Study Area Operable Unit (OU) 3 Corning, Steuben County, New York Site ID No. 851046 **July 2017**



NEW YORK STATE OF OPPORTUNITY. Componental Conservation

Prepared by Division of Environmental Remediation New York State Department of Environmental Conservation

DECLARATION STATEMENT - DECISION DOCUMENT

Study Area Operable Unit (OU) 3 Corning, Steuben County, New York Site ID No. 851046 July 2017

Statement of Purpose and Basis

This document presents the remedy for the Study Area, site number 851046. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Study Area and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are:

- 1. Remedial Design A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. The remedial design program will include:
 - Design-Phase Investigation A design-phase investigation will be conducted at the Corning Painted Post High School to determine if the existing one foot cover meets restricted residential SCOs. In the event this investigation determines that the existing one foot cover does not meet restricted residential SCOs, additional remedial work will be required.
 - Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31.
- 2. Excavation and off-site disposal contaminated soils in the top two feet from Corning Christian Academy and Memorial Stadium which exceed restricted residential soil cleanup objectives (as defined by 6 NYCRR Part 375-6.8) and target fill in accordance with Commissioner Policy CP-51 Section G will both be excavated and disposed at a facility permitted to accept the material. Contaminated soils in the top one foot from Corning Painted Post High School, which exceed restricted residential soil cleanup objectives (as defined by 6 NYCRR Part 375-6.8) and target fill in accordance with Commissioner Policy CP-51 Section G, which exceed restricted residential soil cleanup objectives (as defined by 6 NYCRR Part 375-6.8) and target fill in accordance with Commissioner Policy CP-51 Section G, will both be excavated and disposed at a facility permitted to accept the

material. An evaluation of all samples from an individual property will be performed, recognizing the heterogeneity of contamination and the uncertainty of sampling and analysis. The Department, in consultation with the NYSDOH, will exercise limited discretion when determining that remediation is complete and has generally achieved the remedial goals where some discrete samples may not achieve the established cleanup levels. This flexibility will be tied to exposure potential. Also, the Department, in consultation with the NYSDOH, may determine that remediation is complete for properties when (1) there are a large number of confirmatory samples; (2) the vast majority of confirmation samples indicate that the soil cleanup levels for the site have been achieved; and (3) those that do not achieve the SCO exceed it only by a small amount. This determination will also accommodate property owner concerns related to preservation of their property with respect to specific features such as mature trees, or other features of significance to the property owner where possible. Where the soil cover is required, it will be as described in paragraphs 4 and 5 below, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted residential use.

- 3. Restoration of Excavated Areas All areas where soil is excavated will be restored in accordance with the restoration requirements set forth in the approved remedial design, and will:
 - a. be backfilled with clean fill soil and top soil as appropriate which meets the requirements of 6NYCRR 375-6.8 to establish the grades approved in the remedial design. Grass covered areas will be restored by seeding or placement of sod. Trees will be replaced at the discretion of the property owner and if any areas are determined to be wildlife habitat they will be appropriately restored to allow this use; and
 - b. replace landscaping features such as sidewalks, driveways, and other propertyspecific features in kind (and consistent with local building codes) where removal is required to implement the remedy. The need for removal of any property-specific features will be determined during the design of the remediation phase in consultation with the affected property owners; and
 - c. restore publicly owned property and infrastructure if it is shown to have been damaged by remedial activities. Any affected property shall be replaced in accordance with local building codes and standard industry practices.
- 4. Cover System, Corning Christian Academy and Memorial Stadium A cover will be required to allow for restricted residential use of the property. The cover will consist of either the existing structures such as buildings, pavement, sidewalks comprising the development or a soil cover in areas where the top two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs) or target fill exists. The soil cover will be placed over a demarcation layer, with the upper six inches of soil having sufficient quality to maintain a vegetation layer. In the event the use of the property(ies) change(s), a cover thickness appropriate for that new use will be required. Any fill material brought to the property(ies) will meet the requirements for the identified land use as set forth in 6 NYCRR Part 375-6.7(d).

