PROJECT DOCUMENTATION REPORT TIOGA AVENUE DEMOLITION FALL BROOK, GMS & RELATED FACILITIES CORNING, NEW YORK

by

Haley & Aldrich of New York Rochester, New York

for

Corning Incorporated Corning, New York

File No. 33123-003 22 February 2008



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22 February 2008 File No. 33123-003

Corning Incorporated MP-BH-04 Corning, New York 14831

Attention: Mr. William D. Burdick, Jr.

Subject:

t: TAD Project Documentation Report Tioga Avenue Facilities Corning, New York

Ladies and Gentlemen:

Please find the attached Tioga Avenue Demolition (TAD) Project Documentation Report for the above referenced property. This report provides a summary of demolition and related work performed over the timeframe of December 2006 to December 2007.

Thank you for the opportunity to perform these services for you. Please do not hesitate to contact us if you have any questions or comments.

Sincerely yours, HALEY & ALDRICH OF NEW YORK

David M. Nostrant Senior Field Geologist

Enclosures

c: Tracy Hall Doug Wolf

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Edward L. Hynes Vice President

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### 1. INTRODUCTION

Haley & Aldrich of New York (Haley & Aldrich) has prepared this report at the request of Corning Incorporated (Corning) to document the decommissioning and demolition of the former Corning Fall Brook glass manufacturing plant inclusive of the General Machine Shop (GMS), Central Trades, Mason Shop and related structures collectively referred to as the Tioga Avenue Demolition (TAD) project as shown on Figure 1. The TAD project included the demolition and removal of buildings and related infrastructure over the time period of December 2006 through December 2007 in accordance with the demolition permit issued by the City of Corning and applicable regulatory requirements. Haley & Aldrich was engaged by Corning to provide full-time on-site monitoring services and to maintain various records documenting the work and the management of materials removed from the property. This report provides an overview and summary of the building decommissioning and demolition work as observed and documented by Haley & Aldrich and is appended with copies of various project records.

The Tioga Avenue facilities encompassed approximately 400,000 square feet of space in several buildings on about 14.5 acres as shown on Figure 2. The TAD project included removal of buildings except for the waste water treatment plant (WWTP) and associated equalization tank, and a small storage structure. The closure and disposition of these remaining facilities will be determined at a later date. The mixhouse/batch area are shared with WKLLC and the new unload facility has been constructed. WKLLC operation will remain on the Corning property and Corning may transfer or long term lease. Other than these pre-existing and newly constructed facilities, all other buildings and structures were demolished to grade leaving floor slabs, foundations and other hard surfaces intact. The remaining below grade building elements (floor slabs and foundations) will be removed at a later date as will the sewer piping on the property in conjunction with a yet to be defined site redevelopment plan. The property is currently covered by impervious surfaces (concrete and asphalt) that was thoroughly cleaned following demolition work and the property is secured with perimeter fencing.

### 1.1 Brownfield Cleanup Program Application

Concurrent with the demolition work, Corning Incorporated has entered into an agreement with the New York State Department of Environmental Conservation (NYSDEC) to assess and mitigate adverse environmental conditions that may exist on the property under the NYS Brownfield Cleanup Program (BCP). This process will facilitate the eventual redevelopment of the property for mixed commercial and light industrial use. Investigations are anticipated to be implemented under the BCP Agreement in 2008.

### 1.2 Project Team

The TAD project was undertaken by qualified and experienced contactors and consultants working under the direction of the Corning Incorporated project manager, as assisted by Haley & Aldrich, who included:

 Ontario Specialty Contracting, Inc. of Buffalo, NY (OSC) – OSC provided site demolition services including self performance of asbestos abatement services. OSC services included post-demolition cleaning and video taping of process and storm sewers on the property that was subcontracted to North American Industrial Services,



Inc. of Ballston Spa, NY.

Waste Technology Services, Inc. of Niagara Falls, NY (WTS) – WTS coordinated and managed all aspects of waste material characterization and arranged for the transportation and disposal of materials generated during building decommissioning and all waste generated during building demolition. WTS provided this service directly to Corning Incorporated and provided the written documentation for all types of waste and other materials removed during the TAD project. WTS engaged the services of Paradigm Environmental Services, Inc. to perform the sampling of various materials in buildings as part of the waste characterization and profiling process for disposal of construction debris.

- Paradigm Environmental Services, Inc. of Rochester, NY In addition to the sampling services provided to WTS, Paradigm also conducted pre-demolition asbestos surveys of all the site structures and provided all demolition phase asbestos abatement services including project monitoring, air testing, final visual inspections and report documentation as required by NYSDOL Industrial Code Rule 56 and City of Corning. These services were provided to Corning through subcontract with Haley & Aldrich.
- World Kitchen, LLC (WKLLC) Designated WKLLC personnel served as liaison with the TAD project team participating in project meetings and for coordination with Corning on building and utility separations between the Corning and WKLLC plants to minimize and preclude any impacts on WKLLC plant operations.
- Other Contractors and Tradesmen Corning engaged the serves of various other contractors and tradesmen to support the project including utility separations with the adjacent operating WKLLC facility, utility closures and disconnects with the City and public utility companies, land surveying, and other activities.

