Interim Remedial Measures / Alternatives Analysis Report
Brownfield Cleanup Program Site #C828101

Former Alliance Metal Stamping & Fabrication Facility
12 Pixley Industrial Parkway
Town of Gates, Monroe County, New York

Prepared for:
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September 2021

CERTIFICATION

I, Dwight Harrienger of Stantec Consulting Services Inc., certify that I am currently a NYS registered professional engineer and that this Interim Remedial Measures / Alternatives Analysis Report (IRM/AAR) was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

Sept. 21, 2021

Signature | Date

Executive Summary

This report presents an analysis of alternatives (Alternatives Analysis, AA) potentially applicable to remediation of environmental contamination identified at the Former Alliance Metal Stamping & Fabrication (AMSF) Facility Site located at 12 Pixley Industrial Parkway in the Town of Gates, Monroe County, New York. The report also describes interim remedial measures (IRMs) that have been completed at the Site.

The AMSF Site is identified by site identification number C828101 in the Brownfield Cleanup Program (BCP) administered by the New York State Department of Environmental Conservation (NYSDEC).

Site Description

The 7-acre Site is occupied by the former AMSF industrial facility. Manufacturing operations (metal stamping and fabricating) were initiated at the site in the early 1970s and decommissioned in 1994. Since 1995, Maguire Family Properties, Inc. (MFP), the current owner, has leased individual spaces in the facility to a variety of light manufacturing and commercial tenants.

History of Investigations of Environmental Conditions

An initial assessment of the environmental history of the AMSF Site and an investigation of environmental conditions in exterior areas outside the facility building were performed between 1991 and 1994 prior to the sale of the Site to MFP. The 1991 to 1994 assessment and investigations were performed on behalf of Gleason Corporation, the parent company for the Alliance Metal Stamping & Fabrication operation.

The results of the sampling activities performed at the Site in the early 1990s identified groundwater contamination by 1,1,1-trichloroethane (1,1,1-TCA), a chlorinated volatile organic compound (VOC) commonly used as a solvent in industrial degreasing operations. The highest levels of contamination were found at a well located at the northwest corner of the Site. Contamination of groundwater by much lower concentrations of tetrachloroethylene, a chlorinated VOC commonly used as a degreasing or dry-cleaning solvent (also known as tetrachloroethene or perchloroethylene, and commonly abbreviated as PERC or PCE), was identified in groundwater along the southern boundary of the Site. The investigations also identified four occurrences of soil contamination at the Site which were addressed in 1994 with remedial actions to remove the contaminated soil.

The west boundary of the AMSF Site adjoins the site of the ITT Corporation Former Rochester Form Machine Facility located at 30 Pixley Industrial Parkway (the ITT or RFM site), an inactive hazardous waste site (NYSDEC Site # 828112). The ITT site and the adjoining downgradient properties, including a portion of the AMSF Site, have been the subject of a Remedial Investigation (RI) and Feasibility Study (FS) program implemented by ITT under the oversight of

NYSDEC. The focus of the ITT site RI/FS was contamination by 1,1,1-TCA and related VOCs related to past releases from degreasing operations at the ITT site. The data from the RI of the ITT site indicate that bedrock, groundwater and soil vapor in areas of the AMSF Site which are downgradient of the ITT site have been impacted by chlorinated solvent contamination, with 1,1,1-TCA being the principal contaminant.

In April 2009, assessment of the potential for soil-vapor intrusion in the AMSF building performed as part of the ITT site RI detected elevated concentrations of PCE in sub-slab vapor beneath the northeastern portion of the AMSF building. Historical records for the AMSF Site were identified which indicated that a degreaser had been located in that part of the AMSF facility during at least part of the period of AMSF operations. The need for further investigation of the subsurface conditions in the area of the former degreaser was the impetus for Maguire Family Properties to volunteer to undertake an RI at the AMSF Site under New York State's BCP.

Remedial Investigation Findings

The Site was admitted into the BCP by NYSDEC in July 2011. The BCP RI was initiated in March 2012 and completed in December 2015. The findings of the RI concerning the nature and extent of contamination at the Site were as follows:

<u>Soil</u>

Occurrences of soil contamination exceeding NYSDEC's Soil Cleanup Objectives (SCOs) for protection of public health at commercial or industrial use sites were not identified at the Site.

VOC contamination exceeding NYSDEC's SCOs for protection of unrestricted site use (UU SCOs) and protection of groundwater (POGW SCOs) were detected in three areas of the Site:

- Former Degreaser Area - Area of Concern AOC 1
- Former Waste Storage Area B – AOC 5B
- Former Paint Shop Area - AOC 6

All three areas are within the footprint of the Site building, and the contaminated soil is therefore covered by and contained beneath the building floor slab. In each area, the water table occurs below the top of bedrock. The cap provided by the floor slab, the unsaturated conditions and the contaminant concentrations in both soil and groundwater together indicate that the soil contamination in these areas is unlikely to pose health risks to site workers or others from direct contact or ingestion or to be contributing to groundwater contamination at the Site.

<u>Groundwater</u>

Chlorinated VOCs are present in Site groundwater at concentrations that exceed NYSDEC's groundwater quality standards in the shallow-bedrock zone across the entire Site, and are also present in the intermediate- and deep-bedrock zones.

Concentrations of 1,1,1-TCA and the chlorinated VOCs which are the daughter products of the degradation of 1,1,1-TCA in the environment (including principally 1,1-dichloroethane and 1,1-dichloroethene) are highest in Operable Unit 1 (OU-1), located in the upgradient northwest corner of the Site, with contamination above standards extending from OU-1 beneath the building to the eastern, downgradient Site boundary. Contamination by PCE and its degradation daughter products (including principally trichloroethene and cis-1,2-dichloroethene) is present at lower concentrations, with the highest levels found in the area of the former degreaser in AOC 1 and with exceedances of standards extending to the eastern Site boundary. Groundwater sampling has not been performed on the adjacent properties located east of the Site, and therefore the extent of the VOC contaminant plume beyond the downgradient eastern Site boundary is not known. (As a BCP Volunteer, MFP is not responsible for delineation of the extent of off-Site groundwater contamination.)

<u>Soil Vapor</u>

The results of the RI indicated that there is a potential for chlorinated VOCs that are present in the subsurface at the Site to migrate by soil vapor intrusion (SVI) from below the floor of the facility building into the air inside the building. Concentrations of TCA, PCE and/or one or more related chlorinated VOC daughter products were detected in sub-slab vapor and indoor air sample pairs collected at locations throughout the building. Concentrations in sub-slab vapor at most of the locations sampled have exceeded SVI assessment guidance values established by the New York State Department of Health (NYSDOH). The few exceptions include locations at the west edge, southwest corner, and southeast corner of the building.