- 5. Cover System, Corning Painted Post High School A one foot soil cover will be required consisting of either the existing structures such as buildings, pavement, sidewalks comprising the development or a soil cover in areas where the top one foot of exposed surface soil exceed the applicable soil cleanup objectives (SCOs) or target fill exists. The soil cover will be placed over a demarcation layer, with the upper six inches of soil having sufficient quality to maintain a vegetation layer. In the event the use of the property changes, a cover thickness appropriate for that new use will be required. Any fill material brought to the property will meet the requirements for the identified land use as set forth in 6 NYCRR Part 375-6.7(d).
- 6. Institutional Controls Imposition of an institutional control in the form of environmental easements for the controlled properties which will:
 - require the remedial party or property owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
 - allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws; and
 - require compliance with the Department approved Site Management Plan. A Site Management Plan is required, which includes the following:
 - a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the area of concern and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: requires Corning Incorporated to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375- 1.8(h)(3). Institutional controls also include voluntary agreements between Corning Incorporated and respective property owners for access and any other pertinent provisions to enable the installation and maintenance of cover systems, management of remaining contamination, excavation, inspections, sampling, and/or any other requisite activities.

Engineering Controls: The soil cover discussed in Paragraphs 4 and 5 above.

The Site Management Plan will include, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination; and
- a provision for further investigation and remediation should large scale redevelopment occur or the use of the property(ies) change(s), if any of the existing structures are demolished, or if the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department. Based on the investigation results and the Department's determination of the need for a

remedy, a Remedial Action Work Plan (RAWP), if required, will be developed for the final remedy for the site, including removal and/or treatment of any source areas to the extent feasible. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment; and

- a provision for further investigation and remediation, if necessary, to refine the nature and extent of contamination in areas where access was previously hindered or where future excavations are proposed at depths greater than that remediated under this proposed remedy as well as areas where unexpected fill containing ash brick or glass is encountered regardless of depth; and
- provisions for the management and inspection of the identified engineering controls, including within right-of-way areas (while usage of these areas is generally controlled by their right-of-way status, Corning Incorporated has committed to address potential exposures related to required maintenance or repairs to piping, culverts, *etc.* and the presence of remaining contamination including excavation, management and disposal in accordance with the intended use of the right-of-way area); and
- a provision maintaining access control and Department notifications; and
- a provision for tracking of property ownership changes to allow for continued communication with owners; and
- a provision for an annual reminder from Corning Incorporated to the Corning-Painted Post School District, Corning Christian Academy, and the City of Corning of the presence of remaining contamination, and of Corning Incorporated's commitment to address (including excavation, management, and disposal) remaining contaminated soils, as necessary and in accordance with the intended use of the property; and
- a provision for Corning Incorporated to send annual reminders to the City and Town of Corning Code Enforcement Offices and Departments of Planning and Economic Development to timely inform Corning Incorporated of any building permits or other approvals they grant for properties within the area addressed by this proposed decision document where contamination remains after the remedy is completed; and
- a provision for Corning Incorporated to send annual reminders to the Corning-Painted Post School District, Corning Christian Academy, and the City of Corning (Memorial Stadium) with a request to timely inform Corning Incorporated of any plans to conduct ground-intrusive work within the area addressed by this proposed decision document (*e.g.*, soil disturbance work); and
- the provisions necessary for the periodic reviews and certification of the institutional and/or engineering controls; and
- a provision for providing, in the event that the current use of the Corning Christian Academy, Corning Painted Post School District or Memorial Stadium property(ies) change(s), a cover thickness appropriate for that new use will be required. Any fill material brought to the property(ies) will meet the requirements for the identified land use as set forth in 6 NYCRR Part 375-6.7(d).