Other entities involved with the TAD project included the NYSDEC who made frequent site visits and made information requests regarding environmental aspects of the project and to which appropriate and acceptable responses were provided by Corning.

#### 1.3 Report Content

The following sections of this report provide documentation of the planning and execution of the demolition work along with best management practices employed to mitigate impacts during demolition. The report describes the handling of waste materials generated during demolition and provides the supporting documentation on the final destination of these materials. The report is appended with pertinent information documenting performance of work including the interactions with NYSDEC over the course of the TAD project.



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### 2. PRE-DEMOLITION PHASE ACTIVITIES

### 2.1 Building Decommissioning

As part of closure of the Fall Brook facility operations during 2002, certain activities were performed including, but not limited to, removal of various products and materials used in manufacturing operations and facility maintenance, and cleaning of equipment containing hazardous substances such as air emission control devices and the litharge silo. During the TAD project, additional facility closure and decommissioning phase services were performed prior to building demolition generally including recovery of remaining reusable equipment; cleaning of vessels or storage facilities; collection of universal waste or any other potentially hazardous materials; asbestos abatement; and other activities to make the buildings "clean" and suitable for demolition. These activities were defined prior to demolition work in the Building Decommissioning Assessment (BDA) Report (Haley & Aldrich, May 2006) and implemented prior to building demolition by Corning, WTS and OSC.

The BDA report was used by OSC as a basis for development of its work plan submittal (*Tioga Avenue Demolition Project Work Plan*, OSC, November 2006) to assure that potential environmental contaminants were removed from buildings before demolition to the extent feasible. A copy of the OSC Work Plan is provided in Appendix A. The various materials and waste generated during building decommissioning and means of managing these materials are detailed on Tables 1 through 3.

### 2.2 Asbestos Abatement

A comprehensive survey program was performed to identify the presence of any remaining asbestos containing materials (ACM) in all buildings on the Tioga Avenue property. These surveys were performed by Paradigm and are documented in a series of 28 ACM survey reports for each building or subdivided functional space on the property. These reports were provided to OSC for filing with the NSYDOL and City of Corning and used as a basis for implementation of the necessary pre-demolition abatement of all asbestos (both friable and non-friable). The abatement activities were performed by OSC and the monitoring, air testing and final visual inspections provided by Paradigm. The survey and abatement phase ACM documents are summarized on Table 4. These documents have been provided to Corning under separate cover and copies are also maintained by Haley & Aldrich. A comprehensive summary of friable and non-friable asbestos waste removed and disposed during the TAD project are provided in Tables 5 and 6 respectively.

### 2.3 Waste Characterization and Sampling

WTS coordinated and/or conducted all of the sampling, waste characterization and profiling activities to assure the proper management of waste materials removed during building decommissioning and during building demolition. The sampling program included collection and analysis of bulk, core, chip and wipe samples of materials or building components, the results of which are maintained by Corning with the associated waste profile information. The sampling performed included the collection and analysis of building material samples as requested by the NYSDEC. These and other sampling events are fully documented in the submittals made by Corning to NYSDEC in January and April 2007 responding to the Department's questions and information requests. Copies of these submittals are attached in Appendix B.



WTS and Corning developed arrangements in advance with licensed and permitted waste transporters and commercial treatment or disposal facilities, based on results of waste characterization and types of waste materials anticipated to be generated during the building decommissioning and demolition phases of work for the TAD project. The waste and other materials shipped from the site during the TAD project are detailed by waste type as tabulated herein including reference to shipping documentation, transporter and disposal location on a per-load-shipped basis. Waste handling procedures are further described under Waste Handling Plan below in Section 2.6.

### 2.4 Best Management Practices for Prevention of Releases During Demolition

Best management practices (BMPs) and procedures were developed at the outset of the demolition phase of work to control and mitigate the potential for release of air or water borne contaminants from the property during demolition. Implementation of these BMPs were required throughout the demolition project and are described as follows:

