NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
BCP Significant Threat Determination Report

3/26/2024

Site Code C851031 **Site Name** Tioga Avenue Site
City Corning **Town** Corning (c)
Region 8 **County** Steuben
Current Classification C
Estimated Size 14.1800 **Allowable Use** Commercial
Significant Threat: No **Project Manager** Evelyn Hussey

Summary of Approvals

Originator/Supervisor: Michael Cruden **02/13/2024**

Regional Hazardous Waste Remedial Engineer: David Pratt: **02/14/2024**

BEEI of NYSDOH: **02/29/2024**

CO Bureau Director: Michael Cruden, Dir., Remedial Bureau E: **2/29/2024**

03/22/2024

Assistant Division Director: David Harrington, P.E.:

Basis for Significant Threat Determination

The offsite sediment downstream of the site presents a reasonably foreseeable significant threat to human health and the environment due to the historic discharge of industrial waste through site outfalls to the Chemung River. The outfalls conducted fluid and waste material to the River, apparently from at least 1958 to 1992 and possibly longer. Historic documents report outputs of particulate containing lead and other metals generated during industrial operations, as well as etching and other fluids like hydrofluoric acid, with variable amounts of treatment, through the outfalls and to the River. Historic monitoring reports also document violations of discharge permit limits for lead in at least 1985 and 1987 and reports also document potential waste oil impacts as far downstream as Elmira in 1965 and 1966.
In addition to the historic documents, following receipt of the site COC, excavation and cleaning of outfall pipe produced wastes disposed of a hazardous for lead based on TCLP results, but the material cleaned from the pipes was not fully analyzed or documented.
The material documented to have been discharged to the River, and material similar to that observed to fail TCLP in the outfall pipe during cleaning, are highly likely to have contaminated sediments downstream of the outfall discharges.

Site Description - Last Review: 06/16/2021

Project Status - Long Term Site Management

3/26/2024

Site Code C851031 **Site Name** Tioga Avenue Site

Location: The Tioga Ave. Site is located at 213, 219, and 239 East Tioga Ave, three contiguous parcels in the City of Corning, Steuben County.

Site Features: The site covers 14.18 acres and most recently was the site of the former Corning Fallbrook Glass Mfg. plant

Current Use/Zoning: The Site is zoned commercial/industrial with future plans conforming to that usage.

Historic Uses: The Corning Fallbrook Glass Mfg. plant operated at the site from the late 1920's until 2002 with earlier usage as a railroad operations center dating back to the mid 1800s. In 2007 the Fallbrook facility was demolished and the buildings removed, leaving essentially a level site covered by impervious materials, concrete slabs and building foundations. Portions of the site and demolition materials were characterized hazardous for lead and disposed of at a regulated facility. The Site is bordered by the Chemung River and industrial property on the north with the remaining boundary parcels occupied by parking lots, commercial establishments and residential properties.

A number of Site Assessments were completed on the Site including preliminary RCRA inspections/ evaluations completed in the 1990's and an Environmental Site Assessment (ESA) and Phase II ESA completed in 2007. These investigations identified eight Area's of Concern associated with historical operations at various locations on the site and provided the basis for developing the scope of the Remedial Investigation Work Plan.

Site Geology and Hydrogeology: The site subsurface soils are best characterized as historic fill of variable depth (1-13') overlying native soils. Ground water is found at 18-20' below ground surface with a shallow flow in the NE direction. Ground water surface modeling implies that shallow flow direction may be influenced by a non potable industrial pumping well in the SE corner of the adjacent World Kitchen property.

Contaminants of Concern (Including Materials Disposed)	**Quantity Disposed**
OU 01	
1,1,1-Trichloroethane(TCA)	UNKNOWN
arsenic	UNKNOWN
lead	UNKNOWN
petroleum products	UNKNOWN

Analytical Data Available for : Groundwater, Soil

Applicable Standards Exceeded for: Soil

Site Environmental Assessment - Last Review: 06/16/2021

3/26/2024

Site Code C851031 **Site Name** Tioga Avenue Site

Remediation at the site is complete. Prior to remediation, the primary contaminants of concern arsenic, lead and weathered petroleum in the historical fill materials. Remedial actions have successfully achieved soil cleanup objectives for commercial use. Residual contamination in the soil is being managed under a Site Management Plan.

Site Health Assessment - Last Update: 03/07/2012

People are not coming into contact with the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Since the site is fenced and completely covered by asphalt or concrete, people will not come into contact with site related soil and groundwater contamination unless they dig below the surface. Volatile organic compounds in the subsurface materials may move into the soil vapor (air between soil particles), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. The site is currently vacant. If mitigation is not included in the construction of future on-site buildings, additional investigations will be necessary to evaluate whether actions are needed to address potential exposures related to soil vapor intrusion. Environmental sampling indicates soil vapor intrusion is not a concern off-site from site-related contaminants.

