

2019 PERIODIC REVIEW REPORT & IC/EC CERTIFICATION SUBMITTAL
TIOGA AVENUE BCP SITE # C851031
CORNING, NEW YORK

by Haley & Aldrich of New York
Rochester, New York

for New York State Department of Environmental Conservation
East Avon, New York

File No. 131230-003
28 April 2020





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28 April 2020
File No. 131230-003

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 8
6274 East Avon-Lima Road
East Avon, New York 14414

Attention: Mr. Timothy Schneider, P.E.

Subject: 2019 Periodic Review Report & IC/EC Certification Submittal
Tioga Avenue BCP Site #C851031
Corning, New York

Dear Mr. Schneider:

On behalf of Corning Incorporated and Corning Property Management Corporation (collectively referred to herein as Corning), Haley & Aldrich of New York (Haley & Aldrich), as the Qualified Environmental Professional, is providing the attached Site Management Periodic Review Report and Annual Institutional and Engineering Controls Certification (PRR) for the Tioga Avenue BCP Site #C851031 in accordance with the New York Department of Environmental Conservation (NYSDEC) Certificate of Completion dated April 18, 2012 and the Site Management Plan as revised and approved by NYSDEC on April 3, 2012. The NYSDEC Site Management Periodic Review Report Notice, Institutional and Engineering Controls Certification Form is included in this report under Appendix A. The last PRR submitted for the Tioga Avenue BCP Site (Site) was the 2018 PRR, dated April 29, 2019. This PRR covers the time period between March 30, 2019 and March 29, 2020.

The Site was redeveloped and transformed from idle former industrial property to a passive park called the Fall Brook Park. The redevelopment activities were performed in accordance with the Site Management Plan (SMP) and associated NYSDEC Notifications and were documented previous periodic review reporting.

There were no activities conducted during the Reporting Period that involved breach of the existing cover systems on the Site or otherwise required notification and documentation pursuant to the NYSDEC-approved SMP. As documented in this PRR, the Site is in compliance with the Institutional and Engineering Controls required under the SMP.

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Please do not hesitate to contact us should you have any questions regarding this report.

Sincerely yours,
HALEY & ALDRICH OF NEW YORK



James E. Siegfried, P.E.
Senior Project Manager

Enclosures

c: Corning Incorporated; Attn: Chris Gabel

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Executive Summary

The Tioga Avenue Brownfield Site # C851031 (the Site) is a 14.18-acre parcel located at the northwest corner of Tioga Avenue and Steuben Street in Corning, NY. The Site was investigated and remediated in accordance with Brownfield Cleanup Agreement (BCA) Index # B8-0767-08-01, which was executed between Corning Property Management Corporation and Corning Incorporated (collectively Corning) and New York State Department of Environmental Conservation (NYSDEC) on August 22, 2008. The NYSDEC Brownfield Cleanup Program Certificate of Completion for this Site was issued on April 18, 2012.

Corning redeveloped the BCP Site in 2012 and 2013 to repurpose it from vacant industrial property to a passive community park with green space, concrete walks, and associated amenities (the Redevelopment Project). Fall Brook Park opened on October 18, 2013 for use by the community. The Redevelopment Project was conducted under the BCP based on NYSDEC-approved work plans and reports for the investigation and remediation of the Site contaminants.

Historic fill on the Site contains Contaminants of Concern (COCs) above applicable Soil Cleanup Objectives (SCOs) consisting of arsenic and lead. The Site remedy requires that a cover system be maintained, as described in the Site Management Plan (SMP), to prevent human or environmental exposure to contaminants that may be present above the applicable Restricted Commercial land use SCOs for arsenic and lead.

There were no activities conducted during the Reporting Period that involved breach of the existing cover systems on the Site or otherwise required notification and documentation pursuant to the NYSDEC-approved SMP. As documented in this PRR, the Site is in compliance with the Institutional and Engineering Controls required under the SMP. No change in frequency of the PRR submittals is recommended and on-going site management continues to be required.

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1. Site Overview

The Tioga Avenue Brownfield Site # C851031 (the Site) is a 14.18-acre parcel located at the northwest corner of Tioga Avenue and Steuben Street in Corning, NY. The Site property is currently owned by Corning Property Management Corporation, a wholly owned subsidiary of Corning Incorporated (collectively Corning) and was used (1929-2002) for glass manufacturing and related support operations that were referred to as the “Fall Brook” plant. Manufacturing operations of the Fall Brook plant were discontinued in 2002, demolition of the buildings and facilities was completed in 2007, demolition of the wastewater treatment facility was completed in 2012, and all wastewater and stormwater conveyed from the BCP site is now conveyed to the Corelle Brands treatment facility as of 2017.

