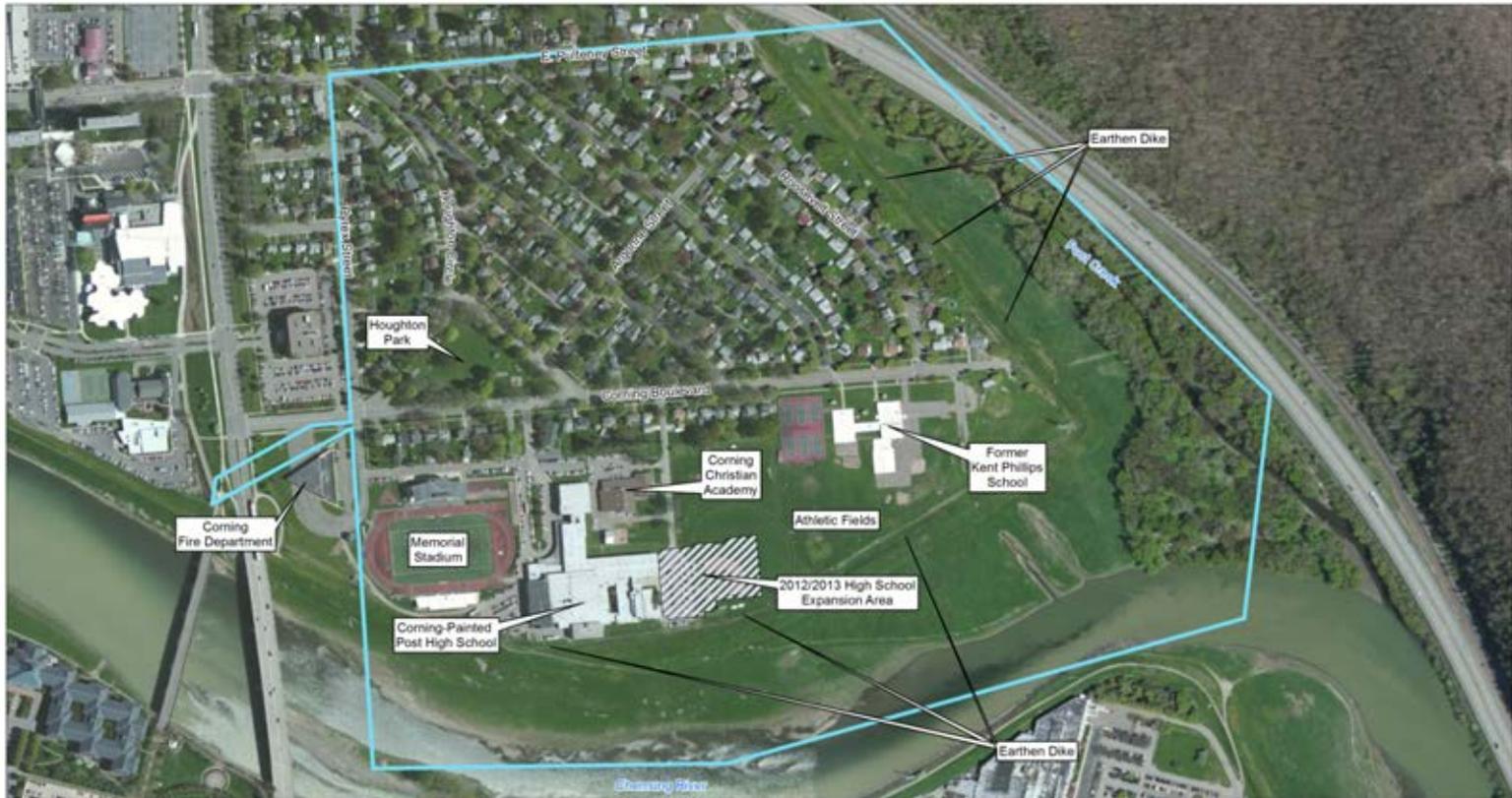


Study Area – Project Update

Bounded by Pyrex Street, E. Pulteney Street, Post Creek, and Chemung River



Legend	Study Area Boundary Based on 1937 Out Claim Deed
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NOTES: Base Imagery: ESRI; DigitalGlobe, GeoEye; Mapping Services, 2011 Coordinate System: NAD 1983 State Plane New York Central Foot Datum: NAD83 Units: Feet	Study Area Corning NY