IRM SMP Monitoring Program

An Interim Remedial Measure (IRM) Site Management Plan (SMP) specifying a program of annual building inspection and indoor air monitoring was implemented in 2016 to periodically assess whether SVI of chlorinated VOCs was occurring at the Site and evaluate whether other actions (actions in addition to the annual monitoring) were warranted to address potential exposure of building occupants to VOCs which may have been detected in the indoor air.

Beginning in February 2016, IRM monitoring was performed annually during the winter heating season. During the IRM monitoring events conducted in the 2015-2016 and 2016-2017 heating seasons, some of the indoor air samples collected exhibited PCE or trichloroethene (TCE) at concentrations above NYSDOH's air guidelines. The samples in question were collected in the area in the northeast to north-central section of the building which includes the Former Degreaser Area (AOC 1) and Former Drainage Swale Area (AOC 2). Actions taken to respond to those results included removal of a cleaning solvent product containing PCE that had been in use in that section of the building in February 2016, sealing of a potential floor penetration at one of the sample locations, and resampling of indoor air to re-assess the indoor air quality conditions in the spaces in question. Resampling results indicated that further actions were not needed to address the potential for soil vapor intrusion at the Site during either heating season.

SVI assessment monitoring for the 2017-2018 heating season was performed in December 2017. No exceedances of NYSDOH Air Guidelines were detected. The December 2017 results indicated that immediate actions were not needed to address the potential for SVI at the Site during the 2017-2018 heating season.

SVI assessment monitoring for the 2018-2019 heating season was performed in December 2018, after the June 2018 AAR was submitted to the NYSDEC. One nominal exceedance of the NYSDOH Air Guideline Values was detected in the northeast section of the building. The TCE concentration of 2.6 micrograms per cubic meter (µg/m^3), detected in the sample collected at the AM-IA-18 location was below the 20 µg/m^3 level considered by NYSDOH as warranting immediate and effective further action to reduce health risks associated with potential exposures of building occupants to TCE. The December 2018 results indicated that immediate actions were not needed to address the potential for SVI at the Site during the 2018-2019 heating season.

SVI assessment monitoring was also conducted during the 2019-2020 and 2020-2021 heating seasons following implementation of an IRM that included installation and commissioning of an SVI mitigation system in 2019. Additional information concerning the 2019-2020 and 2020-2021 monitoring events is presented in Section 8 of this report.

Remedial Alternatives Analysis

An Alternatives Analysis was performed in 2018 to evaluate remedial options for addressing the conditions indicated by the findings of the RI and the IRM SMP monitoring program. The AA was conducted in accordance with NYSDEC's DER-10 Technical Requirements for Site Investigation and Remediation to provide the basis for selecting a remedy that is:

- feasible from an engineering perspective,
- financially feasible, and
- well suited to address the identified Site impacts given:
    - the current and reasonably anticipated future uses of the Site and surrounding area, and
    - the presence of contamination by chlorinated VOCs in soil, bedrock and groundwater on the adjacent, upgradient ITT site.

Among other criteria, remedial alternatives were screened under the assumption that an institutional control will be implemented that will restrict Site uses to the kinds of commercial and industrial uses that have characterized the Site and surrounding area for the past 50 years. The remedial alternatives developed in the AA are those which have provisions for restricted site use. The AA also considered alternatives which could theoretically achieve conditions that would allow for unrestricted use of the Site relative to soil contamination.

A preliminary screening of remedial technologies potentially applicable to Site conditions was performed which took into account factors such as technical feasibility, pertinence to remedial action objectives, cost effectiveness, and required time to implement. The preliminary screening led to selection of remedial alternatives for further analysis. Each selected alternative was comprised of a remedial technology or combination of remedial technologies that could be implemented to address the Site contamination and meet the remedial action objectives, while also complying with applicable regulations and guidance.

The following remedial technologies passed the preliminary screening and were selected to develop alternatives for further analysis:

- On-site Institutional Controls (IC), including implementation of a restriction on Site use and a Site Management Plan.
- Containment of contaminated soil exceeding applicable SCOs.
- Groundwater quality monitoring to address groundwater contamination by chlorinated VOCs.
- Alternatives which involve:
  - modification or abandonment of on-Site stormwater recharge wells to reduce the potential for further mobilization of VOC contaminants from bedrock in source areas and reduce the potential for off-Site migration of groundwater contaminated with chlorinated VOCs, and
  - construction of new stormwater management infrastructure to replace the stormwater handling capacity of the modified or abandoned recharge wells.
- Sealing of floor slab joints, cracks and penetrations and sealing of potential vapor migration pathways associated with sub-grade features in the Site building, coupled with indoor air monitoring (IAM) to verify the effectiveness of the building slab as an overall SVI measure to reduce exposures.
- Sub-slab depressurization (SSD) for SVI mitigation in the entire Site building.

To meet the BCP Volunteer's responsibility under the BCP to assess the feasibility of preventing offsite migration of the groundwater contaminant plume along the downgradient east site boundary, remedial technologies potentially capable of plume containment and/or stabilization were included in the preliminary screening. However, no feasible alternatives were identified that passed the preliminary screening. In its July 18, 2016 letter accepting the December 2015 RI report for the AMSF Site, NYSDEC stipulated that the potential for soil vapor intrusion in off-site structures related to off-site migration of the contaminated groundwater plume would need to be addressed in the Alternatives Analysis. While as a BCP Volunteer MFP does not bear responsibility for addressing the potential for SVI exposures at adjacent off-Site downgradient properties, the following remedial approach was selected for evaluation in the alternatives analysis to comply with the NYSDEC comment of July 18, 2016:

- Development and implementation of plans to perform initial vapor intrusion assessments for adjacent off-site properties located along the eastern Site boundary to determine whether off-site migration of contaminated groundwater represents a potential for SVI in the buildings located on those properties.

Each of the alternatives developed from the selected technologies and approaches was evaluated as specified in the BCP guidance and regulations. Results of the evaluation lead to the conclusion that a remedial program which combines the following elements was comparatively well suited to addressing the Site contamination:

- Containment of VOC-contaminated soil exceeding SCOs by maintaining the existing building as cover in affected areas.

- Annual monitoring of site-wide groundwater quality conditions as an element of a Site Management Plan to address contaminated Site groundwater.