- Storm water within the TAD Project site was directed, controlled and treated by the on-site wastewater treatment plant (WWTP) as shown on Figure 2. The WWTP was (and continues as of this report date) to be operated via a NYSDEC State Pollution Control Discharge Elimination System (SPDES) Permit with a single outfall to the Chemung River. Requests were made by NYSDEC during the demolition project that water generated from washing activities, though minimized as much as possible, should be diverted to the existing equalization tank prior to treatment. Accordingly, storm water and other water associated with cleaning operations was managed based on NYSDEC recommendations and treated water monitored (sampled) based on the SPDES permit requirements.
- Storm water catch basins on the Tioga Avenue property were all identified prior to demolition and covered with filter fabric to minimize the discharge of sediments in storm water. The fabric covers were routinely inspected and cleaned or replaced over the duration of the demolition project.
- Sanitary sewer connections within the buildings on the TAD Project site were identified and sealed prior to demolition.
- Waste materials pending offsite shipment were stored in a secured manner to prevent exposure to precipitation including covering of roll-off containers. Hazardous waste materials were stored in a designated area in accordance with applicable RCRA requirements and the TAD Project Integrated Hazardous Waste Contingency Plan (Haley & Aldrich 2006).
- Sweeping/cleaning of waste storage areas, loaded waste transport vehicles as well as the general areas near access points to the property was routinely performed to mitigate tracking of materials from the property.
- As with any demolition project in a populated area, the use of water as a dust suppressant on the site was of prime importance and applied as necessary and sufficient to control dust but not create runoff or excess load on the WWTP. In



general, an OSC worker was tasked with dust suppression activities on a continuous basis throughout the TAD project execution. Water in the form of a high pressure mist was continuously used in areas where lead containing material was being removed. OSC also employed specialized equipment on the site such as "misters" specially designed to produce a fine mist for dust suppression. The portable unit was typically placed upwind of an area to be demolished and allowed to wet the area for several hours prior to the start of demolition. In cases where multiple areas needed wetting, workers sprayed the building areas with 2-inch hoses prior to commencing work.

At the completion of the demolition work the site consisted almost entirely of impervious surfaces including concrete (floor slabs) and paving. The entire surface of the site was thoroughly cleaned at the conclusion of demolition to remove any remaining sediment or loose materials that could become entrained in storm water. Surface cleaning activities were performed in advance of the storm sewer cleaning.

## 2.5 Health and Safety

All personnel including site workers and any visitors were required to follow the Corning Incorporated health and safety requirements including attendance at the health and safety briefing before accessing the property. In addition, OSC maintained its own project specific health and safely plan as well as assigned a dedicated on-site health and safety officer for the duration of the project. The health and safety program involved daily communications with the work crews as well as an agenda item for weekly project team meetings.

### 2.6 Waste Handling Procedures

A waste handling plan was developed at the outset of the demolition project to identify specific procedures for storage, loading, transportation and disposal of every different type of waste anticipated to be generated during building decommissioning and demolition. The handling of waste was coordinated by WTS and OSC, and monitored by Corning and H&A with written documentation for every load of waste, recyclable or scrapped material leaving the property in the form of a manifest for regulated hazardous waste or bill of lading for all other materials. There was no reuse of any building demolition materials on the Tioga Avenue property as all demolition waste, recyclable or scrap materials were delivered to authorized commercial handling facilities as described below. The companies/facilities used for transportation and disposal of materials were pre-approved and designated by Corning with the assistance of WTS as described above. The waste and other materials generated during the TAD Project are generally categorized and described as follows:

<u>Universal Waste</u> - OSC performed pre-demolition removal of all universal waste (as defined by RCRA regulations) from each proposed demolition area before any demolition work was initiated. The materials were containerized and transferred to the designated waste storage building pending offsite shipment that was arranged and coordinated in advance by WTS and the shipments observed by Corning or Haley & Aldrich personnel. These materials were limited to items meeting the regulatory definition of "universal waste" including fluorescent tube lamps, high pressure sodium bulbs, lead acid batteries and emergency lighting batteries that were placed in appropriate containers and shipped under a Bill of Lading to the preapproved waste handling facility. Walkthroughs were performed by OSC, Haley & Aldrich and Corning to confirm all waste was removed. The universal waste generated and shipped



during the TAD project is summarized on Table 1.

<u>Other Recycled Materials</u> – Certain other materials were identified during the building decommissioning phase and planned for removal and reuse, sale and recycling including: old growth hart pine timbers selectively removed from the mix house area, unused (on pallets) refractory, and reusable non-PCB electrical transformers and switchgear. Shipments of these materials are detailed on Table 2.

<u>Other Building Decommissioning Materials</u> - All immediately accessible forms of other "nonuniversal" materials remaining in the facility was also inventoried during building decommissioning, then removed and containerized by OSC prior to the demolition work. These materials were staged in the designated waste storage area pending offsite shipment and included a variety of items characterized as:

- Non-Regulated Oils
- Non-Regulated Oily Solids
- Non-PCB Capacitors
- RQ PCB Solids
- No-Regulated Antifreeze
- Mercury
- Waste Corrosive Solids
- Cleaning Fluids (small amounts as generated by OSC for pre-demo cleaning)
- Flammable Liquids
- Waste Hypochlorite Solution
- Toxic liquid (Organic)
- Non-Regulated Material (Saureisen No. 31 powder and liquid)
- Corrosive Liquid
- Propane
- Hydrogen Peroxide
- Waste Acetic Acid Solution
- Waste Diesel Fuel
- Non-Regulated Cleaners, Waxes, Finishes

A comprehensive summary of these "other building decommissioning materials" managed during building decommissioning is provided on Table 3.

