

Haley & Aldrich of New York 200 Town Centre Drive Suite 2 Rochester, NY 14623 585.359.9000

15 July 2015 File No. 33123-032

Timothy Schneider, P.E.

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

Subject: Updated Work Plan, June 30, 2015, Addendum #1

Former Outfall 001/1A(CGW) Tioga Avenue BCP Site #C851031

Corning, New York

Dear Mr. Schneider:

Corning Incorporated and Haley & Aldrich of New York (Haley & Aldrich) are in receipt of your correspondence dated July 7, 2015 regarding the Departments review of the updated work plan for completing closure of the former Outfall 001/1A(CGW) including its associated pipes and structures that are located on the above referenced Tioga Avenue BCP Site.

Approval of the work plan was based on three contingencies which we shall address as follows and shall be incorporated into the Work Plan as Addendum #1:

- 1. The pipe leading offsite to the east from the Outfall 001/1A(CGW) structure will not be permanently closed. A removable plug will be placed in the pipe and the structure will be left open until resolution of any remaining potential issues, at which time the structure will be closed by filling to ground surface with flowable fill or concrete as described in the work plan.
- 2. The elevations of the pipes leaving the structure are visible from the structure. Machine excavation for each pipe will be carefully conducted to remove overburden soils to the top or near the top of the pipe while attempting to minimize disturbance of the pipe. The pipes will be uncovered allowing for inspection to determine if there are breaks or offset joints in the pipe that may have been sources of leakage to nearby soils. Pipe condition will be documented and pipes will be removed as described in the Work Plan. If observed based on the monitoring described in the work plan, impacted soil (from an apparent pipe break) will be handled in accordance with this work plan and the SMP for the site.
- 3. The work will be performed in an area of the site designated as low permeability cover. After removal of the structures and piping, onsite excavated suitable soils will be returned to the trench. Any additional material necessary for fill to restore grade will be Item #4 gravel obtained from a dedicated stockpile at the Gridley Excavating South Gravel Mine (NYSDEC Permit #8-4638-00078/0001). This material was previously tested based on applicable soil import protocol and the results submitted to you on August 5, 2014 and approved on August 27, 2014. Final

New York State Department of Environmental Conservation 15 July 2015 Page 2

surface restoration shall be asphalt pavement installed in accordance with the detail labeled "Low Permeability Cover or Standard Duty - Asphalt Option", shown on Figure 11 of the SMP.

Edward of the

Edward L. Hynes

Senior Client Leader

Corning Incorporated will notify the Department at least fifteen days prior to the intended start of construction activities applicable under this work plan, in accordance with the SMP and EWP, upon receipt of the Notice to Proceed from the Department.

Sincerely yours,
HALEY & ALDRICH OF NEW YORK

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

James Suffried

cc: Frank Ricotta, NYSDEC

Mike Ford, Corning Incorporated

workplan.C851031.2015-07-15.Outfall 001A_Addendum.pdf

HALEY



WORK PLAN FOR THE CHARACTERIZATION AND REMOVAL OF FORMER OUTFALL 001/1A(CGW) AND ASSOCIATED INLET PIPING AND TWO NEARBY INDUSTRIAL STRUCTURES TIOGA AVENUE BCP SITE - #C851031 CORNING, STEUBEN COUNTY, NEW YORK

by

Haley & Aldrich of New York Rochester, New York

for

Corning Incorporated Corning, New York



James E. Siegfried, P.E.

Lic No 062918

File No. 33123-032 30 June 2015

Work Plan for the Characterization and Removal of Former Outfall 001/1A(CGW) and Associated Inlet Piping and Two Nearby Industrial Structures Tioga Avenue BCP Site - #C851031 Corning, Steuben County, New York Revised June 30, 2015

This Work Plan is provided in accordance with the Tioga Avenue BCP Site Management Plan (SMP) dated January 2012, revised April 3, 2012, the prior revised Work Plan dated October 24, 2013 and based on further revisions discussed with NYSDEC on April 9 and May 20, 2015. The Work Plan describes procedures for additional characterization and permanent closure of the inlet pipes connected to former Outfall 001/1A(CGW) and the two nearby structures that are within the BCP Site limits.

This Work Plan is based, in part, upon review of records maintained by the New York State Department of Environmental Conservation (NYSDEC) relative to Outfall 001/1A as obtained under NYSDEC FOIA Request #13-0684 which documents the regulated discharge activities that were formerly associated with Outfall 001/1A and compressor room. The review of the FOIA records is provided in the October 15, 2013 letter from Corning Incorporated to the NYSDEC that summarizes the regulatory and operational details on the prior use and regulatory closure of former Outfall 001/1A including wastewater generation activities associated with the former compressor room in support of this Work Plan. A copy of the October 15, 2013 letter is provided as Attachment A.

Work Plan Revisions

This Work Plan reflects comments provided by the NYSDEC in the project meetings between the NYSDEC and Corning Incorporated on April 9, 2015 and May 20, 2015. This document is revised to include additional information or clarifications that are provided in the appropriate sections of this revised Work Plan regarding the following topics:

- Procedure for collection and chemical analysis of materials that are collected from within the pipes that are associated with Outfall 001/1A (CGW);
- Clarification that some piping associated with Outfall 001/1A (CGW) will be removed and some
 of this piping will be cleaned and closed in-place because the pipes are not readily accessible
 and/or need to remain in place to protect overlying structures;
- Procedure for post-cleaning video within sections of pipes that are closed in-place as applicable;
 and
- Clarification on reporting of the work.



Background and Purpose

A newly discovered drainage feature was identified on the above-described Brownfield Cleanup Program (BCP) Site property during implementation of the Tioga Avenue Redevelopment Project in May 2013. This structure consists of a previously permitted and now closed concrete vault with inlet and outlet pipe connections beneath a metal plate identified as former Outfall 001/1A(CGW). Based on historical records identified in NYSDEC files, the pipes within Outfall 001/1A(CGW) were formerly used to convey industrial wastewater mainly comprised of compressor condensate and non-contact cooling water.

In addition, NYSDEC inquired in an email on September 12, 2013 about the status of two structures/ sumps as shown in the attached aerial photo. Historical records indicated these structures to be located within the footprint of the former compressor room building as shown on attached Figure 1. Figure 1 also shows the former location of Outfall 001/1A (CGW). Location and Description of Former Outfall 001/1A(CGW).

Former Outfall 001/1A(CGW) consists of a concrete sump with interior dimensions approximately 2 feet wide x 4 feet long x 5 feet deep with an open top covered by a metal plate in the location shown on Figure 1 and the photograph provided in Attachment B. The following pipes (apparent cast-iron) enter or exit former Outfall 001/1A(CGW):

- North Wall Two pipes approximately 4 and 6 inches in diameter.
- East Wall One pipe approximately 8 inches in diameter.
- South Wall One pipe approximately 6 inches in diameter.
- West Wall One pipe approximately 8 inches in diameter.

The two nearby structures are located within the footprint of the former compressor room building as shown on Figure 1. Further characterization of the size and nature of these structures as well as the presence of inlet pipes will be developed during closure of these structures as described below.

Previous Investigation at Outfall 001/1A (CGW)

A drilling and sampling program was performed at Outfall 001/1A to evaluate subsurface conditions beneath the structure for possible presence of substances of concern associated with the Site. The scope of the investigation, and the sampling and analytical protocol were developed and implemented as described in email communications between NYSDEC and Haley & Aldrich on May 15 and 21, 2013. Sampling and analytical results are compared with the NYSDEC criteria for protecting groundwater resources. The results were discussed during meetings with NYSDEC on April 9 and May 20, 2015.

