REMEDIAL INVESTIGATION REPORT
GM COMPONENTS HOLDINGS, LLC
200 UPPER MOUNTAIN ROAD - BUILDING 8
LOCKPORT, NEW YORK
BCP SITE #C932139

by

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1. INTRODUCTION

This report presents the results of the Remedial Investigation (RI) performed at Building 8, GM Components Holdings (GMCH) Lockport Facility, located at 200 Upper Mountain Road, Lockport, New York. The work was performed under the New York State Department of Environmental Conservation (NYSDEC), Brownfield Cleanup Program (BCP). The GMCH BCP Agreement for the Building 8 Site (NYSDEC Site C932139) was executed on May 20, 2010. A Site Locus Plan is included as Figure 1 and a comprehensive Site Plan is included as Figure 2.

It should be noted that there are three separate BCP Sites associated with the GMCH Lockport Facility, as follows.

- GM Components Holdings, LLC Building 7, site ID #C932138 (Building 7)
- GM Components Holdings, LLC Building 8, site ID #C932139 (Building 8)
- GM Components Holdings, LLC Building 10, site ID #C932140 (Building 10)

This RI Report has been developed for the work associated with Building 8. Interpretations presented within this report are based primarily on the investigations described herein. Pertinent data from the previous investigation[1] (to be referred to as the "Previous Phase II Investigation") generated prior to entering into the BCP have been included within this report.

1.1 Purpose

The objectives of the RI were to obtain site specific data on the nature and extent of potential soil, groundwater, soil vapor, and indoor air contamination and the degree to which the identified site conditions pose a threat to human health and the environment. The RIs for the three BCP Sites at the GMCH Lockport Facility were conducted concurrently.

In addition to the investigation activities conducted as part of the Building 8 BCP Site, 31 additional monitoring wells were sampled as part of other on-going monitoring events or the other two (2) BCP investigations. These groundwater data were used to assess facility-wide groundwater conditions.

The specific objectives of the RI are as follows:

- Further assess Site geology;
- Further assess hydrogeology;
- Evaluate extent of contamination;
- Evaluate contaminant transport mechanisms;
- Assess the potential source(s) of contamination and assess impact to soil, groundwater, indoor air; and
- Identify potential pathways for human exposure as part of a qualitative risk assessment.

1 "Field Investigation Report, West Lockport Complex, Lockport, NY" dated January 17, 2007. Prepared for Delphi Corporation by Environmental Resource Management.

1.2 Site and Surrounding Area Description

The GMCH Facility is located at 200 Upper Mountain Road in both the City and Town of Lockport, which is located in Niagara County, New York. The portion of the facility which includes Building 8 is located within the City of Lockport. The GMCH Facility is approximately 342 acres in size and is located in an area of mixed residential, agricultural, commercial, and industrial settings along Upper Mountain Road. Building 8 occupies approximately 13.1 of the 342 acres and is located in the north central portion of the GMCH Facility (see Figure 2). The Niagara Escarpment is located approximately one-half mile to the northeast of the GMCH Facility across Upper Mountain Road. A stone quarry and former steel facility are located approximately 1 mile south of the GMCH Facility. Residential properties are generally present along the east and north sides of Upper Mountain Road and to the west.

Within the GMCH Facility, Building 7 and Building 8 are dedicated to manufacturing and engineering. Building 9 is no longer used for manufacturing as the equipment has been removed and the building is currently used by maintenance for storage purposes. Building 10 has been converted to house new manufacturing operations in the northern portion of the building and the southern portion is used by GMCH as a warehouse (see Figure 2).

The City and Town of Lockport is bordered by the Town of Newfane to the north, the Town of Hartland to the northeast, the Town of Royalton to the east, the Town of Pendleton to the south, and the Town of Cambria to the west.

1.3 Site History

GMCH currently owns and operates an automotive component manufacturing facility along Upper Mountain Road in the City and Town of Lockport, New York. The facility was initially developed in 1937 on vacant agricultural land and orchards. The Site was developed as part of the radiator manufacturing operation, formerly located in downtown Lockport. Manufacturing operations began at the facility along Upper Mountain Road in 1939.

Building 8 was constructed in phases between 1960 and 1966 and was utilized for manufacturing since its construction. The northern portion of the building is being used for storage of product and unused equipment; manufacturing is still on-going in the southern portion of the building.

General Motors Corporation (GMC) owned and operated the facility until it was conveyed to Delphi Automotive Systems, LLC (Delphi) in December 1998. In June 2009, GMC filed for Chapter 11 bankruptcy protection and it is now known as Motors Liquidation Company (MLC).

General Motors LLC (GM) was created to purchase certain assets of MLC. In October 2009, a GM subsidiary known as GMCH took title from Delphi a portion of the facility including Building 8.

1.4 Previous Investigations

In 2006, a voluntary facility-wide investigation of soil and groundwater conditions at the facility was conducted. The first phase of that work was the development of a Current Conditions Summary (CCS) which was completed by Environmental Resource Management (ERM).

After completion of the CCS, a field investigation was initiated to assess soil and groundwater conditions at the 50 areas of interest (AOI) identified by the CCS (Previous Phase II Investigation). 144

soil borings were completed, and nine (9) sediment and four (4) surface soil samples were collected. Six (6) monitoring wells were installed, but only five were sampled as one of the wells was dry. Over 400 soil and groundwater samples were collected from the 144 soil borings and analyzed for an extensive list of parameters, which included volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, and polychlorinated biphenyls (PCBs). The field investigation activities and results were described in the Field Investigation Report (FIR) that was submitted to the NYSDEC Region 9 office in January 2007, followed by the CCS submission in May 2007.

Three (3) AOIs located within the footprint of the Building 8 BCP site were investigated as part of the Previous Phase II Investigation. Thirty-two (32) soil probes were completed to assess the AOI associated with Building 8 (see Previous Phase II Investigation figure for Building 8 in Appendix A). At each AOI, samples were analyzed for VOCs, SVOCs, PCBs, and metals. These AOIs are as follows.

- AOI-18 was a former chromium sump area in the central portion of the building;
- AOI-22 was six (6) former degreasing locations located throughout the building; and
- AOI-23 was a historic press operations area in the northeastern portion of the building.

The investigation identified elevated levels of chlorinated solvents in soils beneath one former degreaser area (AOI-22) in the southeastern interior of Building 8, as well as chlorinated solvents in groundwater south of the building (monitoring well MW-003-B). Arsenic (As) was detected at an elevated concentration at AOI-18 and benzo(a)pyrene was detected at elevated concentrations at AOI-23.

Boring 8-001-G was one of nine (9) soil borings completed within AOI-18. Analytical results of the soil samples from 8-001-G indicated that arsenic was detected at a concentration of 65.8 mg/kg in a sample collected from 2 to 4 feet below the building slab, which is above the NYSDEC Part 375 Industrial Soil Cleanup Objective (ISCO) of 16 mg/kg. No other compounds were detected above their respective ISCO in the samples collected at AOI-18. The detection is not considered to be significant as its detection was limited to one location at a depth of 2 to 4 feet, which is above the groundwater table in this area of the Site.

Boring 8-006-F was one of seven borings completed within AOI-23. Benzo(a)pyrene (BaP) was detected at a concentration of 1.4 mg/kg in a sample collected from 8-006-F (0 to 1.5 feet below the building slab), which is above the NYSDEC Part 375 ISCO of 1.1 mg/kg. This detection is not considered to be significant as BaP is not mobile in soil, and its detection was limited to one relatively shallow depth above the groundwater table in this area of the Site. No other compounds were detected above their respective ISCO in the samples collected at AOI-23.

Trichloroethene (TCE) was detected at a concentration of 1,000 mg/kg in a sample collected from boring 8-005-3C (8 to 10 feet below the building slab), which is above the NYSDEC Part 375 ISCO of 400 mg/kg. No other compounds were detected above their respective ISCO in the samples collected at AOI-22. Data tables and figures from the Previous Phase II Investigation related to the Building 8 BCP Site are included in Appendix A.

A New York State Inactive Hazardous Waste Disposal Site, known as the Delphi Harrison Thermal Systems Site (Delphi Harrison Site, Site # 932113), is located in the eastern portion of the GMCH facility, east of the Building 8 BCP Site (the disposal site area is shown on Figure 10). Delphi Harrison Thermal Systems, a division of Delphi Automotive Systems LLC, (Delphi) entered into an Order on Consent with the NYSDEC to investigate the approximate 22.7 acre Delphi Harrison Site. This Order

on Consent required Delphi to investigate the nature and extent of residual contamination associated with the former aboveground TCE storage tank that was located at the southeast corner of Building 8. The tank was decommissioned in 1994.

In October 1994, an underground water line ruptured in the vicinity off of the former TCE storage tank and workers noted a solvent odor during the excavations to repair the ruptured line. NYSDEC was notified of the release at that time and assigned the incident Spill Number 9410972.

As part of the spill response, soils impacted with TCE were excavated from a 27 by 22 foot area down to the top of bedrock, about 7.5 feet. All of the soil could not be removed due to the irregular nature of the bedrock surface. The excavated soil was properly disposed off-site and the excavation was backfilled with clean material. In 1999, NYSDEC listed the Site as a Class 3 site in the Inactive Hazardous Waste Disposal Site Registry in New York State. A Class 3 site is defined as a site where hazardous waste does not present a significant threat to the public health or the environment and action may be deferred.

NYSDEC and Delphi entered into a Consent Order (# B9-0553-99-06) on July 31, 2001 that obligated Delphi to implement a Remedial Investigation and Feasibility Study (RI/FS) at the Delphi Harrison Site. The RI was completed in April 2002 and the FS was completed in December 2003.

After completion of the remedial investigation program, NYSDEC issued a Record of Decision (ROD) (March 2005) for the Site in which it selected a remedy with the following components:

- monitored natural attenuation (MNA) with groundwater monitoring to ensure the continued effectiveness of the remedy;
- development of a contingency plan for groundwater control/treatment if natural attenuation processes can no longer be demonstrated or if significant off-site groundwater contamination is observed;
- development of a site management plan to: (a) address residual contaminated soils that may be excavated from the site during future redevelopment, (b) evaluate the potential for vapor intrusion for all current site buildings and any developed on the site in the future, including provision for mitigation of any impacts identified; (c) provide for the operation and maintenance of the components of the remedy; (d) monitor site groundwater; and (e) identify any use restrictions on site development or groundwater use;
- imposition of an environmental easement to restrict groundwater use and ensure compliance with the approved site management plan; and
- certification of the institutional and engineering controls.

In 2009, GMCH purchased from Delphi a portion of the Delphi manufacturing complex that included the Delphi Harrison Site. GMCH is currently negotiating a new Order on Consent with NYSDEC to formally implement the ROD-selected remedial program for the Delphi Harrison Site. A Site Management Plan (SMP) was prepared to address the components of the ROD-selected remedy and submitted to NYSDEC. The SMP will not be formally approved by NYSDEC until the new Order on Consent is established. GMCH has been conducting annual MNA groundwater sampling of the Delphi Harrison Site and submitting the results to NYSDEC.

1.5 Report Organization

The text of this report is divided into six (6) sections. Immediately following the text are the tables, figures, and appendices. A brief summary of each section is provided below.

Section 1 - Introduction: This section presents the purpose of the RI report, the Site background including Site description, Site history, and previous relevant studies, and report organization.

Section 2 - Remedial Investigation: This section summarizes the fieldwork completed with respect to Building 8 including test borings, monitoring well installation, soil probes, indoor air assessment, sample collection, and field information.

Section 3 - Physical Characteristics of the Study Area: This section presents and interprets the various data collected and evaluates Site conditions (e.g., hydrogeology, geology, hydrology, etc.).

Section 4 - Remedial Investigation Results: The types and concentrations of detected chemical compounds in the different environmental media are discussed. The section is divided into the various types of samples collected which include: subsurface soil, groundwater, and vapor intrusion samples (indoor and outdoor).

Section 5 - Conceptual Site Model: An evaluation of potential migration pathways and contaminant persistence is presented. This section presents the results of a general qualitative exposure assessment for the Site. The assessment includes an estimation of exposure point concentrations and a comparison of this data with published New York State standards, criteria, and guidance values (SCGs).

Section 6 - Conclusions & Recommendations: This section summarizes the results and findings of the RI.

2. REMEDIAL INVESTIGATION (RI) ACTIVITIES

RI field explorations were performed in general accordance with the NYSDEC-approved Work Plans to obtain and evaluate site-specific data, nature and extent of contamination and the degree to which releases and contamination may pose a threat to human health and the environment.

This RI was completed in general accordance with the following documents.

- The scope of work described in the "Revised Remedial Investigation Work Plan, GM Components Holdings, LLC, 200 Upper Mountain Road, Lockport, New York, Building 8 Site #932139" dated October 2010;

- "GM Components Holdings, LLC, Brownfield Cleanup Program, Quality Assurance and Quality Control Plan, Building 7 (Site ID #C932138), Building 8 (Site ID #932139) and Building 10 (Site ID #C932140), Lockport Facility, 200 Upper Mountain Road, Lockport, New York" dated June 2010;

- "Site Health and Safety Plan, GM Components Holdings, LLC, Brownfield Cleanup Program, Building 7 (Site ID #C932138), Building 8 (Site ID #932139) and Building 10 (Site ID #C932140), Lockport Facility, 200 Upper Mountain Road, Lockport, New York" dated April 20, 2010;

- "Brownfield Cleanup Program, Citizen Participation Plans, GM Components Holdings, LLC, Building 7 Site ID #C932138, Building 8 Site ID #932139 and Building 10 Site ID #C932140, 200 Upper Mountain Road, City of Lockport, New York" dated June 2010; and

- NYSDEC Division of Environmental Remediation DER-10, "Technical Guidance for Site Investigation and Remediation", dated May 2010.

The RI activities completed as part the BCP Agreement executed in May 2010, consisted of the following:

- Test borings and bedrock monitoring well installations;
- Soil probes; and
- Soil, groundwater, sub-slab vapor, and indoor air sampling.

A description of the field explorations conducted during this RI is presented in the following subsections.

2.1 Test Boring and Monitoring Well Installation

Earth Dimensions Inc. (EDI) completed four (4) test borings and installed four (4) bedrock groundwater monitoring wells at the Building 8 BCP Site in December 2010 and January 2011 (see Figure 3). The bedrock monitoring wells were installed to evaluate the bedrock conditions, bedrock groundwater flow direction, and collection of groundwater samples. Three (3) monitoring wells were installed inside Building 8 and one (1) well was installed on the eastern exterior portion of Building 8.

Boreholes were advanced through the overburden to the top of bedrock using a truck-mounted rotary drill rig and 6-5/8 inch inside diameter (I.D.) hollow stem augers (HSA). Overburden soil samples were collected continuously by driving a 1-3/8 inch I.D. by 24-inch long split spoon sampler with an automated

140-pound hammer falling approximately 30 inches, in general accordance with ASTM D1586 (Standard Penetration Test). Test borings were advanced with the HSAs until auger refusal (suspected top of bedrock). Auger cuttings from the holes were containerized for subsequent disposal by GMCH (see Appendix B).

Soil samples collected from the test borings were classified in the field by visual examination in accordance with a modified Burmister Classification System. Boring logs that identify appropriate stratification lines, blow counts (if applicable), sample identification, sample depth interval and recovery, and date are included in Appendix C.

One soil sample was collected for laboratory analytical testing from each of the four (4) completed test borings and analyzed for VOCs. A summary of the samples collected and the analysis performed is shown on Table I. Analytical test results from the test borings soil samples are summarized on Table II and the results are further discussed in Section 4.6.

Upon reaching the top of bedrock, as indicated by auger refusal, a 5-7/8 inch diameter tri-cone roller bit was used to form an approximate 2 foot deep socket hole in the top of bedrock. A 4-inch steel casing was then placed in the socket hole and grouted in place. The grout (consisting of Portland cement and bentonite mixture) was allowed to set for at least 24 hours prior to initiating rock coring. A 3-7/8 inch diameter rock core barrel was then used to core into bedrock. Bedrock cores recovered ranged from 9 feet to 10.3 feet in length. Following the completion of rock coring, the water used during coring activities was containerized for subsequent disposal by GMCH (see Appendix B).

The recovered rock core samples were logged including run number, sample interval, length of sample recovered, rock quality designation (RQD), depth where drill water was lost, and a description of the rock sampled and individual discontinuities (bedding planes, joints, voids, etc.). This information is included on the boring logs (see Appendix C).

The bedrock monitoring wells were constructed of 2-inch I.D. flush-coupled Schedule 40 polyvinyl chloride (PVC) riser and screen. Following placement of the screen and riser within the 4-inch diameter steel casing, the annular space around the screen, which was approximately 7 feet in length, was backfilled with #N00 sand to approximately 2 feet above the top of the screen. An approximate 3-foot thick layer of bentonite chips was placed above the sand filter and hydrated to fill the annulus between the PVC well riser and steel casing above the top of the sand pack. A mixture of cement/bentonite grout was used to fill the remaining annulus space of the steel casing from the top of the bentonite seal to approximately 1 foot bgs. The remainder of the borehole was completed at ground surface with cement and a protective steel road box. Well installation diagrams are shown on the boring logs presented in Appendix C.

Following installation, the wells were developed utilizing a centrifugal pump on the drill rig to evacuate the wells and remove cuttings and check that the wells were functioning properly. The monitoring wells were pumped to dry-like conditions, allowed to recharge for approximately 1 hour and then pumped to dry-like conditions again. The following table is a summary of the volume of water removed from each well.

Well Location	Volume Removed	One Well Volume	Number of Well Volumes Removed
MW-8-1	12 gallons	2.8 gallons	4.3
MW-8-2	9 gallons	2.5 gallons	3.5
MW-8-3	6 gallons	2.2 gallons	2.7
MW-8-4	10 gallons	2.4 gallons	4.1

Groundwater samples were collected using low-flow techniques from each of the four (4) bedrock wells for the analysis of VOCs. A summary of the samples collected and the analysis performed is shown on Table I. Analytical test results from the groundwater samples collected from the bedrock monitoring wells are summarized on Table III and Table IV and discussed in Section 4.7.

2.2 Soil Probe Exploration

Matrix Environmental Technologies, Inc. (Matrix) installed twelve (12) soil probes inside Building 8 in December 2010 (see Figure 3). These soil probes are designated as 8-SB-1 through 8-SB-12. The soil probe logs are contained in Appendix C.

Five (5) soil probes were completed in the southeastern portion of the building to delineate the extent of TCE contamination previously identified in soil boring 8-00503C at a depth of 8 to 10 feet below the building slab. The five (5) soil probes were drilled at locations approximately 20 to 25 from soil boring 8-00503C (see Figure 3) to assess the potential extent of the TCE present in the subsurface soil.

Four (4) soil probes were completed in the northern central portion of the building to delineate the extent of arsenic contamination (65.8 mg/kg) previously identified in soil boring 8-001-G at a depth of 2 to 4 feet below the building slab. The four (4) soil probes were drilled at locations approximately 15 to 20 feet from soil boring 8-001-G (see Figure 3) to assess the potential extent of the arsenic present in the subsurface soil.

Three (3) soil probes were also completed in the western interior portion of Building 8 (see Figure 3) for general site coverage as the Previous Phase II Investigation did not assess this portion of the building west of the Former Chromium Sump Area (AOI-18, see Figure 3).

Soil probes were advanced using direct push methodology via hydraulic hammer on a track mounted probe rig. Soil samples were collected with a macrocore sampler which contained a 2-inch outer diameter by 48-inch long acetate liner. A new acetate liner was used for each subsequent 4-foot sample run.

Prior to drilling the interior soil probes, the concrete floor slab was cored to remove the concrete. Probes were then pushed through fill material and native overburden soils to the top of bedrock and/or refusal, at soil probes 8-SB-1 through 8-SB-12. Probes were pushed through fill material and native overburden soils to the top of bedrock and/or refusal, which ranged in depth from approximately 4.5 feet (8-SB-11) to 12.5 feet bgs (8-SB-9).

One soil sample was collected from each of the twelve (12) soil probes for laboratory analysis. Soil sample analyses included VOCs, SVOCs, PCBs, and metals. A summary of the samples collected and the analyses performed is shown on Table I. Analytical test results from the soil probe soil samples are summarized on Table II and the results are further discussed in Section 4.6.

2.3 Field Screening

Soil samples retrieved from the test borings and soil probes were field screened for total volatile organics using an organic vapor meter (OVM) equipped with a photo-ionization detector and 10.6 eV bulb. The OVM was calibrated daily during its use, in accordance with manufacturer's requirements, using a standard gas (isobutylene). The split spoon sampler and/or acetate liner was opened and the soil samples retrieved were screened immediately with the OVM by passing the OVM over the top of the retrieved samples and splitting the sample cores open at 4 to 6 inch intervals. The peak response per 2-foot screening interval was recorded on the boring and soil probe logs in Appendix C.

2.4 Soil Vapor Intrusion (SVI) Sampling

Soil vapor intrusion (SVI) sampling was completed within Building 8 in January 2011 to assess if SVI is occurring within Building 8. Five (5) indoor air and sub-slab and one (1) outdoor background samples were collected on January 18, 2011 (see Figure 3). The indoor air samples are designated with an "IA" (e.g., 8-VI-1IA), the sub-slab samples are designated with a "SS" (e.g., 8-VI-1SS) and the outdoor air samples was designated 8-VI-OUT.

GMCH maintains a database of approved chemicals and chemical products stored and used within Building 8. GMCH provided a sorted list of products containing the compounds of concern [TCE, PCE, vinyl chloride (VC), cis-1,2-dichloroethylene (cis-DCE), and trans-1,2-dichloroethylene (trans-DCE)]. No active or in-use products or chemicals containing the compounds of concern were identified for Building 8. A copy of the database was provided for review prior to completing the air sampling and is included in Appendix D.

During the air sampling event, GZA also made observations of the chemicals and chemical products present within approximately 25 to 30 feet of the sampling areas. An OVM with a photo-ionization detector (PID), which could measure total organic vapors in the part per billion (ppb) range, was used to screen some of the individual containers observed and determine background levels within the sampling areas. The following table contains a list of the products observed in the vicinity of the SVI sampling locations and the OVM readings.

Sampling Location	Product Present	Field Screening Result	Background Field Screening Result
8-VI-1	All Purpose Lube General Purpose Cleaner Ammonia Hydroxide	75 ppb 62 ppb 109 ppb	75 ppb
8-VI-2	No products present	Not applicable	8 ppb
8-VI-3	No products present	Not Applicable	10 ppb
8-VI-4	C-AE (Fuchs Lubrodal) Coil Guard	200 ppb 187 ppb	135 ppb
8-VI-5	Draw Lube	270 ppb	240 ppb

Five (5) indoor air samples (IA) were collected from within Building 8 (see Figure 3). The IA samples were collected from the breathing zone approximately 4 feet above the floor slab and designated 8-VI-1IA through 8-VI-5IA. Polyethylene tubing was connected to the regulator using band clamps and extended into the air with wood lath to achieve the approximate 4-foot sampling height.

Prior to collecting the IA samples, a vacuum test was performed on each sample canister to verify that the band clamp connections to the regulators were not leaking. A Gilian-5 personal air pump operating at a flow rate of about 3 liters per minute was connected to the polyethylene tubing and turned on to purge the air from the tubing and create a vacuum. Once a vacuum was established, the air pump would automatically shut down, due to the lack of air flow through the pump. The air pump was connected to the tubing for 1 minute. After 1 minute, the pump was turned back on to check if the seal formed by the band clamp held the vacuum. Upon turning the pump back on, it would again shut down within 10 seconds indicating that the vacuum was still present and air was not infiltrating though the band clamp seal. See Air/Vapor Sampling Forms in Appendix E for documentation.

Five (5) sub-slab vapor samples were collected from within Building 8. The sub-slab vapor samples were collected from under the floor slab through an approximate 1/2-inch diameter hole drilled in a competent portion of the concrete floor away from cracks or drains. Clean, dedicated polyethylene tubing was placed into the hole to the base of the concrete slab and sealed at the floor surface with modeling clay. The sub-slab vapor samples were collected from within 10 feet of the IA sample locations (see Figure 3).

Prior to collecting the sub-slab vapor samples, helium gas was used as a tracer gas to check for surface air infiltration through the surface seal into the subsurface. A helium detector was used to measure helium concentrations in sub-slab vapor drawn up from the subsurface inside the polyethylene tubing. Helium was released into an enclosure (i.e., 5-gallon bucket modified to allow injection of helium and subsurface tubing to pass through the top) that was placed over the top of the surface seal to determine if the surface seal was sufficient (see Air/Vapor Sampling Forms in Appendix E). The detected concentrations were below the guidance provided by the October 2006 NYSDOH "Final Guidance for Evaluating Soil Vapor Intrusion in the State New York" (NYSDOH VI Guidance) for tracer gas detection. Prior to removing the enclosure from over the top of the surface seals, a helium measurement was collected from inside the enclosure. Helium concentrations inside the enclosure ranged from 85 to 95%.

One (1) ambient outdoor air sample was collected from an exterior location upwind of Building 8. The outdoor air sample was collected on the day of the indoor air sampling event from approximately 5 feet above the ground surface at the location shown of Figure 3.

The SVI sampling was completed using dedicated, laboratory-supplied flow regulators and sample canisters set for an approximate eight-hour duration (standard shift duration in a commercial/industrial facility). The SVI samples were generally collected for about 8 hours, except 8-VI-1IA, which was stopped after about 5 hours. The vacuum on the air canister had dropped to below -5 inches of mercury (in. Hg) and was shut down to maintain a vacuum on the canister. The other IA, SS, and outdoor air canisters were also shutdown to maintain a vacuum on the canisters after approximately 8 hours (see Air/Vapor Sampling Form in Appendix E).

The samples were analyzed for VOCs via EPA Method TO-15 in general accordance with the NYSDOH VI Guidance.

2.5 Hydraulic Conductivity Testing

The hydraulic conductivity of the four (4) bedrock monitoring wells installed as part of the Building 8 RI were calculated via slug test methodologies using water levels measured by an electronic pressure transducer (Insitu MiniTroll). Prior to installing the slug, an electronic pressure transducer was placed into

the monitoring well approximately 2 feet from the bottom of the well. The pressure transducer was used to measure and record the recovery of the water column in the well. The pressure transducer was allowed to stabilize within the well based on the review of real time field readings on a laptop computer. In order to check that the transducer was working properly, upon stabilization the transducer was lifted approximately 1 foot up the water column for about 30 seconds to 1 minute and set back to rest 2 feet above the bottom of the well. The transducer reading was observed to correspond with this change in depth within the water column, confirming that the transducer was working properly.

The slug utilized for the testing consisted of a five-foot long by 1.5-inch diameter solid piece of PVC filled with sand. The slug was placed into the well to displace the water inside the well. The slug remained in the well until the water level inside the well had generally recovered to within 95% of the static water level or after a minimum of at least 1 hour. The slug was then quickly removed from the well and the recovery of the water column in the well was measured and recorded by the pressure transducer. The data along with the static water level and monitoring well information (intake zone, diameter, etc.) were analyzed in accordance with methodologies outlined in Bouwer and Rice[2], as further discussed in Section 3.7.

2.6 Groundwater Sampling

In addition to the four (4) newly-installed groundwater monitoring wells, groundwater samples were also collected from four (4) existing wells (MW-6-F-8, MW-8-003-B, MW-6-1 and MW-6-2; see Figure 3) as part of the Building 8 BCP work. These eight (8) monitoring wells are considered to be the Building 8 BCP Site monitoring well network.

Thirty-nine (39) monitoring wells were sampled between April and May 2011 across the GM facility. The following is a breakdown of the sampled monitoring wells.

- Building 8 BCP Site New and Existing Wells: 8
- Building 7 BCP Site New and Existing Wells: 11
- Building 10 BCP Site New and Existing Wells: 4
- Delphi Harrison Thermal Systems Registry Site No. 932113: 10
- Major Oil Storage Facility Tank Wells: 6

VOC analysis was completed at each of these 39 locations. Some of these monitoring well locations had additional sampling requirements depending upon the rationale for the sampling.

