Haley & Aldrich of New York 200 Town Centre Dr. Suite 2 Rochester, NY 14623-4264

> Tel: 585.359.9000 Fax: 585.359.4650 HaleyAldrich.com



14 September 2009 File No. 33123-006

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

Attention:

Bartholomew H. Putzig, P.E.

Subject:

Addendum - Remedial Investigation Work Plan

Tioga Avenue BCP Site# C851031

Corning, New York

Gentlemen:

On behalf of Corning Property Management Corporation and Corning Incorporated (collectively referred to as Corning), Haley & Aldrich of New York (Haley & Aldrich) is submitting responses to NYS DEC and NYS DOH comments, and these responses are considered an addendum to the Remedial Investigation Work Plan (RIWP) for the subject site. This document is submitted in accordance with the Brownfield Cleanup Agreement/Tioga Avenue Site #C851031 between the New York State Department of Environmental Conservation (the Department) and Corning.

This addendum is provided in response to the Department's comments submitted by letter dated 18 August 2009 on the RIWP for the Tioga Avenue Site, as revised April 2009, and reviewed with your staff and the Department of Health (DOH) on 9 September 2009. This RIWP Addendum contains responses to each of the Department's comments with cross-reference to the specific changes to the April 2009 RIWP, and provides additional or revised tables or figures to be included as part of the final RIWP.

We appreciate the efforts of your staff and the DOH in facilitating discussion and reaching consensus on resolution of the remaining comments and finalizing the RIWP. On receipt of your written approval of the RIWP we will file a copy of this RIWP Addendum with the document repository and will start to implement the remedial program later this month. We will advise the Department of the specific start date once the schedule is finalized.

New York State Department of Environmental Conservation 14 September 2009 Page 2

If you have any questions please do not hesitate to contact us.

Sincerely yours,

HALEY & ALDRICH OF NEW YORK

Edward L. Hynes Vice President

Attachments:

Comment Response Summary
Table 8 – Sampling and Analytical Program Detail
Revised Figure 6 – Final BCP RI Exploration Locations
Figure 7 – Monitoring Well Schematic

Cc: Gary Bonarski, NYSDEC w/enclosure (2 copies)
Katherine Comerford, NYSDOH-Rochester w/enclosure
James D. Charles, Esq., NYSDEC w/o enclosure
Richard T. Weakland, CPMCo w/o enclosure
Nancy T. Holtby, Esq., Corning w/o enclosure
Jean H. McCreary, Esq., Nixon Peabody w/enclosure
Robert Ohl, Corning w/enclosure
Tracy Hall, Corning w/enclosure
Joseph Kane, Corning w/enclosure



TIOGA AVENUE SITE #C851031

SUMMARY OF CORNING INCORPORATED RESPONSES TO NYSDEC AND NYSDOH COMMENTS ON THE RIWP DATED AUGUST 18, 2009 AND ADDENDUM TO THE REMEDIAL INVESTIGATION WORK PLAN (as revised April 2009)

(NYSDEC/NYSDOH comments are numbered consecutively and quoted in italics below followed by the Corning Incorporated responses and Work Plan addenda)

Comment 1:

Response Letter Item #3 - As indicated in your response and documentation, trichlorethene (TCE) was detected in 1990 in the former Pressware Drinking Water Supply at levels of 22 ppb, significantly higher than the Maximum Contaminant Level of 5 ppb. This resulted in abandonment of this supply as a potable water source and ultimately resulted in connection to the City of Corning's Public Water Supply. No records, however, have been provided indicating when that physical connection was made. Repeat sampling conducted in 1992 indicated that levels of TCE, at that time, met State Sanitary Code regulations, but no confirmation exists whether the source of supply tested at the time was from the municipality or an on-site well. In review of the ESA, the Source Water Assessment Area diagram currently locates three wells, within one mile of the site, two upgradiant and one down gradient. As requested in the original RIWP review, but determined through our investigation, is the fact that three municipal wells, located downgrade from the site, between 1200 and 500 feet in distance were abandoned by the City of Corning due to TCE contamination. These wells were screened at depths of approximately 60'-70' bgs which is comparable to the screened depth of the designated wells #1 and #2. In comparison, monitoring well B143-MW, positioned near the #1 well to investigate the presence of TCE in this area's groundwater, was drilled only to a depth of 28'. Please relocate the proposed BCP monitoring well, shown near the eastern property line, to the area of Well #1 and set the screened depths comparable to Well #1 and the referenced municipal wells. Also, please install a monitoring well with similar specifications in the Southeast corner of the BCP site and specify the site's centrally located monitoring well with the same installation specifications.

