Project Update and Proposed Remedy

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New York State Department of Environmental Conservation & New York State Department of Health Representatives

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Meeting Agenda

- Meeting Purpose & Project Background - NYSDEC
- Study and Expansion Area Findings - NYSDEC
- Exposure Evaluation & Recommendations – NYSDOH/NYSDEC
- Proposed Decision Documents – NYSDEC
- Next Steps – NYSDEC/Corning Incorporated
- Questions and Answers - All
Purpose of Meeting

- Explain findings of Investigations
- Discuss the State’s proposed remedy for the Study and Expansion Areas including the Schools and Memorial Stadium
- Discuss the pre-design investigation and other additional sampling that will be completed in the Study and Expansion Areas
- Discuss how Corning Incorporated, under the State’s oversight, will complete the pre-design investigation work and implement the remedy
Study Area Background

- Fill encountered during expansion of CPP High School in 2012 contained ash, brick, and glass (target fill)
  - contained arsenic, cadmium, and lead
  - some of the excavated fill disposed of as hazardous waste
- 1920 property deed for the Study Area contained provision for Corning Glass Works to maintain ash dumps as then located
- Corning Incorporated entered into an Order with NYSDEC in June 2014
Expansion Area Background

- Residential Areas immediately to north and west of the Study Area
- Target fill was initially confirmed
  - at northwest boundaries of Study Area
  - at multiple residential properties in the Expansion Area during preliminary sampling by NYSDEC
- Expansion Area Characterization initiated by NYSDEC in May 2015, funded by State Superfund, the Site Characterization Report is available in the Document Repositories and at: [www.dec.ny.gov/chemical/97180.html](http://www.dec.ny.gov/chemical/97180.html)
Investigation Findings for the Study and Expansion Areas

- Identified that the contaminants of concern are several metals including arsenic, lead and cadmium and semi-volatile organic compounds (SVOCs)
- Identified areas with no SCO exceedances and no target fill containing ash, brick and glass requiring no further action
- Identified layers of target fill near the surface and at depth with and without SCO exceedances
- Identified areas where soil exceeds SCOs
- Determined that groundwater is not currently impacted by contamination associated with target fill
Exposure Evaluation Big Picture

- While exceedances of metals and other contaminants of concern have been found in some of the surface, sub-surface and garden soil sample results, measures can be taken to minimize contact and in doing so will reduce your potential for exposure.

- Groundwater monitoring to date has not identified levels of site-related contaminants above groundwater standards.
Routes of Exposure

- The physical contact with a chemical or substance
  1. direct contact (touching)
  2. ingestion (eating/drinking)
  3. inhalation (breathing)

No Contact = No Health Effect
Potential Exposures

- Contact with metals and other contaminants of concern is possible in surface soils (within top 2 inches of ground surface), particularly in areas not covered with grass, mulch or pavement, especially in areas with visible ash, brick, and glass.

- Contact is also possible in sub-surface soil (beneath ground surface) if you dig into the ground.

- People can be exposed to metals or other contaminants of concern in soil if they get soil on their hands or vegetables and swallow or ingest the soil through hand-to-mouth or eating activities.
Recommendations to Reduce Exposure until Remediation is Complete

- Maintain a grass or mulch cover over soil
- Avoid unnecessary digging
- Avoid bringing soil inside the house by brushing off your clothes and removing shoes at the door
- Use doormats and periodic damp mopping of floors for soil that might be tracked indoors
- Wash hands with soap and water after outdoor activities
Recommendations for Gardening until Remediation is Complete

- Grow vegetables in raised beds with clean soil at least ten inches deep.
  - Use untreated wood to make the beds. Pressure-treated wood and railroad ties contain added chemicals.
- Wear gloves when working in the garden.
- Wash with soap and water after gardening or any time before you eat.
- Additional information about healthy gardening may be found at: http://www.health.ny.gov/publications/1301/.
How Will the Remedy Address Exposure at Your Home Long Term?

- The top 2 feet of soil at a residential property will meet the residential SCOs.

- Existing features (e.g., paved driveway) may be incorporated into the cover system over any remaining contamination.

- Institutional controls to minimize uncontrolled disturbances of remaining contamination – assistance provided by Corning Incorporated for digging in areas where contamination remains.
How Will the Remedy Address Exposure at the School/Community Use Area Long Term?