The Site is situated within an area of mixed residential, commercial and industrial development. The Site is contiguous (northeastern property boundary) with property owned by Corelle Brands (formerly World Kitchen) which is not affiliated with Corning Incorporated. The Corelle Brands facility is an active manufacturing operation producing consumer glassware products and uses/occupies portions of the BCP Site for its ongoing operations.

The nature and extent of contamination prior to remediation with respect to historic fill, alluvial soil, and groundwater is summarized as follows:

- **Historic Fill** – Historic fill on the Site contains Contaminants of Concern (COCs) above applicable Soil Cleanup Objectives (SCOs) for this Site consisting of arsenic and lead within historic fill. The Site remedy requires that a cover system be maintained as described in the SMP to prevent human or environmental exposure to contaminants that may be present above the applicable Restricted Commercial land use SCOs for arsenic and lead.
- **Alluvial Soil** – Undisturbed native soil beneath the historic fill on the Site is comprised of poorly-graded to well-graded sand with varying amounts of gravel and a relatively low percentage of silt. Analysis of this media did not identify the presence of contaminants, except possibly in the former petroleum storage areas where aesthetic petroleum conditions could be present.
- **Groundwater** – Groundwater on the Site is present at approximate depths ranging from 17 to 25 feet below ground surface and is situated below the historic fill on the Site. Groundwater is not adversely affected (i.e. as compared to NYSDEC screening criteria) by the presence of historical fill; however, degraded petroleum residuals have been observed/detected in shallow groundwater in limited areas. The SMP provides additional information regarding these conditions. The SMP also identifies the Institutional Controls required to address these conditions; essentially that future potable use of groundwater at the Site is not permitted without treatment.

The Site was investigated and remediated in accordance with Brownfield Cleanup Agreement (BCA) Index # B8-0767-08-01, which was executed between Corning and New York State Department of Environmental Conservation (NYSDEC) on August 22, 2008. To complete the Track 4 Site remedy, site cover needed to be upgraded on less than four percent of the Site. A Change of Use Notification was submitted to NYSDEC in 2011 to perform the needed cover upgrades. The work was completed in late 2011 and, in early 2012, the Final Engineering Report (FER) was completed documenting the work and that the necessary Site engineering controls were in place and effect. Following the FER, the Site

Management Plan (SMP) was completed, the Environmental Easement was filed, and the Certificate of Completion was issued, all in 2012.

Corning redeveloped the BCP Site during 2012 and 2013 to repurpose it from vacant industrial property to a passive community park with green space, concrete walks, and associated amenities (the Redevelopment Project). The Redevelopment Project was conducted under the BCP based on NYSDEC-approved work plans and reports for the investigation and remediation of the Site contaminants.

The completed Track 4 Site remedy, as described in the SMP, currently consists of the following elements:

- Cover systems approved by NYSDEC to eliminate potential for direct contact with contaminants remaining on the Site: these are engineering controls.
- A specifically identified portion of the Site contains a low permeability ground cover system, or other remedy as approved by the NYSDEC, to reduce infiltration of surface/stormwater through historic fill: this is an engineering control.
- Institutional Controls in the form of an Environmental Easement limiting Site use to only future commercial or industrial use and prohibiting any future potable use of groundwater from the Site.
- Development and implementation of a Site Management Plan describing actions needed to maintain the cover systems over time or to be taken in the event the cover systems are ever removed as part of future development or other activity.
- Recording the Environmental Easement at the office of the Steuben County Clerk.

2. Remedy Performance, Effectiveness, and Protectiveness

The remedy incorporates defined cover systems as the sole type of engineering control on the Site as described in the SMP. There were and are no mechanical systems, groundwater pumping or soil vapor/subslab depressurization systems which were selected as part of the Site remedy.

Table I. Remedy Effectiveness

Remedy Element	Effectiveness
Engineering Control - Site cover systems	In place and effect.
Engineering Control – Site cover systems in designated ‘low permeability cover system’ areas	In place and effect.
Institutional Controls – Site use restricted to commercial and industrial uses and no use of groundwater without treatment.	In place and effect.
Site Management Plan	In place and effect.
Environmental Easement	In place and effect.

The Site remedy elements are all in place, are operating effectively and are providing the intended effectiveness to achieve the remedial goals at the Site.

3. IC/EC Plan Compliance and Certification

3.1 IC/EC REQUIREMENTS AND COMPLIANCE

The Site IC/ECs are identified on the IC/EC Certification Form included in Appendix A. That form, provided by NYSDEC, lists six Institutional Controls and one Engineering Control for the Site, which are presented in Table II below. Detailed descriptions of the controls are presented in Section 2.3 of the SMP; a summary is given in Table II.