Groundwater sampling was conducted utilizing low-flow sampling techniques using a water quality meter, disposable polyethylene tubing and a variable speed peristaltic pump. A summary of the samples collected associated with the Building 8 BCP Site and the analysis performed is shown on Table I. Analytical test results from the groundwater samples collected from the bedrock monitoring wells are summarized on Table III and Table IV and discussed in Section 4.7. Groundwater generated during the well purging was containerized for subsequent disposal by GMCH (see Appendix B).

2.7 Environmental Sampling

The various environmental samples collected as part of the RI were submitted to the TestAmerica Laboratories, Inc., as follows.

2 "The Bouwer and Rice Slug Test - An Update", Bouwer, H. Groundwater Journal, Vol. 27., No.3, May-June 1989.

- TestAmerica Pittsburg – Soil samples collected during the December 2010 and January 2011 RI work;
- TestAmerica Buffalo – Groundwater samples collected during the April and May 2011 RI work; and
- TestAmerica Knoxville – VI air samples collected during the January 2011 RI work.

The analytical data packages were submitted to Conestoga Rover and Associates (CRA) for quality assessment and validation (see Appendix F). The data quality assessment and validation reports are further discussed in Section 4.1.

2.7.1 Subsurface Soil Samples

Sixteen (16) subsurface soil samples (excluding Quality Control (QC) duplicate and matrix spike and matrix spike duplicate (MS/MSD) samples) were collected from the four (4) monitoring wells and twelve (12) soil probes completed as part of the Building 8 RI. A duplicate soil sample was collected from 8-SB-12 (10 to 12 feet) and a MS/MSD sample was collected from 8-SB-3 (8 to 11.5 feet). A summary of analytical samples collected and the analyte list are presented in Table I; results are presented in Table II.

2.7.2 Groundwater Samples

Eight (8) groundwater samples (excluding duplicate and MS/MSD samples) were collected from the eight (8) monitoring wells in the Building 8 BCP Site monitoring well network locations as part of the Building 8 RI. A duplicate groundwater sample was collected from MW-8-3 and MS/MSD samples were collected from MW-8-4. A summary of analytical samples collected and the analyte list are presented in Table I; results are presented in Table III and Table IV.

2.7.3 Soil Vapor Intrusion Samples

Eleven (11) SVI samples (excluding duplicate samples) were collected as part of the Building 8 BCP RI. Five (5) of the samples were IA samples, five (5) of the samples were SS vapor samples, and one (1) sample was an ambient outdoor air sample that was collected from an exterior location upwind of Building 8. A duplicate sample was collected from 8-VI-1IA. A summary of analytical samples collected and the analyte list are presented in Table I; results are presented in Table V.

2.8 Building 8 Subsurface Utility Assessment

A plan view of the subsurface piping for Building 8 is shown on Figure 4. The subsurface information from the drawings (i.e., pipe locations and inverts) was used to create cross-sections of the various sewer pipes along with investigation-derived information (i.e., depth to bedrock, groundwater elevation). The cross-section is shown on Figure 5.

There are four (4) types of sewers present beneath Building 8, as follows.

- Treated Sewers – These sewers contain contact cooling water and/or untreated manufacturing waste water. The treated sewers were directed to the former waste water treatment plant (WWTP) until 2006 when it was taken out of service. The treated sewers currently discharge

via the sanitary sewer to the City of Lockport WWTP per permit number CL860103. The treated sewers are identified in dark blue on Figures 4 and 5.

- Process Sewers – These sewers contain non-contact cooling water that is brought to and from the cooling towers at the GMCH Facility. The process sewers are identified in green on Figures 4 and 5.

- Sanitary Sewers – These sewers contain sanitary sewage from the restrooms and sinks present throughout Building 8. The sanitary sewers are discharged to the City of Lockport WWTP. The sanitary sewers are identified in red on Figures 4 and 5.

- Storm Sewers – These sewers primarily contain storm water from roof drains present on the roof of Building 8. During low flow (i.e., flow rate of less than 300 gallons per minute [gpm]) the storm sewers discharge to the City of Lockport WWTP. During high flow (i.e., flow rates greater than 300 gpm) the storm sewer discharges to the drainage swale at Outfall D002, operating under NYSDEC SPDES Permit Number NY 000 0558. This drainage swale connects to The Gulf (see Section 3.6 for description) east of Outfall D002. The Gulf discharges off-site along the eastern property line and eventually to Eighteenmile Creek northeast of the GMCH Facility. The storm sewers are identified in light blue on Figures 4 and 5.

  Based on a review of storm water flow data for Outfall D002 from September 18, 2010 through September 17, 2011 high flow events occurred 57 times (see Storm Water Flow Data in Appendix I). High flow events for Outfall D002 generally consist of flow rates greater than 300 gallons per minute (gpm). The number of high flow events was determined by evaluating: 1) the flow meter data (hourly log data for storm water flow within the parshall flume at the outfall prior to discharging to the drainage swale; 2) manual storm water measurement logs (daily manual readings and inspection notes); and 3) historic weather data from Niagara Falls Airport weather station for the same period. It should be noted that the electronic flow meter does not measure flows less than 100 gallons per 1 hour measured interval. Therefore flows less than 100 gallons are recorded as zero. It was also assumed that flow data indicative of high flow events that occurred within 12 hours of previous high flow event data, were part of the same high flow event. At least 12 hours must transpire between data indicative of a high flow event, in order for an event to be considered to be a separate event.

  Outfall D002 has been monitored via NYSDEC SPDES program since 1990 through the present at various NYSDEC required frequencies throughout that time. Sampling parameters included the following compounds of concern (COC), TCE, PCE and 1,2-trans-dichloroethlene (trans-1,2-DCE). Table I-1 in Appendix I is a summary table of the analytical results for storm water sampling events for Outfall D002 from February 1991 through October 2010 for TCE, PCE and trans-1,2-DCE. Note that the frequency of the sampling and the number of grab samples required per sampling event has changed over the years as required by NYSDEC. Analytical results reported for sampling events with multiple grab samples (1991 through 2001) are the highest concentration detected within the grab samples for that particular sampling event.

  Graphs depicting the PCE, TCE and trans-1,2-DCE analytical data from Outfall D002 are also provided in Appendix I. The analytical results for PCE, TCE and trans-1,2-DCE appear to be on a downward trend as shown by the trend lines included on each graph with trans-1,2-DCE results having been below method detection limits in the sample rounds from March 2009 through October 2010. The average concentrations for PCE and TCE are 22 ug/l and 50 ug/l,

respectively, for 12 rounds of sample data from February 2008 through October 2010. There are no quantitative discharge limits on the GMCH Facility SPDES permit for Outfall D002.

The rationale for the presence of COC in the storm sewer is unknown but may be attributed to impacted groundwater infiltrating the storm sewer system at locations where system piping is present at or below the groundwater table.

It appears that storm sewer, treated sewer, and sanitary sewer pipes that are present beneath the building and orientated from west to east, are present beneath the groundwater table. Some north-south orientated process, storm and sanitary sewer pipes are also present beneath the groundwater table.

A GMCH facility-wide subsurface piping plan is shown on Figure 6 and a cross-section of the GMCH facility-wide subsurface piping present through the central portion of the facility is shown on Figure 7. The majority of the storm water, sanitary, treated, and process water (if present) from the individual buildings at the GMCH Facility are directed to the utility corridor which is present in the central portion of the facility with pipes generally flowing in a west to east direction. A significant portion of the subsurface piping present in the central portion of the facility is present near or below the groundwater table and also appears to be present near the top or below the top of bedrock throughout the majority of the GMCH facility.

2.9 Survey

A licensed land surveyor (McIntosh & McIntosh, PC) completed a survey of the monitoring wells along the exterior of Building 8. The ground surface, road box, and monitoring point elevations of the monitoring wells were measured and referenced to the National Geodetic Vertical Datum (NGVD). The exterior monitoring well was also measured horizontally and referenced to the NAD83/96, New York State Plane Coordinates, West Zone.

Detailed building drawings were provided by GMCH that identified sampling locations within the footprint of the building, and were used to locate the interior sampling locations. The interior monitoring wells and soil probe surface elevations were determined using the floor elevation from within Building 8 (elevation 615.46). The survey points for the monitoring wells were measured with a tape measure from the top of the floor slab to the top of the monitoring point. The horizontal measurements of the monitoring wells, soil probes, and IA sample locations were measured from marked columns present throughout the building at 40-foot spacing.

3. PHYSICAL CHARACTERISTICS OF THE STUDY AREA

The following sections discuss surface features, meteorology, surface water hydrology, regional and Site geology, regional and Site hydrogeology, and land use.

3.1 Surface Features

The Building 8 BCP Site is approximately 13.1 of the 342.25 acres that make up the GMCH facility. The majority of the Building 8 BCP Site consists of the footprint of Building 8 (see Figure 2). The ground surface and building concrete floor slab are generally level surfaces and the concrete floor slab is approximately 2 to 4 feet higher than ground surface outside the building. The floor elevation within Building 8 is 615.46 feet above mean sea level.

North of the Building 8 BCP Site is a parking lot and beyond that are residential homes along Upper Mountain Road. To the east are Building 6, (space leased from GMCH by Delphi Automotive System and used for Engineering), the Delphi Harrison Thermal Systems Inactive Hazardous Waste Site (Site No. 9-32-113), and Upper Mountain Road. To the south is Building 7, beyond which is a New York Central Railroad line. To the west is Building 9, beyond which is unused GMCH property and the Town of Lockport Industrial Park.

The Building 8 BCP Site is occupied by one building with an approximate 553,436 square-foot footprint. The building has been used for manufacturing since it was built in stages from 1960 to 1966. Areas not occupied by the building include a paved area used as storage, parking, and loading docks.

3.2 Meteorology

The GMCH facility is located within Niagara County which is typified by moderately warm summers and cold winters with an average yearly temperature of 48 degrees Fahrenheit. Niagara County is bounded to the north by Lake Ontario, the Niagara River to the west, Erie County/Tonawanda Creek to the south, and both Orleans and Genesee Counties to the east. The proximity to Lake Ontario and Lake Erie has an effect on the temperature and precipitation in Niagara County. The average yearly rain fall is about 34 inches and the average snowfall is about 98 inches.

3.3 Surface Water Hydrology

3.3.1 Regional Surface Water Hydrology

The Niagara Escarpment, further discussed in Section 3.4, acts somewhat as a regional surface water hydrologic divide. Surface water in the near vicinity and north of the escarpment flows northward towards Lake Ontario. Surface water bodies south of the escarpment generally flow to the south and southwest towards the Niagara River or the Erie Barge Canal. The Niagara River flows northerly discharging to Lake Ontario while the Erie Canal flows west to east. The Erie Canal is located approximately 1 mile southeast of the GMCH facility and has a southwest-northeast orientation in that area.

3.3.2 Site Surface Water Hydrology

As the majority of the Building 8 BCP Site is covered by the building footprint, surface water drains off the building roof via sheet flow to roof drains which are connected to the subsurface storm sewer system. Areas outside of the building footprint drain via sheet flow to stormwater catch basins which are directed to the storm sewer system, or pond at low points where infiltration and/or evaporation occur.

Surface water entering the storm sewer system flows to Outfall D002, located east of Building 8 (see Figure 2). During periods of low flow (i.e. flow rates less than 300 gpm) storm water at Outfall D002 is directed to the City of Lockport WWTP. During periods of high flow (i.e. flow rates greater than 300 gpm), storm water is discharged to the drainage swale east of Outfall 002, which flows east and connects with The Gulf stream (see Section 3.6 for definition) which enters the GMCH Lockport Facility from the southern property boundary. The Gulf stream flows northeast beneath Upper Mountain Road and into The Gulf at a location east of the GMCH facility, and eventually to Eighteenmile Creek.

3.4 Regional Geology

The existing topography in the vicinity of the GMCH facility is generally flat. At the GMCH Lockport Facility, there is an approximate 25 foot change in elevation from the Truck Gate at the western side (615 foot elevation) to the eastern side along Upper Mountain Road (590 foot elevation) over a distance of 3,150 feet, or less than a 1% grade downward to the east.

The two primary surface reliefs in the area are the Niagara Escarpment, located approximately two miles to the north, and the Erie Canal, located approximately 1 mile southeast of the GMCH facility, which has a southwest-northeast orientation in the vicinity of the facility. There is an approximate 200-foot difference in elevation from the ground surface elevation at the facility to the base of the escarpment. This escarpment acts as a surface water and groundwater divide.

Regionally, the surficial geology consists of glacially-derived soils comprised of lacustrine clays and silts which overly bedrock. The upper-most bedrock unit is the Lockport Group, which consists of the Gasport Limestone Formation and the Lockport Dolomite. Below the Lockport Group is the Clinton Group, which consists of the Rochester Shale Formation, the Irondequoit Limestone Formation, and the Rockway/Hickory Corners/Neahga Formation. This formation consists of dolostone, limestone, and shale units. Below the Rockway/Hickory Corners/Neahga Formation is the Medina Group, which consists of the Grismby Sandstone Formation, the Power Glen Shale Formation, and the Whirlpool Sandstone Formation. The Lockport, Clinton, and Medina groups are Middle to Lower Silurian in age and were deposited from 410 to 430 million years ago.

Bedrock in western New York generally dips to the south to southwest at about 40 feet per mile. The rock bedding is considered essentially flat over short distances.

3.5 Site Geology

3.5.1 Overburden

Overburden soil conditions at the Building 8 BCP Site typically consist of fill material ranging in thickness from about 2.5 (MW-8-1) to 8 feet (8-SB-1 and 8-SB-2). The fill material ranges from fine grained silts and clays (potentially reworked native soils) to sand and gravel, and overlays native soils (clayey silts to silty clays with lesser and varying amounts of sands and gravel). Bedrock is generally encountered at depths ranging from approximately 8 to 12 feet below the surface.

3.5.2 Bedrock

Bedrock underlying the GMCH facility is the Lockport Dolomite Formation. Four (4) shallow bedrock monitoring wells were installed in the Lockport Dolomite as part of the Building 8 BCP RI. The four (4) bedrock wells were advanced through the overburden soil and approximately 11 to 12 feet into the upper bedrock.

The Lockport Dolomite is a gray dolomitic limestone, which is hard and fine-grained with horizontal to low angle fractures. The upper fractured bedrock encountered at the Site can generally be classified as fair (rock quality designation [RQDs] of 51 to 75 percent) to good (RQDs of 76 to 90 percent) quality based on the RQD values obtained from the bedrock coring and recorded on the test boring logs in Appendix C.

RQD values for bedrock cores obtained from the Building 8 BCP Site generally ranged from 72 to 95 percent, with the exception of the rock core from MW-8-4 from 12 to 16.8 feet (44 percent). The upper 4 to 5 feet of bedrock cored had RQD values between 44 and 95 percent with an average of about 76 percent. The next 5 feet of cored bedrock had RQD values between 72 and 95 percent with an average of about 85 percent. In general, the rock cored/sampled in the borings completed as part of the Building 8 RI did not exhibit extensive fractures or jointing, with the exception of rock core from MW-8-4 at 12 to 16.8 feet.

3.6 Regional Hydrogeology

Groundwater from the GMCH facility flows east toward The Gulf located on the east side of Upper Mountain Road (see Figure 1). The Gulf is a large topographic depression which acts as a groundwater sink.

3.7 Site Hydrogeology

Four (4) bedrock groundwater monitoring wells (see Figure 3) were installed at the Building 8 BCP Site as part of the RI. Water levels in these bedrock wells range from 5 to 9 feet bgs based on measurements collected on May 2, 2011 (see Table VI). Groundwater flow direction appears to be in a south to southeast direction with a gradient of about 0.003 based on the groundwater elevations of MW-8-1, northwest interior corner of Building 8, and MW-7 located outside the southeast corner (see Figure 8).

Groundwater beneath the entire GMCH facility (based on the measured groundwater elevations from 43 monitoring wells on May 2, 2011) flows generally from east to west with a gradient of about 0.009, based

on the groundwater elevations of MW-9-101-A, south of Building 9, and MW-13 along Upper Mountain Road on the eastern property line (see Figure 8).

Groundwater flow within the bedrock at the Building 8 BCP Site is generally controlled by fractures and joints within the rock mass. As discussed in Section 2.8 above, sewer lines are present onsite that intercept groundwater. Groundwater flow may also be influenced in part by the sewer systems. The RQD values obtained during the subsurface explorations associated with Building 8 BCP Site RI indicate the rock encountered during the coring is generally not highly fractured or jointed.

3.7.1 Hydraulic Conductivity and Groundwater Flow Velocities

Estimated horizontal hydraulic conductivity values were calculated from rising head slug tests conducted in the four (4) bedrock monitoring wells. As shown in Appendix G, the hydraulic conductivity in the Building 8 BCP Site (inclusive of MW-8-1 through MW-8-4) is relatively low and varies between approximately 9.7×10^{-6} cm/s (MW-8-3) and 9.9×10^{-4} cm/s (MW-8-1) or about 0.03 to 2.8 feet per day (fpd), with an average of about 0.9 fpd.

In other portions of the GMCH facility, the effective hydraulic conductivities ranges were as follows.

- Building 7 BCP RI Wells: 1.6×10^{-6} cm/s to 5.2×10^{-4} cm/s (0.005 to 1.5 feet per day);
- Building 10 BCP RI Wells: 6.4×10^{-5} cm/s to 1.7×10^{-4} cm/s (0.2 to 0.5 feet per day); and
- Delphi Site: 1.1×10^{-6} cm/s to 1.1×10^{-2} cm/s (0.003 to 31 feet per day)

Groundwater flow velocities within the upper bedrock were calculated using Darcy's Law. We have assumed that horizontal flow in the bedrock is isotropic. We note that Darcy's Law was developed for flow through porous media and not fractured rock and the values calculated should be considered estimates. The parameters required for this determination include hydraulic conductivity, hydraulic gradient, and fracture porosity. The hydraulic conductivity and gradient were determined based on field measurements.

The porosity was estimated by assessing published values for fracture porosity. Snow[3] estimated fracture porosity to be on the order of 0.01 to 0.4%. For fractured bedrock with hydraulic conductivity on the order of 10^{-2} to 10^{-4} cm/s, Jumikis published values of secondary porosity between about 5 and 20%[4]. Freeze and Cherry[5] estimated porosity in fractured rock to be between 0 and 10% and Fetter[6] reported values from limestone and dolomite range from less than 1 percent to 30%. It is expected that the porosity ranges from less than 1% to 10% for the shallow fractured bedrock at the GMCH facility. Groundwater velocities were calculated using 0.5% and 5% to identify the potential range of groundwater velocities.

Utilizing a horizontal hydraulic gradient for Building 8 of 0.003, an average hydraulic conductivity of 320 feet per year, and assumed effective porosities of 0.005 and 0.05, the average linear

3 "Rock Fracture Spacings, Openings and Porosities", Snow, D., Journal of Soil Mechanics and Foundations Division, Proceedings of the American Society of Civil Engineers, January 1968.
4 "Rock Mechanics"; Jumikis, A. R.; Trans Tech Publications, 1983.
5 "Groundwater"; Freeze, R. A., and Cherry, J.A; Prentice Hall Inc, 1979.
6 "Applied Hydrogeology" 3rd Edition; Fetter, C.W.; MacMillan College Publishing Company, 1994.

velocity for groundwater ranges from 32 to 320 feet/year, with an average of approximately 176 feet/year (see Appendix G).

Equation 1: Average Linear Velocity

$$-\frac{K}{n} \times \frac{dh}{dl}$$

3.8 Land Use and Demography

The Building 8 BCP Site is part of the GMCH facility in the City of Lockport, which is located in Niagara County, New York. The City of Lockport is surrounded by the Town of Lockport. The Town of Lockport is bordered by the Town of Newfane to the north, the Town of Hartland to the northeast, the Town of Royalton to the east, the Town of Pendleton to the south, and the Town of Cambria to the west. The GMCH facility is located in an area of mixed residential, agricultural, commercial, and industrial settings along Upper Mountain Road.

3.9 Fish & Wildlife Resources Impact Analysis

No fish and wildlife resource impact analysis (FWRIA) was required as part of the RI. The FWRIA Decision Key in Appendix 3C of NYSDEC DER-10 was used to come to this conclusion, as follows.

Step 1: Is the site or area of concern a discharge or spill event? *Yes (Go to Step 13)*

Step 13: Does the contamination at the site or area of concern have the potential to migrate to, erode into or otherwise impact any on-site or off-site habitat of endangered, threatened or special concern species or other fish and wildlife resource? (See #9 for a list of potential resources.

The Building 8 BCP Site (manufacturing facility) is in an area of mixed residential agricultural, commercial, and industrial located in the City of Lockport. There is a very limited fish and wildlife population within a ¼ mile radius of the Building 8 BCP Site because it is located within a larger manufacturing facility (GMCH Lockport Facility) area (See Figure 12). There are no state or federal wetlands or streams with ¼ mile radius of the Building 8 BCP Site (see Figure 12).

Step #9 identified the following resources:

- Any endangered, threatened or special concern species or rare pants or their habitat; - *Not Applicable (NA)*
- Any DEC designated significant habitats or rare NYS Ecological Communities; *NA*
- Tidal or Freshwater wetlands; *NA*
- Stream, creek or river; *NA*
- Pond, lake, lagoon; *NA*
- Drainage ditch or channel; *A drainage ditch is present approximately ¼ mile east of Building 8 and receive high flow storm water discharge from Outfall D002 and operated under NYSDEC SPDES Permit Number NY 000 0558.*
- Other surface water feature; *NA*
- Other marine or freshwater habitat; *NA*
- Forest; *NA*

- Grassland or grassy field; *NA*
- Parkland or woodland; *NA*
- Shrubby area; *NA*
- Urban wildlife habitat; *NA*
- Other terrestrial habitat. *NA*

Additionally, the NYSDEC Natural Heritage Unit reviewed their files to determine if there are ecological concerns or habitats for endangered, threatened or special concern species in the vicinity of the Site (see Appendix H for letter to NYSDEC). The response for NYSDEC Natural Heritage Unit indicated that "no records of rare or state-listed animals or plants, significant natural communities, or other significant habitats, on or in the immediate vicinity of your site" (see Appendix H).

As "No" was the answer to Step 13, follow to Step #14.

Step #14: No FWRIA needed.

4. REMEDIAL INVESTIGATION RESULTS

This section discusses the nature and extent of contamination at the Site.

4.1 Data Validation Reports

TestAmerica Laboratories Inc. provided analytical laboratory services for this RI. Conestoga Rovers and Associates (CRA) of Niagara Falls, New York prepared the quality assessment and validation reports (QAVR) for the analytical data collected as part of the Building 8 BCP RI. One report was prepared for each of the environmental media collected. These reports are as follows.

- Memorandum from CRA – "Data Quality Assessment and Validation, BCP Investigation, Building 8 Soils, GM-Lockport, Lockport, New York, December 2010 - January 2011" dated February 15, 2011;
- Memorandum from CRA – "Data Quality Assessment and Validation, BCP Investigation, Building 8 Air, GM-Lockport, Lockport, New York, January 2011" dated March 22, 2011; and
- Memorandum from CRA – "Data Quality Assessment and Validation, BCP Investigation, Building 8 Groundwater, GM-Lockport, Lockport, New York, April 2011" dated July 7, 2011.

Copies of the three QAVRs, along with validated analytical data, qualifiers, their definitions, as defined by CRA, are included in Appendix F. The following is a summary of the overall assessment of each report.

- Soil QAVR: The data were found to exhibit acceptable levels of accuracy and precision, based on the provided information, and may be used with the qualifications and exceptions noted within the report. No data were rejected.

- Air QAVR: The data were found to exhibit acceptable levels of accuracy and precision, based on the provided information, and may be used with the qualifications and exceptions noted within the report. No data were rejected.

- Groundwater QAVR: The data were found to exhibit acceptable levels of accuracy and precision, based on the provided information, and may be used without qualification. No data were rejected.

Validated results were used to develop analytical tables and figures, and for discussion purposes within the report. Our presentation of analytical test results within the text does not include data qualifiers.

4.2 Comparative Criteria

To determine if a potential threat to human health or the environment exists, the comparative criteria used for assessment of the various media samples were as follows.

<u>Subsurface Soil</u>

- 6 New York Code Rules and Regulation (6 NYCRR) Part 375 Environmental Remediation Programs, Subparts 375-12 to 375-4 & 375-6, effective December 14, 2006.

- The Part 375 Protection of Groundwater Soil Cleanup Objectives (PGWSCOs) was used for comparison with the subsurface analytical data for cleanup objectives and when performing the qualitative exposure assessment.

Groundwater

- NYSDEC's Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1), June 1998, amended April 2000 (Class GA criteria).

Soil Vapor Intrusion Samples

- NYSDOH's "Final Guidance for Evaluating Soil Vapor Intrusion in the State New York" dated October 2006 (NYSDOH Guidance).

4.3 Contaminant Types

Discussions of laboratory analytical results for the various identified environmental media are presented by the chemical classes including VOCs, SVOCs, PCBs, and inorganics that were analyzed for and detected as part of the RI. Some compounds of these chemical classes were identified at concentrations exceeding associated New York State criteria at sporadic locations around the Site. Based on previous investigations, the principal contaminant of concern in the groundwater for the Building 8 BCP Site and throughout the GMCH Facility are VOCs, primarily PCE, TCE, and their breakdown products (i.e., cis-DCE and VC).

4.4 Source Areas

Soil probes were completed inside Building 8 to assess two areas where soil contamination was identified during the previous investigation and for general site coverage, as the Previous Phase II Investigation did not assess the western portion of Building 8 west of the Former Chromium Sump Area. The two areas where soil contamination was identified previously are as follows:

- TCE contamination was identified in previous soil boring 8-005-3C at 1,000 mg/kg in a soil sample from 8 to 10 feet below the building slab; and
- Arsenic contamination identified in soil boring 8-001-G at 65.8 mg/kg in a soil sample from 2 to 4 feet below the building slab.

Five (5) soil probes (8-SB-1 through 8-SB-5) were completed around the location of 8-005-3C. TCE was detected in four of the five samples collected from these five soil probes. The concentrations of TCE detected ranged from 0.96 ug/kg to 450 ug/kg, which are below both the Part 375 USCOs and PGWSCOs. Therefore, TCE soil contamination previously identified at 8-00503C does not appear to be widespread in the soil. However, cis-DCE was detected in three soil samples: 8-SB-3, 8 to 11.5 feet (400 ug/kg); 8-SB-4, 10 to 11 feet (270 ug/kg); and 8-SB-5, 10 to 11 feet (700 ug/kg) at concentrations above the Part 375 PGWSCO of 250 ug/kg.

Four (4) soil probes (8-SB-6 through 8-SB-9) were completed around the location of 8-001-G. Arsenic was detected in the four (4) samples collected from these soil probes at concentrations ranging from 3.4 mg/kg to 6.9 mg/kg, which are below both the Part 375 USCOs and Part 375 PGWSCOs. Therefore, the As soil contamination previously identified at 8-001-G does not appear to be widespread in the soil.

However, lead was detected in the soil sample 8-SB-9, above the groundwater table at 2 to 4 feet, at a concentration of 2,420 mg/kg, which exceeds it Part 375 PGWSCO (450 mg/kg).

The analytical results from the three (3) soil probes completed in the western portion of Building 8 and the four (4) test borings for monitoring well installations did not identify contaminants at concentrations exceeding their respective Part 375 USCOs or Part 375 PGWSCOs.

Results of the groundwater sampling from the four (4) monitoring wells installed as part of the RI identified elevated levels of VOCs at MW-8-2 (TCE at 660 μg/L; VC at 270 μg/L; and cis-DCE at 9,300 μg/L) located near a former degreaser location in the southwestern portion of the building.