<u>Recycled Metal</u> – Ownership of recyclable metals was retained and managed solely by OSC who arranged separately for handling for sale as scrap and recycled metal. Corning however tracked the shipment of these materials. Significant quantities of ferrous and non-ferrous metals were segregated and sold for scrap. Scrap steel was segregated into categories based on the material type, size and former use. OSC designated the following categories when shipping scrap steel offsite for recycling:

- Unprepared scrap steel of varying size and shape in the form of plate steel, mixed with some support steel and piping.
- Prepared scrap steel similar to the above except this material was cut into pieces five feet in length or less prior to being loaded and shipped offsite.
- Miscellaneous scrap steel of varying size and shape in the form of piping,



steel siding, conduit and framing steel.

- Structural scrap steel consisting primarily of support steel, beams and girders cut into pieces manageable for loading onto trucks.
- Non-ferrous metals in the form of copper communication wiring, transformer windings, copper piping and fittings, aluminum wire, piping, plate and fittings, stainless steel piping, plate and fittings.

Scrap metal was separated into stockpiles in designated areas on the Tioga Avenue property for pickup and transport to a recycling facility. The steel was transported by trucks equipped with dump trailers, roll offs, or by railcar via the on-site rail spur. A portion of the nonferrous metal was purchased and transported by a specialty metal dealer. All these materials were shipped by truck or rail to various recyclers or scrap dealers as summarized on Table 7.

<u>Construction & Demolition Debris</u> - This category of non-hazardous solid waste was by far the most abundant waste type handled and disposed during the TAD project and generally included: brick, concrete, wood, plaster and drywall material, fiberglass insulation, window glass, ceramic tile, acoustic ceiling tiles, and miscellaneous plastics generated from building demolition. This material was either live-loaded into dump trailers for immediate transport and disposal or loaded into onsite roll off containers for daily pickup. For live-loading, advance arrangements were scheduled by WTS and the transporter. The materials were transported under a bill of lading to the Steuben County Landfill for disposal. Shipments of these materials are detailed on Table 6.

A portion of the construction and demolition debris referred to as "processed C&D" was specially handled and shipped separately to the Steuben County Landfill for use within the confines of the landfill. The "processed C&D" included concrete, brick and masonry materials that were sized by OSC on the Tioga Avenue property in accordance with the specifications provided by the County. These materials were also shipped under bill of lading as documented in the shipping summary on Table 8.

Lead Containing Construction and Demolition Debris - Based on process knowledge of site operations, and/or results of pre-demolition sampling and analysis of building materials, certain areas of the main Fall Brook plant were presumed to contain hazardous substances, primarily associated with use of litharge and specifically lead. These areas were demarcated and isolated prior to demolition and all waste and demolition debris segregated, managed and transported for off-site disposal as a lead characteristic hazardous waste (D008). Areas managed in this manner included: the Fala building insulating materials concrete wall sections, some of the glass tank areas (specifically tanks 36, 44 and 45), and litharge silo in the mix house. A substantial quantity of hazardous waste was generated and shipped under a Uniform Hazardous Waste Manifest a comprehensive summary of which is provided in Table 9.



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#### 3. DEMOLITION PHASE SERVICES

The demolition phase services were conducted by OSC in accordance with the OSC Work Plan and the above described plans and procedures. The work was sequenced; generally progressing west to east across the property starting at the GMS building and ending at the mix house which required phased demolition so as not to interrupt the rail delivery capability provided to World Kitchen. Demolition work at the interface with World Kitchen operations were closely coordinated with World Kitchen to mitigate impacts or disruption to their operations. Shared utilities and facilities were identified before any disconnects were made. World Kitchen's use and operation of the mix house was maintained throughout the TAD project by erecting a temporary enclosure over this area, followed by dismantling of the original mix house structure and associated silos, after which a new permanent building was erected for World Kitchen to enclose the rail unloading facility within the former mix house.

Based on the OSC Work Plan, the TAD project was divided into functional work areas (Areas 1 through 8) as shown on Figure 3. A copy of the OSC Work Plan is provided in Appendix A. Work was sequenced such that demolition was advanced in a given work area while decommissioning and asbestos abatement was performed in the next work area to make it ready for demolition. The demolition work was undertaken in accordance with the plans and procedures described above to mitigate potential adverse impacts from the demolition process, including the delineation of areas of the site where hazardous substances were actually or potentially present. This assessment was focused on lead and other heavy metals that were constituents of the raw materials formerly used in glass making operations at the site mostly in OSC Area 4. Overall, however, operations at the Tioga Avenue site were generally not chemical intensive and the metal-containing materials not widespread on the property except in certain work areas as described in the following discussion. Areas of the site where hazardous substances were not expected based on process knowledge were sampled prior to demolition as confirmation that potential hazardous waste debris would not be generated.