Response/RIWP Addendum:

Corning Incorporated (Corning) has provided all available records to the Department related to the 1990 detection of TCE in a water supply well.

Corning has not been provided with any details regarding the Department's investigation of municipal wells, thus we are not in a position to respond to the interpretations on groundwater conditions in the City of Corning resulting from the Department's investigation. The responses during the original RIWP review are based on the details regarding the presence of organic solvents in the City of Corning water supply wells and closure of certain wells is documented in the information previously provided to the Department, namely the Groundwater Associates report for the City of Corning titled "Preliminary Contamination Investigation". In order to advance the RI program without further delay, Corning agrees to expand the groundwater investigation program to include the installation and sampling of deeper wells as requested by the Department. Section 5.2 of the April 2009 RIWP is revised as follows:



- The proposed new well located at the eastern property line will be moved to the area of Well #1 which is shown as well B249-MW on the attached Exploration Location Plan, Figure 6, as revised August 2009, which replaces Figure 6 in the RIWP, as revised April 2009. This new well will be installed in accordance with the procedures specified in the RIWP except that the total well depth will be 70 feet below ground surface (bgs) with the well screen set from approximately 60 feet to 70 feet bgs.
- The proposed new well located in the center of the Tioga Avenue site (identified on Figure 6, as revised August 2009, as well B247-MW) will be extended to a total well depth of 70 feet below ground surface (bgs) with the well screen set from approximately 60 feet to 70 feet bgs.
- An additional well will be located in the southeast corner of the BCP site identified as well B248-MW on Figure 6, as revised August 2009. This well will be completed the same as the above wells with a well screen set from approximately 60 to 70 feet bgs.
- Each of the deeper wells (B247-MW through B249-MW) will be sampled for TCL VOCs in accordance with the Department's request. The remaining new wells will be sampled as specified in the RIWP. The groundwater sampling and analytical program for the existing and new wells is detailed on Table 8 as appended to the RIWP.

Comment 2:

Section 5.2 – In reference to monitoring well installation, please include a well construction drawing providing detailed design information including material specifications, backfill material, thicknesses, seal thicknesses, screen positioning in relationship to groundwater depths, etc.

Response/RIWP Addendum:

The proposed new wells will be completed as shown on the schematic drawing identified as Figure 7 as appended to the RIWP.

Comment 3:

It has been reported that lead levels in site related storm water substantially exceeds permissible discharge levels based on recently provided analytical results. Please include a storm water sampling plan to determine wastewater contamination levels aimed at pinpointing the source area of this contamination.

Response/RIWP Addendum:

Corning Incorporated has and will continue to maintain operation of the waste water treatment plant (WWTP) to treat stormwater from the Tioga Avenue property in accordance with SPDES permit # NY-003981 and the applicable discharge limits. Corning renewed this permit in 2008 for an additional 5-year term. Corning has reviewed these plans with Ms. Nancy Rice of the NYSDEC Division of Water and informed the Division of Water that Corning will maintain operation of the WWTP until such time that future site development and/or site remediation is conducted as approved by the Department under the applicable Brownfield Cleanup Agreement. The stormwater analytical results that were provided to Ms. Rice were from a sample taken at the influent to the WWTP. The effluent sampling results from the WWTP have been in continuous compliance with the SPDES discharge limit for lead.



Corning has undertaken the flushing and cleaning of sewer piping subsequent to the facility demolition project in 2007 as described in the Project Documentation Report which we have previously provided to the Department. Any potential remaining sediment in the sewer system that could reside in storm sewer pipes on the Tioga Avenue property will be further mitigated by sealing of the site sewer system concurrent with WWTP plant closure and development of new stormwater conveyances necessary for future site remediation and development.

Comment 4:

Section 5.1 – Drilling spoils and groundwater removed during well installation, development, etc. will be contained or drummed for "appropriate handling". Please describe "appropriate handling".