Study Area
Document Name: CPP_Approval_f_Study_Area.MXD
6/27/2014



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

Greg MacLean, NYSDEC Project Manager

Bart Putzig, NYSDEC Regional Hazardous Waste
Engineer

Melissa Doroski, NYSDOH Project Manager



Meeting Agenda

- Project Background - NYSDEC
- Project Summary - Corning Incorporated/Weston Solutions
- Additional Characterization - NYSDEC
- Exposure Evaluation & Recommendations - NYSDOH
- Next Steps - NYSDEC
- Questions and Answers - All



Project Background

- Fill encountered during expansion of CPPHS contained ash, brick, and glass
- Primary constituents of concern:
 - arsenic, cadmium, and lead
- Large quantities of excavated soil characterized as Hazardous Waste:
 - Nearly 8,000 tons as of end of 2013
- DEC asked Corning to conduct an evaluation and Corning entered into an Order with DEC to do so.



Corning/Weston Presentation



What is Hazardous Waste

- Defined under the federal Resource Conservation and Recovery Act (RCRA) of 1976
- Toxicity Characteristic Leaching Procedure (TCLP)
 - Simulates how soils will leach in a landfill (acidic environment).
 - Measured as concentration of contaminant present in leachate
 - Also used to evaluate whether soil contamination has the potential to impact groundwater



Soil Cleanup Objectives (SCOs)

- Developed by NYSDEC, in consultation with NYSDOH, in 2006
- Use-based Objectives
 - SCOs for Residential Use apply to the Study Area



Soil Cleanup Objectives (SCOs)

- SCOs Measured as TOTAL Concentration of Contaminant in a Soil Sample (mg/kg)
- NOT the Same as TCLP
- TCLP Measures the Concentration of Contaminant in Leachate (mg/l)



Additional Characterization

- Shallow Evaluation Activities
 - Preliminary identification of properties with fill containing ash, brick, or glass
 - Generally to a depth of 2 feet below ground
 - At select residential properties within and adjacent to the Study Area where property owners have reported this fill is present