4.5 Surface Soil Analytical Results

Surface soil samples were not collected as part of this RI, as the entire Building 8 BCP Site footprint is either covered by the building footprint or surface cover (i.e., pavement or concrete).

4.6 Subsurface Soil Analytical Results

Sixteen (16) subsurface soil samples (excluding QA/QC samples) were collected for analysis from twelve (12) soil probes and four (4) test borings completed as part of the Building 8 RI. Of the 16 samples collected:

- Twelve (12) were analyzed for VOCs via SW-846 8260B;
- Seven (7) were analyzed for SVOCs via SW-846 8270C;
- Seven (7) were analyzed for PCBs via SW-846 8082; and
- Seven (7) were analyzed for metals via SW-846 6010/7000 Series.

A summary of samples collected for laboratory analysis and the analyte list is presented in Table I. Analytical results are summarized on Table II and in Figure 9.

4.6.1 Volatile Organic Compounds (VOCs)

Twelve (12) subsurface soil samples (excluding QC duplicate and MS/MSD samples) were analyzed from the twelve (12) soil probes and four (4) test borings completed as part of the Building 8 RI for VOCs.

From these twelve (12) soil samples, five VOCs were detected above method detection limits, which include acetone, methylene chloride, TCE, VC, and cis-DCE (see Table II). Cis-DCE was detected at three (3) locations and acetone was detected at one location at concentrations that exceeded their respective Part 375 PGWSCOs.

4.6.2 Semi-Volatile Organic Compounds

Seven (7) subsurface soil samples (excluding QC duplicate and MS/MSD samples) were analyzed from the twelve (12) soil probes and four (4) test borings completed as part of the Building 8 RI for SVOCs.

Thirteen (13) SVOCs were detected above method detection limits in three of the seven (7) samples (see Table II). None of the detected concentrations of these 13 compounds exceeded their respective Part 375 PGWSCOs.

4.6.3 Polychlorinated Biphenyls (PCBs)

Seven (7) subsurface soil samples (excluding QC duplicate and MS/MSD samples) were analyzed from the twelve (12) soil probes and four (4) test borings completed as part of the Building 8 RI for PCBs. No PCBs were detected above method detection limits.

4.6.4 Metals

Seven (7) subsurface soil samples (excluding QC duplicate and MS/MSD samples) were analyzed from the twelve (12) soil probes and four (4) test borings completed as part of the Building 8 RI for metals.

From these seven (7) soil samples, 23 different metals were detected above method detection limits (see Table II). Lead was detected at 8-SB-9 (two to four feet) at a concentration of 2,420 mg/kg, which exceeds the Part 375 PGWSCO of 450 mg/kg and CSCOs of 1,000 mg/kg. None of the other metals were detected at concentrations above their respective Part 375 PGWSCO.

4.7 Groundwater Analytical Results

Eight (8) groundwater samples were collected as part of the Building 8 RI for VOCs analysis. The groundwater samples were collected from the four (4) monitoring wells (MW-8-1 through MW-8-4) installed as part of the Building 8 RI and four (4) existing monitoring wells (MW-8-003-B, MW-6-F-8, MW-6-1, and MW-6-2).

Figure 3 shows the approximate locations of the sampled monitoring wells; the groundwater analytical results are summarized on Tables III and IV and Figure 10.

4.7.1 Volatile Organic Compounds

Five (5) VOCs (PCE, TCE, cis-DCE, trans-DCE, and VC) were detected above method detection limits in five (5) of the eight (8) groundwater samples collected (see Table III and Table IV). VOCs were not detected above method detection limits in the groundwater samples from monitoring well MW-6-F-8, north of the Building 8 BCP Site, and both MW-6-1 and MW-6-2, which are east of the Building 8 BCP Site, close to the eastern property line along Upper Mountain Road.

One (1) VOC, cis-DCE, was detected in the groundwater sample collected from MW-8-1 at a concentration of 0.86 ug/L, which is below the NYSDEC Class GA criteria of 5 ug/L.

VOCs were detected at concentrations exceeding their respective Class GA criteria at the other four (4) well locations, as follows.

- MW-8-2: Cis-DCE (9,300 ug/L), TCE (660 ug/L), and VC (270 ug/L);
- MW-8-3: TCE (9.3 ug/L);

- MW-8-4: Cis-DCE (68 ug/L), TCE (12 ug/L), and VC (17 ug/L); and
- MW-8-003-B: Cis-DCE (190 ug/L), PCE (300 ug/L), TCE (110 ug/L), and VC (19 ug/L).

Based on the groundwater sample results, it appears that a potential source of groundwater contamination may be present in the southwestern portion of the building near a former degreasing operation.

In addition to the eight (8) groundwater samples collected for VOCs analysis as part of the Building 8 RI, 31 additional monitoring wells located throughout the GMCH facility were sampled for VOCs as part of other BCP RIs or other NYSDEC program work. A posting map depicting the VOC concentrations for the entire GMCH facility is shown on Figure 10 and also summarized on Table IV.

Based on the findings of the BCP RIs and other sampling completed, VOCs are present in the groundwater at Building 7 and beneath a portion of Building 8. To the east of Building 8 is the Delphi Harrison Site (discussed in Section 1.4) where VOCs are also present in the groundwater. However, it does not appear that the contamination is migrating off-site as groundwater samples from six (6) of the seven (7) monitoring wells along the GMCH facility eastern property line (downgradient location) do not contain VOCs above method detection limits. The six (6) wells from north to south include: MW-6-2, MW-6-1, MW-11, MW-13, MW-7-2, and MW-7-4. PCE (6.7 ug/L) was detected slightly above its respective Class GA criteria (5 ug/L) at MW-15, which is also along the eastern property line.

4.8 Sub-slab and Indoor Air Analytical Results

Five (5) IA, five (5) sub-slab vapor samples, and one (1) outdoor air samples (excluding QC duplicate sample) were collected for VOCs analysis via TO-15 as part of the Building 8 BCP Site RI. Results of the SVI sampling identified 30 different VOCs that were detected in the air samples collected above method detection limits (see Table V). The results of the IA samples and the SS vapor samples were compared to the decision matrices provided in the NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in New York State" (2006) as summarized in Table V and presented on Figure 11.

TCE was the only VOC detected in the five (5) IA samples at a concentration exceeding the NYSDOH Air Guideline Value (AGV) of 5 micrograms per cubic meter (ug/m^3). TCE concentrations detected ranged from 7 ug/m^3 (8-VI-2IA) to 16 ug/m^3 (8-VI-4IA), slightly above the NYSDOH AGV. This AGV is considered extremely low relative to the other regulatory and advisory values used by other agencies that govern chemical exposure in industrial work environments. By comparison, the Occupational Safety and Health Administration (OSHA) has established the following regulatory values for TCE.

- Permissible Exposure Limit (PEL) for TCE averaged over an 8-hour work shift is 100 ppm or 537,423 ug/m^3;
- OSHA Short-term exposure limit (STEL) for a 5 minute exposure in any 2-hour period is 300 ppm or 1,612,270 ug/m^3; and
- OSHA ceiling is 200 ppm or 1,074,847 ug/m^3.

The National Institute for Occupational Safety and Health (NIOSH) has established the following advisory values for TCE.

- NIOSH time weighted average (TWA) for exposure to TCE is 25 ppm; and
- NIOSH immediate danger to life or health concentration (IDLH) is 1,000 ppm.

Therefore, the detected concentrations of TCE in the IA samples exceed the NYSDOH AGV, but are not considered a health risk for on-site workers compared to the OSHA regulatory values or NIOSH advisory values that are typically used to govern exposure in workplace environments.

5. CONCEPTUAL SITE MODEL

As described in DER-10, the Conceptual Site Model (CSM) process is utilized to: 1) develop a framework for analysis of contaminants identified at the Building 8 BCP Site during the investigative process: and 2) provide the basis for determining the need and scope of the remedial action process that is protective of human health and the environment. The CSM process includes delineation of the Contaminants of Concern (COCs), assessment of the extent and transport of the COCs within the environment, and development of a Qualitative Human Health Exposure Assessment (QHHEA) to determine if COCs could constitute an exposure pathway currently or under the future intended land use scenarios. More specifically, the CSM addresses:

- Sources of Contamination;
- Nature and Extent of Contamination;
- Dominant Fate and Transport Characteristics (based on Building 8 BCP Site conditions and contaminants encountered);
- Potential Exposure Paths; and
- Potentially Impacted Receptors.

The Building 8 CSM has been prepared using information derived from the RI sampling and analytical testing program. These investigations document the following key factors on contaminant presence and mobility at the Building 8 BCP Site.

Site Features/Characteristics:

- The Building 8 BCP Site is currently an active manufacturing facility.

- The majority of the ground surface is currently almost entirely covered by building foundations, or pavement creating a physical barrier between the ground surface and the underlying soils.

- Immediately below this barrier is a fill layer consisting gravel, sand, and silt, ranging from approximately 2.5 to 8 feet below ground surface. Below the fill are native clays and silts. Bedrock consisting of the Lockport Dolomite was encountered between 8 and 12 feet below ground surface.

- Based on the most recent facility-wide elevation (El) data, the groundwater table across the entire Building 8 BCP Site flows towards the east at a slight gradient from approximately El 617 at its highest point to approximately El 584 at its lowest point. There is a slight south/southeastern gradient specifically over the Building 8 BCP Site, ranging from approximately El 610 on the northern side of the Building 8 BCP Site to approximately El 606 on the southeastern side of the Building 8 BCP Site.

- Groundwater is not utilized as potable and/or non-potable purposes at the Building 8 BCP Site.

Site Data:

Soil:

- Field investigations conducted in the Building 8 BCP Site study area in 2006 (refer to Appendix A), detected VOCs (specifically TCE and vinyl chloride) at concentrations above ISCOs, CSCOs and/or PGWSCOs in samples collected from approximately 8-10 feet bgs. PAHs were detected at concentrations above the ISCO in one (1) sample although some laboratory detection limits were elevated due to sample dilution performed by the laboratory. In total, only one PAH (benzo(a)pyrene) was detected at two locations at concentrations of 1.4 mg/kg (8-006-F) and 1.5 mg/kg (GS-D), which are slightly above the ISCO (1.1 mg/kg) for this compound. Arsenic was also detected at a concentration above the ISCO in one (1) sample collected beneath the building slab

  The results of these investigations were used to develop the scope of the Building 8 BCP Site RI. The results of the Building 8 BCP Site RI are described below.

- VOCs, (cis-DCE) was detected in the soil at concentrations ranging from 0.27 to 0.7 mg/kg, above the PGWSCOs of 0.25 mg/kg, at depths ranging from 8 to 12 feet below ground surface. One detection of acetone at an estimated concentration of 0.056 mg/kg, which is slightly greater than the PGWSCO of 0.05 mg/kg.

- Metals, PCBs, and SVOCs were not detected at concentrations above the PGWSCOs with the following exception:

  - Lead (Pb) was detected at a concentration above the PGWSCO and CSCO, but below the ISCO (2,450 mg/kg) in one sample collected from 0-4 feet below ground surface.

- Overall, significant impacts to soil were not noted as part of the Building 8 BCP Site RI. The isolated detections of lead (Pb) and acetone are not representative of site-wide conditions and could be from naturally-occurring conditions and/or anomalies of the laboratory analysis. In addition, there did not appear to be substantial variation between the analytical data from fill soils versus native soils, indicating that historical fill is not anticipated to be a source of contamination at the Building 8 BCP Site.

Groundwater:

New and historical groundwater sample results were compared to the NYSDEC TOGS 1.1.1 class GA criteria.

- Based on historical and recent sampling as part of the Building 8 BCP Site RI, the primary contaminants identified in groundwater include PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride; the highest VOC concentration detected was cis-1,2-DCE.

- Naturally occurring elements, iron (Fe), magnesium (Mg), potassium (K), and sodium (Na) were detected at concentrations above the comparison GA criteria in the vicinity of the Building 8 BCP Site (MW-3 and MW-7). The analytes were detected in both filtered and unfiltered samples. However, groundwater is not currently used at or in the vicinity of the GMCH facility for potable or non-potable purposes.

- Groundwater may be infiltrating the storm sewer system at locations where the system piping is present at or below the groundwater elevation.

Sub-Slab Vapor/Indoor Air:

- Five (5) pairs of indoor air and sub slab vapor samples were collected from various locations throughout the interior of Building 8. The concentrations of VOCs detected in the sub-slab vapor and/or indoor air samples exceeded the comparison threshold values provided by the decision matrices of the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in New York State (2006).

- VOCs identified in the sub-slab vapor and indoor air include cis-1,2-DCE, TCE, PCE.

5.1 Contaminants of Concern (COC)

The Building 8 BCP Site contaminants of concern (COC) were identified based on the detection of organic and inorganic substances that are Site-related and are present at concentrations higher than the relevant standards, criteria, and guidelines (SCGs). Consistent with the RIWP, the SCG for the Building 8 BCP Site RI findings were evaluated by comparison with the Part 375 BCP Regulations soil cleanup objectives (SCO) (specifically ISCOs, CSCOs, and PGWSCOs) and the NYS Drinking Water (GA) Standards specified in NYSDEC TOGS 1.1.1. for groundwater, the decision matrices provided in the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (2006) for soil vapor and indoor air. The SCG represent concentrations determined by the NYSDEC/NYSDOH to be fully protective of human health and the environment.

The COC analysis included the Building 8 BCP Site soil, groundwater, and sub-slab vapor/indoor air data as summarized on Tables II through V. COCs for the Building 8 BCP Site were determined on the following factors:

- COC substances consistently detected at concentrations above the SCG.

- COC substances are likely related to Building 8 BCP Site activities, are not naturally-occurring and/or from ambient conditions.

- COC substances have been detected at a frequency and concentrations that would present a reasonable potential for adverse impact on human health or the environment.

The COCs identified for the Building 8 BCP Site include:

- VOCs including PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride in soil, groundwater, sub-slab vapor, and indoor air.

These COCs were included in the Qualitative Human Health Assessment (QHHEA) performed in accordance with NYSDOH protocol as detailed below. Though identified in excess of PGWSCOs, CSCOs and/or ISCOs, lead (Pb), arsenic (As), benzo(a)pyrene (PAH), and acetone in soil have not been included as COCs due to the following reasons:

- Due to only one incidence of lead and arsenic, and two incidences of benzo(a)pyrene detected in soil in excess of the PWGSCOs, CSCOs and/or ISCOs during the RI and previous investigations, it is anticipated that these detections are anomalous and not representative of Site-wide impacts. Furthermore, considering the low mobility of these analytes, adverse impacts to groundwater and/or migration from the Building 8 BCP Site are not anticipated.

- Due to only one incidence of acetone detected in slight excess of the PGWSCO during the RI, it is anticipated that this detection is anomalous and not representative of Site-wide impacts.

5.2 Chemical Properties of Contaminants of Concern

The physical properties of chemical compounds influence their behavior, fate and transport, and potential migration in the environment, therefore influencing potential pathways that may result in or lead to human and environmental exposure. The following information (derived from chemical compound summaries generated by the Agency for Toxic Substances and Disease Registry [ATSDR]) provides general information on the physical properties of the COCs identified at the Building 8 BCP Site. The summary below provides general information of the behavior of the COCs in soil, groundwater, and vapor/air that may influence the potential for exposure to receptors. The information below was used to evaluate if potential exposure pathways could exist in connection with the COCs identified at the Building 8 BCP Site. Potential exposure pathways are further described and form the basis of the site-specific qualitative human health exposure assessment (QHHEA) performed for the Building 8 BCP Site. The QHHEA was performed in accordance with the relevant NYSDOH QHHEA guidelines appended to DER 10.

Chlorinated Solvents:

Chlorinated solvents detected at the Building 8 BCP Site include PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride. PCE and TCE are typically used as degreasers in manufacturing and for commercial dry cleaning purposes. TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride are considered breakdown or "daughter products" of PCE and result from natural breakdown of PCE in soil and groundwater.

Chlorinated solvents enter the environment by evaporating in air during use. In the event of release of to the environment, chlorinated solvents can travel through soils and dissolve in groundwater. Contaminated soil vapors can be emitted from contaminated groundwater/soil and impact indoor air quality. Chlorinated solvents in soil and groundwater can also degrade over time from parent compounds (PCE, TCE) to benign end products (chloride, ethene) however more harmful daughter products such as vinyl chloride can be formed during the breakdown process.

5.3 Qualitative Human Health Exposure Assessment

A Qualitative Human Health Exposure Assessment (QHHEA) is an evaluation of the potential for a complete pathway to exist by which human receptors may be exposed to the Building 8 BCP Site COCs. The QHHEA process is used as an initial screening tool to assess the potential that the COCs identified at the Building 8 BCP Site could represent a current or potential future human health risk. This initial screening process is used to focus results of the RI on the options to mitigate human exposure and potential risk that may currently exist or which could exist in the future. The Building 8 BCP Site QHHEA has been completed in accordance with DER-10 requirements for human health exposure assessment with the following specific objectives for the Building 8 BCP Site:

- Qualitatively evaluate actual or potential exposures to Building 8 BCP Site COCs;
- Characterize the exposure setting, identify potential exposure pathways, and evaluate contaminant fate and transport;
- Derive a conclusion whether or not a complete exposure pathway could exist currently or be reasonably anticipated in the future whereby human contact to the medium which contains contaminants on the Building 8 BCP Site could potentially occur; and,
- If the QHHEA concludes that complete exposure pathways are potentially present at the Building 8 BCP Site, describe the nature of the population exposed, or potentially exposed, to contaminants that are present at the Building 8 BCP Site and provide recommendations on additional exposure analysis and/or for remedial actions appropriate to mitigate the exposure pathway.

  Or

  If the QHHEA concludes that complete exposure pathways do not currently exist or could reasonably exist in the future, further human health exposure assessment is not warranted.

In accordance with the QHHEA guidance, analysis of exposure pathways for each of the COCs identified on the Building 8 BCP Site as are described above includes a positive determination that an exposure pathway is "complete" if all the following factors or conditions are identified at the Building 8 BCP Site:

1. Presence of a contaminant in a medium (soil, air, or water);
2. Receptor (i.e., a visitor, occupant, or worker);
3. Transport mechanism (i.e. volatilization) within which the contaminant can migrate to the receptor; and
4. Route of exposure (i.e. inhalation) for the receptor.

The QHHEA for the Building 8 BCP Site is detailed on Table VII, which identifies the potential for complete exposure pathways to exist currently or that could reasonably exist in the future based on commercial or industrial site use. For each media (soil, groundwater, soil vapor/indoor air) on the Building 8 BCP Site, Table VII presents an assessment of whether COCs are/could be present, the key fate and transport characteristics of these substances, the potential current and future human exposure/land use scenarios, and identification of exposure pathways. Pathway analysis is based on the assumed exposure scenarios as consistent with the relevant SCGs as referenced above and as appropriate for this Building 8 BCP Site.

The current and reasonably anticipated exposure settings for the Building 8 BCP Site are based on inadvertent ingestion, adsorption or inhalation of COCs to the extent these substances have been identified as being contained within soil, groundwater, or air/vapor at the Building 8 BCP Site. Exposed populations include workers under the current Building 8 BCP Site use scenario, and workers and occupants of the Building 8 BCP Site in future commercial or industrial use. The future Building 8 BCP Site use scenario includes the assumption that the existing ground surface may be disturbed (e.g. buildings and pavement removed). The rationale for the Building 8 BCP Site exposure setting is further described on Table VII.

In summary, exposure pathways for soil and groundwater are currently incomplete because there are controls on the Building 8 BCP Site that mitigate the potential for exposure to any reasonably anticipated current site occupant. These controls are, in effect, comparable in scope to "engineering controls" as defined in the relevant regulations of 6 NYCRR Part 375-1 including a surface cap, access

restriction/control, and lack of groundwater use that prevent the potential for exposure to the COCs. With respect to air/vapor, a complete exposure pathway to the COC currently exists within Building 8. The remedial technology and/or engineering/institutional control options to address this pathway will be evaluated as part of an Alternatives Analysis Report (AAR) for the Building 8 BCP Site.

Assessment of future conditions assume that yet to be defined commercial or industrial development may occur at the Site, which could involve the removal of the existing ground cover to accommodate new construction and/or result in groundwater extraction or use. Under these scenarios, the QHHEA process concludes that exposure pathways to certain receptor populations could potentially become temporarily complete. For groundwater, currently there is no complete exposure pathway given that groundwater is not currently used at the Building 8 BCP Site or the surrounding community as both are serviced by municipal water supply. However, should it be used in the future particularly for potable uses, the exposure pathway would be complete. The exposure pathway would also be complete via excavation activities if contaminated groundwater was encountered. The remedial technology and/or engineering/institutional control options to address these potential future exposure pathways will be evaluated as part of an Alternatives Analysis Report (AAR) for the Building 8 BCP Site.

6. CONCLUSIONS & RECOMMENDATIONS

In accordance with the NYSDEC BCA for the Building 8 BCP Site, GMCH has undertaken the RI as a "participant" to investigate the nature and extent of contaminants. The RI included a comprehensive exploration and sampling program designed to characterize soil and groundwater across the Building 8 BCP Site and soil vapor intrusion within Building 8.

This RI Report provides the results of the RI and incorporates previous Site investigation data and results in appendices. The RI has been completed consistent with the applicable NYSDEC 6 NYCRR Part 375 Regulations and related guidance documents (most notably the guidance criteria in NYSDEC DER-10), and the RIWP as approved by the NYSDEC in conjunction with the NYSDOH.

The information developed during the RI was used to evaluate if remedial actions are warranted to be protective of human health and the environment. GMCH anticipates that future use of the Building 8 BCP Site will be limited to commercial or industrial use.

6.1 Conclusions

Based on the previous Phase II investigations and this RI program, the following conclusions have been identified to meet the approved RIWP objectives and Building 8 BCP Site characterization requirements from the applicable regulatory and guidance documents described above:

- The nature and extent of soil, groundwater and soil vapor impacts at the Building 8 BCP Site has been determined from the information and data collected during the RI and the previous investigation activities completed at the GMCH facility since 2006.

- COCs in soil, groundwater, soil vapor, and indoor air at the Building 8 BCP Site consist of PCE, TCE, cis-1,2-DCE, and vinyl chloride.

- VOCs are currently present in sub-slab vapor and indoor air within the Building 8 BCP Site building.

- Because the majority of the ground surface is currently covered by the building floor slabs and/or paving, there are no currently complete exposure pathways to the impacted groundwater and/or soils.

- TCE, benzo(a)pyrene, arsenic, and lead were each detected above the soil cleanup objectives in soil samples collected from within the Building 8 BCP Site. The limited number of detections indicates that soil is not significantly impacted within the Building 8 BCP Site.

- COC contaminated groundwater is present within the Building 8 BCP Site and migrating in an easterly direction. Another source of COCs is present in the groundwater and down gradient (east) of Building 8 (Delphi Harrison Thermal Systems Site). However, natural attenuation is occurring and reducing the COC contamination to non-detectable levels at the GMCH Facility down gradient property line. Therefore, off-site groundwater contamination does not appear to be a concern.

- Groundwater is not currently used at the Building 8 BCP Site for potable or industrial purposes, nor are such uses reasonably anticipated in the future.

The RI results and conclusions as summarized above provided the input necessary for the Qualitative Human Health Exposure Assessment (QHHEA) for the Building 8 BCP Site that was prepared in accordance with applicable NYSDOH guidance. The QHHEA is used to determine whether any of the COCs identified at the Building 8 BCP Site could pose an existing or potential hazard to the exposed or potentially exposed populations. Results of the QHHEA include:

- There were no complete human health exposure pathways identified at the Building 8 BCP Site under the current Building 8 BCP Site conditions with respect to soil and groundwater. Access to impacted soils is mitigated by the building foundations and pavement. There is no potential exposure to COCs in groundwater as groundwater is not, nor is planned to be, used for potable or non-potable purposes.

- There is a complete exposure pathway from indoor air/sub-slab vapor within the Building 8 BCP Site building. This pathway will require mitigation as part of the Remedial Action program.

- The potential for future complete exposure pathways from inadvertent ingestion, dermal absorption, and inhalation of a COCs could potentially exist to the extent that the building foundations/pavement are removed and the soil and groundwater, and subsequently vapors becomes exposed at the ground surface; or if groundwater that does contain COCs is extracted in the future and used in a way that creates an exposure pathway. Appropriate remedial technologies and/or engineering/institutional controls for these potential future exposure pathways should be evaluated and implemented as part of the remedial program for the Building 8 BCP Site.

- Based on these RI results, remedial actions and/or engineering/institutional controls may be warranted to mitigate the potential for human or environmental exposure at the Building 8 BCP Site.

- The RI has produced a sufficient quantity and quality of data to support development of a an Analysis alternatives Report (AAR) and Remedial Action Work Plan (RAWP) as appropriate for current, intended, and reasonably anticipated future commercial or industrial use of the Building 8 BCP Site.

6.2 Recommendations

Consistent with the BCP, it is reasonable and appropriate to conclude that the potential future risk presented by exposure to COCs can be addressed for the Building 8 BCP Site. Potential soil and groundwater remediation and/or engineering/institutional controls scenarios should be considered to reduce contamination levels, mitigate the potential for soil vapor intrusion at the Building 8 BCP Site, and reduce the potential for contaminated groundwater to infiltrate the on-site sewer system.

Therefore, consistent with Section II.A.2 of the BCA, GMCH will prepare and submit an Alternatives Analysis Report (AAR) for the Building 8 BCP Site to document the remedial alternative screening process, and a Remedial Action Work Plan (RAWP) to detail the scope and implementation process for

the proposed institutional and engineering controls for the Building 8 BCP Site and other mitigation activities, if warranted.

