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INTERIM REMEDIAL MEASURES WORK PLAN

Study Area Bounded by Pyrex Street, E. Pulteney Street,
Post Creek and Chemung River
Corning, NY

NYSDEC Project ID 851046

Corning Christian Academy Property

May 4, 2016

Prepared for:

Corning Incorporated
Corning, New York

Prepared by:

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W.O. No. 02005.056.002.0001

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Certification

I, Michael H. Corbin, certify that I am currently a New York State registered professional engineer as defined in 6 NYCRR Part 375 and that this Interim Remedial Measures Work Plan was prepared in accordance with all applicable standards and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Executed on the ___ day of _____, 2016

Weston Solutions, Inc.

_____

Technical Director, P.E.

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TABLE OF CONTENTS

Section **Page**

1. INTRODUCTION 1-1
1.1 ENVIRONMENTAL SETTING 1-1
1.1.1 Land Use 1-1
1.1.2 Topography 1-2
1.1.3 Geology 1-2
1.1.4 Hydrology 1-2
1.1.5 Ecological Setting 1-3
1.2 ORGANIZATION OF THIS DOCUMENT 1-3

2. CURRENT CONDITIONS 2-1
2.1 CHARACTERIZATION ACTIVITIES 2-1
2.1.1 Surface and Shallow Soil Sampling 2-1
2.1.2 Soil Boring Sampling 2-2
2.1.3 Groundwater Sampling Results 2-3
2.2 SUMMARY OF CURRENT CONDITIONS 2-3

3. INTERIM REMEDIAL MEASURES APPROACH 3-1
3.1 INTERIM REMEDIAL MEASURES OBJECTIVE 3-1
3.2 INTERIM REMEDIAL MEASURES APPROACH 3-1

4. INTERIM REMEDIAL MEASURES ACTIVITIES & METHODOLOGIES 4-1
4.1 WRITTEN ACCESS CONSENT 4-1
4.2 SOIL EXCAVATION ACTIVITIES 4-1
4.2.1 Pre-Excavation Activities 4-1
4.2.2 Excavation Activities 4-2
4.3 WASTE HANDLING 4-4
4.3.1 Staging and Loading 4-5
4.4 SURVEY ACTIVITIES 4-5
4.5 INSPECTIONS 4-6

5. PROJECT MANAGEMENT 5-1
5.1 SCHEDULE 5-1
5.2 DOCUMENTATION 5-1
5.2.1 Field Logs 5-1
5.2.2 Photo Log 5-1
5.2.3 Field Measurements 5-1
5.2.4 Field Reports 5-2
5.2.5 Reporting 5-2
5.3 HEALTH AND SAFETY PLAN 5-2

DRAFT

TABLE OF CONTENTS (Continued)

Section **Page**

5.4 TEMPORARY FIELD OFFICE 5-3

6. REFERENCES 5-1

APPENDIX A – CHARACTERIZATION SAMPLING RESULTS

APPENDIX B – HEALTH AND SAFETY PLAN (HASP)

APPENDIX C – COMMUNITY AIR MONITORING PLAN (CAMP)

DRAFT

LIST OF FIGURES

Title

Figure 1-1 Location of Study Area

Figure 1-2 Study Area Features

Figure 1-3 Corning Christian Academy Property Features

Figure 2-1 Sample Locations, Corning Christian Academy Property

Figure 2-2 IRM Areas, Corning Christian Academy Property

Figure 3-1 IRM Limits of Excavation, Corning Christian Academy Property

Figure 5-1 Corning Christian Academy IRM Schedule

DRAFT

LIST OF TABLES

Title

Table 2-1 Soil Boring Log Summary, Study Area, Corning, NY, Corning Christian Academy Property

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LIST OF ACRONYMS

CAMP	Community Air Monitoring Plan
cfs	cubic feet per second
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
ft amsl	feet above mean sea level
ft bgs	feet below ground surface
GPS	global positioning system
HASP	Health and Safety Plan
IDW	investigative derived waste
in bgs	inches below ground surface
IRM	Interim Remedial Measure
mg/Kg	milligram per kilogram
mg/L	milligram per liter
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSNPDES	New York State Pollutant Discharge Elimination System
PC	public-conservation zoning
PCBs	polychlorinated bi-phenyls
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
RCRA	Resource Conservation Recovery Act
SCO	Soil Cleanup Objectives
SOP	standard operating procedure
SVOCs	semi-volatile organic compounds
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
TOGS	New York State Division of Water Technical Operation and Guidance Series
TPH	total petroleum hydrocarbons

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LIST OF ACRONYMS (Continued)

USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
µg/Kg	microgram per kilogram
VOCs	volatile organic compounds
WESTON®	Weston Solutions, Inc.

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1. INTRODUCTION

The Study Area is located in the City of Corning, New York, and is bounded by Pyrex Street on the west, E. Pulteney Street on the north, Post Creek on the east and the Chemung River on the south, as illustrated on Figure 1-1. The Corning Christian Academy property, subject of this Interim Remedial Measure (IRM) Work Plan, neighbors the Corning-Painted Post School District property in the southern portion of the Study Area, as illustrated on Figure 1-2.

On June 27, 2014 Corning Incorporated entered into an Order on Consent and Administrative Settlement (Order on Consent) with the New York State Department of Environmental Conservation (NYSDEC) to perform preliminary characterization activities within the Study Area. Weston Solutions, Inc. (WESTON®) prepared, on behalf of Corning Incorporated, a Study Area Characterization Work Plan dated June 2014, which was Attachment B to the Order on Consent (WESTON, 2014a). Subsequent to the Order on Consent, the NYSDEC approved Study Area Work Plan Addendum 3 (Work Plan Addendum 3) for additional characterization activities in the Corning Christian Academy property (WESTON, 2015). Collectively, the June 2014 Study Area Characterization Work Plan and its Addenda, as modified, amended and approved by NYSDEC will be referred to herein as the Study Area Work Plan.

In accordance with Section II.5 and Appendix A, Section III of the Order on Consent, an IRM is proposed for the Corning Christian Academy property based on analytical data collected during field investigation activities performed from July 2014 through June 2015 under the Study Area Work Plan.

1.1 ENVIRONMENTAL SETTING

1.1.1 Land Use

The Corning Christian Academy property is an approximately 2.6 acre parcel. The land is owned by the Corning Christian Academy and is zoned Public-Conservation (PC). The Corning Christian Academy property is primarily used for educational purposes. As illustrated on Figure 1-3, the surface area for the Corning Christian Academy property is covered by the Corning Christian Academy buildings, a variety of impervious surfaces (i.e., concrete sidewalks, asphalt roadways

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and asphalt parking areas), and areas of pervious surfaces (i.e., grass covered areas, mulch-covered playground, etc.).

1.1.2 Topography

The Corning, New York 1976 U.S. Geological Service (USGS) 7.5-minute topographic quadrangle map indicates that the Corning Christian Academy property is approximately 929 feet above mean sea level (ft amsl). Within approximately one mile radius of the Corning Christian Academy property, the ground surface elevation ranges from 915 ft amsl to 1,459 ft amsl.

The Corning Christian Academy property location neighbors the Corning-Painted Post School District property which is adjacent to the Chemung River. The Corning Christian Academy property is located outside the Federal Emergency Management Agency (FEMA) 100-year and 500-year flood zones (FEMA, 2002).

1.1.3 Geology

The Corning Christian Academy property is located in the Chemung River valley which contains predominately sand and gravel deposits of glaciofluvial origin and more recent alluvial deposits. In the vicinity of the Corning Christian Academy property, a low permeability, lacustrine silt and clay layer (approximately 10 feet thick) appears to be present about 30 feet below ground surface (ft bgs) in the Chemung River valley-fill deposits (Miller, 1982). The river valley deposits are on the order of 100 feet thick in the vicinity of the Corning Christian Academy property. These river valley deposits are underlain by low permeability shale/siltstone bedrock (Miller, 1982).

1.1.4 Hydrology

The saturated portions of the Chemung River valley deposits are recharged principally by infiltration of precipitation. This valley-filled glacial/alluvial aquifer is generally unconfined (i.e., the water table forms the upper boundary of the aquifer) and saturated approximately to the level of nearby rivers (such as the Chemung River) (Olcot, 1995). No groundwater wells are installed on the Corning Christian Academy property; however the depth to the water table at the Corning-Painted Post School District property, which neighbors the Corning Christian Academy property on three sides, ranges from approximately 16 to 21 ft bgs. Groundwater in the valley aquifer

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generally flows toward and discharges to nearby rivers/creeks; however, groundwater flow directions can be locally altered by supply well withdrawals from the valley aquifer.

1.1.5 Ecological Setting

The Corning Christian Academy property is composed of a terrestrial cultural ecological community created and maintained by human activities and has been modified by human influence to such a degree that the physical conformation of the substrate and the biological composition of the resident community is substantially different from the character of the substrate or community as it existed prior to human influence.

1.2 ORGANIZATION OF THIS DOCUMENT

This Work Plan is organized into the following sections:

- **Section 1 – Introduction.** This section contains an introduction to the project and environmental setting information.
- **Section 2 – Current Conditions.** This section contains a description of characterization activities conducted at the Corning Christian Academy property, including the location, types and number of samples collected.
- **Section 3 – Interim Remedial Measure Approach.** This section contains a description of the approach and objectives of the proposed IRM.
- **Section 4 – Interim Remedial Measure Activities and Methodologies.** This section contains a description of the activities to be conducted, including the locations, rationale for design, and execution of the planned work.
- **Section 5 – Project Management.** This section contains information regarding the scheduling of the work as well as the reporting schedule. Additionally, this section provides details about project logistics, including project controls, management and public relations.
- **Section 6 – References.**

Generally, tables and figures are provided at the end of each section for ease of review.

Tables of validated analytical results for samples collected on the Corning Christian Academy property are provided in Appendix A.

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SECTION 1

FIGURES

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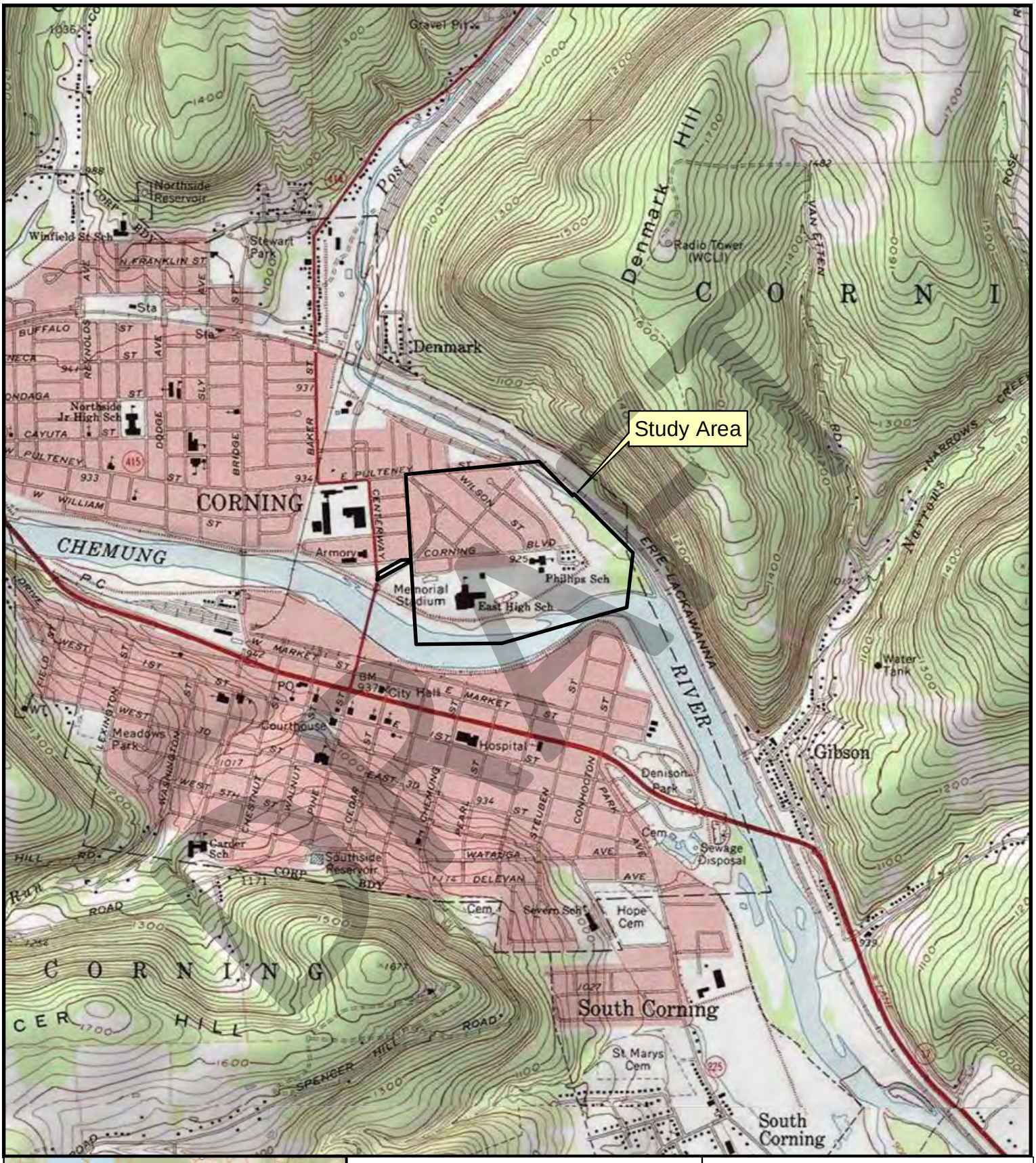
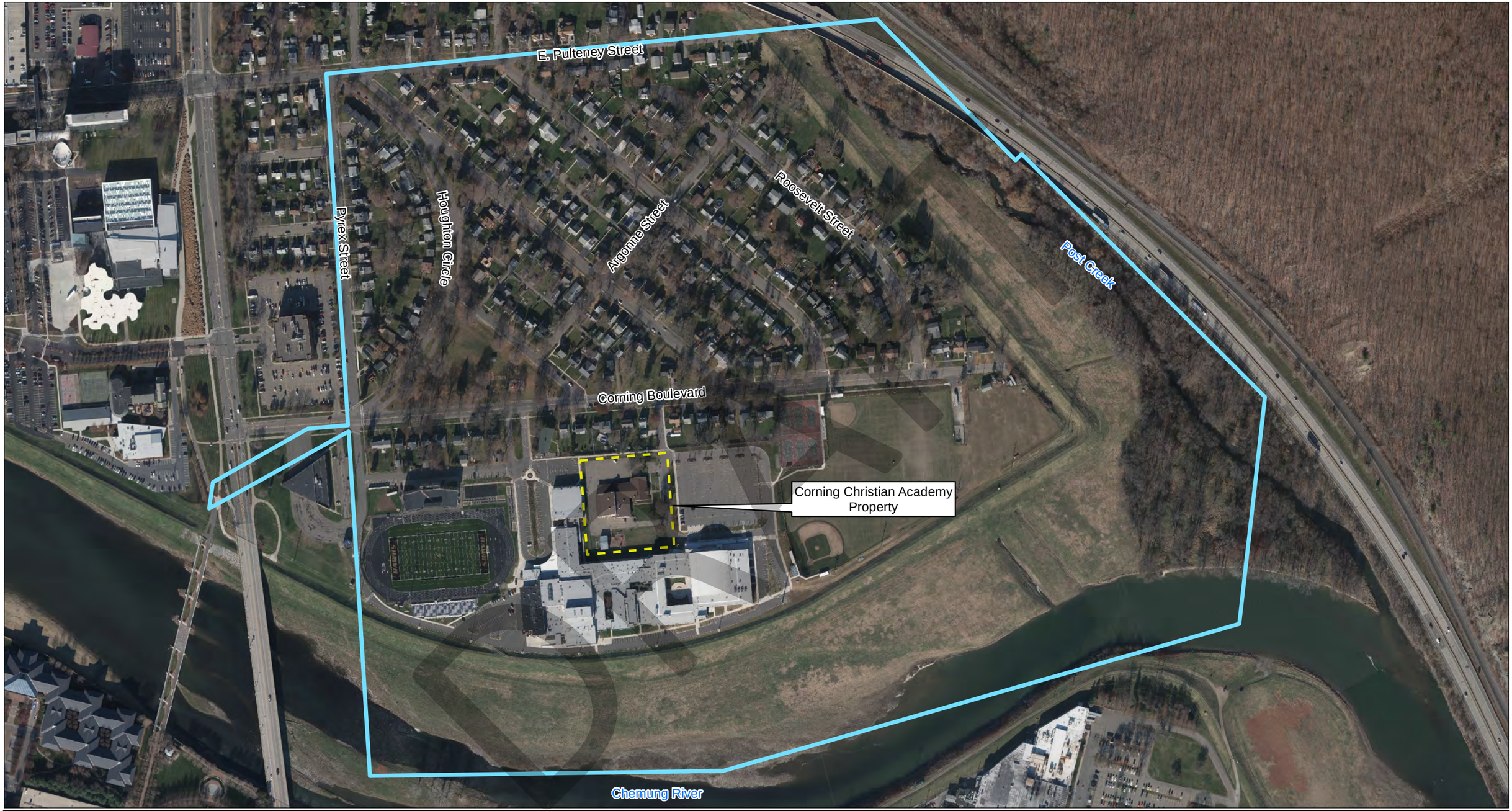
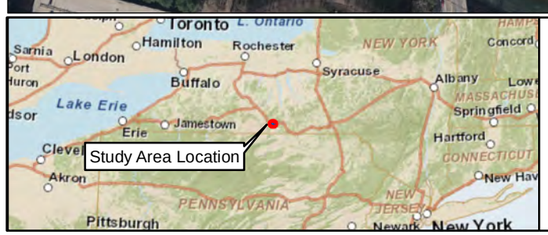


Figure 1-1
Location of Study Area

Corning NY

Document Name: Site_Location.MXD





Legend

Study Area Boundary Based on 1937 Quit Claim Deed

Corning Christian Academy Property

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

N

0 350 700 Feet

0 75 150 225 Meters

Study Area
Corning NY

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Figure 1-2
Study Area Features

Document Name: CCA_Study_Area_Features.MXD

2/5/2016

Legend

Corning Christian Academy Property

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 1-3
Corning Christian Academy Property
Features

N

0 75 150 Feet

0 10 20 30 Meters

Document Name: CCA_Features.MXD

2/8/2016

2. CURRENT CONDITIONS

2.1 CHARACTERIZATION ACTIVITIES

In accordance with the Study Area Work Plan and Work Plan Addendum 3, WESTON on behalf of Corning Incorporated has installed nine soil borings and collected soil samples from 14 surface soil sampling locations on the Corning Christian Academy property. Although no groundwater monitoring wells are installed on the Corning Christian Academy property, four groundwater monitoring wells have been installed on the neighboring Corning-Painted Post School District property, which surrounds the Corning Christian Academy property on three sides, in accordance with the Study Area Work Plan and the NYSDEC-approved Groundwater Wells Plan (WESTON, 2014b).

Cumulatively, a total of 55 soil samples, along with associated quality assurance/quality control (QA/QC) samples have been collected at the Corning Christian Academy property. Samples were analyzed for Target Analyte List (TAL) metals plus mercury, Toxicity Characteristic Leaching Procedure (TCLP) Resource Conservation and Recovery Act (RCRA) metals, total petroleum hydrocarbons (TPH), polychlorinated bi-phenyls (PCBs), Target Compound List (TCL) semi-volatile organic compounds (SVOCs), and volatile organic compounds (VOCs), or a subset thereof. The locations of the soil sampling locations and soil boring locations are illustrated on Figure 2-1. Tables of validated analytical results for soil samples collected on the Corning Christian Academy property are provided in Appendix A.

2.1.1 Surface and Shallow Soil Sampling

Fourteen surface soil sampling locations (CCASS001 to CCASS014) were sampled throughout the Corning Christian Academy property. Of these fourteen locations, twelve were located in grass covered areas of the property, and two were collected in the mulch-covered playground. For each sampling location, a surface (0 to 2 inches bgs [in bgs]) and a shallow (2 to 24 in bgs or refusal) soil sample was collected. A summary of the surface soil analytical results is provided in Appendix A.

At thirteen of the fourteen sampling locations, including the two sampling locations in the playground, all analytical results for both the surface (0 to 2 inches below ground surface [in bgs])

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and shallow (2 to 24 in bgs) soil samples were less than or equal to the NYSDEC restricted residential Soil Cleanup Objectives (NYSDEC restricted residential SCOs; NYSDEC Subpart 375-6). At one sampling location (CCASS005), collected in the grassy area south of the school entrance, arsenic was detected in the shallow soil sample at a concentration greater than the NYSDEC restricted residential SCO of 16 mg/Kg. Analytical results from the corresponding surface soil sample at this location were less than or equal to NYSDEC restricted residential SCOs.

2.1.2 Soil Boring Sampling

Of the nine soil borings advanced to approximately 16 ft bgs on the Corning Christian Academy property, seven soil borings were advanced in the grassy area south of the school entrance, one was advanced in a grassy area along the northern property boundary, and one was advanced in grassy area near the southern property boundary and east of the playground. The locations of the soil borings are illustrated on Figure 2-1. The seven soil borings advanced south of the school entrance were installed around surface soil sampling location CCASS005 to delineate the extent of the area with soil concentrations greater than NYSDEC restricted residential SCOs. Two to four samples were collected from each soil boring in accordance with the Study Area Work Plan. A summary of the soil boring analytical results is provided in Appendix A and a summary of the soil boring logs is in included in Table 2-1.

No layer of fill material containing ash, brick and/or glass was observed in the soil boring advanced in the grassy area along the northern property boundary (CCASS001) or the soil boring advanced in the grassy area near the southern property boundary and east of the playground (CCASS002). Analytical results for all soil samples collected from these two soil borings were less than or equal to the NYSDEC restricted residential SCOs.

No layer of fill material containing ash, brick and/or glass was observed at two of the seven soil borings (CCASB007 and CCASB009) advanced in the grassy area south of the entrance to the Corning Christian Academy. CCASB007 and CCASB009 were the southern-most and eastern-most soil borings advanced south of the school entrance. Analytical results for all soil samples collected from these two soil borings were below the NYSDEC restricted residential SCOs.

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A layer of fill material containing ash, brick and/or glass was observed at the other five soil borings advanced south of the entrance to the Corning Christian Academy, in the vicinity of surface sampling location CCASS005 (CCASB003, CCASB004, CCASB005, CCASB006 and CCASB008). See Table 2-1 for boring specific information. At soil boring CCASB006, analytical results for all soil samples collected were less than or equal to the NYSDEC restricted residential SCOs. At the other four soil borings locations (CCASB003, CCASB004, CCASB005, and CCASB008) concentrations of arsenic, cadmium, lead, barium and/or mercury, or a subset thereof exceeded the NYSDEC restricted residential SCOs for one or more soil samples collected in the identified layer of fill material containing ash, brick, and/or glass. In all four of these soil borings, concentrations were less than or equal to the NYSDEC restricted residential SCOs for samples collected immediately below the identified later of fill material containing ash, brick and/or glass.

In addition, the samples collected in the fill material containing ash, brick and/or glass were analyzed using USEPA TCLP method. TCLP lead was detected in the samples of the fill material containing ash, brick and/or glass at soil borings CCASB004 and CCASB008 at concentrations of 12.1 mg/L and 6.6 mg/L, respectively. The USEPA TCLP method is used to determine the appropriate disposal method under current NYSDEC and USEPA regulations. Excavated material will need to be characterized for disposal profiling.

2.1.3 Groundwater Sampling Results

Although no groundwater monitoring wells were installed on the Corning Christian Academy property, four groundwater monitoring wells were installed on the neighboring Corning-Painted Post School District property. Analytical results from sampling events on the Corning-Painted Post School District property indicate that the groundwater has not been impacted by the layers of fill material containing ash, brick and/or glass. Arsenic, cadmium and lead, the primary constituents, were not detected in the groundwater at concentrations greater than the TOGS standards.

2.2 SUMMARY OF CURRENT CONDITIONS

Based on the characterization activities at the Corning Christian Academy property, one area has been identified where soil concentrations of arsenic, cadmium and/or lead were detected at concentrations greater than the NYSDEC restricted residential SCOs (See Figure 2-2). This area is located south of the Corning Christian Academy school building entrance. This area

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encompasses the five soil borings and one surface soil sample with concentrations greater than NYSDEC restricted residential SCOs. This area is bounded by the Corning Christian Academy on the north and west sides, by soil boring location CCASB007 to the south and soil boring location CCASB009 to the east. All other soil samples collected on the Corning Christian Academy Property were less than the NYSDEC restricted residential SCOs.

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SECTION 2

FIGURES

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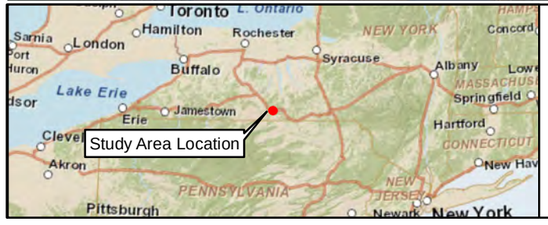

Legend

- Corning Christian Academy Property
- Verify Existing Cover
- Surface Soil Sampling Locations
- Soil Borings

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

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Figure 2-1
Sample Locations
Corning Christian Academy Property

N

0 75 150 Feet

0 10 20 30 Meters

Source File: CCA_Sample_locs.MXD

2/5/2016

Legend

- Corning Christian Academy Property
- Verify Existing Cover
- Surface Soil Sampling Locations
- Soil Borings

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

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Figure 2-2
IRM Areas
Corning Christian Academy Property

N

0 75 150 Feet

0 10 20 30 Meters

Source File: CCA_Potential_IRM_Area.MXD

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SECTION 2

TABLES

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Table 2-1: Soil Boring Log Summary
Study Area, Corning, NY

Sample Location	Observance of ash, coal, brick, and/or glass pieces			Depth to Native Soil (ft bgs)	Total Boring Depth (ft bgs)
	Comment / Notes	Interval (ft bgs)	Thickness (ft)		
Corning Christian Academy Property (CCA)					
CCASB001	None	--	--	3.4 ft	16.0 ft
CCASB002	None	--	--	1.3 ft	16.0 ft
CCASB003	Coal, brick and glass	2.3 to 4.5 ft	2.2 ft	6.2 ft	8.0 ft
CCASB004	Brick and glass	3.2 to 6.1 ft	2.9 ft	6.1 ft	8.0 ft
CCASB005	Ash, coal, brick, and glass	0.5 to 9.0 ft	8.5 ft	10.5 ft	12.0 ft
CCASB006	Ash, brick, and glass	0.5 to 4.0 ft	3.5 ft	4.0 ft	8.0 ft
CCASB007	Piece of coal	-	-	3.9 ft	15 ft
CCASB008	Ash, brick, and glass	3.8 ft - 6.0 ft	2.2 ft	6.0 ft	15 ft
CCASB009	Piece of glass	-	-	6.5 ft	15 ft

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3. INTERIM REMEDIAL MEASURES APPROACH

3.1 INTERIM REMEDIAL MEASURES OBJECTIVE

An IRM is proposed to be conducted at the Corning Christian Academy Property to "mitigate potential environmental or human exposure" to soils with concentrations greater than the NYSDEC restricted residential SCOs [DER-10 1.11(a)1]. In accordance with the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation (DER-10) a "non-emergency" IRM is being proposed because the potential exposure to soils and fill material containing glass, ash and/or brick with concentrations greater than NYSDEC restricted residential SCOs can be effectively addressed before completion of the ongoing investigation activities in the Study Area [DER-10 1.11(c)1].

The specific objective of the IRM is to provide a two foot soil cover in the area with soil sample concentrations greater than the NYSDEC restricted residential SCOs in the area south of the entrance to the Corning Christian Academy.

3.2 INTERIM REMEDIAL MEASURES APPROACH

Two feet of soil will be excavated and removed from the area identified on Figure 3-1 ("defined limits of excavation"). The area of soil to be excavated was identified by radiating outward from the sampling locations with soil concentrations greater than the NYSDEC restricted residential SCOs to sampling locations where soil concentrations were below the NYSDEC restricted residential SCOs or to the building structure. Final excavation limits will be established based on utility clearance and accessibility.

Following completion of the IRM activities, the Corning Christian Academy has committed to impose an institutional control in the form of an Environmental Easement restricting use of the Corning Christian Academy property to Restricted Residential Uses and requiring compliance with a NYSDEC-approved Site Management Plan (SMP) that will be prepared by Corning Incorporated.

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SECTION 3

FIGURES

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Legend

- Corning Christian Academy Property
- Potential IRM Areas
- Verify Existing Cover
- Surface Soil Sampling Locations
- Soil Borings

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

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Figure 3-1
IRM Limits of Excavation
Corning Christian Academy Property

N

0 75 150 Feet

0 10 20 30 Meters

Source File: CCA_IRM_Area.MXD

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4. INTERIM REMEDIAL MEASURES ACTIVITIES & METHODOLOGIES

4.1 WRITTEN ACCESS CONSENT

The Corning Christian Academy property is not owned by or under the control of Corning Incorporated or NYSDEC, therefore, activities proposed in this IRM Work Plan will be performed under a written access agreement between Corning Incorporated and the Corning Christian Academy.

4.2 SOIL EXCAVATION ACTIVITIES

A map identifying where the IRM activities will be conducted at the Corning Christian Academy property under this IRM Work Plan is provided as Figure 3-1. The proposed IRM within the defined limits of excavation includes excavation to two feet below ground surface and placement of a demarcation layer followed by backfill and re-vegetation.

The vertical extent of excavation will be limited to 2 ft bgs. As analytical results from the characterization sampling activities indicate some of the soil below 2 ft bgs has concentrations greater than NYSDEC restricted residential SCOs, a demarcation layer will be installed in all excavation areas at the base of the excavation between the existing in-place soils and the imported backfill material.

4.2.1 Pre-Excavation Activities

Prior to the start of any excavation activities, construction health and safety perimeters will be established around the project work area (i.e. exclusion zone) to prevent unauthorized personnel from entering. The perimeters will be established through the use of temporary barriers, fencing and/or signage to prevent access to the area during excavation and backfilling activities.

The established perimeter will encompass an area large enough to provide a safe construction buffer and for excavation equipment to operate freely to perform the excavation as well as the staging of the excavated soils. The exclusion zone will also provide an area of protection around the open excavation and have temporary construction fencing with signage to prevent trespassers from entering the established exclusion zone. The exclusion zone will remain in place until backfilling of the excavation has been completed.

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Prior to excavation activities, the locations of subsurface utilities will be identified by non-intrusive subsurface scans using a combination of geophysical methods to assist in identifying subsurface details.

Prior to and/or during excavation activities, temporary construction erosion and sedimentation control measures (i.e., silt fences, erosion eels) will be installed as needed, adjusted during the course of the work, and will be removed when the area is stabilized. It should be noted that the proposed work will not require a New York State Pollutant Discharge Elimination System (NYSPDES) General Permit for Stormwater Discharges since less than one acre of soil disturbance is proposed.

4.2.2 Excavation Activities

Soil removal will generally be accomplished through the use of conventional earth moving equipment such as an excavator, backhoe, front-end loader, skid steer loader and/or other construction equipment. It is anticipated that smaller equipment (i.e., small to mid-size excavator and a skid steer loader) will be used for the excavation activities given the shallow excavation depth and location of the excavation relative to existing property structures and roadways. Excavation activities will be performed in a controlled manner to limit the exposed earthen areas and minimize the effect on soil erosion. Shovels, rakes and other hand tools will be used as needed for precise removal of material around existing property structures, foundations and utilities.

Staging of excavated soils will be conducted in a controlled manner such as (1) on a prepared pad lined with plastic sheeting (i.e., visqueen), bermed and tarped to provide containment and protection from precipitation, or (2) in roll-off containers. As described in the Community Air Monitoring Plan (CAMP) and subsection 4.3.1, additional actions will be undertaken as needed during hauling and excavation activities to manage dust generation. Wherever possible, excavated soil will be directly loaded onto trucks or into roll off containers for hauling to an appropriate landfill or staging area. Additional information about the handling of excavated soils is described in subsection 4.3. Where possible, care will be taken to allow traffic to pass around the staging and excavation areas and the Corning Christian Academy will be notified of planned excavation activities at least 48 hours prior to the start of activities. To the extent practicable, hauling will be

limited to off-peak school hours (i.e., minimize traffic during peak student arrival and departure times).

Erosion and sediment control measures will be implemented as needed and inspected weekly and after each major storm event during excavation activities. Maintenance and repair of the sediment and erosion control measures will be performed on an as needed basis. Excavation activities will be performed in a manner such that erosion is adequately controlled and soil and sediments are not allowed to flow into or onto any watercourse, adjacent properties, roadways, parking areas, walkways or storm and sanitary sewers. In most of the area, excavation will be conducted in a below grade manner which will minimize uncontrolled run-off. Soil staging/stockpiling areas will be bermed and covered/tarped. Water that collects in an excavation area will be allowed to infiltrate. Excavation will proceed in a manner to minimize water management, however excess water may have to be removed by pumping prior to backfill.

The demarcation layer, typically a geotextile membrane, will be placed at the base of excavation between the subsurface existing soil and the imported backfill material. The excavated area will then be initially backfilled with structural fill and graded to the natural surrounding topographic contours or pre-determined elevations. Grassy areas will be covered with a minimum of 6 inches of vegetative support soil (i.e., top soil, amended soil). Following placement of the vegetative support soil, sod will be installed at the ground surface or, in the event sod is not available due to time of year, a natural seed blanket will be installed and covered with a protective stabilization blanket composed of biodegradable materials.

The order of excavation activities on the Corning Christian Academy property will be determined based upon a variety of factors, typically including: weather, traffic, ongoing activities at the property and communication with the property owner. Backfilling could occur after part of the excavation is completed to minimize the time that excavation remains open. To prevent potential cross contamination, separate backfilling equipment will typically be used or equipment will be decontaminated prior to being utilized to move imported backfill material. Equipment decontamination will be conducted in accordance with Standard Operating Procedures included in Appendix D to the Study Area Work Plan (Weston, 2014a).

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Prior to importing backfill material, analytical samples will be collected at the source to ensure the material meets the requirements for soil to be imported under DER-10 Section 5.4(e). These samples will be collected and analyzed in accordance with Quality Assurance Project Plan (QAPP). Analytical results for soil samples will be submitted to NYSDEC for approval prior to use during the IRM activities.

Confirmation sampling will not be collected in a horizontal direction during the execution of the IRM activities because the lateral extent of excavation is bound by sampling locations where soil concentrations are below NYSDEC restricted residential SCOs, or by property structures. Vertical confirmation sampling will not be necessary because soils will be excavated to a predetermined depth of two feet within the defined limits of excavation.

4.3 WASTE HANDLING

Excavated soil generated during removal activities will be direct loaded for disposal or loaded into roll-off containers and moved to a NYSDEC-approved Study Area staging area for disposal profiling and subsequent disposal. In lieu of moving soil to a staging area, soil can be directly loaded onto haul trucks for disposal in accordance with applicable NYSDEC waste regulations. For disposal profiling of the removed material, including decontamination water and/or solids, samples of the various excavated media will be collected and analyzed in accordance with the QAPP in place for the Study Area Work Plan for disposal profiling. Sampling for disposal profiling can include collection of *in situ* composite samples prior to excavation activities, to facilitate landfill pre-acceptance of material that is excavated and direct loaded for disposal. Excavated materials will be disposed in accordance with all applicable federal and state laws. If any material, including decontamination water, excavated soil and/or other solids are found to be characteristically hazardous based on disposal profiling sampling, a Study Area-specific USEPA Identification Number will be used for disposal documentation in accordance with all applicable federal and state laws.

Reasonable care will be taken by the equipment operator in handling and loading of excavated soils to minimize spillage and tracking. In the event of spillage or tracking of soils, hand shovels, brooms, a skid steer loader or an industrial street sweeper will be utilized to clean traffic areas.

4.3.1 Staging and Loading

Prior to any staging and loading activities, an exclusion zone will be established around the excavation area. To the extent practical, the exclusion zone will be set up in a manner to allow haul trucks to remain outside of the exclusion zone where they can be loaded by equipment located inside the exclusion zone. This will minimize the need for decontamination and potential for tracking soil out of the exclusion zone.

Staging and loading activities will be conducted on existing asphalt roadways/driveways to the extent practical. Transportation vehicles will not be permitted to be staged on the grass at the Corning Christian Academy property. If soils are directly loaded, all trucks will be operated by a licensed hauling company. A route of access will be determined for all truck vehicles going to or from the Corning Christian Academy property and WESTON will inspect all vehicles prior to departure to assure the load is secured to prevent spillage, leakage or airborne movement during transit. Staging of excavated soils at the NYSDEC-approved Study Area staging area will occur on an as needed basis.

Any construction water or accumulated precipitation collecting in the excavation will be allowed to infiltrate. Excavation will proceed in a manner to minimize water management, however excess water may have to be removed by pumping prior to backfill.

In the event of excessive dry conditions that could create dust, the spread of dust and dirt will be limited by the use of water mist or other suitable methods. Air monitoring will be performed by WESTON to ensure excessive migration of dust particles does not occur during the excavation activities. Ambient air concentrations greater than the action level will result in actions being taken to control fugitive emissions (see the CAMP).

4.4 SURVEY ACTIVITIES

The final limits of the excavation will be surveyed by a New York State licensed professional surveyor prior to backfilling. The professional surveyor will produce and stamp a set of “as-built” drawings to document the limits of removal.

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4.5 INSPECTIONS

Following backfilling and restoration, WESTON will perform monthly inspections of the areas where the IRM excavation activity was performed under this IRM Work Plan to (1) initially ensure the stability of the area and reestablishment of vegetation in backfilled area and to (2) confirm that no visual indicators of soil disturbance at depth occurred. These monthly inspections will be conducted until a final remedy is implemented for the Corning Christian Academy property, unless otherwise approved by the NYSDEC.

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5. PROJECT MANAGEMENT

The proposed activities will be performed by WESTON on behalf of Corning Incorporated. It is anticipated that this work, consistent with the activities performed to date in the Study Area, will be performed under the oversight of an NYSDEC field representative.

5.1 SCHEDULE

The activities described in this IRM Work Plan are scheduled to be performed following the NYSDEC approval of this IRM Work Plan and upon receipt of consent to access from the property owner. The anticipated project schedule is provided as Figure 5-1.

5.2 DOCUMENTATION

5.2.1 Field Logs

Essential project information pertinent to field activities will be recorded in bound field logbooks and/or field hauling inspection sheets (if applicable). Information pertinent to field activities may include the following: active excavation area, daily excavation and backfill volumes, inspection reports, equipment decontamination, placement of demarcation barrier, waste profiling, project manifests, etc.

5.2.2 Photo Log

A project photo log will be prepared and maintained throughout the IRM activities to provide photo documentation of field activities.

5.2.3 Field Measurements

The limits of excavation will be measured and documented as the work progresses primarily using GPS and survey controls. Final depth and limits of excavation will be measured prior to backfilling, to document extent of removal, in addition to the location of buried utilities or other structures encountered in the excavation area. After backfilling final elevations will be measured prior to placing sod or seeding.

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5.2.4 Field Reports

NYSDEC and NYSDOH will be provided verbal updates of the field activities periodically and electronic copies of weekly work activity reports, including select supporting photographs, pursuant to the existing Study Area Work Plan. All air monitoring data will be recorded in the site field logbook, in designated field sheets, or digitally, and the results of the air monitoring will be communicated to the NYSDEC and New York State Department of Health (NYSDOH) on a scheduled basis (i.e. daily for levels which require actions, weekly for routine monitoring data).

5.2.5 Reporting

Following implementation of IRM activities, a Construction Completion Report documenting the work performed will be prepared and submitted to NYSDEC in accordance with DER-10 subdivision 5.8(b)-(d).