Response/RIWP Addendum:

Section 5.1 of the April 2009 RIWP is revised to clarify that drill spoils that are placed into containers or drums will be sampled in accordance with the applicable regulations and disposed offsite at properly licensed facilities authorized to accept the material. Section 5.2 of the April 2009 RIWP is revised to clarify that groundwater will be handled in the same manner and will be either disposed offsite or, possibly treated on-site at the WWTP, if approved in the advance by the NYSDEC Division of Water.

Comment 5:

Item #10, #28, Section 5.1 – As previously requested, and to adequately characterize the site vertically, we are requesting that all borings will minimally extend to groundwater level. Please remove "will generally be advanced to the top of un-impacted native soil", and "if any evidence of contamination is observed...," indicating otherwise. Also, you have indicated that up to 26 additional borings will be installed on the basis of "conditions" observed in the field. The conditions have not been specified nor prioritization of the additional locations discussed. Please indicate that placement of the additional borings is subject to decision, and/or pre approval and acceptance by representatives of this Department.

Response/RIWP Addendum:

Subsurface conditions at the Tioga Avenue site have been defined to the ground water level based on previous explorations as shown in the plan and profile drawings in the RIWP. There are only two stratigraphic units in this zone on the Tioga Avenue site comprised of soil fill of varying composition and depth underlain by an alluvial sand and gravel deposit that appears uniform across the site. We have not observed variability in these conditions except that the thickness of fill varies across the site. To date there have been 21 borings advanced to the groundwater level on the Tioga Avenue site and up to an additional 25 borings will be advanced to the groundwater level as currently proposed in the RIWP. While we concur with the Department on the importance of vertical characterization of the Tioga Avenue site, advancing all of the proposed borings to the groundwater level and specifically the grid boring locations described in Section 5.1 of the RIWP is unnecessary. Accordingly, Section 5.1 of the RIWP is revised to indicate that certain of the random boring locations will be extended to the water table depth for further vertical characterization of the site. These deeper boring locations will include borings B-202, B-206, B-210, B-211, B-226 and B-233 as are shown on the Exploration Location Plan, Figure 6, as revised August 2009. As indicated in Section 5.1 of the RIWP, "if evidence of



contamination is observed in any other boring, such boring will also be extended to a depth sufficient for full penetration through the impacted zone or at a minimum to the water table depth."

With respect to the additional borings as referenced in Section 5.1 of the RIWP, the locations of which will be determined by "conditions observed in the field", and the Department's request for "preapproval and acceptance of additional locations/samples by representatives of this Department", we understand the Department will have representative on site during the exploration program and will provide approvals promptly and without delay to the exploration program.

Comment 6:

Item #10 – Logging notes indicated that the presence of petroleum odors in at least eight boring locations north from boring B116 to the northern extent of the BCP site was prevalent at depths between 20-24' bags. Please indicate that all borings in this area will be subject to expanded analysis.

Response/RIWP Addendum:

As indicated in Section 5 the RIWP, AOCs 6, 7, and 8 encompass the area north from boring B-116 where petroleum USTs were indicated in historical records or impact is otherwise suspected based on observations during the prior explorations as noted on boring logs and analysis of samples obtained from the impacted strata. Section 5.1 of the RIWP is revised to indicate that the borings in AOCs 6, 7, and 8 will be extended to a minimum depth of 24 feet or to the top of the water table and samples obtained will be analyzed for full TCL VOCs, and for petroleum constituents in accordance with relevant NYSDEC guidance as contained in STARS Memo #1 for investigation of petroleum-impacted sites. Section 5 of the RIWP is revised to indicate that the sampling and analytical program is detailed by boring location, sample interval and sample parameters on Table 8 as appended to the RIWP.

Comment 7:

Item #14 – Please indicate that samples chosen for expanded analysis are subject to Department decision and or approval.

Response/RIWP Addendum:

Section 5 of the RIWP is revised to indicate that the sampling and analytical program is detailed by boring location, sample interval and sample analyses on Table 8 as appended to the RIWP. Table 8 indicates samples to be analyzed for expanded parameters.

Comment 8:

Item #20 – A sample from B113 was not analyzed and a PID malfunction was logged on this boring. Please site a boring in this area to confirm AOC-15 as not an area of concern.