- b. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan will include, but may not be limited to:
 - monitoring of groundwater to assess the performance and effectiveness of the remedy; and
 - a schedule of monitoring and frequency of submittals to the Department; and
 - an annual visual inspection of properties to ensure that the controls remain in place and effective.
- 7. Interim Site Management Plan An Interim Site Management Plan (ISMP) is required during pre-design, design and remedial activities that is consistent with Paragraph 6 (above) for properties located in the area addressed by this Proposed Decision Document including rights of way and utility corridors. The ISMP is intended to address all soil management issues until the remedy is fully implemented and will terminate once all properties where access was granted are remediated and a Department approved SMP is in place.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

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Michael Cruden, Director Remedial Bureau E

Date

Study Area Operable Unit (OU) 3 Corning, Steuben County, New York Site No. 851046 July 2017

Statement of Purpose and Basis

This Decision Document presents the remedy identified by the Department of Environmental Conservation (Department), in consultation with the Department of Health (NYSDOH), for Operable Unit 3 of the Study Area (the Site). This decision is based on the investigation and interim remedial measures implemented by Corning Incorporated pursuant to the 2014 Order on Consent (Index No. B8-0835-14-07).

CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repositories:

NYSDEC – Region 8 Office 6274 East Avon- Lima Rd. Avon, NY 14414 M-F: 8:45am – 4:30pm Contact: Linda Vera for an appointment (585) 226 - 5324 Southeast Steuben County Library 300 Nasser Civic Center Plaza Suite 101 Corning, NY 14830 phone: (607) 936-3713

In addition, the Department's project-specific website contains relevant information on this site, including many of the reports located in the repositories: <u>http://www.dec.ny.gov/chemical/97180.html</u>

Receive site-related Citizen Participation information by Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular

county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <u>http://www.dec.ny.gov/chemical/61092.html</u>

Description of the Site

The site consists of approximately 201 acres, and it has been separated into five Operable Units (OUs). The Site was initially defined in the Order on Consent (Index No. B8-0835-14-07) with Corning Incorporated as the area 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. The area has been expanded to include the area characterized by the Department as the "Expansion Area" (i.e., OU5). The five Operable Units (see descriptions below) are now collectively referred to as the "Study Area". During the 2012 demolition of the former Kent Phillips School and improvements to the Corning-Painted Post High School (CPPHS), workers encountered fill containing ash, brick, or glass waste in layers which exceed one inch ("target fill") during excavations. Department determined that the presence of the target fill material and the contaminant levels warranted additional investigation at the school property and at nearby properties within the Study Area. The Department asked Corning Incorporated to begin an investigation to further characterize the nature and extent of target fill within the study area. Subsequently, investigations were undertaken by Corning Incorporated and the Department, and fill containing ash, brick, or glass was found in other locations in the Study Area. Target fill has been identified that has concentrations of arsenic, cadmium, and lead exceeding restricted residential and/or commercial SCOs and may test as characteristic hazardous waste. The Operable Units are defined as follows:

- **OU1 Residential Area**: The larger residential area including Houghton Park. It is bounded by school properties to the south, NYS Flood Control lands to the east, East Pulteney Street to the north, and Pyrex Street to the west. Remediation of this area will not be addressed within this PDD.
- **OU2 Residential Area at the Eastern End of Corning Boulevard:** Remediation of this area will not be addressed within this PDD.
- **OU3 School/Community Use Areas**: Properties owned by the Corning-Painted Post School District, Corning Christian Academy, and the City of Corning (Memorial Stadium).
- **OU4 Flood Control Areas**: The southern and eastern most portions of the Study Area including flood control structures, levies, and adjacent portions of the Chemung River and Post Creek. Remediation of this area will not be addressed within this PDD.
- **OU5 Off-Site Expansion Area**: The residential areas immediately to the north and west of the boundaries of OU1. The Expansion Area is further bounded by I-86 to the north, Centerway (NYS Route 414) to the west, and the Guthrie Medical Center property to the South. Remediation of this area will not be addressed within this PDD.