The aforementioned report will typically contain the following information:

- Summary description of the removal action as implemented pursuant to the IRM Work Plan
- Quantity of material removed and disposal facility
- Source of backfill and analytical test results
- A set of "as-built" survey drawings documenting the limits of removal (i.e., depth and extent) and final elevations after backfilling
- Description of institutional controls (if applicable)
- Documentation of any changes to the IRM Work Plan activities

5.3 HEALTH AND SAFETY PLAN

The health and safety of field workers, visitors, and the community are of utmost importance. For the field work, it is planned that workers will be in Level D personal protection (i.e., coveralls or work clothes, work boots, safety glasses, and hard hats). All field activities will be conducted in accordance with the Health and Safety Plan (HASP) and CAMP contained in Appendices B and C. An exclusion zone will be established around the work area in accordance with the HASP. To the extent possible, haul trucks will operate outside of the exclusion zone to minimize the need for

decontamination and potential for tracking soils. As excavation areas are completed the exclusion zone will be adjusted accordingly.

5.4 TEMPORARY FIELD OFFICE

The excavation activities will involve mobilization of personnel and equipment. The temporary field office and equipment staging area, approved by NYSDEC for the ongoing Study Area work, will be utilized. This temporary field office area is surrounded by temporary fencing for security. The office area and access gate are closed and locked when not in use and consist of an office trailer and staging area for field equipment.

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SECTION 5

FIGURE

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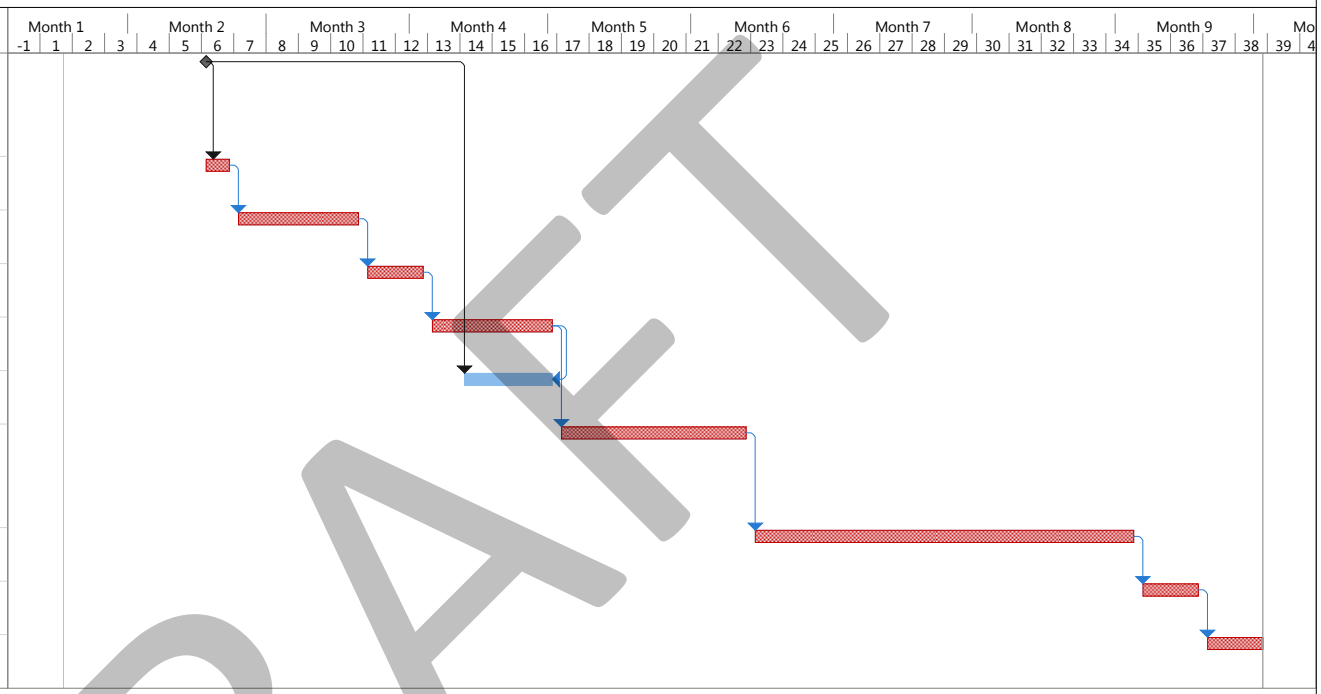
Confidential Settlement Communication
Inadmissible in this or Any Other
Proceeding

ID	Task Name	Duration
1	NYSDEC Approve IRM Work Plan[1]	0 days
2	Backfill Source Sampling	5 days
3	Data Validation	20 days
4	NYSDEC Approval of Backfill source(s)	10 days
5	Mobilization and Procurement	20 days
6	Obtain Written Access Consent	15 days
7	Excavation and Backfill[2]	30 days
8	Prepare Draft CCR Report	60 days
9	NYSDEC Comments	10 days
10	Prepare Final CCR Report	10 days



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Notes:
[1] Subject to approval by NYSDEC
[2] Predicated upon obtaining written access consent from the property owner

Figure 5-1
Corning Christian Academy IRM Schedule
Study Area, Corning, NY

Task **Split** **Milestone** **Critical Path**

Wed 3/16/16

6. REFERENCES

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WESTON, 2014a. Study Area Characterization Work Plan, June 2014. Prepared by Weston Solutions, Inc. for Corning Incorporated.

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APPENDIX A

CHARACTERIZATION SAMPLING RESULTS

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASB001		CCASB001		CCASB001		CCASB002		CCASB002		CCASB003		CCASB003		CCASB003	
Sample ID			CCASB001-0-000		CCASB001-0-020		CCASB001-1-020		CCASB002-0-000		CCASB002-0-020		CCASB003-0-000		CCASB003-0-002		CCASB003-0-020	
Date			7/29/2014		7/29/2014		7/29/2014		7/29/2014		7/29/2014		12/18/2014		12/18/2014		12/18/2014	
Sample Depth			0 - 2 feet		2 - 8 feet		2 - 8 feet		0 - 2 feet		2 - 7 feet		0-2 inches		2-24 inches		2-6 feet	
Sample Type			0 - Primary		0 - Primary		1 - Duplicate		0 - Primary		0 - Primary		0 - Primary		0 - Primary		0 - Primary	
Matrix			SB		SB		SB		SB		SB		SB		SB		SB	
Laboratory Sample ID			480-64613-23		480-64613-24		480-64613-25		480-64613-21		480-64613-22		480-73350-1		480-73350-2		480-73350-3	
Toxicity Characteristic Leaching Procedure (TCLP) Metals, mg/L																		
Arsenic, TCLP	~	5	0.0056	U	0.0056	U	0.0056	U	~		~		0.019		0.078		0.0061	J
Barium, TCLP	~	100	0.50		0.39		0.38		~		~		0.74		2.4		0.53	
Cadmium, TCLP	~	1	0.0015	J	0.00077	J	0.00059	J	~		~		0.0043		0.088		0.00050	U
Chromium, TCLP	~	5	0.0099	J+	0.0045	J+	0.0040	U	~		~		0.0076	J+	0.0040	U	0.0040	U
Lead, TCLP	~	5	0.021		0.0030	U	0.0030	U	~		~		0.085		1.8		0.0030	U
Mercury, TCLP	~	0.2	0.00012	U	0.00012	U	0.00012	U	~		~		0.00012	U	0.00012	U	0.00012	U
Selenium, TCLP	~	1	0.0087	U	0.0087	U	0.0087	U	~		~		0.0087	U	0.0087	U	0.0087	U
Silver, TCLP	~	5	0.0017	U	0.0017	U	0.0017	U	~		~		0.0017	U	0.0017	U	0.0017	U
Total Metals, mg/Kg																		
Aluminum, Total	~	~	8400		7800	J+	7300	J+	~		~		9590		9280		8580	
Antimony, Total	~	~	0.47	U	0.49	UJ	0.46	UJ	~		~		1.8	J	3.4	J	6.1	J
Arsenic, Total	16	~	6.7		4.7		4.4		6.6		3.6		12.1		44.6		48.0	
Barium, Total	400	~	110		93		83		~		~		139		225		410	
Beryllium, Total	72	~	0.47		0.42		0.38		~		~		0.50		0.50		0.49	
Boron, Total	~	~	3.0		2.0	J	2.0	J	~		~		8.6		20.4		36.0	
Cadmium, Total	4.3	~	0.37		0.13	J	0.11	J	0.30		0.074	J	1.0		3.7		6.8	
Calcium, Total	~	~	1800		1200		1000		~		~		3480		3510		7750	
Chromium, Total	180	~	9.8		10		8.2		~		~		12.1		13.4		21.0	
Cobalt, Total	~	~	7.8		7.7		6.9		~		~		7.9		8.6		8.0	
Copper, Total	270	~	12		10		9.3		~		~		18.1		43.7		49.0	
Iron, Total	~	~	17000		16000		15000		~		~		17400		17800		17100	
Lead, Total	400	~	40		13		11		29		6.6		164		407		914	
Magnesium, Total	~	~	2300		2100		2000		~		~		2690		3480		3140	
Manganese, Total	2000	~	510		440		380		~		~		466		467		421	
Mercury, Total	0.81	~	~		~		~		~		~		0.14		0.23		2.0	
Nickel, Total	310	~	17		15		14		~		~		19.1		35.4		30.9	
Potassium, Total	~	~	630		510		540		~		~		1310		1000		954	
Selenium, Total	180	~	0.47	U	0.49	U	0.46	U	~		~		0.86	J	0.57	J	0.48	U
Silver, Total	180	~	0.23	U	0.24	U	0.23	U	~		~		0.27	U	0.22	U	0.85	
Sodium, Total	~	~	21	J	22	J	21	J	~		~		38.8	J	45.3	J	120	J
Thallium, Total	~	~	0.35	U	0.36	U	0.35	U	~		~		0.40	U	0.32	U	0.36	U
Vanadium, Total	~	~	11		9.9		9.3		~		~		14.6		13.9		12.8	
Zinc, Total	10000	~	56		43		41		~		~		122		162		226	
Volatile Organic Compounds (VOCs), ug/Kg																		
1,1,1-Trichloroethane	100000	~	~		~		~		~		~		~		~		~	
1,1,2,2-Tetrachloroethane	~	~	~		~		~		~		~		~		~		~	
1,1,2-Trichloro-1,2,2-trifluoroethane	~	~	~		~		~		~		~		~		~		~	
1,1,2-Trichloroethane	~	~	~		~		~		~		~		~		~		~	
1,1-Dichloroethane	26000	~	~		~		~		~		~		~		~		~	
1,1-Dichloroethene	100000	~	~		~		~		~		~		~		~		~	
1,2,4-Trichlorobenzene, VOC	~	~	~		~		~		~		~		~		~		~	
1,2-Dibromo-3-chloropropane	~	~	~		~		~		~		~		~		~		~	
1,2-Dibromoethane	~	~	~		~		~		~		~		~		~		~	
1,2-Dichlorobenzene, VOC	~	~	~		~		~		~		~		~		~		~	
1,2-Dichloroethane	3100	~	~		~		~		~		~		~		~		~	
1,2-Dichloropropane	~	~	~		~		~		~		~		~		~		~	
1,3-Dichlorobenzene, VOC	~	~	~		~		~		~		~		~		~		~	
1,4-Dichlorobenzene, VOC	~	~	~		~		~		~		~		~		~		~	
2-Butanone	~	~	~		~		~		~		~		~		~		~	

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASB001		CCASB001		CCASB001		CCASB002		CCASB002		CCASB003		CCASB003		CCASB003	
Sample ID			CCASB001-0-000		CCASB001-0-020		CCASB001-1-020		CCASB002-0-000		CCASB002-0-020		CCASB003-0-000		CCASB003-0-002		CCASB003-0-020	
Date			7/29/2014		7/29/2014		7/29/2014		7/29/2014		7/29/2014		12/18/2014		12/18/2014		12/18/2014	
Sample Depth			0 - 2 feet		2 - 8 feet		2 - 8 feet		0 - 2 feet		2 - 7 feet		0-2 inches		2-24 inches		2-6 feet	
Sample Type			0 - Primary		0 - Primary		1 - Duplicate		0 - Primary		0 - Primary		0 - Primary		0 - Primary		0 - Primary	
Matrix			SB		SB		SB		SB		SB		SB		SB		SB	
Laboratory Sample ID			480-64613-23		480-64613-24		480-64613-25		480-64613-21		480-64613-22		480-73350-1		480-73350-2		480-73350-3	
Volatile Organic Compounds (VOCs), ug/Kg (continued)																		
2-Hexanone	~	~	~		~		~		~		~		~		~		~	
4-Methyl-2-pentanone	~	~	~		~		~		~		~		~		~		~	
Acetone	100000	~	~		~		~		~		~		~		~		~	
Benzene	4800	~	~		~		~		~		~		~		~		~	
Bromodichloromethane	~	~	~		~		~		~		~		~		~		~	
Bromoform	~	~	~		~		~		~		~		~		~		~	
Bromomethane	~	~	~		~		~		~		~		~		~		~	
Carbon disulfide	~	~	~		~		~		~		~		~		~		~	
Carbon tetrachloride	2400	~	~		~		~		~		~		~		~		~	
Chlorobenzene	100000	~	~		~		~		~		~		~		~		~	
Chloroethane	~	~	~		~		~		~		~		~		~		~	
Chloroform	49000	~	~		~		~		~		~		~		~		~	
Chloromethane	~	~	~		~		~		~		~		~		~		~	
cis-1,2-Dichloroethene	100000	~	~		~		~		~		~		~		~		~	
cis-1,3-Dichloropropene	~	~	~		~		~		~		~		~		~		~	
Cyclohexane	~	~	~		~		~		~		~		~		~		~	
Cyclohexane, Methyl-	~	~	~		~		~		~		~		~		~		~	
Dibromochloromethane	~	~	~		~		~		~		~		~		~		~	
Dichlorodifluoromethane	~	~	~		~		~		~		~		~		~		~	
Ethylbenzene	41000	~	~		~		~		~		~		~		~		~	
Isopropylbenzene	~	~	~		~		~		~		~		~		~		~	
Methyl acetate	~	~	~		~		~		~		~		~		~		~	
Methyl tert-butyl ether	100000	~	~		~		~		~		~		~		~		~	
Methylene chloride	100000	~	~		~		~		~		~		~		~		~	
Styrene	~	~	~		~		~		~		~		~		~		~	
Tetrachloroethene	19000	~	~		~		~		~		~		~		~		~	
Toluene	100000	~	~		~		~		~		~		~		~		~	
trans-1,2-Dichloroethene	100000	~	~		~		~		~		~		~		~		~	
trans-1,3-Dichloropropene	~	~	~		~		~		~		~		~		~		~	
Trichloroethene	21000	~	~		~		~		~		~		~		~		~	
Trichlorofluoromethane	~	~	~		~		~		~		~		~		~		~	
Vinylchloride	~	~	~		~		~		~		~		~		~		~	
Xylenes, Total	100000	~	~		~		~		~		~		~		~		~	
Semi-Volatile Organic Compounds (SVOCs), ug/Kg																		
2,4,5-Trichlorophenol	~	~	41	U	41	U	41	U	~		~		50	U	43	U	43	U
2,4,6-Trichlorophenol	~	~	12	U	12	U	12	U	~		~		15	U	13	U	13	U
2,4-Dichlorophenol	~	~	9.9	U	9.8	U	9.7	U	~		~		12	U	10	U	10	U
2,4-Dimethylphenol	~	~	51	U	51	U	50	U	~		~		62	U	53	U	54	U
2,4-Dinitrophenol	~	~	66	U	66	U	65	U	~		~		80	U	69	U	70	U
2,4-Dinitrotoluene	~	~	29	U	29	U	29	U	~		~		35	U	30	U	31	U
2,6-Dinitrotoluene	~	~	46	U	46	U	45	U	~		~		56	U	48	U	49	U
2-Chloronaphthalene	~	~	13	U	13	U	12	U	~		~		15	U	13	U	13	U
2-Chlorophenol	~	~	9.6	U	9.6	U	9.5	U	~		~		12	U	10	U	10	U
2-Methylnaphthalene	~	~	3.8	J	2.3	U	2.2	U	~		~		5.0	J	12	J	32	J
2-Methylphenol	100000	~	5.8	U	5.8	U	5.7	U	~		~		7.0	U	6.0	U	6.1	U
2-Nitroaniline	~	~	60	U	60	U	60	U	~		~		73	U	63	U	64	U
2-Nitrophenol	~	~	8.6	U	8.6	U	8.5	U	~		~		10	U	8.9	U	9.1	U
3,3'-Dichlorobenzidine	~	~	170	U	160	U	160	U	~		~		200	U	170	U	170	U
3-Nitroaniline	~	~	43	U	43	U	43	U	~		~		53	U	45	U	46	U

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASB001		CCASB001		CCASB001		CCASB002		CCASB002		CCASB003		CCASB003		CCASB003	
Sample ID			CCASB001-0-000		CCASB001-0-020		CCASB001-1-020		CCASB002-0-000		CCASB002-0-020		CCASB003-0-000		CCASB003-0-002		CCASB003-0-020	
Date			7/29/2014		7/29/2014		7/29/2014		7/29/2014		7/29/2014		12/18/2014		12/18/2014		12/18/2014	
Sample Depth			0 - 2 feet		2 - 8 feet		2 - 8 feet		0 - 2 feet		2 - 7 feet		0-2 inches		2-24 inches		2-6 feet	
Sample Type			0 - Primary		0 - Primary		1 - Duplicate		0 - Primary		0 - Primary		0 - Primary		0 - Primary		0 - Primary	
Matrix			SB		SB		SB		SB		SB		SB		SB		SB	
Laboratory Sample ID			480-64613-23		480-64613-24		480-64613-25		480-64613-21		480-64613-22		480-73350-1		480-73350-2		480-73350-3	
Semi-Volatile Organic Compounds (SVOCs), ug/Kg (continued)																		
4,6-Dinitro-2-methylphenol	~	~	65	U	65	U	64	U	~		~		79	U	68	U	69	U
4-Bromophenyl-phenylether	~	~	60	U	60	U	59	U	~		~		73	U	62	U	63	U
4-Chloro-3-methylphenol	~	~	7.7	U	7.7	U	7.6	U	~		~		9.4	U	8.0	U	8.2	U
4-Chloroaniline	~	~	55	U	55	U	54	U	~		~		67	U	57	U	58	U
4-Chlorophenyl-phenylether	~	~	4.0	U	4.0	U	4.0	U	~		~		4.9	U	4.2	U	4.2	U
4-Methylphenol	100000	~	10	U	10	U	10	U	~		~		13	U	11	U	11	U
4-Nitroaniline	~	~	21	U	21	U	21	U	~		~		26	U	22	U	22	U
4-Nitrophenol, SVOC	~	~	46	U	46	U	45	U	~		~		55	U	47	U	48	U
Acenaphthene	100000	~	2.2	U	2.2	U	2.2	U	~		~		2.7	U	2.3	U	5.2	J
Acenaphthylene	100000	~	1.5	U	1.5	U	1.5	U	~		~		1.9	U	20	J	120	J
Acetophenone	~	~	9.7	U	9.6	U	9.5	U	~		~		12	U	10	U	10	U
Anthracene	100000	~	5.7	J	4.8	U	4.8	U	~		~		5.9	U	5.0	U	61	J
Atrazine	~	~	8.4	U	8.4	UJ	8.3	UJ	~		~		10	U	8.7	U	8.8	U
Benz(a)anthracene	1000	~	3.2	U	3.2	U	3.2	U	~		~		28	J	42	J	83	J
Benzaldehyde	~	~	21	U	21	U	20	U	~		~		25	U	21	U	22	U
Benzo(a)pyrene	1000	~	35	J	7.3	J	7.0	J	~		~		28	J	42	J	160	J
Benzo(b)fluoranthene	1000	~	54	J	6.5	J	6.1	J	~		~		4.4	U	58	J	180	J
Benzo(g,h,i)perylene	100000	~	28	J	3.4	J	2.2	U	~		~		31	J	79	J	210	
Benzo(k)fluoranthene	3900	~	21	J	3.1	J	2.0	U	~		~		2.5	U	14	J	61	J
Biphenyl	~	~	12	U	12	U	12	U	~		~		14	U	12	U	12	U
bis (2-chloroisopropyl) ether	~	~	20	U	20	U	19	U	~		~		24	U	20	U	21	U
bis(2-Chloroethoxy)methane	~	~	10	U	10	U	10	U	~		~		12	U	11	U	11	U
bis(2-Chloroethyl)ether	~	~	16	U	16	U	16	U	~		~		20	U	17	U	17	U
bis(2-Ethylhexyl)phthalate	~	~	99	J	85	J	65	J	~		~		74	U	63	U	64	U
Butyl benzyl phthalate	~	~	51	U	50	U	50	U	~		~		61	U	53	U	53	U
Caprolactam	~	~	81	U	81	U	80	U	~		~		99	U	85	U	86	U
Carbazole	~	~	3.3	J	2.2	U	2.1	U	~		~		2.6	U	2.3	U	20	J
Chrysene	3900	~	40	J	1.9	U	6.3	J	~		~		34	J	55	J	130	J
Dibenz(a,h)anthracene	330	~	8.1	J	2.2	U	2.2	U	~		~		2.7	U	2.3	U	30	J
Dibenzofuran	59000	~	2.7	J	2.0	U	1.9	U	~		~		2.4	U	2.0	U	12	J
Diethylphthalate	~	~	5.7	U	5.7	U	5.6	U	~		~		6.9	U	5.9	U	6.0	U
Dimethyl phthalate	~	~	4.9	U	4.9	U	4.8	U	~		~		6.0	U	5.1	U	5.2	U
Di-N-Butyl phthalate	~	~	65	U	65	U	64	U	~		~		79	U	68	U	69	U
Di-N-Octyl phthalate	~	~	4.4	U	4.4	U	4.3	U	~		~		5.4	U	4.6	U	4.6	U
Fluoranthene	100000	~	55	J	3.7	J	5.1	J	~		~		50	J	61	J	200	
Fluorene	100000	~	4.3	U	4.3	U	4.3	U	~		~		5.3	U	4.5	U	28	J
Hexachlorobenzene	1200	~	9.4	U	9.3	U	9.2	U	~		~		11	U	9.7	U	9.9	U
Hexachlorobutadiene, SVOC	~	~	9.6	U	9.6	U	9.5	U	~		~		12	U	10	U	10	U
Hexachlorocyclopentadiene	~	~	57	UJ	57	UJ	56	UJ	~		~		69	U	59	U	60	U
Hexachloroethane	~	~	15	U	15	U	14	U	~		~		18	U	15	U	15	U
Indeno(1,2,3-cd)pyrene	500	~	27	J	5.2	U	5.1	U	~		~		38	J	46	J	130	J
Isophorone	~	~	9.4	U	9.4	U	9.3	U	~		~		13	J	9.8	U	9.9	U
Naphthalene, SVOC	100000	~	5.7	J	3.1	U	3.1	U	~		~		3.8	U	11	J	21	J
Nitrobenzene	15000	~	8.3	U	8.3	U	8.2	U	~		~		10	U	8.7	U	8.8	U
N-Nitroso-di-N-propylamine	~	~	15	U	15	U	15	U	~		~		18	U	16	U	16	U
N-Nitrosodiphenylamine	~	~	10	U	10	U	10	U	~		~		13	U	11	U	11	U
Pentachlorophenol, SVOC	6700	~	65	U	64	U	64	U	~		~		79	U	67	U	68	U
Phenanthrene	100000	~	30	J	3.9	U	3.9	U	~		~		21	J	29	J	140	J
Phenol	100000	~	20	U	20	U	20	U	~		~		24	U	21	U	21	U
Pyrene	100000	~	44	J	3.5	J	3.9	J	~		~		33	J	48	J	130	J

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASB001		CCASB001		CCASB001		CCASB002	CCASB002	CCASB003	CCASB003	CCASB003
Sample ID			CCASB001-0-000		CCASB001-0-020		CCASB001-1-020		CCASB002-0-000	CCASB002-0-020	CCASB003-0-000	CCASB003-0-002	CCASB003-0-020
Date			7/29/2014		7/29/2014		7/29/2014		7/29/2014	7/29/2014	12/18/2014	12/18/2014	12/18/2014
Sample Depth			0 - 2 feet		2 - 8 feet		2 - 8 feet		0 - 2 feet	2 - 7 feet	0-2 inches	2-24 inches	2-6 feet
Sample Type			0 - Primary		0 - Primary		1 - Duplicate		0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary
Matrix			SB		SB		SB		SB	SB	SB	SB	SB
Laboratory Sample ID			480-64613-23		480-64613-24		480-64613-25		480-64613-21	480-64613-22	480-73350-1	480-73350-2	480-73350-3
Polychlorinated Biphenyls (PBCs), mg/Kg													
Aroclor-1016	~	~	0.0036	U	0.0035	U	0.0035	U	~	~	~	~	~
Aroclor-1221	~	~	0.0036	U	0.0035	U	0.0035	U	~	~	~	~	~
Aroclor-1232	~	~	0.0036	U	0.0035	U	0.0035	U	~	~	~	~	~
Aroclor-1242	~	~	0.0036	U	0.0035	U	0.0035	U	~	~	~	~	~
Aroclor-1248	~	~	0.0036	U	0.0035	U	0.0035	U	~	~	~	~	~
Aroclor-1254	~	~	0.0086	U	0.0085	U	0.0085	U	~	~	~	~	~
Aroclor-1260	~	~	0.0086	U	0.0085	U	0.0085	U	~	~	~	~	~
Aroclor-1262	~	~	0.0086	U	0.0085	U	0.0085	U	~	~	~	~	~
Aroclor-1268	~	~	0.0086	U	0.0085	U	0.0085	U	~	~	~	~	~
Total Petroleum Hydrocarbons, mg/Kg													
TPH	~	~	43	U	44	U	44	U	~	~	~	~	~

Notes:
mg/Kg = milligram per kilogram.
mg/L = milligram per liter.
ug/Kg = microgram per kilogram.
U = The analyte was analyzed for but was not detected above the level of the detection quantitation limit.
UJ = The analyte was analyzed for but not detected. The quantitation limit is approximate and may be inaccurate or imprecise.
J = The positive result reported is estimated either because the result is less than the LOQ or because certain quality control criteria were not met.
J+ = The result is an estimated quantity, but the result may be biased high because certain quality control criteria were not met.
SB = Soil boring.
SS = Surface soil.
(1) New York State Department of Environmental Conservation (NSYDEC) Subpart 375-6 Remedial Program Soil Cleanup Objectives (SCOs).
(2) Federal Code of Regulations, Section 261.24 - Toxicity characteristic. Context: Title 40 - Protection of Environment. CHAPTER I - ENVIRONMENTAL PROTECTION AGENCY (CONTINUED). SUBCHAPTER I - SOLID WASTES (CONTINUED). PART 261 - IDENTIFICATION AND LISTING OF HAZARDOUS WASTE. Subpart C - Characteristics of Hazardous Waste (2012-07-01).
~ = Analysis not performed or No standard or guidance value listed for this constituent.

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASB003	CCASB004	CCASB004	CCASB004	CCASB004	CCASB005	CCASB005	CCASB005
Sample ID			CCASB003-0-062	CCASB004-0-000	CCASB004-0-002	CCASB004-0-020	CCASB004-0-061	CCASB005-0-000	CCASB005-0-020	CCASB005-0-002
Date			12/18/2014	12/18/2014	12/18/2014	12/18/2014	12/18/2014	12/18/2014	12/18/2014	12/18/2014
Sample Depth			6-8 feet	0-2 inches	2-24 inches	2-6.1 feet	6.1-8 feet	0-2 inches	2-10.5 feet	2-24 inches
Sample Type			0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary
Matrix			SB	SB	SB	SB	SB	SB	SB	SB
Laboratory Sample ID			480-73350-4	480-73350-5	480-73350-6	480-73350-7	480-73350-8	480-73350-9	480-73350-11	480-73350-10
Toxicity Characteristic Leaching Procedure (TCLP) Metals, mg/L										
Arsenic, TCLP	~	5	0.060	0.014 J	0.027	0.046	0.0073 J	0.044	0.090 J	0.022
Barium, TCLP	~	100	3.1	0.69	1.4	1.5	0.50	1.1	2.0	4.0
Cadmium, TCLP	~	1	0.10	0.0044	0.010	0.36	0.00060 J	0.012	0.026	0.021
Chromium, TCLP	~	5	0.0040 U	0.0040 U	0.0040 U	0.0092 J+	0.0040 U	0.0040 U	0.0040 U	0.0040 U
Lead, TCLP	~	5	1.7	0.055	0.28	12.1	0.0058 J	0.071	0.23	0.35
Mercury, TCLP	~	0.2	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U
Selenium, TCLP	~	1	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U
Silver, TCLP	~	5	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U
Total Metals, mg/Kg										
Aluminum, Total	~	~	9480	9800	9290	8360	9130	8520	8930	8240
Antimony, Total	~	~	1.1 J	1.5 J	1.8 J	3.5 J	0.83 J	1.8 J	1.8 J	2.3 J
Arsenic, Total	16	~	5.5	11.6	16.5	16.2	6.7	18.0	16.7 J	37.2
Barium, Total	400	~	102	141	149	154	98.0	108	97.7 J	142
Beryllium, Total	72	~	0.49	0.52	0.47	0.41	0.45	0.41	0.38	0.35
Boron, Total	~	~	17.5	6.7	8.3	17.0	26.2	10.4	11.7 J	8.9
Cadmium, Total	4.3	~	0.035 U	0.81	1.1	4.8	0.035 U	1.2	0.99	1.4
Calcium, Total	~	~	1360	3360	3820	1540	826	12600	15300 J	57700
Chromium, Total	180	~	10.9	12.0	11.1	10.9	10.3	15.8	11.9	9.9
Cobalt, Total	~	~	8.4	7.9	7.7	6.9	8.0	6.2	8.1	6.7
Copper, Total	270	~	10.8	16.9	15.5	14.3	10.2	21.2	25.0 J	32.0
Iron, Total	~	~	17600	18000	16100	14500	16900	15100	19600 J	15300
Lead, Total	400	~	12.6	165	221	867	10.1	167	125 J	163
Magnesium, Total	~	~	2440	2700	2670	2000	2410	5630	5420 J	3540
Manganese, Total	2000	~	534	480	442	375	448	362	459 J	423
Mercury, Total	0.81	~	0.010 U	0.096	0.075	0.060	0.010 J	0.18	0.13 J	0.21
Nickel, Total	310	~	18.5	18.8	18.4	15.9	17.7	16.6	22.4	16.4
Potassium, Total	~	~	937	1230	1000	1010	1330	1300	899 J	823
Selenium, Total	180	~	0.46 U	0.72 J	0.65 J	0.47 U	0.46 U	0.62 J	0.44 U	0.43 U
Silver, Total	180	~	0.23 U	0.27 U	0.21 U	0.23 U	0.23 U	0.27 U	0.22 U	0.21 U
Sodium, Total	~	~	43.8 J	38.0 J	34.7 J	55.1 J	118 J	51.3 J	57.3 J	63.0 J
Thallium, Total	~	~	0.35 U	0.41 U	0.31 U	0.35 U	0.35 U	0.40 U	0.33 U	0.32 U
Vanadium, Total	~	~	12.5	14.4	13.4	11.7	12.2	15.8	14.1	12.5
Zinc, Total	10000	~	49.3	94.4	78.2	66.7	47.4	144	103 J	99.7
Volatile Organic Compounds (VOCs), ug/Kg										
1,1,1-Trichloroethane	100000	~	~	~	~	~	~	~	~	~
1,1,2,2-Tetrachloroethane	~	~	~	~	~	~	~	~	~	~
1,1,2-Trichloro-1,2,2-trifluoroethane	~	~	~	~	~	~	~	~	~	~
1,1,2-Trichloroethane	~	~	~	~	~	~	~	~	~	~
1,1-Dichloroethane	26000	~	~	~	~	~	~	~	~	~
1,1-Dichloroethene	100000	~	~	~	~	~	~	~	~	~
1,2,4-Trichlorobenzene, VOC	~	~	~	~	~	~	~	~	~	~
1,2-Dibromo-3-chloropropane	~	~	~	~	~	~	~	~	~	~
1,2-Dibromoethane	~	~	~	~	~	~	~	~	~	~
1,2-Dichlorobenzene, VOC	~	~	~	~	~	~	~	~	~	~
1,2-Dichloroethane	3100	~	~	~	~	~	~	~	~	~
1,2-Dichloropropane	~	~	~	~	~	~	~	~	~	~
1,3-Dichlorobenzene, VOC	~	~	~	~	~	~	~	~	~	~
1,4-Dichlorobenzene, VOC	~	~	~	~	~	~	~	~	~	~
2-Butanone	~	~	~	~	~	~	~	~	~	~

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASB003		CCASB004		CCASB004		CCASB004		CCASB004		CCASB005		CCASB005		CCASB005	
Sample ID			CCASB003-0-062		CCASB004-0-000		CCASB004-0-002		CCASB004-0-020		CCASB004-0-061		CCASB005-0-000		CCASB005-0-020		CCASB005-0-002	
Date			12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014	
Sample Depth			6-8 feet		0-2 inches		2-24 inches		2-6.1 feet		6.1-8 feet		0-2 inches		2-10.5 feet		2-24 inches	
Sample Type			0 - Primary		0 - Primary		0 - Primary		0 - Primary		0 - Primary		0 - Primary		0 - Primary		0 - Primary	
Matrix			SB		SB		SB		SB		SB		SB		SB		SB	
Laboratory Sample ID			480-73350-4		480-73350-5		480-73350-6		480-73350-7		480-73350-8		480-73350-9		480-73350-11		480-73350-10	
Volatile Organic Compounds (VOCs), ug/Kg (continued)																		
2-Hexanone	~	~	~		~		~		~		~		~		~		~	
4-Methyl-2-pentanone	~	~	~		~		~		~		~		~		~		~	
Acetone	100000	~	~		~		~		~		~		~		~		~	
Benzene	4800	~	~		~		~		~		~		~		~		~	
Bromodichloromethane	~	~	~		~		~		~		~		~		~		~	
Bromoform	~	~	~		~		~		~		~		~		~		~	
Bromomethane	~	~	~		~		~		~		~		~		~		~	
Carbon disulfide	~	~	~		~		~		~		~		~		~		~	
Carbon tetrachloride	2400	~	~		~		~		~		~		~		~		~	
Chlorobenzene	100000	~	~		~		~		~		~		~		~		~	
Chloroethane	~	~	~		~		~		~		~		~		~		~	
Chloroform	49000	~	~		~		~		~		~		~		~		~	
Chloromethane	~	~	~		~		~		~		~		~		~		~	
cis-1,2-Dichloroethene	100000	~	~		~		~		~		~		~		~		~	
cis-1,3-Dichloropropene	~	~	~		~		~		~		~		~		~		~	
Cyclohexane	~	~	~		~		~		~		~		~		~		~	
Cyclohexane, Methyl-	~	~	~		~		~		~		~		~		~		~	
Dibromochloromethane	~	~	~		~		~		~		~		~		~		~	
Dichlorodifluoromethane	~	~	~		~		~		~		~		~		~		~	
Ethylbenzene	41000	~	~		~		~		~		~		~		~		~	
Isopropylbenzene	~	~	~		~		~		~		~		~		~		~	
Methyl acetate	~	~	~		~		~		~		~		~		~		~	
Methyl tert-butyl ether	100000	~	~		~		~		~		~		~		~		~	
Methylene chloride	100000	~	~		~		~		~		~		~		~		~	
Styrene	~	~	~		~		~		~		~		~		~		~	
Tetrachloroethene	19000	~	~		~		~		~		~		~		~		~	
Toluene	100000	~	~		~		~		~		~		~		~		~	
trans-1,2-Dichloroethene	100000	~	~		~		~		~		~		~		~		~	
trans-1,3-Dichloropropene	~	~	~		~		~		~		~		~		~		~	
Trichloroethene	21000	~	~		~		~		~		~		~		~		~	
Trichlorofluoromethane	~	~	~		~		~		~		~		~		~		~	
Vinylchloride	~	~	~		~		~		~		~		~		~		~	
Xylenes, Total	100000	~	~		~		~		~		~		~		~		~	
Semi-Volatile Organic Compounds (SVOCs), ug/Kg																		
2,4,5-Trichlorophenol	~	~	45	U	51	U	41	U	43	U	44	U	49	U	40	U	42	U
2,4,6-Trichlorophenol	~	~	14	U	15	U	12	U	13	U	13	U	15	U	12	U	13	U
2,4-Dichlorophenol	~	~	11	U	12	U	9.9	U	10	U	11	U	12	U	9.6	U	10	U
2,4-Dimethylphenol	~	~	56	U	63	U	51	U	54	U	55	U	60	U	49	U	52	U
2,4-Dinitrophenol	~	~	73	U	82	U	66	U	70	U	71	U	78	U	64	U	67	U
2,4-Dinitrotoluene	~	~	32	U	36	U	29	U	31	U	31	U	34	UJ	28	U	30	UJ
2,6-Dinitrotoluene	~	~	51	U	57	U	46	U	49	U	50	U	54	U	45	U	47	U
2-Chloronaphthalene	~	~	14	U	16	U	13	U	13	U	14	U	15	U	12	U	13	U
2-Chlorophenol	~	~	11	U	12	U	9.6	U	10	U	10	U	11	U	9.3	U	9.7	U
2-Methylnaphthalene	~	~	12	J	2.8	U	8.0	J	5.4	J	2.5	U	7.8	J	13	J	4.8	J
2-Methylphenol	100000	~	6.4	U	7.2	U	5.8	U	6.1	U	6.2	U	6.8	U	5.6	U	5.9	U
2-Nitroaniline	~	~	66	U	75	U	60	U	64	U	65	U	71	U	59	U	61	U
2-Nitrophenol	~	~	9.5	U	11	U	8.6	U	9.1	U	9.3	U	10	U	8.4	U	8.8	U
3,3'-Dichlorobenzidine	~	~	180	U	210	U	160	U	170	U	180	U	200	U	160	U	170	U
3-Nitroaniline	~	~	48	U	54	U	43	U	46	U	47	U	51	U	42	U	44	U