Response/RIWP Addendum:

AOC-15 is the location of a former hydraulic elevator where releases are not reported or observed based on a prior boring adjacent to the elevator pit or when the elevator piston was removed.



Hydraulic oil does not contain volatile compounds that would be detectable using a PID, therefore visual observation is the primary sample screening method. Section 5.1 of the RIWP is revised to indicate that a boring will be placed (and sampled) next to the former elevator in accordance with the Department's request (refer to boring B-227 on Figure 6, as revised August 2009 and to Table 8 as appended to the RIWP).

Comment 9:

Item #22, Section 4.3.16 – Please locate a boring in the substation and transformer pad proximity and include analysis for PCB's in addition to the proposed wipe samples.

Response/RIWP Addendum:

Section 5.1 of the RIWP is revised to indicate that a boring will be located and sampled for PCBs that is proximate to the substation and transformer (refer to boring B-209 on Figure 6, as revised August 2009 and to Table 8 as appended to the RIWP).

Comment 10:

Section 4.3.17 – The Department is concerned with being able to address the acid ampoule burial area in the site remedy (likely through an environmental easement) without first defining the nature and extent of the area. What degree of certainty on placement of the borings in locating the area of concern?

Response/RIWP Addendum:

The location of the acid ampoule area was determined from the available historical drawings described and appended to the RIWP. These drawings were of sufficient clarity and scale to reasonably determine location on the ground via measurements from common ground features (i.e. building foundations).

Comment 11:

Please remove Gary Litwin's name from the cc list and add Gary E. Bonarski.

Response/RIWP Addendum:

The cc/distribution list for communications and submittals related to the Tioga Avenue BCP has been revised as requested.

Attachments:

Figure 6 (revised August 2009) – Final BCP RI Exploration Locations Figure 7 (new and added to RIWP) – Monitoring Well Schematic Table 8 (new and added to RIWP) – Sampling and Analytical Program Detail



TABLE 8

SAMPLING AND ANALYTICAL PROGRAM DETAIL REMEDIAL INVESTIGATION PROGRAM TIOGA AVENUE BCP SITE #C851031

					Sample Analyses						
Boring/Well	Commis Townstilled		Sample	Sample	Site		TCL	STARS	TAL		
Location	Sample Target/Interval	Target Depth	Matrix	Type	Metals	TCL VOCs	SVOCs	PAHs	Metals	PCBs	
GRID BORING								生 医抗肉蛋			
B201-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	X						
B201-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*					
B201-3	native soil under fill	based on fill depth	native soil	grab	X						
B202-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B202-2	below 1 ft	thickness of fill	fill	composite	×	Based on PIDs*					
B202-3	native soil under fill	based on fill depth	native soil	grab	X						
B203-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х	5					
B203-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*					
B203-3	native soil under fill	based on fill depth	native soil	grab	X						
B204-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B204-2	below 1 ft	thickness of fill	fill	composite	×	Based on PIDs*					
B204-3	native soil under fill	based on fill depth	native soil	grab	X						
B205-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B205-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*					
B205-3	native soil under fill	based on fill depth	native soil	grab	X						

D : 01/ 11/			Sample Analyses							
Boring/Well Location	Sample Target/Interval	Target Depth	Sample	Sample	Site	TOL 1/00	TCL	STARS	TAL	
Location	Odnipie raigetinitervai	rarget Depth	Matrix	Туре	Metals	TCL VOCs	SVOCs	PAHs	Metals	PCBs
B206-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х					
B206-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*				
B206-3	native soil under fill	based on fill depth	native soil	grab	х					
B207-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х					
B207-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*				
B207-3	native soil under fill	based on fill depth	native soil	grab	Х					
B208-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab		×	Х		Х	
B208-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*				
B208-3	native soil under fill	based on fill depth	native soil	grab	Х					
B209-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х					Х
B209-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*				
B209-3	native soil under fill	based on fill depth	native soil	grab	Х					
B210-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х					
B210-2	below 1 ft	thickness of fill	fill	composite	×	Based on PIDs*				
B210-3	native soil under fill	based on fill depth	native soil	grab	Х					
B211-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х					
B211-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*				
B211-3	native soil under fill	based on fill depth	native soil	grab	Х					
B212-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х					
B212-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*				
B212-3	native soil under fill	based on fill depth	native soil	grab	Х					