OU3 is the subject of this document. A Decision Document(s) will be issued separately for OUs 1, 2, 4, and 5.

Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that

are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

Site Characterization Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified within the Study Area are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. The contaminants of concern identified at this site are a number of metals including lead, arsenic and cadmium, and semi-volatile organic compounds. The contaminant(s) of concern exceed the applicable SCGs for soil.

Nature and Extent of Contamination

Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides. Based upon investigations conducted to date, the primary contaminants of concern are lead, arsenic, cadmium and semi-volatile organic compounds.

Site characterization confirmed the disposal of significant quantities of target fill in various portions of the Study Area, including the Corning-Painted Post High School, Corning Christian Academy and Corning Memorial Stadium which comprise OU3.

Analytical results exceeded Toxicity Characteristic Leaching Procedure (TCLP) regulatory levels for lead in 9 of 87 samples (at concentrations up to 46 parts per million [ppm]) and for cadmium in 1 of 87 samples (at concentrations up to 1.1 ppm) in OU3.

Total concentrations of several metals and semi-volatile organic compounds (SVOCs) exceed the restricted residential use soil cleanup objectives (SCOs). Arsenic was detected in 44 of 242 samples at concentrations up to 530 ppm, barium was detected in 4 of 87 samples at concentrations up to 3,000 ppm, cadmium was detected in 23 of 242 samples at concentrations up to 420 ppm, and lead was detected in 34 of 242 samples at concentrations up to 5,870 ppm. Total SVOCs have been detected at a total concentration of 1,613 ppm. Approximately 22 percent of the soil excavated during construction work at CPP High School from 2012 through 2014 contained levels of lead and/or cadmium which characterized them as hazardous waste. As of the end of the 2014 construction season, excavation of fill material was largely complete, and approximately 8,332 tons had been disposed of as hazardous waste and 28,785 tons had been disposed of as non-hazardous waste.

Groundwater samples have been collected from seven groundwater monitoring wells installed on school and City property, the school's irrigation well (used to water athletic fields as needed in dry weather), and an adjacent public water supply well. Groundwater monitoring to date has not identified levels of the Study Area-related contaminants above groundwater standards. The area is served by public water and no other private water supplies are known to exist in this area.

Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

People may contact contamination by digging or otherwise disturbing soils in areas of known soil contamination or in areas where visible fill containing ash, brick, or glass is present.

Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles. The remedial action objectives for this site are:

<u>Soil</u>

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants in soil.

RAOs for Environmental Protection

• Prevent migration of contaminants that would result in groundwater or surface water contamination.

Basis for Selection

The selected remedy is based on an evaluation of alternatives given the challenging circumstances of existing public use areas which were developed over former ash dumps. An unrestricted cleanup would necessitate extensive excavation, including some building demolition, and would be overly destructive to the existing public use properties. An unrestricted use remedy is not feasible or necessary to be protective of human health and the environment. The remedy will consist of excavation and removal of target fill and contaminated soil within the top two feet (one foot at the Corning Painted Post High School) to meet restricted residential SCO remedial goals. The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375 and a consideration of these criteria is described below. The first two evaluation criteria are termed "threshold criteria" and must be satisfied in order for an alternative to be considered for selection.