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASB003		CCASB004		CCASB004		CCASB004		CCASB004		CCASB005		CCASB005		CCASB005	
Sample ID			CCASB003-0-062		CCASB004-0-000		CCASB004-0-002		CCASB004-0-020		CCASB004-0-061		CCASB005-0-000		CCASB005-0-020		CCASB005-0-002	
Date			12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014	
Sample Depth			6-8 feet		0-2 inches		2-24 inches		2-6.1 feet		6.1-8 feet		0-2 inches		2-10.5 feet		2-24 inches	
Sample Type			0 - Primary		0 - Primary		0 - Primary		0 - Primary		0 - Primary		0 - Primary		0 - Primary		0 - Primary	
Matrix			SB		SB		SB		SB		SB		SB		SB		SB	
Laboratory Sample ID			480-73350-4		480-73350-5		480-73350-6		480-73350-7		480-73350-8		480-73350-9		480-73350-11		480-73350-10	
Semi-Volatile Organic Compounds (SVOCs), ug/Kg (continued)																		
4,6-Dinitro-2-methylphenol	~	~	72	U	81	U	65	U	69	U	70	U	77	U	63	U	66	U
4-Bromophenyl-phenylether	~	~	66	U	75	U	60	U	63	U	65	U	71	U	58	U	61	U
4-Chloro-3-methylphenol	~	~	8.5	U	9.6	U	7.7	U	8.2	U	8.3	U	9.2	U	7.5	U	7.9	U
4-Chloroaniline	~	~	61	U	69	U	55	U	58	U	59	U	65	U	54	U	56	U
4-Chlorophenyl-phenylether	~	~	4.4	U	5.0	U	4.0	U	4.2	U	4.3	U	4.7	U	3.9	U	4.1	U
4-Methylphenol	100000	~	12	U	13	U	10	U	11	U	11	U	12	U	10	U	11	U
4-Nitroaniline	~	~	23	U	26	U	21	U	22	U	23	U	25	U	20	U	21	U
4-Nitrophenol, SVOC	~	~	50	U	57	U	46	U	48	U	49	U	54	U	44	U	46	U
Acenaphthene	100000	~	2.4	U	2.8	U	2.2	U	2.3	U	2.4	U	2.6	U	2.1	U	2.2	U
Acenaphthylene	100000	~	7.5	J	8.0	J	5.5	J	1.6	U	1.7	U	7.9	J	26	J	7.3	J
Acetophenone	~	~	11	U	12	U	9.7	U	10	U	10	U	11	U	9.4	U	9.8	U
Anthracene	100000	~	5.3	U	6.0	U	4.8	U	5.1	U	5.2	U	7.6	J	10	J	4.9	U
Atrazine	~	~	9.2	U	10	U	8.4	U	8.9	U	9.0	U	9.9	U	8.1	U	8.5	U
Benz(a)anthracene	1000	~	42	J	38	J	3.2	U	3.4	U	3.5	U	35	J	23	J	3.3	U
Benzaldehyde	~	~	23	U	26	U	21	U	22	U	22	U	24	U	20	U	21	U
Benzo(a)pyrene	1000	~	37	J	34	J	24	J	11	J	4.9	U	37	J	22	J	15	J
Benzo(b)fluoranthene	1000	~	48	J	62	J	38	J	18	J	3.9	U	52	J	23	J	25	J
Benzo(g,h,i)perylene	100000	~	24	J	34	J	28	J	2.4	U	2.4	U	25	J	35	J	11	J
Benzo(k)fluoranthene	3900	~	15	J	17	J	13	J	2.2	U	2.2	U	23	J	2.0	U	9.1	J
Biphenyl	~	~	13	U	15	U	12	U	12	U	13	U	14	U	11	U	12	U
bis (2-chloroisopropyl) ether	~	~	22	U	24	U	20	U	21	U	21	U	23	U	19	U	20	U
bis(2-Chloroethoxy)methane	~	~	11	U	13	U	10	U	11	U	11	U	12	U	9.9	U	10	U
bis(2-Chloroethyl)ether	~	~	18	U	20	U	16	U	17	U	18	U	19	U	16	U	17	U
bis(2-Ethylhexyl)phthalate	~	~	67	U	76	U	61	U	64	U	65	U	72	U	59	UJ	62	U
Butyl benzyl phthalate	~	~	56	U	63	U	50	U	53	U	54	U	60	U	49	U	51	U
Caprolactam	~	~	90	U	100	U	81	U	86	U	88	U	96	U	79	U	83	U
Carbazole	~	~	23	J	2.7	U	2.2	U	2.3	U	2.3	U	6.8	J	2.1	U	2.2	U
Chrysene	3900	~	46	J	41	J	32	J	13	J	2.0	U	44	J	27	J	21	J
Dibenz(a,h)anthracene	330	~	2.4	U	2.8	U	2.2	U	2.3	U	2.4	U	5.6	J	2.2	U	2.3	U
Dibenzofuran	59000	~	2.2	U	2.4	U	2.0	U	2.1	U	2.1	U	2.3	U	1.9	U	2.0	U
Diethylphthalate	~	~	6.3	U	7.1	U	5.7	U	6.0	U	6.1	U	6.7	U	5.5	U	5.8	U
Dimethyl phthalate	~	~	5.4	U	6.1	U	4.9	U	5.2	U	5.3	U	5.8	U	4.8	U	5.0	U
Di-N-Butyl phthalate	~	~	72	U	81	U	65	U	69	U	70	U	77	U	63	U	66	U
Di-N-Octyl phthalate	~	~	4.9	U	5.5	U	4.4	U	4.7	U	4.7	U	5.2	U	4.3	U	4.5	U
Fluoranthene	100000	~	130	J	73	J	45	J	17	J	2.9	U	86	J	34	J	31	J
Fluorene	100000	~	16	J	5.4	U	4.3	U	4.6	U	4.7	U	5.1	U	5.8	J	4.4	U
Hexachlorobenzene	1200	~	10	U	12	U	9.3	U	9.9	U	10	U	11	U	9.1	U	9.5	U
Hexachlorobutadiene, SVOC	~	~	11	U	12	U	9.6	U	10	U	10	U	11	U	9.4	U	9.8	U
Hexachlorocyclopentadiene	~	~	63	U	71	U	57	U	60	U	61	U	67	U	55	U	58	U
Hexachloroethane	~	~	16	U	18	U	15	U	15	U	16	U	17	U	14	U	15	U
Indeno(1,2,3-cd)pyrene	500	~	27	J	39	J	29	J	12	J	5.6	U	31	J	31	J	15	J
Isophorone	~	~	10	U	12	U	83	J	10	J	10	U	12	J	9.1	U	9.6	U
Naphthalene, SVOC	100000	~	3.5	U	3.9	U	5.4	J	3.3	U	3.4	U	3.7	U	18	J	3.2	U
Nitrobenzene	15000	~	9.2	U	10	U	8.3	U	8.8	U	9.0	U	9.9	U	8.1	U	8.5	U
N-Nitroso-di-N-propylamine	~	~	16	U	19	U	15	U	16	U	16	U	18	U	15	U	15	U
N-Nitrosodiphenylamine	~	~	11	U	13	U	10	U	11	U	11	U	12	U	10	U	10	U
Pentachlorophenol, SVOC	6700	~	71	U	80	U	65	U	68	U	70	U	76	U	63	U	66	U
Phenanthrene	100000	~	130	J	27	J	23	J	8.4	J	4.3	U	32	J	29	J	14	J
Phenol	100000	~	22	U	25	U	20	U	21	U	21	U	23	U	19	U	20	U
Pyrene	100000	~	110	J	48	J	33	J	13	J	1.3	U	48	J	30	J	16	J

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASB003	CCASB004	CCASB004	CCASB004	CCASB004	CCASB005	CCASB005	CCASB005
Sample ID			CCASB003-0-062	CCASB004-0-000	CCASB004-0-002	CCASB004-0-020	CCASB004-0-061	CCASB005-0-000	CCASB005-0-020	CCASB005-0-002
Date			12/18/2014	12/18/2014	12/18/2014	12/18/2014	12/18/2014	12/18/2014	12/18/2014	12/18/2014
Sample Depth			6-8 feet	0-2 inches	2-24 inches	2-6.1 feet	6.1-8 feet	0-2 inches	2-10.5 feet	2-24 inches
Sample Type			0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary
Matrix			SB	SB	SB	SB	SB	SB	SB	SB
Laboratory Sample ID			480-73350-4	480-73350-5	480-73350-6	480-73350-7	480-73350-8	480-73350-9	480-73350-11	480-73350-10
Polychlorinated Biphenyls (PBCs), mg/Kg										
Aroclor-1016	~	~	~	~	~	~	~	~	~	~
Aroclor-1221	~	~	~	~	~	~	~	~	~	~
Aroclor-1232	~	~	~	~	~	~	~	~	~	~
Aroclor-1242	~	~	~	~	~	~	~	~	~	~
Aroclor-1248	~	~	~	~	~	~	~	~	~	~
Aroclor-1254	~	~	~	~	~	~	~	~	~	~
Aroclor-1260	~	~	~	~	~	~	~	~	~	~
Aroclor-1262	~	~	~	~	~	~	~	~	~	~
Aroclor-1268	~	~	~	~	~	~	~	~	~	~
Total Petroleum Hydrocarbons, mg/Kg										
TPH	~	~	~	~	~	~	~	~	~	~

Notes:

mg/Kg = milligram per kilogram.

mg/L = milligram per liter.

ug/Kg = microgram per kilogram.

U = The analyte was analyzed for but was not detected above the level of the detection quantitation limit.

UJ = The analyte was analyzed for but not detected. The quantitation limit is approximate and may be inaccurate or imprecise.

J = The positive result reported is estimated either because the result is less than the LOQ or because certain quality control criteria were not met.

J+ = The result is an estimated quantity, but the result may be biased high because certain quality control criteria were not met.

SB = Soil boring.

SS = Surface soil.

(1) New York State Department of Environmental Conservation (NSYDEC) Subpart 375-6 Remedial Program Soil Cleanup Objectives (SCOs).

(2) Federal Code of Regulations, Section 261.24 - Toxicity characteristic. Context: Title 40 - Protection of Environment. CHAPTER I - ENVIRONMENTAL PROTECTION AGENCY (CONTINUED). SUBCHAPTER I - SOLID WASTES (CONTINUED). PART 261 - IDENTIFICATION AND LISTING OF HAZARDOUS WASTE. Subpart C - Characteristics of Hazardous Waste (2012-07-01).

~ = Analysis not performed or No standard or guidance value listed for this constituent.

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASB005		CCASB005		CCASB006		CCASB006		CCASB006		CCASB006		CCASB007		CCASB007	
Sample ID			CCASB005-1-020		CCASB005-0-105		CCASB006-0-000		CCASB006-0-002		CCASB006-0-020		CCASB006-0-040		CCASB007-0-002		CCASB007-0-020	
Date			12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		6/24/2015		6/24/2015	
Sample Depth			2-10.5 feet		10.5-12 feet		0-2 inches		2-24 inches		2-4 feet		4-6 feet		2-24 inches		2-4 feet	
Sample Type			1 - Duplicate		0 - Primary		0 - Primary		0 - Primary		0 - Primary		0 - Primary		0-Primary		0-Primary	
Matrix			SB		SB		SB		SB		SB		SB		SB		SB	
Laboratory Sample ID			480-73350-12		480-73350-13		480-73350-15		480-73350-16		480-73350-17		480-73350-18		480-82861-1		480-82861-2	
Toxicity Characteristic Leaching Procedure (TCLP) Metals, mg/L																		
Arsenic, TCLP	~	5	0.031	J	0.0064	J	0.0089	J	0.0056	U	0.0056	U	0.0056	U	~		~	
Barium, TCLP	~	100	1.8		0.53		0.60		0.36	J+	0.56		0.95		~		~	
Cadmium, TCLP	~	1	0.029		0.0017	J	0.0030		0.00050	U	0.0022		0.0037		~		~	
Chromium, TCLP	~	5	0.0040	U	0.0040	U	0.0040	U	0.0040	U	0.0040	U	0.0040	U	~		~	
Lead, TCLP	~	5	0.17		0.0091	J	0.022		0.0030	U	0.035		0.027		~		~	
Mercury, TCLP	~	0.2	0.00012	U	0.00012	U	0.00012	U	0.00012	U	0.00012	U	0.00012	U	~		~	
Selenium, TCLP	~	1	0.0087	U	0.0087	U	0.0087	U	0.0087	U	0.0087	U	0.0087	U	~		~	
Silver, TCLP	~	5	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	~		~	
Total Metals, mg/Kg																		
Aluminum, Total	~	~	9070		6610		9840		10500		10000		5780		~		~	
Antimony, Total	~	~	2.5	J	0.48	U	1.1	J	0.95	J	1.6	J	0.42	U	~		~	
Arsenic, Total	16	~	19.3	J	4.1		11.0		10.0		8.3		1.0	J	8.6		5.8	
Barium, Total	400	~	121	J	61.6		127		134		136		16.6		~		~	
Beryllium, Total	72	~	0.48		0.33		0.52		0.53		0.51		0.23		~		~	
Boron, Total	~	~	17.4	J	11.6		7.5		7.5		7.1		2.2		~		~	
Cadmium, Total	4.3	~	1.0		0.036	U	0.57		0.65		0.59		0.058	J	0.39		0.11	J
Calcium, Total	~	~	37100	J	946		3380		2920		1610		3610		~		~	
Chromium, Total	180	~	12.5		7.5		12.2		13.4		11.2		2.7		~		~	
Cobalt, Total	~	~	8.3		5.9		8.1		9.5		8.1		1.2		~		~	
Copper, Total	270	~	25.4	J	7.7		16.7		15.0		11.3		2.9		~		~	
Iron, Total	~	~	19600	J	13100		17300		18100		17500		5450		~		~	
Lead, Total	400	~	122	J	9.6		110		109		101		8.2		82.7		21.4	
Magnesium, Total	~	~	14300	J	1760		2770		2680		2440		794		~		~	
Manganese, Total	2000	~	402	J	269		490		505		475		42.1		~		~	
Mercury, Total	0.81	~	0.30	J	0.0090	U	0.078		0.026		0.043		0.0094	U	0.037		0.029	
Nickel, Total	310	~	26.2		12.3		18.6		19.5		18.5		1.6	J	~		~	
Potassium, Total	~	~	990	J	811		1080		1020		1020		193		~		~	
Selenium, Total	180	~	0.44	U	0.48	U	0.82	J	0.47	J	0.50	U	0.42	U	~		~	
Silver, Total	180	~	0.23	J	0.24	U	0.28	U	0.23	U	0.25	U	0.21	U	~		~	
Sodium, Total	~	~	80.4	J	41.9	J	37.0	J	34.8	J	30.7	J	53.4	J	~		~	
Thallium, Total	~	~	0.33	U	0.36	U	0.42	U	0.34	U	0.37	U	0.32	U	~		~	
Vanadium, Total	~	~	14.1		9.1		14.5		14.2		13.5		7.0		~		~	
Zinc, Total	10000	~	113	J	39.2		78.0		76.4		64.5		15.3		~		~	
Volatile Organic Compounds (VOCs), ug/Kg																		
1,1,1-Trichloroethane	100000	~	~		~		~		~		~		~		~		~	
1,1,2,2-Tetrachloroethane	~	~	~		~		~		~		~		~		~		~	
1,1,2-Trichloro-1,2,2-trifluoroethane	~	~	~		~		~		~		~		~		~		~	
1,1,2-Trichloroethane	~	~	~		~		~		~		~		~		~		~	
1,1-Dichloroethane	26000	~	~		~		~		~		~		~		~		~	
1,1-Dichloroethene	100000	~	~		~		~		~		~		~		~		~	
1,2,4-Trichlorobenzene, VOC	~	~	~		~		~		~		~		~		~		~	
1,2-Dibromo-3-chloropropane	~	~	~		~		~		~		~		~		~		~	
1,2-Dibromoethane	~	~	~		~		~		~		~		~		~		~	
1,2-Dichlorobenzene, VOC	~	~	~		~		~		~		~		~		~		~	
1,2-Dichloroethane	3100	~	~		~		~		~		~		~		~		~	
1,2-Dichloropropane	~	~	~		~		~		~		~		~		~		~	
1,3-Dichlorobenzene, VOC	~	~	~		~		~		~		~		~		~		~	
1,4-Dichlorobenzene, VOC	~	~	~		~		~		~		~		~		~		~	
2-Butanone	~	~	~		~		~		~		~		~		~		~	

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASB005		CCASB005		CCASB006		CCASB006		CCASB006		CCASB006		CCASB007		CCASB007	
Sample ID			CCASB005-1-020		CCASB005-0-105		CCASB006-0-000		CCASB006-0-002		CCASB006-0-020		CCASB006-0-040		CCASB007-0-002		CCASB007-0-020	
Date			12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		6/24/2015		6/24/2015	
Sample Depth			2-10.5 feet		10.5-12 feet		0-2 inches		2-24 inches		2-4 feet		4-6 feet		2-24 inches		2-4 feet	
Sample Type			1 - Duplicate		0 - Primary		0 - Primary		0 - Primary		0 - Primary		0 - Primary		0-Primary		0-Primary	
Matrix			SB		SB		SB		SB		SB		SB		SB		SB	
Laboratory Sample ID			480-73350-12		480-73350-13		480-73350-15		480-73350-16		480-73350-17		480-73350-18		480-82861-1		480-82861-2	
Volatile Organic Compounds (VOCs), ug/Kg (continued)																		
2-Hexanone	~	~	~		~		~		~		~		~		~		~	
4-Methyl-2-pentanone	~	~	~		~		~		~		~		~		~		~	
Acetone	100000	~	~		~		~		~		~		~		~		~	
Benzene	4800	~	~		~		~		~		~		~		~		~	
Bromodichloromethane	~	~	~		~		~		~		~		~		~		~	
Bromoform	~	~	~		~		~		~		~		~		~		~	
Bromomethane	~	~	~		~		~		~		~		~		~		~	
Carbon disulfide	~	~	~		~		~		~		~		~		~		~	
Carbon tetrachloride	2400	~	~		~		~		~		~		~		~		~	
Chlorobenzene	100000	~	~		~		~		~		~		~		~		~	
Chloroethane	~	~	~		~		~		~		~		~		~		~	
Chloroform	49000	~	~		~		~		~		~		~		~		~	
Chloromethane	~	~	~		~		~		~		~		~		~		~	
cis-1,2-Dichloroethene	100000	~	~		~		~		~		~		~		~		~	
cis-1,3-Dichloropropene	~	~	~		~		~		~		~		~		~		~	
Cyclohexane	~	~	~		~		~		~		~		~		~		~	
Cyclohexane, Methyl-	~	~	~		~		~		~		~		~		~		~	
Dibromochloromethane	~	~	~		~		~		~		~		~		~		~	
Dichlorodifluoromethane	~	~	~		~		~		~		~		~		~		~	
Ethylbenzene	41000	~	~		~		~		~		~		~		~		~	
Isopropylbenzene	~	~	~		~		~		~		~		~		~		~	
Methyl acetate	~	~	~		~		~		~		~		~		~		~	
Methyl tert-butyl ether	100000	~	~		~		~		~		~		~		~		~	
Methylene chloride	100000	~	~		~		~		~		~		~		~		~	
Styrene	~	~	~		~		~		~		~		~		~		~	
Tetrachloroethene	19000	~	~		~		~		~		~		~		~		~	
Toluene	100000	~	~		~		~		~		~		~		~		~	
trans-1,2-Dichloroethene	100000	~	~		~		~		~		~		~		~		~	
trans-1,3-Dichloropropene	~	~	~		~		~		~		~		~		~		~	
Trichloroethene	21000	~	~		~		~		~		~		~		~		~	
Trichlorofluoromethane	~	~	~		~		~		~		~		~		~		~	
Vinylchloride	~	~	~		~		~		~		~		~		~		~	
Xylenes, Total	100000	~	~		~		~		~		~		~		~		~	
Semi-Volatile Organic Compounds (SVOCs), ug/Kg																		
2,4,5-Trichlorophenol	~	~	39	U	42	U	51	U	46	U	43	U	42	U	~		~	
2,4,6-Trichlorophenol	~	~	12	U	13	U	15	U	14	U	13	U	13	U	~		~	
2,4-Dichlorophenol	~	~	9.3	U	10	U	12	U	11	U	10	U	10	U	~		~	
2,4-Dimethylphenol	~	~	48	U	52	U	63	U	57	U	54	U	52	U	~		~	
2,4-Dinitrophenol	~	~	62	U	68	U	82	U	74	U	70	U	68	U	~		~	
2,4-Dinitrotoluene	~	~	27	U	30	U	36	U	33	U	31	U	30	U	~		~	
2,6-Dinitrotoluene	~	~	43	U	47	U	57	U	52	U	49	U	47	U	~		~	
2-Chloronaphthalene	~	~	12	U	13	U	16	U	14	U	13	U	13	U	~		~	
2-Chlorophenol	~	~	9.0	U	9.9	U	12	U	11	U	10	U	9.9	U	~		~	
2-Methylnaphthalene	~	~	8.5	J	2.3	U	12	J	2.5	U	2.4	U	2.3	U	~		~	
2-Methylphenol	100000	~	5.5	U	6.0	U	7.2	U	6.5	U	6.1	U	6.0	U	~		~	
2-Nitroaniline	~	~	57	U	62	U	75	U	68	U	64	U	62	U	~		~	
2-Nitrophenol	~	~	8.1	U	8.9	U	11	U	9.6	U	9.1	U	8.9	U	~		~	
3,3'-Dichlorobenzidine	~	~	160	U	170	U	200	U	180	U	170	U	170	U	~		~	
3-Nitroaniline	~	~	41	U	45	U	54	U	48	U	46	U	45	U	~		~	

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASB005		CCASB005		CCASB006		CCASB006		CCASB006		CCASB006		CCASB007	CCASB007
Sample ID			CCASB005-1-020		CCASB005-0-105		CCASB006-0-000		CCASB006-0-002		CCASB006-0-020		CCASB006-0-040		CCASB007-0-002	CCASB007-0-020
Date			12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		12/18/2014		6/24/2015	6/24/2015
Sample Depth			2-10.5 feet		10.5-12 feet		0-2 inches		2-24 inches		2-4 feet		4-6 feet		2-24 inches	2-4 feet
Sample Type			1 - Duplicate		0 - Primary		0 - Primary		0 - Primary		0 - Primary		0 - Primary		0-Primary	0-Primary
Matrix			SB		SB		SB		SB		SB		SB		SB	SB
Laboratory Sample ID			480-73350-12		480-73350-13		480-73350-15		480-73350-16		480-73350-17		480-73350-18		480-82861-1	480-82861-2
Semi-Volatile Organic Compounds (SVOCs), ug/Kg (continued)																
4,6-Dinitro-2-methylphenol	~	~	61	U	67	U	81	U	73	U	69	U	67	U	~	~
4-Bromophenyl-phenylether	~	~	56	U	62	U	74	U	67	U	63	U	62	U	~	~
4-Chloro-3-methylphenol	~	~	7.3	U	8.0	U	9.6	U	8.7	U	8.2	U	8.0	U	~	~
4-Chloroaniline	~	~	52	U	57	U	68	U	62	U	58	U	57	U	~	~
4-Chlorophenyl-phenylether	~	~	3.8	U	4.1	U	5.0	U	4.5	U	4.2	U	4.1	U	~	~
4-Methylphenol	100000	~	9.9	U	11	U	13	U	12	U	11	U	11	U	~	~
4-Nitroaniline	~	~	20	U	22	U	26	U	24	U	22	U	22	U	~	~
4-Nitrophenol, SVOC	~	~	43	U	47	U	57	U	51	U	48	U	47	U	~	~
Acenaphthene	100000	~	2.1	U	2.3	U	2.7	U	12	J	2.3	U	2.3	U	~	~
Acenaphthylene	100000	~	32	J	1.6	U	1.9	U	1.7	U	1.6	U	1.6	U	~	~
Acetophenone	~	~	9.1	U	9.9	U	12	U	11	U	10	U	10	U	~	~
Anthracene	100000	~	4.5	U	5.0	U	6.0	U	24	J	5.1	U	5.0	U	~	~
Atrazine	~	~	7.9	U	8.6	U	10	U	9.4	U	8.8	U	8.6	U	~	~
Benz(a)anthracene	1000	~	29	J	3.3	U	42	J	68	J	3.4	U	3.3	U	~	~
Benzaldehyde	~	~	19	U	21	U	26	U	23	U	22	U	21	U	~	~
Benzo(a)pyrene	1000	~	43	J	4.7	U	37	J	58	J	4.8	U	4.7	U	~	~
Benzo(b)fluoranthene	1000	~	54	J	3.8	U	58	J	80	J	3.9	U	3.8	U	~	~
Benzo(g,h,i)perylene	100000	~	42	J	2.3	U	36	J	38	J	2.4	U	2.3	U	~	~
Benzo(k)fluoranthene	3900	~	21	J	2.1	U	23	J	35	J	2.2	U	2.1	U	~	~
Biphenyl	~	~	11	U	12	U	15	U	13	U	12	U	12	U	~	~
bis (2-chloroisopropyl) ether	~	~	19	U	20	U	24	U	22	U	21	U	20	U	~	~
bis(2-Chloroethoxy)methane	~	~	9.7	U	11	U	13	U	11	U	11	U	11	U	~	~
bis(2-Chloroethyl)ether	~	~	15	U	17	U	20	U	18	U	17	U	17	U	~	~
bis(2-Ethylhexyl)phthalate	~	~	57	UJ	62	U	75	U	68	U	64	U	63	U	~	~
Butyl benzyl phthalate	~	~	48	U	52	U	63	U	57	U	53	U	52	U	~	~
Caprolactam	~	~	77	U	84	U	100	U	91	U	86	U	84	U	~	~
Carbazole	~	~	2.1	U	2.2	U	6.1	J	12	J	2.3	U	2.2	U	~	~
Chrysene	3900	~	34	J	1.9	U	41	J	63	J	2.0	U	1.9	U	~	~
Dibenz(a,h)anthracene	330	~	8.1	J	2.3	U	2.7	U	12	J	2.3	U	2.3	U	~	~
Dibenzofuran	59000	~	1.9	U	2.0	U	2.4	U	2.2	U	2.1	U	2.0	U	~	~
Diethylphthalate	~	~	5.4	U	5.9	U	7.0	U	6.4	U	6.0	U	5.9	U	~	~
Dimethyl phthalate	~	~	4.6	U	5.1	U	6.1	U	5.5	U	5.2	U	5.1	U	~	~
Di-N-Butyl phthalate	~	~	61	U	67	U	81	U	73	U	69	U	67	U	~	~
Di-N-Octyl phthalate	~	~	4.2	U	4.5	U	5.5	U	4.9	U	4.6	U	4.5	U	~	~
Fluoranthene	100000	~	31	J	2.8	U	78	J	140	J	2.9	U	2.8	U	~	~
Fluorene	100000	~	5.5	J	4.5	U	5.4	U	12	J	4.6	U	4.5	U	~	~
Hexachlorobenzene	1200	~	8.8	U	9.6	U	12	U	10	U	9.9	U	9.6	U	~	~
Hexachlorobutadiene, SVOC	~	~	9.1	U	9.9	U	12	U	11	U	10	U	9.9	U	~	~
Hexachlorocyclopentadiene	~	~	54	U	59	U	70	U	64	U	60	U	59	U	~	~
Hexachloroethane	~	~	14	U	15	U	18	U	16	U	15	U	15	U	~	~
Indeno(1,2,3-cd)pyrene	500	~	43	J	5.4	U	39	J	50	J	5.5	U	5.4	U	~	~
Isophorone	~	~	8.9	U	9.7	U	12	U	11	U	9.9	U	9.7	U	~	~
Naphthalene, SVOC	100000	~	9.0	J	3.2	U	3.9	U	3.5	U	3.3	U	3.2	U	~	~
Nitrobenzene	15000	~	7.9	U	8.6	U	10	U	9.3	U	8.8	U	8.6	U	~	~
N-Nitroso-di-N-propylamine	~	~	14	U	15	U	19	U	17	U	16	U	15	U	~	~
N-Nitrosodiphenylamine	~	~	9.7	U	11	U	13	U	12	U	11	U	11	U	~	~
Pentachlorophenol, SVOC	6700	~	61	U	66	U	80	U	72	U	68	U	67	U	~	~
Phenanthrene	100000	~	20	J	4.1	U	47	J	100	J	4.2	U	4.1	U	~	~
Phenol	100000	~	19	U	20	U	25	U	22	U	21	U	20	U	~	~
Pyrene	100000	~	28	J	1.3	U	53	J	100	J	1.3	U	1.3	U	~	~

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASB005	CCASB005	CCASB006	CCASB006	CCASB006	CCASB006	CCASB007	CCASB007
Sample ID			CCASB005-1-020	CCASB005-0-105	CCASB006-0-000	CCASB006-0-002	CCASB006-0-020	CCASB006-0-040	CCASB007-0-002	CCASB007-0-020
Date			12/18/2014	12/18/2014	12/18/2014	12/18/2014	12/18/2014	12/18/2014	6/24/2015	6/24/2015
Sample Depth			2-10.5 feet	10.5-12 feet	0-2 inches	2-24 inches	2-4 feet	4-6 feet	2-24 inches	2-4 feet
Sample Type			1 - Duplicate	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0-Primary	0-Primary
Matrix			SB	SB	SB	SB	SB	SB	SB	SB
Laboratory Sample ID			480-73350-12	480-73350-13	480-73350-15	480-73350-16	480-73350-17	480-73350-18	480-82861-1	480-82861-2
Polychlorinated Biphenyls (PBCs), mg/Kg										
Aroclor-1016	~	~	~	~	~	~	~	~	~	~
Aroclor-1221	~	~	~	~	~	~	~	~	~	~
Aroclor-1232	~	~	~	~	~	~	~	~	~	~
Aroclor-1242	~	~	~	~	~	~	~	~	~	~
Aroclor-1248	~	~	~	~	~	~	~	~	~	~
Aroclor-1254	~	~	~	~	~	~	~	~	~	~
Aroclor-1260	~	~	~	~	~	~	~	~	~	~
Aroclor-1262	~	~	~	~	~	~	~	~	~	~
Aroclor-1268	~	~	~	~	~	~	~	~	~	~
Total Petroleum Hydrocarbons, mg/Kg										
TPH	~	~	~	~	~	~	~	~	~	~

Notes:
mg/Kg = milligram per kilogram.
mg/L = milligram per liter.
ug/Kg = microgram per kilogram.
U = The analyte was analyzed for but was not detected above the level of the detection quantitation limit.
UJ = The analyte was analyzed for but not detected. The quantitation limit is approximate and may be inaccurate or imprecise.
J = The positive result reported is estimated either because the result is less than the LOQ or because certain quality control criteria were not met.
J+ = The result is an estimated quantity, but the result may be biased high because certain quality control criteria were not met.
SB = Soil boring.
SS = Surface soil.
(1) New York State Department of Environmental Conservation (NSYDEC) Subpart 375-6 Remedial Program Soil Cleanup Objectives (SCOs).
(2) Federal Code of Regulations, Section 261.24 - Toxicity characteristic. Context: Title 40 - Protection of Environment. CHAPTER I - ENVIRONMENTAL PROTECTION AGENCY (CONTINUED). SUBCHAPTER I - SOLID WASTES (CONTINUED). PART 261 - IDENTIFICATION AND LISTING OF HAZARDOUS WASTE. Subpart C - Characteristics of Hazardous Waste (2012-07-01).
~ = Analysis not performed or No standard or guidance value listed for this constituent.

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASB008		CCASB008		CCASB008		CCASB008		CCASB009		CCASB009		CCASS001		CCASS001	
Sample ID			CCASB008-0-002		CCASB008-0-038		CCASB008-0-060		CCASB008-1-060		CCASB009-0-002		CCASB009-0-020		CCASS001-0-000		CCASS001-1-000	
Date			6/24/2015		6/24/2015		6/24/2015		6/24/2015		6/24/2015		6/24/2015		7/31/2014		7/31/2014	
Sample Depth			2-24 inches		3.8-6 feet		6-12 feet		6-12 feet		2-24 inches		2-4 feet		0 - 2 inches		0 - 2 inches	
Sample Type			0-Primary		0-Primary		0-Primary		1-Duplicate		0-Primary		0-Primary		0 - Primary		1 - Duplicate	
Matrix			SB		SB		SB		SB		SB		SB		SS		SS	
Laboratory Sample ID			480-82861-3		480-82861-4		480-82861-5		480-82861-6		480-82861-7		480-82861-8		480-64773-1		480-64773-2	
Toxicity Characteristic Leaching Procedure (TCLP) Metals, mg/L																		
Arsenic, TCLP	~	5	0.0056	U	0.016		0.0056	J	0.0056	U	~		~		0.0056	U	~	
Barium, TCLP	~	100	0.63	J	0.99	J	0.60	J	0.60	J	~		~		0.56		~	
Cadmium, TCLP	~	1	0.00083	J	0.17		0.0012	J	0.0011	J	~		~		0.0016	J	~	
Chromium, TCLP	~	5	0.010	U	0.010	U	0.010	U	0.010	U	~		~		0.0010	U	~	
Lead, TCLP	~	5	0.0039	J	6.6		0.0030	U	0.0030	U	~		~		0.0077	J	~	
Mercury, TCLP	~	0.2	0.00012	U	0.00012	U	0.00012	UJ	0.00012	UJ	~		~		0.00012	U	~	
Selenium, TCLP	~	1	0.0087	U	0.0087	U	0.0087	U	0.0087	U	~		~		0.0087	U	~	
Silver, TCLP	~	5	0.0017	U	0.0017	U	0.0017	U	0.0017	U	~		~		0.0017	J	~	
Total Metals, mg/Kg																		
Aluminum, Total	~	~	11800		8280		10600		9940		~		~		9200	J	~	
Antimony, Total	~	~	0.49	U	9.5	J	0.48	UJ	0.51	UJ	~		~		0.51	J	~	
Arsenic, Total	16	~	8.6		63.3		5.7		5.7		15.7		14.2		7.2		~	
Barium, Total	400	~	136		404		108	J	93.8	J	~		~		130	J	~	
Beryllium, Total	72	~	0.56		0.39		0.50		0.48		~		~		0.51		~	
Boron, Total	~	~	5.9		43.0		16.4	J	15.6	J	~		~		2.5		~	
Cadmium, Total	4.3	~	0.36		7.7		0.13	J	0.15	J	1.2		0.61		0.39		~	
Calcium, Total	~	~	2320		2380		1210	J	1070	J	~		~		2100		~	
Chromium, Total	180	~	13.1		14.5		11.4		10.8		~		~		11		~	
Cobalt, Total	~	~	8.6		7.8		8.1		7.3		~		~		8.8		~	
Copper, Total	270	~	13.6		107		10.5		10.3		~		~		15		~	
Iron, Total	~	~	19900		18200		18700		17700		~		~		17000		~	
Lead, Total	400	~	44.9		587		11.6		12.9		158		128		49		~	
Magnesium, Total	~	~	2690		1900		2410	J	2260	J	~		~		2500	J	~	
Manganese, Total	2000	~	509		377		487	J	415	J	~		~		570	J	~	
Mercury, Total	0.81	~	0.029		0.13		0.017	J	0.012	J	0.10		0.12		~		~	
Nickel, Total	310	~	20.8		29.6		18.3		16.9		~		~		19		~	
Potassium, Total	~	~	1460		1210		1350	J	1340	J	~		~		670		~	
Selenium, Total	180	~	0.49	U	2.0	J	0.48	U	0.51	U	~		~		1.3	J	~	
Silver, Total	180	~	0.24	U	0.25	U	0.24	U	0.25	U	~		~		0.24	U	~	
Sodium, Total	~	~	88.4	J	141	J	106	J	88.6	J	~		~		160	J	~	
Thallium, Total	~	~	0.37	U	0.37	U	0.36	U	0.38	U	~		~		0.36	U	~	
Vanadium, Total	~	~	16.1		11.9		14.0		13.5		~		~		12		~	
Zinc, Total	10000	~	85.1		322		48.8	J	46.4	J	~		~		73		~	
Volatile Organic Compounds (VOCs), ug/Kg																		
1,1,1-Trichloroethane	100000	~	~		~		~		~		~		~		0.40	UJ	0.34	UJ
1,1,2,2-Tetrachloroethane	~	~	~		~		~		~		~		~		0.90	UJ	0.76	UJ
1,1,2-Trichloro-1,2,2-trifluoroethane	~	~	~		~		~		~		~		~		1.3	UJ	1.1	UJ
1,1,2-Trichloroethane	~	~	~		~		~		~		~		~		0.72	UJ	0.61	UJ
1,1-Dichloroethane	26000	~	~		~		~		~		~		~		0.68	UJ	0.57	UJ
1,1-Dichloroethene	100000	~	~		~		~		~		~		~		0.68	UJ	0.57	UJ
1,2,4-Trichlorobenzene, VOC	~	~	~		~		~		~		~		~		0.34	UJ	0.28	UJ
1,2-Dibromo-3-chloropropane	~	~	~		~		~		~		~		~		2.8	UJ	2.3	UJ
1,2-Dibromoethane	~	~	~		~		~		~		~		~		0.71	UJ	0.60	UJ
1,2-Dichlorobenzene, VOC	~	~	~		~		~		~		~		~		0.43	UJ	0.36	UJ
1,2-Dichloroethane	3100	~	~		~		~		~		~		~		0.28	UJ	0.23	UJ
1,2-Dichloropropane	~	~	~		~		~		~		~		~		2.8	UJ	2.3	UJ
1,3-Dichlorobenzene, VOC	~	~	~		~		~		~		~		~		0.28	UJ	0.24	UJ
1,4-Dichlorobenzene, VOC	~	~	~		~		~		~		~		~		0.77	UJ	0.65	UJ
2-Butanone	~	~	~		~		~		~		~		~		2.0	UJ	1.7	UJ

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASB008		CCASB008		CCASB008		CCASB008		CCASB009		CCASB009		CCASS001		CCASS001	
Sample ID			CCASB008-0-002		CCASB008-0-038		CCASB008-0-060		CCASB008-1-060		CCASB009-0-002		CCASB009-0-020		CCASS001-0-000		CCASS001-1-000	
Date			6/24/2015		6/24/2015		6/24/2015		6/24/2015		6/24/2015		6/24/2015		7/31/2014		7/31/2014	
Sample Depth			2-24 inches		3.8-6 feet		6-12 feet		6-12 feet		2-24 inches		2-4 feet		0 - 2 inches		0 - 2 inches	
Sample Type			0-Primary		0-Primary		0-Primary		1-Duplicate		0-Primary		0-Primary		0 - Primary		1 - Duplicate	
Matrix			SB		SB		SB		SB		SB		SB		SS		SS	
Laboratory Sample ID			480-82861-3		480-82861-4		480-82861-5		480-82861-6		480-82861-7		480-82861-8		480-64773-1		480-64773-2	
Volatile Organic Compounds (VOCs), ug/Kg (continued)																		
2-Hexanone	~	~	~		~		~		~		~		~		2.8	UJ	2.3	UJ
4-Methyl-2-pentanone	~	~	~		~		~		~		~		~		1.8	UJ	1.5	UJ
Acetone	100000	~	~		~		~		~		~		~		4.7	UJ	3.9	UJ
Benzene	4800	~	~		~		~		~		~		~		0.27	UJ	0.23	UJ
Bromodichloromethane	~	~	~		~		~		~		~		~		0.74	UJ	0.62	UJ
Bromoform	~	~	~		~		~		~		~		~		2.8	UJ	2.3	UJ
Bromomethane	~	~	~		~		~		~		~		~		0.50	UJ	0.42	UJ
Carbon disulfide	~	~	~		~		~		~		~		~		2.8	UJ	2.3	UJ
Carbon tetrachloride	2400	~	~		~		~		~		~		~		0.54	UJ	0.45	UJ
Chlorobenzene	100000	~	~		~		~		~		~		~		0.73	UJ	0.61	UJ
Chloroethane	~	~	~		~		~		~		~		~		1.3	UJ	1.1	UJ
Chloroform	49000	~	~		~		~		~		~		~		0.87	J	0.29	UJ
Chloromethane	~	~	~		~		~		~		~		~		0.33	UJ	0.28	UJ
cis-1,2-Dichloroethene	100000	~	~		~		~		~		~		~		0.71	UJ	0.60	UJ
cis-1,3-Dichloropropene	~	~	~		~		~		~		~		~		0.80	UJ	0.67	UJ
Cyclohexane	~	~	~		~		~		~		~		~		0.77	UJ	0.65	UJ
Cyclohexane, Methyl-	~	~	~		~		~		~		~		~		0.84	UJ	0.71	UJ
Dibromochloromethane	~	~	~		~		~		~		~		~		0.71	UJ	0.60	UJ
Dichlorodifluoromethane	~	~	~		~		~		~		~		~		0.46	UJ	0.38	UJ
Ethylbenzene	41000	~	~		~		~		~		~		~		0.38	UJ	0.32	UJ
Isopropylbenzene	~	~	~		~		~		~		~		~		0.83	UJ	0.70	UJ
Methyl acetate	~	~	~		~		~		~		~		~		1.0	UJ	0.87	UJ
Methyl tert-butyl ether	100000	~	~		~		~		~		~		~		0.54	UJ	0.46	UJ
Methylene chloride	100000	~	~		~		~		~		~		~		2.5	UJ	2.1	UJ
Styrene	~	~	~		~		~		~		~		~		0.28	UJ	0.23	UJ
Tetrachloroethene	19000	~	~		~		~		~		~		~		0.74	UJ	0.63	UJ
Toluene	100000	~	~		~		~		~		~		~		0.42	UJ	0.35	UJ
trans-1,2-Dichloroethene	100000	~	~		~		~		~		~		~		0.57	UJ	0.48	UJ
trans-1,3-Dichloropropene	~	~	~		~		~		~		~		~		2.4	UJ	2.0	UJ
Trichloroethene	21000	~	~		~		~		~		~		~		1.2	UJ	1.0	UJ
Trichlorofluoromethane	~	~	~		~		~		~		~		~		0.52	UJ	0.44	UJ
Vinylchloride	~	~	~		~		~		~		~		~		0.68	UJ	0.57	UJ
Xylenes, Total	100000	~	~		~		~		~		~		~		0.93	UJ	0.78	UJ
Semi-Volatile Organic Compounds (SVOCs), ug/Kg																		
2,4,5-Trichlorophenol	~	~	54	U	55	U	56	U	56	U	~		~		45	U	~	
2,4,6-Trichlorophenol	~	~	40	U	40	U	41	U	41	U	~		~		14	U	~	
2,4-Dichlorophenol	~	~	21	U	21	U	22	U	22	U	~		~		11	U	~	
2,4-Dimethylphenol	~	~	48	U	49	U	50	U	49	U	~		~		56	U	~	
2,4-Dinitrophenol	~	~	920	U	930	U	950	U	950	U	~		~		72	U	~	
2,4-Dinitrotoluene	~	~	41	U	42	U	43	U	42	U	~		~		32	U	~	
2,6-Dinitrotoluene	~	~	23	U	24	U	24	U	24	U	~		~		50	U	~	
2-Chloronaphthalene	~	~	33	U	33	U	34	U	34	U	~		~		14	U	~	
2-Chlorophenol	~	~	36	U	37	U	38	U	37	U	~		~		11	U	~	
2-Methylnaphthalene	~	~	40	U	40	U	41	U	41	U	~		~		2.5	U	~	
2-Methylphenol	100000	~	23	U	24	U	24	U	24	U	~		~		6.3	U	~	
2-Nitroaniline	~	~	29	U	30	U	30	U	30	U	~		~		66	U	~	
2-Nitrophenol	~	~	56	U	57	U	58	U	58	U	~		~		9.4	U	~	
3,3'-Dichlorobenzidine	~	~	230	U	240	U	240	U	240	U	~		~		180	U	~	
3-Nitroaniline	~	~	55	U	56	U	57	U	57	U	~		~		47	U	~	

