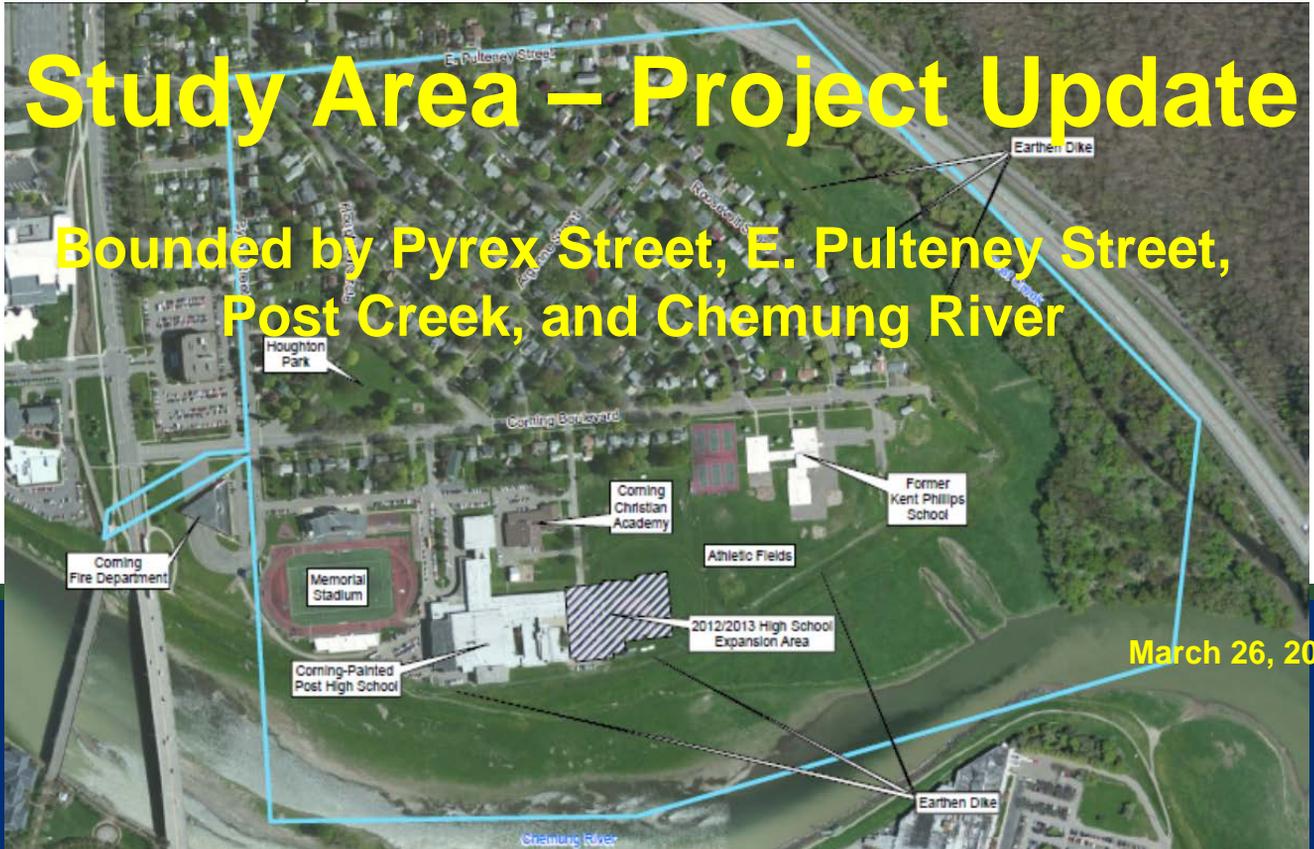




Department of
Environmental
Conservation

Study Area – Project Update

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



March 26, 2015

**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 Areas - 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:
 - greater than 8,000 tons as of end of 2014
- DEC asked Corning to conduct an evaluation and Corning entered into an Order with DEC to do so

Corning/Weston Presentation

DEC Shallow Soil Sampling in Study Area

- September 2014

- Shallow soils (generally to depths of 2 feet) evaluated at some properties where owner reported presence of glass
- 1 of 7 soil samples collected had an exceedance of Residential SCOs (mercury).