	Start		End	
OU 00				
Certificate of Completion	10/30/11	ACT	4/18/12	ACT
Corrective Measures	5/31/14	ACT	10/15/24	PLN
OGC Docket - Other	10/16/14	ACT	11/30/22	ACT
Periodic Review	11/8/13	ACT	5/31/14	DEN
Periodic Review	10/15/24	PLN	11/29/24	PLN
Site Management	4/18/12	ACT	4/18/42	PLN
OU 01				
Agreement	11/20/07	ACT	8/22/08	ACT
Application Approval	8/7/07	ACT	11/20/07	ACT
Application Completion	7/30/07	ACT	8/7/07	ACT
OGC Docket - Brownfield Cleanup Agreement	11/20/07	ACT	8/22/08	ACT
OGC Docket - Eligibility Determination	9/21/07	ACT	11/20/07	ACT
OGC Docket - Environmental Easement	6/15/11	ACT	4/17/12	ACT
OGC Docket - Environmental Easement	1/31/24	ACT	7/31/24	PLN
Reclass Pkg.	2/13/24	ACT	5/31/24	PLN
Remedial Action	2/29/12	ACT	4/18/12	ACT
Remedial Design	2/9/12	ACT	2/29/12	ACT
Remedial Investigation	9/24/09	ACT	2/9/12	ACT
OU 02				
Remedial Investigation	11/1/22	ACT	3/31/26	PLN

Remedy Description and Cost

Remedy Description for Operable Unit 00

The current site cover is protective of human health and the environment. The remedy for the site identifies all current an future engineering control cover systems and institutional controls to maintain the effectiveness of the remedy. This includes a Site Management Plan that comprehensively addresses any materials management during routine maintenance or redevelopment and provides for a contaminated vapor evaluation should any structures be planned for the site. An environmental easement will be completed for this site.

Total Cost $2,500,000

Remedy Description for Operable Unit 01

1. Green remediation principals and techniques will be implemented to the extent feasible in the sit management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise b considered a waste.

2. A site cover currently exists and will be maintained to allow for commercial or industrial use of the site. Any site redevelopment will maintain a site cover, which may consist either of the structure such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted commercial OR industrial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

3. Imposition of an institutional control in the form of an environmental easement for the controlle property that:

- requires the remedial party or site 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);

• allows the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;

• restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH;

• prohibits agriculture or vegetable gardens on the controlled property; and

• requires compliance with the Department approved Site Management Plan.

4. A Site Management Plan is required, which includes but may not be limited to the following:

• an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

o Institutional Controls:
? The Environmental Easement as discussed above.

o Engineering Controls:
? The soil cover as discussed above.

• an Excavation Plan which details the provisions for management of future excavations in areas c remaining contamination;

• descriptions of the provisions of the environmental easement including any land and/or groundwater use restrictions;

• a provision for evaluation of the potential for soil vapor intrusion for any buildings developed or the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;

• provisions for the management and inspection of the identified engineering controls;