- Supplemental semi-annual monitoring for a two-year period in the area on the east side of the facility to assess the influence of stormwater recharge at recharge well RW-5 on groundwater quality conditions along the eastern Site boundary.

- Plugging of the bottom section of recharge well RW-2 to eliminate direct injection of stormwater into the deep bedrock horizons of the contaminated bedrock aquifer and thereby reduce the potential for mobilization and migration of VOC contaminants.

- An SVI mitigation program that involves a combination of:

    - implementation of sub-slab depressurization in all the areas of the building, and

    - annual indoor air monitoring in the building until such time as SSDS coverage has been implemented throughout the building.

- Imposition of an institutional control in the form of an Environmental Easement for the controlled property which will:
    - require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
    - allow the use and development of the controlled property for commercial use or industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
    - restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
    - require compliance with a Department-approved Site Management Plan.
- The Site Management Plan will include the following:

  a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

    - Institutional Controls: the Environmental Easement described above.
    - Engineering Controls: A cover system that includes the existing building and its floor slab, outdoor pavements, and surface soil which meets soil cleanup objectives applicable for commercial use of the site.

  This Institutional and Engineering Control Plan includes, but may not be limited to:

    - an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
    - a provision should redevelopment occur to ensure no soil exceeding protection of groundwater concentrations will remain below storm water retention basin or infiltration structures.
    - descriptions of the provisions of the environmental easement including any land use and/or groundwater water use restrictions;

- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with the existing site cover system will be placed in any areas where the upper one foot of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);

- a provision for evaluation of the potential for soil vapor intrusion for any new buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;

- provisions for the management and inspection of the identified engineering controls;

- maintaining site access controls and Department notification; and

- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- monitoring of groundwater and indoor air to assess the performance and effectiveness of the remedy;

- a schedule of monitoring and frequency of submittals to the Department; and

- monitoring for vapor intrusion for any buildings as may be required by the Institutional and Engineering Control Plan discussed above.

In addition, performance of initial SVI assessments at the buildings located on the two off-site properties adjacent to the downgradient eastern Site boundary (4 and 10 Pixley Industrial Parkway) was recommended, followed, if necessary as determined by NYSDEC, by additional follow-up actions such as SVI mitigation or monitoring. Under BCP regulations, MFP as a BCP Volunteer is not responsible for the performance of such assessments or follow-up actions.

The AA described above was completed in 2018, and an Alternatives Analysis Report (AAR) describing the results of the AA was submitted to the Department in June 2018. The Department's review of the June 2018 AAR was deferred pending implementation of additional IRMs at the Site in 2019 and 2021. The additional IRMs, which involved construction of components of the remedial alternative recommended in the June 2018 AAR, are described below.

The AA completed in 2018 is described in full in this IRM/AAR. The recommendation for the Site remedy that was presented in the June 2018 AAR has been updated in this report to account for completion of the IRMs described below.

Environmental Easement

An environmental easement that addresses the easement provisions described in the June 2018 AAR was granted to the NYSDEC by Maguire Family Properties, Inc., the owner of the Site property, in 2019. It was executed by the Department on August 15, 2019 and filed with the Monroe County Clerk on October 8, 2019. It contains provisions requiring: (1) implementation, maintenance and monitoring of the Engineering Controls for the Site; (2) prevention of future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and (3) a limitation on the use and development of the Site to commercial and industrial uses only.

Summary of Completed IRMs

IRM for SVI Mitigation and Recharge Well Modification

The first of the two IRMs implemented following completion of the 2018 AAR was constructed at the Site in 2019. The IRM was implemented in accordance with the specifications of the IRM Work Plan (Stantec, June 2019), modifications to the work plan specified by NYSDEC in its approval letter dated July 24, 2019, and the "Proposed Amendment to the IRM Work Plan" (Stantec, September 5, 2019) accepted by NYSDEC on September 27, 2019.

The IRM involved construction of two elements of the remedy recommended in the June 2018 AAR. The IRM activities were implemented to remedy impacts from the presence of chlorinated volatile organic compounds (CVOCs) in Site groundwater, soil and soil vapor.

The construction of the IRM involved the following two remedial actions:

- On-Site stormwater recharge well RW-2, located in the northwest corner of the Site, was modified by installation of a grout plug to seal the deep-bedrock portions of the well while maintaining the function of the well as a component of the stormwater management infrastructure for the Site.

- A SSDS that covers the entire building was installed and commissioned. Full-time operation, maintenance and monitoring of the SSDS component of the IRM began in October 2019 and has continued since then.

The goals and objectives of the IRM included the following:

Goal: Mitigate the potential migration of soil vapor impacted by CVOCs from beneath the building footprint into the interior occupied spaces of the building.

Objective: Construct, commission and operate an SSDS to achieve and maintain a minimum vacuum pressure differential of 0.002 inches of water column (in. WC) between the sub-slab and the routinely occupied interior spaces of the building.

Goal: Reduce the potential for mobilization and migration of CVOC contaminants in the deep bedrock horizons of the contaminated bedrock aquifer.

Objective: Eliminate direct injection of stormwater into the deep bedrock horizons of the contaminated bedrock aquifer in the vicinity of the contaminant source area by plugging the bottom section of deep recharge well RW-2 up to a depth of approximately 60 feet below ground surface (ft bgs). A secondary objective was to maintain the shallow-bedrock section of the well (above 60 ft bgs) to allow RW-2 to continue to function with the other existing shallow recharge wells (RW-1 through -5) as an essential component of the Site stormwater management system.

Completion of the IRM was documented in a Construction Completion Report (CCR) submitted to NYSDEC in August 2020. The CCR documents that the IRM was implemented in accordance with NYSDEC requirements and the goals and objectives for the IRM were achieved.

<u>Cover System IRM</u>

The second of the two IRMs was implemented at the Site in May and June 2021. The IRM was implemented in accordance with the specifications of the September 2020 IRM Work Plan (Stantec, September 2020), modifications to the work plan specified by NYSDEC in its approval letter dated September 25, 2020, and the "Implementation of Cover System IRM Work Plan – Interim Report" (Stantec, March 10, 2021).

The IRM was implemented to address cover system conditions in lawn areas on the east and south sides of the site. A pre-design investigation of cover system surface soil at the Site completed in 2019 had identified the presence of a single compound, the poly-nuclear aromatic hydrocarbon (PAH) compound benzo(a)pyrene (B(a)P), in surface soil samples in those areas at concentrations above the NYSDEC soil cleanup objective for protection of human health at a commercial-use BCP site (the CU SCO).