Table II. Institutional and Engineering Controls

INSTITUTIONAL CONTROLS	DESCRIPTION	OBJECTIVE	EVALUATION OF PERFORMANCE
Ground Water Use Restriction	Potable use of groundwater without treatment is prohibited.	Preclude consumption of groundwater potentially containing residual contaminants.	Effective. Groundwater is not used for potable purposes at the Site. Groundwater is used for irrigation in the Passive Park.
Institutional Control / Engineering Control Plan	The Institutional and Engineering controls for the Site are listed within this table and are presented in Section 2.3 of the SMP.	ICs and ECs are followed so that the Site is managed according to Part 375, DER-10 and the SMP.	Effective. The Environmental Easement remains in force. Cover systems are in place per the SMP.
Land Use Restriction	Restrict development of the Site to Industrial or Commercial uses.	Site use is restricted consistent with the Site Remedy and the SMP.	Effective. Site use is consistent with commercial or industrial uses according to Part 375, DER-10, and the SMP.
Operations & Maintenance Plan	The O&M Plan is presented in Section 4.0 of the SMP. The Site remedy does not rely on any mechanical systems; therefore, O&M of such components is not relevant.	Maintain the Site Engineering Control (cover systems) to preclude contact with Site soil potentially containing residual contaminants.	Effective. Cover systems are in place and were maintained per the SMP.
Site Management Plan	The SMP is integral to the Environmental Easement placed on the Site.	The SMP prescribes measures to be followed for compliance with the Environmental Easement.	Effective. This Periodic Review Report documents compliance with the SMP.
Soil Management Plan	The Excavation Work Plan (EWP) is contained in Appendix C of the SMP. It describes procedures for performing intrusive Site earthwork using methods protective of human health and the environment.	Minimize risks to health, safety, and the environment during intrusive activities at the Site.	Effective. This Periodic Review Report documents compliance with the EWP for the reporting period.
ENGINEERING CONTROL			

INSTITUTIONAL CONTROLS	DESCRIPTION	OBJECTIVE	EVALUATION OF PERFORMANCE
Cover Systems	The Site requires various types of cover including, but not limited to concrete, asphalt, clean soil, buildings, and low permeability cover as described in the SMP.	Preclude contact with Site soil potentially containing residual contaminants.	Effective. Site inspections by the QEP confirm the cover systems are in place in accordance with the SMP.

No change in frequency of the PRR submittals is recommended and on-going site management continues to be required.

3.2 IC/EC CERTIFICATION

The completed and signed IC/EC Certification Form is included in Appendix A.

4. Monitoring Plan Compliance Report

The environmental media monitoring program is presented in Section 3.3 of the SMP. There is no routine monitoring of air, surface water, groundwater, or soil required for the Site. Environmental monitoring only is needed during intrusive work at the Site per the Site Management Plan. As previously stated, there were no activities conducted during the Reporting Period that involved breach of the existing cover systems on the Site or otherwise required monitoring compliance pursuant to the SMP.

4.1 ANNUAL SITE INSPECTION

Haley & Aldrich conducted an annual site inspection of the Tioga Avenue BCP Site on December 31, 2019. During the inspection it was observed that the area of tire rutting identified in the 2018 inspection, north of the Park fence inside the Corelle Brands operating area, was re-graded and grass cover restored. However, one small area of shallow topsoil disturbance was noted in the eastern lawn area of the Park, adjacent to the sidewalk. An estimated 5ft. long area of soil was disturbed by a snowplow and displaced the soil cover approximately 3 to 5 inches. To prevent the loss of cover soils, the report recommends that the area of disturbance be seeded when weather permits. The Annual Inspection Form is attached in Appendix B.

4.2 MONITORING PLAN CONCLUSIONS

Inspection of the Site was conducted under the requirements of the SMP. Routine monitoring of air, surface water, groundwater, or soil are not required. Monitoring is required under the Excavation Work Plan if ground intrusive activities occur. Monitoring, as described above, was performed during the construction of the SIP in accordance with the SMP. No deficiencies in the monitoring plan were noted.

5. Operation & Maintenance Plan Compliance Report

5.1 O&M PLAN

The O&M Plan is presented in Section 4.0 of the SMP. The Site remedy does not rely on any mechanical systems; therefore, O&M of such components is not relevant. The Site cover systems are described in the SMP. Inspection of the Site cover systems takes place annually. The results of the inspection appear in the PRR covering that period.

5.2 SUMMARY OF O&M COMPLETED DURING REPORTING PERIOD

The area of tire rutting previously identified during the 2018 Site inspection north of the Park fence inside the Corelle Brands operating area was re-graded and grass cover restored.