The buildings on the Tioga Avenue property were all constructed on concrete slabs at grade except for the original brick railroad office building at the southeast corner of the main Fall Brook building which had a full basement area. The scope of demolition included complete removal of buildings and related structures to grade (or to basement level in the case of the railroad structure) leaving floor slabs and foundations in place. Depressions, voids and pits and the office building basement area were all backfilled with imported gravel fill (NYSDOT Item 4 stone) purchased from a commercial supplier to mitigate post-demolition trip and fall hazards on the property. There was no on-site reuse of construction debris or any other materials generated from the TAD project for backfill or any other use. There were several sub-grade building elements that were included within the scope of the TAD project. Where present in any given OSC-defined work area, these items were addressed as part of the demolition project as described below. These items generally included elevators, dock leveling systems, pits, flues, and sewer piping.

The demolition work is further summarized below for each of the OSC-defined work areas. A daily accounting of work activities is provided in Daily Field Reports (DFRs) prepared by the Haley & Aldrich on-site monitor as provided in Appendix C. A photographic log was maintained during the TAD project. Due to size, the comprehensive file of photographs is maintained electronically by Corning and by Haley & Aldrich with copies of selected photographs provided herein in Appendix D.



### 3.1 Area 1 – GMS & GMS Annex

This area is located in the western portion of the site comprising the buildings formerly known as the General Machine Shop and the General Machine Shop Annex. Demolition activities in Area 1 took place throughout February 2007. During the demolition process in this area, demolition debris was separated into piles of like material and temporarily staged or directly loaded into trucks for disposal. Based on knowledge of site operations and confirmatory sampling, the non-recyclable C&D debris generated was managed at the Steuben County Bath landfill as either processed or unprocessed C&D material. Following cleanup of the area all metal trip-hazards were removed.

The main GMS building site was revisited in April 2007 for the removal of the subsurface pistons associated with the passenger elevator and loading dock elevator. Prior to the removal activities in both areas, poly sheeting was placed in the work areas. At the passenger elevator location, the associated concrete lined elevator pit was cleaned and determined to be in good condition lacking any evidence of deterioration. The piston and integral casing assembly was removed and all oil contained inside was transferred to labeled drums and disposed. The exterior of the piston casing assembly was constructed of stainless steel and observed to be in very good condition with no corrosion present. Following removal the piston borehole was sealed using a cement-bentonite-water grout mix. The bottom of the elevator pit was covered with 3/4in. thick sheets plywood to protect the grout mix and the pit was backfilled with DOT Item-4 gravel.

The pit at the GMS dock elevator was cleaned and the elevator components removed at the same time. The interior of the elevator casings were observed to be intact with no corrosion or other evidence of historical leakage present. Residual oil inside the casings was pumped into a drum for disposal and the interior of the casing was swabbed of any residual oil. The casing boreholes were grouted in place using a cement-bentonite-water grout mix. The bottom of the elevator pit was covered with 3/4in. thick sheets of plywood to protect the grout mix and the pit was backfilled with Item-4 gravel.

#### 3.2 Area 2 – Central Trades

This area is located east of Area 1 along the southern edge of the site comprising the area and building known as Central Trades. Decommission and demolition activities in Area 2 began in mid-February 2007 and continued through mid-March 2007. During the demolition process in this area, demolition debris was separated into piles of like material and temporally staged or loaded into trucks for disposal. Based on knowledge of site operations and confirmatory sampling, the C&D debris generated was managed at the Steuben County Bath landfill as either processed or unprocessed C&D material. Following cleanup of the area all metal triphazards were removed.

Area 2 was re-visited on April 11, 2007 to remove the piston assembly for the single elevator formerly serving the Central Trades building using the same procedures described above for the GMS elevators. Prior to removing the piston, the associated pit was cleaned of all soils and other debris. The interior of the elevator casing was observed to be intact with no corrosion present. Oil from inside the casing was pumped into a drum and the interior of the casing was swabbed of any residual oil and grouted in place using a cement-bentonite-water grout mix. The bottom of the elevator pit was covered with 3/4in. thick sheets of plywood to protect the grout mix and the pit was backfilled with Item-4 gravel.



#### 3.3 Area 3 – Mason Shop

This area is located east of Area 2 along the southern edge of the site comprising the area and building known as the Mason Shop. Demolition activities in this area began in mid-March 2007 and continued through early April 2007 following the same procedures described above for sorting, staging and disposing of C&D materials at the Steuben County Bath landfill. The Mason Shop did not have an elevator or any other subsurface elements except for sewer piping the handling of which is described below.