The boring program was performed on May 21, 2013 under observation of a Haley & Aldrich geologist and the NYSDEC BCP project manager. One soil boring designated "Plated Structure" (which at the time prior to review of FOIL records was the reference used for Outfall 001/1A[CGW]) was conducted in the approximate center of plated structure to assess underlying soil conditions as shown on Figure 1. This boring was advanced using direct push methods below the plated structure from which soil samples



were obtained continuously for classification and field screening visually and by photoionization detector (10.6/11.7 eV PID) for indications of soil impact consistent with the SMP. This exploration program including field observations, sample protocol and analytical results are summarized as follows:

- Prior to drilling, the plated structure was cleaned by removal of a small amount of a mixture of glass cullet and grey sediment from the bottom of Outfall 001/1A(CGW). These materials were loose and consolidated and not observed to have any oil staining or odors or any elevated PID readings. An approximate 5-gallon bucket sized quantity of this material is segregated. It was sampled for appropriate off-Site disposal and the results indicated that it can be disposed of at the Steuben County Landfill based on characterization sampling showing this material to be non-hazardous (see photograph in Attachment B and disposal characterization sampling results in Attachment C).
- The borehole designated "plated structure" was advanced to an approximate depth of 13.7 feet below the bottom of the plated structure. Conditions observed consisted of brown silty gravel soil that were dry except for residual water introduced during coring through the bottom of the structure prior to Geoprobe boring. There were no indications of oily staining, odors or any elevated PID readings in any of the soil samples obtained. A small amount of black material was observed just below the bottom of the concrete. These conditions are documented on the Geoprobe Exploration Report in Attachment D.
- Based on conditions observed and samples screened during drilling, the soil sample from the depth interval containing the black material described above (5.7 to 6.2 feet) was submitted for analysis of arsenic and lead by EPA Method 6010B and polychlorinated biphenyls (PCBs) by EPA Method 8081. All three compounds were detected (arsenic-8.0 parts per million/ppm, lead-160 ppm, PCB-2.8 ppm). None of the results exceed the corresponding NYSDEC Groundwater Protection Soil Cleanup Objectives (6 NYCRR 375-6). Samples were analyzed by Environmental Science Corporation of Mt. Juliet, Tennessee, a NYS ELAP approved laboratory. Copies of the analytical reports are provided in Attachment E along with an independent Data Useability Summary developed by Haley & Aldrich.

Permanent Closure Procedures

Based on the above described investigations, review of FOIL-requested records and the feedback provided during the April 9, 2015 and May 20, 2015 meetings with the NYSDEC, the following procedures will be used for permanently closing these structures as part of the BCP Redevelopment Project.

Former Outfall 001/1A(CGW) - The inlet pipes connected to former Outfall 001A(CGW) that are present within the BCP Site will be permanently closed and documented following relevant procedures identified in Section C-2 of the SMP and reviewed with NYSDEC in the April 9 and May 20, 2015 meetings. These procedures are as follows:

1. This plated structure (former Outfall 001/1A(CGW) has been cleaned by removal of residual materials and characterization of the conditions beneath the plated structure as described



above. This structure will be removed or closed in-place by filling with flowable fill or concrete (if removal is not necessary for construction of the new stormwater system or not practically accessible for removal given existing structures in this area of the Site).

2. The on-Site pipes extending from the north, east, south and west walls of Outfall 001/1A(CGW) as described above will be excavated and removed from the BCP property to the extent these pipes are readily accessible from within the BCP property boundary and can be removed without disturbing overlying or nearby structures such as buildings and retaining walls or supports. The pipes leading north and east from the drainage structure appear to extend to (and beyond) the BCP property line and each of these pipes will be cut and plugged at the BCP property line. Corning has obtained acknowledgement from World Kitchen (WKI) that it can cut and plug the pipes at the property line to WKI (see Attachment). The pipes leading west and south appear to extend to former facilities on the BCP property (i.e. former compressor room/currently active cullet shed). Pipes which extend beneath existing structures (cullet shed) will be terminated at the building by plugging with concrete or other suitable permanent method.

Pipes related to this structure within the BCP boundary that are not readily accessible for excavation and removal will be cleaned to remove materials contained therein and a video survey performed on the unremoved sections following closure. Cleaned pipe sections will be closed in-place by filling with flowable fill. The areas where pipes may not be readily accessible and closed in-place are shown on Figure 1.

- 3. Material removed from within pipes will be segregated, analyzed and disposed off-Site at a licensed facility. A representative sample from each of the pipes inside of the BCP property line will be obtained and submitted for chemical analysis based on the following protocol:
 - Analysis of the Target Compound List (TCL) volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) only if VOCs are suspected based on field screening described in the SMP (elevated readings on either a 10.6eV or 11.7eV photoionization detector/PID) as per the SMP;
 - Analysis of Target Analyte List (TAL) metals (includes mercury);
 - Analysis of PCBs.
- 4. Pipe excavation activities will be monitored as described in Section C-2 of the EWP involving visual, olfactory and instrument-based (PID) soil screening.
- 5. If pre-existing breaks in the inlet piping are observed during the closure process, characterization of the surrounding media will be conducted to facilitate removal and off-Site



- disposal of grossly contaminated media as determined by visual indication of impact (soil staining, evidence of waste, industrial process material), or presence of elevated PID readings.
- 6. Closure of Outfall 001/1A and the associated inlet pipes will be documented in an engineering report to be provided to the NYSDEC when the work is completed as well as in the PRR covering the time period the work takes place. The engineering report will be prepared following completion of the work and receipt of associated laboratory analytical data including assessing data useability and the video survey documenting post-cleaning conditions of pipes that are not excavated and removed.
- 7. Corning Incorporated has obtained acknowledgement from WKI that it has no objection to closing and disconnecting the Outfall 001/1A pipes at its property line (Attachment F).

Two Nearby Structures - These two structures are present within the BCP Site and will be permanently closed and documented following relevant procedures identified in the SMP including section C-2 of the Excavation Work Plan (EWP). Each structure will be assessed during closure involving removal of any contents for waste characterization sampling and appropriate disposal as described in Item 3 above for former Outfall 001/1A (CGW), and documenting the size and nature of the structures and associated pipes, if present. These on-Site structures will be cleaned and closed in-place. Soil underlying the excavations will be assessed in the same way as described in Item 5 above by visual/PID field screening and removal of grossly impacted media if encountered. Closure of these structures and the associated pipes will be documented in the same engineering report submittal as the Former Outfall 001/1A closure activities.

Schedule

This Work Plan will be implemented on approval by NYSDEC to allow for completion of the stormwater improvements and replacement of low permeable cover in this area of the BCP Site during the 2015 construction season. The anticipated schedule duration to complete and document closure of Outfall 001/1A and the two nearby structures is approximately 25 weeks based on the following anticipated timeframes:

- SMP Notification 3 weeks
- NYSDEC Review & Approval 2 weeks
- Procurement/Contractor Retention 5 weeks
- Site Work Activities (excavation/closure) 4 weeks
- Timeframe for Laboratory Sample Analysis and Data Useablity 5 weeks
- Engineering Report Preparation and Submittal to NYSDEC 6 weeks



In order to complete this work during the current construction season, NYSDEC will need to approve the plan by the early July 2015 timeframe.