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASB008		CCASB008		CCASB008		CCASB008		CCASB009		CCASB009		CCASS001		CCASS001
Sample ID			CCASB008-0-002		CCASB008-0-038		CCASB008-0-060		CCASB008-1-060		CCASB009-0-002		CCASB009-0-020		CCASS001-0-000		CCASS001-1-000
Date			6/24/2015		6/24/2015		6/24/2015		6/24/2015		6/24/2015		6/24/2015		7/31/2014		7/31/2014
Sample Depth			2-24 inches		3.8-6 feet		6-12 feet		6-12 feet		2-24 inches		2-4 feet		0 - 2 inches		0 - 2 inches
Sample Type			0-Primary		0-Primary		0-Primary		1-Duplicate		0-Primary		0-Primary		0 - Primary		1 - Duplicate
Matrix			SB		SB		SB		SB		SB		SB		SS		SS
Laboratory Sample ID			480-82861-3		480-82861-4		480-82861-5		480-82861-6		480-82861-7		480-82861-8		480-64773-1		480-64773-2
Semi-Volatile Organic Compounds (SVOCs), ug/Kg (continued)																	
4,6-Dinitro-2-methylphenol	~	~	200	U	200	U	210	U	210	U	~		~		71	U	~
4-Bromophenyl-phenylether	~	~	28	U	28	U	29	U	29	U	~		~		66	U	~
4-Chloro-3-methylphenol	~	~	49	U	50	U	51	U	51	U	~		~		8.5	U	~
4-Chloroaniline	~	~	49	U	50	U	51	U	51	U	~		~		61	U	~
4-Chlorophenyl-phenylether	~	~	25	U	25	U	26	U	25	U	~		~		4.4	U	~
4-Methylphenol	100000	~	23	U	24	U	24	U	24	U	~		~		11	U	~
4-Nitroaniline	~	~	100	U	110	U	110	U	110	U	~		~		23	U	~
4-Nitrophenol, SVOC	~	~	140	U	140	U	140	U	140	U	~		~		50	U	~
Acenaphthene	100000	~	29	U	30	U	30	U	30	U	~		~		2.4	U	~
Acenaphthylene	100000	~	26	U	26	U	27	U	27	U	~		~		1.7	U	~
Acetophenone	~	~	27	UJ	27	UJ	28	UJ	28	UJ	~		~		11	U	~
Anthracene	100000	~	49	U	50	U	51	U	51	U	~		~		5.5	J	~
Atrazine	~	~	69	U	70	U	72	U	71	U	~		~		9.2	U	~
Benz(a)anthracene	1000	~	43	J	57	J	21	U	21	U	~		~		40	J	~
Benzaldehyde	~	~	160	U	160	U	160	U	160	U	~		~		23	U	~
Benzo(a)pyrene	1000	~	29	J	47	J	30	U	30	U	~		~		66	J	~
Benzo(b)fluoranthene	1000	~	41	J	69	J	33	U	33	U	~		~		120	J	~
Benzo(g,h,i)perylene	100000	~	21	U	39	J	22	U	22	U	~		~		89	J	~
Benzo(k)fluoranthene	3900	~	26	U	35	J	27	U	27	U	~		~		44	J	~
Biphenyl	~	~	29	UJ	30	UJ	30	UJ	30	UJ	~		~		13	U	~
bis (2-chloroisopropyl) ether	~	~	40	U	40	U	41	U	41	U	~		~		22	U	~
bis(2-Chloroethoxy)methane	~	~	42	UJ	43	UJ	44	UJ	43	UJ	~		~		11	U	~
bis(2-Chloroethyl)ether	~	~	26	U	26	U	27	U	27	U	~		~		18	U	~
bis(2-Ethylhexyl)phthalate	~	~	68	U	69	U	71	U	70	U	~		~		97	J	~
Butyl benzyl phthalate	~	~	33	U	33	U	34	U	34	U	~		~		55	U	~
Caprolactam	~	~	60	U	61	U	62	U	62	U	~		~		89	U	~
Carbazole	~	~	23	U	24	U	24	U	24	U	~		~		7.0	J	~
Chrysene	3900	~	44	U	63	J	46	U	46	U	~		~		90	J	~
Dibenz(a,h)anthracene	330	~	35	U	36	U	36	U	36	U	~		~		19	J	~
Dibenzofuran	59000	~	23	U	24	U	24	U	24	U	~		~		2.2	U	~
Diethylphthalate	~	~	26	U	26	U	27	U	27	U	~		~		6.2	U	~
Dimethyl phthalate	~	~	23	U	24	U	24	U	24	U	~		~		5.4	U	~
Di-N-Butyl phthalate	~	~	34	U	48	J	35	U	35	U	~		~		71	U	~
Di-N-Octyl phthalate	~	~	23	U	24	U	24	U	24	U	~		~		4.8	U	~
Fluoranthene	100000	~	61	J	150	J	22	U	22	U	~		~		100	J	~
Fluorene	100000	~	23	U	24	U	24	U	24	U	~		~		4.8	U	~
Hexachlorobenzene	1200	~	27	U	27	U	28	U	28	U	~		~		10	U	~
Hexachlorobutadiene, SVOC	~	~	29	U	30	U	30	U	30	U	~		~		11	U	~
Hexachlorocyclopentadiene	~	~	27	U	27	U	28	U	28	U	~		~		62	U	~
Hexachloroethane	~	~	26	U	26	U	27	U	27	U	~		~		16	U	~
Indeno(1,2,3-cd)pyrene	500	~	25	U	42	J	26	U	25	U	~		~		82	J	~
Isophorone	~	~	42	U	43	U	44	U	43	U	~		~		10	U	~
Naphthalene, SVOC	100000	~	26	U	26	U	27	U	27	U	~		~		3.4	U	~
Nitrobenzene	15000	~	22	U	23	U	23	U	23	U	~		~		9.1	U	~
N-Nitroso-di-N-propylamine	~	~	34	U	34	U	35	U	35	U	~		~		16	U	~
N-Nitrosodiphenylamine	~	~	160	U	160	U	170	U	170	U	~		~		11	U	~
Pentachlorophenol, SVOC	6700	~	200	U	200	U	210	U	210	U	~		~		71	U	~
Phenanthrene	100000	~	29	U	120	J	30	U	30	U	~		~		38	J	~
Phenol	100000	~	30	U	31	U	32	U	31	U	~		~		22	U	~
Pyrene	100000	~	45	J	86	J	24	U	24	U	~		~		90	J	~

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASB008	CCASB008	CCASB008	CCASB008	CCASB009	CCASB009	CCASS001	CCASS001
Sample ID			CCASB008-0-002	CCASB008-0-038	CCASB008-0-060	CCASB008-1-060	CCASB009-0-002	CCASB009-0-020	CCASS001-0-000	CCASS001-1-000
Date			6/24/2015	6/24/2015	6/24/2015	6/24/2015	6/24/2015	6/24/2015	7/31/2014	7/31/2014
Sample Depth			2-24 inches	3.8-6 feet	6-12 feet	6-12 feet	2-24 inches	2-4 feet	0 - 2 inches	0 - 2 inches
Sample Type			0-Primary	0-Primary	0-Primary	1-Duplicate	0-Primary	0-Primary	0 - Primary	1 - Duplicate
Matrix			SB	SB	SB	SB	SB	SB	SS	SS
Laboratory Sample ID			480-82861-3	480-82861-4	480-82861-5	480-82861-6	480-82861-7	480-82861-8	480-64773-1	480-64773-2
Polychlorinated Biphenyls (PBCs), mg/Kg										
Aroclor-1016	~	~	~	~	~	~	~	~	0.0040 U	~
Aroclor-1221	~	~	~	~	~	~	~	~	0.0040 U	~
Aroclor-1232	~	~	~	~	~	~	~	~	0.0040 U	~
Aroclor-1242	~	~	~	~	~	~	~	~	0.0040 U	~
Aroclor-1248	~	~	~	~	~	~	~	~	0.0040 U	~
Aroclor-1254	~	~	~	~	~	~	~	~	0.0095 U	~
Aroclor-1260	~	~	~	~	~	~	~	~	0.0095 U	~
Aroclor-1262	~	~	~	~	~	~	~	~	0.0095 U	~
Aroclor-1268	~	~	~	~	~	~	~	~	0.0095 U	~
Total Petroleum Hydrocarbons, mg/Kg										
TPH	~	~	~	~	~	~	~	~	220	~

Notes:
mg/Kg = milligram per kilogram.
mg/L = milligram per liter.
ug/Kg = microgram per kilogram.
U = The analyte was analyzed for but was not detected above the level of the detection quantitation limit.
UJ = The analyte was analyzed for but not detected. The quantitation limit is approximate and may be inaccurate or imprecise.
J = The positive result reported is estimated either because the result is less than the LOQ or because certain quality control criteria were not met.
J+ = The result is an estimated quantity, but the result may be biased high because certain quality control criteria were not met.
SB = Soil boring.
SS = Surface soil.
(1) New York State Department of Environmental Conservation (NSYDEC) Subpart 375-6 Remedial Program Soil Cleanup Objectives (SCOs).
(2) Federal Code of Regulations, Section 261.24 - Toxicity characteristic. Context: Title 40 - Protection of Environment. CHAPTER I - ENVIRONMENTAL PROTECTION AGENCY (CONTINUED). SUBCHAPTER I - SOLID WASTES (CONTINUED). PART 261 - IDENTIFICATION AND LISTING OF HAZARDOUS WASTE. Subpart C - Characteristics of Hazardous Waste (2012-07-01).
~ = Analysis not performed or No standard or guidance value listed for this constituent.

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASS001		CCASS002	CCASS002	CCASS003	CCASS003	CCASS004	CCASS004	CCASS005
Sample ID			CCASS001-0-002		CCASS002-0-000	CCASS002-0-002	CCASS003-0-000	CCASS003-0-002	CCASS004-0-000	CCASS004-0-002	CCASS005-0-000
Date			7/31/2014		8/7/2014	8/7/2014	7/31/2014	7/31/2014	7/31/2014	7/31/2014	7/29/2014
Sample Depth			2 - 24 inches		0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches
Sample Type			0 - Primary		0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary
Matrix			SS		SS	SS	SS	SS	SS	SS	SS
Laboratory Sample ID			480-64773-3		480-65233-10	480-65233-11	480-64773-4	480-64773-5	480-64773-7	480-64773-8	480-64613-9
Toxicity Characteristic Leaching Procedure (TCLP) Metals, mg/L											
Arsenic, TCLP	~	5	0.0056	U	~	~	~	~	~	~	~
Barium, TCLP	~	100	0.56		~	~	~	~	~	~	~
Cadmium, TCLP	~	1	0.0015	J	~	~	~	~	~	~	~
Chromium, TCLP	~	5	0.0010	U	~	~	~	~	~	~	~
Lead, TCLP	~	5	0.0063	J	~	~	~	~	~	~	~
Mercury, TCLP	~	0.2	0.00012	U	~	~	~	~	~	~	~
Selenium, TCLP	~	1	0.0087	U	~	~	~	~	~	~	~
Silver, TCLP	~	5	0.0017	U	~	~	~	~	~	~	~
Total Metals, mg/Kg											
Aluminum, Total	~	~	8600		~	~	~	~	~	~	~
Antimony, Total	~	~	0.51	U	~	~	~	~	~	~	~
Arsenic, Total	16	~	5.4		5.8	7.2	13	10	12	9.6	15
Barium, Total	400	~	110		~	~	~	~	~	~	~
Beryllium, Total	72	~	0.49		~	~	~	~	~	~	~
Boron, Total	~	~	1.8	J	~	~	~	~	~	~	~
Cadmium, Total	4.3	~	0.24	J	0.52	0.41	1.3	0.87	0.73	0.54	0.92
Calcium, Total	~	~	1500		~	~	~	~	~	~	~
Chromium, Total	180	~	11		~	~	~	~	~	~	~
Cobalt, Total	~	~	8.2		~	~	~	~	~	~	~
Copper, Total	270	~	12		~	~	~	~	~	~	~
Iron, Total	~	~	17000		~	~	~	~	~	~	~
Lead, Total	400	~	31		62	40	180	150	110	74	140
Magnesium, Total	~	~	2400		~	~	~	~	~	~	~
Manganese, Total	2000	~	510		~	~	~	~	~	~	~
Mercury, Total	0.81	~	~		~	~	~	~	~	~	~
Nickel, Total	310	~	20		~	~	~	~	~	~	~
Potassium, Total	~	~	540		~	~	~	~	~	~	~
Selenium, Total	180	~	0.51	U	~	~	~	~	~	~	~
Silver, Total	180	~	0.26	U	~	~	~	~	~	~	~
Sodium, Total	~	~	110	J	~	~	~	~	~	~	~
Thallium, Total	~	~	0.38	U	~	~	~	~	~	~	~
Vanadium, Total	~	~	11		~	~	~	~	~	~	~
Zinc, Total	10000	~	66		~	~	~	~	~	~	~
Volatile Organic Compounds (VOCs), ug/Kg											
1,1,1-Trichloroethane	100000	~	0.33	U	~	~	~	~	~	~	~
1,1,2,2-Tetrachloroethane	~	~	0.74	U	~	~	~	~	~	~	~
1,1,2-Trichloro-1,2,2-trifluoroethane	~	~	1.0	U	~	~	~	~	~	~	~
1,1,2-Trichloroethane	~	~	0.59	U	~	~	~	~	~	~	~
1,1-Dichloroethane	26000	~	0.56	U	~	~	~	~	~	~	~
1,1-Dichloroethene	100000	~	0.56	U	~	~	~	~	~	~	~
1,2,4-Trichlorobenzene, VOC	~	~	0.28	U	~	~	~	~	~	~	~
1,2-Dibromo-3-chloropropane	~	~	2.3	U	~	~	~	~	~	~	~
1,2-Dibromoethane	~	~	0.59	U	~	~	~	~	~	~	~
1,2-Dichlorobenzene, VOC	~	~	0.36	U	~	~	~	~	~	~	~
1,2-Dichloroethane	3100	~	0.23	U	~	~	~	~	~	~	~
1,2-Dichloropropane	~	~	2.3	U	~	~	~	~	~	~	~
1,3-Dichlorobenzene, VOC	~	~	0.23	U	~	~	~	~	~	~	~
1,4-Dichlorobenzene, VOC	~	~	0.64	U	~	~	~	~	~	~	~
2-Butanone	~	~	1.7	U	~	~	~	~	~	~	~

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASS001		CCASS002	CCASS002	CCASS003	CCASS003	CCASS004	CCASS004	CCASS005
Sample ID			CCASS001-0-002		CCASS002-0-000	CCASS002-0-002	CCASS003-0-000	CCASS003-0-002	CCASS004-0-000	CCASS004-0-002	CCASS005-0-000
Date			7/31/2014		8/7/2014	8/7/2014	7/31/2014	7/31/2014	7/31/2014	7/31/2014	7/29/2014
Sample Depth			2 - 24 inches		0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches
Sample Type			0 - Primary		0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary
Matrix			SS		SS	SS	SS	SS	SS	SS	SS
Laboratory Sample ID			480-64773-3		480-65233-10	480-65233-11	480-64773-4	480-64773-5	480-64773-7	480-64773-8	480-64613-9
Volatile Organic Compounds (VOCs), ug/Kg (continued)											
2-Hexanone	~	~	2.3	U	~	~	~	~	~	~	~
4-Methyl-2-pentanone	~	~	1.5	U	~	~	~	~	~	~	~
Acetone	100000	~	3.8	U	~	~	~	~	~	~	~
Benzene	4800	~	0.22	U	~	~	~	~	~	~	~
Bromodichloromethane	~	~	0.61	U	~	~	~	~	~	~	~
Bromoform	~	~	2.3	U	~	~	~	~	~	~	~
Bromomethane	~	~	0.41	U	~	~	~	~	~	~	~
Carbon disulfide	~	~	2.3	U	~	~	~	~	~	~	~
Carbon tetrachloride	2400	~	0.44	U	~	~	~	~	~	~	~
Chlorobenzene	100000	~	0.60	U	~	~	~	~	~	~	~
Chloroethane	~	~	1.0	U	~	~	~	~	~	~	~
Chloroform	49000	~	0.28	U	~	~	~	~	~	~	~
Chloromethane	~	~	0.28	U	~	~	~	~	~	~	~
cis-1,2-Dichloroethene	100000	~	0.58	U	~	~	~	~	~	~	~
cis-1,3-Dichloropropene	~	~	0.66	U	~	~	~	~	~	~	~
Cyclohexane	~	~	0.64	U	~	~	~	~	~	~	~
Cyclohexane, Methyl-	~	~	0.69	U	~	~	~	~	~	~	~
Dibromochloromethane	~	~	0.58	U	~	~	~	~	~	~	~
Dichlorodifluoromethane	~	~	0.38	U	~	~	~	~	~	~	~
Ethylbenzene	41000	~	0.31	U	~	~	~	~	~	~	~
Isopropylbenzene	~	~	0.69	U	~	~	~	~	~	~	~
Methyl acetate	~	~	0.85	U	~	~	~	~	~	~	~
Methyl tert-butyl ether	100000	~	0.45	U	~	~	~	~	~	~	~
Methylene chloride	100000	~	2.1	U	~	~	~	~	~	~	~
Styrene	~	~	0.23	U	~	~	~	~	~	~	~
Tetrachloroethene	19000	~	0.61	U	~	~	~	~	~	~	~
Toluene	100000	~	0.35	U	~	~	~	~	~	~	~
trans-1,2-Dichloroethene	100000	~	0.47	U	~	~	~	~	~	~	~
trans-1,3-Dichloropropene	~	~	2.0	U	~	~	~	~	~	~	~
Trichloroethene	21000	~	1.0	U	~	~	~	~	~	~	~
Trichlorofluoromethane	~	~	0.43	U	~	~	~	~	~	~	~
Vinylchloride	~	~	0.56	U	~	~	~	~	~	~	~
Xylenes, Total	100000	~	0.77	U	~	~	~	~	~	~	~
Semi-Volatile Organic Compounds (SVOCs), ug/Kg											
2,4,5-Trichlorophenol	~	~	45	U	~	~	~	~	~	~	~
2,4,6-Trichlorophenol	~	~	14	U	~	~	~	~	~	~	~
2,4-Dichlorophenol	~	~	11	U	~	~	~	~	~	~	~
2,4-Dimethylphenol	~	~	56	U	~	~	~	~	~	~	~
2,4-Dinitrophenol	~	~	73	U	~	~	~	~	~	~	~
2,4-Dinitrotoluene	~	~	32	U	~	~	~	~	~	~	~
2,6-Dinitrotoluene	~	~	51	U	~	~	~	~	~	~	~
2-Chloronaphthalene	~	~	14	U	~	~	~	~	~	~	~
2-Chlorophenol	~	~	11	U	~	~	~	~	~	~	~
2-Methylnaphthalene	~	~	2.5	U	~	~	~	~	~	~	~
2-Methylphenol	100000	~	6.4	U	~	~	~	~	~	~	~
2-Nitroaniline	~	~	67	U	~	~	~	~	~	~	~
2-Nitrophenol	~	~	9.5	U	~	~	~	~	~	~	~
3,3'-Dichlorobenzidine	~	~	180	U	~	~	~	~	~	~	~
3-Nitroaniline	~	~	48	U	~	~	~	~	~	~	~

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASS001		CCASS002	CCASS002	CCASS003	CCASS003	CCASS004	CCASS004	CCASS005
Sample ID			CCASS001-0-002		CCASS002-0-000	CCASS002-0-002	CCASS003-0-000	CCASS003-0-002	CCASS004-0-000	CCASS004-0-002	CCASS005-0-000
Date			7/31/2014		8/7/2014	8/7/2014	7/31/2014	7/31/2014	7/31/2014	7/31/2014	7/29/2014
Sample Depth			2 - 24 inches		0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches
Sample Type			0 - Primary		0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary
Matrix			SS		SS	SS	SS	SS	SS	SS	SS
Laboratory Sample ID			480-64773-3		480-65233-10	480-65233-11	480-64773-4	480-64773-5	480-64773-7	480-64773-8	480-64613-9
Semi-Volatile Organic Compounds (SVOCs), ug/Kg (continued)											
4,6-Dinitro-2-methylphenol	~	~	72	U	~	~	~	~	~	~	~
4-Bromophenyl-phenylether	~	~	66	U	~	~	~	~	~	~	~
4-Chloro-3-methylphenol	~	~	8.6	U	~	~	~	~	~	~	~
4-Chloroaniline	~	~	61	U	~	~	~	~	~	~	~
4-Chlorophenyl-phenylether	~	~	4.4	U	~	~	~	~	~	~	~
4-Methylphenol	100000	~	12	U	~	~	~	~	~	~	~
4-Nitroaniline	~	~	23	U	~	~	~	~	~	~	~
4-Nitrophenol, SVOC	~	~	50	U	~	~	~	~	~	~	~
Acenaphthene	100000	~	2.4	U	~	~	~	~	~	~	~
Acenaphthylene	100000	~	1.7	U	~	~	~	~	~	~	~
Acetophenone	~	~	11	U	~	~	~	~	~	~	~
Anthracene	100000	~	5.3	U	~	~	~	~	~	~	~
Atrazine	~	~	9.3	U	~	~	~	~	~	~	~
Benz(a)anthracene	1000	~	21	J	~	~	~	~	~	~	~
Benzaldehyde	~	~	23	U	~	~	~	~	~	~	~
Benzo(a)pyrene	1000	~	35	J	~	~	~	~	~	~	~
Benzo(b)fluoranthene	1000	~	68	J	~	~	~	~	~	~	~
Benzo(g,h,i)perylene	100000	~	46	J	~	~	~	~	~	~	~
Benzo(k)fluoranthene	3900	~	18	J	~	~	~	~	~	~	~
Biphenyl	~	~	13	U	~	~	~	~	~	~	~
bis (2-chloroisopropyl) ether	~	~	22	U	~	~	~	~	~	~	~
bis(2-Chloroethoxy)methane	~	~	11	U	~	~	~	~	~	~	~
bis(2-Chloroethyl)ether	~	~	18	U	~	~	~	~	~	~	~
bis(2-Ethylhexyl)phthalate	~	~	67	U	~	~	~	~	~	~	~
Butyl benzyl phthalate	~	~	56	U	~	~	~	~	~	~	~
Caprolactam	~	~	90	U	~	~	~	~	~	~	~
Carbazole	~	~	2.4	U	~	~	~	~	~	~	~
Chrysene	3900	~	46	J	~	~	~	~	~	~	~
Dibenz(a,h)anthracene	330	~	11	J	~	~	~	~	~	~	~
Dibenzofuran	59000	~	2.2	U	~	~	~	~	~	~	~
Diethylphthalate	~	~	6.3	U	~	~	~	~	~	~	~
Dimethyl phthalate	~	~	5.4	U	~	~	~	~	~	~	~
Di-N-Butyl phthalate	~	~	72	U	~	~	~	~	~	~	~
Di-N-Octyl phthalate	~	~	4.9	U	~	~	~	~	~	~	~
Fluoranthene	100000	~	49	J	~	~	~	~	~	~	~
Fluorene	100000	~	4.8	U	~	~	~	~	~	~	~
Hexachlorobenzene	1200	~	10	U	~	~	~	~	~	~	~
Hexachlorobutadiene, SVOC	~	~	11	U	~	~	~	~	~	~	~
Hexachlorocyclopentadiene	~	~	63	U	~	~	~	~	~	~	~
Hexachloroethane	~	~	16	U	~	~	~	~	~	~	~
Indeno(1,2,3-cd)pyrene	500	~	47	J	~	~	~	~	~	~	~
Isophorone	~	~	10	U	~	~	~	~	~	~	~
Naphthalene, SVOC	100000	~	3.5	U	~	~	~	~	~	~	~
Nitrobenzene	15000	~	9.2	U	~	~	~	~	~	~	~
N-Nitroso-di-N-propylamine	~	~	17	U	~	~	~	~	~	~	~
N-Nitrosodiphenylamine	~	~	11	U	~	~	~	~	~	~	~
Pentachlorophenol, SVOC	6700	~	71	U	~	~	~	~	~	~	~
Phenanthrene	100000	~	4.4	U	~	~	~	~	~	~	~
Phenol	100000	~	22	U	~	~	~	~	~	~	~
Pyrene	100000	~	45	J	~	~	~	~	~	~	~

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASS001	CCASS002	CCASS002	CCASS003	CCASS003	CCASS004	CCASS004	CCASS005
Sample ID			CCASS001-0-002	CCASS002-0-000	CCASS002-0-002	CCASS003-0-000	CCASS003-0-002	CCASS004-0-000	CCASS004-0-002	CCASS005-0-000
Date			7/31/2014	8/7/2014	8/7/2014	7/31/2014	7/31/2014	7/31/2014	7/31/2014	7/29/2014
Sample Depth			2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches
Sample Type			0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary
Matrix			SS	SS	SS	SS	SS	SS	SS	SS
Laboratory Sample ID			480-64773-3	480-65233-10	480-65233-11	480-64773-4	480-64773-5	480-64773-7	480-64773-8	480-64613-9
Polychlorinated Biphenyls (PBCs), mg/Kg										
Aroclor-1016	~	~	0.0040 U	~	~	~	~	~	~	~
Aroclor-1221	~	~	0.0040 U	~	~	~	~	~	~	~
Aroclor-1232	~	~	0.0040 U	~	~	~	~	~	~	~
Aroclor-1242	~	~	0.0040 U	~	~	~	~	~	~	~
Aroclor-1248	~	~	0.0040 U	~	~	~	~	~	~	~
Aroclor-1254	~	~	0.0095 U	~	~	~	~	~	~	~
Aroclor-1260	~	~	0.0095 U	~	~	~	~	~	~	~
Aroclor-1262	~	~	0.0095 U	~	~	~	~	~	~	~
Aroclor-1268	~	~	0.0095 U	~	~	~	~	~	~	~
Total Petroleum Hydrocarbons, mg/Kg										
TPH	~	~	140	~	~	~	~	~	~	~

Notes:
mg/Kg = milligram per kilogram.
mg/L = milligram per liter.
ug/Kg = microgram per kilogram.
U = The analyte was analyzed for but was not detected above the level of the detection quantitation limit.
UJ = The analyte was analyzed for but not detected. The quantitation limit is approximate and may be inaccurate or imprecise.
J = The positive result reported is estimated either because the result is less than the LOQ or because certain quality control criteria were not met.
J+ = The result is an estimated quantity, but the result may be biased high because certain quality control criteria were not met.
SB = Soil boring.
SS = Surface soil.
(1) New York State Department of Environmental Conservation (NSYDEC) Subpart 375-6 Remedial Program Soil Cleanup Objectives (SCOs).
(2) Federal Code of Regulations, Section 261.24 - Toxicity characteristic. Context: Title 40 - Protection of Environment. CHAPTER I - ENVIRONMENTAL PROTECTION AGENCY (CONTINUED). SUBCHAPTER I - SOLID WASTES (CONTINUED). PART 261 - IDENTIFICATION AND LISTING OF HAZARDOUS WASTE. Subpart C - Characteristics of Hazardous Waste (2012-07-01).
~ = Analysis not performed or No standard or guidance value listed for this constituent.

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASS005	CCASS006	CCASS006	CCASS007	CCASS007	CCASS008	CCASS008	CCASS009
Sample ID			CCASS005-0-002	CCASS006-0-000	CCASS006-0-002	CCASS007-0-000	CCASS007-0-002	CCASS008-0-000	CCASS008-0-002	CCASS009-0-000
Date			7/29/2014	8/7/2014	8/7/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014
Sample Depth			2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches
Sample Type			0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary
Matrix			SS	SS	SS	SS	SS	SS	SS	SS
Laboratory Sample ID			480-64613-10	480-65233-4	480-65233-5	480-64613-7	480-64613-8	480-64613-19	480-64613-20	480-64613-3
Toxicity Characteristic Leaching Procedure (TCLP) Metals, mg/L										
Arsenic, TCLP	~	5	~	~	~	0.0056 U	0.0063 J	~	~	~
Barium, TCLP	~	100	~	~	~	0.48	0.73	~	~	~
Cadmium, TCLP	~	1	~	~	~	0.0020	0.021	~	~	~
Chromium, TCLP	~	5	~	~	~	0.0040 U	0.0040 U	~	~	~
Lead, TCLP	~	5	~	~	~	0.0087 J	0.014	~	~	~
Mercury, TCLP	~	0.2	~	~	~	0.00012 U	0.00012 U	~	~	~
Selenium, TCLP	~	1	~	~	~	0.0087 U	0.010 J	~	~	~
Silver, TCLP	~	5	~	~	~	0.0017 U	0.0017 U	~	~	~
Total Metals, mg/Kg										
Aluminum, Total	~	~	~	~	~	7600	9300	~	~	~
Antimony, Total	~	~	~	~	~	0.76 J	0.48 U	~	~	~
Arsenic, Total	16	~	34	6.1	8.9	7.9	8.0	0.43 U	6.4	7.5
Barium, Total	400	~	~	~	~	100	120	~	~	~
Beryllium, Total	72	~	~	~	~	0.43	0.50	~	~	~
Boron, Total	~	~	~	~	~	3.9	4.1	~	~	~
Cadmium, Total	4.3	~	1.5	0.26	0.45	0.55	0.37	0.032 U	0.25	0.50
Calcium, Total	~	~	~	~	~	2200	2900	~	~	~
Chromium, Total	180	~	~	~	~	10	12	~	~	~
Cobalt, Total	~	~	~	~	~	7.4	8.7	~	~	~
Copper, Total	270	~	~	~	~	13	13	~	~	~
Iron, Total	~	~	~	~	~	16000	18000	~	~	~
Lead, Total	400	~	250	18	53	75	46	0.26 U	12	70
Magnesium, Total	~	~	~	~	~	2300	2600	~	~	~
Manganese, Total	2000	~	~	~	~	470	550	~	~	~
Mercury, Total	0.81	~	~	~	~	~	~	~	~	~
Nickel, Total	310	~	~	~	~	16	18	~	~	~
Potassium, Total	~	~	~	~	~	770	870	~	~	~
Selenium, Total	180	~	~	~	~	0.54 U	0.48 U	~	~	~
Silver, Total	180	~	~	~	~	0.27 U	0.24 U	~	~	~
Sodium, Total	~	~	~	~	~	34 J	42 J	~	~	~
Thallium, Total	~	~	~	~	~	0.40 U	0.36 U	~	~	~
Vanadium, Total	~	~	~	~	~	10	13	~	~	~
Zinc, Total	10000	~	~	~	~	61	60	~	~	~
Volatile Organic Compounds (VOCs), ug/Kg										
1,1,1-Trichloroethane	100000	~	~	~	~	~	~	~	~	~
1,1,2,2-Tetrachloroethane	~	~	~	~	~	~	~	~	~	~
1,1,2-Trichloro-1,2,2-trifluoroethane	~	~	~	~	~	~	~	~	~	~
1,1,2-Trichloroethane	~	~	~	~	~	~	~	~	~	~
1,1-Dichloroethane	26000	~	~	~	~	~	~	~	~	~
1,1-Dichloroethene	100000	~	~	~	~	~	~	~	~	~
1,2,4-Trichlorobenzene, VOC	~	~	~	~	~	~	~	~	~	~
1,2-Dibromo-3-chloropropane	~	~	~	~	~	~	~	~	~	~
1,2-Dibromoethane	~	~	~	~	~	~	~	~	~	~
1,2-Dichlorobenzene, VOC	~	~	~	~	~	~	~	~	~	~
1,2-Dichloroethane	3100	~	~	~	~	~	~	~	~	~
1,2-Dichloropropane	~	~	~	~	~	~	~	~	~	~
1,3-Dichlorobenzene, VOC	~	~	~	~	~	~	~	~	~	~
1,4-Dichlorobenzene, VOC	~	~	~	~	~	~	~	~	~	~
2-Butanone	~	~	~	~	~	~	~	~	~	~

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASS005	CCASS006	CCASS006	CCASS007	CCASS007	CCASS008	CCASS008	CCASS009
Sample ID			CCASS005-0-002	CCASS006-0-000	CCASS006-0-002	CCASS007-0-000	CCASS007-0-002	CCASS008-0-000	CCASS008-0-002	CCASS009-0-000
Date			7/29/2014	8/7/2014	8/7/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014
Sample Depth			2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches
Sample Type			0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary
Matrix			SS	SS	SS	SS	SS	SS	SS	SS
Laboratory Sample ID			480-64613-10	480-65233-4	480-65233-5	480-64613-7	480-64613-8	480-64613-19	480-64613-20	480-64613-3
Volatile Organic Compounds (VOCs), ug/Kg (continued)										
2-Hexanone	~	~	~	~	~	~	~	~	~	~
4-Methyl-2-pentanone	~	~	~	~	~	~	~	~	~	~
Acetone	100000	~	~	~	~	~	~	~	~	~
Benzene	4800	~	~	~	~	~	~	~	~	~
Bromodichloromethane	~	~	~	~	~	~	~	~	~	~
Bromoform	~	~	~	~	~	~	~	~	~	~
Bromomethane	~	~	~	~	~	~	~	~	~	~
Carbon disulfide	~	~	~	~	~	~	~	~	~	~
Carbon tetrachloride	2400	~	~	~	~	~	~	~	~	~
Chlorobenzene	100000	~	~	~	~	~	~	~	~	~
Chloroethane	~	~	~	~	~	~	~	~	~	~
Chloroform	49000	~	~	~	~	~	~	~	~	~
Chloromethane	~	~	~	~	~	~	~	~	~	~
cis-1,2-Dichloroethene	100000	~	~	~	~	~	~	~	~	~
cis-1,3-Dichloropropene	~	~	~	~	~	~	~	~	~	~
Cyclohexane	~	~	~	~	~	~	~	~	~	~
Cyclohexane, Methyl-	~	~	~	~	~	~	~	~	~	~
Dibromochloromethane	~	~	~	~	~	~	~	~	~	~
Dichlorodifluoromethane	~	~	~	~	~	~	~	~	~	~
Ethylbenzene	41000	~	~	~	~	~	~	~	~	~
Isopropylbenzene	~	~	~	~	~	~	~	~	~	~
Methyl acetate	~	~	~	~	~	~	~	~	~	~
Methyl tert-butyl ether	100000	~	~	~	~	~	~	~	~	~
Methylene chloride	100000	~	~	~	~	~	~	~	~	~
Styrene	~	~	~	~	~	~	~	~	~	~
Tetrachloroethene	19000	~	~	~	~	~	~	~	~	~
Toluene	100000	~	~	~	~	~	~	~	~	~
trans-1,2-Dichloroethene	100000	~	~	~	~	~	~	~	~	~
trans-1,3-Dichloropropene	~	~	~	~	~	~	~	~	~	~
Trichloroethene	21000	~	~	~	~	~	~	~	~	~
Trichlorofluoromethane	~	~	~	~	~	~	~	~	~	~
Vinylchloride	~	~	~	~	~	~	~	~	~	~
Xylenes, Total	100000	~	~	~	~	~	~	~	~	~
Semi-Volatile Organic Compounds (SVOCs), ug/Kg										
2,4,5-Trichlorophenol	~	~	~	~	~	47 U	44 U	~	~	~
2,4,6-Trichlorophenol	~	~	~	~	~	14 U	13 U	~	~	~
2,4-Dichlorophenol	~	~	~	~	~	11 U	11 U	~	~	~
2,4-Dimethylphenol	~	~	~	~	~	58 U	55 U	~	~	~
2,4-Dinitrophenol	~	~	~	~	~	75 U	71 U	~	~	~
2,4-Dinitrotoluene	~	~	~	~	~	33 U	31 U	~	~	~
2,6-Dinitrotoluene	~	~	~	~	~	53 U	50 U	~	~	~
2-Chloronaphthalene	~	~	~	~	~	14 U	14 U	~	~	~
2-Chlorophenol	~	~	~	~	~	11 U	10 U	~	~	~
2-Methylnaphthalene	~	~	~	~	~	4.3 J	5.3 J	~	~	~
2-Methylphenol	100000	~	~	~	~	6.6 U	6.2 U	~	~	~
2-Nitroaniline	~	~	~	~	~	69 U	65 U	~	~	~
2-Nitrophenol	~	~	~	~	~	9.8 U	9.3 U	~	~	~
3,3'-Dichlorobenzidine	~	~	~	~	~	190 U	180 U	~	~	~
3-Nitroaniline	~	~	~	~	~	49 U	47 U	~	~	~

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASS005	CCASS006	CCASS006	CCASS007	CCASS007	CCASS008	CCASS008	CCASS009
Sample ID			CCASS005-0-002	CCASS006-0-000	CCASS006-0-002	CCASS007-0-000	CCASS007-0-002	CCASS008-0-000	CCASS008-0-002	CCASS009-0-000
Date			7/29/2014	8/7/2014	8/7/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014
Sample Depth			2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches
Sample Type			0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary
Matrix			SS	SS	SS	SS	SS	SS	SS	SS
Laboratory Sample ID			480-64613-10	480-65233-4	480-65233-5	480-64613-7	480-64613-8	480-64613-19	480-64613-20	480-64613-3
Semi-Volatile Organic Compounds (SVOCs), ug/Kg (continued)										
4,6-Dinitro-2-methylphenol	~	~	~	~	~	74 U	70 U	~	~	~
4-Bromophenyl-phenylether	~	~	~	~	~	68 U	64 U	~	~	~
4-Chloro-3-methylphenol	~	~	~	~	~	8.8 U	8.3 U	~	~	~
4-Chloroaniline	~	~	~	~	~	63 U	59 U	~	~	~
4-Chlorophenyl-phenylether	~	~	~	~	~	4.6 U	4.3 U	~	~	~
4-Methylphenol	100000	~	~	~	~	12 U	11 U	~	~	~
4-Nitroaniline	~	~	~	~	~	24 U	23 U	~	~	~
4-Nitrophenol, SVOC	~	~	~	~	~	52 UJ	49 UJ	~	~	~
Acenaphthene	100000	~	~	~	~	17 J	7.5 J	~	~	~
Acenaphthylene	100000	~	~	~	~	1.8 U	3.5 J	~	~	~
Acetophenone	~	~	~	~	~	11 U	10 U	~	~	~
Anthracene	100000	~	~	~	~	21 J	21 J	~	~	~
Atrazine	~	~	~	~	~	9.6 U	9.0 U	~	~	~
Benz(a)anthracene	1000	~	~	~	~	67 J	89 J	~	~	~
Benzaldehyde	~	~	~	~	~	24 U	22 U	~	~	~
Benzo(a)pyrene	1000	~	~	~	~	64 J	88 J	~	~	~
Benzo(b)fluoranthene	1000	~	~	~	~	96 J	150 J	~	~	~
Benzo(g,h,i)perylene	100000	~	~	~	~	39 J	72 J	~	~	~
Benzo(k)fluoranthene	3900	~	~	~	~	39 J	49 J	~	~	~
Biphenyl	~	~	~	~	~	13 U	13 U	~	~	~
bis (2-chloroisopropyl) ether	~	~	~	~	~	22 U	21 U	~	~	~
bis(2-Chloroethoxy)methane	~	~	~	~	~	12 U	11 U	~	~	~
bis(2-Chloroethyl)ether	~	~	~	~	~	19 U	18 U	~	~	~
bis(2-Ethylhexyl)phthalate	~	~	~	~	~	69 U	65 U	~	~	~
Butyl benzyl phthalate	~	~	~	~	~	58 U	54 U	~	~	~
Caprolactam	~	~	~	~	~	93 UJ	88 UJ	~	~	~
Carbazole	~	~	~	~	~	16 J	11 J	~	~	~
Chrysene	3900	~	~	~	~	68 J	87 J	~	~	~
Dibenz(a,h)anthracene	330	~	~	~	~	2.5 U	19 J	~	~	~
Dibenzofuran	59000	~	~	~	~	8.6 J	5.6 J	~	~	~
Diethylphthalate	~	~	~	~	~	6.5 U	6.1 U	~	~	~
Dimethyl phthalate	~	~	~	~	~	5.6 U	5.3 U	~	~	~
Di-N-Butyl phthalate	~	~	~	~	~	74 U	70 U	~	~	~
Di-N-Octyl phthalate	~	~	~	~	~	5.0 UJ	4.7 UJ	~	~	~
Fluoranthene	100000	~	~	~	~	140 J	170 J	~	~	~
Fluorene	100000	~	~	~	~	15 J	8.2 J	~	~	~
Hexachlorobenzene	1200	~	~	~	~	11 U	10 U	~	~	~
Hexachlorobutadiene, SVOC	~	~	~	~	~	11 U	10 U	~	~	~
Hexachlorocyclopentadiene	~	~	~	~	~	65 UJ	61 UJ	~	~	~
Hexachloroethane	~	~	~	~	~	17 U	16 U	~	~	~
Indeno(1,2,3-cd)pyrene	500	~	~	~	~	46 J	77 J	~	~	~
Isophorone	~	~	~	~	~	11 U	10 U	~	~	~
Naphthalene, SVOC	100000	~	~	~	~	4.3 J	5.7 J	~	~	~
Nitrobenzene	15000	~	~	~	~	9.5 U	9.0 U	~	~	~
N-Nitroso-di-N-propylamine	~	~	~	~	~	17 U	16 U	~	~	~
N-Nitrosodiphenylamine	~	~	~	~	~	12 U	11 U	~	~	~
Pentachlorophenol, SVOC	6700	~	~	~	~	74 U	70 U	~	~	~
Phenanthrene	100000	~	~	~	~	110 J	91 J	~	~	~
Phenol	100000	~	~	~	~	23 U	21 U	~	~	~
Pyrene	100000	~	~	~	~	110 J	140 J	~	~	~

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASS005	CCASS006	CCASS006	CCASS007	CCASS007	CCASS008	CCASS008	CCASS009
Sample ID			CCASS005-0-002	CCASS006-0-000	CCASS006-0-002	CCASS007-0-000	CCASS007-0-002	CCASS008-0-000	CCASS008-0-002	CCASS009-0-000
Date			7/29/2014	8/7/2014	8/7/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014
Sample Depth			2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches
Sample Type			0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary
Matrix			SS	SS	SS	SS	SS	SS	SS	SS
Laboratory Sample ID			480-64613-10	480-65233-4	480-65233-5	480-64613-7	480-64613-8	480-64613-19	480-64613-20	480-64613-3
Polychlorinated Biphenyls (PBCs), mg/Kg										
Aroclor-1016	~	~	~	~	~	0.0041 U	0.0039 U	~	~	~
Aroclor-1221	~	~	~	~	~	0.0041 U	0.0039 U	~	~	~
Aroclor-1232	~	~	~	~	~	0.0041 U	0.0039 U	~	~	~
Aroclor-1242	~	~	~	~	~	0.0041 U	0.0039 U	~	~	~
Aroclor-1248	~	~	~	~	~	0.0041 U	0.0039 U	~	~	~
Aroclor-1254	~	~	~	~	~	0.0099 U	0.0093 U	~	~	~
Aroclor-1260	~	~	~	~	~	0.0099 U	0.0093 U	~	~	~
Aroclor-1262	~	~	~	~	~	0.0099 U	0.0093 U	~	~	~
Aroclor-1268	~	~	~	~	~	0.0099 U	0.0093 U	~	~	~
Total Petroleum Hydrocarbons, mg/Kg										
TPH	~	~	~	~	~	50 J	46 U	~	~	~

Notes:
mg/Kg = milligram per kilogram.
mg/L = milligram per liter.
ug/Kg = microgram per kilogram.
U = The analyte was analyzed for but was not detected above the level of the detection quantitation limit.
UJ = The analyte was analyzed for but not detected. The quantitation limit is approximate and may be inaccurate or imprecise.
J = The positive result reported is estimated either because the result is less than the LOQ or because certain quality control criteria were not met.
J+ = The result is an estimated quantity, but the result may be biased high because certain quality control criteria were not met.
SB = Soil boring.
SS = Surface soil.
(1) New York State Department of Environmental Conservation (NSYDEC) Subpart 375-6 Remedial Program Soil Cleanup Objectives (SCOs).
(2) Federal Code of Regulations, Section 261.24 - Toxicity characteristic. Context: Title 40 - Protection of Environment. CHAPTER I - ENVIRONMENTAL PROTECTION AGENCY (CONTINUED). SUBCHAPTER I - SOLID WASTES (CONTINUED). PART 261 - IDENTIFICATION AND LISTING OF HAZARDOUS WASTE. Subpart C - Characteristics of Hazardous Waste (2012-07-01).
~ = Analysis not performed or No standard or guidance value listed for this constituent.