The Cover System IRM involved the following elements:

- Supplemental soil sampling of the lawn areas on the east and south sides of the Site to delineate areas of exceedance of the CU SCO for B(a)P.

- Installation of imported cover material in those east and south side lawn areas confirmed by the supplemental sampling to exhibit exceedances of a CU SCO as necessary to create a cover system that meets the CU SCOs. Imported cover material was pre-characterized in accordance with NYSDEC Part 375 regulations and DER-10 policy requirements to confirm its eligibility for use as cover.

The IRM activities were implemented to make surface soil conditions in lawn areas at the Site consistent with Department objectives for cover systems at a BCP site with current and reasonably anticipated future uses that are commercial and industrial. The goals and objectives of the IRM included the following:

Goal: Determine whether existing surface soil in individual sections of the lawn areas on the south and east sides of the facility can remain in place to serve as part of the cover system for the final remedy for the Site.

Objective: Complete supplemental surface soil sampling in each east-side and south-side lawn area to delineate where exceedances of the CU SCO for B(a)P occur.

Goal: Perform remedial actions to cover or remove and replace the soils where exceedances of the CU SCO for B(a)P were found to occur.

Objective: Construct a new cover system in areas of exceedance of the CU SCO for B(a)P by establishing 12 inches of cover that meets DER-10 requirements.

Completion of the Cover System IRM was documented in a Construction Completion Report (CCR) submitted to NYSDEC in August 2021. The CCR documents that the IRM was implemented in accordance with NYSDEC requirements and that goals and objectives for the IRM were achieved.

Recommended Remedial Alternative

Based on the results of the alternatives analysis presented in this report and the completion of the IRMs implemented at the Site, the following combination of remedial elements is recommended as a remedy for the contamination identified at the Site and the related potential on- and off-Site human health exposures identified by the qualitative exposure assessment:

- No further remedial action is necessary following completion of the IRMs.
- Institutional Controls restricting future use of the Site to industrial and commercial uses and prohibiting use of Site groundwater will be implemented. The institutional controls

include those established in the Environmental Easement that was granted to NYSDEC in 2019.

- A NYSDEC-approved Site Management Plan will be developed and implemented.

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1.0 Introduction

Stantec Consulting Services Inc. (Stantec) has prepared this report describing the Alternatives Analysis (AA) performed in connection with a Remedial Investigation (RI) of the Former Alliance Metal Stamping & Fabrication (AMSF) Facility Site located at 12 Pixley Industrial Parkway in the Town of Gates, Monroe County, New York. A map showing the Site location is presented on Figure 1.

Maguire Family Properties, Inc. (MFP), the current owner of the Former AMSF Site, implemented an RI as a Volunteer under New York State's Brownfield Cleanup Program (the BCP) pursuant to a Brownfield Cleanup Agreement (BCA) for the Site between MFP and the New York State Department of Environmental Conservation (NYSDEC). The Site was accepted into the BCP in July 2011 as Site #C828101.

Under the requirements of the BCP, including applicable regulations which are set forth in New York State's Compilation of Codes, Rules and Regulations Title 6, Part 375, Subpart 3 (6 NYCRR Subpart 375-3), an AA is to be performed in order to select the remedial program for the Site. An AA is required to evaluate feasible remedial alternatives for addressing Site-related impacts. The AA is utilized by NYSDEC to select a remedy to be implemented for the Site.

1.1 REPORT CONTENTS

This report includes the following:

- A Site Description which presents a summary of background information on the Site, including its history, physical setting and land use setting (presented in Section 2).
- A summary of the results of the RI concerning Site geology and hydrogeology, the nature and extent of environmental contamination at the Site, and the potential for exposures to Site-related contamination (Section 3).
- Description of an Interim Remedial Measure Site Management Plan(IRM SMP) monitoring program that was implemented at the Site (Section 4).
- A description of the goals and objectives for the remedial program at the Site (Section 5).
- An evaluation of feasible alternative remedial technologies and approaches that could be used to achieve those objectives (Section 6).
- A recommendation concerning the remedial measures best suited to address the contamination identified at the Site (Section 7).
- A description of IRMs completed at the Site (Section 8).

- Conclusions and a recommendation for the Site remedy (Section 9).
- A list of references (Section 10).

2.0 Site Description and History

2.1 SITE DESCRIPTION AND SETTING

The Site is occupied by the former AMSF industrial facility. The Site building is a ±120,000 square-foot industrial building with no basement and slab-on-grade construction. The remainder of the Site is covered by either grass or asphalt, the latter of which is used for parking and/or loading ramp space. The property, which is approximately 7 acres in size, is identified as Monroe County Tax Parcel No. 119.17-1-2, located in the Town of Gates, New York. Figures 1 and 2 present a Site Location Map and a Site Plan, respectively.

The town zoning code for the Site and the other properties located along Pixley Industrial Parkway is General Industrial. Current and reasonably-anticipated future use of the Site includes commercial and industrial (light manufacturing) uses. The tenants currently occupying the building conduct a variety of light manufacturing and commercial activities. A summary of current tenant space characteristics and operations is presented in Appendix A.

Land uses in the surrounding area include a mix of vacant land and industrial facilities on the properties to the east, south and west of the AMSF facility and a multi-screen movie theater and its parking lot on the adjacent property to the north. The nearest residences are in neighborhoods located 1,000 feet to the southeast, 1,500 feet to the south, and 1,500 feet to the west of the Site boundaries. No schools or federal, state, county, municipal or community parks or recreational areas are known to be present in the immediate vicinity of the property. Public water supply and municipal sanitary sewer services are available at the Site and in the surrounding area. No designated wellhead protection or drinking water aquifer recharge areas are known to be located in proximity to the Site. Groundwater is not known to be used as a drinking water supply at the Site or in the surrounding area.

Ground surface elevations range from approximately 573 feet above mean sea level (ft. amsl) at the northern Site boundary to 560 ft. amsl along Pixley Industrial Parkway on the south side of the Site.

Municipal storm sewers are not available for stormwater management in the area of the Site. Stormwater at the Site and on the surrounding properties is managed using surface drainage ditches and stormwater recharge wells which discharge to the subsurface. The recharge wells are vertical wells installed in bedrock. There are five recharge wells (RW-1 through RW-5) on the AMSF Site as shown on Figure 2. Surface water run-off from approximately 80 percent of the building roof and from paved areas along the north side of the facility is directed to recharge wells RW-2 through -5. Roof drains from the remainder of the Site building discharge to a ditch which flows to the west along the north side of Pixley Industrial Parkway.