6. Conclusions & Recommendations

During the Reporting Period the Tioga Ave BCP Site was in compliance with the SMP, all IC/EC's, Monitoring Plan requirements, and O&M Plan requirements for the Site. No excavation or removal of material occurred on site during the Reporting Period.

All repair work has been successfully completed to previously identified Site cover deficiencies and the Site remedy elements are all in place, operating effectively, and providing the intended effectiveness to achieve the remedial goals at the Site.

No change in the frequency of the PRR submittals is recommended and on-going site management continues to be required.

APPENDIX A

Institutional and Engineering Controls Certification Form



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



	Site Details	Box 1	
Site No.	C851031		
Site Name Tioga Avenue Site			
Site Address: East Tioga Avenue		Zip Code: 14831	
City/Town: Corning			
County: Steuben			
Site Acreage: 14.2			
Reporting Period: March 30, 2019 to March 29, 2020			
		YES	NO
1.	Is the information above correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.			
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.			
5.	Is the site currently undergoing development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

		Box 2	
		YES	NO
6.	Is the current site use consistent with the use(s) listed below? Commercial and Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7.	Are all ICs/ECs in place and functioning as designed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.			
A Corrective Measures Work Plan must be submitted along with this form to address these issues.			
Signature of Owner, Remedial Party or Designated Representative		Date	

Box 2A

YES NO

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid?
(The Qualitative Exposure Assessment must be certified every five years)

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C851031

Box 3**Description of Institutional Controls**ParcelOwnerInstitutional Control

318.10-01-01.100

Corning Property Management Corporation

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Site Management Plan
O&M Plan
IC/EC Plan

- Prohibition potable water use
- Soil cover over 5 acres
- Compliance with a soils management plan
- Use must be maintained as commercial or industrial
- Vapor evaluation & mitigation if occupied structures constructed
- Management of remaining contaminated soils below cover

Box 4**Description of Engineering Controls**ParcelEngineering Control

318.10-01-01.100

Cover System

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. C851031

Box 6

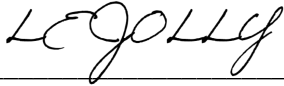
SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Linda E. Jolly at One Riverfront Plaza, Corning, NY,
print name print business address

am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.



Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

April 26, 2020

Date

IC/EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I James E. Siegfried, P.E. at Haley & Aldrich of New York
200 Town Centre Dr.
Rochester, NY 14623,
print name print business address

I am certifying as a Qualified Environmental Professional for the Owner
(Owner or Remedial Party)



4/22/2020

Signature of Qualified Environmental Professional, for
the Owner or Remedial Party, Rendering Certification

Stamp
(Required for PE)

Date

APPENDIX B

Annual Site Inspection Form



SMP - ANNUAL SITE INSPECTION

PROJECT	Tioga Avenue BCP Site C851031	Prepared By: Samantha Fisher	Routine/Nonroutine Inspection: Routine Annual
LOCATION	Corning, New York	Company: Haley & Aldrich of New York	Weather: Low 20's, Sleet
DATE(s)	12/31/2019	Title: Staff Scientist	Other Noteworthy Conditions: None

See Attached Photo Log.

1. SITE COVER - SOIL, CONCRETE, ASPHALT, STRUCTURES

A. Visual Inspection and Integrity Observations:

One small area of disturbance was noted in the lawn area of the eastern side of the Park, adjacent to the sidewalk. An estimated 5 ft. long area of soil was disturbed by a snow plow and penetrated into the soil cover approximately 3-5 inches.

Based on the monitoring performed including my own site visits, the site cover is in place and effective. Section C. below describes a recommended minor repair to tire ruts in a small portion of the cover system, which did not affect the effectiveness of the cover system overall.

B. Maintenance, repairs, or changes to site cover completed since previous inspection(s):

Tire ruts that were previously observed in the 2018 site inspection have since been regraded and grass cover has been restored.

C. Deficiencies noted, if any:

Disturbed soils as noted in Section A.

D. Recommended actions:

Repair the disturbed soils to restore cover when weather permits to re-establish grass cover.

2. OTHER SITE OBSERVATIONS (include any incidents, repairs, maintenance, or other observations affecting site management plan and reporting):

None.

3. SITE / OWNER PERSONNEL CONTACTED:

a. Chris Gabel, Corning Incorporated.



Photo 1: Repaired area of tire rutting in Cover Soil previously noted in 2018 inspection, adjacent to railroad tracks.



Photo 2: Rutting from snowplows in Soil Cover around park sidewalk.

Tioga Ave. BCP Site
Corning, New York
File No. 33123-035
Date Photographs Taken: 12-31-2019



Photo 3: Asphalt Cover.



Photo 4: Passive Park Cover.