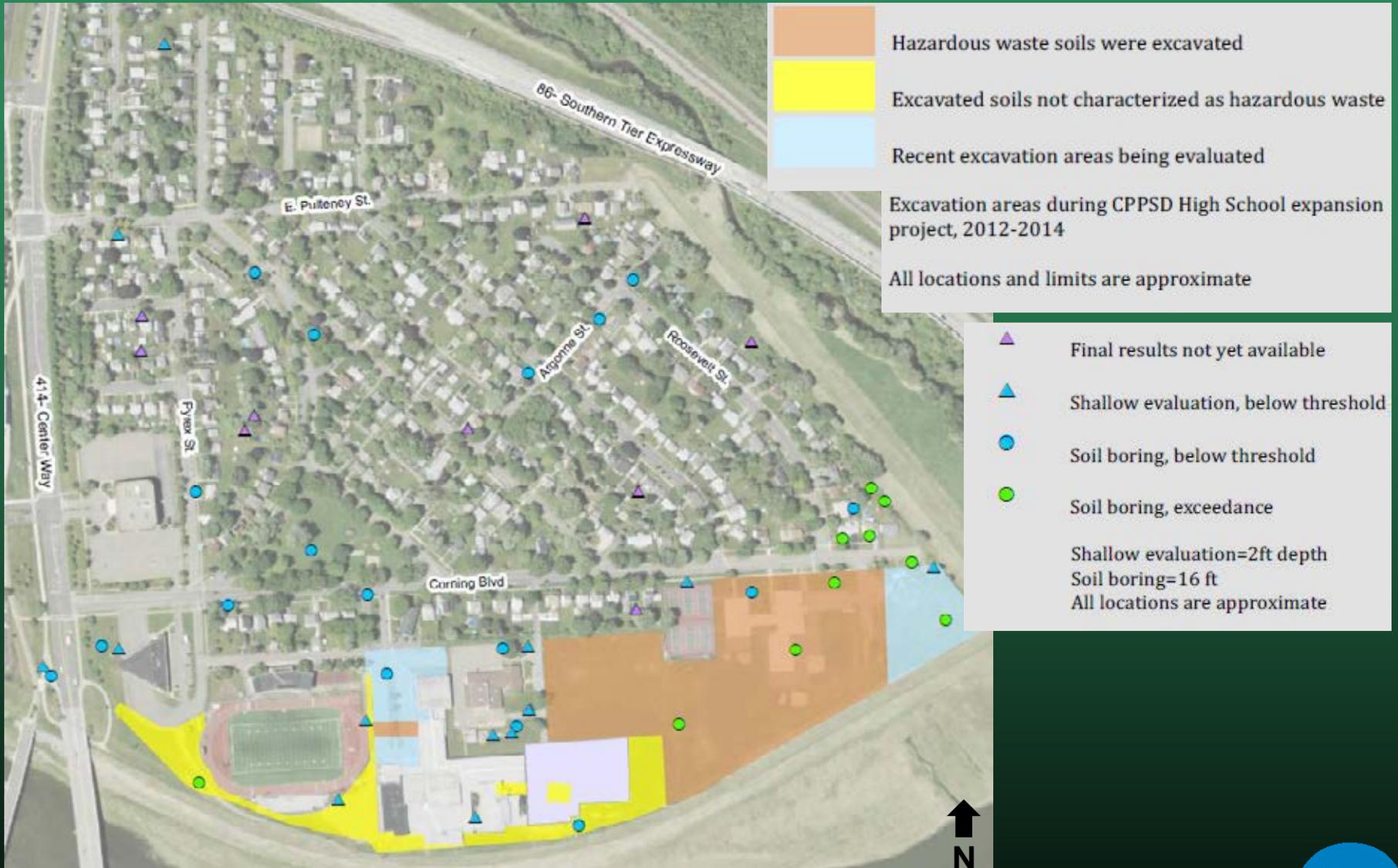
Locations Evaluated for Presence of Fill with Ash, Brick, or Glass