- Further investigation at the Corning Painted Post High School to ensure the existing one foot cover meets restricted residential SCOs.

- The top 2 feet of soil at the Corning Christian Academy and Memorial Stadium will meet restricted residential SCOs.

- Existing features (e.g., paved driveway) would be incorporated into the cover system over any remaining contamination.

- Institutional controls to minimize uncontrolled disturbances of remaining contamination – assistance provided by Corning Incorporated for digging in areas where contamination remains.
Site Management at School/Community Use Areas and at Your Home

- Measures will be put in place prior to and after remediation to prevent contact with contamination.

- Groundwater will continue to be monitored to ensure site-related contaminants do not impact public water supply and school irrigation wells.

- Monitoring to ensure cover systems (such as soil cover) remain and continue to be an effective barrier.
Overall

- The investigations conducted have evaluated all exposure pathways and actions have been taken to minimize or prevent exposure.

- The proposed remedy will address any potential current or future exposures and is protective of public health.
Proposed Decision Documents

- Operable Units 1, 2 and 5 - Residential Areas (Study and Expansion Areas)

- Operable Unit 3 - Corning Painted Post High School, Corning Memorial Stadium and Corning Christian Academy

- Public Comment through April 10, 2017 - The State encourages anyone who has comments or concerns with the proposed remedy to share those comments either tonight or in writing by April 10th.
Basis for Selection of the Proposed Remedies

- The proposed remedy is based on an evaluation of alternatives given the challenging circumstances of an existing residential neighborhood and common areas developed over a former waste disposal area.
- An unrestricted cleanup would necessitate extensive excavation, including some building demolition, and would be overly destructive to the existing properties.
- The proposed remedies are protective of public health and the environment because they address the soil contamination near the surface, which is the threat to public health.
Elements of the Proposed Remedies

- Pre-design Investigation
- Excavation and Restoration
- Engineering Controls - Cover System
- Institutional Controls
  - Easements (Schools and Memorial Stadium)
  - A System of Notifications and Reminders (residential properties)
  - Interim Site Management Plan until the remedy is fully implemented
  - Long-term Site Management Plan
Flexibility with the Proposed Measures to Prevent Long Term Exposures

Excavation and removal of soils within the top two feet to meet the residential SCO remedial goals with some flexibility to be employed by the NYSDEC on a case-specific basis to allow for limited confirmation samples to exceed this level, based on 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 is appropriate.

In addition, this consideration will also be applied to accommodate property owner concerns related to preservation of their property with respect to specific features such as mature trees, sheds, decorative plantings, or other features of significance to the property owner where possible.
Two Foot Soil Cover

- Existing Material May Exceed Residential SCOs
- Top Soil Meeting Residential SCOs
- Common Fill Meeting Residential SCOs
- Geotextile Demarcation Layer
- Seeding or Sod
- Sub-base
- Asphalt driveway

2 ft
Institutional Controls

- Environmental Easement – an interest in a property by DEC which restricts its use in accordance with a Long Term Site Management Plan (www.dec.ny.gov/docs/remediation_hudson_pdf/der33.pdf)

- Other institutional controls which may supplement or replace the environmental easement:
  - Notice to new property owners
  - A system of notifications and reminders
  - Procedures for materials management if excavations occur on properties awaiting remediation and or below the cover on remediated properties
  - For more information go to: http://www.dec.ny.gov/chemical/8665.html
Long Term Site Management

- Long Term Site Management Plan (SMP)
  - Identifies and implements institutional and engineering controls such as an environmental easement or property owner notifications and the cover system
  - Provides direction as to handling, management, and disposal during any future excavation beneath a cover system or involving other contaminated material
  - An example template is provided at: www.dec.ny.gov/docs/remediation_hudson_pdf/smp_template.pdf
What this means for the Property Owner

For those residential properties within the Study Area where target fill or soils above the SCOs remain beneath a clean cover of soil, the property owner can expect:

1. An excavation plan with provisions for managing future excavations;
2. Periodic inspection of the soil cover by Corning Incorporated;
3. Annual reminders from Corning Incorporated to the property owner;
4. Corning Incorporated will send annual reminders to the City of Corning, Town of Corning and/or Steuben County to timely inform Corning Incorporated of any City, Town or County plans to conduct intrusive maintenance work.
Pre-design Investigation