D : 01/ 11/			Sample Analyses							
Boring/Well Location	Sample Target/Interval	Target Depth	Sample	Sample	Site	TOL MOO	TCL	STARS	TAL	
	Odnipie raigetinitervai	rarget Depth	Matrix	Type	Metals	TCL VOCs	SVOCs	PAHs	Metals	PCBs
B213-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х					
B213-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*				
B213-3	native soil under fill	based on fill depth	native soil	grab	Х					
B214-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab		×	Х		Х	
B214-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*				
B214-3	native soil under fill	based on fill depth	native soil	grab	Х					
B215-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х					
B215-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*				
B215-3	native soil under fill	based on fill depth	native soil	grab	Х					
B216-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х					
B216-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*				
B216-3	native soil under fill	based on fill depth	native soil	grab	Х					
B217-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х					
B217-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*				
B217-3	native soil under fill	based on fill depth	native soil	grab	Х					
B218-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab		Х	Х		Х	
B218-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*				
B218-3	native soil under fill	based on fill depth	native soil	grab	Х					
B219-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х					
B219-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*				
B219-3	native soil under fill	based on fill depth	native soil	grab	X					

Poring/Mall					Sample Analyses						
Boring/Well Location	Sample Target/Interval	Target Depth	Sample Matrix	Sample Type	Site Metals	TCL VOCs	TCL SVOCs	STARS PAHs	TAL Metals	PCBs	
D000 4				Туре	Wetais	TCL VOCS	30005	PARS	wetais	PUBS	
B220-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab		X	Х		Х		
B220-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*					
B220-3	native soil under fill	based on fill depth	native soil	grab	Х						
B221-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B221-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*					
B221-3	native soil under fill	based on fill depth	native soil	grab	X						
B222-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B222-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*					
B222-3	native soil under fill	based on fill depth	native soil	grab	Х						
B223-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab		Х	Х		Х		
B223-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*					
B223-3	native soil under fill	based on fill depth	native soil	grab	X						
B224-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B224-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*					
B224-3	native soil under fill	based on fill depth	native soil	grab	Х						
B225-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B225-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*					
B225-3	native soil under fill	based on fill depth	native soil	grab	Х					0	
B226-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B226-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*					
B226-3	native soil under fill	based on fill depth	native soil	grab	X						

Daving MAL					Sample Analyses						
Boring/Well Location	Sample Target/Interval	Target Depth	Sample Matrix	Sample Type	Site Metals	TCL VOCs	TCL SVOCs	STARS PAHs	TAL Metals	PCBs	
			Matrix	туре	Wetais	TCL VOCS	30005	ГАПБ	wetais	PCBS	
B227-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B227-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*					
B227-3	native soil under fill	based on fill depth	native soil	grab	Х	Bacca cirribo					
B227-4	elevator	6-8 ft. (or stained soil)	soil/fill	grab				X			
B228-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B228-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*					
B228-3	native soil under fill	based on fill depth	native soil	grab	Х						
B229-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B229-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*					
B229-3	native soil under fill	based on fill depth	native soil	grab	Х						
B230-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab		X	Х		Х		
B230-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*					
B230-3	native soil under fill	based on fill depth	native soil	grab	Х						
B231-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B231-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*					
B231-3	native soil under fill	based on fill depth	native soil	grab	Х						
B232-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab		Х	Х		Х		
B232-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*					
B232-3	native soil under fill	based on fill depth	native soil	grab	X	Action and a color of the color					
B233-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B233-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*					
B233-3	native soil under fill	based on fill depth	native soil	grab	X						