Examples of Fill at Residential Properties with Ash, Brick, and Glass



Locations Tested for Hazardous Waste



Locations Tested for Compliance with RSCOs

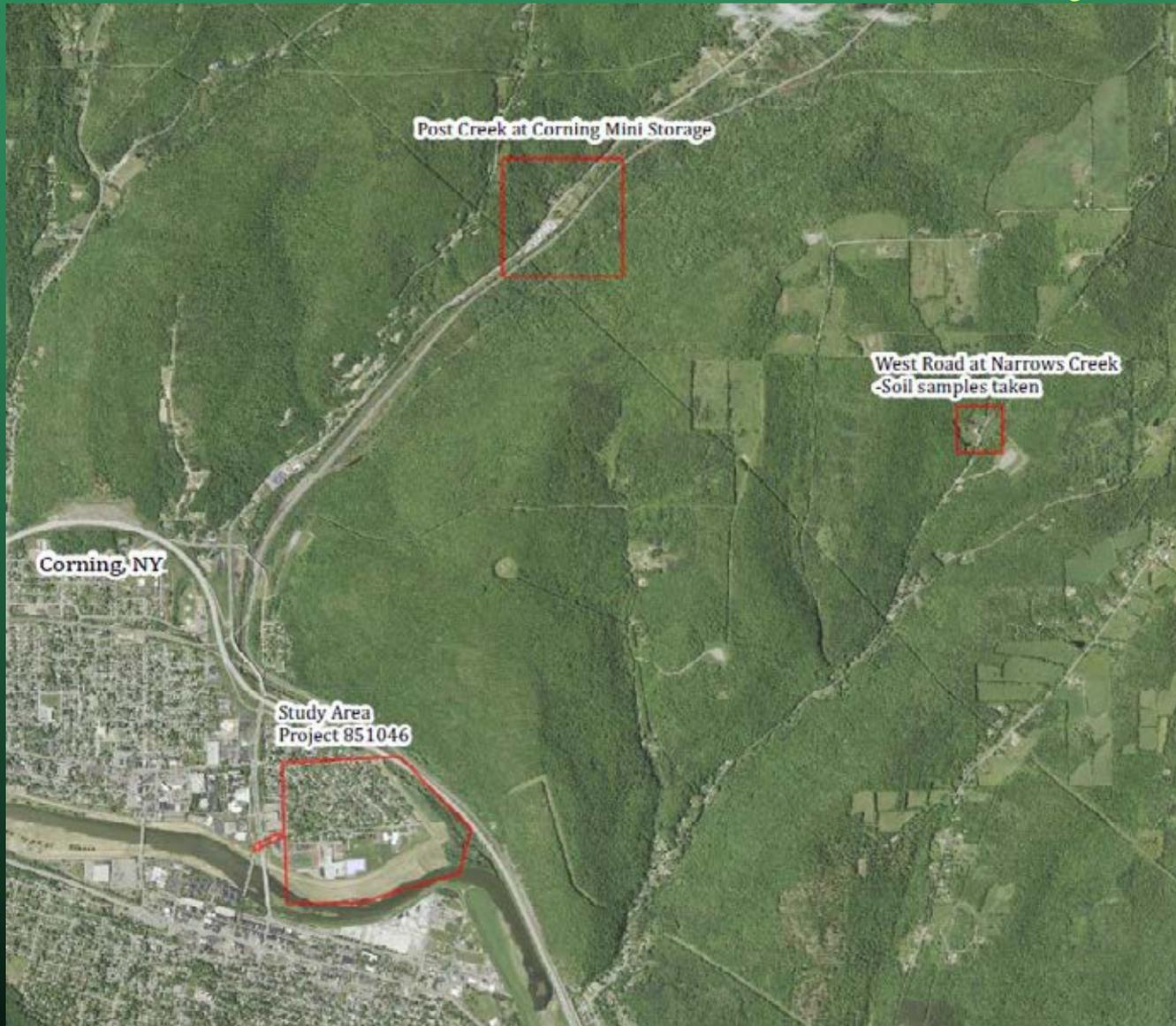


- ▲ Final results not yet available
- ▲ Shallow evaluation, > RSCOs
- ▲ Shallow evaluation, < RSCOs
- Soil boring, > RSCOs
- Soil boring, < RSCOs