#### 3.4 Area 4 – Fall Brook Main Plant

Area 4 comprised the main Fall Brook building that supported the glass making, administrative offices and related functions as shown on Figure 2. Demolition in Area 4 was accomplished in phases beginning in late April and ending in late August 2007. The main Fall Brook building contained the process (melt) tanks and related handling facilities where litharge was used as a raw material. These areas were specifically identified, demarcated, and isolated prior to demolition as further described below. Open sections of buildings in the litharge areas were fully isolated prior to demolition by sealing with reinforced tarp and heavy gauge poly sheeting material comparable to enclosures used for asbestos abatement. Wooden framework was installed in combination with the tarps to create an air tight work space. The enclosure materials were considered a one-time use and disposed of as lead containing material after demolition.

All demolition debris (tanks, equipment and building components) within the tank 36, 44 and 45 areas were managed and disposed as hazardous waste. Otherwise the non-hazardous demolition debris outside of these tank areas was separated into piles of like material and temporarily staged or directly loaded into trucks for disposal. Based on knowledge of site operations and confirmatory sampling the non-hazardous C&D debris generated was managed at the Steuben County Bath landfill as either processed or unprocessed C&D material. More detailed discussion of waste characterization and demolition procedures, including sampling and analytical reports by WTS/Paradigm, are provided in the NYSDEC correspondence in Appendix B.

OSC began preliminary activities at the northwest corner of Area 4 starting in late April 2007 with the removal of lead containing material identified in the area of Tanks 36, 44 and 45. Prior to demolition in this area, OSC removed a section of the west wall of the building enclosing the tanks and a constructed a wood framed set of doors covered with reinforced tarps. The doors were constructed as to allow the excavators access to the building to remove lead containing materials that were known to be present at the tanks and the concrete floor adjacent to the tanks. During and at the end of each workday, the doors were closed to prevent wind from entering the building. Similarly, a wood framed and reinforced poly barrier was constructed along the newly opened south wall of the second and third floor of the building. This measure allowed the workers to expedite the lead containing removal process without raising the concern of increased dust being generated by wind action. When lead removal activities began, workers continuously applied water in the form of a high pressure mist to the specific areas of work as a dust suppression measure. The lead containing material was loaded directly into hazardous waste roll offs. The full roll offs were tarped prior to leaving the area and staged at a designated area of the site. Dust suppression measures were also employed outside the building as needed, however, generation of dust within the lead areas was largely controlled by enclosures fully encompassing these areas.



The recyclable metals from the lead areas were also sorted and either prepared for shipment to recyclers or in certain cases managed as hazardous waste. Metal framework, piping, etc. displaying suspected lead containing particles was rinsed prior to being placed in stockpiles for recycle. In cases where the material was hardened or encrusted onto the metal work or other building material, this material was treated as lead containing and disposed as hazardous waste. Following demolition of an area where lead containing materials where known or suspected, all residual materials remaining were handled as lead containing.

Residual lead removal in the Tank 44 and 45 areas included removal of the accessible portion of the Tank 44 subsurface flue. This flue system was constructed of refractory fully contained within a concrete-lined trench extending sub-grade from the tank area northward to the emission control devices. After tank removal the flue was exposed and observed to contain an accumulation of red lead oxide material. This material was removed along with the flue materials (refractory) as part of the demolition work except that there is a portion of the flue that was not accessed during the demolition project that will be addressed at a later time. All materials within the concrete trench including brick, lead oxide and surrounding soils adjacent to the flue structure were live loaded into dump trailers and disposed of as hazardous waste (D008). Demolition continued to the Tank 36 area. Similarly, the demolition materials from this area were handled and disposed of as lead containing material. Work continued at the northeast section of Area 4 with demolition of the non-lead tanks including the 40 melter building and Tank 41 area. Pits located in the Tank 41 batch house and the 40 melter areas were cleaned of residual material, washed and backfilled with Item #4 gravel.

After the tank area demolition, work progressed to the south into the former Fall Brook office space (original brick building) that was demolished in mid-June. All material from the basement area was removed and the basement was backfilled with Item # 4 gravel. From this point, demolition progressed to the west along the north side of Tioga Ave. Demolition of the southern section of the Fall Brook main building was complete with the exception of sorting materials by early July 2007.

Preparatory work at the FALA building began in early June with removal of conveyor belts, conveyors and cullet material. With the exception of metal to be recycled, all material removed from the FALA building was assumed to be lead containing material and was handled and disposed of as such. The remaining structure was felled on July 16, 2007.

## 3.5 Area 5 – Pallet & Cullet Storage

This area was comprised of the 3-sided covered wooden bins known as the pallet storage and cullet storage areas including a small hose house as shown on Figure 2. The materials remaining in this area were removed for use as raw material by World Kitchen and the wooden structures and hose house removed and disposed as solid waste over the time period of mid-January 2007.