Attachments

Figure 1 – Location Plan

Attachment A – FOIL Records Review Summary Letter from Corning Incorporated to NYSDEC, October 15, 2013

Attachment B – Photographs

Attachment C – Waste Disposal Characterization Sampling Results

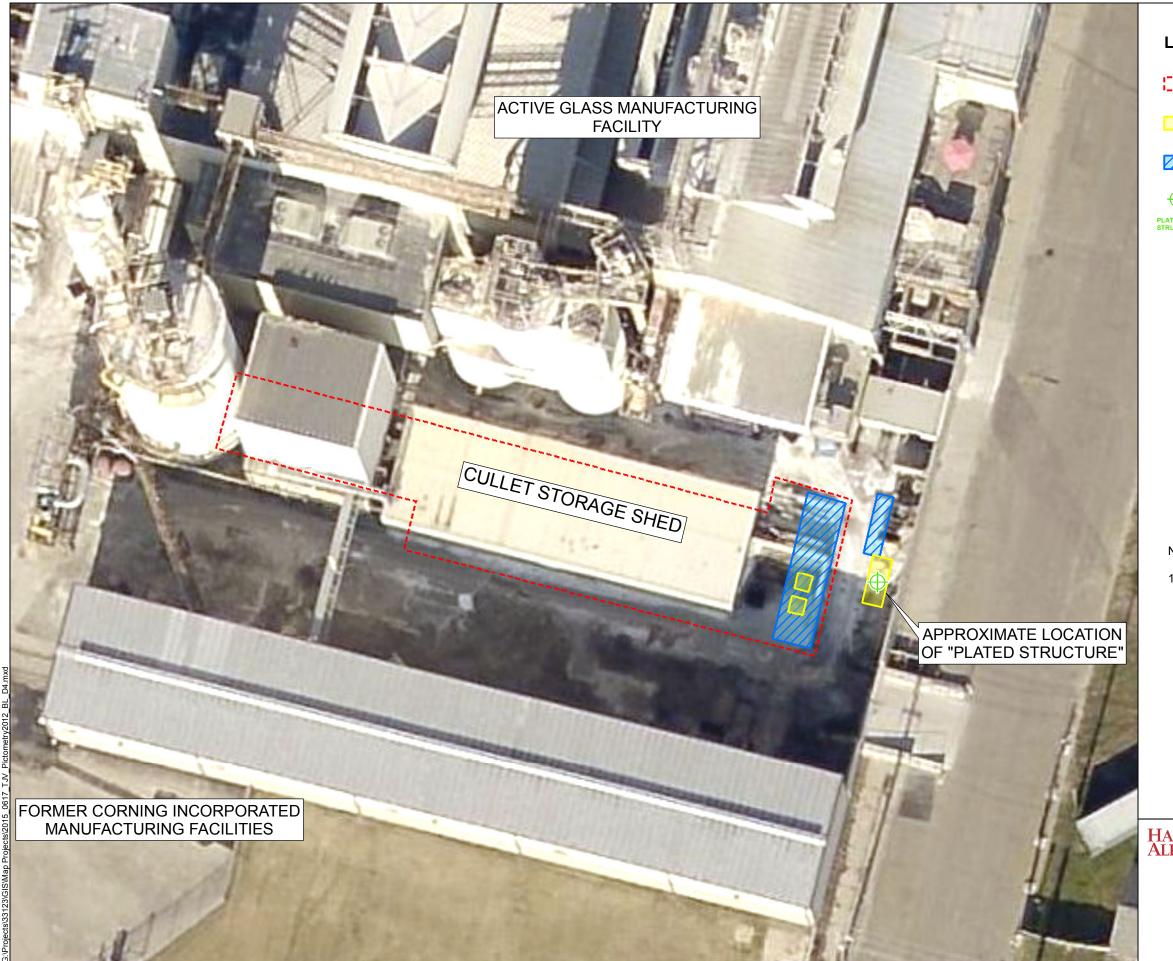
Attachment D - Geoprobe Exploration Report

Attachment E - Laboratory Analytical Report and Data Useability Summary

Attachment F – World Kitchen Incorporated Acknowledgement of Closure of Outfall 001/1A and Related Pipes

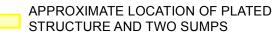
G:\Projects\33123\032 2015 Services\DEC Presentation May 2015\Outfall 1A Work Plan\workplan.C851031.2015-06-30_Outfall 001-1A-F.docx

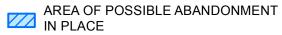


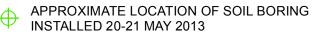


LEGEND

APPROXIMATE FORMER COMPRESSOR ROOM BUILDING FOOTPRINT



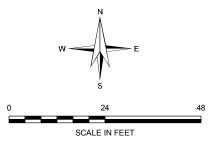




PLATED STRUCTURE

NOTES:

1) AERIAL IMAGERY COURTESY OF PICTOMETRY INTERNATIONAL, INC., 2012.



HALEY& CORNING INCORPORATED & CORNING PROPERTY MANAGEMENT BCP SITE #C851031 CORNING, NEW YORK

DRAINAGE FEATURE LOCATION PLAN

SCALE: AS SHOWN JUNE 2015 REV1

FIGURE 1

ATTACHMENT A

FOIL Records Review Summary Letter from Corning Incorporated to NYSDEC, October 15, 2013



CORNING

October 15, 2013

VIA E-MAIL

Timothy A. Schneider, P.E. Environmental Engineer 2 New York State Department of Environmental Conservation Division of Environmental Remediation 6274 East Avon-Lima Road Avon, New York 14414-9519

RE:

Tioga Avenue Site #C851031

Former Outfall 001/1A Plated Structure

Dear Tim:

This responds to the Department's requests for a plan with respect to a plated structure depicted on 1970's drawings, which had a formerly permitted outfall designated 001/1A(CGW). In correspondence with Corning Incorporated ("Corning"), the Department has requested investigation of this pipe and plated structure along with certain other apparent pipe connections.

As the Department has acknowledged, Corning cleaned out the plated structure and characterized the sub-grade soils from beneath the structure. Visual characterization and chemical analysis of the sub-grade soils did not identify any impacts associated with potential releases from this structure that exceeded the groundwater protection criteria. Corning has further committed to remove or abandon the structure and associated piping present on the BCP Site pursuant to a Work Plan to be submitted to the Department shortly by Corning.

Documents² from the Department's own files show that the Department's request for investigation of off-Site sewer sediments in the event that the on-Site soil sediments are shown to exceed screening criteria is unwarranted. These records indicate the following:

- 1. Former Outfall 001/1A and Associated Discharge Activities Were Regulated and Closed Under Regulatory Authority: Records indicate that former Outfall 001/1A(CGW) was a regulated and monitored discharge point for the Pressware facility in the approved SPDES Permit #NY0003981 until Outfall 001/1A was reengineered and eliminated (between late 1975 and early 1977). Permit records in NYSDEC files describe the following sequence of actions:
 - a. The October 1975 Discharge Modification Plan for rerouting of Pressware facility wastewater from Outfall 001/1A to other Pressware regulated discharge

¹ Including May 30, 2013 letter, July 11, 2013 email chain, and September 19, 2013 letter.

² Copies of referenced documents are attached to this letter in Appendix A.

- points was submitted in response to an agency (NYSDEC and USEPA at the time) requested compliance plan and schedule.
- b. The agencies were notified by Corning in April 1977 and again in June 1977 that implementation of the approved Discharge Modification Plan had been completed including virtually eliminating Outfall 001/1A.
- c. In October 1978, the Agency notified and provided to the Pressware facility a Compliance Monitoring Report prepared by an Agency contractor that identifies the Pressware discharge activities to be compliant with permit-required effluent limitations.
- d. Based on verbal discussions with NYSDEC (Mr. Dennis Sugumele) in the fall of 1978 and apparently based on his recommendation, the April 1979 SPDES permit renewal for the Pressware facility eliminated Outfall 001, indicating the Department's concurrence that there was little or no likelihood that Corning-related pollutants would be discharged through former Outfall 001/1A (CGW) to the City Sewer System.
- e. Subsequently, the SPDES permit renewals and agency SPDES Compliance Inspection Reports omit this Outfall location and indicate the Pressware facility to be in compliance with SPDES permit requirements.