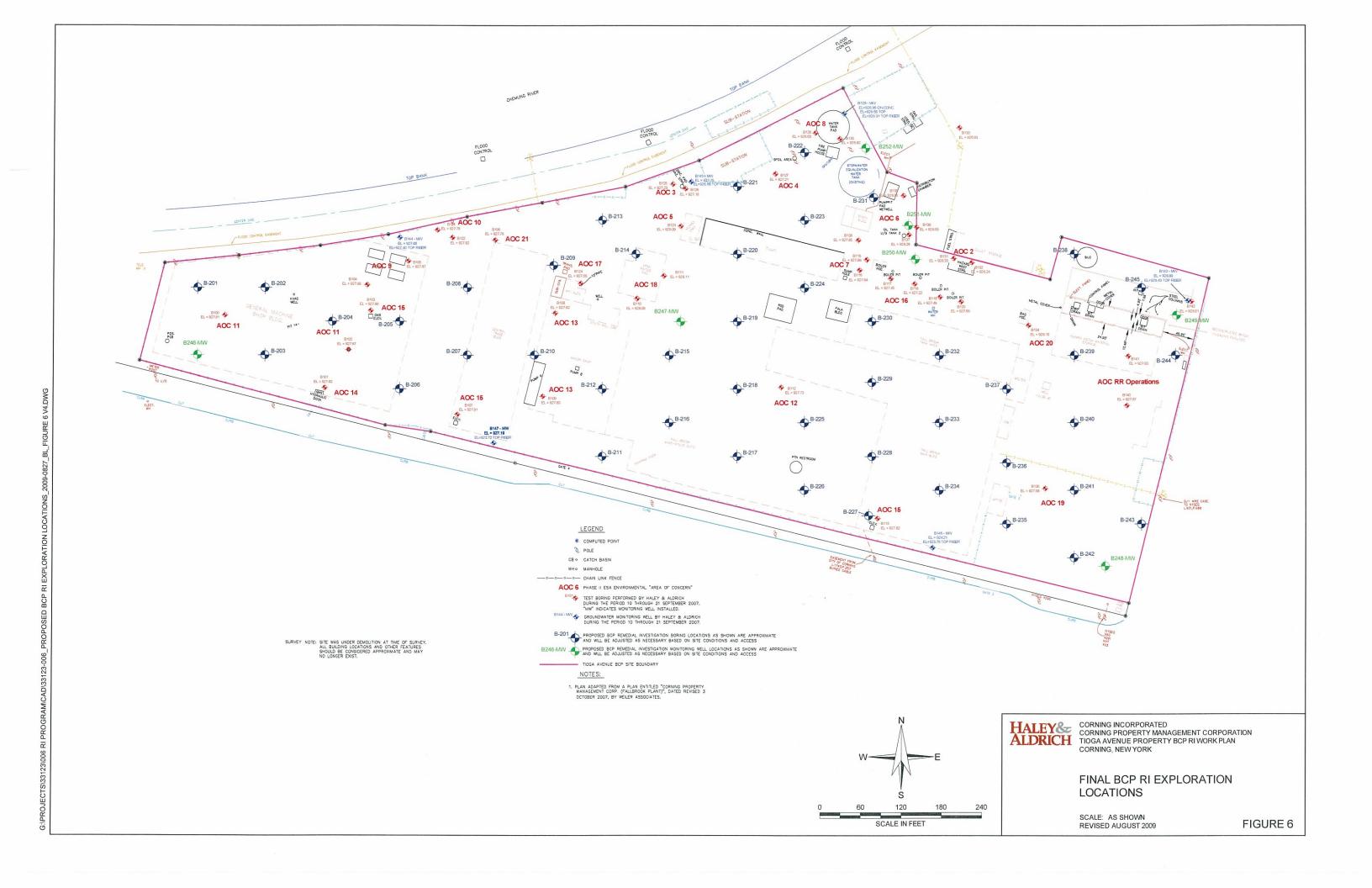
Doring/Mall		r			Sample Analyses						
Boring/Well Location	Sample Target/Interval	Target Depth	Sample Matrix	Sample	Site Metals	TOL VOO	TCL	STARS	TAL		
		raiget Deptii	IVIALITIX	Туре	Metais	TCL VOCs	SVOCs	PAHs	Metals	PCBs	
B234-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab		X	Х	-	Х		
B234-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*					
B234-3	native soil under fill	based on fill depth	native soil	grab	Х						
B235-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B235-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*					
B235-3	native soil under fill	based on fill depth	native soil	grab	Х						
B236-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B236-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*					
B236-3	native soil under fill	based on fill depth	native soil	grab	Χ						
B237-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B237-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*					
B237-3	native soil under fill	based on fill depth	native soil	grab	Х						
B238-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Χ						
B238-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*					
B238-3	native soil under fill	based on fill depth	native soil	grab	X						
B239-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Χ						
B239-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*					
B239-3	native soil under fill	based on fill depth	native soil	grab	X						
B240-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B240-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*					
B240-3	native soil under fill	based on fill depth	native soil	grab	Χ						