### 3.6 Area 6 – Boiler House, EP Fan & Bag House

This area is located along the northern edge of the site comprising the areas and buildings known as the Boiler House, EP Fan Room, and Bag House building. Demolition activities were completed in phases starting in June 2007 with removal of the upper platform and steel smokestack on the bag house building. Very little residue was observed in the interior of the smokestack that was handled as a lead containing material. Demolition work in Area 6 was completed in August 2007. The debris was sorted into piles of similar material prior to being



loaded and disposed of off site. All demolition material from the bag house and fan area was assumed to be lead containing and hazardous waste, and was handled and disposed of as such.

#### 3.7 Area 7 – Batch Material & Mixing

This area was comprised of the buildings known as Cullet Storage, Batch Material Storage and Fall Brook Mixing. Demolition activities in area 7 were accomplished in different phases of work based on the need to plan for separations with World Kitchen including construction of a new enclosure for the mix house area. Starting in mid-December 2006 the south portion of the cullet storage area was removed. As demolition progressed, OSC actively began separating the debris into stockpiles of similar material and began transferring the materials into trucks for disposal offsite as solid waste. Demolition progressed to the Batch Material Storage Building in mid-January 2007 and continued with debris sorting and material disposal until February 2007. Demolition progressed to the north where two (non lead containing) sand silos were demolished on January 29, 2007. Additional work in Area 7 was postponed to allow for planning of the separations and for construction of the new mix house facilities associated with World Kitchen operations.

In early April 2007 workers began removal of overhead ducts at the World Kitchen cullet storage sheds. The duct work was sealed with poly sheeting then removed and placed on poly sheeting at ground level. The decommissioning activity continued in this area through April and May. Demolition of the litharge silo was also completed during this timeframe along with removal the concrete loading dock and ramp south of the former cullet storage area. Following demolition, this area was graded level to the surrounding site. During this same time period, a series of concrete-lined pits at the east end of the mix house were cleaned of mostly metal debris and backfilled with imported Item #4 gravel.

Demolition activities resumed in early August with removal of several steel silos at the eastern section of the mix house while separations between Corning-owned and World Kitchen-owned facilities continued. During this same time frame, OSC began removal of a portion of the east end of the mix house walls. The balance of the structure was demolished on September 29-30, 2007 and a temporary structure was erected to maintain the uninterrupted use of the mix house for World Kitchen operations.

The demolition debris generated in Area 7 was managed in accordance with the specified waste management procedures with most of the debris being managed as processed or unprocessed C&D debris at the Steuben County Bath Landfill. Old growth hart pine timbers were segregated during demolition of the older part of the mix house building and sold for reuse as was relatively limited amounts of scrap metal. The litharge silo and all residual contents was entirely managed as hazardous waste as was the soil/fill that was excavated during installation of foundations for the new mix house building. This soil/fill material was presumed to be lead containing based on proximity former litharge handling areas and thus managed as hazardous waste.

### 3.8 Area 8 – Water Tank & Small Structures

This area contained the above ground steel water tank and other small structures used for storage of materials and a hose-house all situated in the northernmost area of the site. Demolition of these structures was completed in March and April 2007. The water was cut and removed in pieces with the steel segregated for recycling by OSC. The concrete floor of the tank was left intact and will be removed at a later date. Otherwise the non-hazardous



demolition debris generated for removal of small structures was managed as unprocessed non-hazardous C&D debris at the Steuben County Bath landfill.



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#### 4. OTHER RELATED WORK

#### 4.1 Sanitary Sewer Line Abandonment

The sanitary sewer lines serving the Fall Brook, GMS, Mason Shop and Central Trades buildings were excavated to their terminations at manholes along Steuben St. and Tioga Ave in June 2007. All penetrations in the manholes and pipes were sealed with fast setting cement prior to backfilling the excavations. These sanitary sewer closure activities were all coordinated with the City of Corning.

#### 4.2 Post Demolition Cleaning Activities

The post demolition condition of the Tioga Avenue property consists almost entirely of impervious surfaces including concrete floor slabs and asphalt paving. On completion of building demolition the surface of the entire site was thoroughly cleaned to remove accumulated sediment with the objective of mitigating the potential future impact to stormwater. The cleaning process involved the use of mechanical sweepers and hand brooms followed by high pressure washing of the concrete pad. In addition, all metal protrusions were cut off flush at grade using torches or mechanical means. All accumulated solid materials generated during the cleaning process were segregated and managed as hazardous waste. Wash water generated during the cleaning process was managed at the WWTP.

### 4.3 Storm Sewer System Cleaning & Inspection

Following building demolition and post-demolition cleaning as described above, the storm sewer system on the Tioga Avenue property was cleaned, flushed, and visually inspected by North American Services, Inc. a specialty sub-contractor to OSC. These activities were performed as the final phase of the TAD project in September 2007.

The storm sewer system on the TAD property consists of a network of buried pipes of various size interconnected via manholes and catch basins, all of which currently discharge to the WWTP. The storm sewer system is designed to enable flow directly to the WWTP or the flow may be diverted to the equalization tank then to the WWTP. The diversion point is referred to as the wet well and is located adjacent to the equalization tank contained within a subgrade concrete vault. The wet well was cleaned before work on the piping system was initiated.