Thus, Outfall 001/1A was closed and eliminated in accordance with the applicable regulatory requirements as verified by subsequent Agency inspections. As discussed in more detail below, it appears that even though an emergency overflow connection from Sump B to the former Outfall 001/1A (CGW) discharge point was left in place, the engineering design and the operational experience of the reengineered diversion system convinced the Department that discharge of Corning-related pollutants through the former outfall had been virtually eliminated, leading the Department to remove Outfall 001/1A (CGW) from the SPDES Permit.

- 2. **Insignificant Discharges:** Even before the federal Clean Water Act was passed and N/SPDES permits began to be issued, industrial wastewater discharges from this plant were covered by a State-issued wastewater discharge permit. In an inspection report issued in September 1969, NYSDOH (NYSDEC's predecessor) reiterated that the 001/1A discharge was "insignificant" and thus coverage by a Permit was not needed. [#Appendix A Doc. 1] Once N/SPDES Permits began to be issued, Outfall 001/1A(CGW) was covered, first by a NPDES then by a SPDES permit. SPDES permit coverage continued until this outfall was re-engineered with most of its industrial wastewater (which was mainly non-contact cooling water) diverted through other permitted outfalls. As discussed below, discharge 001/1A (CGW) was virtually eliminated between late 1975 and early 1977.
- 3. **Low Potential for Overflow:** When the former Outfall 001/1A was being reengineered in the mid-1970s in accordance with plans approved by the Department,

2,000 GPD of condensate/"contact" water which had been discharged through 001/1A was diverted to "Sump B" and then to the Existing Lagoon prior to discharge through Outfall 003. Because the Sump B water carried only aftercooler condensate and any leakage from the non-contact cooling water pipes into the compressor room floor trench (which could contain oil that had collected within the floor trench), the potential for this water to contain significant contamination is considered low.

Although an emergency overflow line was installed connecting Sump B to the 001/1A plated structure, Corning built in engineering controls (such as installing two 10 GPM pumps in Sump B) to virtually eliminate the potential for an overflow. [Appendix A #3 Doc. 1 page 8 and Appendix B, and Appendix #5, Doc. #1] After probing the basis of this position, the Department was satisfied with Corning's actions and approved the proposed *Wastewater Discharge Modifications Pressware Plant*. [#3, all] As Corning indicated in a January 1976 letter to the Department, "the only reason [Corning] could see for an emergency overflow would be an electrical power failure to both pumps." [Appendix A #4 Doc. 1]. After approving this diversion and the drawings, and after at least three inspections, the Department removed this Outfall from the 1981 renewal of the SPDES Permit. [Appendix A #4 Doc. 2]

Therefore, there is no indication that any discharge occurred after regulatory closure, and the system was designed to reduce the possibility that such a discharge would occur.

4. Use of Undepicted Structures Does Not Imply Unregulated Sources of

Discharge: Engineering drawings of this plated structure found in the NYSDEC files are schematic in nature and were intended to reflect only what Corning termed "industrial wastewater" (which, for the post 1977 Outfall 001/CGW1A, was potential overflow from the Sump B). Thus, it depicted the structure as having one pipe leading into it and one pipe leading out, meaning that there were only two industrial wastewater pipes leading in and out of this structure. See, for example, [Appendix A #3 Doc. 1 page 12 of 16], which stated "Note: Storm Water not included in this schematic".

Records indicate that Outfall 001/1A had one former point of discharge to the municipal sewer system and three former points of influent including up to 509,000 GPD of non-contact cooling water from the Pressware facility (currently World Kitchen) immediately north of Outfall 001/1A, up to 2,000 GPD of condensate from the former compressor room immediately west of the Outfall 001/1A (current location of the cullet shed), and stormwater associated with these facilities. Records do not provide any basis to expect any other points of non-stormwater discharge to the plated structure. Further verification that the pipes observed during the May 2013 visual inspection of this structure lead from/to Outfall 001/1A or in the direction the direction of the former compressor room and World Kitchen facility will be done during the plated structure closure process and will be discussed in the upcoming Work Plan.

Based on the above review of documents held by the Department, it is clear that:

- (a.) the outfall was permitted and its closure was in accordance with applicable regulatory requirements, and was reviewed and approved by the then-existing authorized regulatory agencies;
- (b.) there was no evidence of a release to Outfall 1A after installation of the wastewater system in October 1975 submittal;
- (c.) the engineering design features described above likely prevented most if not all overflows from Sump B to the plated structure; and
- (d.) any conditions that would be identified off the BCP Site would be far more likely to have originated from the City storm sewer system than to have resulted from any discharges from Corning via Outfall 001/1A.

Thus, at most, the only additional action needed before the former Outfall 001/1A plated structure is removed or filled with flowable fill is collection of any solid residue present in this sump or recoverable from the beginning of the southeast pipe on-Site just as it exits the plated structure and characterization and disposal of this material as necessary for offsite disposal purposes in accordance with the SMP following analysis of it for Oil & Grease and PCBs.

As you know, the Department has also asked Corning to try to determine the origin and past usage of two other plated structures recently found on the BCP Site. To date Corning has not been able to locate these structures on any historical maps or drawings. Because of this, Corning is amending its draft Plated Structure Closure Plan to include the same type of on-Site investigation and closure of these two structures as has been outlined above for the plated structure which was the former discharge point for Outfall 001/1A (CGW). Accordingly, Corning plans to submit to the Department the Plated Structure Work Plan as outlined above by October 29, 2013.

Sincerely,

Michael L. Ford

Senior Environmental Project Engineer

Webach Sans

Appendix A (Revised 10-16-13)

Supporting Historic Documents

The following Documents, are taken from the documents recently obtained from the Department in response to a FOIL request to review the pertinent SPDES-Permit related files. They are listed by the label on the Department (Region 8) file that the document was found in.

Ref. #	NYSDEC File Label
1.	1967-1975
2.—	Missing Label (appears to correspond with the 1970 to 1976 file folder)
3.	Wastewater discharge Oct-1975 report
4.	Tioga 1976-1979
5.	Glass Works drawings11293-13461 wt1-wt7

ATTACHMENT B

Photographs





Photograph 1. Plated structure



Photograph 2. Plated structure cleanings pending disposal

ATTACHMENT C

Waste Disposal Characterization Sampling Results





12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Mr. Jon Babcock Haley & Aldrich 200 Town Centre Dr., Ste. 2 Rochester, NY 14623

Report Summary

Thursday June 13, 2013

Report Number: L639136 Samples Received: 06/04/13 Client Project:

Description: Tioga

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Leslie Newton , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Mr. Jon Babcock

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

June 13,2013

Haley & Aldrich 200 Town Centre Dr., Ste. 2

Rochester, NY 14623

ESC Sample # : L639136-01 04, 2013

Date Received : June
Description : Tioga BCP

Site ID : Sample ID : 4552-060313-1500 Project :

Collected By : David M. Norstrant Collection Date : 06/03/13 15:00

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	Ву	Dil
TCLP Extraction	-				1311	06/06/13 0826	MVE	1
Lead	0.17	0.050	mg/l	5.0	6010B	06/12/13 0052	ST	1

BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL) Limit - Maximum Contaminant Level as established by the US EPA Note: The reported analytical results relate only to the sample submitted. This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 06/13/13 10:33 Printed: 06/13/13 10:34



12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 13,2013

REPORT OF ANALYSIS

Mr. Jon Babcock Haley & Aldrich

200 Town Centre Dr., Ste. 2

Rochester, NY 14623

ESC Sample # : L639136-02 04, 2013

Date Received : June
Description : Tioga BCP

Site ID : Sample ID : 4552-060313-1515 Project :

Collected By : David M. Norstrant Collection Date : 06/03/13 15:15

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	Ву	Dil
TCLP Extraction	-				1311	06/06/13 0826	MVE	1
Arsenic Lead	BDL 0.091	0.050 0.050	mg/l mg/l	5.0 5.0	6010B 6010B	06/12/13 0153 06/12/13 0153		

BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL) Limit - Maximum Contaminant Level as established by the US EPA Note:

The reported analytical results relate only to the sample submitted. This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 06/13/13 10:33 Printed: 06/13/13 10:34



Mr. Jon Babcock

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

June 13,2013

Haley & Aldrich 200 Town Centre Dr., Ste. 2 Rochester, NY 14623

ESC Sample # : L639136-03

Date Received : June 04, 2013 Description : Tioga BCP

Site ID : Project # :

Sample ID 4552-060313-1515

Collected By : David M. Norstrant Collection Date : 06/03/13 15:15

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	91.1	0.100	%	2540 G-2011	06/09/13	1
Polychlorinated Biphenyls						
PCB 1016	BDL	0.019	mg/kg	8082	06/10/13	1
PCB 1221	BDL	0.019	mg/kg	8082	06/10/13	1
PCB 1232	BDL	0.019	mg/kg	8082	06/10/13	1
PCB 1242	BDL	0.019	mg/kg	8082	06/10/13	1
PCB 1248	BDL	0.019	mg/kg	8082	06/10/13	1
PCB 1254	0.13	0.019	mg/kg	8082	06/10/13	1
PCB 1260	BDL	0.019	mg/kg	8082	06/10/13	1
PCBs Surrogates						
Decachlorobiphenyl	68.6		% Rec.	8082	06/10/13	1
Tetrachloro-m-xylene	76.6		% Rec.	8082	06/10/13	1

Results listed are dry weight basis. BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Summary of Remarks For Samples Printed 06/13/13 at 10:34:07

TSR Signing Reports: 044 R5 - Desired TAT

All invoice revisions emailed with a receipt request to ap@haleyaldrich.com and project manager's email. ln 2/15/13 Removed city/state from Account name per Haley & Aldrich accounting. ln 11/4/09

Sample: L639136-01 Account: HALALDRNY Received: 06/04/13 09:00 Due Date: 06/11/13 00:00 RPT Date: 06/13/13 10:33

Sample: L639136-02 Account: HALALDRNY Received: 06/04/13 09:00 Due Date: 06/11/13 00:00 RPT Date: 06/13/13 10:33

Sample: L639136-03 Account: HALALDRNY Received: 06/04/13 09:00 Due Date: 06/11/13 00:00 RPT Date: 06/13/13 10:33



Haley & Aldrich Mr. Jon Babcock 200 Town Centre Dr., Ste. 2

Rochester, NY 14623

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

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Est. 1970

Quality Assurance Report Level II

L639136

June 13, 2013

			Laborato	ry Blank						
Analyte	Result		Units	% R	ec	Limit		Batch	Date	<u>Analy</u> zed
Total Solids	< .1		8					WG665333	06/09	/13 17:03
Arsenic Lead	< .05		mg/l mg/l							/13 00:45 /13 00:45
									•	·
Analyte	Units	Resu		icate uplicate	RPD	Limit		Ref Sam	р	Batch
Total Solids	8	89.0	8	8.5	0.427	5		L639142-	-05	WG665333
Arsenic Lead	mg/l mg/l	0 0.190		.00140	NA 11.1	20 20		L639136- L639136-		WG665763 WG665763
Lead	ilig/ i	0.190	0	.170	11.1	20		1039130-	-01	WG003703
Analyte	Units		ratory C wn Val	ontrol Sai R	mple esult	% Rec		Limit		Batch
Total Solids	%	50		50.)	100.		85-115		WG665333
Arsenic Lead	mg/l mg/l	1.1		1.1		101. 100.		85-115 85-115		WG665763 WG665763
Analysta	Units	MS Res	Matrix Ref	-	% Rec	Limit		Ref Samp		Batch
Analyte	UIIILS	MS KES	KEL	KES IV	* KeC	DIMIC		KEL Samp		Batten
PCB 1016	mg/kg	0.149	0	.16		10-165		L639136-0	03	WG664942
PCB 1260	mg/kg	0.152	0	.16		29-154		L639136-0	03	WG664942
Decachlorobiphenyl					71.70	21-147				WG664942
Tetrachloro-m-xylene					79.20	35-130				WG664942
Arsenic	mg/l	1.21	0.00	140 1.1	109.	75-125		L639136-0	01	WG665763
Lead	mg/l	1.30	0.17	0 1.1	102.	75-125		L639136-0	01	WG665763
			13	- 31						
Analyte	Units	MSD Mat	rıx Spık Ref	e Duplica %Rec	te Limit	RPD	Limit	Ref Samp		Batch
mary ec	OHIED	HOD	RCI	once	DIMIT	TG D	DIMI	z rez bamp		<u> </u>
PCB 1016	mg/kg	0.146	0.149	87.5	10-165	2.23	33	L639136-0	03	WG664942
PCB 1260	mg/kg	0.178	0.152	107.	29-154	16.3	23	L639136-0	03	WG664942
Decachlorobiphenyl				70.20	21-147					WG664942
Tetrachloro-m-xylene				77.50	35-130					WG664942
Arsenic	mg/l	1.20	1.21	108.	75-125	0.830	20	L639136-0	0.1	WG665763
Lead	mg/l	1.31	1.30	103.	75-125	0.766	20	L639136-0		WG665763
=					.5 125	000		_007100 (

Batch number /Run number / Sample number cross reference

WG664890: R2697382: L639136-01 02 WG665333: R2700401: L639136-03 WG664942: R2702121: L639136-03 WG665763: R2705862: L639136-01 02

 $^{^{\}star}$ * Calculations are performed prior to rounding of reported values.