2.2 SITE HISTORY

The AMSF facility was reportedly constructed in 1967, before which the property was undeveloped agricultural land. The original Site building may have been operated as a warehouse by the Alcoa Aluminum Corporation prior to its occupancy by AMSF.

Manufacturing operations appear to have begun at the Site in the early 1970s. The facility was purchased by the Alliance Tool Corporation, a subsidiary of the Gleason Corporation, in 1973. Alliance operated the Alliance Metal Stamping & Fabrication facility at the Site until July 1994. Manufacturing operations included stamping, forming, grinding, cleaning, painting, phosphating, and deburring of metal piecework. Alliance decommissioned the manufacturing operation and sold the vacant facility to MFP in 1995.

Since 1995, MFP has subdivided the building and leases spaces to companies operating a variety of light manufacturing operations and commercial activities. A summary of operations conducted by facility tenants at the time the AA was completed in 2018 is presented in Appendix A.

2.3 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

An initial assessment of the environmental history of the AMSF Site and an investigation of environmental conditions in exterior areas outside the facility building were performed between 1991 and 1994 prior to the sale of the Site to MFP. The 1991 to 1994 assessment and investigations were performed on behalf of Gleason Corporation, the parent company for the Alliance Metal Stamping & Fabrication operation.

The results of the sampling activities performed at the Site in the early 1990s identified groundwater contamination by 1,1,1-trichloroethane (1,1,1-TCA), a chlorinated volatile organic compound (VOC) commonly used as a solvent in industrial degreasing operations. The highest levels of contamination were found at a well located at the northwest corner of the Site. Contamination of groundwater by much lower concentrations of tetrachloroethylene, a chlorinated VOC commonly used as a degreasing or dry-cleaning solvent (also known as tetrachloroethene or perchloroethylene, and commonly abbreviated as PERC or PCE), was identified in groundwater along the southern boundary of the Site. The investigations also identified four occurrences of soil contamination at the Site which were addressed in 1994 with remedial actions to remove the contaminated soil.

The west boundary of the AMSF Site adjoins the site of the ITT Corporation Former Rochester Form Machine Facility located at 30 Pixley Industrial Parkway (the ITT or RFM site), an inactive hazardous waste site (NYSDEC Site # 828112). The ITT site and the adjoining downgradient properties, including a portion of the AMSF Site, have been the subject of a Remedial Investigation (RI) and Feasibility Study (FS) program implemented by ITT under the oversight of

NYSDEC. The focus of the ITT site RI/FS was contamination by 1,1,1-TCA and related VOCs related to past releases from degreasing operations at the ITT site. The data from the RI of the ITT site indicate that bedrock, groundwater and soil vapor in areas of the AMSF Site which are downgradient of the ITT site have been impacted by chlorinated solvent contamination, with 1,1,1-TCA being the principal contaminant.

In April 2009, assessment of the potential for soil-vapor intrusion in the AMSF building performed as part of the ITT site RI detected elevated concentrations of PCE in sub-slab vapor beneath the northeastern portion of the AMSF building. Historical records for the AMSF Site were identified which indicated that a degreaser had been located in that part of the AMSF facility during at least part of the period of AMSF operations. The need for further investigation of the subsurface conditions in the area of the former degreaser was the impetus for MFP to undertake an RI at the AMSF Site as a Volunteer under New York State's BCP.

3.0 Remedial Investigation Findings

3.1 GEOLOGIC AND HYDROLOGIC SETTING

Overburden deposits were found to consist of an upper layer of from less than 1 to a few feet of fill material underlain by a few to several feet of glacio-lacustrine sediments which are typically underlain by a few to several feet of glacial till. The glacio-lacustrine sediments include a few to several feet of low-permeability thinly laminated clay-rich layers as well as sandier deposits.

The depth to the top of bedrock was found to occur from 4 to 20.5 feet below ground surface (bgs). The top of bedrock surface at the Site appears to be an irregular surface that slopes generally north to south. A relatively pronounced low is apparent on the east side of the Site at monitoring well AMSF-MW-34. (Monitoring well locations at the Site are shown on Figure 3.)

The uppermost bedrock unit at the Site is the Eramosa Dolostone of the Upper Silurian-aged Lockport Group. The Penfield Dolostone, Decew Dolostone, and the Gates Member of the Rochester Shale underlie the Eramosa.

The data collected during the RI indicate that over most of the Site, the water table occurs at or below the top of bedrock during both high water-table and low water table conditions. However, the data indicate that it is likely that during high water table periods, the water table may rise a few feet into the overburden in the area along the southern edge of the Site and other areas where the top of bedrock surface is low. This appears to be the case at shallow bedrock monitoring well AMSF-MW-34, where wet soils were noted from 15 to 20.5 feet bgs during the drilling of the MW-34 well boring and where groundwater elevations 6.5 to 7.6 feet above the top of bedrock surface elevation were recorded during monitoring events.

Results of the remedial investigation of the adjacent ITT Corporation Former RFM Site have indicated that there are three zones of distinctive groundwater flow characteristics at the Site. Within the shallow (uppermost) bedrock groundwater zone, in the upper 25 ft of the Eramosa Dolostone, the permeability is very high and flow is predominantly along fractures and zones of solution cavity development. Permeability of the underlying intermediate bedrock horizon is reported to also be high, although not as high as the upper Eramosa. Permeability is reported to be lower in deeper bedrock units.

RI groundwater level monitoring results indicate that, in general, areas to the north, west and south of the Site are all hydraulically upgradient of the Site, and that in general the direction of shallow groundwater flow along the north, west and south Site boundaries is towards the Site from the adjacent off-Site areas. Results of groundwater level monitoring events performed during the RI indicated a very shallow eastward hydraulic gradient in the shallow bedrock zone across the northern half of the Site, with a somewhat steeper northeastward gradient of shallow flow in the southwestern portion of the Site. The RI data indicate that the area to the east of the eastern Site boundary is hydraulically downgradient of the AMSF Site.

Results of groundwater level monitoring performed as part of the ITT site RI indicate that during major precipitation events, stormwater influx to recharge wells RW-1 and RW-2 results in brief periods when the direction of groundwater flow in high permeability sections of the bedrock aquifer zones surrounding the recharge wells is radially outward in all directions away from the recharge wells. There are therefore brief periods during major recharge events when the direction of flow in the areas immediately west and north of recharge well RW-2 is from the AMSF Site towards the adjacent off-Site properties to the west and north.