• maintaining site access controls and Department notification, and

• the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

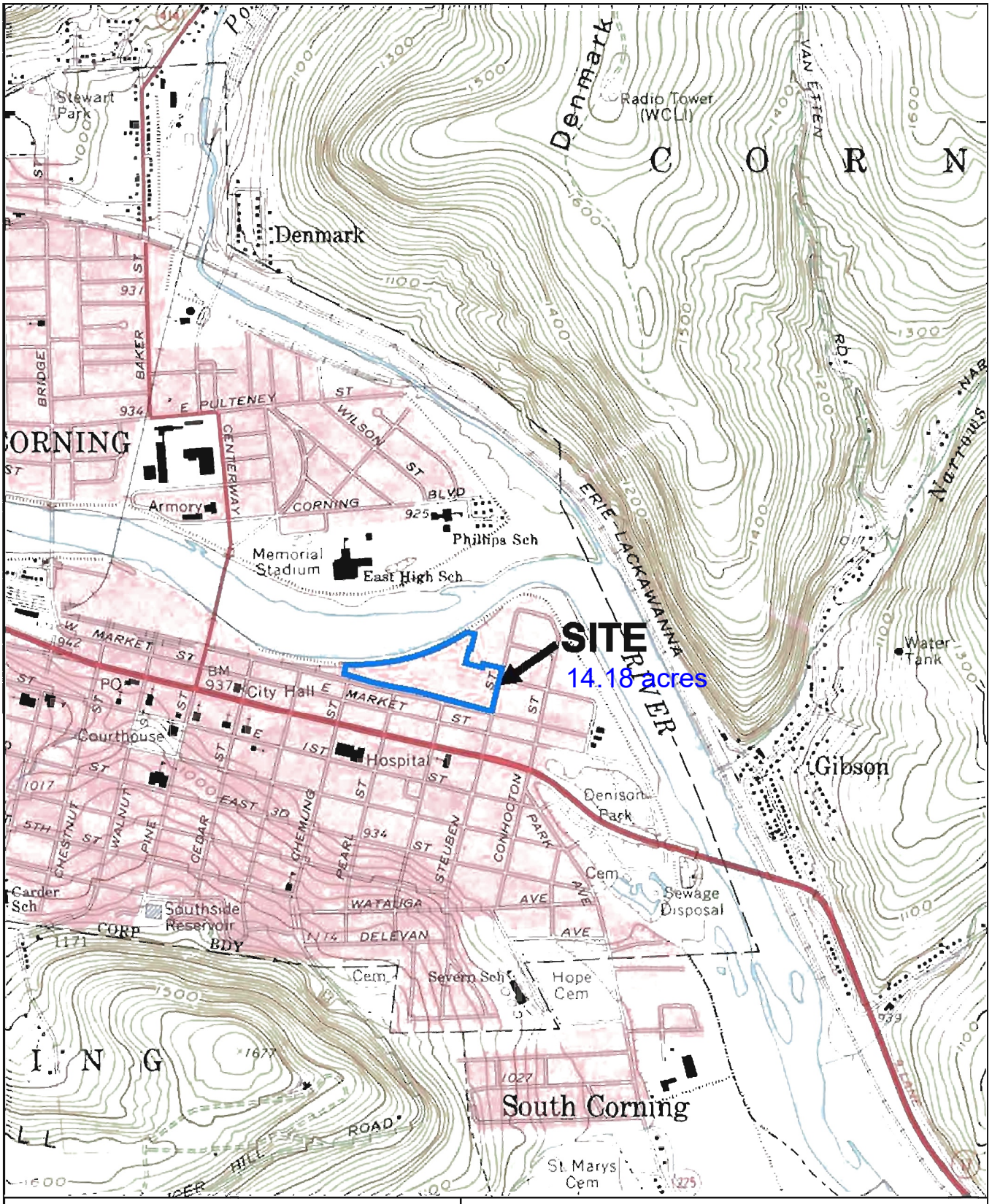
3/26/2024

Site Code C851031 **Site Name** Tioga Avenue Site

Total Cost

Remedy Description for Operable Unit 02

Total Cost



SITE COORDINATES: 42°06'35"N 77°02'39"W

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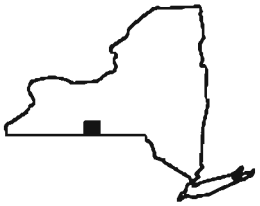


U.S.G.S. QUADRANGLE: CORNING, NEW YORK

HALEY & ALDRICH

CORNING INCORPORATED
CORNING PROPERTY MANAGEMENT CORPORATION
TIOGA AVENUE PROPERTY BCP SITE #C851031
SITE MANAGEMENT PLAN
CORNING, NEW YORK