7. REFERENCES

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Table I
Analytical Sample Summary Table
GMCH Lockport Facility
Building 8 BCP Site
Site #C932139

Location	Sample Identifier	Date Collected	Depth/ Interval (ft bgs)	Matrix	VOCs Method SW-846 8260B	SVOCs Method SW-846 8270C	PCBs Method SW-846 8081	Metals MethodSW-846 6010 7000 Series	EPA Method TO-15	Commets
SOIL SAMPLES										
8-SB-1	8-SB-1-122710-1545	12/27/10	4 to 6	Soil	X	X	X			
8-SB-2	8-SB-2-122710-1600	12/27/10	2 to 4	Soil	X					
8-SB-3	8-SB-3-122810-0830	12/28/10	8 to 11.5	Soil	X	X	X			MS/MSD
8-SB-4	8-SB-4-122810-0910	12/28/10	10 to 11	Soil	X	X	X			
8-SB-5	8-SB-5-122810-0940	12/28/10	10 to 11	Soil	X	X	X			
8-SB-6	8-SB-6-122810-1305	12/28/10	2 to 4	Soil				X		
8-SB-7	8-SB-7-122810-1315	12/28/10	2 to 4	Soil				X		
8-SB-8	8-SB-8-122810-1345	12/28/10	2 to 4	Soil				X		
8-SB-9	8-SB-9-122810-1400	12/28/10	2 to 4	Soil				X		
8-SB-10	8-SB-10-122810-1150	12/28/10	4 to 5	Soil	X	X	X	X		
8-SB-11	8-SB-11-122810-1140	12/28/10	2 to 4	Soil	X	X	X	X		
8-SB-12	8-SB-12-122810-1100	12/28/10	10 to 12	Soil	X	X	X			
8-SB-12	DUP-122810-0001	12/28/10	10 to 12	Soil	X	X	X	X		Dup of 8-SB-12-122810-1100
MW-8-1	MW-8-1-122910-0830	12/29/10	8 to 10	Soil	X					
MW-8-2	MW-8-2-122810-1015	12/28/10	8 to 10	Soil	X					
MW-8-3	MW-8-3-122710-1330	12/27/10	8 to 10	Soil	X					
MW-8-4	MW-8-4-1-5-11-1330	01/05/11	5 to 7	Soil	X					
QA/QC	EB-122910-0001	12/29/10	NA	Soil	X	X	X	X		Equipment Blank
GROUNDWATER SAMPLES										
MW-6-1	MW-6-1-042711-0945	4/27/2011	NA	GW	X					
MW-6-2	MW-6-2-042711-1145	4/27/2011	NA	GW	X					
MW-6-F-8	MW-6-F-8-042711-1320	4/27/2011	NA	GW	X					
MW-8-003-B	MW-8-003-B-042811-1515	4/28/2011	NA	GW	X					
MW-8-1	MW-8-1-042911-0915	4/29/2011	NA	GW	X					
MW-8-2	MW-8-2-042911-1130	4/29/2011	NA	GW	X					
MW-8-3	MW-8-3-050211-1245	5/2/2011	NA	GW	X					
MW-8-3	DUP-050211-001	5/2/2011	NA	GW	X					Dup of MW-8-3-050211-1245
MW-8-4	MW-8-4-050211-1330	5/2/2011	NA	GW	X					MS/MSD
Rinse Blank	BLDG-8-RINSE-042911-1700	4/29/2011	NA	GW	X					Rinse Blank
QA/QC	Trip Blank	5/2/2011	NA	GW	X					Trip Blank
VAPOR INTRUSION AIR SAMPLES										
8-VI-1IA	8-VI-1IA-011811-0747	01/18/11	NA	Indoor Air					X	
8-VI-DUP	8-VI-DUP-011811-0838	01/18/11	NA	Indoor Air					X	Dup of 8-VI-1IA-011811-0747
8-VI-1SS	8-VI-1SS-011811-0748	01/18/11	NA	Sub slab					X	
8-VI-2IA	8-VI-2IA-011811-0726	01/18/11	NA	Indoor Air					X	
8-VI-2SS	8-VI-2SS-011811-0728	01/18/11	NA	Sub slab					X	
8-VI-3IA	8-VI-3IA-011811-0735	01/18/11	NA	Indoor Air					X	
8-VI-3SS	8-VI-3SS-011811-0736	01/18/11	NA	Sub slab					X	
8-VI-4IA	8-VI-4IA-011811-0739	01/18/11	NA	Indoor Air					X	
8-VI-4SS	8-VI-4SS-011811-0738	01/18/11	NA	Sub slab					X	
8-VI-5IA	8-VI-5IA-011811-0742	01/18/11	NA	Indoor Air					X	
8-VI-5SS	8-VI-5SS-011811-0743	01/18/11	NA	Sub slab					X	
8-VI-OUT	8-VI-OUT-011811-0735	01/18/11	NA	Outdoor Air					X	

Notes:
1. ft bgs = feet below ground surface
2. GW = groundwater
3. VOCs = Volatile Organic Compounds
4. SVOCs = Semi-Volatile Organic Compounds
5. PCBs = Polychlorinated Biphenyls
6. TO-15 = Toxic Organic Compounds in Air
7. MS/MSD = Matrix Spike/Matrix Spike Duplicate
8. NA = Non Applicable
9. QA/QC = Quality Assurence/Quality Control Sample
10. EB = Equipment Blank
11. Dup = Duplicate Sample

TABLE II
SOIL ANALYTICAL RESULTS - BUILDING 8
GMCH LOCKPORT FACILITY
LOCKPORT, NEW YORK
BCP SITE #C932139

BUILDING				Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8
LOCATION	Protection of	Restricted	Restricted	8-SB-1	8-SB-2	8-SB-3	8-SB-4	8-SB-5	8-SB-6	8-SB-7	8-SB-8	8-SB-9	8-SB-10	8-SB-11
DATE	Groundwater	Commercial	Industrial	12/27/2010	12/27/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010
DEPTH	SCOs	SCOs	SCOs	4 - 6 ft BGS	2 - 4 ft BGS	8 - 11.5 ft BGS	10 - 11 ft BGS	10 - 11 ft BGS	2 - 4 ft BGS	2 - 4 ft BGS	2 - 4 ft BGS	2 - 4 ft BGS	4 - 5 ft BGS	2 - 4 ft BGS
SAMPLE TYPE	(PGWSCOs)	(CSCOs)	(ISCOs)	N	N	N	N	N	N	N	N	N	N	N
Metals (mg/kg)														
Aluminum	-	-	-	-	-	-	-	-	**10500**	**4840**	**11000**	**13900 J**	**8980**	**8650**
Antimony	-	-	-	-	-	-	-	-	1.0 U	1.1 U	**0.31 J**	**3.5 J**	1.1 U	1.1 U
Arsenic	16	16	16	-	-	-	-	-	**3.4**	**6.9**	**3.4**	**3.4**	**5.4**	**2.7**
Barium	820	400	10000	-	-	-	-	-	**85**	**58.5**	**110**	**110**	**80.8**	**62.5**
Beryllium	47	590	2700	-	-	-	-	-	**0.62**	**0.39 J**	**0.63**	**0.76**	**0.53**	**0.49**
Cadmium	7.5	9.3	60	-	-	-	-	-	0.50 U	0.54 U	**0.22 J**	**0.16 J**	0.56 U	0.54 U
Calcium	-	-	-	-	-	-	-	-	**37900**	**64100**	**57700**	**25400**	**25900**	**3640**
Chromium	-	1500	6800	-	-	-	-	-	**15.7**	**7.6**	**16.6**	**19.9**	**13.8**	**9.7**
Cobalt	-	-	-	-	-	-	-	-	**7.4**	**5.6**	**7.8**	**10.1 J**	**9.6**	**5.7**
Copper	1720	270	10000	-	-	-	-	-	**18.5**	**25.1**	**68.5**	**74.1 J**	**20.8**	**34.1**
Iron	-	-	-	-	-	-	-	-	**19100**	**15200**	**18900**	**21400**	**24800**	**16800**
Lead	450	1000	3900	-	-	-	-	-	**9.9**	**6.2**	**129**	**2420** [AB]	**12.8**	**12.4**
Magnesium	-	-	-	-	-	-	-	-	**8840**	**21200**	**12400**	**8750**	**7610**	**3430**
Manganese	2000	10000	10000	-	-	-	-	-	**754**	**938**	**635**	**553**	**534**	**1180**
Mercury	0.73	2.8	5.7	-	-	-	-	-	0.036 U	0.038 U	0.040 U	**0.016 J**	**0.018 J**	**0.025 J**
Nickel	130	310	10000	-	-	-	-	-	**17**	**9.8**	**18.1**	**22.3 J**	**15.3**	**12.5**
Potassium	-	-	-	-	-	-	-	-	**1460**	**584**	**1340**	**1520**	**980**	**533 J**
Selenium	4	1500	6800	-	-	-	-	-	0.50 U	0.54 U	0.56 U	0.52 U	0.56 U	0.54 U
Silver	8.3	1500	6800	-	-	-	-	-	**0.20 J**	**0.17 J**	**0.64**	**0.61**	**0.15 J**	**0.16 J**
Sodium	-	-	-	-	-	-	-	-	**88.0 J**	**84.0 J**	**119 J**	**115 J**	**95.6 J**	**13.9 J**
Thallium	-	-	-	-	-	-	-	-	1.0 U	1.1 U	1.1 U	1.0 U	1.1 U	1.1 U
Vanadium	-	-	-	-	-	-	-	-	**22.4**	**12.4**	**23.4**	**28.3**	**19.6**	**17.7**
Zinc	2480	10000	10000	-	-	-	-	-	**48.6**	**33.5**	**98.8**	**147 J**	**62.6**	**27.4**
PCBs (mg/kg)														
Aroclor-1016 (PCB-1016)	3.2	1	25	0.018 U	-	0.019 U	0.021 U	0.02 U	-	-	-	-	0.02 U	0.018 U
Aroclor-1221 (PCB-1221)	3.2	1	25	0.018 U	-	0.019 U	0.021 U	0.02 U	-	-	-	-	0.02 U	0.018 U
Aroclor-1232 (PCB-1232)	3.2	1	25	0.018 U	-	0.019 U	0.021 U	0.02 U	-	-	-	-	0.02 U	0.018 U
Aroclor-1242 (PCB-1242)	3.2	1	25	0.018 U	-	0.019 U	0.021 U	0.02 U	-	-	-	-	0.02 U	0.018 U
Aroclor-1248 (PCB-1248)	3.2	1	25	0.018 U	-	0.019 U	0.021 U	0.02 U	-	-	-	-	0.02 U	0.018 U
Aroclor-1254 (PCB-1254)	3.2	1	25	0.018 U	-	0.019 U	0.021 U	0.02 U	-	-	-	-	0.02 U	0.018 U
Aroclor-1260 (PCB-1260)	3.2	1	25	0.018 U	-	0.019 U	0.021 U	0.02 U	-	-	-	-	0.02 U	0.018 U
Semi-Volatile Organic Compounds (mg/kg)														
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	-	-	-	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	0.078 U	0.073 U
2,4,5-Trichlorophenol	0.1	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
2,4,6-Trichlorophenol	-	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
2,4-Dichlorophenol	0.4	-	-	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	0.078 U	0.073 U
2,4-Dimethylphenol	-	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
2,4-Dinitrophenol	0.2	-	-	1.9 U	-	1.9 U	2.2 U	2 U	-	-	-	-	2 U	1.9 U
2,4-Dinitrotoluene	-	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
2,6-Dinitrotoluene	0.17	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
2-Chloronaphthalene	-	-	-	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	0.078 U	0.073 U
2-Chlorophenol	-	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
2-Methylnaphthalene	36.4	-	-	0.075 U	-	0.076 U	**0.024 J**	0.08 U	-	-	-	-	0.078 U	0.073 U
2-Methylphenol	0.33	500	1000	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
2-Nitroaniline	0.4	-	-	1.9 U	-	1.9 U	2.2 U	2 U	-	-	-	-	2 U	1.9 U
2-Nitrophenol	0.3	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
3,3'-Dichlorobenzidine	-	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
3-Nitroaniline	0.5	-	-	1.9 U	-	1.9 U	2.2 U	2 U	-	-	-	-	2 U	1.9 U
4,6-Dinitro-2-methylphenol	-	-	-	1.9 U	-	1.9 U	2.2 U	2 U	-	-	-	-	2 U	1.9 U
4-Bromophenyl phenyl ether	-	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
4-Chloro-3-methylphenol	-	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
4-Chloroaniline	0.22	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
4-Chlorophenyl phenyl ether	-	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
4-Methylphenol	0.33	500	1000	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
4-Nitroaniline	-	-	-	1.9 U	-	1.9 U	2.2 U	2 U	-	-	-	-	2 U	1.9 U
4-Nitrophenol	0.1	-	-	1.9 U	-	1.9 U	2.2 U	2 U	-	-	-	-	2 U	1.9 U
Acenaphthene	98	500	1000	0.075 U	-	0.076 U	**0.033 J**	0.08 U	-	-	-	-	0.078 U	0.073 U

TABLE II
SOIL ANALYTICAL RESULTS - BUILDING 8
GMCH LOCKPORT FACILITY
LOCKPORT, NEW YORK
BCP SITE #C932139

BUILDING				Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8
LOCATION	Protection of	Restricted	Restricted	8-SB-1	8-SB-2	8-SB-3	8-SB-4	8-SB-5	8-SB-6	8-SB-7	8-SB-8	8-SB-9	8-SB-10	8-SB-11
DATE	Groundwater	Commercial	Industrial	12/27/2010	12/27/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010
DEPTH	SCOs	SCOs	SCOs	4 - 6 ft BGS	2 - 4 ft BGS	8 - 11.5 ft BGS	10 - 11 ft BGS	10 - 11 ft BGS	2 - 4 ft BGS	2 - 4 ft BGS	2 - 4 ft BGS	2 - 4 ft BGS	4 - 5 ft BGS	2 - 4 ft BGS
SAMPLE TYPE	(PGWSCOs)	(CSCOs)	(ISCOs)	N	N	N	N	N	N	N	N	N	N	N
Acenaphthylene	107	500	1000	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	0.078 U	0.073 U
Acetophenone	-	500	1000	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
Anthracene	1000	500	1000	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	**0.015 J**	0.073 U
Atrazine	-	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
Benzaldehyde	-	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
Benzo(a)anthracene	1	5.6	11	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	**0.064 J**	0.073 U
Benzo(a)pyrene	22	1	1.1	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	**0.066 J**	0.073 U
Benzo(b)fluoranthene	1.7	5.6	11	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	**0.094**	0.073 U
Benzo(g,h,i)perylene	1000	500	1000	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	**0.043 J**	0.073 U
Benzo(k)fluoranthene	1.7	56	110	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	0.078 U	0.073 U
Biphenyl (1,1-Biphenyl)	-	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
bis(2-Chloroethoxy)methane	-	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
bis(2-Chloroethyl)ether	-	-	-	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	0.078 U	0.073 U
bis(2-Ethylhexyl)phthalate (DEHP)	435	-	-	0.75 U	-	0.76 U	0.85 U	0.8 U	-	-	-	-	0.78 U	0.73 U
Butyl benzylphthalate (BBP)	122	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
Caprolactam	-	-	-	1.9 U	-	1.9 U	2.2 U	2 U	-	-	-	-	2 U	1.9 U
Carbazole	-	-	-	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	0.078 U	0.073 U
Chrysene	1	56	110	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	**0.067 J**	0.073 U
Dibenz(a,h)anthracene	1000	0.56	1.1	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	0.078 U	0.073 U
Dibenzofuran	6.2	500	1000	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
Diethyl phthalate	7.1	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
Dimethyl phthalate	27	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
Di-n-butylphthalate (DBP)	8.1	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
Di-n-octyl phthalate (DnOP)	120	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
Fluoranthene	1000	500	1000	**0.028 J**	-	0.076 U	**0.0096 J**	0.08 U	-	-	-	-	**0.12**	0.073 U
Fluorene	386	500	1000	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	0.078 U	0.073 U
Hexachlorobenzene	1.4	6	12	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	0.078 U	0.073 U
Hexachlorobutadiene	-	-	-	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	0.078 U	0.073 U
Hexachlorocyclopentadiene	-	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
Hexachloroethane	-	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
Indeno(1,2,3-cd)pyrene	8.2	5.6	11	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	**0.036 J**	0.073 U
Isophorone	4.4	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
Naphthalene	12	500	1000	0.075 U	-	0.076 U	**0.086**	0.08 U	-	-	-	-	0.078 U	0.073 U
Nitrobenzene	0.17	69	140	0.75 U	-	0.76 U	0.85 U	0.8 U	-	-	-	-	0.78 U	0.73 U
N-Nitrosodi-n-propylamine	-	-	-	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	0.078 U	0.073 U
N-Nitrosodiphenylamine	-	-	-	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
Pentachlorophenol	0.8	6.7	55	0.37 U	-	0.38 U	0.42 U	0.39 U	-	-	-	-	0.39 U	0.36 U
Phenanthrene	1000	500	1000	**0.024 J**	-	0.076 U	**0.042 J**	0.08 U	-	-	-	-	**0.064 J**	0.073 U
Phenol	0.33	500	1000	0.075 U	-	0.076 U	0.085 U	0.08 U	-	-	-	-	0.078 U	0.073 U
Pyrene	1000	500	1000	**0.022 J**	-	0.076 U	0.085 U	0.08 U	-	-	-	-	**0.095**	0.073 U
Total Solids (%)														
Total solids	-	-	-	**89.7**	**90.1**	**87.7**	**77.8**	**83.6**	**91.3**	**86.7**	**82.4**	**84.6**	**84.6**	**91.6**
Volatile Organic Compounds (mg/kg)														
1,1,1-Trichloroethane	0.68	500	1000	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
1,1,2,2-Tetrachloroethane	0.6	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
1,1,2-Trichloroethane	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
1,1-Dichloroethane	0.27	240	480	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
1,1-Dichloroethene	0.33	500	1000	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
1,2,4-Trichlorobenzene	3.4	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
1,2,4-Trimethylbenzene	3.6	190	380	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
1,2-Dibromoethane (Ethylene dibromide)	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
1,2-Dichlorobenzene	1.1	500	1000	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
1,2-Dichloroethane	0.02	30	60	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U

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LOCATION	Protection of	Restricted	Restricted	8-SB-1	8-SB-2	8-SB-3	8-SB-4	8-SB-5	8-SB-6	8-SB-7	8-SB-8	8-SB-9	8-SB-10	8-SB-11
DATE	Groundwater	Commercial	Industrial	12/27/2010	12/27/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010	12/28/2010
DEPTH	SCOs	SCOs	SCOs	4 - 6 ft BGS	2 - 4 ft BGS	8 - 11.5 ft BGS	10 - 11 ft BGS	10 - 11 ft BGS	2 - 4 ft BGS	2 - 4 ft BGS	2 - 4 ft BGS	2 - 4 ft BGS	4 - 5 ft BGS	2 - 4 ft BGS
SAMPLE TYPE	(PGWSCOs)	(CSCOs)	(ISCOs)	N	N	N	N	N	N	N	N	N	N	N
1,2-Dichloropropane	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
1,3,5-Trimethylbenzene	8.4	190	380	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	2.4	280	560	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
1,4-Dichlorobenzene	1.8	130	250	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
2-Butanone (Methyl ethyl ketone) (MEK)	0.3	500	1000	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
2-Hexanone	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
2-Phenylbutane (sec-Butylbenzene)	11	500	1000	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	1	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Acetone	0.05	500	1000	0.022 U	0.022 U	0.11 U	**0.056 J** [A]	0.12 U	-	-	-	-	0.024 U	0.022 U
Benzene	0.06	44	89	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Bromodichloromethane	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Bromoform	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Bromomethane (Methyl bromide)	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Carbon disulfide	2.7	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Carbon tetrachloride	0.76	22	44	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Chlorobenzene	1.1	500	1000	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Chloroethane	1.9	350	700	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Chloroform (Trichloromethane)	0.37	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Chloromethane (Methyl chloride)	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
cis-1,2-Dichloroethene	0.25	500	1000	**0.029**	0.0056 U	**0.4** [A]	**0.27** [A]	**0.7** [A]	-	-	-	-	**0.0017 J**	0.0055 U
cis-1,3-Dichloropropene	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Cyclohexane	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Cymene (p-Isopropyltoluene)	10	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Dichlorodifluoromethane (CFC-12)	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Ethylbenzene	1	390	780	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Isopropyl benzene	2.3	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
m&p-Xylenes	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Methyl cyclohexane	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Methyl tert butyl ether (MTBE)	0.93	500	1000	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Methylene chloride	0.05	500	1000	0.0056 U	**0.001 J**	0.029 U	**0.015 J**	**0.0077 J**	-	-	-	-	**0.0017 J**	**0.0018 J**
N-Butylbenzene	12	500	1000	-	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	3.9	500	1000	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
tert-Butylbenzene	5.9	500	1000	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	1.3	150	300	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Toluene	0.7	500	1000	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
trans-1,2-Dichloroethene	0.19	500	1000	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
trans-1,3-Dichloropropene	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Trichloroethene	0.47	200	400	**0.00096 J**	0.0056 U	**0.0056 J**	**0.45**	**0.012 J**	-	-	-	-	0.0059 U	0.0055 U
Trichlorofluoromethane (CFC-11)	-	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Trifluorotrichloroethane (Freon 113)	6	-	-	0.0056 U	0.0056 U	0.029 U	0.032 U	0.03 U	-	-	-	-	0.0059 U	0.0055 U
Vinyl chloride	0.02	13	27	0.0056 U	0.0056 U	0.029 U	0.032 U	**0.0062 J**	-	-	-	-	0.0059 U	0.0055 U
Xylenes (total)	1.6	500	1000	0.017 U	0.017 U	0.086 U	0.096 U	0.09 U	-	-	-	-	0.018 U	0.016 U

Notes and Abbreviations:

1. Results shown in red exceed the following criteria:
   [A]: Protection of Groundwater Criteria
   [B]: Restricted Commercial Criteria
   [C]: Restricted Industrial Criteria
2. Results shown in **bold** were detected.
3. U - Results not detected above shown reporting limit.
   J - Estimated result
4. Sample Types: N - Normal Sample, FD- Field Duplicate
5. Data compared to the NYSDEC Soil Cleanup Objectives (NYCRR Part 375)
6. The SCOs for trivalent chromium were used as the criteria for total chromium data.

TABLE II
SOIL ANALYTICAL RESULTS - BUILDING 8
GMCH LOCKPORT FACILITY
LOCKPORT, NEW YORK
BCP SITE #C932139

BUILDING LOCATION DATE DEPTH SAMPLE TYPE	Protection of Groundwater SCOs (PGWSCOs)	Restricted Commercial SCOs (CSCOs)	Restricted Industrial SCOs (ISCOs)	Building 8 8-SB-12 12/28/2010 10 - 12 ft BGS FD	Building 8 8-SB-12 12/28/2010 10 - 12 ft BGS N	Building 8 BLDG 8-1 5/24/2005 4 - 6 ft N	Building 8 BLDG 8-2 5/24/2005 4 - 7 ft N	Building 8 MW-8-1 12/29/2010 8 - 10 ft BGS N	Building 8 MW-8-2 12/28/2010 8 - 10 ft BGS N	Building 8 MW-8-3 12/27/2010 8 - 10 ft BGS N	Building 8 MW-8-4 1/5/2011 5 - 7 ft BGS N
Metals (mg/kg)											
Aluminum	-	-	-	**7610**	**7330**	-	-	-	-	-	-
Antimony	-	-	-	1.1 U	1.0 U	-	-	-	-	-	-
Arsenic	16	16	16	**2.4**	**3.2**	-	-	-	-	-	-
Barium	820	400	10000	**64**	**43.7**	-	-	-	-	-	-
Beryllium	47	590	2700	**0.5**	**0.49**	-	-	-	-	-	-
Cadmium	7.5	9.3	60	0.57 U	0.51 U	-	-	-	-	-	-
Calcium	-	-	-	**64600**	**41300**	-	-	-	-	-	-
Chromium	-	1500	6800	**12.6**	**12**	-	-	-	-	-	-
Cobalt	-	-	-	**7.7**	**7.5**	-	-	-	-	-	-
Copper	1720	270	10000	**15.4**	**12.8**	-	-	-	-	-	-
Iron	-	-	-	**16300**	**17300**	-	-	-	-	-	-
Lead	450	1000	3900	**4.8**	**3.9**	-	-	-	-	-	-
Magnesium	-	-	-	**9640**	**8240**	-	-	-	-	-	-
Manganese	2000	10000	10000	**614**	**598**	-	-	-	-	-	-
Mercury	0.73	2.8	5.7	0.043 U	0.040 U	-	-	-	-	-	-
Nickel	130	310	10000	**16.1**	**16.3**	-	-	-	-	-	-
Potassium	-	-	-	**1450**	**1130**	-	-	-	-	-	-
Selenium	4	1500	6800	0.57 U	0.51 U	-	-	-	-	-	-
Silver	8.3	1500	6800	**0.16 J**	**0.13 J**	-	-	-	-	-	-
Sodium	-	-	-	**217 J**	**171 J**	-	-	-	-	-	-
Thallium	-	-	-	1.1 U	1.0 U	-	-	-	-	-	-
Vanadium	-	-	-	**19**	**19.1**	-	-	-	-	-	-
Zinc	2480	10000	10000	**38.2**	**32.8**	-	-	-	-	-	-
PCBs (mg/kg)											
Aroclor-1016 (PCB-1016)	3.2	1	25	0.022 U	0.02 U	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	3.2	1	25	0.022 U	0.02 U	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	3.2	1	25	0.022 U	0.02 U	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	3.2	1	25	0.022 U	0.02 U	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	3.2	1	25	0.022 U	0.02 U	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	3.2	1	25	0.022 U	0.02 U	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	3.2	1	25	0.022 U	0.02 U	-	-	-	-	-	-
Semi-Volatile Organic Compounds (mg/kg)											
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	-	-	-	0.086 U	0.08 U	-	-	-	-	-	-
2,4,5-Trichlorophenol	0.1	-	-	0.42 U	0.39 U	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	0.42 U	0.39 U	-	-	-	-	-	-
2,4-Dichlorophenol	0.4	-	-	0.086 U	0.08 U	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	0.42 U	0.39 U	-	-	-	-	-	-
2,4-Dinitrophenol	0.2	-	-	2.2 U	2 U	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	0.42 U	0.39 U	-	-	-	-	-	-
2,6-Dinitrotoluene	0.17	-	-	0.42 U	0.39 U	-	-	-	-	-	-
2-Chloronaphthalene	-	-	-	0.086 U	0.08 U	-	-	-	-	-	-
2-Chlorophenol	-	-	-	0.42 U	0.39 U	-	-	-	-	-	-
2-Methylnaphthalene	36.4	-	-	0.086 U	0.08 U	-	-	-	-	-	-
2-Methylphenol	0.33	500	1000	0.42 U	0.39 U	-	-	-	-	-	-
2-Nitroaniline	0.4	-	-	2.2 U	2 U	-	-	-	-	-	-
2-Nitrophenol	0.3	-	-	0.42 U	0.39 U	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	0.42 U	0.39 U	-	-	-	-	-	-
3-Nitroaniline	0.5	-	-	2.2 U	2 U	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	2.2 U	2 U	-	-	-	-	-	-
4-Bromophenyl phenyl ether	-	-	-	0.42 U	0.39 U	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	0.42 U	0.39 U	-	-	-	-	-	-
4-Chloroaniline	0.22	-	-	0.42 U	0.39 U	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	-	-	-	0.42 U	0.39 U	-	-	-	-	-	-
4-Methylphenol	0.33	500	1000	0.42 U	0.39 U	-	-	-	-	-	-
4-Nitroaniline	-	-	-	2.2 U	2 U	-	-	-	-	-	-
4-Nitrophenol	0.1	-	-	2.2 U	2 U	-	-	-	-	-	-
Acenaphthene	98	500	1000	0.086 U	0.08 U	0.33 U	0.33 U	-	-	-	-