3.2 NATURE AND EXTENT OF SITE CONTAMINATION

3.2.1 Exceedances of Soil Cleanup Objectives

Site soil sample locations are shown on Figure 4. Areas where Site contaminants were found to exceed NYSDEC's Soil Cleanup Objectives (SCOs) are outlined on Figure 4, and Figure 4A presents the soil sample location plan with a summary of the SCO exceedances detected in Site samples.

VOCs

VOC contamination exceeding NYSDEC's SCOs for unrestricted use sites (UU SCOs) and for protection of groundwater at restricted use sites (POGW SCOs) were detected in three areas of the Site. Exceedances of SCOs for protection of public health at commercial or industrial use sites were not identified at the Site.

As shown on Figure 4, all three areas where VOCs were detected above UU/POGW SCOs during the RI are within the footprint of the Site building, and the contaminated soil is therefore covered by and contained beneath the building floor slab. In each area, the water table occurs below the top of bedrock. These conditions and the contaminant concentrations described below indicate that the soil contamination in these areas is unlikely to pose health risks to site workers or others from direct contact or ingestion or to be contributing to groundwater contamination at the Site.

The three areas include:

- Former Degreaser Area - Area of Concern (AOC) 1

  PCE (UU/POGW SCOs = 1.3 parts per million, ppm) was detected at concentrations of 1.3 and 2.2 ppm in samples collected at depths of 6.9 and 10.0 ft., respectively, from the AMSF-MW-20 test boring. 1,4-dioxane (UU/POGW SCOs = 0.1 ppm) was detected at a concentration of 2.4 ppm in a sample collected at a depth of 7.5 ft. from the adjacent DG-TB-1 test boring. SCO exceedances were not detected in samples from surrounding test borings. As shown on Figure 4, the area affected by SCO exceedances is estimated to be approximately 375 square feet.

- Former Waste Storage Area B – AOC 5B

1,4-dioxane (UU/POGW SCOs = 0.1 ppm) was detected at concentrations of 0.25 to 3.6 ppm in samples collected from the two AOC 5B test borings 5B-TB-1 and 5B-TB-2. The AOC 5B samples were collected at depths ranging from 3 to 7 ft. As shown on Figure 4, the size of the area affected by SCO exceedances is estimated to be approximately 1,600 square feet.

- Former Paint Shop Area - AOC 6

Cis-1,2-dichloroethene (DCE) (UU/POGW SCOs = 0.25 ppm) and 1,1-DCE (UU/POGW SCOs = 0.27 ppm) were detected at concentrations of 0.49 and 0.41 ppm, respectively, in a sample collected at a depth of 2 ft. from test boring, PS-TB-1. 1,4-dioxane (UU/POGW SCOs = 0.1 ppm) was detected at a concentration of 0.14 ppm in a sample collected from that boring at a depth of 8 ft. SCO exceedances were not detected in samples from other borings in the area. As shown on Figure 4, the size of the area affected by SCO exceedances is estimated to be approximately 600 square feet.

No exceedances of SCOs, including Unrestricted Use SCOs, were detected in the soil samples collected in Operable Unit 1. OU-1 is the northwest portion of the Site where contamination of the bedrock matrix by chlorinated VOCs is present and appears to act as a source for VOC contamination in Site groundwater. As required by NYSDEC in its July 18, 2016, letter accepting the December 2015 RI report for the AMSF Site, a figure and tables presenting sample locations and validated analytical results for OU-1 soil samples are presented in Appendix B.

Metals and SVOCs

Zinc was detected at a concentration that exceeded NYSDEC's SCO for protection of ecological resources (109 ppm) in one soil sample collected at a depth of 8 ft. from Former Paint Shop (AOC 6) test boring AMSF-MW-26. The concentration detected (224 ppm) did not exceed human health or groundwater protection SCOs.

An occurrence of poly-nuclear aromatic hydrocarbon compounds (PAHs) and nickel was detected in one of the three surface soil samples collected to characterize Site-wide soil conditions. The concentrations of five PAHs exceeded SCOs, including one compound (benzo(a)pyrene, 1.3 ppm) which exceeded its commercial-use SCO (1.0 ppm). However, the detected concentrations (0.830 to 1.8 ppm) of those five PAHs, including benzo(a)pyrene, are not unusual for surface soil in an urban or industrial area. Furthermore, because the sample was collected at a location adjacent to the facility parking lot, the PAH detections are believed to reflect conditions related to pavement constituents and/or parking lot run-off. The nickel concentration (34 mg/kg) exceeded the SCO for protection of ecological resources (30 mg/kg) but not human health or groundwater protection SCOs.

Exceedances of SCOs for aluminum, iron, magnesium and calcium detected in several samples are due to background conditions and do not represent environmental contamination.

Note: After completion of the RI, exceedances of SCOs for PAHs were later identified in surface soil in lawn areas on the south and east sides of the Site. These occurrences, which are described in Section 8 of this report, were identified and addressed in connection with the Cover System IRM completed in 2021.

Pesticides and PCBs

Pesticides and poly-chlorinated biphenyl compounds (PCBs) were not detected above SCOs.

3.2.2 Exceedances of Groundwater Quality Standards

VOCs

The chlorinated VOCs 1,1,1-TCA and PCE, and the chlorinated ethane and ethene compounds which are the daughter products of the degradation of 1,1,1-TCA and PCE in the environment, are present in Site groundwater at concentrations that exceed NYSDEC's Technical and Operational Guidance Series Memorandum 1.1.1 (TOGS) groundwater quality standards in the shallow-bedrock zone across the entire Site. Contamination is also present in the intermediate- and deep-bedrock zones.

Groundwater monitoring well locations at the Site are shown on Figure 3. Exceedances of groundwater quality standards have been detected in the most recent samples from all of the wells shown on Figure 3 except for the deep bedrock zone wells AMSF-MW-1D, -3D and -8D, which are located at or near the northwest, southeast, and southwest corners of the Site, respectively. Summaries of RI groundwater sample analysis results are presented on Figures 3A (Shallow Bedrock Wells) and 3B (Intermediate and Deep Bedrock Wells).

Concentrations of 1,1,1-TCA and related daughter products are highest in the OU-1 area, located in the upgradient northwest corner of the Site, with contamination above standards extending downgradient beneath the building to the eastern, downgradient Site boundary.

Contamination by PCE and its daughter products is also present across the Site but at lower concentrations. Highest concentrations of PCE and its daughters are found in the area of the former degreaser in AOC 1, in the west-central part of the Site, indicating that the former degreaser area represents a source of contamination that is discrete from the source area located near the northwest corner of the Site. Exceedances of standards for PCE and its daughters also extend to the eastern Site boundary.