SITE LOCUS

SCALE: 1:24000
NOVEMBER 2011

FIGURE 1

G:\PROJECTS\33123\017\SITE MANAGEMENT PLAN - SEPTEMBER 2011\33123-018-SITE LOCUS SMP.DWG

NEW YORK
STATE OF
OPPORTUNITY

Department of
Environmental
Conservation

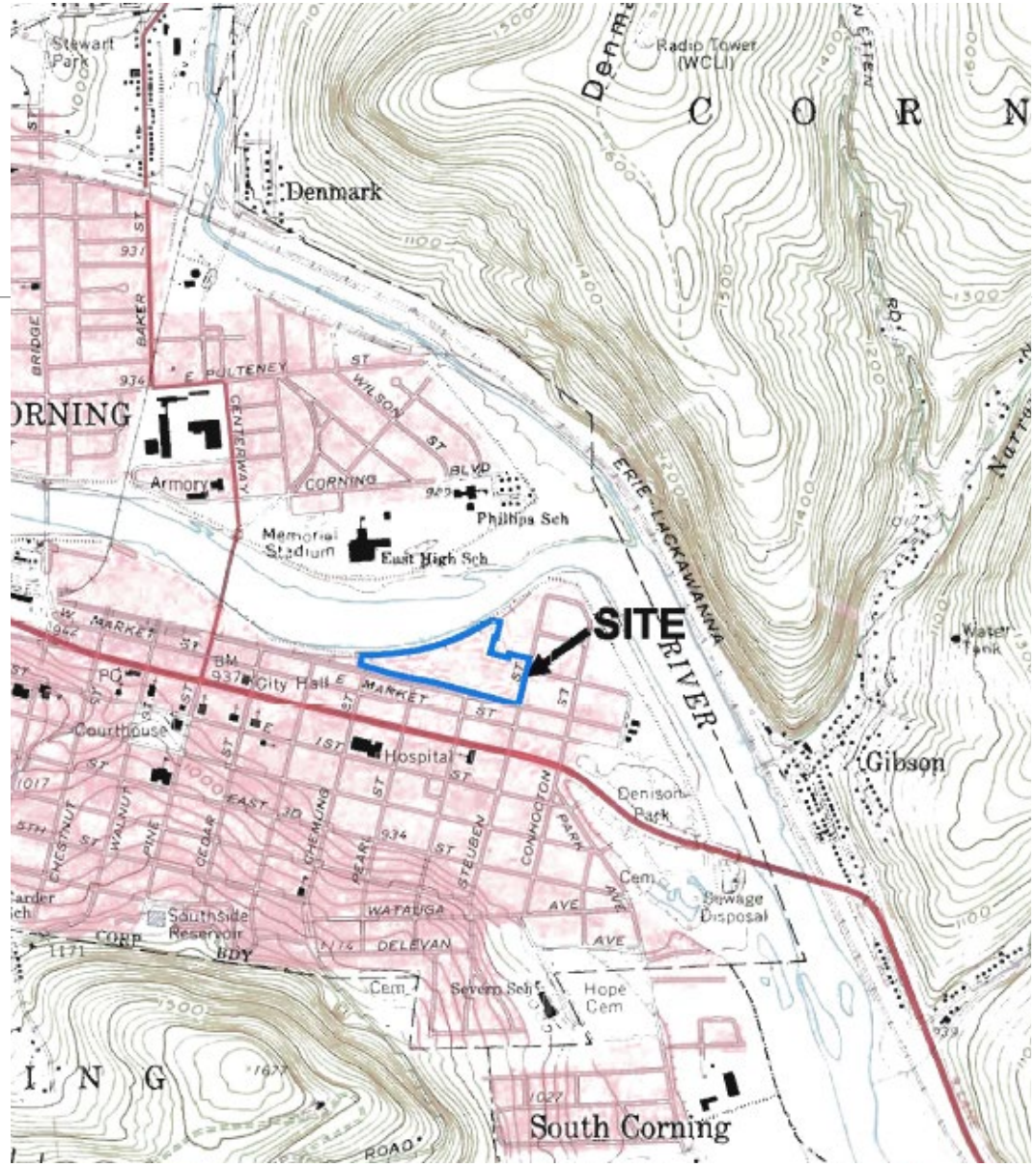
Tioga Ave Site, C851031
Corning, Steuben County

RECLASS MEETING – SIGNIFICANT THREAT

FEB 14, 2024

Site Summary

- 14-acre site in Corning, NY
- On-site contamination managed under SMP
- Documented discharges to the Chemung
- Documented lead in outfall pipes
- Off-site discharges to the Chemung River must be investigated