^{*} Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



Haley & Aldrich Mr. Jon Babcock 200 Town Centre Dr., Ste. 2

Rochester, NY 14623

Quality Assurance Report Level II

L639136

June 13, 2013

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

					E-	-/	28	-				
Company Name/Address:		Bil	ling Informa						/Container/	Preservative	A022	Chain of Custody
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HALEY ALDRA	NTRE	De 17		LANE								
ROCITESTER, NY	1462	3		INGT								SC
				0180	3-5/	00				3.0	L-A-B S-C	:-I-E-N-C-E-S
Report to: J. BARCOCK, D. Noss. Project	E KATT	Ema	baba	cckehe	alajakt	rehe	gen.					banon Road t, TN 37122
Project Description: 710611 BC	P		City/Sate	antoh	/	rkh.	a				Phone: (8	00) 767-5859
Phone: 585-353-9000	Client Project	#:	Collected ESC Key	CORNI	WC,N	7			}		· ·	15) 758-5858 15) 758-5859
FAX:			1	ALDR	XM 61	1415	2	3 %				
Collected by: (print) DAVIO M. NOSTRANT	Site/Facility I	D#:	P.O.#;	····	1 00	7/2	W	SA				
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		RDDay	. 50% . 25%	FAX?	No_Yes	Cntrs	3	17 6			Shipped Via:	
Sample ID	Comp/Grab	Matrix*	Depth	Date	Time		1	KI	1		Remarks/Contaminant	Sample # (lab only)
4542-0603/3-1500		GLASSED		04/03/13	1500	1	X				CB-28,CB-27	L639136-01
4552-060313-1515	C	CHASINED		06/03/13	1575	2	X	XX			COTFALL STR.	-02/-03
												1530 Med
												ALEX SELECTION
*Matriv: SS Soil/Soilid CM Commit												
*Matrix: SS - Soil/Solid GW - Ground Remarks:	water ww - V	VasteWater DV	V - Drinking	Water OT - 0	Other					pН	Ter	mp
								504	100633	6390 Flor	w Oth	ner
definguished by (Signature)	Date:	Time: 173	Receive	ed by: (Signat	ture)			San	nples returne edEx □ Cou	d via: 🗆 🗆 pe	Condition:	(lab use only)
Relinquished by: (Signature)	Date:	Time:		ed by: (Signat	ure)				F.6°C	Bottles Recei	ved:	Y_N_NA
Relinquished by: (Signature)	Date:	Time:		ed for lab by:				Dat		3-4σ Time:	pH Checked:	NCF:
			L	me b	van	<u> </u>		6	1//3	0900		

ATTACHMENT D

Geoprobe Exploration Report



Clie	ject ent ntractor		ng Tiog				corning, Ne	ew York		S	File No. 33123-021 Sheet No. 1 of 1 Start May 21, 2 Finish May 21, 2								
			С	asing	San	npler	Barrel	Drilling Equipment and Procedure	es		Finish May 21, 2013 Driller N. Short								
ype	e			_	Ma	acro	_	Rig Make & Model: LT-55 ATV		Η	&A	Re	p.				rant		
nsio	de Diar	neter (ir	1.)	_	1	.5	_	Bit Type: Cutting Head				atio	n						
lan	nmer V	veight (I	b.)	_		-	_	Drill Mud: None Casing: -		-	atu oca	m itior	1	See	Pla	lan			
lan	nmer F	all (in.)		_		-	_	- Hoist/Hammer: Winch Automatic Hammer											
<u> </u>		<u>9</u> (2		E	Ę	log		No. of Many all the differences of December 2		Gr	ave	I	San	_		F	ield	Те	25
(#)		ole N	h (ft	iagra	/Оер	Symbol		Visual-Manual Identification and Descriptio	on	arse	l o	arse	dium	l o	es	ς	ness	ξį	<u>.</u>
Depth	SPT	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	nscs		sity/consistency, color, GROUP NAME, max. parti, , odor, moisture, optional descriptions, geologic in		% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	5
0 -	-	0,0	0, 0	>		ر		-OPEN TO 5.0 FT-		-	-				-		_	Δ.	=
								-OFEN 10 3.0 FT-											
2																			
4																			
•																			
-								CONCRETE		_									_
				LED	5.0		Concrete b	-CONCRETE- bottom cored form 5.0 ft to 5.7 ft											
6		G1	5.7	WELL INSTALLED	5.7	GP- GM		orly-graded GRAVEL with silt and sand , mps 25 mm, no stains/odor, wet from	PID = ND pp	m 30	35	10	10	5	10				
		6	9.7	SNI		JIVI	. , ,	oring, trace black staining											
				VELI				-FILL-	PID = ND pp	m									
				NO W					PF										
8				~				I	PID = ND pp	m									
		C2	0.7	-	9.7	GM	Brown silt	ty GRAVEL with sand (GM), mps 30 mm,		25	30	10	10	10	15				_
10 -		G2 24	9.7 13.7				no stains/o		PID = ND pp										
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_	ote		ter Lev Elaps	ed	Dep	th (ft.)		Sample Identification Well Diagr	Pipe (Overb	urc		mm (lin		1	13.7			-
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Fie	eld Test	to:		Dilata	ancv:	R-R	apid, S-Slo	i ZZZZ Benten	nite Seal	NA NA	dir	ım	Н						-

ATTACHMENT E

Laboratory Analytical Report and Data Useability Summary





12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Mr. Jon Babcock Haley & Aldrich 200 Town Centre Dr., Ste. 2 Rochester, NY 14623

Report Summary

Thursday June 06, 2013

Report Number: L637559 Samples Received: 05/23/13 Client Project:

Description: Tioga

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Leslie Newton , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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Tax I.D. 62-0814289

Est. 1970

June 06,2013

REPORT OF ANALYSIS

Mr. Jon Babcock Haley & Aldrich

200 Town Centre Dr., Ste. 2

Rochester, NY 14623

ESC Sample # : L637559-03

Date Received : May
Description : Tioga BCP 23, 2013

Site ID : Sample ID 4552-052113-1035 Project # :

Collected By : David M. Norstrant Collection Date : 05/21/13 10:35

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	89.5	0.100	%	2540 G-2011	05/30/13	1
Arsenic Lead	8.0 160	1.1 0.28	mg/kg mg/kg	6010B 6010B	05/31/13 05/31/13	1 1
Polychlorinated Biphenyls						
PCB 1016	BDL	0.19	mg/kg	8082	05/31/13	10
PCB 1221	BDL	0.19	mg/kg	8082	05/31/13	10
PCB 1232	BDL	0.19	mg/kg	8082	05/31/13	10
PCB 1242	BDL	0.19	mg/kg	8082	05/31/13	10
PCB 1248	BDL	0.19	mg/kg	8082	05/31/13	10
PCB 1254	2.8	0.19	mg/kg	8082	05/31/13	10
PCB 1260	BDL	0.19	mg/kg	8082	05/31/13	10
PCBs Surrogates						
Decachlorobiphenyl	59.5		% Rec.	8082	05/31/13	10
Tetrachloro-m-xylene	73.2		% Rec.	8082	05/31/13	10

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL)

Note:

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12065 Lebanon Rd Mt. Juliet, TN 37122 (615) 758-5858 (800) 767-5859 Fax (615) 758-5859 Tax I.D 62-0814289 Est. 1970

Extraction Date: 5/29/2013

Quality Control Summary SDG: L637559 Haley & Aldrich

Test: Total Solids by Method 2540 G-2011

Project No: Matrix: Soil - mg/kg

Project: Tioga BCP EPA ID: TN00003 Collection Date: 5/20/2013 Analytic Batch: WG663746

Analysis Date: 5/30/2013 11:29:00 AM Analyst: 487

Instrument ID: LOGBAL1

Sample Numbers: L637559-01, -02, -03

Method Blank

Analyte	CAS	PQL	Qualifiers
Total Solids		< 0.100	

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Total Solids	50.0	50.0	100	85 - 115	_



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Quality Control Summary SDG: L637559 Haley & Aldrich

Test: Total Solids by Method 2540 G-2011

Project No: Matrix: Soil - mg/kg

Project: Tioga BCP EPA ID: TN00003 Collection Date: 5/20/2013 Analytic Batch: WG663746

Analysis Date: 5/30/2013 11:29:00 AM Analyst: 487

Instrument ID: LOGBAL1 Extraction Date: 5/29/2013

Sample Numbers: L637559-01, -02, -03

Sample Duplicate

L638191-07

Name	Sample Results	Duplic Results	%RPD	Limit	Qualifiers
Total Solids	88.0	88.4	0.4	5	



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Quality Control Summary SDG: L637559 Haley & Aldrich

