Previously</b>	<b>Soil Boring Samples Collected Previously</b>	<b>Planned Sampling Activities</b>	<b>Analysis</b>
RES015	Yes	No	None	-
RES016	No	No	4 Surface soil samples	Arsenic, cadmium and lead
RES017	Yes	No	None	-
RES023	No	No	4 Surface soil samples	Arsenic, cadmium and lead
RES029	Yes	No	Soil boring(s)	See text <sup>1</sup>
RES030	Yes	No	None	-
RES031	Yes	No	None	-
RES032	Yes	No	None	-
RES033	No	No	4 Surface soil samples	Arsenic, cadmium and lead
RES038	Yes	No	None	-
RES039	Yes	Yes	None	-
RES040	No	No	4 Surface soil samples	Arsenic, cadmium and lead
RES043	Yes	No	None	-
RES046	Yes	No	Soil boring(s)	See text <sup>1</sup>
RES047	Yes	No	Soil boring(s)	See text <sup>1</sup>
RES048	Yes	No	None	-
RES050	Yes	No	Soil boring(s)	See text <sup>1</sup>



**Table 1**  
**Expedited Portion of the Study Area Sampling**  
**Study Area, Corning, NY**

Residential Property Code	Surface Soil Samples Collected Previously	Soil Boring Samples Collected Previously	Planned Sampling Activities	Analysis
RES061	Yes	No	None	-
RES062	Yes	Yes	None	-
RES063	No	No	4 Surface soil samples	Arsenic, cadmium and lead
RES116	Yes	No	None	-
RES117	No	No	4 Surface soil samples	Arsenic, cadmium and lead
RES118	No	No	4 Surface soil samples	Arsenic, cadmium and lead
RES142	Yes	No	Soil boring(s)	See text <sup>1</sup>
RES143	Yes	Yes	2 Surface soil samples	Chromium
RES144	Yes	No	Soil boring(s)	See text <sup>1</sup>
RES145	Yes	No	None	-
RES146	Yes	No	None	-
RES147	Yes	No	None	-
RES149	No	No	4 Surface soil samples	TAL metals + mercury <sup>2</sup>
RES150	No	No	4 Surface soil samples	Arsenic, cadmium and lead
RES151	Yes	No	2 Surface soil samples	Mercury
RES152	Yes	No	None	-
RES153	No	No	5 Surface soil samples	Arsenic, cadmium and lead



**Table 1**  
**Expedited Portion of the Study Area Sampling**  
**Study Area, Corning, NY**

<b>Residential Property Code</b>	<b>Surface Soil Samples Collected Previously</b>	<b>Soil Boring Samples Collected Previously</b>	<b>Planned Sampling Activities</b>	<b>Analysis</b>
RES154	Yes	No	Soil boring(s) and 3 surface soil samples	Soil borings - See text <sup>1</sup> Surface soil samples - Arsenic
RES163	Yes	No	Soil boring(s)	See text <sup>1</sup>
RES164	Yes	Yes	3 Surface soil samples	Mercury
RES165	Yes	No	Soil boring(s)	See text <sup>1</sup>
RES166	Yes	No	Soil boring(s)	See text <sup>1</sup>
RES167	Yes	No	2 Surface soil samples	Chromium
RES168	Yes	No	Soil boring(s)	See text <sup>1</sup>
RES169	Yes	No	None	-
RES172	Yes	No	None	-
RES174	Yes	No	Soil boring(s)	See text <sup>1</sup>
RES176	Yes	No	Soil boring(s)	See text <sup>1</sup>
RES177	No	No	4 Surface soil samples	Arsenic, cadmium and lead
RES180	No	No	4 Surface soil samples	Arsenic, cadmium and lead
RES181	Yes	No	Soil boring(s)	See text <sup>1</sup>
RES182	Yes	No	None	-
RES183	Yes	No	None	-
RES184	Yes	No	Soil boring(s)	See text <sup>1</sup>