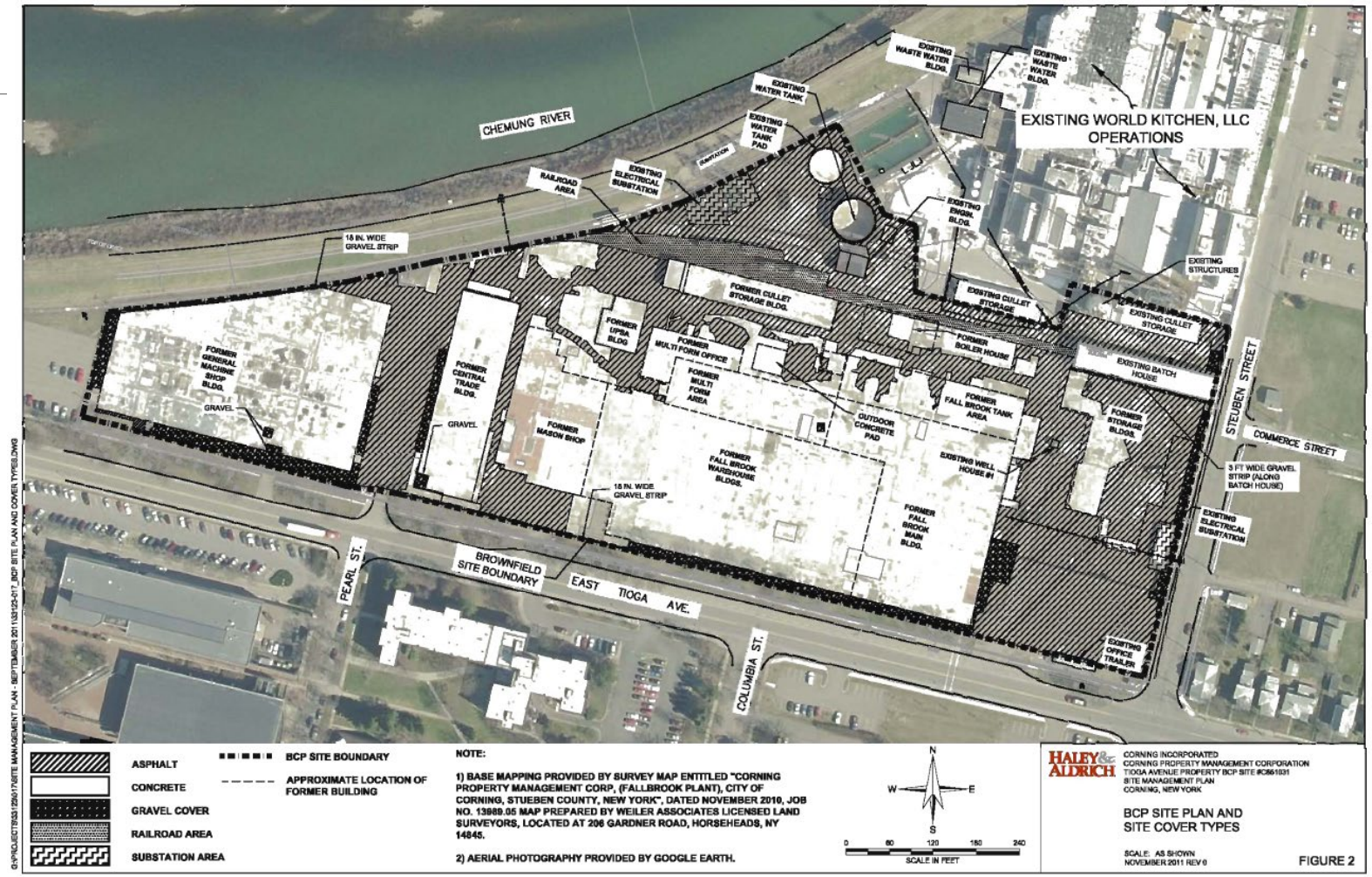


Site History & Background

Past site uses include:

- Rail yard and operations center
- Glass manufacturing
- Machining and maintenance

The historic industrial use discharged wastes to the Chemung through outfalls on the site



NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Relevant to Significant Threat Determination

- **Known historic discharges to Chemung:** Discharges from outfalls are documented from at least 1958 to 1992, with variable treatments and treatment success.
  - 1967 report lists masses of various materials discharged/expected to discharge
  - 1985 discharge permit violation for lead
  - 1987 discharge permit violation for lead

- **Hazardous material in outfall pipes:** post COC work on the site included cleaning/removal/capping of outfall pipes, material cleaned from outfalls was hazardous for lead (TCLP)

- **Chemung sediment impact:** Metals (copper, lead, arsenic, and nickel) detected exceeded Class A Sediment Guidance values when sampled near Tioga outfalls as part of Conhocton (851066) Site Characterization

Historic Documents: 1967 report

REPORT ON INDUSTRIAL WASTE WATER DISCHARGES

TO THE CHEMUNG RIVER

FROM CORNING GLASS WORKS PLANTS

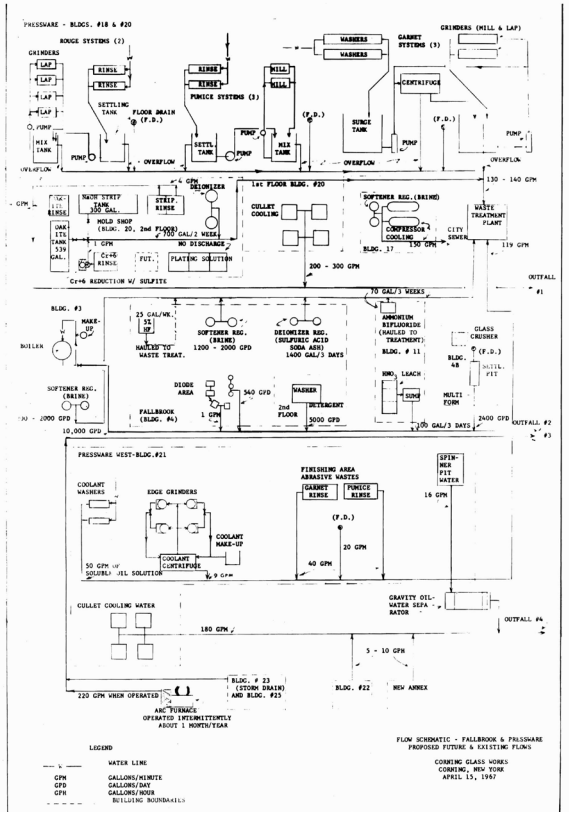
LOCATED IN CORNING, N. Y.