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASS009	CCASS010	CCASS010	CCASS011	CCASS011	CCASS011	CCASS012	CCASS012
Sample ID			CCASS009-0-002	CCASS010-0-000	CCASS010-0-002	CCASS011-0-000	CCASS011-0-002	CCASS011-1-002	CCASS012-0-000	CCASS012-0-002
Date			7/29/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014
Sample Depth			2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches
Sample Type			0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	1 - Duplicate	0 - Primary	0 - Primary
Matrix			SS	SS	SS	SS	SS	SS	SS	SS
Laboratory Sample ID			480-64613-4	480-64613-5	480-64613-6	480-64613-16	480-64613-17	480-64613-18	480-64613-1	480-64613-2
Toxicity Characteristic Leaching Procedure (TCLP) Metals, mg/L										
Arsenic, TCLP	~	5	~	~	~	0.0056 U	0.0061 J	0.0056 U	~	~
Barium, TCLP	~	100	~	~	~	0.49	0.49	0.42	~	~
Cadmium, TCLP	~	1	~	~	~	0.0020	0.0011 J	0.0011 J	~	~
Chromium, TCLP	~	5	~	~	~	0.0010 U	0.0065 J+	0.0051 J+	~	~
Lead, TCLP	~	5	~	~	~	0.016	0.011	0.0084 J	~	~
Mercury, TCLP	~	0.2	~	~	~	0.00012 U	0.00012 U	0.00012 U	~	~
Selenium, TCLP	~	1	~	~	~	0.012 J	0.0087 U	0.0087 U	~	~
Silver, TCLP	~	5	~	~	~	0.0017 U	0.0017 U	0.0017 U	~	~
Total Metals, mg/Kg										
Aluminum, Total	~	~	~	~	~	9400	9000 J	8700 J	~	~
Antimony, Total	~	~	~	~	~	0.51 U	0.50 UJ	0.48 UJ	~	~
Arsenic, Total	16	~	5.3	8.8	8.5	8.8	6.6	6.5	7.8	7.4
Barium, Total	400	~	~	~	~	120	110 J	110 J	~	~
Beryllium, Total	72	~	~	~	~	0.49	0.47	0.45	~	~
Boron, Total	~	~	~	~	~	3.4	2.7	2.8	~	~
Cadmium, Total	4.3	~	0.24	0.89	0.55	0.49	0.21 J	0.24	0.53	0.36
Calcium, Total	~	~	~	~	~	1800	1500	1400	~	~
Chromium, Total	180	~	~	~	~	12	12	11	~	~
Cobalt, Total	~	~	~	~	~	8.5	8.3	8.0	~	~
Copper, Total	270	~	~	~	~	13	11	10	~	~
Iron, Total	~	~	~	~	~	18000	18000	17000	~	~
Lead, Total	400	~	26	110	61	69	25	31	67	34
Magnesium, Total	~	~	~	~	~	2600	2500	2300	~	~
Manganese, Total	2000	~	~	~	~	510	500	480	~	~
Mercury, Total	0.81	~	~	~	~	~	~	~	~	~
Nickel, Total	310	~	~	~	~	18	18	17	~	~
Potassium, Total	~	~	~	~	~	800	720	730	~	~
Selenium, Total	180	~	~	~	~	0.51 U	0.50 U	0.57 J	~	~
Silver, Total	180	~	~	~	~	0.26 U	0.25 U	0.24 U	~	~
Sodium, Total	~	~	~	~	~	84 J	71 J	70 J	~	~
Thallium, Total	~	~	~	~	~	0.39 U	0.38 U	0.36 U	~	~
Vanadium, Total	~	~	~	~	~	13	12	12	~	~
Zinc, Total	10000	~	~	~	~	65	59	63	~	~
Volatile Organic Compounds (VOCs), ug/Kg										
1,1,1-Trichloroethane	100000	~	~	~	~	~	~	~	~	~
1,1,2,2-Tetrachloroethane	~	~	~	~	~	~	~	~	~	~
1,1,2-Trichloro-1,2,2-trifluoroethane	~	~	~	~	~	~	~	~	~	~
1,1,2-Trichloroethane	~	~	~	~	~	~	~	~	~	~
1,1-Dichloroethane	26000	~	~	~	~	~	~	~	~	~
1,1-Dichloroethene	100000	~	~	~	~	~	~	~	~	~
1,2,4-Trichlorobenzene, VOC	~	~	~	~	~	~	~	~	~	~
1,2-Dibromo-3-chloropropane	~	~	~	~	~	~	~	~	~	~
1,2-Dibromoethane	~	~	~	~	~	~	~	~	~	~
1,2-Dichlorobenzene, VOC	~	~	~	~	~	~	~	~	~	~
1,2-Dichloroethane	3100	~	~	~	~	~	~	~	~	~
1,2-Dichloropropane	~	~	~	~	~	~	~	~	~	~
1,3-Dichlorobenzene, VOC	~	~	~	~	~	~	~	~	~	~
1,4-Dichlorobenzene, VOC	~	~	~	~	~	~	~	~	~	~
2-Butanone	~	~	~	~	~	~	~	~	~	~

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASS009	CCASS010	CCASS010	CCASS011	CCASS011	CCASS011	CCASS012	CCASS012
Sample ID			CCASS009-0-002	CCASS010-0-000	CCASS010-0-002	CCASS011-0-000	CCASS011-0-002	CCASS011-1-002	CCASS012-0-000	CCASS012-0-002
Date			7/29/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014
Sample Depth			2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches
Sample Type			0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	1 - Duplicate	0 - Primary	0 - Primary
Matrix			SS	SS	SS	SS	SS	SS	SS	SS
Laboratory Sample ID			480-64613-4	480-64613-5	480-64613-6	480-64613-16	480-64613-17	480-64613-18	480-64613-1	480-64613-2
Volatile Organic Compounds (VOCs), ug/Kg (continued)										
2-Hexanone	~	~	~	~	~	~	~	~	~	~
4-Methyl-2-pentanone	~	~	~	~	~	~	~	~	~	~
Acetone	100000	~	~	~	~	~	~	~	~	~
Benzene	4800	~	~	~	~	~	~	~	~	~
Bromodichloromethane	~	~	~	~	~	~	~	~	~	~
Bromoform	~	~	~	~	~	~	~	~	~	~
Bromomethane	~	~	~	~	~	~	~	~	~	~
Carbon disulfide	~	~	~	~	~	~	~	~	~	~
Carbon tetrachloride	2400	~	~	~	~	~	~	~	~	~
Chlorobenzene	100000	~	~	~	~	~	~	~	~	~
Chloroethane	~	~	~	~	~	~	~	~	~	~
Chloroform	49000	~	~	~	~	~	~	~	~	~
Chloromethane	~	~	~	~	~	~	~	~	~	~
cis-1,2-Dichloroethene	100000	~	~	~	~	~	~	~	~	~
cis-1,3-Dichloropropene	~	~	~	~	~	~	~	~	~	~
Cyclohexane	~	~	~	~	~	~	~	~	~	~
Cyclohexane, Methyl-	~	~	~	~	~	~	~	~	~	~
Dibromochloromethane	~	~	~	~	~	~	~	~	~	~
Dichlorodifluoromethane	~	~	~	~	~	~	~	~	~	~
Ethylbenzene	41000	~	~	~	~	~	~	~	~	~
Isopropylbenzene	~	~	~	~	~	~	~	~	~	~
Methyl acetate	~	~	~	~	~	~	~	~	~	~
Methyl tert-butyl ether	100000	~	~	~	~	~	~	~	~	~
Methylene chloride	100000	~	~	~	~	~	~	~	~	~
Styrene	~	~	~	~	~	~	~	~	~	~
Tetrachloroethene	19000	~	~	~	~	~	~	~	~	~
Toluene	100000	~	~	~	~	~	~	~	~	~
trans-1,2-Dichloroethene	100000	~	~	~	~	~	~	~	~	~
trans-1,3-Dichloropropene	~	~	~	~	~	~	~	~	~	~
Trichloroethene	21000	~	~	~	~	~	~	~	~	~
Trichlorofluoromethane	~	~	~	~	~	~	~	~	~	~
Vinylchloride	~	~	~	~	~	~	~	~	~	~
Xylenes, Total	100000	~	~	~	~	~	~	~	~	~
Semi-Volatile Organic Compounds (SVOCs), ug/Kg										
2,4,5-Trichlorophenol	~	~	~	~	~	45 U	45 U	42 U	~	~
2,4,6-Trichlorophenol	~	~	~	~	~	14 U	13 U	13 U	~	~
2,4-Dichlorophenol	~	~	~	~	~	11 U	11 U	10 U	~	~
2,4-Dimethylphenol	~	~	~	~	~	56 U	55 U	52 U	~	~
2,4-Dinitrophenol	~	~	~	~	~	73 U	72 U	68 U	~	~
2,4-Dinitrotoluene	~	~	~	~	~	32 U	32 U	30 U	~	~
2,6-Dinitrotoluene	~	~	~	~	~	51 U	50 U	47 U	~	~
2-Chloronaphthalene	~	~	~	~	~	14 U	14 U	13 U	~	~
2-Chlorophenol	~	~	~	~	~	11 U	10 U	9.8 U	~	~
2-Methylnaphthalene	~	~	~	~	~	22 J	2.5 U	2.3 U	~	~
2-Methylphenol	100000	~	~	~	~	6.4 U	6.3 U	5.9 U	~	~
2-Nitroaniline	~	~	~	~	~	67 U	65 U	62 U	~	~
2-Nitrophenol	~	~	~	~	~	9.5 U	9.3 U	8.8 U	~	~
3,3'-Dichlorobenzidine	~	~	~	~	~	180 U	180 U	170 U	~	~
3-Nitroaniline	~	~	~	~	~	48 U	47 U	44 U	~	~

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASS009	CCASS010	CCASS010	CCASS011		CCASS011		CCASS011		CCASS012	CCASS012
Sample ID			CCASS009-0-002	CCASS010-0-000	CCASS010-0-002	CCASS011-0-000		CCASS011-0-002		CCASS011-1-002		CCASS012-0-000	CCASS012-0-002
Date			7/29/2014	7/29/2014	7/29/2014	7/29/2014		7/29/2014		7/29/2014		7/29/2014	7/29/2014
Sample Depth			2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches		2 - 24 inches		2 - 24 inches		0 - 2 inches	2 - 24 inches
Sample Type			0 - Primary	0 - Primary	0 - Primary	0 - Primary		0 - Primary		1 - Duplicate		0 - Primary	0 - Primary
Matrix			SS	SS	SS	SS		SS		SS		SS	SS
Laboratory Sample ID			480-64613-4	480-64613-5	480-64613-6	480-64613-16		480-64613-17		480-64613-18		480-64613-1	480-64613-2
Semi-Volatile Organic Compounds (SVOCs), ug/Kg (continued)													
4,6-Dinitro-2-methylphenol	~	~	~	~	~	72	U	71	U	67	U	~	~
4-Bromophenyl-phenylether	~	~	~	~	~	66	U	65	U	62	U	~	~
4-Chloro-3-methylphenol	~	~	~	~	~	8.6	U	8.4	U	8.0	U	~	~
4-Chloroaniline	~	~	~	~	~	61	U	60	U	57	U	~	~
4-Chlorophenyl-phenylether	~	~	~	~	~	4.4	U	4.4	U	4.1	U	~	~
4-Methylphenol	100000	~	~	~	~	12	U	11	U	11	U	~	~
4-Nitroaniline	~	~	~	~	~	23	U	23	U	22	U	~	~
4-Nitrophenol, SVOC	~	~	~	~	~	50	UJ	49	UJ	47	U	~	~
Acenaphthene	100000	~	~	~	~	130	J	2.4	U	2.3	U	~	~
Acenaphthylene	100000	~	~	~	~	7.9	J	1.7	U	1.6	U	~	~
Acetophenone	~	~	~	~	~	11	U	10	U	9.9	U	~	~
Anthracene	100000	~	~	~	~	320		5.2	U	4.9	U	~	~
Atrazine	~	~	~	~	~	9.3	U	9.1	UJ	8.6	UJ	~	~
Benz(a)anthracene	1000	~	~	~	~	560		3.5	U	3.3	U	~	~
Benzaldehyde	~	~	~	~	~	23	U	22	U	21	U	~	~
Benzo(a)pyrene	1000	~	~	~	~	460		14	J	19	J	~	~
Benzo(b)fluoranthene	1000	~	~	~	~	610		19	J	27	J	~	~
Benzo(g,h,i)perylene	100000	~	~	~	~	300		11	J	11	J	~	~
Benzo(k)fluoranthene	3900	~	~	~	~	260		2.3	U	2.1	U	~	~
Biphenyl	~	~	~	~	~	13	U	13	U	12	U	~	~
bis (2-chloroisopropyl) ether	~	~	~	~	~	22	U	21	U	20	U	~	~
bis(2-Chloroethoxy)methane	~	~	~	~	~	11	U	11	U	11	U	~	~
bis(2-Chloroethyl)ether	~	~	~	~	~	18	U	18	U	17	U	~	~
bis(2-Ethylhexyl)phthalate	~	~	~	~	~	67	U	66	U	62	U	~	~
Butyl benzyl phthalate	~	~	~	~	~	56	U	55	U	52	U	~	~
Caprolactam	~	~	~	~	~	90	UJ	88	UJ	84	U	~	~
Carbazole	~	~	~	~	~	160	J	2.4	U	2.2	U	~	~
Chrysene	3900	~	~	~	~	510		12	J	19	J	~	~
Dibenz(a,h)anthracene	330	~	~	~	~	2.5	U	2.4	U	3.2	J	~	~
Dibenzofuran	59000	~	~	~	~	84	J	2.1	U	2.0	U	~	~
Diethylphthalate	~	~	~	~	~	6.3	U	6.2	U	5.8	U	~	~
Dimethyl phthalate	~	~	~	~	~	5.4	U	5.3	U	5.0	U	~	~
Di-N-Butyl phthalate	~	~	~	~	~	72	U	71	U	67	U	~	~
Di-N-Octyl phthalate	~	~	~	~	~	4.9	UJ	4.8	UJ	4.5	U	~	~
Fluoranthene	100000	~	~	~	~	1200		21	J	29	J	~	~
Fluorene	100000	~	~	~	~	170	J	4.7	U	4.5	U	~	~
Hexachlorobenzene	1200	~	~	~	~	10	U	10	U	9.6	U	~	~
Hexachlorobutadiene, SVOC	~	~	~	~	~	11	U	10	U	9.9	U	~	~
Hexachlorocyclopentadiene	~	~	~	~	~	63	UJ	62	UJ	58	UJ	~	~
Hexachloroethane	~	~	~	~	~	16	U	16	U	15	U	~	~
Indeno(1,2,3-cd)pyrene	500	~	~	~	~	360		9.3	J	13	J	~	~
Isophorone	~	~	~	~	~	10	U	10	U	9.7	U	~	~
Naphthalene, SVOC	100000	~	~	~	~	21	J	3.4	U	3.2	U	~	~
Nitrobenzene	15000	~	~	~	~	9.2	U	9.1	U	8.6	U	~	~
N-Nitroso-di-N-propylamine	~	~	~	~	~	17	U	16	U	15	U	~	~
N-Nitrosodiphenylamine	~	~	~	~	~	11	U	11	U	11	U	~	~
Pentachlorophenol, SVOC	6700	~	~	~	~	71	U	70	U	66	U	~	~
Phenanthrene	100000	~	~	~	~	1100		14	J	21	J	~	~
Phenol	100000	~	~	~	~	22	U	22	U	20	U	~	~
Pyrene	100000	~	~	~	~	810		16	J	25	J	~	~

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASS009	CCASS010	CCASS010	CCASS011	CCASS011	CCASS011	CCASS012	CCASS012
Sample ID			CCASS009-0-002	CCASS010-0-000	CCASS010-0-002	CCASS011-0-000	CCASS011-0-002	CCASS011-1-002	CCASS012-0-000	CCASS012-0-002
Date			7/29/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014	7/29/2014
Sample Depth			2 - 24 inches	0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches
Sample Type			0 - Primary	0 - Primary	0 - Primary	0 - Primary	0 - Primary	1 - Duplicate	0 - Primary	0 - Primary
Matrix			SS	SS	SS	SS	SS	SS	SS	SS
Laboratory Sample ID			480-64613-4	480-64613-5	480-64613-6	480-64613-16	480-64613-17	480-64613-18	480-64613-1	480-64613-2
Polychlorinated Biphenyls (PBCs), mg/Kg										
Aroclor-1016	~	~	~	~	~	0.0040 U	0.0039 U	0.0036 U	~	~
Aroclor-1221	~	~	~	~	~	0.0040 U	0.0039 U	0.0036 U	~	~
Aroclor-1232	~	~	~	~	~	0.0040 U	0.0039 U	0.0036 U	~	~
Aroclor-1242	~	~	~	~	~	0.0040 U	0.0039 U	0.0036 U	~	~
Aroclor-1248	~	~	~	~	~	0.0040 U	0.0039 U	0.0036 U	~	~
Aroclor-1254	~	~	~	~	~	0.0095 U	0.0094 U	0.0087 U	~	~
Aroclor-1260	~	~	~	~	~	0.0095 U	0.0094 U	0.0087 U	~	~
Aroclor-1262	~	~	~	~	~	0.0095 U	0.0094 U	0.0087 U	~	~
Aroclor-1268	~	~	~	~	~	0.0095 U	0.0094 U	0.0087 U	~	~
Total Petroleum Hydrocarbons, mg/Kg										
TPH	~	~	~	~	~	260	48 J	43 U	~	~

Notes:
mg/Kg = milligram per kilogram.
mg/L = milligram per liter.
ug/Kg = microgram per kilogram.
U = The analyte was analyzed for but was not detected above the level of the detection quantitation limit.
UJ = The analyte was analyzed for but not detected. The quantitation limit is approximate and may be inaccurate or imprecise.
J = The positive result reported is estimated either because the result is less than the LOQ or because certain quality control criteria were not met.
J+ = The result is an estimated quantity, but the result may be biased high because certain quality control criteria were not met.
SB = Soil boring.
SS = Surface soil.
(1) New York State Department of Environmental Conservation (NSYDEC) Subpart 375-6 Remedial Program Soil Cleanup Objectives (SCOs).
(2) Federal Code of Regulations, Section 261.24 - Toxicity characteristic. Context: Title 40 - Protection of Environment. CHAPTER I - ENVIRONMENTAL PROTECTION AGENCY (CONTINUED). SUBCHAPTER I - SOLID WASTES (CONTINUED). PART 261 - IDENTIFICATION AND LISTING OF HAZARDOUS WASTE. Subpart C - Characteristics of Hazardous Waste (2012-07-01).
~ = Analysis not performed or No standard or guidance value listed for this constituent.

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASS013	CCASS013	CCASS014	CCASS014
Sample ID			CCASS013-0-000	CCASS013-0-002	CCASS014-0-000	CCASS014-0-002
Date			7/29/2014	7/29/2014	7/29/2014	7/29/2014
Sample Depth			0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches
Sample Type			0 - Primary	0 - Primary	0 - Primary	0 - Primary
Matrix			SS	SS	SS	SS
Laboratory Sample ID			480-64613-11	480-64613-12	480-64613-13	480-64613-14
Toxicity Characteristic Leaching Procedure (TCLP) Metals, mg/L						
Arsenic, TCLP	~	5	~	~	~	~
Barium, TCLP	~	100	~	~	~	~
Cadmium, TCLP	~	1	~	~	~	~
Chromium, TCLP	~	5	~	~	~	~
Lead, TCLP	~	5	~	~	~	~
Mercury, TCLP	~	0.2	~	~	~	~
Selenium, TCLP	~	1	~	~	~	~
Silver, TCLP	~	5	~	~	~	~
Total Metals, mg/Kg						
Aluminum, Total	~	~	~	~	~	~
Antimony, Total	~	~	~	~	~	~
Arsenic, Total	16	~	6.8	7.1	6.4	6.4
Barium, Total	400	~	~	~	~	~
Beryllium, Total	72	~	~	~	~	~
Boron, Total	~	~	~	~	~	~
Cadmium, Total	4.3	~	1.4	0.24	0.29	0.18 J
Calcium, Total	~	~	~	~	~	~
Chromium, Total	180	~	~	~	~	~
Cobalt, Total	~	~	~	~	~	~
Copper, Total	270	~	~	~	~	~
Iron, Total	~	~	~	~	~	~
Lead, Total	400	~	40	29	33	27
Magnesium, Total	~	~	~	~	~	~
Manganese, Total	2000	~	~	~	~	~
Mercury, Total	0.81	~	~	~	~	~
Nickel, Total	310	~	~	~	~	~
Potassium, Total	~	~	~	~	~	~
Selenium, Total	180	~	~	~	~	~
Silver, Total	180	~	~	~	~	~
Sodium, Total	~	~	~	~	~	~
Thallium, Total	~	~	~	~	~	~
Vanadium, Total	~	~	~	~	~	~
Zinc, Total	10000	~	~	~	~	~
Volatile Organic Compounds (VOCs), ug/Kg						
1,1,1-Trichloroethane	100000	~	~	~	~	~
1,1,2,2-Tetrachloroethane	~	~	~	~	~	~
1,1,2-Trichloro-1,2,2-trifluoroethane	~	~	~	~	~	~
1,1,2-Trichloroethane	~	~	~	~	~	~
1,1-Dichloroethane	26000	~	~	~	~	~
1,1-Dichloroethene	100000	~	~	~	~	~
1,2,4-Trichlorobenzene, VOC	~	~	~	~	~	~
1,2-Dibromo-3-chloropropane	~	~	~	~	~	~
1,2-Dibromoethane	~	~	~	~	~	~
1,2-Dichlorobenzene, VOC	~	~	~	~	~	~
1,2-Dichloroethane	3100	~	~	~	~	~
1,2-Dichloropropane	~	~	~	~	~	~
1,3-Dichlorobenzene, VOC	~	~	~	~	~	~
1,4-Dichlorobenzene, VOC	~	~	~	~	~	~
2-Butanone	~	~	~	~	~	~

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASS013	CCASS013	CCASS014	CCASS014
Sample ID			CCASS013-0-000	CCASS013-0-002	CCASS014-0-000	CCASS014-0-002
Date			7/29/2014	7/29/2014	7/29/2014	7/29/2014
Sample Depth			0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches
Sample Type			0 - Primary	0 - Primary	0 - Primary	0 - Primary
Matrix			SS	SS	SS	SS
Laboratory Sample ID			480-64613-11	480-64613-12	480-64613-13	480-64613-14
Volatile Organic Compounds (VOCs), ug/Kg (continued)						
2-Hexanone	~	~	~	~	~	~
4-Methyl-2-pentanone	~	~	~	~	~	~
Acetone	100000	~	~	~	~	~
Benzene	4800	~	~	~	~	~
Bromodichloromethane	~	~	~	~	~	~
Bromoform	~	~	~	~	~	~
Bromomethane	~	~	~	~	~	~
Carbon disulfide	~	~	~	~	~	~
Carbon tetrachloride	2400	~	~	~	~	~
Chlorobenzene	100000	~	~	~	~	~
Chloroethane	~	~	~	~	~	~
Chloroform	49000	~	~	~	~	~
Chloromethane	~	~	~	~	~	~
cis-1,2-Dichloroethene	100000	~	~	~	~	~
cis-1,3-Dichloropropene	~	~	~	~	~	~
Cyclohexane	~	~	~	~	~	~
Cyclohexane, Methyl-	~	~	~	~	~	~
Dibromochloromethane	~	~	~	~	~	~
Dichlorodifluoromethane	~	~	~	~	~	~
Ethylbenzene	41000	~	~	~	~	~
Isopropylbenzene	~	~	~	~	~	~
Methyl acetate	~	~	~	~	~	~
Methyl tert-butyl ether	100000	~	~	~	~	~
Methylene chloride	100000	~	~	~	~	~
Styrene	~	~	~	~	~	~
Tetrachloroethene	19000	~	~	~	~	~
Toluene	100000	~	~	~	~	~
trans-1,2-Dichloroethene	100000	~	~	~	~	~
trans-1,3-Dichloropropene	~	~	~	~	~	~
Trichloroethene	21000	~	~	~	~	~
Trichlorofluoromethane	~	~	~	~	~	~
Vinylchloride	~	~	~	~	~	~
Xylenes, Total	100000	~	~	~	~	~
Semi-Volatile Organic Compounds (SVOCs), ug/Kg						
2,4,5-Trichlorophenol	~	~	~	~	~	~
2,4,6-Trichlorophenol	~	~	~	~	~	~
2,4-Dichlorophenol	~	~	~	~	~	~
2,4-Dimethylphenol	~	~	~	~	~	~
2,4-Dinitrophenol	~	~	~	~	~	~
2,4-Dinitrotoluene	~	~	~	~	~	~
2,6-Dinitrotoluene	~	~	~	~	~	~
2-Chloronaphthalene	~	~	~	~	~	~
2-Chlorophenol	~	~	~	~	~	~
2-Methylnaphthalene	~	~	~	~	~	~
2-Methylphenol	100000	~	~	~	~	~
2-Nitroaniline	~	~	~	~	~	~
2-Nitrophenol	~	~	~	~	~	~
3,3'-Dichlorobenzidine	~	~	~	~	~	~
3-Nitroaniline	~	~	~	~	~	~

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASS013	CCASS013	CCASS014	CCASS014
Sample ID			CCASS013-0-000	CCASS013-0-002	CCASS014-0-000	CCASS014-0-002
Date			7/29/2014	7/29/2014	7/29/2014	7/29/2014
Sample Depth			0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches
Sample Type			0 - Primary	0 - Primary	0 - Primary	0 - Primary
Matrix			SS	SS	SS	SS
Laboratory Sample ID			480-64613-11	480-64613-12	480-64613-13	480-64613-14
Semi-Volatile Organic Compounds (SVOCs), ug/Kg (continued)						
4,6-Dinitro-2-methylphenol	~	~	~	~	~	~
4-Bromophenyl-phenylether	~	~	~	~	~	~
4-Chloro-3-methylphenol	~	~	~	~	~	~
4-Chloroaniline	~	~	~	~	~	~
4-Chlorophenyl-phenylether	~	~	~	~	~	~
4-Methylphenol	100000	~	~	~	~	~
4-Nitroaniline	~	~	~	~	~	~
4-Nitrophenol, SVOC	~	~	~	~	~	~
Acenaphthene	100000	~	~	~	~	~
Acenaphthylene	100000	~	~	~	~	~
Acetophenone	~	~	~	~	~	~
Anthracene	100000	~	~	~	~	~
Atrazine	~	~	~	~	~	~
Benz(a)anthracene	1000	~	~	~	~	~
Benzaldehyde	~	~	~	~	~	~
Benzo(a)pyrene	1000	~	~	~	~	~
Benzo(b)fluoranthene	1000	~	~	~	~	~
Benzo(g,h,i)perylene	100000	~	~	~	~	~
Benzo(k)fluoranthene	3900	~	~	~	~	~
Biphenyl	~	~	~	~	~	~
bis (2-chloroisopropyl) ether	~	~	~	~	~	~
bis(2-Chloroethoxy)methane	~	~	~	~	~	~
bis(2-Chloroethyl)ether	~	~	~	~	~	~
bis(2-Ethylhexyl)phthalate	~	~	~	~	~	~
Butyl benzyl phthalate	~	~	~	~	~	~
Caprolactam	~	~	~	~	~	~
Carbazole	~	~	~	~	~	~
Chrysene	3900	~	~	~	~	~
Dibenz(a,h)anthracene	330	~	~	~	~	~
Dibenzofuran	59000	~	~	~	~	~
Diethylphthalate	~	~	~	~	~	~
Dimethyl phthalate	~	~	~	~	~	~
Di-N-Butyl phthalate	~	~	~	~	~	~
Di-N-Octyl phthalate	~	~	~	~	~	~
Fluoranthene	100000	~	~	~	~	~
Fluorene	100000	~	~	~	~	~
Hexachlorobenzene	1200	~	~	~	~	~
Hexachlorobutadiene, SVOC	~	~	~	~	~	~
Hexachlorocyclopentadiene	~	~	~	~	~	~
Hexachloroethane	~	~	~	~	~	~
Indeno(1,2,3-cd)pyrene	500	~	~	~	~	~
Isophorone	~	~	~	~	~	~
Naphthalene, SVOC	100000	~	~	~	~	~
Nitrobenzene	15000	~	~	~	~	~
N-Nitroso-di-N-propylamine	~	~	~	~	~	~
N-Nitrosodiphenylamine	~	~	~	~	~	~
Pentachlorophenol, SVOC	6700	~	~	~	~	~
Phenanthrene	100000	~	~	~	~	~
Phenol	100000	~	~	~	~	~
Pyrene	100000	~	~	~	~	~

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Appendix A-1: Validated Soil Analytical Results - Corning-Christian Academy Property
Study Area, Corning, NY

Location ID	Restricted Residential Screening Levels[1]	TCLP Regulatory Levels[2]	CCASS013	CCASS013	CCASS014	CCASS014
Sample ID			CCASS013-0-000	CCASS013-0-002	CCASS014-0-000	CCASS014-0-002
Date			7/29/2014	7/29/2014	7/29/2014	7/29/2014
Sample Depth			0 - 2 inches	2 - 24 inches	0 - 2 inches	2 - 24 inches
Sample Type			0 - Primary	0 - Primary	0 - Primary	0 - Primary
Matrix			SS	SS	SS	SS
Laboratory Sample ID			480-64613-11	480-64613-12	480-64613-13	480-64613-14
Polychlorinated Biphenyls (PBCs), mg/Kg						
Aroclor-1016	~	~	~	~	~	~
Aroclor-1221	~	~	~	~	~	~
Aroclor-1232	~	~	~	~	~	~
Aroclor-1242	~	~	~	~	~	~
Aroclor-1248	~	~	~	~	~	~
Aroclor-1254	~	~	~	~	~	~
Aroclor-1260	~	~	~	~	~	~
Aroclor-1262	~	~	~	~	~	~
Aroclor-1268	~	~	~	~	~	~
Total Petroleum Hydrocarbons, mg/Kg						
TPH	~	~	~	~	~	~

Notes:
mg/Kg = milligram per kilogram.
mg/L = milligram per liter.
ug/Kg = microgram per kilogram.
U = The analyte was analyzed for but was not detected above the level of the detection quantitation limit.
UJ = The analyte was analyzed for but not detected. The quantitation limit is approximate and may be inaccurate or imprecise.
J = The positive result reported is estimated either because the result is less than the LOQ or because certain quality control criteria were not met.
J+ = The result is an estimated quantity, but the result may be biased high because certain quality control criteria were not met.
SB = Soil boring.
SS = Surface soil.
(1) New York State Department of Environmental Conservation (NSYDEC) Subpart 375-6 Remedial Program Soil Cleanup Objectives (SCOs).
(2) Federal Code of Regulations, Section 261.24 - Toxicity characteristic. Context: Title 40 - Protection of Environment. CHAPTER I - ENVIRONMENTAL PROTECTION AGENCY (CONTINUED). SUBCHAPTER I - SOLID WASTES (CONTINUED). PART 261 - IDENTIFICATION AND LISTING OF HAZARDOUS WASTE. Subpart C - Characteristics of Hazardous Waste (2012-07-01).
~ = Analysis not performed or No standard or guidance value listed for this constituent.

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APPENDIX B

HEALTH AND SAFETY PLAN (HASP)

The final Health and Safety Plan will be
maintained at the Study Area during field activities.

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HEALTH AND SAFETY PLAN (*HASP*)

Office:	West Chester, PA
Project Name:	Study Area Bounded by Pyrex Street, E. Pulteney Street, Post Creek and Chemung River
Client:	Corning Incorporated
Work Location:	Corning, NY
WO#:	02005.056.001.0001

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HEALTH AND SAFETY PLAN (*HASP*)

Work Order Number	Date	Project Manager Approval	Project Safety Manager Approval

DRAFT

HEALTH AND SAFETY PLAN (HASP)

Prepared by: A. Jayne / R. McLoughlin	**W.O. Number:** 02005.056.001.0001	**Date:** 04/03/2015

Project Identification

Office: West Chester, PA
Site Name: Study Area, Corning, New York
Client: Corning Incorporated
Work Location Address: Located in Corning, New York on the north bank of the Chemung River (see Figure 1).

Study Area Bounded by Pyrex St., E. Pulteney St., Post Creek and Chemung River

History:
Soil and/or groundwater characterization activities at a site with potential fill containing ash, brick and glass pieces.

Scope of Work: Study Area Characterization Activities

☐ Site visit only; site HASP not necessary. List personnel here and sign off below:

X Utility notification required. If required, provide utility notification agency, authorization number, and valid dates:
New York Leak Detector (NYLD) subcontracted to perform independent utility clearance.

Regulatory Status:

Site regulatory status: TBD

CERCLA/SARA	**RCRA**	**Other Federal Agency**
☐ U.S. EPA	☐ U.S. EPA	☐ DOE
☐ State	☐ State	☐ USACE
☐ NPL Site	**NRC**	☐ Air Force
☐ OSHA	☐ 10 CFR 20	☐ _____

Hazard Communication (Req'd See Attachment D)
☐ 1910 ☐ 1926 ☐ State

Safety Officer Manual (Required to be On-Site)
Based on the Hazard Assessment and Regulatory Status, determine the Standard HASP(s) applicable to this project. Indicate below which Standard HASP will be used and append the appropriate pages of this form along with the Standard Plan.

☐ Stack Test ☐ _____
☐ Air Emissions ☐ _____
☐ Asbestos ☐ _____
☐ Industrial Hygiene ☐ _____
☐ _____ ☐ _____

Review and Approval Documentation:

Reviewed by: SO/DEHSM/CEHS	George Crawford (Name Print)	George M Crawford Jr CIH (Signature)	Date: 04/06/2015
Environmental. Compliance Advisor	(Name Print)	(Signature)	Date:
Approved by: Project Manager	John Sontag (Name Print)	(Signature)	Date:

Hazard Assessment and Equipment Selection:

In accordance with WESTON's Personal Protective Equipment Program and 29 CFR 1910.132, at the site prior to personnel beginning work, the FSO and/or the Site Manager have evaluated conditions and verified that the personal protective equipment selection outlined within this HASP is appropriate for the hazards known or expected to exist. (Refer to CEHS Program Manual Section 5, Personal Protection Program, for guidance.)