1. <u>Protection of Human Health and the Environment.</u> This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

The selected remedy will satisfy this criterion by removing the target fill and contaminated soils in the top two feet which exceed restricted residential soil cleanup objectives (as defined by 6 NYCRR Part 375-6.8) from the impacted properties and properly disposing of them off-site. The selected remedy addresses the soil contamination near the surface, which is the most significant threat to human health and the environment. The selected remedy relies on a cover system, a site use restriction, and a Site Management Plan to protect public health and will also include a restriction on groundwater use on the site as a precautionary measure. The risks of uninformed large scale digging or construction operations is manageable through Institutional Controls. While removal to achieve unrestricted use removes the greatest amount of target fill and contaminated soils, this alternative would result in a significant impact to the community. The duration of a removal and increase in truck traffic to achieve unrestricted use would be substantial. The potential for vehicle and pedestrian accidents would be much higher for a removal to achieve unrestricted use because of the large number of trucks to be loaded and driven through surrounding neighborhoods during the remedial work. Dust control efforts would be significant during a removal to achieve unrestricted use since nearly all the target fill and contaminated soils with elevated concentrations of metals and semi-volatile organic compounds would be excavated. Overall, the selected remedy will be much less disruptive to the community while still achieving the goal of being protective of human health and the environment.

2. <u>Compliance with New York State Standards, Criteria, and Guidance (SCGs).</u> Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the Department has determined to be applicable on a case-specific basis.

The remedy complies with SCGs to the extent practicable, while allowing for the continued existence of the established community. It complies with the restricted residential use soil cleanup objectives at the surface by removal of target fill and contaminated soils in the top two feet (one foot for Corning Painted Post High School) and through construction of a cover system to prevent contact with any contamination remaining below two feet.

The next six "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. <u>Long-term Effectiveness and Permanence.</u> This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or contamination remains on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.

Long-term effectiveness is best accomplished by those alternatives involving excavation of the contaminated overburden soils. Removal of all of the chemical contamination would

remove the need for property use restrictions, but significantly alter the character of the existing neighborhood. The selected remedy provides for a cleanup that results in removal of all of the contamination from the top two feet (one foot for Corning Painted Post High School) to minimize the potential for exposure. The selected remedy also requires institutional controls, a cover system, and long-term site management. The selected remedy will also include a groundwater use restriction as a precautionary measure.

The institutional controls will ensure proper excavation of soils below two feet (one foot for Corning Painted Post High School) except for perhaps small excavations such as planting bushes or installing posts, which would not result in substantial potential risk if the excess soils were dispersed on the ground surface if no target fill is observed and the school or City employees observed common sense practices such as hand washing, etc.

4. <u>Reduction of Toxicity, Mobility or Volume.</u> Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility, or volume of the wastes at the site.

The selected remedy, which includes limited excavation and off-site disposal, reduces the toxicity, mobility and volume of on-site waste by transferring the material to an approved off-site location. However, depending on the disposal facility, the volume of the material will not be reduced. Removal to achieve unrestricted use would require the excavation and disposal of a much larger volume of soil than the selected remedy.

5. <u>Short-term Impacts and Effectiveness.</u> The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

Removal to achieve unrestricted use and the selected remedy both have short-term impacts which could be controlled, however, the selected remedy will have the least impact due to the lower volume of soil to removed and replaced, thereby limiting the impacts of noise, traffic and possible accidents as a result of the lower number of truck trips required to implement the selected remedy. The time needed to achieve the remediation goals is much shorter for the selected remedy and significantly longer for removal to achieve unrestricted use. Removal to achieve unrestricted use would involve significant impacts to the existing community in terms of both disruption and time.

6. <u>Implementability</u>. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, institutional controls, and so forth.

The selected remedy is favorable in that it is readily implementable. Removal to achieve unrestricted use is marginally implementable, and the volume of soil excavated under this alternative will necessitate increased truck traffic on local roads for a longer period of time as well as significant disruption to the existing community. Removal to achieve unrestricted use and the selected remedy both have challenges with implementation such as obtaining access and coordinating activities with property owners and utilities. The selected remedy is more easily implemented than removal to achieve unrestricted use because the selected remedy removes a smaller volume of soil from each property.

7. <u>Cost-Effectiveness</u>. Capital costs and annual operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision.