In its July 18, 2016, letter accepting the December 2015 RI report for the AMSF Site, NYSDEC stated that a discrete area of groundwater contamination by 1,1,1-TCA originating near monitoring well MW-9S was indicated by the RI groundwater sampling results. MW-9S is located on the west side of the Site building, and in its comments on the RI report NYSDEC stated that former waste handling operations and the past presence of soil contamination in this area represented potential sources for the groundwater contamination in this area of the Site. The Department's comments on the contamination in this area are acknowledged. The related statement in the July 18, 2016 letter that remediation and mitigation of potential exposures related to groundwater contamination at the Site is required is addressed by this Alternatives Analysis.

As indicated in Section 3.1, RI groundwater level monitoring results indicate that areas to the north, west and south of the Site are all hydraulically upgradient of the Site, and that in general the direction of shallow groundwater flow along the north, west and south Site boundaries is towards the Site from the adjacent off-Site areas. Groundwater sampling has not been performed on the adjacent properties located east of the Site, and therefore the extent of the VOC contaminant plume beyond the downgradient eastern Site boundary is not known. (As a BCP Volunteer, MFP is not responsible for delineation of the extent of off-Site groundwater contamination.)

The ITT site RI demonstrated through collection and analysis of bedrock samples that 1,1,1-TCA, 1,1-dichloroethane (1,1-DCA), PCE, and trichloroethene (TCE) are adsorbed in the bedrock matrix in shallow to deep bedrock (to depths of 160 feet) at locations in the northeast corner of the ITT site and the adjacent area in the northwest corner of the AMSF Site.

Metals, SVOCs, Pesticides and PCBs

The only occurrence of an exceedance of a groundwater quality standard for potential contaminants other than VOCs was a one-time detection of 82 µg/L of lead in the June 2013 sample collected from monitoring well AMSF-MW-26. The lead concentration in the September 2013 sample from that well was, however, below the TOGS standard of 25 µg/L. Exceedances of groundwater standards and guidance values for iron, magnesium, selenium and sodium that were detected at several other locations are likely due to background conditions present naturally in groundwater in the area.

With one exception, semi-volatile organic compounds (SVOCs, which include PAHs) and pesticides and PCBs were not detected in Site groundwater samples. The one exception was a single detection of a concentration of 3.8 µg/L of caprolactam, an SVOC for which there is no applicable groundwater standard.

3.2.3 Findings of Vapor Intrusion Assessment and Monitoring Activities

A summary of soil vapor intrusion (SVI) assessment locations sampled at the Site during and before the RI is presented on Figure 5. At most sample locations, TCA, PCE and/or one or more related chlorinated VOC daughter products have been detected in the sub-slab vapor and indoor air sample pairs. Figure 5 shows the locations where validated analysis results for indoor air and sub-slab vapor sample pairs collected prior to and during the RI have exceeded SVI assessment guidance values established by the New York State Department of Health (NYSDOH). The exceptions where sampling data indicated that actions were not needed to address the potential for SVI include locations at the west edge (AM-SVIA3), southwest corner (AMSF-10 and AMSF-17) and southeast corner (AM-SVIA10 and AM-SVIA11) of the building.

Exceedances of current NYSDOH indoor air quality guidelines potentially attributable to soil vapor intrusion (rather than to the presence of the chemical in a product in use by a facility tenant) were not detected in indoor air samples collected at the Site during the period from 2005 through 2012. Exceedances of the guidelines for TCE or PCE which were potentially attributable to soil vapor intrusion were detected in indoor air samples collected in 2013 and 2016 in the area of the building surrounding the Former Degreaser Area (AOC 1). Additional information on the locations where exceedances of indoor air guidelines have been detected by recent monitoring is presented below in Section 4 of this report.

Sampling of soil vapor along the eastern boundary was performed during the RI to evaluate whether off-site migration of Site groundwater represented a potential for SVI impacts on adjacent off-site properties located downgradient of the Site. PCE (concentrations of 1.8 to 33 µg/m) was detected in soil vapor at three of the four locations sampled, and TCE (5.9 µg/m3) was detected at one of those locations. Other chlorinated VOCs potentially associated with the groundwater contamination identified at the Site were not detected. Evaluation of the results using a generally accepted attenuation factor for predicting potential indoor air concentrations found that predicted concentrations were well below NYSDOH indoor air guidelines. Additional information concerning the potential for SVI on adjacent off-site properties is presented below in Section 3.3.

3.3 ASSESSMENT OF BUILDING FOUNDATION ELEMENTS AND SUBGRADE STRUCTURES ON POTENTIAL VAPOR INTRUSION PATHWAYS

There are several locations on Site where the top of bedrock is within 5 to 8 feet of the facility floor-slab level. Foundation information and the top of bedrock data indicate that there are areas of the Site building where the bottom of a foundation or subgrade structure is likely to be in contact with or within a few feet of the top of bedrock. At these locations, the lacustrine silt and clay deposits that are the upper unit of the native overburden deposits at the Site would not be an effective barrier to migration of contaminated vapors from groundwater into sub-slab vapor. The backfill that would have been placed around the foundation or subgrade structure when it was constructed would provide a pathway for migration of vapor from bedrock groundwater and the relatively sandy glacial till that typically overlies bedrock into the run-of-bank gravel or other granular fill that underlies the building floor slab, especially in the area of OU-1.

RI data suggest that this condition (a foundation-related pathway for vapor migration of contaminants originating in the contaminated bedrock groundwater plume) is unlikely to exist beneath the off-site buildings located east of the downgradient Site boundary. The test borings for monitoring wells AMSF-MW-30 and -34, which are located close to the eastern boundary and are upgradient of the off-Site buildings, encountered thicker sequences of overburden overlying the top of bedrock. Layers of glacio-lacustrine clay deposits were present at those locations at depths of 12 feet or more, well below the likely bottom depths for foundation elements in the off-Site buildings. In particular, MW-34, which is located approximately 25 west of the of the northwest corner of the 10 Pixley Industrial Parkway building, encountered 20 feet of overburden overlying the top of bedrock, and a 2-foot thick layer of glacio-lacustrine clay was present at that location at depth of 13 to 15 feet below ground surface.

3.4 SUMMARY OF QUALITATIVE EXPOSURE ASSESSMENT FINDINGS

3.4.1 Human Health Exposures

Potential current and future Human Health exposures to Site contamination are summarized as follows:

3.4.1.1 On-Site Exposures

Vapor inhalation exposure pathways for on-Site occupants, occupational workers, and patrons/visitors exist because of the presence of VOCs in subsurface soil vapor. These can be mitigated with vapor intrusion monitoring and/or mitigation measures.