The sewer cleaning activities were initiated from the farthest (western) part of the property working generally east and north toward the WWTP. All active and formerly closed sewer pipe runs were identified using a video camera, cleaned and visually inspected again after cleaning using the in-pipe video equipment. The formerly closed pipe sections included the former outfalls at the Chemung River. These sections of storm pipe were closed many years ago and are sealed at the terminus. These sections of pipe were cleaned from the point of termination working back onto the nearest interconnected manhole on the Tioga Avenue property.

Cleaning was performed systematically between manholes the using a high pressure revolving jetting head cleaning tool from one manhole and pushing material to the next adjoining manhole where the cleaning residuals were pumped and removed.



After cleaning the work was inspected using the video equipment and determined complete or additional cleaning was performed until achieving a visually clean smooth inner pipe surface.

Observations during the cleaning process did not indicate any significant accumulations or blockages of piping on the property. Based on the in-pipe video survey, the piping appeared to range in size from approximately 4-inch to 2-feet in diameter constructed of iron ductile or corrugated HDPE piping. The piping appeared to be in reasonably good condition and there were no observations of any significant cracking, breaching or structural failure. The cleaning materials were removed using vacuum truck container or transferred directly into a watertight disposal container and allowed to settle. Liquids were then decanted from the storage vessels and discharged to the on-site WWTP. The remaining solids and sludges were managed offsite and presumed to be hazardous.

The locations and conditions of sewer piping on the TAD property is fully documented on video tapes and drawings retained by Corning Incorporated. In total there is approximately 4,850 lineal feet of storm sewer piping on the Tioga Avenue property.

### 4.4 Production Well Abandonment

Production Well No. 2 was abandoned and decommissioned for World Kitchen LLC by a well drilling company during the demolition project in September 2007. This well was formerly owned and operated by World Kitchen LLC.

#### 4.5 Survey Control

A comprehensive land survey was performed to document pre-demolition property conditions including documenting the property boundary, locations of buildings, environmental features and sampling locations, sewer piping, and other points of potential future interest. This information is intended to facilitate future environmental evaluation that will be conducted pursuant to the NYSDEC BCP process as well as the eventual site redevelopment. The survey services were provided by Weiler Associates, Inc. of Horseheads, New York and documented on CADD drawings and other electronic media.



## 5. RECORD DOCUMENTS

This report provides a description and summary of work performed related to the planning and execution of the Tioga Avenue Demolition Project that was completed between the time period of December 2006 through December 2007. This report is appended by or contains reference to various other related media, reports, and correspondence generated during the TAD Project. In addition to this report, the TAD project is documented in the following records that can be referenced for more details of particular aspects of the project.

- TAD Project Work Plan by Ontario Specialty Contracting, November 2006 A copy this document is provided with this report (Appendix A).
- TAD Project Information Response Letter from Corning Incorporated to NYSDEC, 22 January 2007 – A copy of this document is provided in this report (Appendix B).
- TAD Project Supplemental Information Response Letter from Corning Incorporated to NYSDEC, 24 April 2007 – A copy of this document is provided in this report (Appendix B).
- Haley & Aldrich Daily Field Reports (DFRs) A DFR was prepared to document work activity on a daily basis and presented in the DFR forms in Appendix C of this report.
- Photographic Documentation Selected photographs showing demolition work are provided in this report (Appendix D). Additional photographs are maintained by Haley & Aldrich and Corning Incorporated.
- Sewer Cleaning Video Video documentation of the sewer piping throughout the Tioga Avenue site is maintained by Corning Incorporated.
- Facility Files The files associated with each of the Tioga Avenue facilities are retained by Corning Incorporated in long term storage.
- Building Demolition Assessment by Haley & Aldrich, May 2006 Copies of this report are on file with Corning Incorporated and Haley & Aldrich.
- Waste Shipping Records These records including copies of bills-of-lading and uniform hazardous waste manifests are retained by Corning Incorporated. Records were also submitted to NYSDEC on a monthly basis as the project progressed.
- TAD Project Integrated Hazardous Waste Contingency Plan, December 2006 Copies of this document are on file with Corning Incorporated and Haley & Aldrich.
- Pre-demolition Asbestos Survey Reports A series of 28 reports by Paradigm Environmental Services, Inc. document results of asbestos inspections and bulk sampling on the Tioga Avenue property. Copies of these reports are on file with Corning Incorporated and Haley & Aldrich.
- Asbestos Abatement Reports A series of corresponding reports by Paradigm Environmental Services, Inc. document the pre-demolition abatement of asbestos



containing materials throughout the Tioga Avenue property. Copies of these reports are on file with Corning Incorporated and Haley & Aldrich.

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