☒ **FSO**	Stephan Roy (Name)	(Signature)	Date:
☒ **Site Manager**	John Sontag (Name)	(Signature)	Date:

☒ **Project Environmental Compliance Officer**	John Sontag (Name)	Date:
☐ **Dangerous Goods Shipping Coordinator**	(Name)	Date:

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BEHAVIOR-BASED SAFETY (BBS) – Pledge

I Accept and Understand 100% Safe Work Is an Achievable Goal

- ★ I will work to develop strong connections and team with my co-workers to establish a culture of working safely 100% of the time.
- ★ I will actively care about all Weston employees, our families, team contractors and clients.
- ★ I will help to keep our projects safe and will meet and exceed compliance requirements.
- ★ I will understand and comply with the Health and Safety Plan, Accident Prevention Plan, and Environmental Compliance Plan for each field project. They guide my actions.
- ★ I will stop any work that presents an imminent hazard to people or the environment or is not adequately addressed in the Health and Safety Plan, Accident Prevention Plan, or Environmental Compliance Plan.
- ★ I will identify changing conditions to address safety implications. No surprises!
- ★ I will identify unsafe working conditions and be proactive in correcting them.
- ★ I will coach and mentor and will accept coaching from others to encourage safe work behaviors.
- ★ I am empowered to share lessons-learned and foster continuous improvement.

I will Learn where I can get Assistance

- ★ I will develop high quality relationships with my Division Environmental, Health, and Safety (EHS) Manager; Profit Center Safety Officer; and Field Safety Officer.
- ★ I will learn how and when to contact our Environmental Advisors.
- ★ I will get to know our Corporate EHS staff and become familiar with the Corporate EHS Portal Site.

I will Report All Incidents

- ★ If a safety incident occurs, even if there is no injury or damage but there could have been, I will report the incident immediately.
- ★ I will conduct safety reviews of all incidents with my supervisor, if requested. The review will focus on cause and lessons-learned so that we can be proactive in preventing it from happening again.

_____ _____

_____ _____

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TABLE OF CONTENTS

Section	Page
1. PERSONNEL ON SITE INFORMATION	**1-1**
1.1 WESTON REPRESENTATIVES	1-2
1.2 WESTON SUBCONTRACTORS	1-2
1.3 SITE PERSONNEL AND CERTIFICATION STATUS	1-3
1.3.1 WESTON Employee Certification	1-3
1.3.2 Subcontractor's Health and Safety Program Evaluation	1-4
2. HEALTH AND SAFETY EVALUATION	**2-1**
2.1 HEALTH AND SAFETY EVALUATION	2-2
2.1.1 Task Hazard Assessment	2-2
2.1.2 Chemical Hazards of Concern	2-3
2.1.3 Biological Hazards of Concern	2-4
2.1.4 Radiation Hazards of Concern	2-5
2.1.5 Physical Hazards of Concern	2-6
3. SITE SECURITY	**3-1**
3.1 SITE SECURITY ASSESSMENT FORM	3-2
3.2 WESTON SITE SECURITY CHECKLIST	3-3
4. TASK BY TASK ASSESSMENT	**4-1**
4.1 TASK-BY-TASK RISK ASSESSMENT	4-2
4.1.1 Task 1 Description	4-2
4.1.2 Task 2 Description	4-3
4.1.3 Task 3 Description	4-4
4.2 PERSONNEL PROTECTION PLAN	4-6
4.3 DESCRIPTION OF LEVELS OF PROTECTION	4-7
5. MONITORING PROGRAM	**5-1**
5.1.1 Air Monitoring Instruments	5-2
5.1.1 Air Monitoring Instruments Calibration Record	5-3
5.2 SITE AIR MONITORING PROGRAM	5-4
5.3 ACTION LEVELS	5-5
6. HOSPITAL INFORMATION	**6-1**
6.1 CONTINGENCIES	6-2
6.1.1 Emergency Contacts and Phone Numbers	6-2
6.1.2 Hospital Map	6-4
6.1.3 Response Plans	6-5
7. DECONTAMINATION PLAN	**7-1**
7.1 GENERAL DECONTAMINATION PLAN	7-2
7.2 LEVEL D DECONTAMINATION PLAN	7-3
7.3 LEVEL C DECONTAMINATION PLAN	7-4
7.4 LEVEL B ( ) or Level A ( ) DECONTAMINATION PLAN	7-5
8. TRAINING AND BRIEFING TOPICS/SIGN OFF SHEET	**8-1**
8.1 TRAINING AND BRIEFING TOPICS	8-2
8.2 HEALTH AND SAFETY PLAN APPROVAL/SIGNOFF FORM	8-3

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ATTACHMENTS

ATTACHMENT A	Chemical Contaminants Data Sheets
ATTACHMENT B	Safety Data Sheets
ATTACHMENT C	Safety Procedures/Field Operating Procedures (FLD Ops)
ATTACHMENT D	Hazard Communication Program
ATTACHMENT E	Air Sampling Data Sheets
ATTACHMENT F	Incident Reporting
ATTACHMENT G	Traffic Control Plan
ATTACHMENT H	Environmental Health & Safety Inspection Checklist

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1. PERSONNEL ON SITE INFORMATION

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1.1 WESTON REPRESENTATIVES

Organization/Branch	Name/Title	Address	Telephone
National Accounts	John Sontag/Project Manager	1400 Weston Way West Chester, PA 19380	610-701-3679
National Accounts	Stephane Roy/ Project Geoscientist	1400 Weston Way West Chester, PA 19380	610-701-3147
National Accounts	Rachel McLoughlin/ Project Scientist	1400 Weston Way West Chester, PA 19380	610-701-3428

Roles and Responsibilities:

Manage and implement site characterization program.

1.2 WESTON SUBCONTRACTORS

Organization/Branch	Name/Title	Address	Telephone
	Name: Title:	Street: City: State, Zip:	
	Name: Title:	Street: City: State, Zip:	
	Name: Title:	Street: City: State, Zip:	

Roles and Responsibilities:

SITE-SPECIFIC HEALTH AND SAFETY PERSONNEL

The Site Field Safety Officer (FSO) for activities to be conducted at this site is: Stephane Roy / Rachel McLoughlin

The Site Manager has ultimate responsibility for ensuring that the provisions of this Site HASP are adequate and implemented in the field.

Changing field conditions may require decisions to be made concerning adequate protection programs. Therefore, the personnel assigned as FSOs must be experienced and meet the additional training requirements specified by OSHA in 29 CFR 1910.120.

Qualifications:
40-hour OSHA HAZWOPER certification; annual 8-hour OSHA HAZWOPER refresher certification; current Adult First Aid and CPR certification; familiarity with jobs of similar scope.

Designated alternates include: John Sontag

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1.3 SITE PERSONNEL AND CERTIFICATION STATUS

1.3.1 WESTON Employee Certification

Name: John Sontag **Title: Project Manager** **Task(s): All** **Certification Level or Description:** ☒Medical Current ☒Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)	**Name: Stephane Roy** **Title: Project Geoscientist** **Task(s): All** **Certification Level or Description:** ☒ Medical Current ☒Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)
Name: Rachel McLoughlin **Title: Project Scientist** **Task(s): All** **Certification Level or Description:** ☒Medical Current ☒Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)	**Name: Matt Barela** **Title: Associate Project Scientist** **Task(s): All** **Certification Level or Description:** ☒Medical Current ☒Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)
Name: Devon Hollenden **Title: Assistant Geoscientist** **Task(s): All** **Certification Level or Description:** ☒Medical Current ☒Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)	**Name: Greg Flasinski** **Title:** **Task(s): All** **Certification Level or Description:** ☒Medical Current ☒Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)
Name: **Title:** **Task(s):** **Certification Level or Description:** ☐Medical Current ☐Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)	**Name:** **Title:** **Task(s):** **Certification Level or Description:** ☐Medical Current ☐Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)
Name: **Title:** **Task(s):** **Certification Level or Description:** ☐Medical Current ☐Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)	**Name:** **Title:** **Task(s):** **Certification Level or Description:** ☐Medical Current ☐Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)

TRAINING CURRENT - Training: All personnel, including visitors, entering the exclusion or contamination reduction zones must have certifications of completion of training in accordance with OSHA 29 CFR 1910, 29 CFR 1926, or 29 CFR 1910.120.

FIT TEST CURRENT - Respirator Fit Testing: All persons, including visitors, entering any area requiring the use or potential use of any tight-fitting respirator must have had, as a minimum, a qualitative fit test, administered in accordance with OSHA 29 CFR 1910.134 or ANSI, within the last 12 months. If site conditions require the use of a full-face, tight-fitting, air-purifying respirator for protection from asbestos or lead, employees must have had a quantitative fit test, administered according to OSHA 29 CFR 1910.1001 or .1025 or 29 CFR 1926.1101 or .62, within the last 12 months.

MEDICAL CURRENT - Medical Monitoring Requirements: All personnel, including visitors, entering the exclusion or contamination reduction zones must be certified as medically fit to work and able to wear a respirator, if appropriate, in accordance with 29 CFR 1910 or 29 CFR 1926 (substance-specific), or 29 CFR 1910.120 (HAZWOPER).

The Site Field Safety Officer is responsible for verifying all certifications and fit tests.

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SITE PERSONNEL AND CERTIFICATION STATUS

1.3.2 Subcontractor's Health and Safety Program Evaluation

Name of Subcontractor: TBD
Address:

Activities To Be Conducted by Subcontractor:

Evaluation Criteria

Medical Program meets OSHA/WESTON criteria ☐ Acceptable ☐ Unacceptable Comments:	Personal Protective Equipment available ☐ Acceptable ☐ Unacceptable Comments:	On-site monitoring equipment available, calibrated, and operated properly ☐ Acceptable ☐ Unacceptable Comments:
Safe Working Procedures clearly specified ☐ Acceptable ☐ Unacceptable Comments:	Training meets OSHA/WESTON criteria ☐ Acceptable ☐ Unacceptable Comments:	Emergency Procedures ☐ Acceptable ☐ Unacceptable Comments:
Decontamination Procedures ☐ Acceptable ☐ Unacceptable Comments:	General Health and Safety Program evaluation ☐ Acceptable ☐ Unacceptable Comments:	Additional comments: ☐ Subcontractor has agreed to and will conform to the WESTON HASP for this project. ☐ Subcontractor will work under its own HASP, which has been accepted by Project PM.

Evaluation Conducted by: **Date:**
Evaluation Source (SubTrack, etc.):

Subcontractor

Certifications for all subcontractor personnel will be added to the HASP prior to beginning work.

Name: **Title:** **Task(s):** **Certification Level or Description:** ☐ Medical Current ☐ Training Current ☐ Fit Test Current (Qual.) ☐ Fit Test Current (Quant.)	**Name:** **Title:** **Task(s):** **Certification Level or Description:** ☐ Medical Current ☐ Training Current ☐ Fit Test Current (Qual.) ☐ Fit Test Current (Quant.)
Name: **Title:** **Task(s):** **Certification Level or Description:** ☐ Medical Current ☐ Training Current ☐ Fit Test Current (Qual.) ☐ Fit Test Current (Quant.)	**Name:** **Title:** **Task(s):** **Certification Level or Description:** ☐ Medical Current ☐ Training Current ☐ Fit Test Current (Qual.) ☐ Fit Test Current (Quant.)

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2. HEALTH AND SAFETY EVALUATION

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2.1 HEALTH AND SAFETY EVALUATION

2.1.1 Task Hazard Assessment

Background Review: **X** Complete ☐ Partial If partial why? **N/A**

Activities Covered Under This Plan:

No.	Task/Subtask	Description	Schedule
1	Soil sampling	A combination of soil boring and surface sampling.	2015 - TBD
2	Groundwater Investigation	Installation of groundwater monitoring wells and groundwater sampling	2015 - TBD
3	Test Pitting/Excavation	Excavation and backfill of test pits/surface soil	2015 - TBD

Types of Hazards:

Numbers refer to one of the following hazard evaluation forms. Complete hazard evaluation forms for each appropriate hazard class.

Physiochemical 1

- ☐ Flammable
- ☐ Explosive
- ☐ Corrosive
- ☐ Reactive
- ☐ O_2 Rich
- ☐ O_2 Deficient

Chemically Toxic 1

- ☒ Inhalation
- ☒ Ingestion
- ☒ Contact
- ☐ Absorption
- ☐ Carcinogen
- ☐ Mutagen
- ☐ Teratogen
- ☐ OSHA 1910.1000 Substance (Air Contaminants)
- ☒ OSHA Specific Hazard Substance Standard (Refer to following page for listing)

Radiation 3

Ionizing:

- ☐ Internal exposure
- ☐ External exposure

Non-ionizing:

- ☒ UV
- ☐ IR
- ☐ RF
- ☐ MicroW
- ☐ Laser

Biological 2

- ☐ Etiological Agent
- ☒ Other (plant, insect, animal)

☐ **Physical Hazards 4**

- ☒ Characterization Activities

Source/Location of Contaminants and Hazardous Substances:

Directly Related to Tasks

- ☐ Air
- ☐ Other Surface
- ☒ Groundwater
- ☒ Soil
- ☐ Surface Water
- ☐ Sanitary Wastewater
- ☐ Process Wastewater
- ☐ Other _____

Indirectly Related to Tasks — Nearby Process(es) That Could Affect Team Members:

- ☒ WESTON Work Location
- ☐ Nearby Non-Client Facility

Describe:

☐ Have activities (task[s]) been coordinated with facility?

Comments:

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HEALTH AND SAFETY EVALUATION

2.1.2 Chemical Hazards of Concern

☐ **N/A**

Chemical Contaminants of Concern

Attach data sheets from an acceptable source such as NIOSH pocket guide, condensed chemical dictionary, ACGIH TLV booklet, Hazardous Substances Data base (HSDB), etc. List chemicals and concentrations below and locate data sheets in Attachment A of this HASP.

☐ **N/A**

Identify hazardous materials used or on-site and attach Safety Data Sheets (SDSs) for all reagent type chemicals, solutions, or other identified materials that in normal use in performing tasks related to this project could produce hazardous substances. Ensure that all subcontractors and other parties working nearby are informed of the presence of these chemicals and the location of the SDSs. Obtain from subcontractors and other parties, lists of the hazardous materials they use or have on-site and identify location of the SDSs here. List chemicals and quantities below and locate SDSs in Attachment B of this HASP.

Chemical Name	Concentration ( )	Chemical Name	Quantity
Arsenic			
Lead			
Cadmium			

OSHA-SPECIFIC HAZARDOUS SUBSTANCES

☐ 1910.1001 Asbestos	☐ 1910.1002 Coal tar pitch volatiles	☐ 1910.1003 4-Nitrobiphenyl, etc.	☐ 1910.1004 alpha-Naphthylamine
☐ 1910.1005 [Reserved]	☐ 1910.1006 Methyl chloromethyl ether	☐ 1910.1007 3,3'-Dichlorobenzidine (and its salts)	☐ 1910.1008 bis-Chloromethyl ether
☐ 1910.1009 beta-Naphthylamine	☐ 1910.1010 Benzidine	☐ 1910.1011 4-Aminodiphenyl	☐ 1910.1012 Ethyleneimine
☐ 1910.1013 beta-Propiolactone	☐ 1910.1014 2-Acetylaminofluorene	☐ 1910.1015 4-Dimethylaminoazobenzene	☐ 1910.1016 N-Nitrosodimethylamine
☐ 1910.1017 Vinyl chloride	☒ 1910.1018 Inorganic arsenic	☒ 1910.1025 Lead (Att. FLD# 46)	☐ 1910.1026 Chromium VI (att. FLD 53)
☒ 1910.1027 Cadmium (Att. 50 FLD)	☐ 1910.1028 Benzene (Att. FLD# 54 or 61)	☐ 1910.1029 Coke oven emissions	☐ 1910.1043 Cotton dust
☐ 1910.1044 1,2-Dibromo-3-chloropropane	☐ 1910.1045 Acrylonitrile	☐ 1910.1047 Ethylene oxide	☐ 1910.1048 Formaldehyde
☐ 1910.1050 Methylenedianiline	☐ 1910.1051 1,3 Butadiene	☐ 1910.1052 Methylene chloride	☐ 1926.60 Methylenedianiline
☒ 1926.62 Lead	☐ 1926.1101 Asbestos (Att. FLD 52)	☒ 1926.1127 Cadmium	

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HEALTH AND SAFETY EVALUATION

2.1.3 Biological Hazards of Concern

☒ **Poisonous Plants** (FLD 43-D) Location/Task No(s) **All** Source: ☐ Known ☒ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☒ Contact ☐ Direct Penetration Team Member(s) Allergic: ☐ Yes ☒ No Immunization required: ☐ Yes ☒ No	☒ **Insects** (FLD 43-B) Location/Task No(s) **All** Source: ☐ Known ☒ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☒ Contact ☒ Direct Penetration Team Member(s) Allergic: ☐ Yes ☒ No Immunization required: ☐ Yes ☒ No
☒ **Snakes, Reptiles** (FLD 43-A) Location/Task No(s) **All** Source: ☐ Known ☒ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☒ Contact ☒ Direct Penetration Team Member(s) Allergic: ☐ Yes ☒ No Immunization required: ☐ Yes ☒ No	☒ **Animals** (FLD 43-A) Location/Task No(s) **All** Source: ☐ Known ☒ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☒ Contact ☒ Direct Penetration Team Member(s) Allergic: ☐ Yes ☒ No Immunization required: ☐ Yes ☒ No
FLD 43 — WESTON Biohazard Field Operating Procedures: Att. OP ☐	
☐ **Sewage** Location/Task No.(s): Source: ☐ Known ☐ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☐ Contact ☐ Direct Penetration Team Member(s) Allergic: ☐ Yes ☐ No Immunization required: ☐ Yes ☐ No Tetanus Vaccination within Past 10 yrs: ☐ Yes ☐ No	☐ **Etiologic Agents** (FLD –C)**(List)** Location/Task No.(s): Source: ☐ Known ☐ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☐ Contact ☐ Direct Penetration Team Member(s) Allergic: ☐ Yes ☐ No Immunization required: ☐ Yes ☐ No
FLD 43-C — Mold and Fungus. Att. OP ☐	
FLD 44 — WESTON Bloodborne Pathogens Exposure Control Plan – First Aid Procedures: Att. OP ☒	
FLD 45 — WESTON Bloodborne Pathogens Exposure Control Plan – Working with Infectious Waste: Att. OP ☐	

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HEALTH AND SAFETY EVALUATION

2.1.4 Radiation Hazards of Concern

NONIONIZING RADIATION

Task No.	Type of Nonionizing Radiation	Source On-Site	TLV/PEL	Wavelength Range	Control Measures	Monitoring Instrument
1	Ultraviolet	Solar			Appropriate clothing/ sunscreen	None
	Infrared					
	Radio Frequency					
	Microwave					
	Laser					

IONIZING RADIATION

Task No.	Radionuclide	Major Radiations	Radioactive Half-Life (Years)	DAC (µCii/mL)			Surface Contamination Limit	Monitoring Instrument
				D	W	Y		

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HEALTH AND SAFETY EVALUATION

2.1.5 Physical Hazards of Concern

Physical Hazard Condition	Physical Hazard	Attach OP	WESTON OP Titles
Loud noise	Hearing loss/disruption of communication	☒	Section 7.0 - ECH&S Program Manual Occupational Noise & HC Program
Inclement weather	Rain/humidity/cold/ice/snow/lightning	☒	FLD02 - Inclement Weather
Steam heat stress	Burns/displaced oxygen/wet working surfaces	☐	FLD03 - Hot Process - Steam
Heat stress	Burns/hot surfaces/low pressure steam	☐	FLD04 - Hot Process - LT3
Ambient heat stress	Heat rash/cramps/exhaustion/heat stroke	☒	FLD05 - Heat Stress Prevention/Monitoring
Cold stress	Hypothermia/frostbite	☒	FLD06 - Cold Stress
Cold/wet	Trench/paddy/immersion foot/edema	☒	FLD02 - Inclement Weather
Confined spaces	Falls/burns/drowning/engulfment/electrocution	☐	FLD08 - Confined Space Entry
Industrial Trucks	Fork Lift Truck Safety	☐	FLD09 – Powered Industrial Trucks
Improper lifting	Back strain/abdomen/arm/leg muscle/joint injury	☒	FLD10 - Manual Lifting/Handling Heavy Objects
Uneven surfaces	Vehicle accidents/slips/trips/falls	☒	FLD11 - Rough Terrain
Poor housekeeping	Slips/trips/falls/punctures/cuts/fires	☒	FLD12 - Housekeeping
Structural integrity	Crushing/overhead hazards/compromised floors	☐	FLD13 - Structural Integrity
Improper cylinder. handling	Mechanical injury/fire/explosion/suffocation	☐	FLD16 - Pressure Systems - Compressed Gases
Water hazards	Poor visibility/entanglement/drowning/cold stress	☐	FLD17 - Diving
Water hazards	Drowning/heat/cold stress/hypothermia/falls	☐	FLD18 - Operation and Use of Boats
Water hazards	Drowning/frostbite/hypothermia/falls/electrocution	☒	FLD19 - Working Over Water
Vehicle hazards	Struck by vehicle/collision	☒	FLD20 - Traffic
Explosions	Explosion/fire/thermal burns	☐	FLD21 - Explosives
Moving mechanical parts	Crushing/pinch points/overhead hazards/electrocution	☒	FLD22 – Earth Moving Equipment
Moving mech. parts	Overhead hazards/electrocution	☐	FLD23 – Cranes, Rigging, and Slings
Working at elevation	Overhead hazards/falls/electrocution	☐	FLD24 - Aerial Lifts/Man lifts
Working at elevation	Overhead hazards/falls/electrocution	☐	FLD25 - Working at Elevation
Working at elevation	Overhead hazards/falls/electrocution/slips	☐	FLD26 - Ladders
Working at elevation	Slips/trips/falls/overhead hazards	☐	FLD27 - Scaffolding
Trench cave-in	Crushing/falling/overhead hazards/suffocation	☒	FLD28 - Excavating/Trenching
Physiochemical	Explosions/fires from oxidizing, flam./corr. material	☐	FLD30 - Hazardous Materials Use/Storage
Physiochemical	Fire and explosion	☒	FLD31 - Fire Prevention/Response Plan Required
Physiochemical	Fire	☒	FLD32 - Fire Extinguishers Required
Structural integrity	Overhead/electrocution/slips/trips/falls/fire	☐	FLD33 - Demolition
Electrical	Electrocution/shock/thermal burns	☒	FLD34 - Utilities
Electrical	Electrocution/shock/thermal burns	☒	FLD35 - Electrical Safety
Burns/fires	Heat stress/fires/burns	☐	FLD36 - Welding/Cutting/Brazing/Radiography
Impact/thermal	Thermal burns/high pressure impaction/heat stress	☒	FLD37 - Pressure Washers/Sand Blasting
Impaction/electrical	Smashing body parts/pinching/cuts/electrocution	☒	FLD38 - Hand and Power Tools
Poor visibility	Slips/trips/falls	☐	FLD39 - Illumination
Fire/explosion	Burns/impaction	☐	FLD40 - Storage Tank Removal/Decommissioning
Communications	Disruption of communications	☐	FLD41 - Std. Hand/Emergency Signals
Energy/release	Unexpected release of energy	☐	FLD42 - Lockout/Tag-out
Biological Hazards	Biological Hazards at site	☐	FLD43 - Biological Hazards
Animals	Animals	☒	FLD43A - Animals
Insects	Stinging and Biting Insects	☒	FLD43B - Stinging and Biting Insects
Molds/Fungi	Molds and Fungi	☐	FLD43C - Molds and Fungi

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2.1.5 Physical Hazards of Concern (Continued)			
Physical Hazard Condition	**Physical Hazard**	**Attach OP**	**WESTON OP Titles**
Hazardous Plants	Hazardous Plants	☒	FLD43D - Hazardous Plants
Etiologic Agents	Etiologic Agents	☐	FLD43E - Etiologic Agents
Biological Hazards/BBP	Biological Hazards/BBP at site/First Aid Providers	☒	FLD44 - Biological Hazards – Bloodborne Pathogens Exposure Control Plan – First Aid Providers
Infectious Waste	Infectious Waste at site/BBP/ at site/Infectious Waste	☐	FLD45 – Biological Hazards – Bloodborne Pathogens Exposure Control Plan – Work With Infectious Waste
Lead Contaminated sites	Lead poisoning	☒	FLD46 - Control of Exposure to Lead
Puncture/cuts	Cuts/ dismemberment/gouges	☐	FLD47 - Clearing, Grubbing and Logging Operations
Government Inspector	Disruption of Operations	☐	FLD48 – Federal, State, Local Regulatory Agency Inspections
Unknown Chemicals	Exposure to hazardous materials/waste	☒	FLD49 – Safe Storage of Samples
Cadmium	Exposure Control	☒	FLD50 – Cadmium Exposure Control Plan
Process Safety Procedure	Safety Procedure	☒	FLD51 – Process Safety Procedure
Asbestos	Asbestos Exposure	☐	FLD52 – Asbestos Exposure Control Plan
Hexavalent Chromium	Exposure Control Plan	☐	FLD53 – Hexavalent Chromium Exposure Control Plan
Benzene	Exposure Control Plan	☐	FLD54 - Benzene Exposure Control Plan
Hydrofluoric acid	Working with HF	☐	FLD55 – Working with Hydrofluoric Acid
Moving drill rig parts	Crushing/pinch points/overhead hazards/electrocution	☒	FLD56 – Drilling Safety
Vehicles/driving	Accidents,/fatigue/cell phone use	☒	FLD 57 – Motor Vehicle Safety
Improper material handling	Back injury/crushing from load shifts/equipment/tools	☒	FLD 58 – Drum Handling Operations
COC decontamination	COCs/slip, trip, and falls/waste generation/environmental compliance/PPE	☒	FLD59 - Decontamination
Drilling hazards	Electrocution/overhead hazards/pinch points	☒	Environmental Remediation Drilling Safety Guideline - 2005
Fatigue	Long work hours	☒	FLD60 – Employee Duty Schedule
Benzene/Gasoline	Benzene exposure	☐	FLD61 – Gasoline Contaminant Exposure
Cardiac Arrest	Accident/Heart Attack	☐	FLD62 – 2009 Automatic External Defibrillator (AED) Program Guidelines
Ionizing Radiation	Ionizing Radiation	☐	FLD63 – Using Handheld X-Ray Fluorescence (XRF) Analyzers
Working Alone	Isolated Working Conditions	☐	FLD64 – Employees Working Alone

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3. SITE SECURITY

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3.1 SITE SECURITY ASSESSMENT FORM

DESCRIPTION	
Site Name and Location: Former Study Area, Corning NY	**Number of Employees and Subcontractors on Site:** TBD
Type of Work: Study Area characterization sampling activities (Soil and/or groundwater sampling)	
Projected Start Date: 2014	**Projected Completion Date: TBD**
Are Chemicals Used or Stored That Meet DHS/CFATS Requirements? N/A http://www.dhs.gov/files/programs/gc_1185909570187.shtm **If Yes, Attach Plan and DHS Approvals to HASP.** http://www.dhs.gov/files/programs/gc_1169501486197.shtm	
SURROUNDING AREA *(urban/suburban/rural; residential/commercial/industrial; traffic volume, population density, etc*	
Suburban, residential neighborhood with school property within Study Area limits.	
THREAT INDICATORS *(apparent social, economic, political, ethnic, criminal, gang related, and other risk factors)*	
N/A	
COUNTERMEASURES *(Current and projected risk mitigation factors)*	
Security Systems (Reference Site Security Checklist):	
Security Procedures (Reference Site Security Checklist):	
Closest police station location and contact information: Corning Police Department – 607-962-0340 1 Center Way Corning, NY 14830	
Other relevant observations or information to factor into the Site Security Plan: N/A	
OVERALL SECURITY ASSESSMENT *(Submit "Medium" and "High" risk assessments to Corporate Security for review)*	
Risk Level: ☒ **Low** ☐ **Medium** ☐ **High**	**Date:**
Site Safety Officer:	**Division Safety Manager:**
USE ATTACHMENTS FOR ADDITIONAL COMMENTS, MAPS AND DIAGRAMS	

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3.2 WESTON SITE SECURITY CHECKLIST

To be used for completing the Site Security Assessment Form required on all WESTON projects. Contact Corporate Security for guidance on any items that are "NEEDED" and "NOT IN PLACE".

CONTROL MEASURES:	In-Place / Not In-Place	Needed / Not Needed
1. Fencing, lockable gates, no holes (enter details below):	☒ / ☐	☐ / ☐
a. Chain Link material	☐ / ☐	☐ / ☒
b. Other material (describe)	☐ / ☐	☐ / ☒
c. Height (in feet and inches)	☐ / ☐	☐ / ☒
d. Top cover (e.g., razor wire)	☐ / ☐	☐ / ☒
e. Signage (e.g., No Trespassing)	☐ / ☐	☐ / ☒
2. Guard service:	☐ / ☐	☐ / ☒
a. During working hours?	☐ / ☐	☐ / ☐
b. During non-working hours?	☐ / ☐	☐ / ☐
c. As a stationary post?	☐ / ☐	☐ / ☐
d. As a roving patrol?	☐ / ☐	☐ / ☐
e. Do they have written instructions?	☐ / ☐	☐ / ☐
f. Do they have adequate training?	☐ / ☐	☐ / ☐
g. Do they have adequate supervision?	☐ / ☐	☐ / ☐
h. Do they have daily reports?	☐ / ☐	☐ / ☐
i. Do they have daily inspections?	☐ / ☐	☐ / ☐
3. ID badges displayed by:	☐ / ☐	☐ / ☒
a. Employees?	☐ / ☐	☐ / ☐
b. Contractors?	☐ / ☐	☐ / ☐
c. Visitors?	☐ / ☐	☐ / ☐
4. Log books for:	☐ / ☐	☐ / ☒
a. Employee sign-in?	☐ / ☐	☐ / ☐
b. Visitor sign-in?	☐ / ☐	☐ / ☐
c. Vehicle sign-in?	☐ / ☐	☐ / ☐
d. Incident reports?	☐ / ☐	☐ / ☐
e. Property removal?	☐ / ☐	☐ / ☐
f. Keys and access cards?	☐ / ☐	☐ / ☐
5. Electronics and hardware options (enter details below):	☐ / ☐	☐ / ☒
a. Access card readers	☐ / ☐	☐ / ☐
b. Adequate lighting	☐ / ☐	☐ / ☐
c. Closed circuit TV	☐ / ☐	☐ / ☐
d. Alarm system	☐ / ☐	☐ / ☐
e. Other (describe)	☐ / ☐	☐ / ☐
6. Procedures documented for:	☐ / ☐	☐ / ☒
a. Security training?	☐ / ☐	☐ / ☐
b. Security instructions?	☐ / ☐	☐ / ☐
c. Contingency plans?	☐ / ☐	☐ / ☐
d. Opening and closing protocols?	☐ / ☐	☐ / ☐
e. Other (describe)?	☐ / ☐	☐ / ☐
7. Law enforcement liaison documented for:	☐ / ☐	☐ / ☒
a. Municipal police?	☐ / ☐	☐ / ☐
b. County sheriff?	☐ / ☐	☐ / ☐
c. State police?	☐ / ☐	☐ / ☐
d. Federal agencies (specify)?	☐ / ☐	☐ / ☐

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WESTON SITE SECURITY CHECKLIST (CONTINUED)

To be used for completing the Site Security Assessment Form required on all WESTON projects.
Contact Corporate Security for guidance on any items that are "NEEDED" and "NOT IN PLACE".

CHAIN OF COMMAND:	Name	24/7 Contact Information
a. Security Coordinator		
b. Site Supervisor		
c. Project Manager	John Sontag	610-701-3679
d. PC Manager		

REMARKS (use this section and supplemental pages to comment on details, exceptions or additional observations):

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4. TASK BY TASK ASSESSMENT

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4.1 TASK-BY-TASK RISK ASSESSMENT

4.1.1 Task 1 Description

TASK 1: Soil sampling. Includes a combination of soil boring and surface soil sampling.

EQUIPMENT REQUIRED/USED

Geoprobe and/or Hollow-stem auger rig
Scoops
Nitrile gloves
Safety Boots
Safety Glasses
Dust Monitoring
Hand tools
Hearing Protection
Mini Rae

POTENTIAL HAZARDS/RISKS

Chemical

☒ Hazard Present Risk Level: ☐ H ☐ M ☒ L
What justifies risk level?
Sampling soil with potential metals.

Physical

☒ Hazard Present Risk Level: ☐ H ☐ M ☒ L
What justifies risk level?
Work generally will occur at residential or school property, with some work in utility right-of-way areas and floodplain areas.

Biological

☒ Hazard Present Risk Level: ☐ H ☐ M ☒ L
What justifies risk level?
Potential for ticks, bees, snakes, vegetation and small animals.

RADIOLOGICAL

☐ Hazard Present Risk Level: ☐ H ☐ M ☐ L
What justifies risk level?

LEVELS OF PROTECTION/JUSTIFICATION

Level D

SAFETY PROCEDURES REQUIRED AND/OR FIELD OPS UTILIZED

All work will be performed in accordance with the provisions of this HASP, OSHA guidelines, and WESTON Standard Operating Procedures.
FLD 02, 05, 06, 10,11, 12, 13, 19, 20, 22, 28, 34, 37, 38, 41, 43, 47, 56, 57, 59, 60, Section 7.0, Environmental Remediation Drilling Safety Guidance – 2005, Air monitoring in accordance with the Study Area-specific Community Air Monitoring Plan (CAMP).

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TASK-BY-TASK RISK ASSESSMENT (Continued)

4.1.2 Task 2 Description

TASK 2: Groundwater sampling activities, includes the installation of groundwater monitoring wells and groundwater sampling

EQUIPMENT REQUIRED/USED

Hollow-stem auger Rig	**Hand Tools**	**Dust Monitoring**
Nitrile Gloves	**Sample Bottles**	
Safety Boots	**Water Level Indicator**	
Safety Glasses	**Groundwater Pumps**	
Hearing Protection	**Bailers**	
MiniRae	**Tubing**	

POTENTIAL HAZARDS/RISKS

Chemical

☒ Hazard Present Risk Level: ☐ H ☐ M ☒ L

What justifies risk level?

Ground water sampling with potential constituents at lower levels

Physical

☒ Hazard Present Risk Level: ☐ H ☐ M ☒ L

What justifies risk level?

Work generally will occur at residential or school property, with some work possibly in utility right-of-way areas

Biological

☒ Hazard Present Risk Level: ☐ H ☐ M ☒ L

What justifies risk level?

Potential for ticks, bees, snakes, vegetation and small animals.

RADIOLOGICAL

☐ Hazard Present Risk Level: ☐ H ☐ M ☐ L

What justifies risk level?

LEVELS OF PROTECTION/JUSTIFICATION

Level D

SAFETY PROCEDURES REQUIRED AND/OR FIELD OPS UTILIZED

All work will be performed in accordance with the provisions of this HASP, OSHA guidelines, and WESTON Standard Operating Procedures.

FLD 01, 02, 05, 06, 10, 11, 12, 17, 18, 19, 20, 32, 34, 35, 36, 37, 41, 43, 47, 57, 59, 60 Section 7.0, Environmental Remediation Drilling Safety Guidance – 2005, Air monitoring in accordance with the Study Area-specific Community Air Monitoring Plan (CAMP).

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4.1 TASK-BY-TASK RISK ASSESSMENT (Continued)

4.1.3 Task 3 Description

TASK 3: Excavation/test pitting, backfilling and sampling activities. Test pits will be approximately 1 foot to 18 inches wide, 4 to 7 feet long and up to 4 feet deep. Excavation activities include surface excavation/scraping up to 1 ft below ground surface.

EQUIPMENT REQUIRED/USED

Construction Equipment (Mini-backhoe/excavator/front end loader)
Safety Boots
Safety Glasses
Hearing Protection
MiniRae
Dust Monitoring
Hearing Protection

POTENTIAL HAZARDS/RISKS

Chemical

☒ Hazard Present Risk Level: ☐ H ☐ M ☒ L
What justifies risk level?
Sampling soil with potential metals.

Physical

☒ Hazard Present Risk Level: ☐ H ☒ M ☐ L
What justifies risk level?
Activities include the use of heavy equipment in residential and public areas.

Biological

☒ Hazard Present Risk Level: ☐ H ☐ M ☐ L
What justifies risk level?
Potential for ticks, bees, snakes, vegetation and small animals.

RADIOLOGICAL

☐ Hazard Present Risk Level: ☐ H ☐ M ☐ L
What justifies risk level?

LEVELS OF PROTECTION/JUSTIFICATION

Level D

SAFETY PROCEDURES REQUIRED AND/OR FIELD OPS UTILIZED

All work will be performed in accordance with the provisions of this HASP, OSHA guidelines, and WESTON Standard Operating Procedures.
FLD 02, 05, 06, 10,11, 12, 13, 20, 22, 28, 34, 37, 38, 41, 43, 47, 56, 57, 59, Section 7.0, Environmental Remediation Drilling Safety Guidance – 2005, Air monitoring in accordance with the Study Area-specific Community Air Monitoring Plan (CAMP).

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4.1 TASK-BY-TASK RISK ASSESSMENT (Continued)

4.1.4 Task 4 Description

EQUIPMENT REQUIRED/USED

POTENTIAL HAZARDS/RISKS

Chemical

☐ Hazard Present Risk Level: ☐ H ☐ M ☐ L
What justifies risk level?

Physical

☐ Hazard Present Risk Level: ☐ H ☐ M ☐ L
What justifies risk level?

Biological

☐ Hazard Present Risk Level: ☐ H ☐ M ☐ L
What justifies risk level?

RADIOLOGICAL

☐ Hazard Present Risk Level: ☐ H ☐ M ☐ L
What justifies risk level?

LEVELS OF PROTECTION/JUSTIFICATION

SAFETY PROCEDURES REQUIRED AND/OR FIELD OPS UTILIZED

All work will be performed in accordance with the provisions of this HASP, OSHA guidelines, and WESTON Standard Operating Procedures.