TABLE II
SOIL ANALYTICAL RESULTS - BUILDING 8
GMCH LOCKPORT FACILITY
LOCKPORT, NEW YORK
BCP SITE #C932139

BUILDING LOCATION DATE DEPTH SAMPLE TYPE	Protection of Groundwater SCOs (PGWSCOs)	Restricted Commercial SCOs (CSCOs)	Restricted Industrial SCOs (ISCOs)	Building 8 8-SB-12 12/28/2010 10 - 12 ft BGS FD	Building 8 8-SB-12 12/28/2010 10 - 12 ft BGS N	Building 8 BLDG 8-1 5/24/2005 4 - 6 ft N	Building 8 BLDG 8-2 5/24/2005 4 - 7 ft N	Building 8 MW-8-1 12/29/2010 8 - 10 ft BGS N	Building 8 MW-8-2 12/28/2010 8 - 10 ft BGS N	Building 8 MW-8-3 12/27/2010 8 - 10 ft BGS N	Building 8 MW-8-4 1/5/2011 5 - 7 ft BGS N
Acenaphthylene	107	500	1000	0.086 U	0.08 U	-	-	-	-	-	-
Acetophenone	-	500	1000	0.42 U	0.39 U	-	-	-	-	-	-
Anthracene	1000	500	1000	0.086 U	0.08 U	0.33 U	0.33 U	-	-	-	-
Atrazine	-	-	-	0.42 U	0.39 U	-	-	-	-	-	-
Benzaldehyde	-	-	-	0.42 U	0.39 U	-	-	-	-	-	-
Benzo(a)anthracene	1	5.6	11	0.086 U	0.08 U	-	-	-	-	-	-
Benzo(a)pyrene	22	1	1.1	0.086 U	0.08 U	0.33 U	0.33 U	-	-	-	-
Benzo(b)fluoranthene	1.7	5.6	11	0.086 U	0.08 U	0.33 U	0.33 U	-	-	-	-
Benzo(g,h,i)perylene	1000	500	1000	0.086 U	0.08 U	0.33 U	0.33 U	-	-	-	-
Benzo(k)fluoranthene	1.7	56	110	0.086 U	0.08 U	0.33 U	0.33 U	-	-	-	-
Biphenyl (1,1-Biphenyl)	-	-	-	0.42 U	0.39 U	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	0.42 U	0.39 U	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	0.086 U	0.08 U	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	435	-	-	0.86 U	0.8 U	-	-	-	-	-	-
Butyl benzylphthalate (BBP)	122	-	-	0.42 U	0.39 U	-	-	-	-	-	-
Caprolactam	-	-	-	2.2 U	2 U	-	-	-	-	-	-
Carbazole	-	-	-	0.086 U	0.08 U	-	-	-	-	-	-
Chrysene	1	56	110	0.086 U	0.08 U	0.33 U	0.33 U	-	-	-	-
Dibenz(a,h)anthracene	1000	0.56	1.1	0.086 U	0.08 U	0.33 U	0.33 U	-	-	-	-
Dibenzofuran	6.2	500	1000	0.42 U	0.39 U	-	-	-	-	-	-
Diethyl phthalate	7.1	-	-	0.42 U	0.39 U	-	-	-	-	-	-
Dimethyl phthalate	27	-	-	0.42 U	0.39 U	-	-	-	-	-	-
Di-n-butylphthalate (DBP)	8.1	-	-	0.42 U	0.39 U	-	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	120	-	-	0.42 U	0.39 U	-	-	-	-	-	-
Fluoranthene	1000	500	1000	0.086 U	0.08 U	**0.39**	0.33 U	-	-	-	-
Fluorene	386	500	1000	0.086 U	0.08 U	0.33 U	0.33 U	-	-	-	-
Hexachlorobenzene	1.4	6	12	0.086 U	0.08 U	-	-	-	-	-	-
Hexachlorobutadiene	-	-	-	0.086 U	0.08 U	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	0.42 U	0.39 U	-	-	-	-	-	-
Hexachloroethane	-	-	-	0.42 U	0.39 U	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	8.2	5.6	11	0.086 U	0.08 U	0.33 U	0.33 U	-	-	-	-
Isophorone	4.4	-	-	0.42 U	0.39 U	-	-	-	-	-	-
Naphthalene	12	500	1000	0.086 U	0.08 U	0.33 U	0.33 U	-	-	-	-
Nitrobenzene	0.17	69	140	0.86 U	0.8 U	-	-	-	-	-	-
N-Nitrosodi-n-propylamine	-	-	-	0.086 U	0.08 U	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	0.42 U	0.39 U	-	-	-	-	-	-
Pentachlorophenol	0.8	6.7	55	0.42 U	0.39 U	-	-	-	-	-	-
Phenanthrene	1000	500	1000	0.086 U	0.08 U	**0.45**	0.33 U	-	-	-	-
Phenol	0.33	500	1000	0.086 U	0.08 U	-	-	-	-	-	-
Pyrene	1000	500	1000	0.086 U	0.08 U	**0.4**	0.33 U	-	-	-	-
Total Solids (%)											
Total solids	-	-	-	**77.3**	**83.2**	**86.9**	**87.8**	**88**	**84.8**	**88.1**	**86**
Volatile Organic Compounds (mg/kg)											
1,1,1-Trichloroethane	0.68	500	1000	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
1,1,2,2-Tetrachloroethane	0.6	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
1,1,2-Trichloroethane	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
1,1-Dichloroethane	0.27	240	480	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
1,1-Dichloroethene	0.33	500	1000	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
1,2,4-Trichlorobenzene	3.4	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
1,2,4-Trimethylbenzene	3.6	190	380	-	-	0.2 U	0.2 U	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
1,2-Dibromoethane (Ethylene dibromide)	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
1,2-Dichlorobenzene	1.1	500	1000	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
1,2-Dichloroethane	0.02	30	60	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U

TABLE II
SOIL ANALYTICAL RESULTS - BUILDING 8
GMCH LOCKPORT FACILITY
LOCKPORT, NEW YORK
BCP SITE #C932139

BUILDING				Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8
LOCATION	Protection of	Restricted	Restricted	8-SB-12	8-SB-12	BLDG 8-1	BLDG 8-2	MW-8-1	MW-8-2	MW-8-3	MW-8-4
DATE	Groundwater	Commercial	Industrial	12/28/2010	12/28/2010	5/24/2005	5/24/2005	12/29/2010	12/28/2010	12/27/2010	1/5/2011
DEPTH	SCOs	SCOs	SCOs	10 - 12 ft BGS	10 - 12 ft BGS	4 - 6 ft	4 - 7 ft	8 - 10 ft BGS	8 - 10 ft BGS	8 - 10 ft BGS	5 - 7 ft BGS
SAMPLE TYPE	(PGWSCOs)	(CSCOs)	(ISCOs)	FD	N	N	N	N	N	N	N
1,2-Dichloropropane	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
1,3,5-Trimethylbenzene	8.4	190	380	-	-	0.2 U	0.2 U	-	-	-	-
1,3-Dichlorobenzene	2.4	280	560	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
1,4-Dichlorobenzene	1.8	130	250	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
2-Butanone (Methyl ethyl ketone) (MEK)	0.3	500	1000	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
2-Hexanone	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
2-Phenylbutane (sec-Butylbenzene)	11	500	1000	-	-	0.2 U	0.2 U	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	1	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Acetone	0.05	500	1000	0.026 U	0.024 U	-	-	0.023 U	0.024 U	0.023 U	0.023 U
Benzene	0.06	44	89	0.0065 U	0.006 U	0.2 U	0.2 U	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Bromodichloromethane	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Bromoform	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Bromomethane (Methyl bromide)	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Carbon disulfide	2.7	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Carbon tetrachloride	0.76	22	44	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Chlorobenzene	1.1	500	1000	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Chloroethane	1.9	350	700	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Chloroform (Trichloromethane)	0.37	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Chloromethane (Methyl chloride)	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
cis-1,2-Dichloroethene	0.25	500	1000	**0.004 J**	**0.0031 J**	-	-	**0.0012 J**	**0.01**	**0.0021 J**	0.0058 U
cis-1,3-Dichloropropene	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Cyclohexane	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Cymene (p-Isopropyltoluene)	10	-	-	-	-	0.2 U	0.2 U	-	-	-	-
Dibromochloromethane	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Dichlorodifluoromethane (CFC-12)	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Ethylbenzene	1	390	780	0.0065 U	0.006 U	0.2 U	0.2 U	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Isopropyl benzene	2.3	-	-	0.0065 U	0.006 U	0.2 U	0.2 U	0.0057 U	0.0059 U	0.0057 U	0.0058 U
m&p-Xylenes	-	-	-	-	-	0.2 U	0.2 U	-	-	-	-
Methyl acetate	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Methyl cyclohexane	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Methyl tert butyl ether (MTBE)	0.93	500	1000	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Methylene chloride	0.05	500	1000	**0.001 J**	**0.00095 J**	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
N-Butylbenzene	12	500	1000	-	-	0.2 U	0.2 U	-	-	-	-
N-Propylbenzene	3.9	500	1000	-	-	0.2 U	0.2 U	-	-	-	-
o-Xylene	-	-	-	-	-	0.2 U	0.2 U	-	-	-	-
Styrene	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
tert-Butylbenzene	5.9	500	1000	-	-	0.2 U	0.2 U	-	-	-	-
Tetrachloroethene	1.3	150	300	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Toluene	0.7	500	1000	0.0065 U	0.006 U	0.2 U	0.2 U	0.0057 U	0.0059 U	0.0057 U	0.0058 U
trans-1,2-Dichloroethene	0.19	500	1000	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
trans-1,3-Dichloropropene	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Trichloroethene	0.47	200	400	**0.0082**	**0.0086**	-	-	0.0057 U	**0.039**	0.0057 U	0.0058 U
Trichlorofluoromethane (CFC-11)	-	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Trifluorotrichloroethane (Freon 113)	6	-	-	0.0065 U	0.006 U	-	-	0.0057 U	0.0059 U	0.0057 U	0.0058 U
Vinyl chloride	0.02	13	27	0.0065 U	0.006 U	-	-	0.0057 U	**0.0012 J**	0.0057 U	0.0058 U
Xylenes (total)	1.6	500	1000	0.019 U	0.018 U	0.2 U	0.2 U	0.017 U	0.018 U	0.017 U	0.017 U

Notes and Abbreviations:

1. Results shown in red exceed the following criteria:
   [A]: Protection of Groundwater Criteria
   [B]: Restricted Commercial Criteria
   [C]: Restricted Industrial Criteria
2. Results shown in **bold** were detected.
3. U - Results not detected above shown reporting limit.
   J - Estimated result
4. Sample Types: N - Normal Sample, FD- Field Duplicate
5. Data compared to the NYSDEC Soil Cleanup Objectives (NYCRR Part 375)
6. The SCOs for trivalent chromium were used as the criteria for total chromium data.

TABLE III
GROUNDWATER ANALYTICAL RESULTS - BUILDING 8
GMCH LOCKPORT FACILITY
LOCKPORT, NEW YORK
BCP SITE #C932139

BUILDING	Class GA	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 6	Building 6	Building 6
LOCATION	TOGS 1.1.1	MW-8-003-B	MW-8-1	MW-8-2	MW-8-3	MW-8-3	MW-8-4	MW-6-1	MW-6-2	MW-6-F-8
DATE		4/28/2011	4/29/2011	4/29/2011	5/2/2011	5/2/2011	5/2/2011	4/27/2011	4/27/2011	4/27/2011
SAMPLE TYPE	ug/L	N	N	N	FD	N	N	N	N	N
Volatile Organic Compounds (ug/L)										
cis-1,2-Dichloroethene	5	**190** [A]	**0.86 J**	**9300** [A]	**5**	**4.3**	**68** [A]	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	**300** [A]	1.0 U	40 U	**1.9**	**1.7**	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	5.0 U	1.0 U	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	**110** [A]	1.0 U	**660** [A]	**9.3** [A]	**6** [A]	**12** [A]	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	**19** [A]	1.0 U	**270** [A]	1.0 U	1.0 U	**17** [A]	1.0 U	1.0 U	1.0 U

Notes and Abbreviations:

1. Results shown in red exceed:
   [A]: Indicates result is greater than TOGS 1.1.1
2. Results shown in **bold** were detected.
3. U - Results not detected above shown reporting limit.
   J - Estimated result
4. Sample Types: N - Normal Sample, FD- Field Duplicate
5. Compounds compared to the NYSDEC Technical and Operational Guidance Series Glass GA Standards & Guidance (TOGS 1.1.1), June 1998 (Amended April 2000)

TABLE IV
SITE-WIDE GROUNDWATER ANALYTICAL RESULTS
GMCH LOCKPORT FACILITY
LOCKPORT, NEW YORK

LOCATION DESCRIPTION	Class GA	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 7	Building 7	Building 7
LOCATION	TOGS 1.1.1	MW-6-1	MW-6-1	MW-6-1	MW-6-1	MW-6-2	MW-6-2	MW-6-2	MW-6-2	MW-6-2	MW-6-F-7	MW-6-F-7	MW-6-F-8	MW-6-F-8	MW-6-F-8	MW-6-F-9	MW-6-F-9	MW-7-1	MW-7-1	MW-7-1
DATE		11/30/2007	2/20/2008	8/14/2008	4/27/2011	11/29/2007	2/20/2008	4/15/2008	8/14/2008	4/27/2011	8/13/2008	11/5/2008	8/13/2008	11/5/2008	4/27/2011	8/13/2008	11/5/2008	11/30/2007	2/20/2008	4/27/2011
SAMPLE TYPE	ug/L	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Metals (ug/l)																				
Calcium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron (dissolved)	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium	35000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium (dissolved)	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manganese	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manganese (dissolved)	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potassium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potassium (dissolved)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium	20000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium (dissolved)	20000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous (ug/l)																				
Total organic carbon (TOC)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Natural Attenuation Parameters (ug/l)																				
Alkalinity, total (as CaCO3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia-N	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrate (as N)	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrite (as N)	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfide	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Semi-Volatile Organic Compounds (ug/l)																				
Acenaphthene	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-ethylhexyl)phthalate	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (ug/l)																				
1,1,1-Trichloroethane	5	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
1,1,2,2-Tetrachloroethane	5	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
1,1,2-Trichloroethane	1	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
1,1-Dichloroethane	5	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
1,1-Dichloroethene	5	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
1,2,3-Trichlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	0.0006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	3	2 U	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-
1,2-Dichloroethane	0.6	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
1,2-Dichloroethene (total)	5	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	**2.4**	2 U	4 U	-	2 U	4 U	**8** [A]	2 U	-
1,2-Dichloropropane	1	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
1,3-Dichlorobenzene	3	2 U	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-
1,4-Dichlorobenzene	3	2 U	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	50	-	10 U	2 U	-	-	10 U	10 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	-	10 U	-
2-Chloroethyl vinyl ether	-	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	4 U	2 U	4 U	-	2 U	4 U	2 U	2 U	-
2-Hexanone	50	-	10 U	2 U	-	-	10 U	10 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	-	10 U	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK	50	-	10 U	2 U	-	-	10 U	10 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	-	10 U	-
Acetone	50	-	10 U	2 U	-	-	10 U	10 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	-	10 U	-
Acrolein	5	10 U	-	-	-	10 U	-	-	-	-	-	-	-	-	-	-	-	10 U	-	-
Acrylonitrile	0.07	10 U	-	-	-	10 U	-	-	-	-	-	-	-	-	-	-	-	10 U	-	-
Benzene	1	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	**3** [A]	2 U	-
Bromodichloromethane	50	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-

TABLE IV
SITE-WIDE GROUNDWATER ANALYTICAL RESULTS
GMCH LOCKPORT FACILITY
LOCKPORT, NEW YORK

LOCATION DESCRIPTION	Class GA	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 6	Building 7	Building 7	Building 7
LOCATION	TOGS 1.1.1	MW-6-1	MW-6-1	MW-6-1	MW-6-1	MW-6-2	MW-6-2	MW-6-2	MW-6-2	MW-6-2	MW-6-F-7	MW-6-F-7	MW-6-F-8	MW-6-F-8	MW-6-F-8	MW-6-F-9	MW-6-F-9	MW-7-1	MW-7-1	MW-7-1
DATE		11/30/2007	2/20/2008	8/14/2008	4/27/2011	11/29/2007	2/20/2008	4/15/2008	8/14/2008	4/27/2011	8/13/2008	11/5/2008	8/13/2008	11/5/2008	4/27/2011	8/13/2008	11/5/2008	11/30/2007	2/20/2008	4/27/2011
SAMPLE TYPE	ug/L	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Bromoform	50	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
Bromomethane (Methyl bromide)	5	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
Carbon disulfide	-	-	2 U	2 U	-	-	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-
Carbon tetrachloride	5	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
Chlorobenzene	5	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
Chlorobromomethane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	5	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
Chloroform (Trichloromethane)	7	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
Chloromethane (Methyl chloride)	5	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
cis-1,2-Dichloroethene	5	-	2 U	2 U	1.0 U	-	2 U	2 U	2 U	1.0 U	2 U	**2.4**	2 U	2 U	1.0 U	2 U	2 U	-	2 U	1.0 U
cis-1,3-Dichloropropene	0.4	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
Dibromochloromethane	50	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
Dichlorodifluoromethane (CFC-12)	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	5	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
Isopropyl benzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m&p-Xylenes	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride	5	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
o-Xylene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	5	-	2 U	2 U	-	-	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-
Tetrachloroethene	5	2 U	2 U	2 U	1.0 U	2 U	2 U	2 U	2 U	1.0 U	2 U	2 U	2 U	2 U	1.0 U	2 U	2 U	2 U	2 U	1.0 U
Toluene	5	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	7 [A]	2 U	-
trans-1,2-Dichloroethene	5	-	2 U	2 U	1.0 U	-	2 U	2 U	2 U	1.0 U	2 U	2 U	2 U	2 U	1.0 U	2 U	2 U	-	2 U	1.0 U
trans-1,3-Dichloropropene	0.4	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-
Trichloroethene	5	2 U	2 U	2 U	1.0 U	25 [A]	2 U	**4**	2 U	1.0 U	2 U	2 U	2 U	2 U	1.0 U	2 U	2 U	110 [A]	56 [A]	1.0 U
Trichlorofluoromethane (CFC-11)	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl acetate	-	-	2 U	2 U	-	-	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-
Vinyl chloride	2	2 U	2 U	2 U	1.0 U	2 U	2 U	2 U	2 U	1.0 U	2 U	2 U	2 U	2 U	1.0 U	2 U	2 U	2 U	2 U	1.0 U
Xylenes (total)	5	-	2 U	2 U	-	-	2 U	2 U	2 U	-	2 U	6 U	2 U	6 U	-	2 U	6 U	-	2 U	-

Notes and Abbreviations:

1. Results shown in red exceed:
   [A]: Indicates result is greater than TOGS 1.1.1
2. Results shown in bold were detected.
3. U - Results not detected above shown reporting limit.
   J - Estimated result
4. Sample Types: N - Normal Sample, FD- Field Duplicate
5. Compounds compared to the NYSDEC Technical and Operational Guidance Series Glass GA Standards & Guidance (TOGS 1.1.1), June 1998 (Amended April 2000)

TABLE IV
SITE-WIDE GROUNDWATER ANALYTICAL RESULTS
GMCH LOCKPORT FACILITY
LOCKPORT, NEW YORK

LOCATION DESCRIPTION	Class GA	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 8
LOCATION	TOGS 1.1.1	MW-7-2	MW-7-2	MW-7-2	MW-7-2	MW-7-3	MW-7-3	MW-7-3	MW-7-4	MW-7-4	MW-7-5	MW-7-5	MW-7-6	MW-7-7	MW-7-8	MW-7-A-6	MW-7-C-2	MW-7-P-1	MW-8-003-B
DATE		11/29/2007	2/20/2008	8/13/2008	4/27/2011	11/29/2007	2/20/2008	4/27/2011	8/14/2008	4/27/2011	4/28/2011	4/28/2011	4/27/2011	4/28/2011	4/28/2011	4/28/2011	4/29/2011	4/28/2011	4/28/2011
SAMPLE TYPE	ug/L	N	N	N	N	N	N	N	N	N	FD	N	N	N	N	N	N	N	N
Metals (ug/l)																			
Calcium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron (dissolved)	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium	35000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium (dissolved)	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manganese	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manganese (dissolved)	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potassium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potassium (dissolved)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium	20000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium (dissolved)	20000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous (ug/l)																			
Total organic carbon (TOC)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Natural Attenuation Parameters (ug/l)																			
Alkalinity, total (as CaCO3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia-N	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrate (as N)	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrite (as N)	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfide	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Semi-Volatile Organic Compounds (ug/l)																			
Acenaphthene	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-ethylhexyl)phthalate	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (ug/l)																			
1,1,1-Trichloroethane	5	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	5	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	1	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	5	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	5	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	0.0006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	3	2 U	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.6	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethene (total)	5	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	1	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	3	2 U	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	3	2 U	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	50	-	10 U	2 U	-	-	10 U	-	2 U	-	-	-	-	-	-	-	-	-	-
2-Chloroethyl vinyl ether	-	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
2-Hexanone	50	-	10 U	2 U	-	-	10 U	-	2 U	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK	50	-	10 U	2 U	-	-	10 U	-	2 U	-	-	-	-	-	-	-	-	-	-
Acetone	50	-	10 U	2 U	-	-	10 U	-	2 U	-	-	-	-	-	-	-	-	-	-
Acrolein	5	10 U	-	-	-	10 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Acrylonitrile	0.07	10 U	-	-	-	10 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	1	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	50	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-

TABLE IV
SITE-WIDE GROUNDWATER ANALYTICAL RESULTS
GMCH LOCKPORT FACILITY
LOCKPORT, NEW YORK

LOCATION DESCRIPTION	Class GA	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 7	Building 8
LOCATION	TOGS 1.1.1	MW-7-2	MW-7-2	MW-7-2	MW-7-2	MW-7-3	MW-7-3	MW-7-3	MW-7-4	MW-7-4	MW-7-5	MW-7-5	MW-7-6	MW-7-7	MW-7-8	MW-7-A-6	MW-7-C-2	MW-7-P-1	MW-8-003-B
DATE		11/29/2007	2/20/2008	8/13/2008	4/27/2011	11/29/2007	2/20/2008	4/27/2011	8/14/2008	4/27/2011	4/28/2011	4/28/2011	4/27/2011	4/28/2011	4/28/2011	4/28/2011	4/29/2011	4/28/2011	4/28/2011
SAMPLE TYPE	ug/L	N	N	N	N	N	N	N	N	N	FD	N	N	N	N	N	N	N	N
Bromoform	50	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	5	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	-	-	2 U	2 U	-	-	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	5	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	5	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
Chlorobromomethane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	5	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	7	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	5	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	5	-	2 U	2 U	1.0 U	-	2 U	**8.6** [A]	2 U	1.0 U	**640** [A]	**680** [A]	**350** [A]	200 U	**29** [A]	**16000** [A]	**230** [A]	**6.2** [A]	**190** [A]
cis-1,3-Dichloropropene	0.4	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	50	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	5	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
Isopropyl benzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m&p-Xylenes	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride	5	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
o-Xylene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	5	-	2 U	2 U	-	-	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	5	2 U	2 U	2 U	1.0 U	2 U	2 U	1.0 U	2 U	1.0 U	**8800** [A]	**8900** [A]	**470** [A]	**26000** [A]	**290** [A]	**140000** [A]	1.0 U	**0.57 J**	**300** [A]
Toluene	5	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	5	-	2 U	2 U	1.0 U	-	2 U	1.0 U	2 U	1.0 U	200 U	**7.4** [A]	**2.7**	200 U	4.0 U	2000 U	1.0 U	**4.9**	5.0 U
trans-1,3-Dichloropropene	0.4	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
Trichloroethene	5	2 U	2 U	2 U	1.0 U	2 U	2 U	1.0 U	2 U	1.0 U	**870** [A]	**890** [A]	**240** [A]	200 U	**100** [A]	**19000** [A]	1.0 U	**2.1**	**110** [A]
Trichlorofluoromethane (CFC-11)	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl acetate	-	-	20 U	2 U	-	-	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	2	2 U	2 U	2 U	1.0 U	2 U	2 U	**46** [A]	2 U	1.0 U	200 U	**5.8** [A]	**35** [A]	200 U	4.0 U	2000 U	**12** [A]	**27** [A]	**19** [A]
Xylenes (total)	5	-	2 U	2 U	-	-	2 U	-	2 U	-	-	-	-	-	-	-	-	-	-

Notes and Abbreviations:

1. Results shown in red exceed:
   [A]: Indicates result is greater than TOGS 1.1.1
2. Results shown in bold were detected.
3. U - Results not detected above shown reporting limit.
   J - Estimated result
4. Sample Types: N - Normal Sample, FD- Field Duplicate
5. Compounds compared to the NYSDEC Technical and Operational Guidance Series Glass GA Standards & Guidance (TOGS 1.1.1), June 1998 (Amended April 2000)

TABLE IV
SITE-WIDE GROUNDWATER ANALYTICAL RESULTS
GMCH LOCKPORT FACILITY
LOCKPORT, NEW YORK

LOCATION DESCRIPTION	Class GA	Building 8	Building 8	Building 8	Building 8	Building 8	Building 9	Building 9	Building 9	Building 10	Building 10	Building 10	Building 10	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide
LOCATION	TOGS 1.1.1	MW-8-1	MW-8-2	MW-8-3	MW-8-3	MW-8-4	MW-9-101-A	MW-9-12	MW-9-4	BLDG10	MW-10-2	MW-10-3	MW-10-3	MW-1	MW-4	MW-4	MW-4	MW-7	MW-7	MW-7
DATE		4/29/2011	4/29/2011	5/2/2011	5/2/2011	5/2/2011	4/29/2011	8/14/2008	8/14/2008	4/29/2011	4/29/2011	4/29/2011	4/29/2011	7/19/2007	7/20/2009	4/22/2011	4/22/2011	10/25/2006	11/29/2007	11/5/2008
SAMPLE TYPE	ug/L	N	N	FD	N	N	N	N	N	N	N	FD	N	N	N	FD	N	N	N	N
Metals (ug/l)																				
Calcium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**493000**	**476000**	-	-	**327000**
Iron	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**3100** [A]	**3100** [A]	**230**	**580** [A]	**6060** [A]
Iron (dissolved)	300	-	-	-	-	-	-	-	-	-	-	-	-	-	**3210** [A]	-	-	-	-	-
Magnesium	35000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**139000** [A]	**138000** [A]	**112200** [A]	**98500** [A]	**74000** [A]
Magnesium (dissolved)	300	-	-	-	-	-	-	-	-	-	-	-	-	-	**193000** [A]	-	-	-	-	-
Manganese	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**1600** [A]	**1600** [A]	**20**	**50**	**2280** [A]
Manganese (dissolved)	300	-	-	-	-	-	-	-	-	-	-	-	-	-	**2640** [A]	-	-	-	-	-
Potassium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**17800**	**17300**	**19400**	**20700**	**4390**
Potassium (dissolved)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**50500**	-	-	-	-	-
Sodium	20000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**1420000** [A]	**1390000** [A]	**237000** [A]	**278000** [A]	**277000** [A]
Sodium (dissolved)	20000	-	-	-	-	-	-	-	-	-	-	-	-	-	**2100000** [A]	-	-	-	-	-
Miscellaneous (ug/l)																				
Total organic carbon (TOC)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**13000**	**600 J**	**540 J**	**27600**	**14000**	**4400**
Natural Attenuation Parameters (ug/l)																				
Alkalinity, total (as CaCO3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**330000**	**342000**	**343000**	**367000**	**322000**	**348000**
Ammonia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**1900**	**1900**	-	-	-
Ammonia-N	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	**3830** [A]	-	-	**1330**	**1140**	**80**
Chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**5320000**	**3260000**	**3130000**	**600000**	**430000**	**980000**
Methane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**5280**	**2000**	**2000**	**60**	**130**	**110**
Methane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrate (as N)	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	600 U	50 U	50 U	50 U	50 U	50 U
Nitrite (as N)	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	600 U	50 U	50 U	50 U	50 U	50 U
Sulfate	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	**295000** [A]	**370000** [A]	**341000** [A]	**470000** [A]	**519000** [A]	**23000**
Sulfide	50	-	-	-	-	-	-	-	-	-	-	-	-	-	**2000** [A]	100 U	100 U	100 U	**800** [A]	100 U
Semi-Volatile Organic Compounds (ug/l)																				
Acenaphthene	20	-	-	-	-	-	-	2 U	73 U	-	-	-	-	-	-	-	-	-	-	-
Anthracene	50	-	-	-	-	-	-	2 U	73 U	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	-	-	-	-	-	-	-	2 U	73 U	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	0.002	-	-	-	-	-	-	2 U	73 U	-	-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	2 U	73 U	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	0.002	-	-	-	-	-	-	2 U	73 U	-	-	-	-	-	-	-	-	-	-	-
Bis(2-ethylhexyl)phthalate	5	-	-	-	-	-	-	2 U	73 U	-	-	-	-	-	-	-	-	-	-	-
Chrysene	0.002	-	-	-	-	-	-	2 U	73 U	-	-	-	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	-	-	-	-	-	-	-	2 U	73 U	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	50	-	-	-	-	-	-	2 U	**7990** [A]	-	-	-	-	-	-	-	-	-	-	-
Fluorene	50	-	-	-	-	-	-	2 U	73 U	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	0.002	-	-	-	-	-	-	2 U	73 U	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	10	-	-	-	-	-	-	2 U	73 U	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	50	-	-	-	-	-	-	2 U	**7970** [A]	-	-	-	-	-	-	-	-	-	-	-
Pyrene	50	-	-	-	-	-	-	2 U	73 U	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (ug/l)																				
1,1,1-Trichloroethane	5	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	5	-	-	-	-	-	-	-	-	-	-	-	-	**6** [A]	-	-	-	-	-	-
1,1,2-Trichloroethane	1	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
1,1-Dichloroethane	5	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
1,1-Dichloroethene	5	-	-	-	-	-	-	-	-	-	-	-	-	**480** [A]	-	-	-	-	-	-
1,2,3-Trichlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
1,2,4-Trichlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	0.04	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	0.0006	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
1,2-Dichlorobenzene	3	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
1,2-Dichloroethane	0.6	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
1,2-Dichloroethene (total)	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	1	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
1,3-Dichlorobenzene	3	-	-	-	-	-	-	-	-	-	-	-	-	**3**	-	-	-	-	-	-
1,4-Dichlorobenzene	3	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	50	-	-	-	-	-	-	-	-	-	-	-	-	10 U	-	-	-	-	-	-
2-Chloroethyl vinyl ether	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	50	-	-	-	-	-	-	-	-	-	-	-	-	10 U	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK	50	-	-	-	-	-	-	-	-	-	-	-	-	**59** [A]	-	-	-	-	-	-
Acetone	50	-	-	-	-	-	-	-	-	-	-	-	-	**20**	-	-	-	-	-	-
Acrolein	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acrylonitrile	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	1	-	-	-	-	-	-	-	-	-	-	-	-	**5** [A]	-	-	-	-	-	-
Bromodichloromethane	50	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-