The costs of the alternatives vary significantly. The selected remedy has a lower cost, but has on-going annual costs on-site associated with long-term maintenance of the cover system and other site management activities. However, once remediation is complete, annual site management costs are expected to be relatively low. Removal to achieve unrestricted use is much more expensive, but does not provide a proportional increase in protection.

8. <u>Land Use</u>. When cleanup to pre-disposal conditions is determined to be infeasible, the Department may consider the current, intended, and reasonable anticipated future land use of the site and its surroundings in the selection of the soil remedy.

Since the existing and anticipated use of the site is generally restricted residential, the selected remedy is less desirable because at least some contaminated soil remains on the property whereas removal to achieve unrestricted use removes all of the contaminated soil permanently. However, the remaining contamination with the selected remedy will be controllable with construction of a cover system, institutional controls, and implementation of a Site Management Plan.

The final criterion, Community Acceptance, is considered a "modifying criterion" and was taken into account after evaluating those above. It was evaluated after public comments on the Proposed Remedial Action Plan were received.

9. <u>Community Acceptance.</u> Concerns of the community regarding the investigation, the evaluation of alternatives, and the selected remedy was evaluated.

The remedy is being selected because, as described above, it satisfies the threshold criteria and provides the best balance of the balancing criteria. The selected remedy is protective of public health and the environment.

Description of the Remedy

The remedy will be implemented within eighteen months of issuance of this decision document or other timeframe as the Department agrees upon in writing, otherwise the remedial decision may be re-evaluated in accordance with DER-2, Making Changes to Selected Remedies. The schedule shall provide for remedy implementation to commence within 60 days of Department's approval of the design document or other time frame as the Department agrees upon in writing.

The remedy will consist of excavation and removal of target fill to conform to Commissioner Policy CP-51 Section G and excavation and removal of soil within the top two feet to meet the restricted residential SCO remedial goals, with some flexibility to be employed by the Department and NYSDOH on a case-specific basis. This flexibility may allow for limited confirmation samples to exceed the SCO levels, based on concentration, the location and/or depth of the sample exceeding the SCO and the implementability of the removal, and exposure potential, while still achieving sufficient removal to assure a protective cleanup for which a no further action determination can be issued, with site management where appropriate.

The elements of the selected remedy are:

- 1. Remedial Design A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. The remedial design program will include:
 - Design-Phase Investigation A design-phase investigation will be conducted at the Corning Painted Post High School to determine if the existing one foot cover meets restricted residential SCOs. In the event this investigation determines that the existing one foot cover does not meet restricted residential SCOs, additional remedial work will be required.
 - Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31.
- 2. Excavation and off-site disposal contaminated soils in the top two feet from Corning Christian Academy and Memorial Stadium which exceed restricted residential soil cleanup objectives (as defined by 6 NYCRR Part 375-6.8) and target fill in accordance with Commissioner Policy CP-51 Section G will both be excavated and disposed at a facility permitted to accept the material. Contaminated soils in the top one foot from Corning Painted Post High School, which exceed restricted residential soil cleanup objectives (as defined by 6 NYCRR Part 375-6.8) and target fill in accordance with Commissioner Policy CP-51 Section G, will both be excavated and disposed at a facility permitted to accept the material. An evaluation of all samples from an individual property will be performed, recognizing the heterogeneity of contamination and the uncertainty of sampling and analysis. The Department, in consultation with the NYSDOH, will exercise limited discretion when determining that remediation is complete and has generally achieved the remedial goals where some discrete samples may not achieve the established cleanup levels. This flexibility will be tied to exposure potential. Also, the Department, in consultation with the NYSDOH, may determine that remediation is complete for properties when (1) there are a large number of confirmatory samples; (2) the vast majority of

confirmation samples indicate that the soil cleanup levels for the site have been achieved; and (3) those that do not achieve the SCO, exceed it only by a small amount. This determination will also accommodate property owner concerns related to preservation of their property with respect to specific features such as mature trees, or other features of significance to the property owner where possible. Where the soil cover is required, it will be as described in paragraphs 4 and 5 below, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted residential use.