April 15, 1967

The major constituents of the waste water, as discussed previously, will be as follows:

1. Abrasive wastes containing garnet, pumice and rouge from Pressware and/or Pressware West Plants.
2. Chromate wastes from a mold plating shop in the Pressware Plant.
3. An insoluble oil waste originating from the spinner pit cooling water at the Pressware West Plant.

According to estimates, the flow of abrasive wastes is expected to be approximately 370 gpm, containing an estimated 10,850 lb per day of abrasive waste, the majority of which has a mesh size of -325.



Historic Documents: Permit Violations

1985 letter from Water Division to Corning Glass Works
Regarding lead removal

FALLBROOK/PRESSWARE

As can be observed by the enclosed DMR summary, Fallbrook is continuing to have problems concerning lead removal. I have read the report which Matt Maslyn recently submitted. His conclusions seemed to agree with what we discussed during the inspection; other lead sources are being released to the outfall without first going through the treatment plant. As was discussed, a schedule must be generated by Corning Glass which illustrates how compliance shall be obtained. Please submit such a schedule including short and long-term objectives within the next two weeks.

1985 Order between Corning Inc and DEC
Following lead exceedances

2. Respondent's facility located in the City of Corning, Steuben County, New York has been issued SPDES Permit No. NY-0003981 by the Department relative to the discharge of industrial pollutants to the Chemung River, and

3. Employees of the Department have determined that Respondent has and is continuing to discharge lead at levels in excess of the permitted effluent limitations for that pollutant, in alleged violation of Article 17 of the ECL and SPDES Permit No. NY-0003981, and

1985 letter from DEC Attorney to Corning Energy and Environmental Control
Regarding lead removal

I have been advised by the Water Division of the ongoing lead removal problems at the above-referenced facility, and the meetings and discussions which have taken place relative to abatement of the current situation.

I have enclosed a proposed Consent Order containing terms and a compliance schedule acceptable to the Department. Failure to execute a Consent Order will result in the initiation of formal legal proceedings relative to the alleged violations of the facility's SPDES Permit.