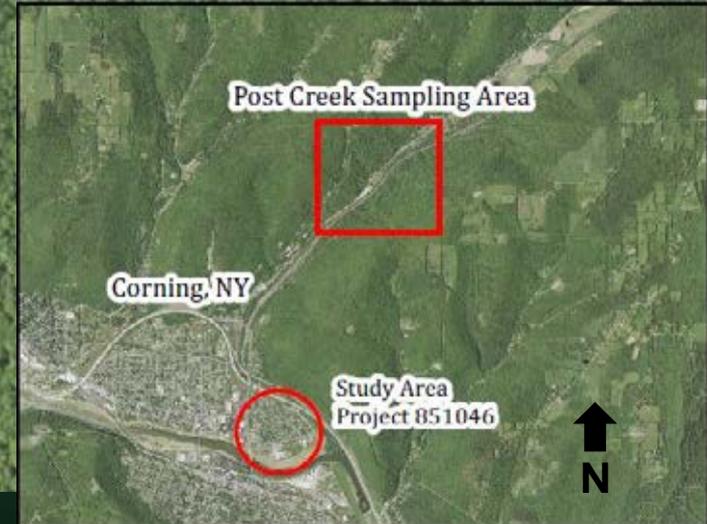
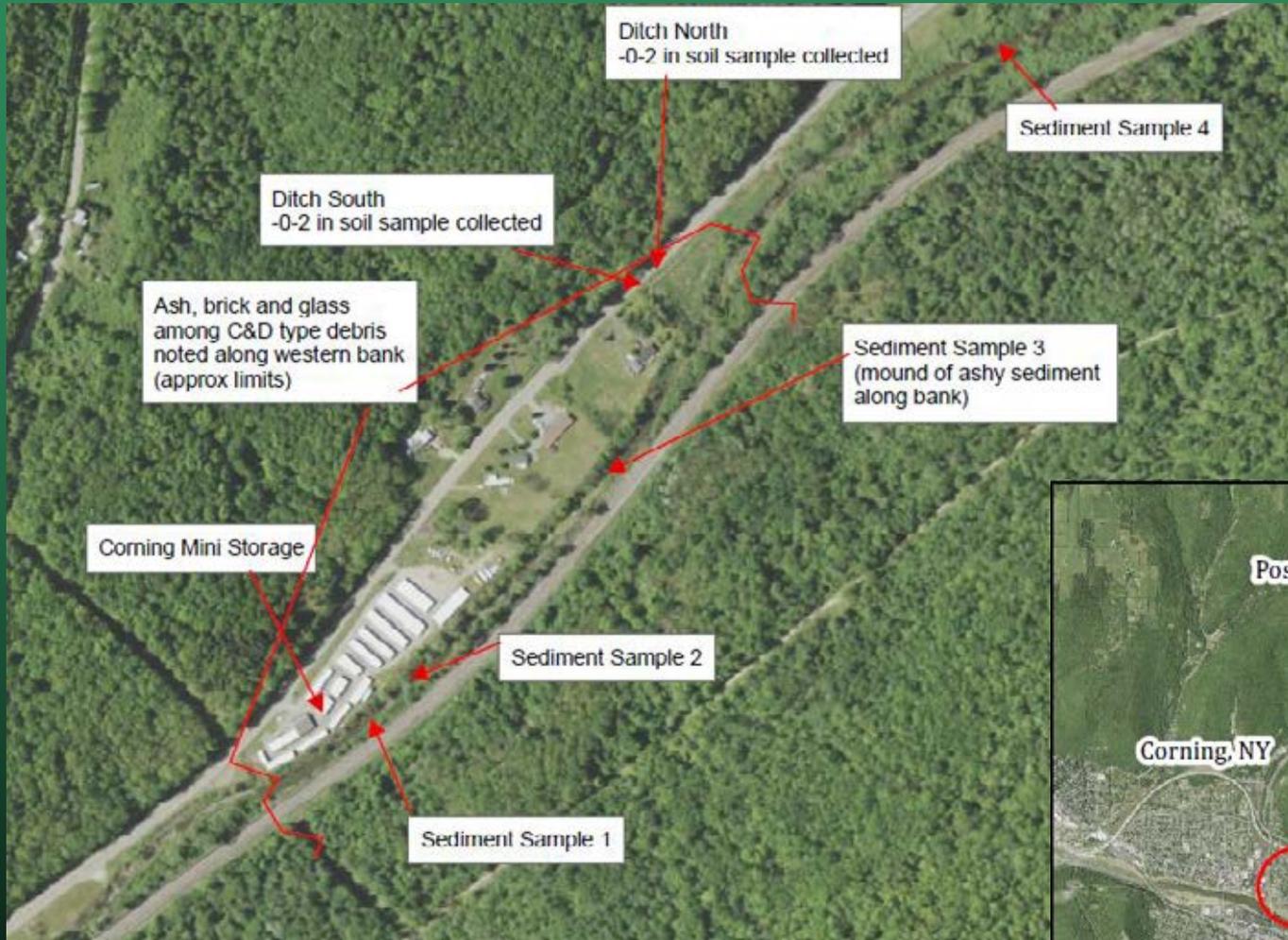
Shallow Evaluation= 2 ft depth
Soil Boring= 16 ft depth
RSCO= Residential Soil Cleanup Objective
All locations and limits are approximate