Test: Trace Metals by Method 6010B

Project No: Matrix: Soil - mg/kg

Project: Tioga BCP EPA ID: TN00003 Collection Date: 5/20/2013 Analytic Batch: WG663857

Analysis Date: 5/31/2013 Analyst: 416

Instrument ID: ICP6 Extraction Date: 5/30/2013

Sample Numbers: L637559-02, -01, -03

Method Blank

Analyte	CAS	PQL	Qualifiers
Arsenic	7440-38-2	<1.00	
Lead	7439-92-1	< 0.250	

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Arsenic	237	231	97.5	83.1 - 117	
Lead	103	102	99.0	83.1 - 117	



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Quality Control Summary SDG: L637559 Haley & Aldrich

Test: Trace Metals by Method 6010B

Project No: Matrix: Soil - mg/kg

Project: Tioga BCP EPA ID: TN00003 Collection Date: 5/20/2013 Analytic Batch: WG663857

Analysis Date: 5/31/2013 Analyst: 416

Instrument ID: ICP6 Extraction Date: 5/30/2013

Sample Numbers: L637559-02, -01, -03

Sample Duplicate

L636144-03

Name	Sample Results	Duplic Results	%RPD	Limit	Qualifiers
Arsenic Lead	0.0000 1.50	1.27 1.73	14	20	

Matrix Spike/Matrix Spike Duplicate

			J	<u> 16361</u> 4	14-03							
	Spike			%		%	Control	% Rec	%	Control	RPD	
Analyte	Value	Sample	MS	Rec	MSD	Rec	Limits	Qualifier	RPD	Limits	Qual	
Arsenic	50.0	1.27	46.3	90.1	45.5	88.5	75-125		1.7	20		
Lead	50.0	1.73	47.8	92.1	47.5	91.5	75-125		0.6	20		



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Quality Control Summary SDG: L637559 Haley & Aldrich

Test: Polychlorinated Biphenyls by Method 8082

Project No: Matrix: Soil - mg/kg
Project: Tioga BCP EPA ID: TN00003

Project: Tioga BCP EPA ID: TN00003 Collection Date: 5/20/2013 Analytic Batch: WG663699

Analysis Date: 5/31/2013 Analyst: 164

Instrument ID: SVGC20 Extraction Date: 5/29/2013

Sample Numbers: L637559-03

Method Blank

Analyte	CAS	PQL	Qualifiers
PCB 1016	12674-11-2	< 0.0170	_
PCB 1221	11104-28-2	< 0.0170	
PCB 1232	11141-16-5	< 0.0170	
PCB 1242	53469-21-9	< 0.0170	
PCB 1248	12672-29-6	< 0.0170	
PCB 1254	11097-69-1	< 0.0170	
PCB 1260	11096-82-5	< 0.0170	



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Quality Control Summary SDG: L637559 Haley & Aldrich

Test: Polychlorinated Biphenyls by Method 8082

Project No: Matrix: Soil - mg/kg

Project: Tioga BCP EPA ID: TN00003 Collection Date: 5/20/2013 Analytic Batch: WG663699

Analysis Date: 5/31/2013 Analyst: 164

Instrument ID: SVGC20 Extraction Date: 5/29/2013

Sample Numbers: L637559-03

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
PCB 1016	0.167	0.140	83.7	64 - 120	
PCB 1260	0.167	0.168	101	72 - 130	



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Quality Control Summary SDG: L637559 Haley & Aldrich

Test: Polychlorinated Biphenyls by Method 8082

Project No: Matrix: Soil - mg/kg

Project: Tioga BCP EPA ID: TN00003 Collection Date: 5/20/2013 Analytic Batch: WG663699

Analysis Date: 5/31/2013 Analyst: 164

Instrument ID: SVGC20 Extraction Date: 5/29/2013

Sample Numbers: L637559-03

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
PCB 1016	0.167	0.157	93.9	64 - 120	
PCB 1260	0.167	0.192	115	72 - 130	



12065 Lebanon Rd Mt. Juliet, TN 37122 (615) 758-5858 (800) 767-5859 Fax (615) 758-5859 Tax I.D 62-0814289 Est. 1970

Quality Control Summary SDG: L637559 Haley & Aldrich

Test: Polychlorinated Biphenyls by Method 8082

Project No: Matrix: Soil - mg/kg

Project: Tioga BCP EPA ID: TN00003 Collection Date: 5/20/2013 Analytic Batch: WG663699

Analysis Date: 5/31/2013 Analyst: 164

Instrument ID: SVGC20 Extraction Date: 5/29/2013

Sample Numbers: L637559-03

Surrogate Summary

			DO	СВ	D	СВ	TO	CX	TO	CX	
Laboratory			Colu	mn 1	Colu	ımn 2	Colu	ımn 1	Colu	mn 2	
Sample ID	Instrument	File ID	ppm	% Rec							
L637559-03 10x	SVGC20	0531_21	0.0396	59.5	0.0473	71.0	0.0488	73.2	0.0768	115	
BLANK WG663699	SVGC18	0531_08	0.0423	63.6	0.0671	101	0.0559	83.9	0.0635	95.3	
LCS WG663699	SVGC18	0531_09	0.046	69.0	0.0675	101	0.0564	84.7	0.0639	95.9	
LCSD WG663699	SVGC18	0531_10	0.0486	73.0	0.0742	111	0.0611	91.7	0.0677	102	

DCB --DECACHLOROBIPHENYL True Value: 0.0666 ppm Limits: 21 - 147
TCX --TETRACHLORO-M-XYLENE True Value: 0.0666 ppm Limits: 35 - 130



12065 Lebanon Rd Mt. Juliet, TN 37122 (615) 758-5858 (800) 767-5859 Fax (615) 758-5859 Tax I.D 62-0814289 Est. 1970

Quality Control Summary SDG: L637559 Haley & Aldrich

Test: Polychlorinated Biphenyls by Method 8082

Project No: Matrix: Soil - mg/kg

Project: Tioga BCP EPA ID: TN00003 Collection Date: 5/20/2013 Analytic Batch: WG663699

Analysis Date: 5/31/2013 Analyst: 164

Instrument ID: SVGC20 Extraction Date: 5/29/2013

Sample Numbers: L637559-03

Laboratory Control Sample/Laboratory Control Sample Duplicate

		_	%	-	%	Control	_	%	Control	
Analyte	Spike	LCS	Rec	LCSD	Rec	Limits	Qualifier	RPD	Limits	Qualifier
PCB 1016	0.167	0.140	83.7	0.157	93.9	64-120		12	20	
PCB 1260	0.167	0.168	101	0.192	115	72-130		14	20	