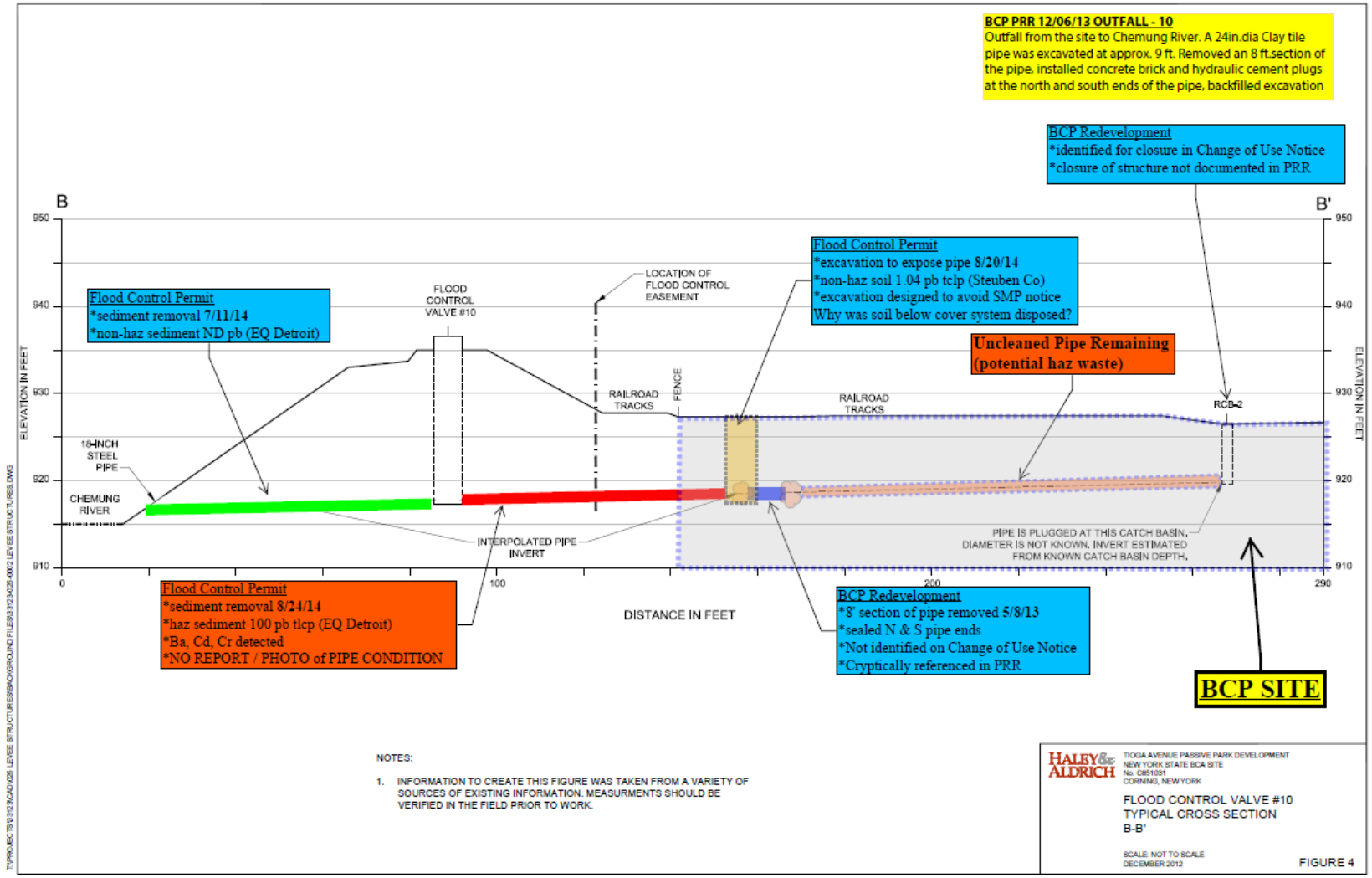
1987 letter from Corning Inc to DEC
Regarding Consent Order/SPDES Lead Exceedances

With regard to Schedule A of the above-referenced case, please be advised that Corning Glass Works anticipates a problem meeting the August 1, 1987 deadline contained in Step #2.

completed by August 24, 1987. Additional wastewater analyses are attached which show the lead concentrations exiting treatment plant #1 filters to remain quite low. The June 1987 Discharge Monitoring Report for outfall 003 will be submitted shortly which will also demonstrate compliance with SPDES discharge limits.