TABLE IV
SITE-WIDE GROUNDWATER ANALYTICAL RESULTS
GMCH LOCKPORT FACILITY
LOCKPORT, NEW YORK

LOCATION DESCRIPTION	Class GA	Building 8	Building 8	Building 8	Building 8	Building 8	Building 9	Building 9	Building 9	Building 10	Building 10	Building 10	Building 10	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide
LOCATION	TOGS 1.1.1	MW-8-1	MW-8-2	MW-8-3	MW-8-3	MW-8-4	MW-9-101-A	MW-9-12	MW-9-4	BLDG10	MW-10-2	MW-10-3	MW-10-3	MW-1	MW-4	MW-4	MW-4	MW-7	MW-7	MW-7
DATE		4/29/2011	4/29/2011	5/2/2011	5/2/2011	5/2/2011	4/29/2011	8/14/2008	8/14/2008	4/29/2011	4/29/2011	4/29/2011	4/29/2011	7/19/2007	7/20/2009	4/22/2011	4/22/2011	10/25/2006	11/29/2007	11/5/2008
SAMPLE TYPE	ug/L	N	N	FD	N	N	N	N	N	N	N	FD	N	N	N	FD	N	N	N	N
Bromoform	50	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
Bromomethane (Methyl bromide)	5	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
Carbon disulfide	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
Carbon tetrachloride	5	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
Chlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
Chlorobromomethane	5	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
Chloroethane	5	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
Chloroform (Trichloromethane)	7	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
Chloromethane (Methyl chloride)	5	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
cis-1,2-Dichloroethene	5	**0.86 J**	9300 [A]	**5**	**4.3**	68 [A]	4.0 U	-	-	2000 U	1100 [A]	11 [A]	11 [A]	220 [A]	41500 [A]	50000 [A]	45000 [A]	35800 [A]	39500 [A]	70000 [A]
cis-1,3-Dichloropropene	0.4	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
Dibromochloromethane	50	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	5	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
Ethylbenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	**4**	-	-	-	-	-	-
Isopropyl benzene	5	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
m&p-Xylenes	5	-	-	-	-	-	-	-	-	-	-	-	-	46 [A]	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
Methylene chloride	5	-	-	-	-	-	-	-	-	-	-	-	-	200 [A]	-	-	-	-	-	-
o-Xylene	5	-	-	-	-	-	-	-	-	-	-	-	-	15 [A]	-	-	-	-	-	-
Styrene	5	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
Tetrachloroethene	5	1.0 U	40 U	**1.9**	**1.7**	1.0 U	4.0 U	-	-	120000 [A]	1100 [A]	13 [A]	13 [A]	114000 [A]	50 U	**1.8**	**1.5**	77 [A]	49 [A]	200 U
Toluene	5	-	-	-	-	-	-	-	-	-	-	-	-	44 [A]	-	-	-	-	-	-
trans-1,2-Dichloroethene	5	1.0 U	40 U	1.0 U	1.0 U	1.0 U	4.0 U	-	-	16 [A]	10 [A]	1.0 U	1.0 U	15 [A]	50 U	1000 U	1000 U	62 [A]	390 [A]	200 U
trans-1,3-Dichloropropene	0.4	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
Trichloroethene	5	1.0 U	660 [A]	9.3 [A]	6 [A]	12 [A]	4.0 U	-	-	2800 [A]	1200 [A]	6 [A]	5.8 [A]	200 [A]	23000 [A]	24000 B [A]	21000 B [A]	260000 [A]	434000 [A]	1100 [A]
Trichlorofluoromethane (CFC-11)	5	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-
Vinyl acetate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	2	1.0 U	270 [A]	1.0 U	1.0 U	17 [A]	4.0 U	-	-	100 [A]	66 [A]	1.0 U	1.0 U	220 [A]	6660 [A]	12000 [A]	10000 [A]	1700 [A]	3200 [A]	2600 [A]
Xylenes (total)	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes and Abbreviations:

1. Results shown in red exceed:
   [A]: Indicates result is greater than TOGS 1.1.1
2. Results shown in bold were detected.
3. U - Results not detected above shown reporting limit.
   J - Estimated result
4. Sample Types: N - Normal Sample, FD- Field Duplicate
5. Compounds compared to the NYSDEC Technical and Operational Guidance Series Glass GA Standards & Guidance (TOGS 1.1.1), June 1998 (Amended April 2000)

TABLE IV
SITE-WIDE GROUNDWATER ANALYTICAL RESULTS
GMCH LOCKPORT FACILITY
LOCKPORT, NEW YORK

LOCATION DESCRIPTION	Class GA	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide
LOCATION	TOGS 1.1.1	MW-7	MW-7	MW-7	MW-8	MW-8	MW-9	MW-9	MW-10	MW-10	MW-11	MW-11	MW-11	MW-12	MW-12	MW-12	MW-12	MW-13	MW-13	MW-13
DATE		2/24/2009	7/15/2009	4/22/2011	7/15/2009	4/22/2011	7/20/2009	4/22/2011	7/15/2009	4/21/2011	10/24/2006	11/28/2007	4/21/2011	10/25/2006	11/28/2007	3/16/2009	4/20/2011	10/24/2006	11/28/2007	11/5/2008
SAMPLE TYPE	ug/L	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Metals (ug/l)																				
Calcium	-	**193000**	-	**121000**	-	**220000**	-	**392000**	-	**281000**	-	-	**92500**	-	-	**269000**	**227000 B**	-	-	**196000**
Iron	300	**90**	-	**200**	-	**120**	-	**34 J**	-	**750** [A]	**800** [A]	**740** [A]	**140**	**7500** [A]	**6680** [A]	**11500** [A]	**6600** [A]	**9210** [A]	**7830** [A]	**7600** [A]
Iron (dissolved)	300	-	**30**	-	**28**	-	10 U	-	**78**	-	-	-	-	-	-	-	-	-	-	-
Magnesium	35000	**86700** [A]	-	**60100** [A]	-	**102000** [A]	-	**94900** [A]	-	**77300** [A]	**30700**	**42100** [A]	**30800**	**44800** [A]	**46000** [A]	**81700** [A]	**65100** [A]	**53700** [A]	**50800** [A]	**52300** [A]
Magnesium (dissolved)	300	-	**84900** [A]	-	**102000** [A]	-	**117000** [A]	-	**103000** [A]	-	-	-	-	-	-	-	-	-	-	-
Manganese	300	**40**	-	**25**	-	**530** [A]	-	**110**	-	**2100 B** [A]	**80**	**80**	**86 B**	**6020** [A]	**4440** [A]	**8600** [A]	**7100** [A]	**6030** [A]	**4950** [A]	**5400** [A]
Manganese (dissolved)	300	-	**32**	-	**395** [A]	-	**313** [A]	-	**2570** [A]	-	-	-	-	-	-	-	-	-	-	-
Potassium	-	**14200**	-	**13800**	-	**7900**	-	**6900**	-	**6900**	**7600**	**12300**	**5700**	**4500**	**3900**	**5100**	**3700**	**9100**	**9600**	**11000**
Potassium (dissolved)	-	-	**24100**	-	**15700**	-	**19000**	-	**20600**	-	-	-	-	-	-	-	-	-	-	-
Sodium	20000	**213000** [A]	-	**3290000** [A]	-	**355000** [A]	-	**1710000** [A]	-	**1760000** [A]	**84700** [A]	**234000** [A]	**119000** [A]	**684000** [A]	**666000** [A]	**1060000** [A]	**958000** [A]	**1210000** [A]	**1250000** [A]	**1430000** [A]
Sodium (dissolved)	20000	-	**230000** [A]	-	**246000** [A]	-	**1600000** [A]	-	**1950000** [A]	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous (ug/l)																				
Total organic carbon (TOC)	-	-	**28000**	**9200**	**22000**	1000 U	**17000**	1000 U	**9100**	**4100**	**1900**	**3000**	**2800**	**6500**	**4000**	-	**3300**	**8400**	**7000**	**3800**
Natural Attenuation Parameters (ug/l)																				
Alkalinity, total (as CaCO3)	-	**270000**	**310000**	**223000**	**300000**	**244000**	**290000**	**233000**	**320000**	**277000**	**341000**	**230000**	**294000**	**333000**	**274000**	**270000**	**272000**	**431000**	**420000**	**410000**
Ammonia	-	-	-	**530**	-	**300**	-	**110**	-	**110**	-	-	**38**	-	-	-	**1100**	-	-	-
Ammonia-N	2000	**980**	**1280**	-	**760**	-	**260**	-	**270**	-	**120**	**370**	-	**1550**	**1470**	**1890**	-	**1350**	**1740**	**1570**
Chloride	-	**410000**	**452000**	**267000**	**457000**	**683000**	**3100000**	**3410000**	**4260000**	**3230000 B**	**108000**	**410000**	**170000 B**	**1300000**	**1300000**	**2300000**	**1880000 B**	**2200000**	**2200000**	**2000000**
Methane	-	**40**	**72**	**15**	**86**	**18**	**32**	**6.9**	**348**	**64**	**8**	**8**	**7.1**	**24**	**12**	**870**	**42**	**160**	**3**	**21**
Methane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrate (as N)	10000	50 U	600 U	50 U	600 U	50 U	600 U	**390**	600 U	50 U	**160**	**160**	**320**	50 U	50 U	50 U	50 U	50 U	**50**	50 U
Nitrite (as N)	10000	50 U	600 U	50 U	600 U	50 U	**900**	50 U	600 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Sulfate	250000	**430000** [A]	**460000** [A]	**463000** [A]	**588000** [A]	**562000** [A]	**379000** [A]	**362000** [A]	**265000** [A]	**175000**	**66000**	**144000**	**53500**	**110000**	**79000**	**140000**	**108000**	**98000**	**95000**	**91000**
Sulfide	50	100 U	**2400** [A]	100 U	**2000** [A]	100 U	**1200** [A]	100 U	**800** [A]	100 U	100 U	**1000** [A]	100 U	100 U	40 U	100 U	100 U	100 U	**400** [A]	100 U
Semi-Volatile Organic Compounds (ug/l)																				
Acenaphthene	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-ethylhexyl)phthalate	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (ug/l)																				
1,1,1-Trichloroethane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	0.0006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethene (total)	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloroethyl vinyl ether	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acrolein	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acrylonitrile	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE IV
SITE-WIDE GROUNDWATER ANALYTICAL RESULTS
GMCH LOCKPORT FACILITY
LOCKPORT, NEW YORK

LOCATION DESCRIPTION	Class GA	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide
LOCATION	TOGS 1.1.1	MW-7	MW-7	MW-7	MW-8	MW-8	MW-9	MW-9	MW-10	MW-10	MW-11	MW-11	MW-11	MW-12	MW-12	MW-12	MW-12	MW-13	MW-13	MW-13
DATE		2/24/2009	7/15/2009	4/22/2011	7/15/2009	4/22/2011	7/20/2009	4/22/2011	7/15/2009	4/21/2011	10/24/2006	11/28/2007	4/21/2011	10/25/2006	11/28/2007	3/16/2009	4/20/2011	10/24/2006	11/28/2007	11/5/2008
SAMPLE TYPE	ug/L	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Bromoform	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobromomethane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	5	56000 [A]	58200 [A]	42000 [A]	859 [A]	810 [A]	1670 [A]	1100 [A]	248 [A]	230 [A]	2 U	**2**	1.0 U	15 [A]	11 [A]	150 [A]	96 [A]	2 U	2 U	2 U
cis-1,3-Dichloropropene	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropyl benzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m&p-Xylenes	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	5	71 [A]	112 [A]	5000 U	5.4 [A]	7.7 [A]	186 [A]	180 [A]	115 [A]	67 [A]	2 U	2 U	1.0 U	2 U	2 U	**2**	1.0 U	2 U	2 U	2 U
Toluene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	5	380 J [A]	107 [A]	5000 U	6.3 [A]	**2.5**	50 U	**4.9**	5 U	**1.6**	2 U	2 U	1.0 U	2 U	2 U	2 U	1.0 U	2 U	2 U	2 U
trans-1,3-Dichloropropene	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	5	530000 [A]	618000 [A]	680000 B [A]	50.2 [A]	78 B [A]	3290 [A]	2300 B [A]	74.6 [A]	88 [A]	2 U	2 U	1.0 U	2 U	2 U	5.5 [A]	**1.2**	**2**	2 U	2 U
Trichlorofluoromethane (CFC-11)	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl acetate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	2	3600 J [A]	2450 [A]	5000 U	98.1 [A]	120 [A]	50 U	32 [A]	43.5 [A]	27 [A]	2 U	**2**	1.0 U	33 [A]	14 [A]	81 [A]	37 [A]	2 U	2 U	2 U
Xylenes (total)	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes and Abbreviations:

1. Results shown in red exceed:
   [A]: Indicates result is greater than TOGS 1.1.1
2. Results shown in bold were detected.
3. U - Results not detected above shown reporting limit.
   J - Estimated result
4. Sample Types: N - Normal Sample, FD- Field Duplicate
5. Compounds compared to the NYSDEC Technical and Operational Guidance Series Glass GA Standards & Guidance (TOGS 1.1.1), June 1998 (Amended April 2000)

TABLE IV
SITE-WIDE GROUNDWATER ANALYTICAL RESULTS
GMCH LOCKPORT FACILITY
LOCKPORT, NEW YORK

LOCATION DESCRIPTION	Class GA	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide
LOCATION	TOGS 1.1.1	MW-13	MW-14	MW-14	MW-14	MW-14	MW-15	MW-15	MW-15	TK-1	TK-2	TK-3	TK-4	TK-5	TK-6	TK-DUP
DATE		4/21/2011	10/24/2006	11/29/2007	2/24/2009	4/21/2011	10/24/2006	11/28/2007	4/21/2011	5/10/2011	5/17/2011	5/18/2011	5/18/2011	5/18/2011	5/18/2011	5/18/2011
SAMPLE TYPE	ug/L	N	N	N	N	N	N	N	N	N	N	N	N	N	N	FD
Metals (ug/l)																
Calcium	-	**210000**	-	-	**165000**	**149000**	-	-	**217000**	-	-	-	-	-	-	-
Iron	300	**7400** [A]	**150**	**440** [A]	**60**	**52**	20 U	**140**	**19 J**	-	-	-	-	-	-	-
Iron (dissolved)	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium	35000	**53200** [A]	**94900** [A]	**111000** [A]	**79800** [A]	**68000** [A]	**62300** [A]	**71700** [A]	**55500** [A]	-	-	-	-	-	-	-
Magnesium (dissolved)	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manganese	300	**6300 B** [A]	**200**	**250**	**180**	**190 B**	**270**	**390** [A]	**240 B**	-	-	-	-	-	-	-
Manganese (dissolved)	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potassium	-	**8300**	**8000**	**10500**	**7300**	**5400**	**4700**	**4900**	**3700**	-	-	-	-	-	-	-
Potassium (dissolved)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium	20000	**1320000** [A]	**831000** [A]	**777000** [A]	**833000** [A]	**875000** [A]	**311000** [A]	**455000** [A]	**390000** [A]	-	-	-	-	-	-	-
Sodium (dissolved)	20000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous (ug/l)																
Total organic carbon (TOC)	-	**5800**	**3300**	**4000**	-	**2800**	**3600**	**2000**	**3500**	-	-	-	-	-	-	-
Natural Attenuation Parameters (ug/l)																
Alkalinity, total (as CaCO3)	-	**368000**	**336000**	**371000**	**299000**	**339000**	**434000**	**346000**	**394000**	-	-	-	-	-	-	-
Ammonia	-	**940**	-	-	-	**140**	-	-	20 U	-	-	-	-	-	-	-
Ammonia-N	2000	-	**250**	**530**	**230**	-	**90**	**1030**	-	-	-	-	-	-	-	-
Chloride	-	**2090000 B**	**1700000**	**1800000**	**1500000**	**1750000 B**	**660000**	**1100000**	**895000 B**	-	-	-	-	-	-	-
Methane	-	**58**	**310**	**160**	**150**	**16**	2 U	2 U	1.0 U	-	-	-	-	-	-	-
Methane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrate (as N)	10000	**69**	50 U	50 U	**70**	**93**	**1890**	50 U	**950**	-	-	-	-	-	-	-
Nitrite (as N)	10000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	-	-	-	-	-	-	-
Sulfate	250000	**105000**	**88000**	**87000**	**68000**	**78200**	**84000**	**74000**	**86700**	-	-	-	-	-	-	-
Sulfide	50	100 U	100 U	**120** [A]	100 U	100 U	100 U	40 U	100 U	-	-	-	-	-	-	-
Semi-Volatile Organic Compounds (ug/l)																
Acenaphthene	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	50	-	-	-	-	-	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(a)pyrene	-	-	-	-	-	-	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(b)fluoranthene	0.002	-	-	-	-	-	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(k)fluoranthene	0.002	-	-	-	-	-	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bis(2-ethylhexyl)phthalate	5	-	-	-	-	-	-	-	-	**17.8** [A]	10 U	10 U	**10.1** [A]	10 U	10 U	**22.2** [A]
Chrysene	0.002	-	-	-	-	-	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	-	-	-	-	-	-	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Fluoranthene	50	-	-	-	-	-	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Fluorene	50	-	-	-	-	-	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene	0.002	-	-	-	-	-	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Naphthalene	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	50	-	-	-	-	-	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Pyrene	50	-	-	-	-	-	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Volatile Organic Compounds (ug/l)																
1,1,1-Trichloroethane	5	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1,2,2-Tetrachloroethane	5	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1,2-Trichloroethane	1	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	5	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethene	5	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2,3-Trichlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	0.0006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	3	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichloroethane	0.6	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichloroethene (total)	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	1	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,3-Dichlorobenzene	3	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,4-Dichlorobenzene	3	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Butanone (Methyl ethyl ketone) (MEK)	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloroethyl vinyl ether	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	3 U
2-Hexanone	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acrolein	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acrylonitrile	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	1	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromodichloromethane	50	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U

TABLE IV
SITE-WIDE GROUNDWATER ANALYTICAL RESULTS
GMCH LOCKPORT FACILITY
LOCKPORT, NEW YORK

LOCATION DESCRIPTION	Class GA	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide	Sitewide
LOCATION	TOGS 1.1.1	MW-13	MW-14	MW-14	MW-14	MW-14	MW-15	MW-15	MW-15	TK-1	TK-2	TK-3	TK-4	TK-5	TK-6	TK-DUP
DATE		4/21/2011	10/24/2006	11/29/2007	2/24/2009	4/21/2011	10/24/2006	11/28/2007	4/21/2011	5/10/2011	5/17/2011	5/18/2011	5/18/2011	5/18/2011	5/18/2011	5/18/2011
SAMPLE TYPE	ug/L	N	N	N	N	N	N	N	N	N	N	N	N	N	N	FD
Bromoform	50	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane (Methyl bromide)	5	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbon disulfide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	5	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chlorobenzene	5	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chlorobromomethane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	5	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform (Trichloromethane)	7	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloromethane (Methyl chloride)	5	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
cis-1,2-Dichloroethene	5	1.0 U	2 U	**10** [A]	**2.2**	1.0 U	2 U	2 U	1.0 U	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	0.4	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	50	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dichlorodifluoromethane (CFC-12)	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	5	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	3 U
Isopropyl benzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m&p-Xylenes	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methylene chloride	5	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	5	1.0 U	2 U	2 U	2 U	1.0 U	**7** [A]	**7** [A]	**6.7** [A]	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Toluene	5	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
trans-1,2-Dichloroethene	5	1.0 U	2 U	2 U	2 U	1.0 U	2 U	2 U	1.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
trans-1,3-Dichloropropene	0.4	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Trichloroethene	5	1.0 U	2 U	2 U	**16** [A]	1.0 U	2 U	2 U	**0.65 J**	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Trichlorofluoromethane (CFC-11)	5	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Vinyl acetate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	2	1.0 U	2 U	2 U	2 U	1.0 U	2 U	2 U	1.0 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U
Xylenes (total)	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes and Abbreviations:

1. Results shown in red exceed:
   [A]: Indicates result is greater than TOGS 1.1.1
2. Results shown in bold were detected.
3. U - Results not detected above shown reporting limit.
   J - Estimated result
4. Sample Types: N - Normal Sample, FD- Field Duplicate
5. Compounds compared to the NYSDEC Technical and Operational Guidance Series Glass GA Standards & Guidance (TOGS 1.1.1), June 1998 (Amended April 2000)

TABLE V
VAPOR INTRUSION ANALYTICAL RESULTS - BUILDING 8
GMCH LOCKPORT FACILITY
LOCKPORT, NEW YORK
BCP SITE #C932139

BUILDING	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8	Building 8
LOCATION	8-VI-1IA	8-VI-1SS	8-VI-2IA	8-VI-2SS	8-VI-3IA	8-VI-3SS	8-VI-4IA	8-VI-4SS	8-VI-5IA	8-VI-5SS	8-VI-OUT
DATE	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011	1/18/2011
SAMPLE TYPE	N	N	N	N	N	N	N	N	N	N	N
Volatile Organic Compounds (ug/m3)											
1,1,1-Trichloroethane	2.2 U	0.87 U	0.87 U	2.2 U	0.87 U	0.44 U	0.87 U	2.2 U	4.4 U	16000 U	0.87 U
1,1,2,2-Tetrachloroethane	2.7 U	1.1 U	1.1 U	2.7 U	1.1 U	0.55 U	1.1 U	2.7 U	5.5 U	21000 U	1.1 U
1,1,2-Trichloroethane	2.2 U	0.87 U	0.87 U	2.2 U	0.87 U	0.44 U	0.87 U	2.2 U	4.4 U	16000 U	0.87 U
1,1-Dichloroethane	1.6 U	0.65 U	0.65 U	1.6 U	0.65 U	0.32 U	0.65 U	1.6 U	3.2 U	12000 U	0.65 U
1,1-Dichloroethene	1.6 U	0.63 U	0.63 U	1.6 U	0.63 U	0.32 U	0.63 U	1.6 U	3.2 U	12000 U	0.63 U
1,2,4-Trichlorobenzene	3.0 UJ	1.2 U	1.2 U	3.0 U	1.2 U	0.59 U	1.2 U	3.0 U	5.9 U	22000 U	1.2 U
1,2,4-Trimethylbenzene	**5.1**	**5.1**	**0.97**	2.0 U	**2.1**	**1.5**	**5.8**	**4.6**	3.9 U	15000 U	0.79 U
1,2-Dibromoethane (Ethylene dibromide)	3.1 U	1.2 U	1.2 U	3.1 U	1.2 U	0.61 U	1.2 U	3.1 U	6.1 U	23000 U	1.2 U
1,2-Dichlorobenzene	2.4 U	0.96 U	0.96 U	2.4 U	0.96 U	0.48 U	0.96 U	2.4 U	4.8 U	18000 U	0.96 U
1,2-Dichloroethane	1.6 U	0.65 U	0.65 U	1.6 U	0.65 U	0.32 U	0.65 U	1.6 U	3.2 U	12000 U	0.65 U
1,2-Dichloropropane	1.8 U	0.74 U	0.74 U	1.8 U	0.74 U	0.37 U	0.74 U	1.8 U	3.7 U	14000 U	0.74 U
1,2-Dichlorotetrafluoroethane (CFC 114)	2.8 U	1.1 U	1.1 U	2.8 U	1.1 U	0.56 U	1.1 U	2.8 U	5.6 U	21000 U	1.1 U
1,3,5-Trimethylbenzene	**2.5 J**	**2.5 J**	0.79 UJ	2.0 UJ	**1.0 J**	**0.62 J**	**2.7 J**	2.0 UJ	3.9 UJ	15000 UJ	0.79 UJ
1,3-Dichlorobenzene	2.4 U	0.96 U	0.96 U	2.4 U	0.96 U	0.48 U	0.96 U	2.4 U	4.8 U	18000 U	0.96 U
1,4-Dichlorobenzene	2.4 U	**8.8**	0.96 U	**2.9**	**1.8**	**1.8**	**6.6**	**11**	4.8 U	18000 U	0.96 U
1,4-Dioxane	3.6 U	1.4 U	1.4 U	3.6 U	1.4 U	0.72 U	1.4 U	3.6 U	7.2 U	27000 U	1.4 U
2,2,4-Trimethylpentane	4.7 U	**26**	**3**	4.7 U	**2.8**	0.93 U	**5.2**	**6.4**	9.3 U	35000 U	1.9 U
2-Butanone (Methyl ethyl ketone) (MEK)	**84**	**91**	**41**	**8.5**	**44**	**3.7**	**63**	**57**	**100**	35000 U	**12**
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	**27**	**22**	**9**	4.1 U	**8**	**0.92**	**17**	**13**	**19**	30000 U	**5.4**
Benzene	**2.1**	**4.8**	**1.4**	1.3 U	**1.6**	**1.7**	**2.2**	**7.5**	2.6 U	9600 U	**1.1**
Benzyl chloride	4.1 U	1.7 U	1.7 U	4.1 U	1.7 U	0.83 U	1.7 U	4.1 U	8.3 U	31000 U	1.7 U
Bromodichloromethane	2.7 U	1.1 U	1.1 U	2.7 U	1.1 U	0.54 U	1.1 U	2.7 U	5.4 U	20000 U	1.1 U
Bromoform	4.1 U	1.7 U	1.7 U	4.1 U	1.7 U	0.83 U	1.7 U	4.1 U	8.3 U	31000 U	1.7 U
Bromomethane (Methyl bromide)	1.6 U	0.62 U	0.62 U	1.6 U	0.62 U	0.31 U	0.62 U	1.6 U	3.1 U	12000 U	0.62 U
Carbon tetrachloride	1.3 UJ	0.50 U	**0.54**	1.3 U	**0.63**	**0.57**	**0.63**	1.3 U	2.5 U	9400 U	**0.55**
Chlorobenzene	1.8 U	0.74 U	0.74 U	1.8 U	0.74 U	0.37 U	0.74 U	1.8 U	3.7 U	14000 U	0.74 U
Chloroethane	1.1 U	0.42 U	0.42 U	1.1 U	**1**	0.21 U	0.42 U	1.1 U	2.1 U	7900 U	0.42 U
Chloroform (Trichloromethane)	2.0 U	0.78 U	0.78 U	2.0 U	0.78 U	0.39 U	0.78 U	**4.2**	3.9 U	15000 U	0.78 U
Chloromethane (Methyl chloride)	2.1 U	**0.91**	**1.4**	2.1 U	**1.8**	**1.5**	**1.7**	2.1 U	4.1 U	15000 U	**1.5**
cis-1,2-Dichloroethene	**2.2**	0.63 U	**1.5**	**190**	**2.6**	**3.3**	**3.7**	**6.7**	**3.3**	**830000**	0.63 U
cis-1,3-Dichloropropene	1.8 U	0.73 U	0.73 U	**1.8 U**	0.73 U	0.36 U	0.73 U	1.8 U	3.6 U	14000 U	0.73 U
Cyclohexane	3.4 U	**4.5**	1.4 U	**3.4 U**	1.4 U	0.69 U	1.4 U	**9.2**	6.9 U	25000 U	1.4 U
Dibromochloromethane	3.4 U	1.4 U	1.4 U	**3.4 U**	1.4 U	0.68 U	1.4 U	3.4 U	6.8 U	26000 U	1.4 U
Dichlorodifluoromethane (CFC-12)	**4.5**	**3.3**	**3.1**	**3.5**	**3.3**	**3.5**	**3.5**	**3.3**	4.0 U	15000 U	**3.1**
Ethanol	**50**	**21**	**26**	**45**	**23**	**22**	**43**	**110**	**38**	57000 U	**280**
Ethylbenzene	**29**	**33**	**12**	**5.1**	**21**	**2.7**	**27**	**20**	**23**	13000 U	0.69 U
Hexachlorobutadiene	4.3 U	1.7 U	1.7 U	**4.3 U**	1.7 U	0.85 U	1.7 U	4.3 U	8.5 U	32000 U	1.7 U
Hexane	3.5 U	**10**	**2**	**3.5 U**	**1.7**	**3.3**	**2.8**	**32**	7.0 U	26000 U	**2.2**
m&p-Xylenes	**90**	**110**	**35**	**18**	**69**	**9.8**	**86**	**68**	**66**	13000 U	**1.2**
Methyl tert butyl ether (MTBE)	2.9 U	1.2 U	1.2 U	**2.9 U**	1.2 U	0.58 U	1.2 U	2.9 U	5.8 U	21000 U	1.2 U
Methylene chloride	3.5 U	1.4 U	**2.6**	**3.5 U**	1.4 U	**2.8**	**3.4**	3.5 U	6.9 U	26000 U	1.4 U
o-Xylene	**17**	**19**	**5.5**	**3.7**	**11**	**2.8**	**16**	**16**	**9.3**	13000 U	0.69 U
Styrene	**4.2**	**3.8**	**0.78**	**1.7 U**	**2.1**	**0.56**	**3.3**	**3**	3.4 U	13000 U	**0.92**
tert-Butyl alcohol	**38**	**24**	**12**	**4.9 U**	**9.3**	**1.3**	**20**	**44**	**30**	36000 U	**15**
Tetrachloroethene	**9.6**	**13**	**5**	**35**	**7.2**	**1.2**	**8.7**	**11**	**11**	20000 U	**2**
Toluene	**21**	**27**	**9**	**5.6**	**13**	**18**	**20**	**120**	**15**	11000 U	**29**
trans-1,2-Dichloroethene	1.6 U	0.63 U	0.63 U	**1.6 U**	0.63 U	0.32 U	0.63 U	**2.1**	3.2 U	12000 U	0.63 U
trans-1,3-Dichloropropene	1.8 U	0.73 U	0.73 U	**1.8 U**	0.73 U	0.36 U	0.73 U	1.8 U	3.6 U	14000 U	0.73 U
Trichloroethene	**11**	**5.7**	**7**	**190**	**13**	**19**	**16**	**45**	**11**	**4200000**	**1.3**
Trichlorofluoromethane (CFC-11)	**3.7**	**1.8**	**1.8**	2.2 U	**1.7**	**1.8**	**2**	**3.9**	4.5 U	17000 U	**1.4**
Trifluorotrichloroethane (Freon 113)	3.1 U	**9.4**	1.2 U	**150**	1.2 U	**1.2**	**1.7**	**18**	6.1 U	23000 U	1.2 U
Vinyl chloride	1.0 U	0.41 U	0.41 U	**1.9**	0.41 U	0.20 U	0.41 U	1.0 U	2.0 U	7700 U	0.41 U