					E-	10	7					
Company Name/Address: HALEY & ALORICA	4 OFN	Bi	illing Informat	ion:	PHABL	E-		Analysis/C	ontainer/Pre	servative		Chain of Custody Page of
ZOC TOWN	ENTRE	EDn.	$\supset_{\alpha} B$	ANC	MAROK			6	05-0	082	H239	
ROCHESTER	MY	2	30RL	NOTE	NIM	A		197			M F	SC
	14623				5/00			4			L-A-B 5-C- 12065 Lebs	1-E-N-C-E-5
Report BADCOCK, D	NOSTR	ANT EM	j pabce	wteh	lundori	cha	~~	RSEW			Mt. Juliet,	4
Project Description: TIO GA 1	BCP				i,Ny		\	250%			Phone: (800 Phone: (615	
Phone: 585-359-9000	Client Project #		ESC Key:								Fax: (615	758-5859
FAX:			HALL	PLORM	Y604	1125		2				
Collected by: (print) DAUID M, NOITEANT	Site/Facility ID	# :	P.O.#:					1			s Surveyage Live &	
Collected by (signature):	Rush? (La Sa	me Day	200%		ts Needed:	No.	S	Me	100 100 100 100 100 100 100 100 100 100		CoCode Template/Prelogin	(lab use only)
Immediately Packed on Ice N Y	Tw	xt Day o Day ce Day		Email?I		of Cntrs	18	orm			Shipped Via:	
Sample ID	Comp/Grab	Matrix*	Depth	Date	Time		B	K			Remarks/Contaminant	Sample # (lab only)
4552-052013-1030	6	55	7-11	5/20/13	1070	1		X			28-2	1637559 -0
4552-052113-0840	6	55	8-10	1 7 7		1		X			27-2	-02
4552-052113-1035	G	55	5,763	5/21/13		1	X	×			DUTFALLIA	- જે
4552-052013-1045	G	55	13-14	1777		1					HOLD (282)	
4552-052013-1100	6	55	14-16	5/20/13		/					HOLD(28-2)	
4552-05-2013-1105	Ġ	55	100	5/20/13		1					14040 (28-2)	
4525-025012-1112	6	55	18-20	5/20/13	1115	1					HOLD(28-2)	
4552-052013-1120	G	55	20-22	5/20/13	1120	1					HOLD (28-2)	
4552-052013-1130	G	55	22-24	7 7	1130	1					HO-D(202)	
*Matrix: SS - Soil/Solid GW - Ground	dwater WW - W	/asteWater D		,	Other				063363	27 pH	Tem	p
Remarks: PLEASE HOLL						تكر ز	7-1	NASS	=5 5	Flow		
Relinatuistred by (Signature)	Date:	Time:		ed by: (Signa				Samp	oles returned videx Courie	'ia: □ UPS	Condition:	(lab use only) ok
Relinquished by: (Signature)	Date:	Time:		ed by: (Signa	ture)	- 11		Temp		ottles Receiv	CoC Cools Intent	YN <u>√</u> NĀ
Relinquished by: (Signature)	Date:	Time:	200000000000000000000000000000000000000	ed for lab by				Date		ime: 0930	pH Checked:	NCF: 15

				E	-106	, ,						
Company Name/Address:		Bill	ing Informat	ion:	_		-	Analysis/C	ontainer/Pr	reservative		Chain of Custody Page 2 of 2
HALEY! ALDR 200 TOWN CE	ICH	PRY	Acco	צדמעט	PAYAL	315		ON B				rage
200 TOWN CE	INTRE	52R -	10 B	ANC	HARD	RO		2				
ROCHESTER, A					MA			-2				FSC
			018	03-5	100			1			L-A-B S	-C-1-E-N-C-E-5
Report to: J. BABCOCIC, D.	Nosti	EMA Ema	dout	ranto 1	nleyald	brich.	94 080	12			1	Lebanon Road liet, TN 37122
Project Description: 7/06A BC	CP		City/Sate	onde	•	1		157		6	Phone:	(800) 767-5859 (615) 758-5858 (615) 758-5859
Phone: 585-359-9000 FAX:	Client Project	#:	ESC Key		, , 11677	اسن د					rax;	(0.13) 130-3033
Collected by: (print) DAVID M. NOSTRIATS	Site/Facility I	D#:	P.O.#:	rupkn	96041	CS		2				65 W 808
Collected by (signature):	Rush? (La	ab MUST Be N	-		lts Needed:	No.	5	7			CoCode Template/Prelog	(lab use only)
Immediately Packed on Ice N Y	T	lext Day wo Day hree Day	. 50%	Email?I	No(Yes NoYes	of		10		Sing.	Shipped Via:	
Sample ID	Comp/Grab	Matrix*	. 25% Depth	Date	Time	Cntrs	1	$N \mid 1$			Remarks/Contaminat	nt Sample # (lab only)
4552-052013-1135	6	55	74-26	5/20/13	1135	1					4000 (28-	2) 1637559
4552-052113-0850	6	55	l	5/24/13		7					1KLD (27-2	
4552-052113-0915	6	35	,	5/24/13		/					HOLD (27-2	
4552-052113-0930	G	55			0930	1					HOLD /27-2	
4552-052113-0935	G	55		5/21/13		1					HO10/27-2	2
4552-05-0881200	6	55	-	5/8/13		/-					HOLD CLEAN	**
4552-052113-1050	G	کک	9-10	5/2//13	1050	/					HOLD OUTFALL!	
4552-052113-1100		55	10-11	4/2/12	1100	1.					HOLD	
1,5,2 05,413 1,00			185-11	3/21/13	7700						OUTFALL	/ /
*Matrix: SS - Soil/Solid GW - Ground	lwater -	MastoMator D	M Drinking	Water OT	Other	<u> </u>				pН		Temp
Remarks: Plans & Ho	Dim	Sprph				 V /Se	ومرتد	PRK5 .	SECT	Flo		Other
Delingalshod by (Signature)	Date: 5/2	/ Time:	Receiv	ed by: (Signa				Samp		d via: UPS	Condition:	(lab use only)
Relinquished by: (Signature)	Date:	7		ed by: (Signa	ature)			Temp); \c S ₂ \c	Bottles Rece	Carrie Indea	tYN_V_NA
Relinquished by: (Signature)	Date:	Time:	Recei	ed for lab by	r: (Signature) /	Com	dwe	Date		Time: 0430	pH Checked:	NCF:

Data Usability Summary Report (DUSR) Tioga - Dry Well & Outfall Closure Analytical Laboratory: Environmental Science Corp. - Mt. Juliet, TN Sample Delivery Group # L637559

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540-R-08-01) and/or
 USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-00-006)
- NYSDEC "Guidance for the Development of Quality Assurance Plans and Data Usability Summary Reports (DUSR)", September 1997

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID 4552-052113-1035

Project Samples were analyzed according to the following analytical methods

	Parameter	Analytical Method	Holding Time Criteria
1	. PCBs	EPA 8082	14 days ext/40 days analysis
2	. ICP Metals	EPA 6010B	180 days
3	. Solids, Total	SM2540G	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed

- · Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Duplicate Sample Analysis
- Sample Data Reporting Format
- · Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%.

G:\Projects\33123\021 Construction Phase\Dry Well & Outfall Closure\Investigation Program\Investigation Report\Data Validation\[L637559_DV.: Date:

7/26/2013

ATTACHMENT F

World Kitchen Incorporated Acknowledgement of Closure of Outfall 001/1A and Related Pipes



Cond, Gidget

From: Green, Gregory E. <GreenGE@worldkitchen.com>

Sent: Monday, August 26, 2013 3:34 PM

To: Ford, Michael L (MTE)

Cc: Resue, Preston T.; Ohl, W Robert (Bob)

Subject: RE: "Hot Box" Structure

Mike -

As long as your plan is approved by the NYS-DEC (and EPA if necessary), World Kitchen has no objection to your plan to plug and disconnect the two lines at the property line.

Best regards,

Greg

From: Ford, Michael L (MTE) [mailto:FordML2@Corning.com]

Sent: Monday, August 26, 2013 1:49 PM

To: Green, Gregory E.

Cc: Resue, Preston T.; Ohl, W Robert (Bob)

Subject: "Hot Box" Structure

Greg,

We are in the planning phase of closing out the "hot box" structure found along Steuben Street. There are two lines which appear to originate from World Kitchen property. The current plan is to plug and disconnect the lines at the property line. Please confirm that it is OK for us to complete this activity.

Mike