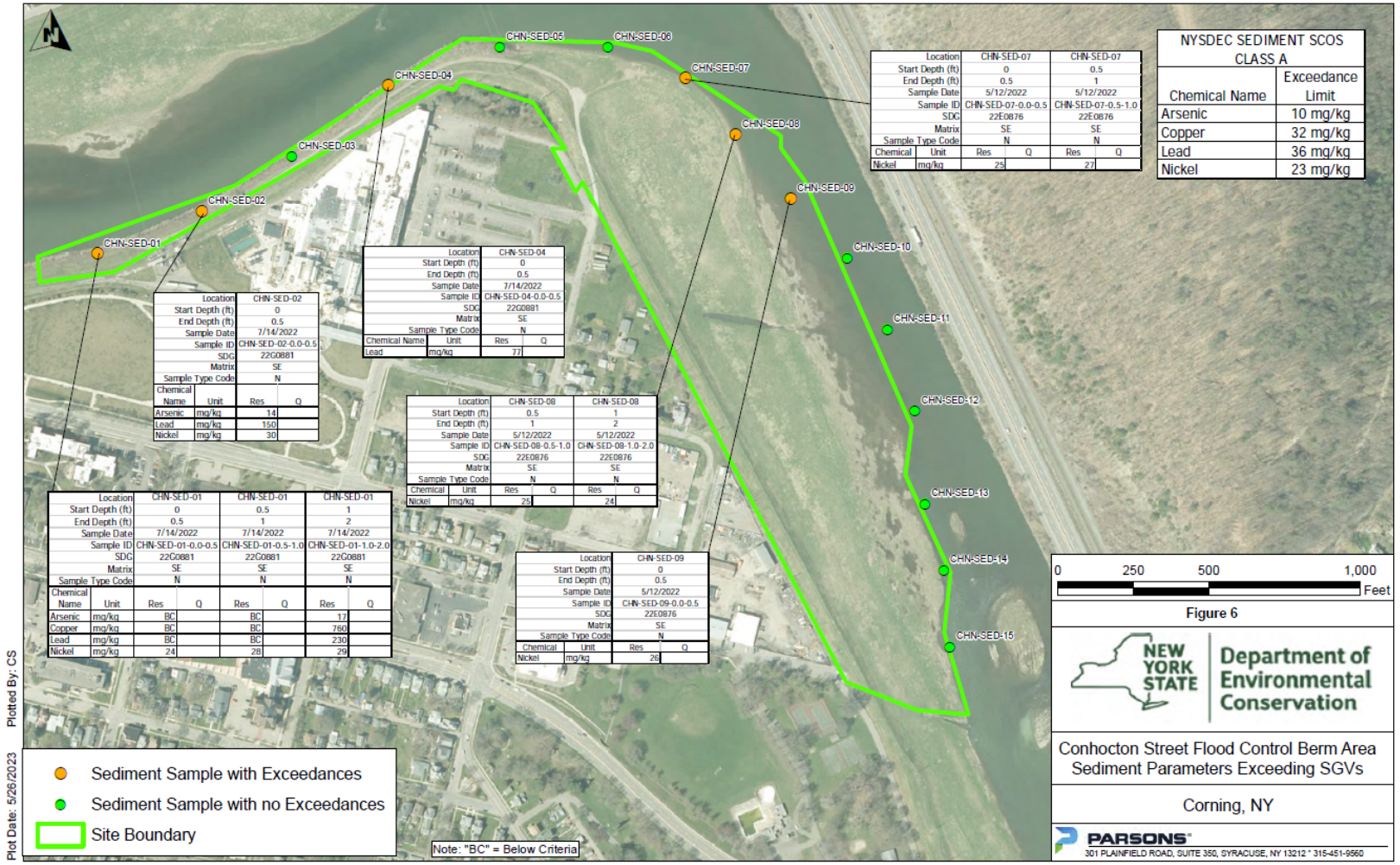
Potential On Site Remaining Contamination

- Some contamination may remain on the site
- Railroad area Corrective Measures Work Plan required in 2022 Opportunity to Cure letter
- Updated SMP required in 2022 Opportunity to Cure letter



Conhocton Sediment Samples

- Exceedances of Class A SGV
- Metals
  - Lead
  - Copper
  - Nickel
  - Arsenic



Conclusion & Next Steps

- **Positive Significant Threat**

YES: For metals, particularly lead, offsite

For onsite remaining contamination and SMP update

NO: For onsite groundwater

Sign-offs in UIS Class Change and Site Control Updates UIS

Participant site:

- Participant must complete offsite RI
- Participant must address items in 2022 Opportunity to Cure letter t

NEW YORK STATE | Department of Health

KATHY HOCHUL
Governor

JAMES V. McDONALD, M.D., M.P.H.
Commissioner

JOHANNE E. MORNE, M.S.
Executive Deputy Commissioner

February 26, 2024

Michael Cruden, Director
Remedial Bureau E
Division of Environmental Remediation
NYS Dept. of Environmental Conservation
625 Broadway
Albany, New York 12233

Re: **Significant Threat Determination**
Tioga Avenue Site
#C851031
Corning, Steuben County

Dear Michael Cruden,

We have reviewed the available information to determine whether the referenced site represents a significant threat to human health. Based on that review, I understand that the site was previously used for industrial uses, including as a rail yard and glass manufacturer, and that on-site soils are contaminated with volatile organic compounds and metals. Groundwater is contaminated with 1,1,1-Trichloroethane.

I understand that historic records indicate discharges from outfalls between 1958 to 1992 that contained lead and other metals generated during industrial operations, as well as etching fluids and waste oils. Excavation and cleaning of outfall pipes produced wastes disposed of as hazardous for lead without full documentation or characterization. Additionally, metals exceeding Class A sediment guidance values were identified during sediment sampling near site-related outfalls. The potential exists for off-site migration of site-related contaminants into areas of the Chemung River utilized for recreation, fishing, water access and public water supply.

Based on the information provided to date, and the potential for exposure to site-related contaminants, I believe this site represents a significant threat to public health. If you have any questions or if you would like to discuss this site further, please contact me at (518) 402-7860.

Sincerely,

Justin Deming, P.G., Chief
Regions 4,5 and 8
Bureau of Environmental Exposure Investigation

ec: C. Vooris / J. Robinson / e-File
A. Bonamici / C. Nicastro – NYSDOH WRO
M. Donovan – NYSDOH HDO
D. Harrington / G. Dieter / E. Hussy – NYSDEC Central Office
D. Pratt – NYSDEC Region 8