Daving OM III					Sample Analyses						
Boring/Well Location	Sample Target/Interval	Target Depth	Sample	Sample	Site	TOL 1/00-	TCL	STARS	TAL		
		rarget Depth	Matrix	Туре	Metals	TCL VOCs	SVOCs	PAHs	Metals	PCBs	
B241-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab		X	Х		X		
B241-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*					
B241-3	native soil under fill	based on fill depth	native soil	grab	Х						
B242-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B242-2	below 1 ft	thickness of fill	fill	composite	×	Based on PIDs*					
B242-3	native soil under fill	based on fill depth	native soil	grab	Х						
B243-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B243-2	below 1 ft	thickness of fill	fill	composite	Х	Based on PIDs*					
B243-3	native soil under fill	based on fill depth	native soil	grab	Х						
B244-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Х						
B244-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*					
B244-3	native soil under fill	based on fill depth	native soil	grab	Х						
B245-1	beneath slab/sub-base	0-1 ft (below slab)	fill	grab	Χ						
B245-2	below 1 ft	thickness of fill	fill	composite	X	Based on PIDs*					
B245-3	native soil under fill	based on fill depth	native soil	grab	Х						
MONITORING	WELLS:										
B246-MW	Groundwater	Water Table +/- 18-28 ft	water	low flow		х			Х		
B247-MW	Groundwater	Screen 60-70 ft.	water	bail		Х					
B248-MW	Groundwater	Screen 60-70 ft.	water	bail		X					
B249-MW	Groundwater	Screen 60-70 ft.	water	bail		Х					
B250-MW	Groundwater	Water Table +/- 18-28 ft	water	low flow		Х		Х	Х		

Dowing MAZE		1								
Boring/Well Location	Sample Target/Interval	Target Depth	Sample Matrix	Sample Type	Site Metals	TCL VOCs	TCL SVOCs	STARS PAHs	TAL Metals	PCBs
B251-MW	Groundwater	Water Table +/- 18-28 ft	water	low flow		Х	Х		Х	
B252-MW	Groundwater	Water Table +/- 18-28 ft	water	low flow		X		Х	Х	
B129-MW	Groundwater	Existing well	water	low flow		X			Х	
B143-MW	Groundwater	Existing well	water	low flow		Х	Х		Х	
B144-MW	Groundwater	Existing well	water	low flow		X			Х	
B145-MW	Groundwater	Existing well	water	low flow		Х			Х	
B146-MW	Groundwater	Existing well	water	low flow		Х			Х	
B147-MW	Groundwater	Existing well	water	low flow		X			X	
RANDOM BO	ORINGS (AOCs 6, 7, 8)									
B253	impact zone or top of water	observation based	soil	grab		X		Х		
B254	impact zone or top of water	observation based	soil	grab		Х		Х		
B255	impact zone or top of water	observation based	soil	grab		Х		Х		
B256	impact zone or top of water	observation based	soil	grab		Х		Х		
B257	impact zone or top of water	observation based	soil	grab		X		X		
B258	impact zone or top of water	observation based	soil	grab	8	Х		X		
B259	impact zone or top of water	observation based	soil	grab		Х		X		
B260	impact zone or top of water	observation based	soil	grab		X		X		
B261	impact zone or top of water	observation based	soil	grab		Х		X		
	Additional borings as warrante	ed based on conditions obs	erved in field	d.				4		

Notes:

- 1. Site Related Parameters: Petroleum/Coal Ash Constituents (TCL VOCs; PAH); Site Metals (antimony, arsenic, barium, cadmium, lead).
- 2. Expanded Parameters: TCL VOCs, TCL SVOCs, TAL Metals
- 3. * If elevated PIDs/odors/stains, etc., are observed during sampling, a sample with highest PID reading will be retained for TCL VOC analysis; if elevated PIDs/stains/odors, etc., not observed then no sample will be analyzed.



ROADWAY BOX AND PROTECTIVE CASING

(STEEL)



MONITORING WELL SCHEMATIC

GROUND SURFACE

SCALE: NOT TO SCALE AUGUST 2009

FIGURE 7