- 3. Restoration of Excavated Areas All areas where soil is excavated will be restored in accordance with the restoration requirements set forth in the approved remedial design, and will:
 - d. be backfilled with clean fill soil and top soil as appropriate which meets the requirements of 6NYCRR 375-6.8 to establish the grades approved in the remedial design. Grass covered areas will be restored by seeding or placement of sod. Trees will be replaced at the discretion of the property owner and if any areas are determined to be wildlife habitat they will be appropriately restored to allow this use; and
 - e. replace landscaping features such as sidewalks, driveways, and other propertyspecific features in kind (and consistent with local building codes) where removal is required to implement the remedy. The need for removal of any property-specific features will be determined during the design of the remediation phase in consultation with the affected property owners; and
 - f. restore publicly owned property and infrastructure if it is shown to have been damaged by remedial activities. Any affected property shall be replaced in accordance with local building codes and standard industry practices.
- 4. Cover System, Corning Christian Academy and Memorial Stadium A cover will be required to allow for restricted residential use of the property. The cover will consist of either the existing structures such as buildings, pavement, sidewalks comprising the development or a soil cover in areas where the top two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs) or target fill exists. The soil cover will be placed over a demarcation layer, with the upper six inches of soil having sufficient quality to maintain a vegetation layer. In the event the use of the property(ies) change(s), a cover thickness appropriate for that new use will be required. Any fill material brought to the property(ies) will meet the requirements for the identified land use as set forth in 6 NYCRR Part 375-6.7(d).
- 5. Cover System, Corning Painted Post High School A one foot soil cover will be required consisting of either the existing structures such as buildings, pavement, sidewalks comprising the development or a soil cover in areas where the top one foot of exposed surface soil exceed the applicable soil cleanup objectives (SCOs) or target fill exists. The soil cover will be placed over a demarcation layer, with the upper six inches of soil having sufficient quality to maintain a vegetation layer. In the event the use of the property changes a cover thickness appropriate for that new use will be required. Any fill material

brought to the property will meet the requirements for the identified land use as set forth in 6 NYCRR Part 375-6.7(d).

- 6. Institutional Controls Imposition of an institutional control in the form of environmental easements for the controlled properties which will:
 - require the remedial party or property owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
 - allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws; and
 - require compliance with the Department approved Site Management Plan. A Site Management Plan is required, which includes the following:
 - c. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the area of concern and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: requires Corning Incorporated to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375- 1.8(h)(3). Institutional controls also include voluntary agreements between Corning Incorporated and respective property owners for access and any other pertinent provisions to enable the installation and maintenance of cover systems, management of remaining contamination, excavation, inspections, sampling, and/or any other requisite activities.

Engineering Controls: The soil cover discussed in Paragraphs 4 and 5 above.