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4.2 PERSONNEL PROTECTION PLAN

Engineering Controls
Describe Engineering Controls used as part of Personnel Protection Plan:

Task(s)
Tasks 1-3

Administrative Controls
Describe Administrative Controls used as part of Personnel Protection Plan:

Task(s)	Tasks 1-3
All	Conduct hazard analysis of all work tasks.
All	Conduct safety briefings with contractors prior to performing daily tasks to discuss safety hazards and controls Taken to minimize or eliminate hazards

Personal Protective Equipment
Action Levels for Changing Levels of Protection. Refer to Site Air Monitoring Program—Action Levels. Define Action Levels for up or down grade for each task:

Task(s)	Tasks 1-3
All	Hard hat, safety glasses, safety shoes, hearing protection (as necessary)
All	PPE will be reviewed with each hazard analysis to ensure level of PPE is appropriate for scope of work
All	Study Area Air Monitoring plan (i.e., Community Air Monitoring Plan [CAMP])

Description of Levels of Protection

Level D		Level D Modified
Task(s): All		**Task(s)**: NA
☒ Head	Hard hat when near drilling rig	☐ Head
☒ Eye and Face	Safety Glasses	☐ Eye and Face
☒ Hearing	Ear plugs in designated areas	☐ Hearing
☐ Arms and Legs Only		☐ Arms and Legs Only
☒ Appropriate Work Uniform	Coveralls or long pants and appropriate shirt	☐ Whole Body
☒ Hand – Gloves	Nitrile (as needed)	☐ Apron
☒ Foot - Safety Boots	Steel-toed boots	☐ Hand - Gloves
☐ Fall Protection		☐ Gloves
☐ Flotation		☐ Gloves
☐ Other		☐ Foot - Safety Boots
		☐ Over Boots

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4.3 DESCRIPTION OF LEVELS OF PROTECTION

Level C	Level B ( ) or Level A ( )
Task(s): NA	**Task(s):** NA
☐ Head	☐ Head
☐ Eye and Face	☐ Eye and Face
☐ Hearing	☐ Hearing
☐ Arms and Legs Only	☐ Arms and Legs Only
☐ Whole Body	☐ Whole Body
☐ Apron	☐ Apron
☐ Hand – Gloves	☐ Hand - Gloves
☐ Gloves	☐ Gloves
☐ Gloves	☐ Gloves
☐ Foot - Safety Boots	☐ Foot - Safety Boots
☐ Outer Boots	☐ Outer Boots
☐ Boots (Other)	☐ Boots (Other)
☐ Half Face	☐ SAR - Airline
☐ Cart./Canister	☐ SCBA
☐ Full Face	☐ Comb. Airline/SCBA
☐ Cart./Canister	☐ Cascade System
☐ PAPR	☐ Compressor
☐ Cart./Canister	☐ Fall Protection
☐ Type C	☐ Flotation
☐ Fall Protection	☐ Other
☐ Flotation	
☐ Other	

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5. MONITORING PROGRAM

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5.1 SITE OR PROJECT HAZARD MONITORING PROGRAM

5.1.1 Air Monitoring Instruments

Instrument Selection and Initial Check Record
Reporting Format: ☒ Field Notebook ☒ Field Data Sheets* ☐ Air Monitoring Log ☐ Trip Report ☐ Other

Instrument	Task No.(s)	Number Required	Number Received	Checked Upon Receipt	Comment	Initials
☐ **RAD**				☐		
☐ GM (Pancake)				☐		
☐ NaI (Micro R)				☐		
☐ ZnS (Alpha Scintillator)				☐		
☐ Other _____				☐		
☒ **PID**				☐		
☒ MiniRAE	1-3			☐		
☐ MultiRAE (LEL/O2/H2S/CO/PID)				☐		
☐ TVA 1000 (PID/FID)				☐		
☐ Other _____				☐		
☐ **FID**						
☐ TVA 1000 (FID/PID)				☐		
☐ Other _____				☐		
☒ **PDR 1000 (Particulate)**	1-3			☐		
☐ **Single Gas Meter (SGM)**				☐		
Specify Chemical:				☐		
☐ **Personal Sampling Pump**				☐		
Specify Media:				☐		
☐ Bio-Aerosol Monitor				☐		
☐ Tubes/type: _____						
☐ Tubes/type: _____						
☐ Tubes/type: _____						
☐ Tubes/type: _____						

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5.1 SITE OR PROJECT HAZARD MONITORING PROGRAM

5.1.1 Air Monitoring Instruments Calibration Record

Instrument, Mfg., Model, Equip. ID No.	Date	Time	Calib. Material	Calib. Method Mfg.'s	Other	Initial Setting and Reading	Final Setting and Reading	Calibrator's Initials

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5.2 SITE AIR MONITORING PROGRAM

Action Levels

These Action Levels, if not defined by regulation, are some percent (usually 50%) of the applicable PEL/TLV/REL. That number must also be adjusted to account for instrument response factors.

	Tasks	Action Level		Action
☐ **Explosive or Flammable Atmosphere**		Ambient Air Concentration	Confined Space Concentration	
		<10% LEL	0 to 1% LEL	Work may continue. Consider toxicity potential.
		10 to 25% LEL	1 to 10% LEL	Work may continue. Increase monitoring frequency.
		>25% LEL	>10% LEL	Work must stop. Ventilate area before returning.
☐ **Oxygen**		Ambient Air Concentration	Confined Space Concentration	
		<19.5% O_2	<19.5% O_2	Leave area. Re-enter only with self-contained breathing apparatus.
		19.5% to 25% O_2	19.5% to 23.5% O_2	Work may continue. Investigate changes from 21%.
		>25% O_2	>23.5% O_2	Work must stop. Ventilate area before returning.
☐ **Radiation**	3, Radiation screening related to XRF to be performed by selected subcontractor for XRF work	< 3 times background		Continue work.
		3 times background to < 1 mR/hour		Radiation above background levels (normally 0.01-0.02 mR/hr) signifies possible radiation source(s) present. Continue investigation with caution. Perform thorough monitoring. Consult with a Health Physicist.
		> 1 mrem/hour		Potential radiation hazard. Evacuate site. Continue investigation only upon the advice of Health Physicist.
☒ **Organic Gases and Vapors**	1, 2	1.0 units sustained		Increase monitoring frequency. Stop work and evaluate appropriate PPE
☒ **Inorganic Gases, Vapors, and Particulates**	1, 2	100 µg/m^3 above background per 15-minute period		Continue work with dust suppression techniques. If levels exceed 150 µg/m^3 above background per 15-minute period. Stop work and re-evaluate dust suppression.

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5.3 ACTION LEVELS

(Attach action level calculations)

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6. HOSPITAL INFORMATION

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6.1 CONTINGENCIES

6.1.1 Emergency Contacts and Phone Numbers

Agency	Contact	Phone Number
WorkCare WESTON Medical Director WorkCare WESTON Program Administrator	Dr. Peter Greaney Heather Lind	**From 6 am to 4:30 pm Pacific Time** call 800-455-6155 and dial 0 for the Operator or ext. 475 for Heather Lind to request the on-call clinician.
After-Business Hours Contact (In Case of Emergency Only)		**4:31 p.m. – 5:59 a.m. Pacific Time, all day Saturday, Sunday, and Holidays** call 800-455-6155 Dial 3 to reach the after-hours answering service. Request that the service connect you with the on-call clinician or the on-call clinician will return your call within 30 minutes.
WESTON Corporate Environmental Health & Safety Director	Harold Hannah	(610) 701-3024 - (267) 516-0274 (Cell)
WESTON Health & Safety Division Safety Manager	George Crawford	(610) 701-3771 - (484) 437-5976 (Cell)
WESTON Health & Safety Local Safety Officer	George Crawford	(610) 701-3771- (484) 437-5976 (Cell)
Fire Department		911
Police Department		911
WESTON FSO Cell Phone		
WESTON PM Cell Phone	John Sontag	(610) 701-3679
Client Site Phone		
Site Telephone		
Nearest Telephone		
Poison Control		(800) 222-1222

Local Medical Emergency Facility(s) - LMF

Name of Hospital: Guthrie Corning Hospital		
Address: 1 Guthrie Drive, Corning, NY 14830		Phone No.: 607-937-8674
Name of Contact:		Phone No.:
Type of Service: **X** Physical trauma only ☐ Chemical exposure only ☐ Physical trauma and chemical exposure ☐ Available 24 hours	**Route to Hospital:** **(See Attached)**	**Travel time from site:** 9 Minutes **Distance to hospital:** 5.2 Miles **Name/no. of 24-hr ambulance service:** 911

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Secondary or Specialty Service Provider		
Name of Hospital:		
Address:		Phone No.:
Name of Contact:		Phone No.:
Type of Service: ☐ Physical trauma only ☐ Chemical exposure only ☐ Physical trauma and chemical exposure ☐ Available 24 hours	**Route to Hospital (see attached):**	**Travel time from site:** **Distance to hospital:** **Name/no. of 24-hr ambulance service:** /

See reporting an incident in Attachment F.

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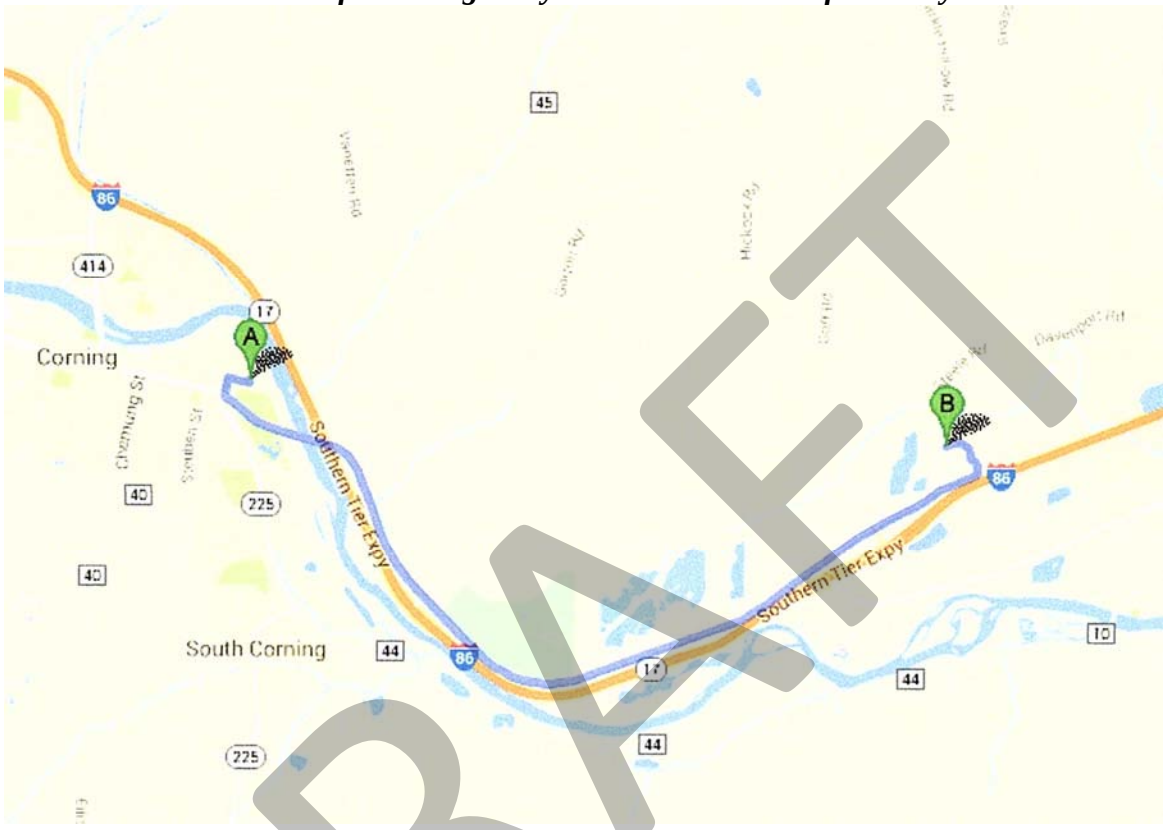
6.1.2 Hospital Map

This map is subject to Google's Terms of Service, and Google is the owner of rights therein. Portions of this image may have been removed for clarity.



A 59 Canisteo St, Corning, NY 14830

1. Head **south** on **Canisteo St** toward **Woodview Ave**	go 82 ft total 82 ft
2. Take the 1st right onto **Woodview Ave**	go 0.1 mi total 0.1 mi
3. Take the 1st left onto **Conhocton St**	go 495 ft total 0.2 mi
4. Take the 2nd left onto **NY-352 E/E Corning Rd/Denison Pkwy E** Continue to follow NY-352 E/E Corning Rd About 5 mins	go 3.8 mi total 4.0 mi
5. Continue straight onto **E Corning Rd** Destination will be on the left About 2 mins	go 1.2 mi total 5.2 mi

B **Guthrie Corning Hospital**
1 Guthrie Drive, Corning, NY 14830

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6.1 CONTINGENCIES

6.1.3 Response Plans

Medical - General Provide first aid, if trained; assess and determine need for further medical assistance. Transport or arrange for transport after appropriate decontamination. LMF = Local Medical Facility	First Aid Kit: ☒ Yes ☐ No Blood Borne Pathogens Kit: ☒ Yes ☐ No	**Type** Appropriate sized ANSI-approved Type III Kit, plus BBP	**Location** In Vehicle near work area	Special First-Aid Procedures: Cyanides on-site ☐ Yes ☒ No If yes, contact LMF. Do they have antidote kit? ☐ Yes ☐ No
	Eyewash required ☒ Yes ☐ No	**Type**	**Location**	**HF** on-site ☐ Yes ☒ No If yes, need neutralizing ointment for first-aid kit. Contact LMF.
	Shower required ☐ Yes ☒ No	**Type**	**Location**	

Plan for Response to Spill/Release		**Plan for Response to Fire/Explosion**		**Fire Extinguishers**
In the event of a spill or release, ensure safety, assess situation, and perform containment and control measures, as appropriate.	a. Cleanup per SDSs if small; or sound alarm, call for assistance, notify Emergency Coordinator b. Evacuate to pre-determined safe place c. Account for personnel d. Determine if team can respond safely e. Mobilize per Site Spill Response Plan	In the event of a fire or explosion, ensure personal safety, assess situation, and perform containment and control measures, as appropriate:	a. Sound alarm and call for assistance, notify Emergency Coordinator b. Evacuate to predetermined safe place c. Account for personnel d. Use fire extinguisher <u>only if safe and trained</u> in its use e. Stand by to inform emergency responders of materials and conditions	Type/Location ABC/Vehicle / / / / / /
Description of Spill Response Gear	Location	Description (Other Fire Response Equipment)		Location

Plan to Respond to Security Problems 911 Emergency

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7. DECONTAMINATION PLAN

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7.1 GENERAL DECONTAMINATION PLAN

Personnel Decontamination

Consistent with the levels of protection required, step-by-step procedures for personnel decontamination for each level of protection are attached.

Level D PPE with used PPE properly disposed on-site

Levels of Protection Required for Decontamination Personnel

The levels of protection required for personnel assisting with decontamination will be:

☐ Level B ☐ Level C ☒ Level D

Modifications include:

Disposition of Decontamination Wastes

Drill cuttings and other waste soil/water generated during characterization activities will be containerized daily in 55-gallon drums or other appropriate containers (as described in the Study Area Work Plan). The filled containers will be staged in a secure, designated area (TBD). The waste soil and waste water will be properly disposed in accordance with sample results.

Equipment Decontamination

A procedure for decontamination steps required for non-sampling equipment and heavy machinery follows:

Equipment will be decontaminated in accordance with the decontamination SOP included in the Study Area Work Plan.

Sampling Equipment Decontamination

Sampling equipment will be decontaminated in accordance with the following procedure:

All non-dedicated sampling and monitoring equipment will be decontaminated in accordance with the decontamination SOP included in the Study Area Work Plan.

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7.2 LEVEL D DECONTAMINATION PLAN

Check indicated functions or add steps, as necessary:

Function	Description of Process, Solution, and Container
☐ Segregated equipment drop	
☐ Boot cover and glove wash	
☐ Boot cover and glove rinse	
☐ Tape removal - outer glove and boot	
☐ Boot cover removal	
☐ Outer glove removal	
HOTLINE	
☐ Suit/safety boot wash	
☐ Suit/boot/glove rinse	
☐ Safety boot removal	
☐ Suit removal	
☐ Inner glove wash	
☐ Inner glove rinse	
☐ Inner glove removal	
☐ Inner clothing removal	
CONTAMINATION REDUCTION ZONE (CRZ)/SAFE ZONE BOUNDARY	
☐ Field wash	
☐ Redress	

Disposal Plan, End of Day:

Disposal Plan, End of Week:

Disposal Plan, End of Project:

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7.3 LEVEL C DECONTAMINATION PLAN

Check indicated functions or add steps, as necessary:

Function	Description of Process, Solution, and Container
☐ Segregated equipment drop	
☐ Boot cover and glove wash	
☐ Boot cover and glove rinse	
☐ Tape removal - outer glove and boot	
☐ Boot cover removal	
☐ Outer glove removal	
HOTLINE	
☐ Suit/safety boot wash	
☐ Suit/boot/glove rinse	
☐ Safety boot removal	
☐ Suit removal	
☐ Inner glove wash	
☐ Inner glove rinse	
☐ Face piece removal	
☐ Inner glove removal	
☐ Inner clothing removal	
CONTAMINATION REDUCTION ZONE (CRZ)/SAFE ZONE BOUNDARY	
☐ Field wash	
☐ Redress	

Disposal Plan, End of Day:

Disposal Plan, End of Week:

Disposal Plan, End of Project:

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7.4 LEVEL B ( ) or Level A ( ) DECONTAMINATION PLAN

Check indicated functions or add steps, as necessary:

Function	Description of Process, Solution, and Container
☐ Segregated equipment drop	
☐ Boot cover and glove wash	
☐ Boot cover and glove rinse	
☐ Tape removal - outer glove and boot	
☐ Boot cover removal	
☐ Outer glove removal	
HOTLINE	
☐ Suit/safety boot wash	
☐ Suit/SCBA/boot/glove rinse	
☐ Safety boot removal	
☐ Remove SCBA backpack without disconnecting	
☐ Splash suit removal	
☐ Inner glove wash	
☐ Inner glove rinse	
☐ SCBA disconnect and face piece removal	
☐ Inner glove removal	
☐ Inner clothing removal	
CONTAMINATION REDUCTION ZONE (CRZ)/SAFE ZONE BOUNDARY	
☐ Field wash	
☐ Redress	

Disposal Plan, End of Day:
All materials will be decontaminated daily in accordance with the decontamination SOP included in the Study Area Work Plan and containerized in 55-gallon drums or other appropriate containers in a secure area.

Disposal Plan, End of Week:

Disposal Plan, End of Project:
All material, will be disposed of properly and in accordance with sampling results.

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8. TRAINING AND BRIEFING TOPICS/SIGN OFF SHEET

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8.1 TRAINING AND BRIEFING TOPICS

The following items will be covered at the site-specific training meeting, daily or periodically.

☒ Site characterization and analysis, Sec. 3.0, 29 CFR 1910.120 I	☐ Level A
☒ Physical hazards	☐ Level B
☒ Chemical hazards	☐ Level C
☒ Animal bites, stings, and poisonous plants	☒ Level D
☐ Etiologic (infectious) agents	☒ Monitoring, 29 CFR 1910.120 (h)
☒ Site control, 29 CFR 1910.120 d	☒ Decontamination, 29 CFR 1910.120 (k)
☒ Engineering controls and work practices, 29 CFR 1910.120 (g)	☒ Emergency response, 29 CFR 1910.120 (l)
☒ Heavy machinery	☒ Elements of an emergency response, 29 CFR 1910.120 (l)
☐ Forklift	☒ Procedures for handling site emergency incidents, 29 CFR 1910.120 (l)
☒ Backhoe	☒ Off-site emergency response, 29 CFR 1910.120 (l)
☒ Equipment	☒ Handling drums and containers, 29 CFR 1910.120 (j)
☒ Tools	☐ Opening drums and containers
☐ Ladder, 29 CFR 1910.25.26.26 + 29 CFR 1926.1053	☐ Electrical material handling equipment
☒ Overhead and underground utilities	☐ Radioactive waste
☐ Scaffolds	☐ Shock-sensitive waste
☐ Structural integrity	☐ Laboratory waste packs
☐ Unguarded openings - wall, floor, ceilings	☐ Sampling drums and containers
☐ Pressurized air cylinders	☒ Shipping and transport, 49 CFR 172.101, IATA
☒ Personal protective equipment, 29 CFR 1910.120 (g); 29 CFR 1910.134	☐ Tank and vault procedures
☐ Respiratory protection, 29 CFR 1910.120 (g); ANSI Z88.2	☐ Illumination, 29 CFR 1926.26
☒ Working over water FLD-19 ☐	☐ Sanitation, 29 CFR 1926.27
☐ Boating safety FLD-18	☒ Proper lifting techniques
☒ Heat Stress / Cold Stress	☒ Lead, Arsenic, Cadmium exposure training

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8.2 HEALTH AND SAFETY PLAN APPROVAL/SIGNOFF FORM

Site Name: Study Area, Corning, New York	**WO#:** 02005.056.001.0001
Address: Located in Corning, New York on the north bank of the Chemung River (see Figure 1).	
I understand, agree to, and will conform with the information set forth in this Health and Safety Plan (and attachments) and discussed in the personnel health and safety briefing(s).	

Name	Signature	Date

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ATTACHMENT A
CHEMICAL CONTAMINANTS DATA SHEETS

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ATTACHMENT B
SAFETY DATA SHEETS

(ATTACH SDS)

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ATTACHMENT C

SAFETY PROCEDURES/FIELD OPERATING PROCEDURES (FLD OPS)

In lieu of attaching individual copies of FLDs, the site safety officer or his designee may elect to maintain an electronic copy of the WESTON Corporate Environmental Compliance, Health, and Safety Program Manual (including all FLDs) on site in an electronic format. The most recent version of the CEHS Program Manual and supporting documents are located at:
http://portal/services/EHS/SitePages/CEHSProgramElements.aspx

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ATTACHMENT D
HAZARD COMMUNICATION PROGRAM

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SITE-SPECIFIC HAZARD COMMUNICATION PROGRAM

Location-Specific Hazard Communication Program/Checklist

To ensure an understanding of and compliance with the Hazard Communication Standard, WESTON will use this checklist/document (or similar document) in conjunction with the WESTON Written Hazard Communication Program as a means of meeting site- or location-specific requirements.

While responsibility for activities within this document reference the WESTON Safety Officer (SO), it is the responsibility of all personnel to ensure compliance. Responsibilities under various conditions can be found within the WESTON Written Hazard Communication Program.

To ensure that information about the dangers of all hazardous chemicals used by WESTON is known by all affected employees, the following Hazard Communication Program has been established. All affected personnel will participate in the Hazard Communication Program. This written program, as well as WESTON's Corporate Hazard Communication Program, will be available for review by any employee, employee representative, representative of OSHA, NIOSH, or any affected employer/employee on a multi-employer site.

☐ Site or other location name/address: Study Area, Corning, NY

☐ Site/Project/Location Manager: John Sontag

☐ Site/Location Safety Officer: TBD

☐ List of chemicals compiled, format: **x** HASP ☐ Other: _____

☐ Location of SDS files: Attached

☐ Training conducted by: Name: TBD Date: _____

☐ Indicate format of training documentation: **X** Field Log: ☐ Other: _____

☐ Client briefing conducted regarding hazard communication: _____

☐ If multi-employer site (client, subcontractor, agency, etc.), indicate name of affected companies:

_____

☐ Other employer(s) notified of chemicals, labeling, and SDS information: _____

☐ Has WESTON been notified of other employer's or client's hazard communication program(s), as necessary? ☐ Yes **X** No

List of Hazardous Chemicals

A list of known hazardous chemicals used by WESTON personnel must be prepared and attached to this document or placed in a centrally identified location with the SDSs. Further information on each chemical may be obtained by reviewing the appropriate SDS. The list will be arranged to enable cross-reference with the SDS file and the label on the container. The SO or Location Manager is responsible for ensuring the chemical listing remains up-to-date.

Container Labeling

The WESTON SO will verify that all containers received from the chemical manufacturer, importer, or distributor for use on-site are clearly labeled.

The SO is responsible for ensuring that labels are placed where required and for comparing SDSs and other information with label information to ensure correctness.

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Safety Data Sheets (SDSs)

The SO is responsible for establishing and monitoring WESTON's SDS program for the location. The SO will ensure that procedures are developed to obtain the necessary SDSs and will review incoming SDSs for new or significant health and safety information. He/she will see that any new information is passed on to the affected employees. If an SDS is not received at the time of initial shipment, the SO will call the manufacturer and have an SDS delivered for that product in accordance with the requirements of WESTON's Written Hazard Communication Program.

A log for, and copies of, SDSs for all hazardous chemicals in use will be kept in the SDS folder at a location known to all site workers. SDSs will be readily available to all employees during each work shift. If an MSDS is not available, immediately contact the WESTON SO or the designated alternate. When a revised SDS is received, the SO will immediately replace the old SDS.

Employee Training and Information

The SO is responsible for the WESTON site-specific personnel training program. The SO will ensure that all program elements specified below are supplied to all affected employees.

At the time of initial assignment for employees to the work site, or whenever a new hazard is introduced into the work area, employees will attend a health and safety meeting or briefing that includes the information indicated below.

- Hazardous chemicals present at the work site.
- Physical and health risks of the hazardous chemicals.
- The signs and symptoms of overexposure.
- Procedures to follow if employees are overexposed to hazardous chemicals.
- Location of the SDS file and Written Hazard Communication Program.
- How to determine the presence or release of hazardous chemicals in the employee's work area.
- How to read labels and review SDSs to obtain hazard information.
- Steps WESTON has taken to reduce or prevent exposure to hazardous chemicals.
- How to reduce or prevent exposure to hazardous chemicals through the use of controls procedures, work practices, and personal protective equipment.
- Hazardous, non-routine tasks to be performed (if any).
- Chemicals within unlabeled piping (if any).

Hazardous Non-routine Tasks

When employees are required to perform hazardous non-routine tasks, the affected employee(s) will be given information by the SO about the hazardous chemicals he or she may use during such activity. This information will include specific chemical hazards, protective and safety measures the employee can use, and steps WESTON is using to reduce the hazards. These steps include, but are not limited to, ventilation, respirators, presence of another employee, and emergency procedures.

Chemicals in Unlabeled Pipes

Work activities may be performed by employees in areas where chemicals are transferred through unlabeled pipes. Prior to starting work in these areas, the employee will contact the SO, at which time information as to the chemical(s) in the pipes, potential hazards of the chemicals or the process involved, and the safety precautions that should be taken will be determined and presented.

Multi-Employer Work Sites

It is the responsibility of the SO to provide other employers with information about hazardous chemicals imported by WESTON to which their employees may be exposed, along with suggested safety precautions. It is also the responsibility of the SO and the Site Manager to obtain information about hazardous chemicals used by other employers to which WESTON employees may be exposed.

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WESTON's chemical listing will be made available to other employers, as requested. SDSs will be available for viewing, as necessary.

The location, format, and/or procedures for accessing SDS information must be relayed to affected employees.

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ATTACHMENT E
AIR SAMPLING DATA SHEETS

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AIR MONITORING PROGRAM

Field Data Sheets

Location:

% LEL	% O_2	PID (units)	FID (units)	Aerosol Monitor (mg/m^3)	GM: Shield Probe/ Thin Window		NaI (uR/hr)	ZnS (cpm)
					mR/hr	cpm		
Monitox (ppm)				**Detector Tube(s)**				
Sound Levels (dBA)		**Illumination**	**pH**	**Other**	**Other**	**Other**	**Other**	**Other**

Location:

% LEL	% O_2	PID (units)	FID (units)	Aerosol Monitor (mg/m^3)	GM: Shield Probe/ Thin Window		NaI (uR/hr)	ZnS (cpm)
					mR/hr	cpm		
Monitox (ppm)				**Detector Tube(s)**				
Sound Levels (dBA)		**Illumination**	**pH**	**Other**	**Other**	**Other**	**Other**	**Other**

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AIR MONITORING/SAMPLING DATA LOG

Client:	**W.O. No.:**	**Sample No.:**
Address:	**Sampled By:**	**Date:**

Employee and Location Information

Employee Name:	**Employee No.:**	**Job Title:**

Respirator ☐ APR ☐ ½ Mask ☐ Full Face
☐ PAPR ☐ ½ Mask ☐ Full Face ☐ Hood
☐ SAR ☐ ½ Mask ☐ Full Face ☐ Hood
☐ SCBA

Manufacturer:

Cartridge Type:

PPE: ☐ Hard Hat ☐ HPD ☐ Gloves ☐ Safety Shoes ☐ Coveralls ☐ Other:

Sampling Data

Sampling Type: ☐ Personal
☐ TWA ☐ STEL ☐ Area ☐ Source
☐ Full Shift ☐ Partial Shift ☐ Grab

Media:

Pump Type/Serial No.:
/

Calibrator/Serial No.:
/

Pre-Calibration:
1.
2.
3.
avg-pre:

Post-Calibration:
1.
2.
3.
avg-post:

Start Time:	**Restart Time:**	**Restart Time:**	**Avg. Flow rate:**	**% Change:**
1st Stop Time:	**2nd Stop Time:**	**3rd Stop Time:**	**Total Time:**	**Volume:**

Multiple Samples for this TWA: ☐ Yes ☐ No	**Multiple Chemical Exposures:** ☐ Yes ☐ No	**Exposure Time:** ☐ Normal ☐ Worst Case

Sampling Conditions

Weather Conditions:
Temp: R.H: B.P.: Other:

Engineering Controls:

Substances Evaluated

Substance	Result	Substance	Result	Substance	Result

Observations and Comments

QA by: _____ **Date:** _____

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ATTACHMENT F
INCIDENT REPORTING

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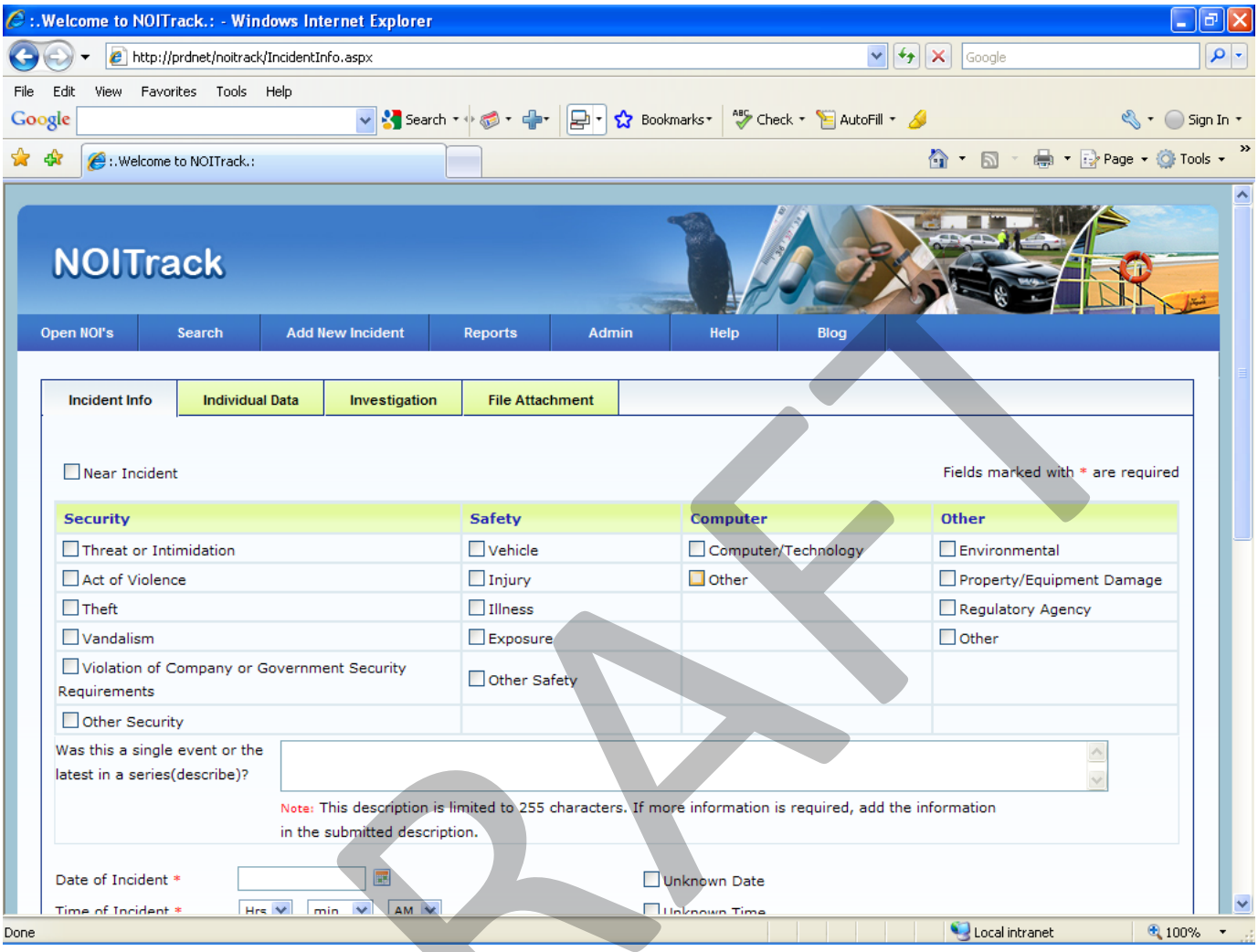

Please go to NOITrack using the following link to complete incident reporting. If you are in the field and do not have access to NOITrack, please contact someone in your office to do the reporting for you.

http://asweb/noitrack/IncidentInfo.aspx

Questions can be directed to Susan Hipp-Ludwick at 610.701.3046.

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ATTACHMENT G
TRAFFIC CONTROL PLAN

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ATTACHMENT H
ENVIRONMENTAL HEALTH & SAFETY INSPECTION CHECKLIST

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ENVIRONMENTAL HEALTH AND SAFETY INSPECTION CHECKLIST

Project Name: _____

Inspector: _____

Submit to: _____

Date: _____

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THE WESTON SITE APPEARANCE

YES	NO		COMMENT
☐	☐	Is the site secured to prevent inadvertent, unnecessary, or unauthorized access? Are gates closed and locked at any time that the access point is not occupied or visible to site workers?	
☐	☐	Are access points posted with signs to indicate client and end-user client name, WESTON's name and logo, names of other contractors and sub-contractors, project name and location, and appropriate safety messages?	
☐	☐	Are required postings in place (e.g., Labor Poster, Emergency Phone Numbers, Site Map, etc.)?	
☐	☐	Are site trailers tied down per local code and provided with stairs that have a landing platform with guard and stair railings?	
☐	☐	Is a Site Safety file system established in the office to maintain records required by applicable safety regulations	
☐	☐	Is the Health and Safety Plan (HASP) or Accident Prevention Plan (APP) amended as scope of work changes, hazards are discovered or eliminated or if risk change?	
☐	☐	Is the Site Safety Plan and the Safety Officers Field Manual on site?	
☐	☐	Is new employee indoctrination provided?	
☐	☐	Have site Rules been provided, discussed and signed off on by all employees	
☐	☐	Incident Reporting procedure explained to all?	
☐	☐	Is site management trained in the WESTON (and client as applicable) Incident Reporting system?	
☐	☐	Are NOI and Supplemental Report forms and OSHA 300 Log available on site?	
☐	☐	Is Site Management aware of the Case Management and Incident Investigation Procedures?	
☐	☐	Is there a list of preferred provider medical facilities available?	
☐	☐	Has the "Inspection By A Regulatory Agency" procedure been reviewed by all site management?	
☐	☐	Will Competent Persons be required because of activities to be performed, equipment to be used or hazards to be encountered?	

POLICIES

YES	NO		COMMENT
☐	☐	Each individual employee is aware that he or she responsible for complying with applicable safety requirements, wearing prescribed safety equipment and preventing avoidable accidents.	
☐	☐	Do employees understand that they will wear clothing suitable for existing weather and work conditions and the minimum work uniform will include long pants, sleeved work shirts, protective footwear, hard hat, and safety glasses unless otherwise specified via the HASP.	
☐	☐	Are employees provided safety and health training to enable them to perform their work safely? Is all training documented to indicate the date of the session, topics covered, and names of participants?	
☐	☐	Safety meetings are conducted daily. The purpose of the meetings are to review past activities, review pertinent tailgate safety topics and establish safe working procedures for anticipated hazards encountered during the day.	
☐	☐	Training has been provided to all personnel regarding handling of emergency situations that may arise from the activity or use of equipment on the project.	
☐	☐	Employees/contractors are informed and understand that they may not be under the influence of alcohol, narcotics, intoxicants, or similar mind-altering substances at any time. Employees found under the influence of or consuming such substances will be immediately removed from the job site.	
☐	☐	Site workers and operators of any equipment or vehicles are able to read and understand the signs, signals, and operating instructions of their use.	
☐	☐	Have contractors performing work provided copies of relevant documentation (such as medical fit-for-duty, training certificates, fit-tests, etc.) prior to initiation of the project?	

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SANITATION
29 CFR 1926 Subparts C, D. EM 385-1-1, Section 2

YES	NO		COMMENT
☐	☐	Is an adequate supply of drinking water provided? Is potable/drinking water labeled as such? Are there sufficient drinking cups provided?	
☐	☐	Are there a sufficient number of toilets?	
☐	☐	Are washing facilities readily available and appropriate for the cleaning needs?	
☐	☐	Are washing facilities kept sanitary with adequate cleansing and drying materials?	
☐	☐	Waste is secured so as not to attract rodents, insects, or other vermin?	
☐	☐	Is an effective housekeeping program established and implemented?	

ACCIDENT PREVENTION SIGNS, TAGS, LABELS, SIGNALS, AND PIPING SYSTEM IDENTIFICATION
29 CFR 1926 Subpart G. EM 385-1-1, Section 8

YES	NO		COMMENT
☐	☐	Are signs, tags, and labels provided to give adequate warning and caution of hazards and instruction/directions to workers and the public?	
☐	☐	Are all employees informed as to the meaning of the various signs, tags, and labels used in the workplace and what special precautions are required?	
☐	☐	Are construction areas posted with legible traffic signs at points of hazard?	
☐	☐	Are signs required to be seen at night lighted or reflectorized?	
☐	☐	Tags contain a signal word (“danger” or “caution”) and a major message to indicate the specific hazardous condition or the instruction to be communicated to the employee. Tags follow requirements as outlined in 29 CFR 1926.200.	

MEDICAL SERVICES AND FIRST AID
29 CFR 1926 Subparts C, D. EM 385-1-1, Section 3

YES	NO		COMMENT
☐	☐	Is a local medical emergency facility (LMEF) identified in the HASP or APP?	
☐	☐	Has the LMEF been visited to verify the directions and establish contacts?	
☐	☐	Has site management reviewed WESTON’s incident management procedures?	
☐	☐	Have clinics and specialists that will help WESTON manage injuries and illnesses been identified?	
☐	☐	Is there at least two (2) people certified in First Aid and CPR?	
☐	☐	Are first aid kits available at the command post and appropriate remote locations?	
☐	☐	Are first Aid Kits and Eyewash/Safety Showers inspected weekly?	
☐	☐	Are 15 minute eyewash/safety showers in place if required?	

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FIRE PREVENTION AND PROTECTION
29 CFR 1926 Subpart F. EM 385-1-1, Section 9

YES	NO		COMMENT
☐	☐	Is an Emergency Response and Contingency Plan in place?	
☐	☐	Are emergency phone numbers posted?	
☐	☐	Are fire extinguishers selected and provided based on the types of materials and potential fire classes in each area?	
☐	☐	Are fire extinguishers provided in each administrative and storage trailer, within 50 ft but no closer than 25 ft of any fuel or flammable liquids storage, on welding and cutting equipment, on mechanical equipment?	
☐	☐	Are fire extinguishers checked daily and inspected monthly?	
☐	☐	Do site personnel know the location of fire extinguishers and how to use them?	
☐	☐	Are flammable and combustible liquids stored in approved containers?	
☐	☐	Safety cans are used for dispensing flammable or combustible liquids in 5 gallon or less volumes.	
☐	☐	Are flammable and combustible liquids stored in flammable storage cabinets or appropriate storage areas?	
☐	☐	Are flammable materials separated from oxidizers by at least 20 feet (or 5 foot tall, ½ -hour rated fire wall) when in storage?	
☐	☐	Are fuel storage tanks double walled or placed in a lined berm?	
☐	☐	Spills are cleaned up immediately and wastes are disposed of properly.	
☐	☐	Combustible scrap, debris, and waste material (oily rags) are stored in closed metal containers and disposed of promptly.	
☐	☐	Vehicle fueling tanks are grounded and bonding between the tank and vehicle being fueled is provided?	
☐	☐	LPG is stored, handled, and used according to OSHA regulations 29 CFR 1926.	
☐	☐	LPG cylinders are not stored indoors.	
☐	☐	Is a hot work permit program in place? See WESTON FLD-36	
☐	☐	Is smoking limited to specific areas, prohibited in flammable storage areas and are signs posted to this effect?	

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HAZARDOUS SUBSTANCES, AGENTS, AND ENVIRONMENTS
29 CFR 1926 Subparts D, Z. EM 385-1-1, Sections 6, 28

YES	NO		COMMENT
☐	☐	Are operations, materials and equipment evaluated to determine the presence of hazardous contaminants or if hazardous agents could be released in the work environment?	
☐	☐	Are SDS for substances made available at the work-site when any hazardous substance is procured, used, or stored?	
☐	☐	Are all containers and piping containing hazardous substances labeled appropriately?	
☐	☐	Is there an inventory of hazardous substances?	
☐	☐	Is there a site Specific Hazard Communication Program?	
☐	☐	Spill kits appropriate for the hazardous materials present are on site and their location is known to spill responders.	
☐	☐	Is disposal of excess hazardous chemicals performed according to WESTON's guidelines and RCRA regulations?	
☐	☐	Before initiation of activities where there is an identified asbestos or lead hazard, is there a written plan detailing compliance with OSHA and EPA asbestos or lead abatement requirements? Does the plan comply with state and local authority, and USACE requirements, as applicable?	
☐	☐	Are personnel trained and provided with protection against hazards from animals, poisonous plants, and insects?	