Areas Evaluated Outside Study Area



Post Creek at Corning Mini Storage



Examples of Ash, Brick, and Glass Post Creek at Corning Mini Storage



Farm Property in Town of Corning

- Glass present at ground surface similar in appearance to that in Study Area
- Two surface soil samples collected
- Final analytical data not yet available



Additional Areas Being Evaluated

- Other Locations?
 - DEC will continue to evaluate any additional possible disposal locations as we become aware of them



Routes of Exposure

The physical contact with a chemical or substance

- **direct contact** (touching)
- **ingestion** (eating/drinking)
- **inhalation** (breathing)

One or more of these physical contacts **must** occur before a chemical has the potential to cause a health problem.



How do metals behave in the environment?

1. Metals attach to dirt particles, where they can be retained for many years.
2. Metals (particularly lead) tend to bioaccumulate in the environment and do not break down over time.
3. Metals can dissolve in water, but prefer to stay present in soil.



How do we evaluate the potential for exposure?

Direct
Contact

- Are metals present in soil at the surface and/or under the ground?

Ingestion

- Are metals present in the groundwater?
- Are metals present in the soil that you come in contact with and incidentally ingest?



Where metals and/or visible fill containing ash, brick or glass has been found

Direct
Contact

- Contact with metals in surface soils is possible in areas not covered with grass or pavement, especially in areas with visible ash, brick, and glass.
- Contact with metals in sub-surface soil is possible if you dig into the ground.



Where metals and/or visible fill containing ash, brick or glass has been found

Ingestion

- The area is served by a public water supply that is routinely tested to ensure the water is suitable for people to drink.
- People can be exposed to metals in soil by incidentally ingesting them.



Contaminants above SCO – what does this mean relative to the potential for health effects?

- SCO are developed based on the assumption that people are exposed to soil through activities that typically occur on residential properties (e.g., working and playing in the yard, gardening).
- Not a "bright line" between soil concentrations that will result in health effects and those that will not.



Measures to Reduce Potential Exposure

Where surface soil contamination has been identified within the study area:

- Additional characterization activities will be done.
- The State will ensure actions are taken to address exposure.

Where soil contamination is present under the ground surface:

- Avoid unnecessary digging.
- Contact the State if ground intrusive activities are needed.



General Recommendations to Reduce Potential Exposure

- Maintain a grass or mulch cover over soil.
- Minimize direct and repeated contact with soils.
- Avoid bringing soil inside the house by brushing off your clothes and remove shoes at the door.
- Doormats and periodic damp mopping of floors for soil that might be tracked indoors.
- Wear gloves when working in the garden and wash hands with soap and water after outdoor activities.



Next Steps

DOH will continue to assist DEC by:

- Evaluating the results as they are available,
- Recommending actions to address exposure, if necessary,
- Helping to communicate the results to the public.

In the meantime, please don't hesitate to contact me with any questions!



Next Steps

- 2nd round of residential surface soil sampling
 - Access agreements need to be returned to Corning Incorporated by November 7
- Additional characterization in Study Area; soil borings and groundwater monitoring wells
 - School property and Memorial Stadium
 - SE and NW portions of residential area
- Further evaluation of residential properties with fill



Next Steps

- Receive and evaluate surface soil data for residential yards
- Provide results to homeowners
 - By mid-February for first round samples
- Availability Sessions
 - Following delivery of results to homeowners
 - Homeowners can speak one-on-one with DEC, DOH and/or Corning Incorporated regarding their results



Next Steps

- DEC/DOH will continue to keep the Public Informed:
 - During the on-going sample collection process;
 - As the sample results are evaluated;
 - By communicating the results and recommended action(s), if necessary.



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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QUESTIONS?