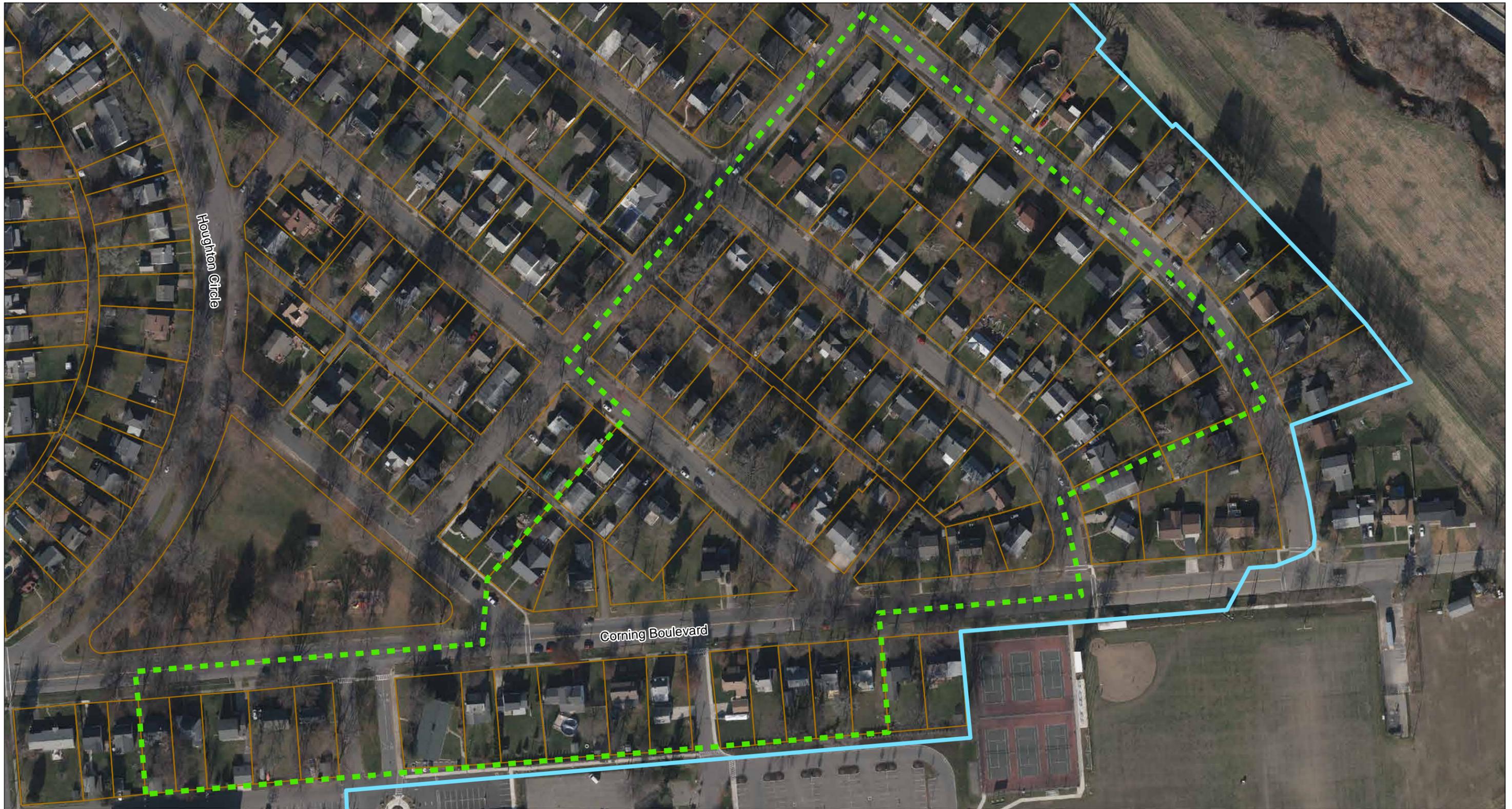


**Table 1**  
**Expedited Portion of the Study Area Sampling**  
**Study Area, Corning, NY**

<b>Residential Property Code</b>	<b>Surface Soil Samples Collected Previously</b>	<b>Soil Boring Samples Collected Previously</b>	<b>Planned Sampling Activities</b>	<b>Analysis</b>
RES185	Yes	Yes	2 Surface soil samples	Mercury
RES186	Yes	No	None	-
RES187	Yes	Yes	2 Surface soil samples	One sample - Mercury One sample - Chromium
RES188	Yes	No	None	-
RES189	Yes	No	2 Surface soil samples	Mercury
RES190	No	No	4 Surface soil samples	Arsenic, cadmium and lead
RES196	Yes	No	None	-
RES204	No	No	4 Surface soil samples	Arsenic, cadmium and lead
RES205	Yes	No	Soil boring(s) and 2 surface soil samples	Soil borings - See text <sup>1</sup> Surface soil sample - Chromium
RES206	Yes	No	2 Surface soil samples	Chromium
RES207	Yes	No	None	-
RES208	Yes	No	None	-
RES209	No	No	Soil boring(s) and 4 Surface soil samples	Soil borings - See text <sup>1</sup> Surface soil samples - Arsenic, cadmium and lead
RES210	Yes	No	Soil boring(s)	See text <sup>1</sup>
RES219	No	No	4 Surface soil samples	Arsenic, cadmium and lead

<sup>1</sup> Analysis of samples collected from soil borings described in Work Plan Addendum Number 4.

<sup>2</sup> Analysis for Target Analyte List (TAL) metals plus mercury being performed at the request of NYSDEC.



**Legend**

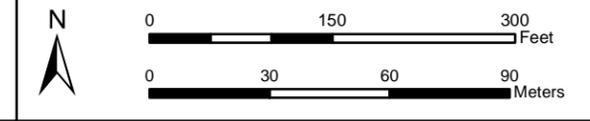
	Residential Area
	Expedited Portion of the Study Area

**NOTES:**  
 Base Imagery: Robinson Aerial Imagery, Dec 2015  
 Coordinate System: NAD 1983 State Plane  
 New York Central Feet  
 Datum: NAD83. Units: Feet

**Study Area**  
 Corning NY



**Figure 1**  
 Expedited Portion of  
 the Study Area



Document Name: Expedited\_Portion.MXD  
 3/10/2017



# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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January 26, 2017

Mr. Michael Ford, P.E.  
Corning Incorporated  
HP-ME-03-83  
Corning, New York 14831

Dear Mr. Ford:

**Subject: Study Area Characterization Work Plan Addendum Number 4,  
Additional Field Investigation Activities in the Expedited Portion of the  
Study Area, Dated July 6, 2016, Site # 851046, Corning, Steuben County**

NYSDEC in conjunction with NYDOH has reviewed the above-referenced document and grants approval for its implementation with the following clarification:

In the event that the proposed sampling yields results that indicate areas with soils above the residential soil cleanup objectives that are not fully defined, additional sampling may be required. In cases where these areas encroach upon property boundaries, it may be necessary to perform the additional sampling on adjacent properties.

If you have any questions or concerns regarding this correspondence or the site, please contact me at 585-226-5351, or via email at [kelly.cloyd@dec.ny.gov](mailto:kelly.cloyd@dec.ny.gov).

Sincerely,

Kelly C. Cloyd, Ph.D.  
Engineering Geologist 2

cc: B. Conlon  
M. Cruden  
J. Deming  
M. Doroski  
B. Putzig  
B. Schilling