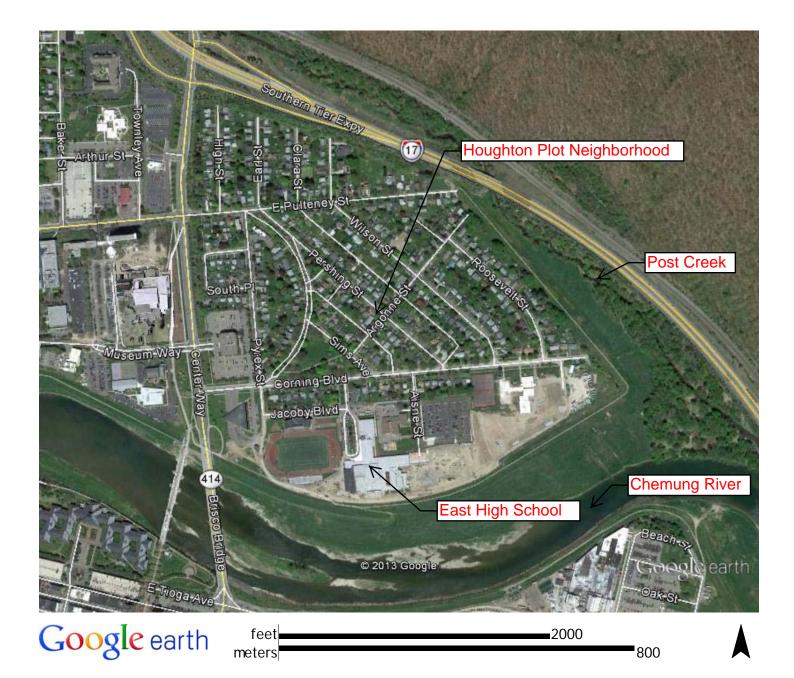
The Site Management Plan will include, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination; and
- a provision for further investigation and remediation should large scale redevelopment occur or the use of the property(ies) change(s), if any of the existing structures are demolished, or if the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department. Based on the investigation results and the Department's determination of the need for a remedy, a Remedial Action Work Plan (RAWP), if required, will be developed for the final remedy for the site, including removal and/or treatment of any source areas to the extent feasible. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment; and
- a provision for further investigation and remediation, if necessary, to refine the nature and extent of contamination in areas where access was previously

hindered or where future excavations are proposed at depths greater than that remediated under this remedy as well as areas where unexpected fill containing ash brick or glass is encountered regardless of depth; and

- provisions for the management and inspection of the identified engineering controls, including within right-of-way areas (while usage of these areas is generally controlled by their right-of-way status, Corning Incorporated has committed to address potential exposures related to required maintenance or repairs to piping, culverts, *etc.* and the presence of remaining contamination including excavation, management and disposal in accordance with the intended use of the right-of-way area); and
- a provision maintaining access control and Department notifications; and
- a provision for tracking of property ownership changes to allow for continued communication with owners; and
- a provision for an annual reminder from Corning Incorporated to the Corning-Painted Post School District, Corning Christian Academy, and the City of Corning of the presence of remaining contamination, and of Corning Incorporated's commitment to address (including excavation, management, and disposal) remaining contaminated soils, as necessary and in accordance with the intended use of the property; and
- a provision for Corning Incorporated to send annual reminders to the City and Town of Corning Code Enforcement Offices and Departments of Planning and Economic Development to timely inform Corning Incorporated of any building permits or other approvals they grant for properties within the area addressed by this decision document where contamination remains after the remedy is completed; and
- a provision for Corning Incorporated to send annual reminders to the Corning-Painted Post School District, Corning Christian Academy, and the City of Corning (Memorial Stadium) with a request to timely inform Corning Incorporated of any plans to conduct ground-intrusive work within the area addressed by this decision document (*e.g.*, soil disturbance work); and
- the provisions necessary for the periodic reviews and certification of the institutional and/or engineering controls; and
- a provision for providing, in the event that the current use of the Corning Christian Academy, Corning Painted Post School District or Memorial Stadium property(ies) change(s), a cover thickness appropriate for that new use will be required. Any fill material brought to the property(ies) will meet the requirements for the identified land use as set forth in 6 NYCRR Part 375-6.7(d).
- d. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan will include, but may not be limited to:
 - monitoring of groundwater to assess the performance and effectiveness of the remedy; and
 - a schedule of monitoring and frequency of submittals to the Department; and
 - an annual visual inspection of properties to ensure that the controls remain in place and effective.

7. Interim Site Management Plan - An Interim Site Management Plan (ISMP) is required during pre-design, design and remedial activities that is consistent with Paragraph 6 (above) for properties located in the area addressed by this Decision Document including rights of way and utility corridors. The ISMP is intended to address all soil management issues until the remedy is fully implemented and will terminate once all properties where access was granted are remediated and a Department approved SMP is in place.



Study Area Operable Units