- November 2014

- Surface soil sample collected next to animal burrow with glass chunks in ROW at northeast end of Argonne St.
- Analytical exceedances of Residential SCOs for arsenic, cadmium, and lead

Additional Characterization by DEC

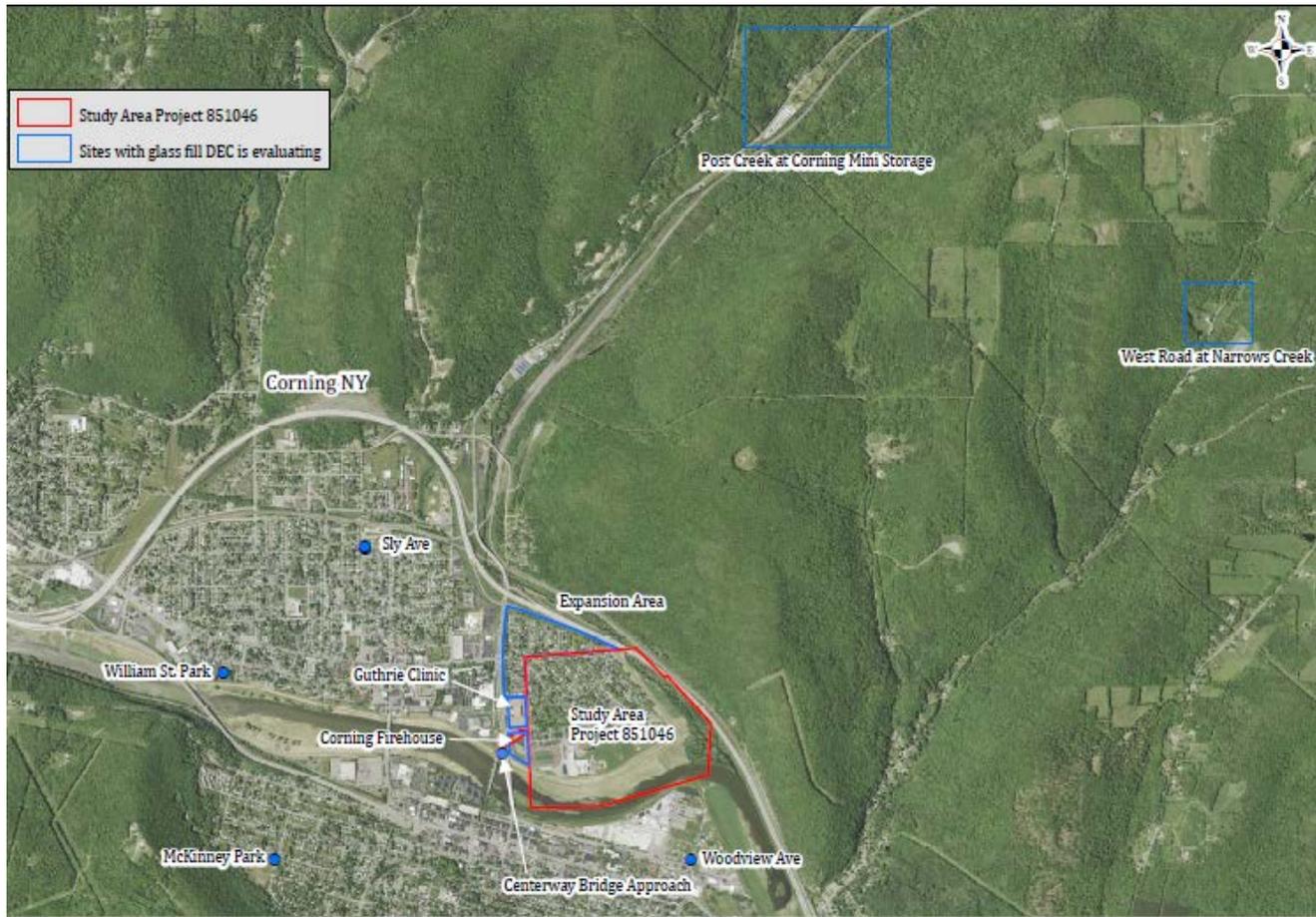
• Locations

- Residential Area adjacent to Study Area
- City of Corning Parks - McKinney and William St.
- Other residential properties - Sly Ave., Woodview Ave., West Rd.
- Corning Mini Storage

• Sampling by DEC has identified:

- Fill with glass pieces similar to that in Study Area
- Analytical exceedances of residential SCOs

Additional Characterization Areas



Adjacent Residential Area

- Neighboring residential areas to north and west of Study Area – “Expansion Area”
- Fill layer in Study Area confirmed at northwestern boundaries, Pyrex St. and E. Pulteney St.
- DEC has identified a similar layer of fill in shallow soil at a residential property ~150 ft west of Study Area boundary



Adjacent Residential Area

- DEC has confirmed glass pieces and/or ash in shallow soils on five residential properties to date
 - Soil samples at 4 of 5 properties had concentrations of metals greater than residential SCOs
- Several additional property owners have reported the presence of such fill



Adjacent Residential Area

- DEC is developing a scope of work to comprehensively characterize this area
- Work to be done by engineering consultant to New York State, under DEC oversight
- City of Corning Rights-of-Way
 - Approx. 20 soil borings
 - Approx. 7 test pits
- Residential Property
 - Surface soil sampling – 4 per property
 - Soil borings – 2 or more at properties where fill containing ash, brick, or glass is reported

Expansion Area – Preliminary Sample Locations



Additional Areas Being Evaluated

- Plans are being developed to characterize other areas shown this spring and summer
- 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 to metals?

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?

Potential Exposure: Direct Contact

- Contact with metals is possible in surface soils (within top 2 inches of ground surface), particularly in areas not covered with grass 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.