Notes and Abbreviations:

1. Results shown in **bold** were detected.
2. U - Results not detected above shown reporting limit.
   J - Estimated result
3. Sample Types: N - Normal Sample, FD- Field Duplicate
4. The results were compared against the October 2006 Soil Vapor/Indoor Air Matrices included in the NYSDOH Guidance for evaluating soil vapor intrusion in the state of New York. Color coding is as follows:

White = No Further Action
Green = Take reasonable and practical actions to identify sources
Yellow = Monitor
Orange = Monitor/Mitigate
Red = Mitigate

5. Only bolded analytes have applicable comparison criteria.

Table VI
Summary of Groundwater Elevation Measurements
GMCH Lockport Facility
Building 8 BCP Site

Monitoring Point	Monitoring Point Elevation (feet)	5/2/2011 Groundwater Depth (feet)	5/2/2011 Groundwater Elevation (feet)
MW-3 S	613.28	7.65	605.63
MW-4	613.07	7.84	605.23
MW-7	613.86	6.15	607.71
MW-8	608.97	5.79	603.18
MW-9	604.90	7.67	597.23
MW-10	604.70	13.82	590.88
MW-11	590.10	5.35	584.75
MW-12	590.71	5.76	584.95
MW-13 *	589.02	4.82	584.20
MW-14	592.77	4.79	587.98
MW-15	594.04	7.41	586.63
MW-6-1	598.23	2.17	596.06
MW-6-2	609.33	3.21	606.12
MW-7-1	597.67	2.25	595.42
MW-7-2	592.57	3.62	588.95
MW-7-3	594.04	3.12	590.92
MW-7-4	593.53	11.79	581.74
MW-7-5	610.96	8.78	602.18
MW-7-6	606.30	3.26	603.04
MW-7-7	610.24	1.89	608.35
MW-7-8	610.92	0.80	610.12
Bldg 10 MW-1	615.05	5.79	609.26
TK-1	622.7	5.07	617.63
TK-2	616.96	3.56	613.40
TK-3	619.95	8.59	611.36
TK-4	618.8	8.34	610.46
TK-5	618.9	6.93	611.97
TK-6	621.69	8.64	613.05
MW-7-A-6	612.13	1.93	610.20
MW-8-003-B	610.94	4.72	606.22
MW-8-1	615.11	5.20	609.91
MW-8-2	615.14	7.61	607.53
MW-8-3	615.06	8.57	606.49
MW-8-4	613.42	6.77	606.65
MW-6-F-7	613.42	4.22	609.20
MW-6-F-8	613.22	2.41	610.81
MW-6-F-9	613.13	5.61	607.52
MW-7-P-1	615.09	9.23	605.86
MW-9-101-A	615.00	5.06	609.94
MW-10-2	610.96	2.61	608.35
MW-10-3	610.4	2.97	607.43
MW-7-C-2	609.42	4.65	604.77
MW-9-12	614.92	8.67	606.25

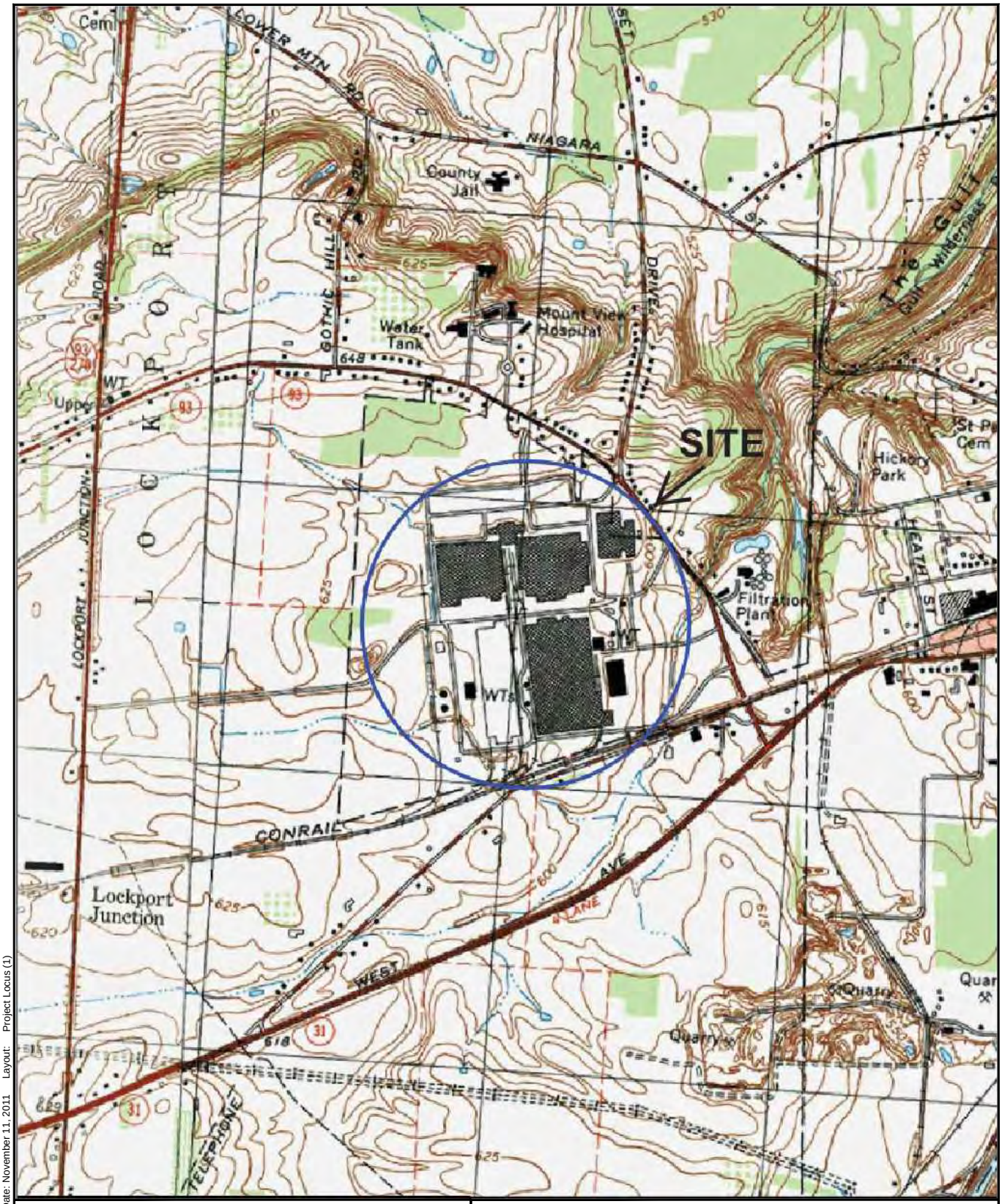
Notes:
1. Elevations shown were calculated based on measurements made by GZA on May 2, 2011.
2. Monitoring points have been established at the top of the PVC casing for each well.
3. NM - Not measured.
4. NI - Not installed at the time of the measurement.
5. * = monitoring point is top of steel casing.

TABLE VII: FATE & TRANSPORT AND POTENTIAL EXPOSURE PATHWAYS FOR SITE CONTAMINANTS OF CONCERN
GMCH LOCKPORT BUILDING 8 BCP SITE REMEDIAL INVESTIGATION PROGRAM
GENERAL MOTORS COMPONANTS HOLDINGS
LOCKPORT, NEW YORK

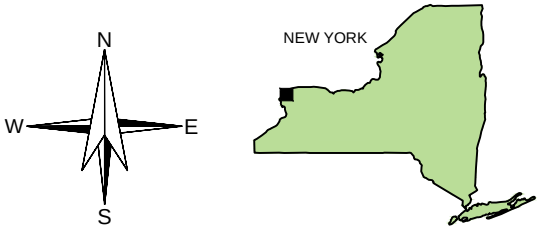
Media	**Constituents of Concern (COCs)**	**Fate & Transport**	**Potentially Affected Populations**	**Exposure Pathways** *Ingestion*	*Absorption*	*Inhalation*	**Potential Exposure Setting & Mechanism**
Soil	▪ Chlorinated Solvents (TCE, cis-1,2-DCE)	▪ Chlorinated solvents were encountered in soil in excess of Protection of Groundwater SCOs between approximately 8 and 12 feet below ground surface. ▪ The Site is largely covered with building foundations and pavement, with access controlled which precludes direct exposure to impacted soil. ▪ Chlorinated solvents in soil could become present in air if the soil is disturbed during a future excavation scenario.	▪ Current Site Workers ▪ Future Site Workers/ Occupants	Incomplete	Incomplete	Incomplete	**Ingestion:** No current pathway exists due to the presence of the buildings and pavement covering a majority of the Site. COCs could become a potential future exposure pathway if the soil is exposed during excavation and inadvertently ingested. **Absorption:** No current pathway exists due to the presence of the buildings and pavement covering a majority of the Site. COCs could become a potential future exposure pathway if soil is exposed during excavation and contacts skin. **Inhalation:** No current pathway exists due to the presence of the buildings and pavement covering a majority of the Site. Could become a potential future exposure pathway soil is disturbed. Inhalation of COCs via vapor/air originating from soil contamination is possible. Refer to discussion below.
			▪ Future Construction Workers (if the Site is re-developed or excavation is to occur)	Potentially Complete	Potentially Complete	Potentially Complete	

Media	Constituents of Concern (COCs)	Fate & Transport	Potentially Affected Populations	Exposure Pathways *Ingestion*	*Absorption*	*Inhalation*	Potential Exposure Setting & Mechanism
Groundwater	▪ Chlorinated Solvents (PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, Vinyl Chloride)	▪ Groundwater is not currently, nor is it intended to be used for drinking water purposes, nor is it used for industrial pumping purposes. ▪ Groundwater flow direction is towards the east, and there is a potential for contaminated groundwater to migrate offsite without mitigation. ▪ Volatilization of chlorinated solvents from groundwater could be emitted into ambient air.	▪ Current Site Workers ▪ Future Site Workers/ Occupants under current use scenario	Incomplete	Incomplete	Not Applicable	**Ingestion:** No current pathway. The Site groundwater is not currently used, nor under any reasonable future use scenario would groundwater be used for potable water. However, if used in the future, an exposure pathway could become complete. **Absorption:** No current pathway. Could be a future potential exposure pathway under a different non-potable usage scenario if impacted groundwater comes into contact with skin, and COC absorbed (i.e. – inadvertently coming in contact with it during a future excavation or groundwater sampling event). It is anticipated that if encountered as part of excavation or future groundwater sampling, extracted groundwater would otherwise be largely isolated from exposure (e.g. contained within the process-pipes, tanks, drums, etc.). **Inhalation:** Inhalation of groundwater is unlikely and not a complete pathway, though inhalation of COCs via vapor/air originating from groundwater contamination is possible. Refer to discussion below.
			▪ Future Construction Workers (if the Site is re-developed or excavation is to occur) or site occupants under another use scenario	Potentially Complete	Potentially Complete	Not Applicable	

Media	Constituents of Concern (COCs)	Fate & Transport	Potentially Affected Populations	Exposure Pathways *Ingestion*	*Absorption*	*Inhalation*	Potential Exposure Setting & Mechanism
Soil Vapor/Air	▪ Chlorinated Solvents (PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, Vinyl Chloride)	▪ Based on sub-slab vapor and indoor air testing conducted within the Site building as part of the RI, COC-impacted vapor and air have been identified that will require mitigation per NYSDOH guidance. ▪ There is a potential that COC vapors could be emitted into the ambient air if soil is excavated and/or groundwater is exposed to surface in the future	▪ Current Site Workers ▪ Future Site Workers/ Occupants	Not Applicable	Not Applicable	Complete	**Ingestion:** Not an applicable pathway. **Absorption:** Not an applicable pathway. **Inhalation:** Currently a complete exposure pathway exists within Building 8. According to NYSDOH guidance, mitigation via a sub-slab depressurization system or other active measure is required. Such a measure will be considered as part of the Remedial Action or as part of an Interim Remedial Measure for the Site. A potentially complete pathway also exists should the building foundations and and/or soil be disturbed in the future or if groundwater is extracted or exposed. Such exposure in the future should be managed under a Site Management Plan for the Site.
			▪ Future Construction Workers (if the Site is re-developed or excavation is to occur)	Not Applicable	Not Applicable	Potentially Complete	



SITE COORDINATES: 43°10'2"N 78°44'12"W



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

HALEY & ALDRICH

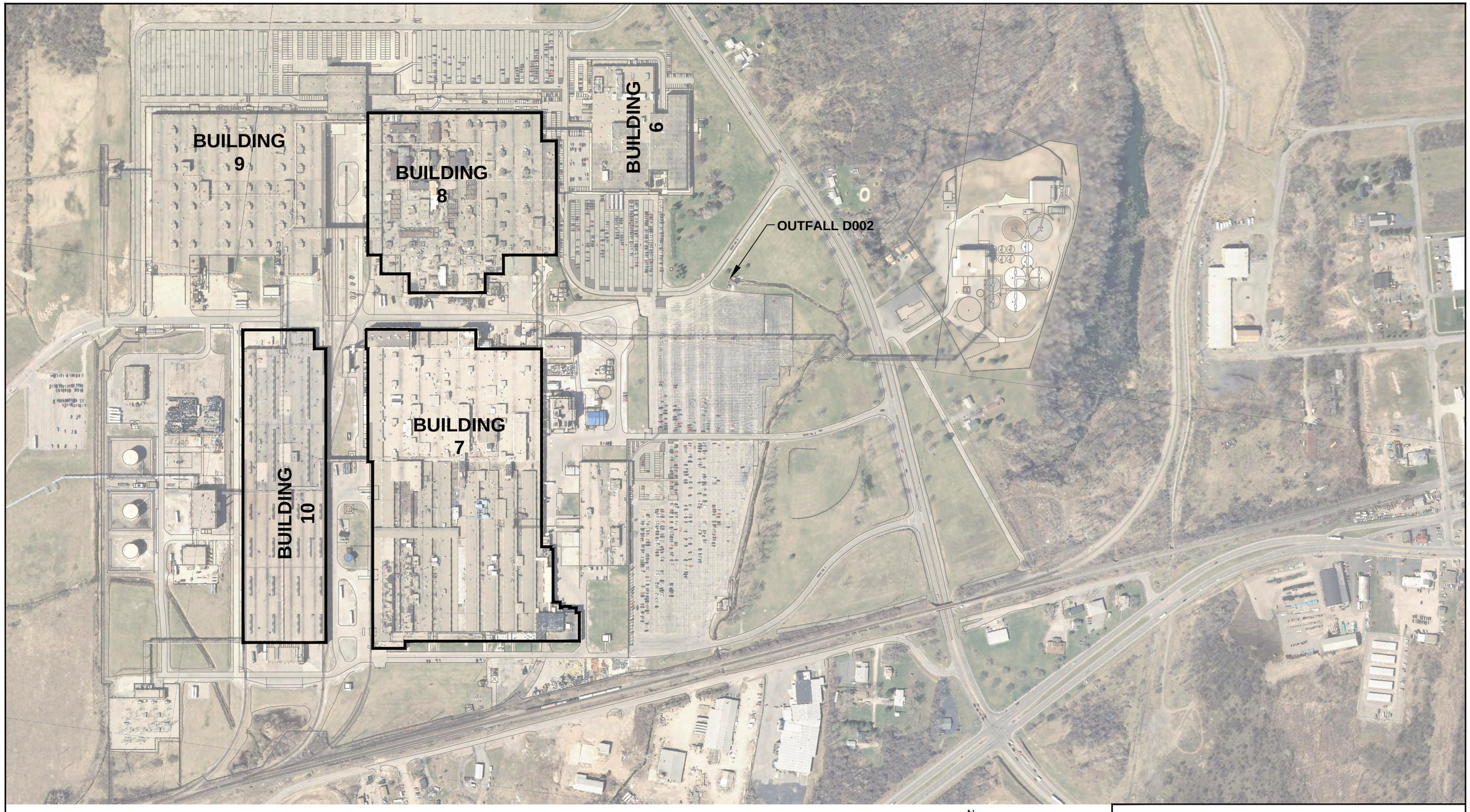
GM COMPONENTS HOLDINGS, LLC
LOCKPORT FACILITY
200 UPPER MOUNTAIN ROAD
LOCKPORT, NEW YORK

PROJECT LOCUS

SCALE: 1:24000
NOVEMBER 2011

FIGURE 1

Drawing Name: G:\36795_GM Lockport\CAD\36795-BLDG8-01.dwg Plot Date: November 11, 2011 Layout: Project Locus (1)
Operator Name: LUCIDO, SAM



NOTES:

1. THIS FIGURE IS BASED ON THE DRAWING PROVIDED BY DELPHI THERMAL AND INTERIOR SYSTEMS, DATED SEPTEMBER 2007.
2. AERIAL IMAGERY COURTESY OF NYS GIS CLEARINGHOUSE, 2008.

N
W E
S

0 400 800
SCALE IN FEET

HALEY & ALDRICH

GM COMPONENTS HOLDINGS, LLC.
LOCKPORT FACILITY
200 UPPER MOUNTAIN ROAD
LOCKPORT, NEW YORK

BUILDING 8
SITE PLAN

SCALE: AS SHOWN
NOVEMBER 2011

FIGURE 2

G:\36795_GM LOCKPORT\CAD\36795-BLDG8-02.DWG

APPROXIMATE LIMITS
BLDG 8 BCP SITE

BUILDING 6

BUILDING 9

BUILDING 8

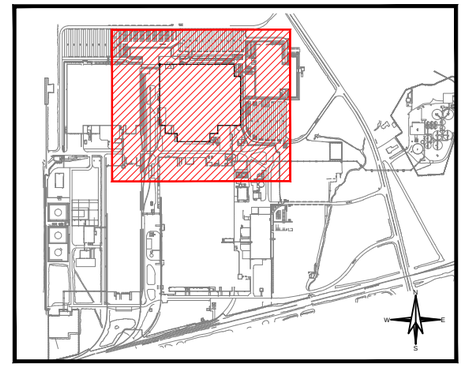
MW-6-F-7
MW-6-F-8
MW-6-F-9
GS-D
8-002-B
8-002-C
8-002-A
8-001-F
8-006-E
8-006-F
8-005-5D
8-006-C
MW-8-1
8-VI-2
8-001-B
8-001-G
8-006-D
8-006-B
8-006-A
8-005-5C
8-VI-1
8-005-1
8-001-C
8-SB-9
8-SB-6
8-SB-8
8-SB-7
MW-8-4
8-SB-10
8-005-5B
8-001-E
8-SB-11
8-005-5A
8-VI-4
MW-8-3
8-SB-12
8-001-I
8-005-4D
8-005-4B
8-005-4A
8-005-4E
8-005-4C
8-VI-5
8-SB-2
8-SB-3
8-005-3B
8-005-2-B
8-VI-3
8-005-2-A
MW-8-2
8-SB-1
8-SB-4
8-005-3A
8-005-2-C
8-005-3C
8-SB-5
8-001-H
8-004-B
MW-7
MW-4
8-001-A
8-004-A
8-004-C
8-001-J
MW-3S
MW-3D
8-009-A
8-009-B
8-VI-OUT
MW-8-003-B
MW-6
7-M-1
GS-C
7-FF-1
7-SB-10
MW-8
7-FF-2
7-L-1
7-M-2

LEGEND:

- TCE AREA MONITORING WELL WITHIN THE ENVIRONMENTAL EASEMENT AREA, PREVIOUSLY LOCATED. (APPROXIMATE LOCATION)
- APPROXIMATE LOCATION OF MONITORING WELL
- APPROXIMATE LOCATION OF SOIL BORING
- APPROXIMATE LOCATION OF AIR SAMPLE
- ERM BORING LOCATION

NOTES:

1. THIS FIGURE IS BASED ON THE DRAWING PROVIDED BY DELPHI THERMAL AND INTERIOR SYSTEMS, DATED SEPTEMBER 2007.
2. THE LOCATIONS OF THE MONITORING WELLS WERE DETERMINED BY GEOENVIRONMENTAL OF NEW YORK. THE LOCATIONS OF MONITORING WELLS SHOULD BE CONSIDERED APPROXIMATE.