- Pre-design investigation is needed to further investigate some properties to:
  
  1) Determine the necessity of remediation and/or
  
  2) Determine the extent of any remediation that will be undertaken
Implementation

- Corning Incorporated will propose a Remedial Action Work Plan:
  - The objective will be to remove contamination from the top two feet where accessible;
  - NYSDEC may require deeper excavation on a property only if that excavation: is only marginally deeper than two feet; is only in a limited area of that property; and would result in a cleanup for which a no further action determination (without site management) could then be issued for that property.
  - If contaminated soil is removed and replaced, imported soil will meet the residential SCOs and a demarcation layer will be installed under the imported clean soil, if contamination remains at deeper levels after excavation.
  - Access agreements will detail proposed remedial work and restoration efforts on each individual property.
Closeout Requirements

NYSDEC, in consultation with NYSDOH, will ultimately issue, either:

- No Further Action (NFA) letters to owners of property where:
  - No excavation is needed and adequate testing demonstrates that applicable SCOs are not exceeded; or
  - Excavation is completed and adequate testing demonstrates that remaining soil does not exceed applicable SCOs

- NFA with Site Management (SM) letters to owners of property where:
  - No excavation is needed in upper two feet but applicable SCOs are exceeded in material at depths greater than two feet; or
  - Excavation is completed and applicable SCOs are exceeded in remaining material at depths greater than two feet
Path to No Further Action Determination

- In order to receive an NFA Letter from NYSDEC, a property owner must grant access for sampling and remediation, where needed.
  - NYSDEC plans to issue NFA letters in the near future for properties where soil meets SCOs.
  - Sampling is planned this spring in a portion of the Study Area where target fill was not identified, this should allow the State to issue additional NFA letters, if no contamination is found.
  - As properties are remediated, the NYSDEC will issue additional NFA letters.
What this means for Property Owners

NYSDEC/NYSDOH desire the timely investigation and if necessary remediation of all properties within the Study Area. The proposed remedy includes provisions for:

1. sun setting of implementation of the remedy for property owners who chose to decline remedy implementation and/or sampling on their property after a period of five years following the completion of the work on all properties where access was provided; and

2. notification to any new property owners of implementation of the remedy for new property owners for a period of two years following a change in ownership; this provision to notify new property owners will run for a period of fifteen years after the completion of the work on all properties where access was provided

3. After the time periods noted above, NYSDEC will evaluate additional measures on unaddressed residential properties which may be needed to be protective of public health.
Next Steps

Residential Properties

- NYSDEC in consultation with NYSDOH will issue NFA Letters for certain properties where soil was tested and does not exceed SCOs
- Corning Incorporated will complete additional sampling under NYSDEC approved Work Plan, Addendum 4, for a portion of the study area where no target fill was found to date
- NYSDEC will finalize the Proposed Decision Document after considering public comments
Next Steps (cont’d)

Residential Properties

- Corning Incorporated will complete NYSDEC approved Pre-Design Investigation
- Corning Incorporated will submit Remedial Action Work Plan
- Corning Incorporated will begin remediation in 2017
Next Steps (cont’d)

Schools and Stadium Property

- Corning Incorporated will begin field work under NYSDEC approved IRM work plans this spring and summer.
- The work will include a pre-design investigation to confirm that a cover system is in place as well as excavation and restoration in some areas.
- Completion of Environmental Easements and Site Management Plans to address long-term site management.
- Work will be coordinated with the City of Corning and Schools.
- NYSDEC will finalize the Proposed Decision Document after considering public comments.
Public Comment

- NYSDEC encourages the public to provide comments on the Proposed Decision Documents. Your comments are welcome now or in writing via e-mail or through the US Postal Service by April 10th at the following address:

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  Avon, NY 14414  
  E-mail: kelly.cloyd@dec.ny.gov
To Stay Informed

NYSDEC Study Area Website
www.dec.ny.gov/chemical/97180.html

List-Serv Signup
www.dec.ny.gov/chemical/61092.html

Document Repository
Southeast Steuben County Library
300 Nasser Civic Center Plaza
Suite 101
Corning, NY 14830
Phone (607) 936-3713
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