Potential Exposure: Ingestion of Soil

- People can be exposed to metals in soil if they get soil particles on their hands and swallow or ingest the soil through hand-to-mouth activity.
- Ingestion may also occur if a metal is in the soil particles on produce (i.e. lettuce) and you ingest that soil when eating the vegetable.

Potential Exposure: Ingestion of Groundwater

- No study-related contaminants were found at levels above groundwater standards in samples collected from monitoring wells installed as part of study.
- The area is served by a public water supply that is routinely tested to ensure the water is suitable for people to drink.

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

- SCOs 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.

Recommendations to Reduce Exposure

Where exceedances of SCO are present in surface soil :

- Maintain a grass or mulch cover over soil.
- 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.
- Wash hands with soap and water after outdoor activities.

Recommendations to Reduce Exposure

Where exceedances of SCO's are present under the ground surface:

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



Recommendations for Gardening

- 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.
- Brush off your clothes and remove shoes and gloves before entering your home.
- 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/>.



Overall

- While exceedances of metals have been found in some of the surface and sub-surface soil sample results, measures can be taken to minimize contact and in doing so will reduce your chances for exposure.
- Groundwater has not been found to be impacted to date.
- Please contact me at any time with any questions that may arise as you begin your spring outdoor activity.

Next Steps

DEC has determined additional investigation work is necessary to further evaluate

- Study Area
- Residential Area adjacent to Study Area
- City of Corning Fire Department
- Guthrie Medical Center
- Centerway Bridge Approach
- McKinney and William Street Parks
- Other residential areas - Sly Ave., Woodview Ave., West Rd.
- Corning Mini Storage



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?