SITE KEY:
NOT TO SCALE

N
W E
S

0 60 120 180 240
SCALE IN FEET

HALEY & ALDRICH

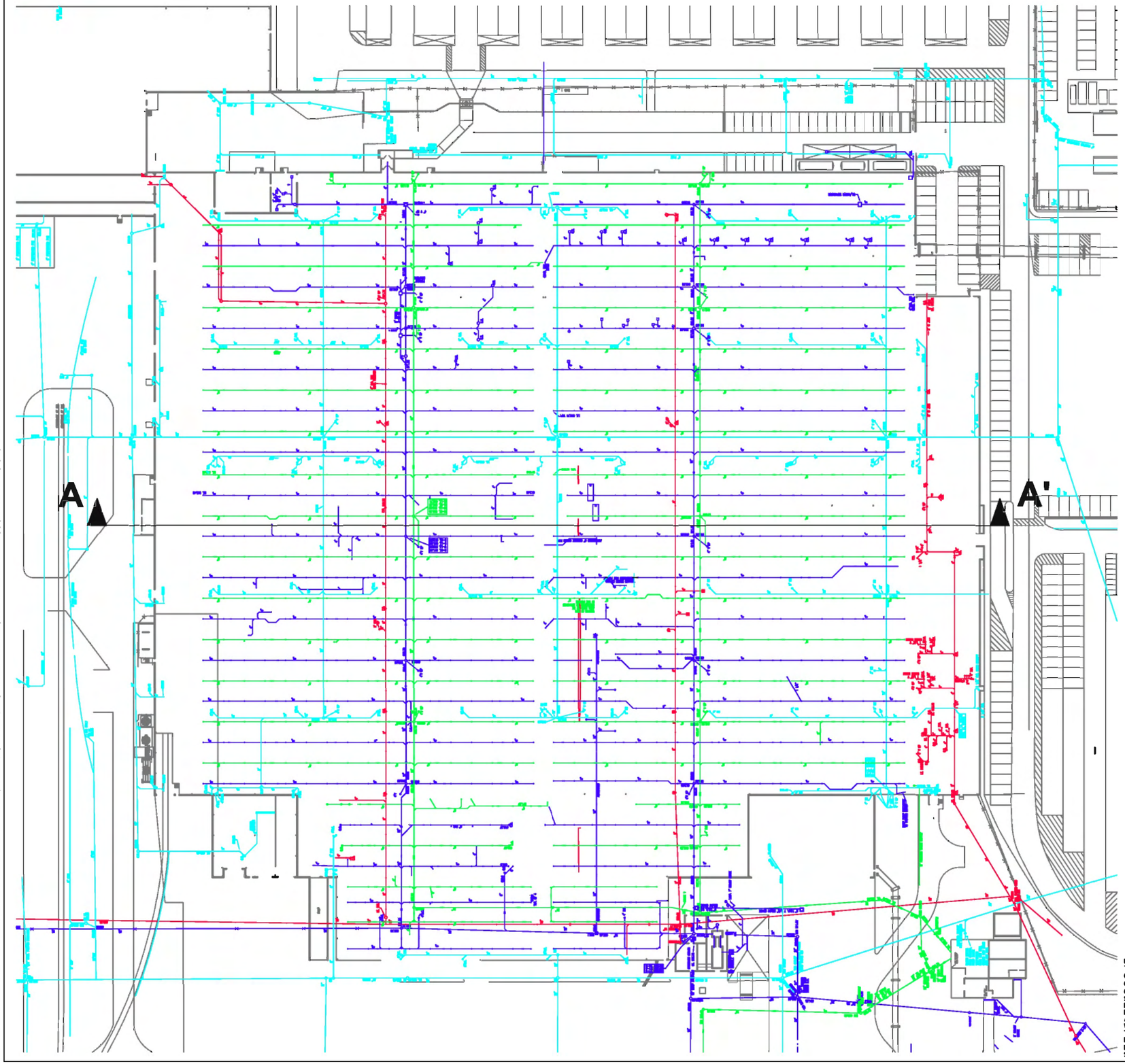
GM COMPONENTS HOLDINGS, LLC.
LOCKPORT FACILITY
200 UPPER MOUNTAIN ROAD
LOCKPORT, NEW YORK

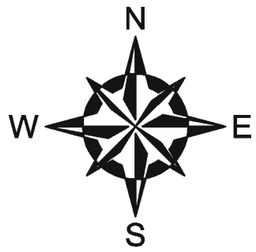
BUILDING 8
SAMPLING LOCATION PLAN

SCALE: AS SHOWN
NOVEMBER 2011

FIGURE 3

G:\36795_GM LOCKPORT\CAD\36795-BLDG8-03.DWG





LEGEND:

- LOCATION OF TREATED SEWER
- LOCATION OF SANITARY SEWER
- LOCATION OF STORM SEWER
- LOCATION OF PROCESS SEWER

0 50 100 200

SCALE IN FEET

NO.	ISSUE/DESCRIPTION	BY	DATE

GM COMPONENTS HOLDINGS, LLC
LOCKPORT FACILITY
200 UPPER MOUNTAIN ROAD
LOCKPORT, NEW YORK

BUILDING 8
SUBSURFACE PIPE LOCATION MAP PLAN VIEW

PREPARED BY:
GZA GeoEnvironmental of N.Y.
Engineers and Scientists
535 WASHINGTON STREET 11th FLOOR
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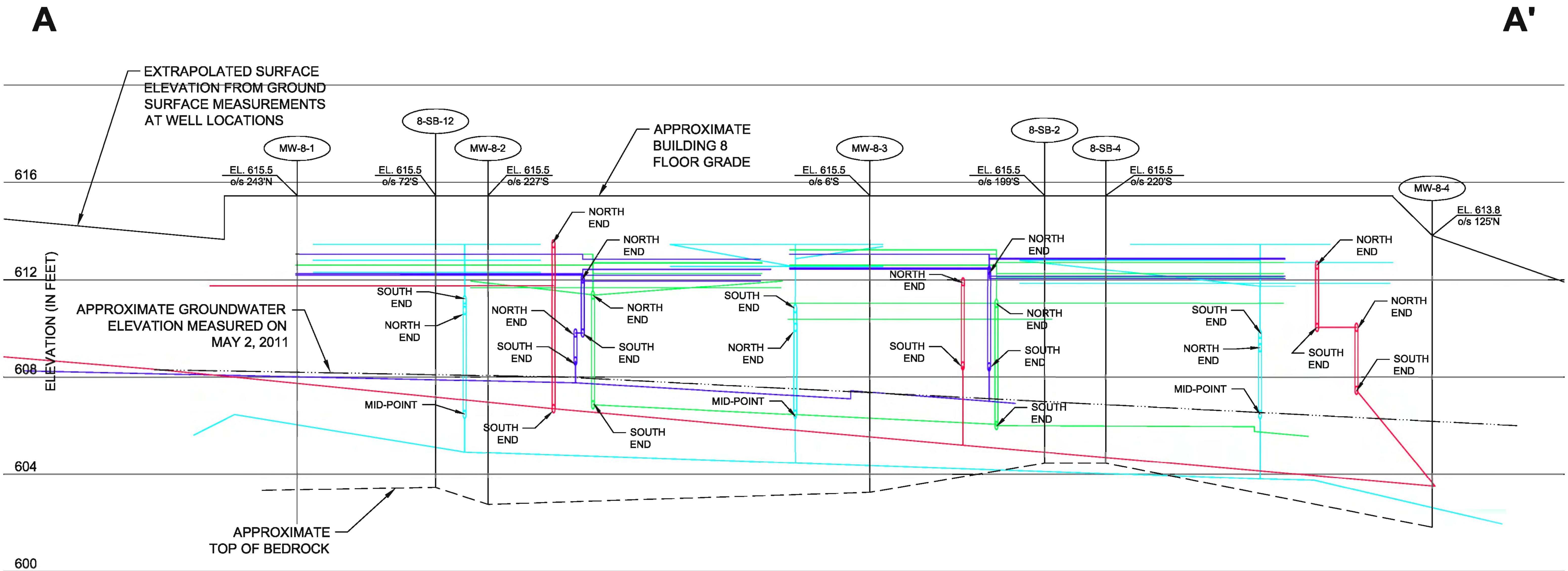
(716) 685-2300

PREPARED FOR:
GM COMPONENTS HOLDINGS, LLC

PROJ MGR: CZB	REVIEWED BY:	CHECKED BY:	FIGURE 4
DESIGNED BY:	DRAWN BY: DEW	SCALE: 1"= 300'	
DATE JULY 2011	PROJECT NO. 21.0056546.00	REVISION NO.	



NOTE:

1. PIPE LOCATIONS SHOWN ARE FOR DEMONSTRATION PURPOSES ONLY, AND MAY NOT REPRESENT ALL PIPE LOCATION DUE TO LACK OF PIPE ELEVATION DATA.

LEGEND:

- APPROXIMATE EXISTING GROUND SURFACE
- APPROXIMATE GROUNDWATER ELEVATION AS MEASURED ON MAY 2, 2011
- APPROXIMATE TOP OF BEDROCK ELEVATION
- LOCATION OF TREATED SEWER
- LOCATION OF SANITARY SEWER
- LOCATION OF STORM SEWER
- LOCATION OF PROCESS SEWER
- INDICATES PIPE RUNNING IN A NORTH-SOUTH ORIENTATION

APPROXIMATE SCALE (IN FEET)

HORIZONTAL: 0 30 60 120

VERTICAL: 0 2 4 8

NO.	ISSUE/DESCRIPTION	BY	DATE

GM COMPONENTS HOLDINGS, LLC
LOCKPORT FACILITY
200 UPPER MOUNTAIN ROAD
LOCKPORT, NEW YORK

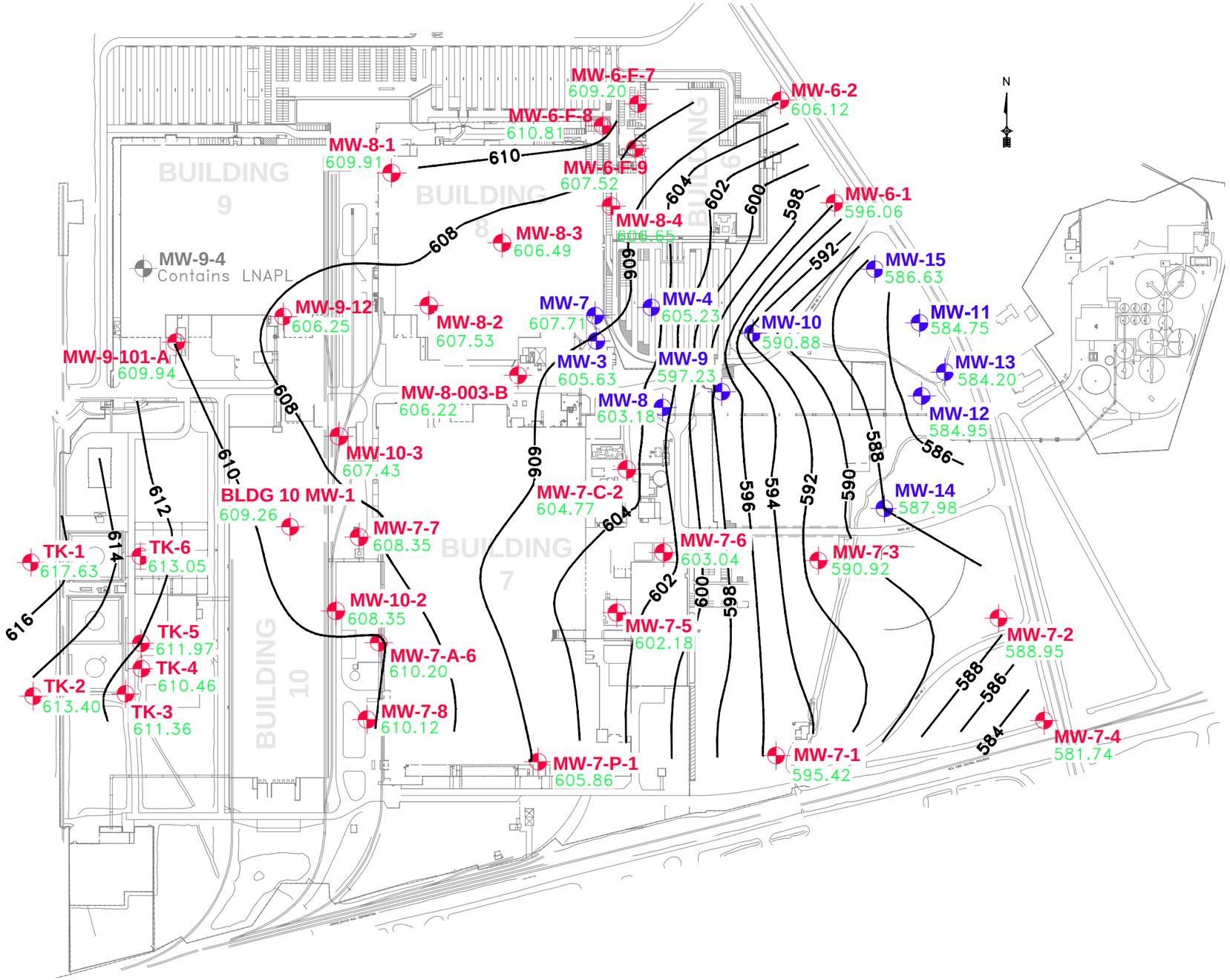
BUILDING 8
SUBSURFACE PIPE LOCATION MAP CROSS SECTION A-A'

PREPARED BY: GZA GeoEnvironmental of N.Y. Engineers and Scientists
535 WASHINGTON STREET 11th FLOOR
BUFFALO, NEW YORK 14203
(716) 685-2300

PREPARED FOR: GM COMPONENTS HOLDINGS, LLC

PROJ MGR: CZB	REVIEWED BY:	CHECKED BY:	FIGURE 5
DESIGNED BY:	DRAWN BY: DEW	SCALE: 1"= 300'	
DATE JULY 2011	PROJECT NO. 21.0056546.00	REVISION NO.	

Figures 6 and 7 were deleted due to file size constraints. These figure, however, are in the GM Building 7 Remedial Investigation Report that can be found elsewhere on this webpage.



LEGEND:

- **MW-11** — APPROXIMATE LOCATION AND DESIGNATION OF TCE AREA MONITORING WELLS WITHIN THE ENVIRONMENTAL EASEMENT AREA PREVIOUSLY LOCATED
- **TK-1** — APPROXIMATE LOCATION AND DESIGNATION OF MONITORING WELLS TO BE LOCATED
- 588.95 — GROUNDWATER ELEVATION (FEET) MEASURED ON MAY 2, 2011
- 590 — GROUNDWATER CONTOUR (FEET) MEASURED ON MAY 2, 2011

NOTES:

1. BASE MAP ADAPTED FROM A DRAWING PROVIDED BY DELPHI THERMAL AND INTERIOR SYSTEMS SEPT. 2007.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

DRAWN BY: **DEW**

DATE: **JUNE 2011**

GZA GeoEnvironmental of New York

APPROXIMATE SCALE IN FEET

0 200 400 800

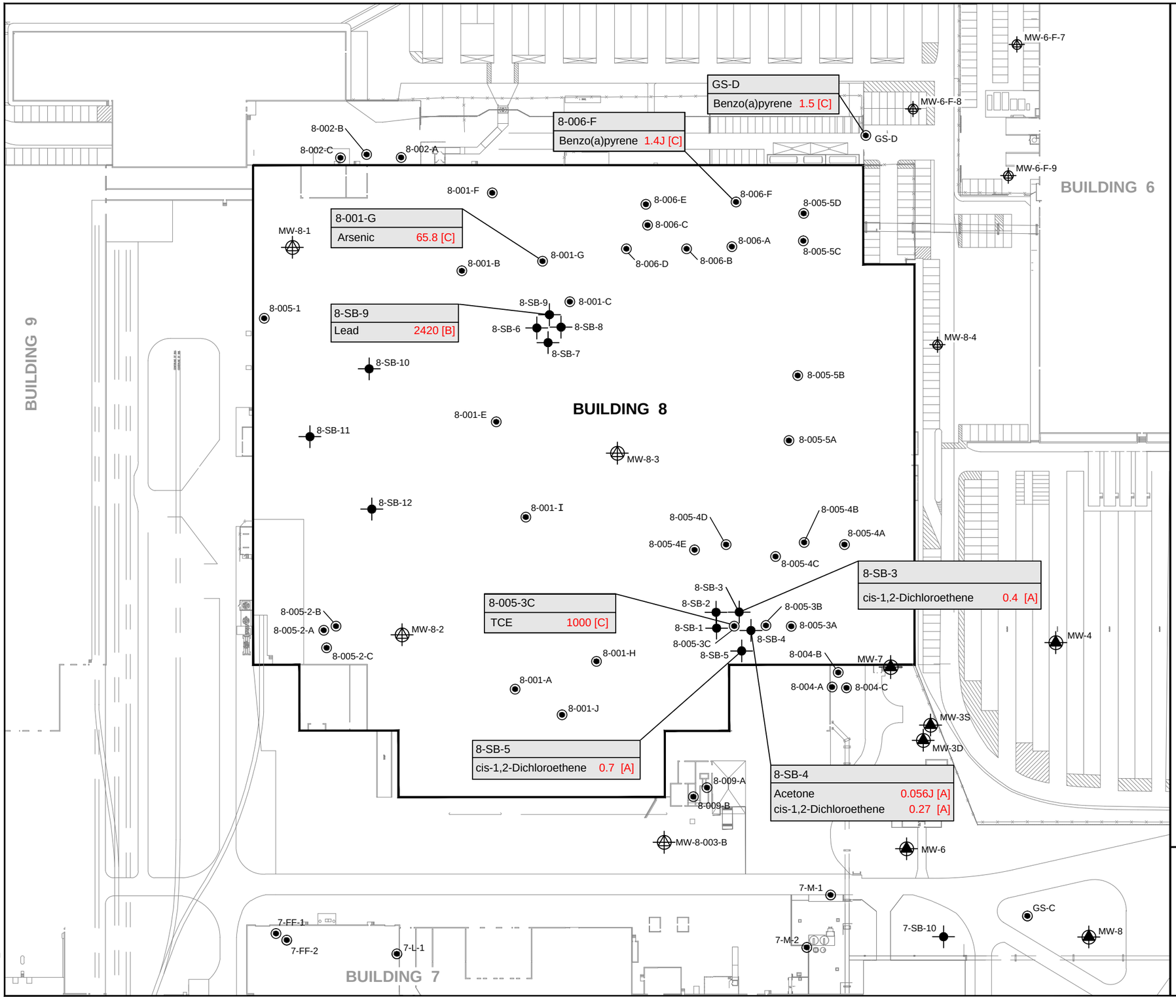
GM COMPONENTS HOLDINGS, LLC
LOCKPORT FACILITY
200 UPPER MOUNTAIN ROAD
LOCKPORT, NEW YORK

GROUNDWATER MONITORING WELL ELEVATIONS OF 5-2-11

PROJECT No.
21.0056546.00

FIGURE No.
8

Drawing Name: G:\36795_GM Lockport\CAD\36795-BLDG8-08.dwg Plot Date: November 11, 2011 Layout: GW Contours (8)
Operator Name: LUCIDO, SAM

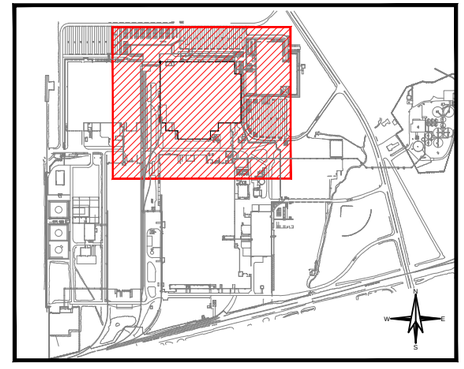


LEGEND:

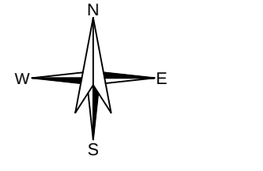
- TCE AREA MONITORING WELL WITHIN THE ENVIRONMENTAL EASEMENT AREA, PREVIOUSLY LOCATED. (APPROXIMATE LOCATION)
- APPROXIMATE LOCATION OF SOIL BORING
- ERM BORING LOCATION
- APPROXIMATE LOCATION OF MONITORING WELL

NOTES:

1. THIS FIGURE IS BASED ON THE DRAWING PROVIDED BY DELPHI THERMAL AND INTERIOR SYSTEMS, DATED SEPTEMBER 2007.
2. DATA RESULTS ARE SHOWN IN mg/kg.
3. CHEMICALS SHOWN IN DATABOXES EXCEEDED NYSDEC SOIL CLEANUP OBJECTIVES.
4. RESULTS IN RED EXCEED NYSDEC SOIL CLEANUP OBJECTIVES:
   [A] - PROTECTION OF GROUNDWATER CRITERIA
   [B] - RESTRICTED COMMERCIAL CRITERIA
   [C] - RESTRICTED INDUSTRIAL CRITERIA
5. DATA QUALIFIERS:
   J - ESTIMATED RESULT
   D - DILUTION REQUIRED



SITE KEY:
NOT TO SCALE



0 60 120 180 240
SCALE IN FEET

HALEY & ALDRICH

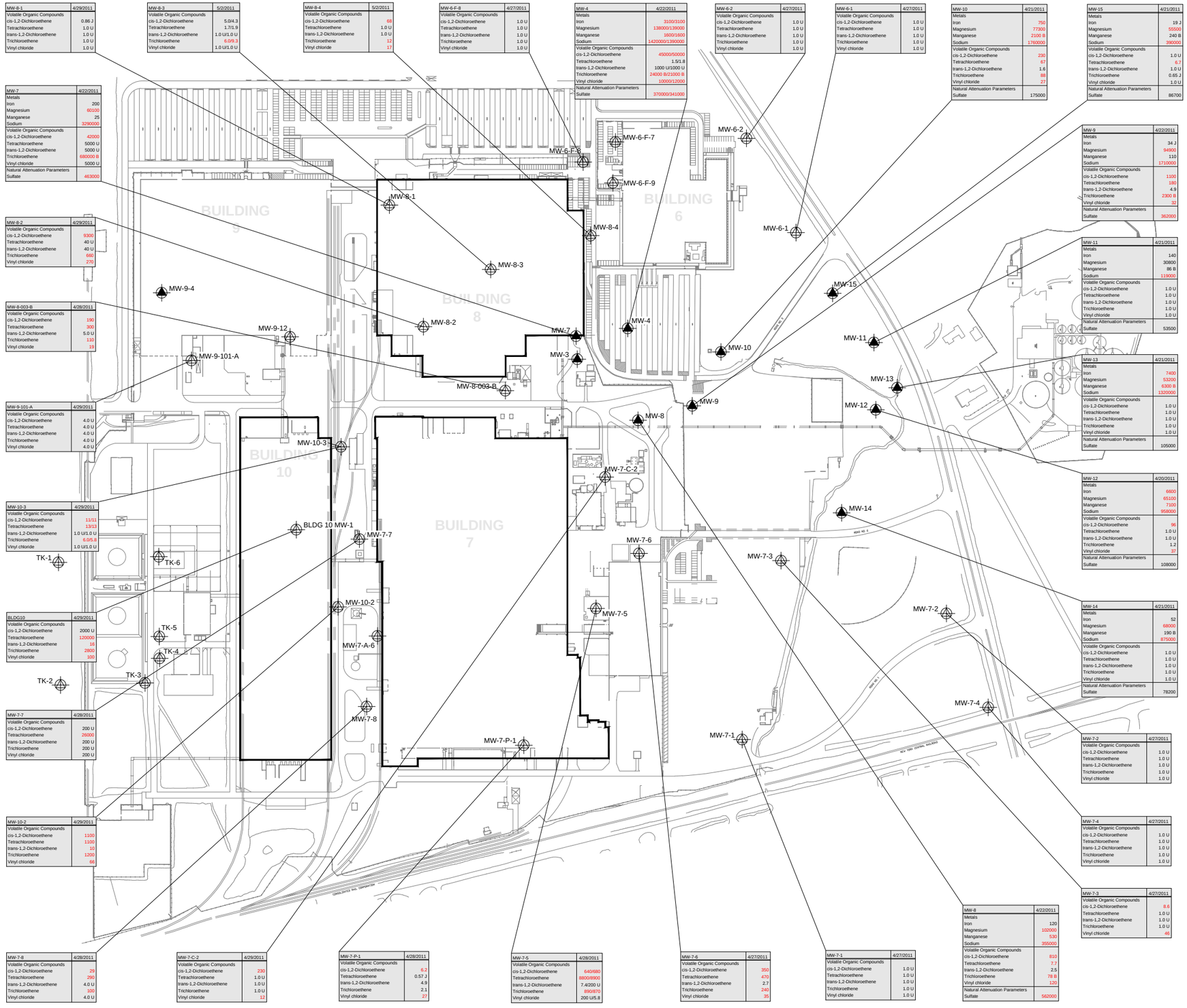
GM COMPONENTS HOLDINGS, LLC.
LOCKPORT FACILITY
200 UPPER MOUNTAIN ROAD
LOCKPORT, NEW YORK

BUILDING 8
SOIL ANALYTICAL EXCEEDANCES SUMMARY

SCALE: AS SHOWN
NOVEMBER 2011

FIGURE 9

G:\36795_GM LOCKPORT\CAD\36795-BLDG8-09.DWG



LEGEND:

TCE AREA MONITORING WELL WITHIN THE ENVIRONMENTAL EASEMENT AREA, PREVIOUSLY LOCATED. (APPROXIMATE LOCATION)

APPROXIMATE LOCATION OF MONITORING WELL (TO BE LOCATED)

NOTES:

1. THIS FIGURE IS BASED ON THE DRAWING PROVIDED BY DELPHI THERMAL AND INTERIOR SYSTEMS, DATED SEPTEMBER 2007.
2. THE LOCATIONS OF THE MONITORING WELLS WERE DETERMINED BY GEOENVIRONMENTAL OF NEW YORK. THE LOCATIONS OF MONITORING WELLS SHOULD BE CONSIDERED APPROXIMATE.
3. DATABOXES SHOWN IN UG/L.
4. CHEMICALS SHOWN IN DATABOXES EXCEEDED CRITERIA FOR BUILDING.
5. RESULTS IN RED EXCEED CRITERIA.
6. DATA QUALIFIERS:
   U - RESULT WAS NOT DETECTED ABOVE REPORTING LIMIT.
   J OR B - ESTIMATED RESULT

N W E S

0 200 400 600 800

SCALE IN FEET

HALEY & ALDRICH

GM COMPONENTS HOLDINGS, LLC.
LOCKPORT FACILITY
200 UPPER MOUNTAIN ROAD
LOCKPORT, NEW YORK

SITE WIDE GROUNDWATER ANALYTICAL RESULTS SUMMARY

SCALE: AS SHOWN
NOVEMBER 2011

FIGURE 10

G:\36795_GM LOCKPORT\CAD\36795-BLDG8-10.DWG

8-VI-2	8-VI-2IA 1/18/2011	8-VI-2SS 1/18/2011
1,1,1-Trichloroethane	0.87 U	2.2 U
1,1-Dichloroethene	0.63 U	1.6 U
Carbon tetrachloride	0.54	1.3 U
cis-1,2-Dichloroethene	1.5	190
Tetrachloroethene	5.0	35
Trichloroethene	7.0	190
Vinyl chloride	0.41 U	1.9

8-VI-1	8-VI-1IA 1/18/2011	8-VI-1SS 1/18/2011
1,1,1-Trichloroethane	2.2 U/1.5	0.87 U
1,1-Dichloroethene	1.6 U/0.63 U	0.63 U
Carbon tetrachloride	0.60/1.3 UJ	0.50 U
cis-1,2-Dichloroethene	2.2/2.1	0.63 U
Tetrachloroethene	9.6/8.9	13
Trichloroethene	11/11	5.7
Vinyl chloride	1.0 U/0.41 U	0.41 U

8-VI-4	8-VI-4IA 1/18/2011	8-VI-4SS 1/18/2011
1,1,1-Trichloroethane	0.87 U	2.2 U
1,1-Dichloroethene	0.63 U	1.6 U
Carbon tetrachloride	0.63	1.3 U
cis-1,2-Dichloroethene	3.7	6.7
Tetrachloroethene	8.7	11
Trichloroethene	16	45
Vinyl chloride	0.41 U	1.0 U

8-VI-3	8-VI-3IA 1/18/2011	8-VI-3SS 1/18/2011
1,1,1-Trichloroethane	0.87 U	0.44 U
1,1-Dichloroethene	0.63 U	0.32 U
Carbon tetrachloride	0.63	0.57
cis-1,2-Dichloroethene	2.6	3.3
Tetrachloroethene	7.2	1.2
Trichloroethene	13	19
Vinyl chloride	0.41 U	0.20 U

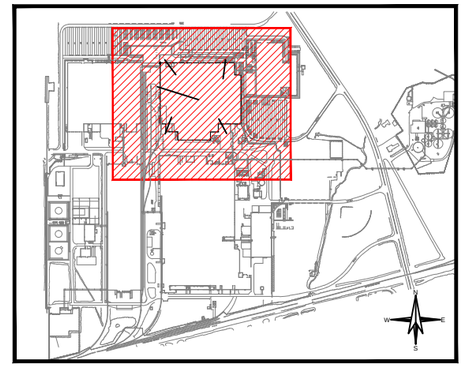
8-VI-5	8-VI-5IA 1/18/2011	8-VI-5SS 1/18/2011
1,1,1-Trichloroethane	4.4 U	16000 U
1,1-Dichloroethene	3.2 U	12000 U
Carbon tetrachloride	2.5 U	9400 U
cis-1,2-Dichloroethene	3.3	830000
Tetrachloroethene	11	20000 U
Trichloroethene	11	4200000
Vinyl chloride	2.0 U	7700 U

LEGEND:

- VAPOR INTRUSION SAMPLING POINT
- TCE AREA MONITORING WELL WITHIN THE ENVIRONMENTAL EASEMENT AREA, PREVIOUSLY LOCATED. (APPROXIMATE LOCATION)
- APPROXIMATE LOCATION OF SOIL BORING
- ERM BORING LOCATION
- APPROXIMATE LOCATION OF MONITORING WELL

NOTES:

1. THIS FIGURE IS BASED ON THE DRAWING PROVIDED BY DELPHI THERMAL AND INTERIOR SYSTEMS, DATED SEPTEMBER 2007.
2. THE LOCATIONS OF THE MONITORING WELLS WERE DETERMINED BY GEOENVIRONMENTAL OF NEW YORK. THE LOCATIONS OF MONITORING WELLS SHOULD BE CONSIDERED APPROXIMATE.
3. DATABOXES SHOWN IN UG/M3.
4. ONLY CHEMICALS WITH CRITERIA SHOWN IN BOXES.
5. RESULTS IN RED EXCEED CRITERIA.
6. DATA QUALIFIERS:
   U - RESULT WAS NOT DETECTED ABOVE REPORTING LIMIT.
   J - ESTIMATED RESULT



SITE KEY:
NOT TO SCALE

N
W E
S

0 60 120 180 240
SCALE IN FEET

HALEY & ALDRICH

GM COMPONENTS HOLDINGS, LLC.
LOCKPORT FACILITY
200 UPPER MOUNTAIN ROAD
LOCKPORT, NEW YORK

BUILDING 8
VAPOR INTRUSION RESULTS SUMMARY SUMMARY

SCALE: AS SHOWN
NOVEMBER 2011

FIGURE 11

G:\36795_GM LOCKPORT\CAD\36795-BLDG8-11.DWG