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PERSONAL PROTECTIVE AND SAFETY EQUIPMENT, RESPIRATORY AND FALL PROTECTION
29 CFR 1926 Subparts D, E, M. EM 385-1-1, Section 5

YES	NO		COMMENT
☐	☐	Do employees understand that the minimum PPE is hard hat, safety glasses with side shields and safety shoes or boots and that long pants and a sleeved shirt are required?	
☐	☐	Has the SSHC reviewed the PPE requirements in the HASP against actual site conditions and certified that the PPE is appropriate? (see Field Manual, PPE Program)	
☐	☐	PPE is inspected, tested and maintained in serviceable and sanitary condition as recommended by the manufacturer. Is defective or damaged equipment taken out of service and repaired or replaced?	
☐	☐	Are workers trained in the use of the PPE required?	
☐	☐	Are personnel exposed to vehicular or equipment traffic, including signal persons, spotters or inspectors required to vests or apparel marked with a reflective or high visibility material?	
☐	☐	Is there a noise hazard? If yes, hearing protection will be required.	
☐	☐	Is there a splash or splatter hazard? Face shields or goggles will be required.	
☐	☐	Will personnel be working in or over water? Personnel Floatation devices will be required.	
☐	☐	Is there a welding hazard? Welding helmet and leathers will be required. Is there a cutting torch hazard? Goggles and protective clothing will be required.	
☐	☐	Is each person on a walking/working surface with an unprotected side or edge which is 6 feet (1.8 m) or more above a lower level protected from falling by the use of guardrail systems, safety net systems or personal fall arrest systems? See WESTON FLD 25 (Note General Industry standard is four feet).	
☐	☐	Guardrail systems are used as primary protection whenever feasible. Guardrail construction meets criteria in 29 CFR 1926.502(b).	
☐	☐	Personal fall arrest systems (PFAS) are inspected and appropriate for use.	
☐	☐	Ropes and straps (webbing) used in lanyards, lifelines, and strength components of body belts and body harnesses are from synthetic fibers.	
☐	☐	Safety nets and safety net installations are constructed, tested and used according to 29 CFR 1926.502.c	
☐	☐	Is respirator use required? See WESTON Respiratory Protection Program	
☐	☐	Persons using respiratory protection have been successfully medically cleared, trained, and fit tested.	
☐	☐	Respirators are used according to the manufacturer's instructions, regulatory requirements, selection criteria, and health and safety plan provisions.	
☐	☐	For Level C operations with organic vapor contamination, is the cartridge change-out schedule documented?	
☐	☐	Is breathing certified as Grade D, or better, and certification available on-site?	

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MACHINERY AND MECHANIZED EQUIPMENT
29 CFR 1926 Subparts N, O, CC and DD. EM 385-1-1, Sections 16, 17, 18

YES	NO		COMMENT
☐	☐	Are inspections of machinery by a competent person established?	
☐	☐	Is equipment inspected daily before its next use?	
☐	☐	Equipment inspection reports are reviewed, followed-up on negative findings and records of inspections are maintained?	
☐	☐	Machinery or equipment found to be unsafe is taken out of service until the unsafe condition has been corrected.	
☐	☐	Is there a preventive maintenance program established?	
☐	☐	Are operators of equipment qualified and authorized to operate?	
☐	☐	Is all self-propelled construction and industrial equipment equipped with a reverse signal alarm?	
☐	☐	Are seats or equal protection provided for each person required to ride on equipment. Are seatbelts installed and worn on motor vehicles, as appropriate.	
☐	☐	All equipment with windshields is equipped with powered wipers. If fogging or frosting is possible, operable defogging or defrosting devices are required.	
☐	☐	Internal combustion engines are not operated in enclosed areas unless adequate ventilation is made. Air monitoring is conducted to assure safe working conditions.	
☐	☐	Is each bulldozer, scraper, dragline, crane, motor grader, front-end loader, mechanical shovel, backhoe, or similar equipment equipped with at least one dry chemical or carbon dioxide fire extinguisher with a minimum rating of 5-B:C?	
☐	☐	Will cranes or other lifting devices be used? If so, are the following documents available on site: 1) a copy of the operating manual, 2) load rating chart, 3) log book, 4) a copy of the last annual inspection and 5) the initial on-site inspection?	
☐	☐	Do operators have certificates of training to operate the type of crane(s) to be used?	
☐	☐	Is a signal person provided when the point of operation is not in full view of the vehicle, machine, or equipment operator? When manual (hand) signals are used, is only one person designated to give signals to the operator?	
☐	☐	Signal persons back one vehicle at a time. While under the control of a signal person, drivers do not back or maneuver until directed. Drivers stop if contact with the signal person is lost.	
☐	☐	Is a critical lift plan prepared by a competent person whenever: a lift is not routine, or a lift exceeds 75% of a crane's capacity, a lift results in the load being out of the operator's line of sight, or a lift involves more than one crane, a man basket is used, or the operator believes there is a need for a critical lift plan.	
☐	☐	Fork Lifts (Powered Industrial Trucks) - Will forklifts be used on site?	
☐	☐	All forklifts meet the requirements of design, construction, stability, inspection, testing, maintenance, and operation as indicated in ANSI/ASME B56.1 Safety Standards for Low Lift and High Lift Trucks.	
☐	☐	Do forklift operators have certificates of training?	
☐	☐	Are pile driving operations conducted according to EM 385-1-1, Section 16.L?	
☐	☐	Is drilling equipment operated, inspected, and maintained as specified in the manufacturer's operating manual? Is a copy of the manual available at the work-site? See also the Drilling Safety Guide in the Safety Officers Field Manual.	
☐	☐	Are flag persons provided when operations or equipment on or near a highway expose workers to traffic hazards? Do flag persons and persons working in proximity to a road wear high visibility vests? Are persons exposed to highway vehicle traffic protected by signs in all directions warning of the presence of the flag persons and the work? Do signs and distances from the work zone conform to federal and local regulations?	

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MOTOR VEHICLES
29 CFR 1926 Subpart O. EM 385-1-1, Section 18

YES	NO		COMMENT
☐	☐	Motor vehicle operators have a valid permit, license, or certification of ability for the equipment being operated.	
☐	☐	Inspection, maintenance, and repair is according to manufacturer's requirements by qualified persons.	
☐	☐	Vehicles are inspected on a scheduled maintenance program.	
☐	☐	Vehicles not in safe operating condition are removed from service until defects are corrected.	
☐	☐	Glass in windshields, windows, and doors is safety glass. Any cracked or broken glass is replaced.	
☐	☐	Seatbelts are installed and worn.	
☐	☐	The number of passengers in passenger-type vehicles does not exceed the number which can be seated.	
☐	☐	Trucks used to transport personnel have securely anchored seating, a rear end gate, and a guardrail.	
☐	☐	No person is permitted to ride with arms or legs outside of a vehicle body; in a standing position on the body; on running boards; seated on side fenders, cabs, cab shields, rear of the truck or on the load.	
☐	☐	ATV operators possess a valid state driver's license, have completed an ATV training course prior to operation of the vehicle, and wear appropriate protective equipment such as helmets, boots, and gloves.	

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EXCAVATING AND TRENCHING
29 CFR 1926 Subpart P. EM 385-1-1, Section 25

YES	NO		COMMENT
☐	☐	Has the known or estimated location of utility installations such as sewer, telephone, fuel, electric, water lines, or any other underground installations that may be expected to be encountered during excavation been determined before excavation? Have utility locations been verified by designated state services according to state regulations? Has the client provided clearance where state jurisdiction doesn't apply?	
☐	☐	Have overhead utilities in excavation areas been identified and either de-energized, shielded or barricaded so excavating equipment will not come within 10 feet?	
☐	☐	Are inspections of the excavation, the adjacent areas, and protective systems made daily and as necessary by a competent person?	
☐	☐	Are Protective systems in place as prescribed by the competent person?	
☐	☐	Is material removed from excavations managed so it will not overwhelm the protective systems?	
☐	☐	Are barriers provided between excavations and walkways?	
☐	☐	Are excavations by roadways barricaded to warn vehicles of presence or to prevent them from falling in?	
☐	☐	Is there a means of exit from the excavation every 25 feet?	
☐	☐	Is air monitoring required? If yes, Is it performed?	

CONFINED SPACES
29 CFR 1910 Subpart J. EM 385-1-1, Section 6

YES	NO		COMMENT
☐	☐	Is there a Confined Space Entry Program in place?	
☐	☐	Are the confined Spaces identified and labeled?	
☐	☐	Will the Confined Spaces be entered?	
☐	☐	Is appropriate entry documentation used and on-file?	

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ELECTRICAL
29 CFR 1926 Subpart K. EM 385-1-1, Section 11

YES	NO		COMMENT
☐	☐	Are electrical installations made according to the National Electrical Code and applicable local codes?	
☐	☐	Qualified electricians make all connections and perform all work within 10 feet of live electric equipment.	
☐	☐	Location of underground, overhead, under floor, behind wall electrical lines is known and communicated. Lines are documented by qualified person as de-energized where necessary.	
☐	☐	Workers understand they must not work near live parts of electric circuits, unless they are qualified as required by OSHA or are protected by de-energizing and grounding the parts, guarding the parts by insulation, or other effective means?	
☐	☐	Employees who regularly work on or around energized electrical equipment or lines are instructed in the cardiopulmonary resuscitation (CPR) methods.	
☐	☐	Workers are prohibited from working alone on energized lines or equipment over 600 volts.	
☐	☐	Are Ground-fault circuit interrupters (GFCI's) or is ground fault circuit protection provided to protect employees from ground-fault hazards for all 115 – 120 Volt, 15 and 20 amp receptacle outlets which are not a part of the permanent wiring of a building or structure at construction sites?	
☐	☐	Circuit breakers are labeled.	
☐	☐	Circuit breaker and all cabinets with exposed electric conductors are kept tightly closed.	
☐	☐	Unused openings (including conduit knockouts) in electrical enclosures and fittings are closed with appropriate covers, plugs, or plates.	
☐	☐	Sufficient access and working space is provided and maintained about all electrical equipment to permit ready and safe operations and maintenance.	
☐	☐	Motors are located within sight of their controllers or controller disconnecting means are capable of being locked in the pen position or is a separate disconnecting means installed in the circuit within sight of the motor.	
☐	☐	Are visual inspections of extension cords and cord-and plug-connected equipment conducted daily? Is equipment found damaged or defective tagged and removed from service, and not used until repaired?	
☐	☐	Wet Areas - Is portable lighting used in wet or conductive locations, such as tanks or boilers operated at no more than 12 volts and protected by GFCIs.	
☐	☐	Are electrical installations in hazardous areas to NEC?	
☐	☐	Metal ladders and tools including tape measures or fabric with metal thread are prohibited where contact with energized electrically parts is possible.	
☐	☐	All extension cords are the three-wire type, designed and rated for hard or extra hard usage?	
☐	☐	Worn or frayed electrical cords or cables are taken out of service. Fastening with staples, hanging from nails or suspending extension cords by wire is prohibited.	
☐	☐	Electric wire/flexible cord passing through work areas is protected from damage such as foot traffic, vehicles, sharp corners, projections and pinching? Flexible cords and cables passing through holes are protected by bushings or fittings?	
☐	☐	Before an employee or contractor performs any service or maintenance on a system where the unexpected energizing, start up, or release of kinetic or stored energy could occur and cause injury or damage, the system is to be isolated. Only authorized persons may apply and remove lockouts and tags.	
☐	☐	Contractors planning to use hazardous energy control procedures submit their hazardous energy control plan to the WESTON site safety officer or designee before implementing lockout/tagout procedures.	
☐	☐	There is a site specific hazardous energy control plan that clearly and specifically outlines the scope, purpose, authorization, rules and techniques to be used for the control of hazardous energy.	
☐	☐	Workers possess the knowledge and skills required for the safe application, usage, and removal of energy controls.	

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WELDING AND CUTTING
29 CFR 1926 Subpart J. EM 385-1-1, Section 10

YES	NO		COMMENT
☐	☐	Prior to performing welding, cutting or any other heat or spark producing activity, an assessment of the area is made by a competent person to identify combustible materials and potential sources of flammable atmospheres.	
☐	☐	Welders, cutters and their supervisors are trained in the safe operation of their equipment, safe welding and cutting practices, hot work permit requirements, and fire protection.	
☐	☐	Welding and cutting equipment is inspected daily before use. Unsafe equipment is taken out of use, replaced, or repaired.	
☐	☐	Workers and the public are shielded from welding rays, flashes, sparks, molten metal, and slag.	
☐	☐	Employees performing welding, cutting, or heating are protected by PPE appropriate for the hazards (e.g., respiratory, vision and skin protection).	
☐	☐	Compatible fire extinguishing equipment is provided in the immediate vicinity of welding or cutting operations.	
☐	☐	Drums, tanks, or other containers and equipment which have contained hazardous materials shall be thoroughly cleaned before welding or cutting. Cleaning shall be performed in accordance with NFPA 327, Cleaning or Safeguarding Small Tanks and Containers, ANSI/AWS F4.1, Recommended Safe Practices for the Preparation for Welding and Cutting of Containers That Have Held Hazardous Substances, and applicable health and safety plan requirements.	

HAND AND POWER TOOL SAFETY
29 CFR 1926 Subpart I. EM 385-1-1, Section 13

YES	NO		COMMENT
☐	☐	Power tools are from a manufacturer listed by a nationally recognized testing laboratory for the specific application for which they are to be used.	
☐	☐	Hand & power tools are inspected, maintained, tested, and determined to be in safe operating condition before use.	
☐	☐	Tools found to be unsafe are not used, tagged and repaired or destroyed.	
☐	☐	Users of tools are trained in safe use.	
☐	☐	Electrical tools have cords and plug connections in good repair.	
☐	☐	Electrical tools are effectively grounded or approved double insulated.	
☐	☐	Reciprocating, rotating, and moving parts of equipment are guarded if they may be accessed by employees or they otherwise create a hazard.	
☐	☐	Safety clips/retainers are installed and maintained on pneumatic impact tool connections.	
☐	☐	Chain saws have an automatic chain brake or anti-kickback device.	
☐	☐	Pneumatic and hydraulic hoses and fittings are inspected regularly.	
☐	☐	Employees who operate powder actuated tools are trained and carry valid operator's cards.	
☐	☐	Powder activated tools are stored in individual locked containers, when not in use and are not loaded until ready to use.	
☐	☐	Powder actuated tools are inspected for obstructions or defects daily before use.	
☐	☐	Powder actuated tool operators have appropriate PPE.	

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RIGGING
29 CFR 1926 Subpart H. EM 385-1-1, Section 15

YES	NO		COMMENT
☐	☐	Rigging equipment is inspected as specified by the manufacturer, by a qualified person, before use on each shift and as necessary to assure that it is safe.	
☐	☐	Defective equipment is removed from service.	
☐	☐	Rigging not in use is removed from the work area, properly stored, and maintained in good condition.	
☐	☐	Wire rope removed from service for defects is cut up or plainly marked as unfit for use as rigging.	
☐	☐	The number of saddle clips used to form eyes in wire rope conforms with Table H-20, are spaced evenly and the saddles are on the live side.	
☐	☐	Chain rigging has a tag clearly indicating load limits, is inspected before initial use, then weekly, and is of alloyed metal.	
☐	☐	Fiber rope rigging is not used if it is frozen or has been subject to acids or excessive heat.	
☐	☐	Slings and their fittings and fastenings are inspected before use on each shift and as needed during use.	
☐	☐	Drums, sheaves, and pulleys on rigging hardware are smooth and free of surface defects that can damage rigging.	

MATERIAL HANDLING, STORAGE, AND DISPOSAL
29 CFR 1926 Subpart H. EM 385-1-1, Section 14

YES	NO		COMMENT
☐	☐	Employees are trained in and use safe lifting techniques.	
☐	☐	Materials are not moved or suspended over workers unless positive precautions have been taken to protect workers.	
☐	☐	Conveyors are constructed, inspected, & maintained by qualified persons according to manufacturer's recommendations.	
☐	☐	All conveyors are to be equipped with emergency stopping devices.	
☐	☐	Hazardous exposed moving machine parts are guarded mechanically, electrically or by location.	
☐	☐	Controls are clearly marked and/or labeled to indicate the function controlled.	
☐	☐	Taglines are used for suspended loads where the movement may be hazardous to persons.	
☐	☐	Material in storage is protected from falling or collapse by effective stacking, blocking, cribbing, etc.	
☐	☐	Walkways and aisles are to be kept clear.	
☐	☐	Materials are not stored on scaffolds or runways in excess of normal placement or in excess of safe load limits.	
☐	☐	Work areas and means of access are maintained safe and orderly.	
☐	☐	Tools, materials, extension cords, hoses or debris do not cause tripping or other hazards.	
☐	☐	Storage and construction sites are kept free from the accumulation of combustible materials.	
☐	☐	Waste materials and rubbish are placed in containers or, if appropriate, in piles. Waste materials are disposed of in accord with applicable local, state, or federal requirements.	

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FLOATING PLANT AND MARINE ACTIVITIES
29 CFR 1926 Subpart O. EM 385-1-1 Section 19

YES	NO		COMMENT
☐	☐	Floating plants that are regulated by the USCG have current inspections and certificates.	
☐	☐	Before any floating plant is brought to the job site and placed in service it is inspected and determined to be in safe operating condition	
☐	☐	Periodic inspections are made such that safe operating conditions are maintained. Strict compliance with EM 385-1-1, Section 19 is expected.	
☐	☐	Plans are in place for removing or securing the plant and evacuation of personnel endangered by severe weather and other marine emergencies such as; fire, flooding, man overboard, hazardous materials incidents, etc.	
☐	☐	Means of access are properly secured, guarded, and maintained free of slipping and tripping hazards.	
☐	☐	Dredging operations follow guidelines as established in EM 385-1-1, Section 19.D.	

PRESSURIZED EQUIPMENT AND SYSTEMS
29 CFR 1926 Subparts I, F. EM 385-1-1, Section 20

YES	NO		COMMENT
☐	☐	Pressurized equipment and systems are inspected before being placed into service.	
☐	☐	Pressurized equipment or systems found to be unsafe are tagged “Out of Service-Do Not Use”.	
☐	☐	Systems and equipment are operated, inspected, and maintained by qualified, designated personnel.	
☐	☐	Safe clearance, lockout/tagout procedures are followed as appropriate during maintenance or repair.	
☐	☐	Air hose, pipes, fittings are pressure-rated for the activity. Defective hoses are removed from service.	
☐	☐	Hoses aren’t laid over ladders, steps, scaffolds, or walkways in a manner that creates a tripping hazard.	
☐	☐	The use of compressed air for personal cleaning is prohibited. The use of compressed air for other cleaning is restricted to less than 30 psig.	
☐	☐	Compressed gas cylinders are stored in well-ventilated locations.	
☐	☐	Cylinders in storage are separated from flammable or combustible liquids and from easily ignitable materials by at least 40 feet or by a minimum five feet tall, ½ -hour fire resistive partition.	
☐	☐	Stored cylinders containing oxidizing gases are separated from fuel gas cylinders by at least 20 feet or by a minimum five feet tall, ½ -hour fire resistive partition.	
☐	☐	Cylinder valve caps are in place when cylinders are in storage, in transit, or a regulator is not in place.	
☐	☐	Compressed gas cylinders in service are secured in substantial fixed or portable racks or hand trucks.	
☐	☐	Oxygen cylinders and fittings are kept away from, and free from oil and grease.	
☐	☐	Cylinder Storage areas are posted with the names of the gases in storage and with signs indicating "No Smoking or Open Flame".	
☐	☐	Cylinders are to be stored such that mechanical and corrosion damage is avoided. Cylinders are not to be stored in areas required as an egress path.	
☐	☐	Cylinders may be stored in the open outdoors, however, they must be protected from the ground to prevent corrosion and must be protected from temperatures that may exceed 125 degrees F.	

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WORK PLATFORMS/SCAFFOLDS
29 CFR 1926 Subparts L, M, N. EM 385-1-1 Sections 21, 22

YES	NO		COMMENT
☐	☐	Work platforms are erected, used, inspected, tested, maintained and repaired according to manufacturer's requirements.	
☐	☐	Construction, inspection, and disassembly of scaffolds is under the direction of a competent person.	
☐	☐	Workers on scaffolding have been trained by a qualified person.	
☐	☐	Scaffolds are erected on a firm and level surface and are square and plumb.	
☐	☐	Scaffolds are not loaded in excess of rated capacity.	
☐	☐	Working levels of work platforms are fully planked or decked.	
☐	☐	Planks are in good condition and free from obvious defects.	
☐	☐	Fabricated frame scaffolding four times higher than the base width is secured to building/structure according to manufacturer's instruction and/or OSHA requirements.	
☐	☐	Working platforms of scaffolding over ten feet in height have guard rails meeting OSHA specifications. Fall protection is suggested at four feet or greater.	
☐	☐	Scaffolding/work platforms are accessed by means of a properly secured ladder or equivalent. Built on ladders conform to scaffold ladder requirements. Climbing of braces is not allowed.	
☐	☐	Crane supported work platforms are designed and used in accordance with OSHA standards.	
☐	☐	Elevating work platforms are operated, inspected, and maintained according to the equipment operations manual.	
☐	☐	Employees working in aerial lifts remain firmly on the floor of the basket. Employees use fall protection while in an aerial lift basket.	

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WALKING AND WORKING SURFACES AND STAIRS
29 CFR 1926 Subparts L, M, X. EM 385-1-1, Sections 21, 22, 24

YES	NO		COMMENT
☐	☐	Work areas are clean, sanitary, and orderly	
☐	☐	Work surfaces are kept dry or appropriate means are taken to assure the surfaces are slip-resistant	
☐	☐	Accumulations of combustible dust are routinely removed.	
☐	☐	Aisles and passageways are kept clear and marked as appropriate.	
☐	☐	There is safe clearance for walking in aisles where motorized or mechanical handling equipment is operating.	
☐	☐	Materials or equipment is stored in such a way that sharp projections will not interfere with the walkway.	
☐	☐	Changes of direction or elevation are readily identifiable.	
☐	☐	Aisles or walkways that pass near moving or operating machinery, welding operations or similar operations are arranged so employees will not be subjected to potential hazards.	
☐	☐	Standard guardrails are provided wherever aisle or walkway surfaces are elevated more than 30 inches above any adjacent floor or the ground and bridges provided where workers must cross over conveyors and similar hazards.	
☐	☐	There are standard stair rails or handrails on all stairways having four or more risers or with an elevation of 30 or more inches.	
☐	☐	Stairways are at least 22 inches wide. (General Industry Standard)	
☐	☐	Stairs angle no more than 50 and no less than 30 degrees, risers are uniform from top to bottom (plus or minus 1/4 inch) and are provided with a surface that renders them slip resistant.	
☐	☐	Stairway handrails are not less than 36 inches above the leading edge of stair treads and have at least 3 inches of clearance between the handrails and the wall or surface they are mounted on.	
☐	☐	Where doors or gates open directly on a stairway, there is a platform provided so the swing of the door does not reduce the width of the platform to less than 20 inches.	
☐	☐	Where stairs or stairways exit directly into any area where vehicles may be operated, there are adequate barriers and warnings provided to prevent employees stepping into the path of traffic.	
☐	☐	Signs are posted showing the load capacity of elevated storage areas.	
☐	☐	An appropriate means of access and egress is provided for surfaces with 19 or more inches of elevation change.	
		Material on elevated surfaces is minimized, with that necessary for immediate work requirements piled, stacked, or racked in a manner to prevent it from tipping, falling, collapsing, rolling, or spreading.	

FLOOR AND WALL HOLES AND OPENINGS
29 CFR 1926 Subpart M. EM 385-1-1, Section 24

YES	NO		COMMENT
☐	☐	Floor and roof openings that persons can walk into or fall through are guarded by a physical barrier or covered.	
☐	☐	Holes (defined as equal to or greater than 2 inches in least dimension) where person could trip must be covered/protected.	
☐	☐	Unprotected sides and edges on a walking/working surface six feet or more (note four feet in General Industry) are protected by guardrail system, safety net, or Personal Fall Arrest System (PFAS).	
☐	☐	Unused portions of service pits and pits not actually in use are either covered or protected by guardrails or equivalent.	
☐	☐	Coverings for holes or other openings must be constructed of sufficient strength to support any anticipated load, must be secured in place to prevent accidental removal or displacement, and must be marked indicating purpose (e.g., stenciled "Hole" or painted contrasting color to surroundings).	

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LADDERS
29 CFR 1926 Subpart X. EM 385-1-1, Section 21

YES	NO		COMMENT
☐	☐	Portable ladders are used for their designed purpose only.	
☐	☐	Portable ladders are examined for defects prior to, and after use.	
☐	☐	Ladders found to be defective are clearly tagged to indicate "DO NOT USE" if repairable, or destroyed immediately if no repair is possible.	
☐	☐	Workers are trained in hazards associated with ladder use and how to inspect ladders.	
☐	☐	Ladders have secure footing provided by a combination of safety feet, top of ladder tie-offs and mud cills or a person holding the ladder to prevent slipping.	
☐	☐	The handrails of a straight ladder used to get from one level to another extend at least 36 inches above the landing.	
☐	☐	Ladders conform to construction criteria of ANSI Standards A-14.1 and A-14.2.	
☐	☐	Wooden ladders are not painted with an opaque covering such that signs of flaws, cracks, or drying are obscured.	
☐	☐	Fixed ladders are constructed and used according to OSHA Standards, 29 CFR 1910.27 and ANSI A-14.3.	
☐	☐	Rungs, cleats or steps, and side rails that may be used for handholds when climbing, offer adequate gripping surface and are free of splinters, slivers or burrs, and substances that could cause slipping.	
☐	☐	Fixed ladders of greater than 24 feet have cages or other approved fall protection devices. (Note General Industry is 20 feet).	
☐	☐	Where fall protection is provided by ladder safety systems (body belts or harnesses, lanyards and braking devices with safety lines or rails), systems meet the requirements of and are used in accordance with WESTON Fall Protection Standard Practices and are compatible with construction of the ladder system.	

DEMOLITION
29 CFR 1926 Subpart T. EM 385-1-1, Section 23

YES	NO		COMMENT
☐	☐	Prior to initiating demolition activities an engineering survey (by a competent person) and a demolition plan (by a competent person) is completed.	
☐	☐	All employees engaged in demolition activities are instructed in the demolition plan.	
☐	☐	It has been determined through the engineering survey and outlined in the plan, if any hazardous materials or conditions (e.g., asbestos, lead, utility connections, etc.) exist. Such hazards are controlled or eliminated before demolition is started.	
☐	☐	Continued inspections, by a competent person, are conducted to ensure safe employee working conditions.	

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TREE MAINTENANCE AND REMOVAL
29 CFR 1910 Subpart R. EM 385-1-1, Section 31

YES	NO		COMMENT
☐	☐	Tree maintenance or removal is done is under the direction of a qualified person.	
☐	☐	Tree work, in the vicinity of charged electric lines, is by trained persons qualified to work with electricity and tree work. Appropriate distances are maintained for all workers who are not qualified.	
☐	☐	Equipment is inspected, maintained, repaired, and used in accordance with the manufacturer's directions.	
☐	☐	Prior to felling actions are planned to include clearing of the area to permit safe working conditions and escape.	
☐	☐	Employees must be trained in the safe operation of all equipment.	
☐	☐	All equipment and machinery is inspected and determined safe prior to use.	
☐	☐	Work is performed under requirements of FLD 43.	

BLASTING
29 CFR 1926 Subpart U. EM 385-1-1, Section 29

YES	NO		COMMENT
☐	☐	A blasting safety plan is developed prior to bringing explosives on-site.	
☐	☐	The transportation, handling, storage, and use of explosives, blasting agents, and blasting equipment must be directed and supervised by a person with proven experience and ability in blasting operations. Licensing of person is verified.	
☐	☐	Blasting operations in or adjacent to cofferdams, piers, underwater structures, buildings, structures, or other facilities must be carefully planned with full consideration to potential vibration and damage.	

HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE AND UNDERGROUND STORAGE TANK (UST) ACTIVITIES
29 CFR 1926 Subpart D. EM 385-1-1, Section 28

YES	NO		COMMENT
☐	☐	All construction activities performed with known or potential exposure to hazardous waste are conducted in accordance with Hazardous Waste Operations and Emergency Response requirements.	

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CONCRETE and MASONRY CONSTRUCTION
29 CFR 1926 Subpart Q. EM 385-1-1, Section 27

YES	NO		COMMENT
☐	☐	Construction loads are not placed on a concrete or masonry structure or portion of a concrete or masonry structure unless the employer determines, based on information from a person who is qualified in structural design, that the structure or portion of the structure is capable of supporting the loads.	
☐	☐	Employees are not permitted to work above or in positions exposed to protruding reinforcing steel or other impalement hazards unless provisions have been made to control the hazard.	
☐	☐	Sections of concrete conveyances and airlines under pressure are secured with wire rope (or equivalent material) in addition to the regular couplings or connections.	
☐	☐	Structural and reinforcing steel for walls, piers, columns, and similar vertical structures is supported and/or guyed to prevent overturning or collapse	
☐	☐	All form-work, shoring, and bracing is designed, fabricated, erected, supported, braced, and maintained so it will safely support all vertical and lateral loads that may be applied until the loads can be supported by the structure.	
☐	☐	Shoring equipment is inspected prior to erection to determine that it is specified in the shoring design. Any equipment found to be damaged is not used.	
☐	☐	Erected shoring equipment is inspected immediately prior to, during, and immediately after the placement of concrete. Any shoring equipment that is found to be damaged, displaced, or weakened is immediately reinforced or re-shored.	
☐	☐	Shoring, vertical slip forms and jacks conform with requirements of Section 27.B.08-13 of USACE EM 385-1-1.	
☐	☐	Forms and shores (except those on slab or grade and slip forms) are not removed until the individual responsible for forming and/or shoring determines that the concrete has gained sufficient strength to support its weight and all superimposed loads.	
☐	☐	Precast concrete members are adequately supported to prevent overturning or collapse until permanent connections are complete	
☐	☐	No one is permitted under pre-cast concrete members being lifted or tilted into position except employees required for the erection of those members.	
☐	☐	Lift slab operations are planned and designed by a registered engineer or architect.	
☐	☐	Hydraulic jacks used in lift slab construction have a safety device that causes the jacks to support the load in any position if the jack malfunctions	
☐	☐	No one is permitted under the slab during jacking operations.	
☐	☐	A limited access zone is established whenever a masonry wall is being constructed.	
☐	☐	Fall protection is provided to masonry workers exposed to falls of 6 feet or more.	

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STEEL ERECTION
29 CFR 1926 Subpart R. EM 385-1-1, Section 27

YES	NO		COMMENT
☐	☐	Impact wrenches have a locking device for retaining the socket. Containers shall be provided for storing or carrying rivets, bolts, and drift pins, and secured against accidental displacement when aloft.	
☐	☐	Structural and reinforcing steel for walls, piers, columns, and similar vertical structures shall be guyed and supported to prevent collapse	
☐	☐	No loading is placed upon steel joists until all bridging is completely and permanently installed.	
☐	☐	Workers are provided fall protection whenever they are exposed to falls of 1.8 m (6 ft) or more (EM 385-1-1).	
☐	☐	Temporary flooring in skeleton steel erection conforms with Section 27.F of USACE 385-1-1	

ROOFING
29 CFR 1926 Subpart M. EM 385-1-1, Sections 21, 22, 24, 27

Yes	No		COMMENT
☐	☐	In the construction, maintenance, repair, and demolition, of roofs, fall protection systems is provided that will prevent personnel from slipping and failing from the roof and prevent personnel on lower levels from being struck by falling objects	
☐	☐	On all roofs greater than 4.8 m (16 ft) in height, a hoisting device, stairways, or progressive platforms are furnished for supplying materials and equipment.	
☐	☐	Roofing materials and accessories that could be moved by the wind, including metal roofing panels, that are on the roof and unattached are secured when wind speeds are greater than, or are anticipated to exceed, 10 mph.	
☐	☐	Level, guarded platforms are provided at the landing area on the roof.	
☐	☐	When their use is permitted, warning line systems comply with USACE Section 27.07 of EM 385-1-1.	
☐	☐	Workers involved in roof-edge materials handling or working in a storage area located on a roof with a slope -/= to four vertical to twelve horizontal and with edges 6 ft or more above lower levels are protected by the use of a guardrail, safety net, or personal fall arrest system along all unprotected roof sides and edges of the area.	

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ENVIRONMENTAL COMPLIANCE

Yes	No		Comments
☐	☐	Environmental Compliance and Waste Management Plan on file.	
☐	☐	Waste Determination Made.	
☐	☐	Manifest and/or Shipping Papers prepared and filed.	
☐	☐	Manifest Exception Reports Prepared, as necessary. Procedures to track manifests in place.	
☐	☐	State Annual and EPA Biennial Reporting Information Available.	
☐	☐	RCRA Personnel Training Records on file.	
☐	☐	CAA Permits on file.	
☐	☐	CWA Permits on file.	
☐	☐	RCRA Permits on file.	
☐	☐	State and/or Local Permits on file.	
☐	☐	RCRA Inspections conducted and Documentation on file.	
☐	☐	Transporter and TSD compliance information on file.	
☐	☐	Waste Accumulation Areas Managed Properly.	
☐	☐	Wetlands Areas Identified and Protected.	
☐	☐	Endangered, Threatened, or Special Concern Species or Areas Identified and Protective Methods Determined.	
☐	☐	Run-on and Runoff Concerns Identified and Managed.	
☐	☐	Adjacent Land Areas Protected as Necessary.	
☐	☐	Non-Hazardous Solid Wastes Managed Properly.	

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MISCELLANEOUS REGULATORY and POLICY COMPLIANCE

Yes	No		Comments
☐	☐	Personnel Training Records for DOT Materials Handling on file.	
☐	☐	Noise Control Issues Addressed and Managed.	
☐	☐	Site Security Issues Identified and Managed.	
☐	☐	Known Historical, Archeological, and Cultural Resources Identified and Managed.	
☐	☐	WESTON EHS Analysis Checklist In Use.	
☐	☐	Safety Observation and Recognition Program in place.	
☐	☐	Weekly EHS Report Card System in place.	
☐	☐	Federal, State, and Local Required Postings in place.	
☐	☐	Site specific Lockout/Tagout Program is in place.	
☐	☐	Site-specific Confined Space Program is in place.	
☐	☐	Site Safety Officer filing system is in place and up to date.	

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APPENDIX C

COMMUNITY AIR MONITORING PLAN (CAMP)

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Community Air Monitoring Plan

Study Area Bounded by Pyrex Street, E. Pulteney Street, Post Creek and Chemung River
Corning, NY
NYSDEC Project ID 851046

June 2014

Prepared for

Corning Incorporated
Corning, New York

Prepared by

WESTON SOLUTIONS, INC.
West Chester, Pennsylvania 19380

W.O. No. 02005.056.001.0001

DRAFT

TABLE OF CONTENTS

Section **Page**

1. INTRODUCTION.....1

2. METHODS.....1

3. CALIBRATIONS.....2

4. DATA RECORDING.....3

5. ACTION LEVELS.....3

DRAFT

LIST OF ACRONYMS

CAMP	Community Air Monitoring Plan
COPCs	constituents of potential concern
HASP	Health and Safety Plan
mg/m^3	milligrams per cubic meter
$\mu g/m^3$	micrograms per cubic meter
NYSDEC	New York State Department of Environmental Conservation
WESTON®	Weston Solutions, Inc.

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1. INTRODUCTION

This Community Air Monitoring Plan (CAMP) has been prepared by Weston Solutions, Inc. (WESTON®) on behalf of Corning Incorporated to detail the dust control and air monitoring procedures to be performed during the execution of characterization activities at the Study Area located in Corning, New York, bounded by Pyrex Street on the west, E. Pulteney Street on the north, Post Creek on the east and the Chemung River on the south (Study Area). This air monitoring plan will supplement the existing Health and Safety Plan (HASP) and provide an additional measure of protection to potential receptors not directly involved with the characterization activities.

As presented in the Study Area Characterization Work Plan (Work Plan), intrusive characterization activities planned to be conducted within the Study Area may include subsurface soil sampling and groundwater investigations. Since the primary constituents of potential concern (COPCs) at the Study Area are arsenic, cadmium, and lead, air monitoring for dust particulates and dust control techniques will be performed during intrusive activities to provide an additional measure of protection to the surrounding community.

2. METHODS

Perimeter air monitoring for dust particles will be conducted at a minimum of two stations, one generally located upwind, and one generally located downwind of any intrusive characterization activity. In addition, due to the close proximity of playgrounds, athletic playing fields, schools and childcare centers, more stringent CAMP requirements will be necessary. When work areas are within 20 feet of these locations, the continuous monitoring locations for particulates must reflect the nearest potentially exposed individuals. The use of engineering controls such as dust barriers will be considered to prevent exposures related to the work activities and to control dust and odors. Consideration will be given to implementing the planned activities when potentially exposed populations are at a minimum (i.e. during hours when children are not likely to be present). Common-sense measures to keep dust and odors at a minimum around the work areas

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will also be implemented to ensure that the children are protected at all times. No visible dust will leave the work area.

As the location of characterization activities will change, the location of the monitoring point relative to the activity will be modified as needed and documented. The monitoring location will be positioned to provide data representative of potential migration of dust in the direction of nearby receptors. The perimeter monitoring equipment will be portable, which will allow the monitoring network to be adjusted if needed to adapt to changes in activities or meteorological conditions.

Particulate monitoring is the measurement of fine liquid or solid particles such as dust, smoke, mist, fumes or smog, in particle sizes less than 10 microns (PM_{10}), in the ambient air. During intrusive activities such as subsurface soil sampling and groundwater monitoring well installation, the generation of dust particles will be monitored. The equipment selected to monitor PM_{10} will be the Thermo Electron Corporation personal DataRAM (pDR), or equivalent. The pDR is a light-scattering monitor, designed for measuring airborne particulates such as aerosols and dusts. The units are portable and measure the concentration of airborne particulate matter (up to 10 µm in size) continuously and in real time, with results expressed in milligrams per cubic meter (mg/m^3), or 1,000 micrograms per cubic meter ($\mu g/m^3$). Particulate concentrations can be measured over the following ranges: 0.01 – 10 mg/m^3 (equivalent to 10 – 10,000 $\mu g/m^3$) and 0.1 – 100 mg/m^3 (equivalent to 100 – 100,000 $\mu g/m^3$). The pDR meets performance standard for a real-time particulate monitor according to the New York State Department of Environmental Conservation (NYSDEC) Technical Guidance for Site Investigation and Remediation; May 2010.

3. CALIBRATIONS

Calibration of instruments will be performed prior to the start of daily activities. Additional calibrations will be performed as needed or whenever maintenance is performed involving the functional elements of the unit. Calibration data will be documented in the field log book or on designated calibration log sheets.

4. DATA RECORDING

The data collected during the monitoring program will be used for real-time data display and notification to on-site personnel when the action levels are exceeded (action levels are discussed in Section 5). All ambient air monitoring data will be recorded in the site field logbook or designated field sheets and the results of the air monitoring will be communicated to the NYSDEC and NYSDOH on scheduled basis (i.e. daily for levels which require actions, weekly for routine monitoring data).

5. ACTION LEVELS

The action level established herein will be used as an indicator that potential excessive migration of dust particles may be occurring during the characterization activities. Monitored ambient air concentrations above the action level will result in actions being taken to more stringently control fugitive emissions or trigger quantitative sampling.

The NYSDEC recommended action level for fugitive dust is 100 $\mu g/m^3$ greater than background (measured at the upwind location) for a 15 minute period. At this concentration, work may continue with dust suppression techniques provided that no visible dust is migrating from the working area, and the downwind particulate levels do not exceed 150 $\mu g/m^3$ greater than background (measured at the upwind location). If the downwind particulate levels exceed 150 $\mu g/m^3$ greater than background (measured at the upwind location), work will stop and dust suppression techniques will be re-evaluated.

If the perimeter monitors detect concentrations above the 100 $\mu g/m^3$ action level, Site supervisory personnel will be notified. Notifications will be sent to the WESTON Site Manager and the Site Health and Safety Officer. Upon receiving the notification message, the supervisor will assess the situation and initiate appropriate administrative and/or engineering controls to mitigate the migration of dust particles.

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