Exposure pathways involving vapor inhalation during construction or utility work, inhalation of contaminants suspended in air on soil particles during earthwork or volatilized from groundwater during groundwater sampling would be expected to be temporary, limited to periods of excavation/earth work or groundwater sampling, and can be mitigated with engineering controls.

Direct exposure by way of ingestion, inhalation or dermal contact with impacted soils or groundwater will also be transient in nature and would be restricted to periods of earth work, utility work and any remedial activities that may involve subsurface excavation. Implementation of a Site Management Plan (SMP) and appropriate institutional and engineering controls such as maintaining the building and its floor slab to serve as a cap over residual soil contamination will allow for control of these exposures.

3.4.1.2 Off-Site Exposures

Groundwater sampling and soil vapor intrusion assessment sampling were not performed at the two properties located at 4 and 10 Pixley Industrial Parkway adjacent to the eastern, downgradient site boundary as part of the RI. Given the absence of off-Site groundwater and SVI assessment data, it is not possible at this time to determine:

- to what extent the groundwater contaminant plume, which is present at or near the eastern Site boundary at monitoring wells AMSF-MW-30 and -34, may continue on to those adjacent properties, or
- to determine whether contaminants that may be present in off-Site groundwater are also present in sub-slab soil vapor beneath the buildings on those properties.

In the absence of off-Site data that would be necessary to demonstrate that a potential for exposure is not present, it is therefore assumed for the purposes of this report that a potential vapor inhalation exposure pathway exists for off-Site workers and patrons/visitors in the buildings on the adjacent properties. This approach is consistent with NYSDEC's letter of July 18, 2016 accepting the RI Report for the Site, in which the Department stipulated that the potential for vapor intrusion related to off-Site migration of the groundwater contaminant plume would have to be addressed in the Alternatives Analysis and that the Qualitative Human Health Exposure Assessment for the Site should state that there is a related potential of off-Site exposures.

The available RI data suggest, however, that the risk of potential vapor intrusion, and the related risk of exposure, is likely to be lower at the off-site properties than in the on-Site building.

- As indicated above in Section 3.3, RI data suggest that overburden deposits of low-permeability glacio-lacustrine sediments are likely to be present beneath the offsite buildings at depths below which they would be penetrated by the bottom of foundation elements.
- Sampling of soil vapor along the eastern Site boundary detected PCE (concentrations of 1.8 to 33 $\mu g/m^3$ at three of the four locations sampled, and TCE (5.9 $\mu g/m^3$) at one of those locations. Other chlorinated VOCs potentially associated with the groundwater

contamination identified at the Site were not detected. The TCE and PCE concentrations detected were relatively low compared to the concentrations of those compounds detected in sub-slab vapor samples collected beneath the Site building. USEPA guidance (EPA's Vapor Intrusion Database: Evaluation and Characterization of Attenuation Factors for Chlorinated Volatile Organic Compounds and Residential Buildings, EPA 530-R-10-002, March 2012) indicates that applying an attenuation factor of 0.001 to predict potential indoor air concentrations from shallow soil gas concentrations is a conservative (biased towards being protective) approach when evaluating soil vapor. Applying a factor of 0.001 to the concentrations detected in the downgradient boundary soil vapor samples yields potential indoor air concentrations two to three orders of magnitude lower than the NYSDOH indoor air guidelines for PCE and TCE (30 and 2 $\mu g/m^3$, respectively).

The available data therefore indicate that the potential off-Site vapor inhalation exposure pathway can be addressed with vapor intrusion monitoring measures. As indicated above, because MFP is a Volunteer in the Brownfield Cleanup Program it falls outside the programmatic responsibility of MFP to address this issue.

3.4.2 Fish and Wildlife Exposures

Significant sensitive ecological receptors have not been identified as being present at the Site or elsewhere in the vicinity of the Site, and possible exposure pathways for fish and wildlife are not apparent. No surface water bodies, significant natural resources, federal or state wetlands, or critical wildlife habitats of threatened or endangered species are known to be present within ½ mile of the property. NYSDEC has indicated it has no records of rare or state-listed animals or plants, significant natural communities or other significant habitats on or in the immediate vicinity of the property.

NYSDEC and the Monroe County Department of Environmental Services (MCDES) would be involved in reviewing and approving plans for pre-treatment and discharge of and associated permits required for any long-term discharge of any treated water generated by a remedial system for Site groundwater should one be required in the future, and this review process would evaluate and address any associated potential for future fish or wildlife exposure.

3.5 SIGNIFICANT THREAT DETERMINATION

In June 2016, after reviewing the RI report for the Site, NYSDEC determined that a) the site posed a significant threat to human health and the environment, and b) remediation of contaminants was required.

4.0 Interim Remedial Measure Site Management Plan Monitoring Program Findings

In 2016, an Interim Remedial Measure Site Management Plan (IRM SMP, [1]) was prepared which specifies a monitoring program to be performed annually to assess whether the chlorinated VOCs that are present in the subsurface at the Site are intruding from below the floor into the air inside the building. Results of the monitoring were evaluated to determine whether other actions (actions in addition to the annual monitoring) were warranted to address potential exposure of building occupants to VOCs which may have been detected in the samples.

The monitoring was performed during each heating season. The annual monitoring program specified in the IRM SMP involved:

- an inspection of the building to review conditions of the floor slab,
- a review of activities and operations conducted by the various occupants,
- an inventory of chemical products in use at the site, and
- collection of indoor air samples at more than 20 locations distributed throughout the entire building and covering the range of activity and occupancy conditions for each tenant's operation.

The IRM SMP monitoring program was initiated during the 2015-2016 heating season. Initial monitoring activities were conducted in February 2016. Indoor air samples collected in the northeast part of the building exhibited PCE and TCE at concentrations above NYSDOH's air guidelines for those two VOCs. The building inspection component of the February event found that at the time of the event a tenant in the affected area of the building had been using a chemical cleaner which contained PCE. (TCE is a compound that is often present in products which contain PCE and can also be produced by the partial breakdown of PCE in the environment.)

Actions were subsequently taken to reduce and control potential exposures of building occupants to PCE and TCE. Use of the cleaner containing PCE was discontinued, and remaining containers of the cleaner were removed from the building. A potential floor penetration in a space which had exhibited an exceedance of the TCE Air Guideline was sealed. After those actions were completed, follow-up sampling was conducted in April 2016 to

[1] Interim Remedial Measure Site Management Plan, Brownfield Cleanup Program Site #C828101, Former Alliance Metal Stamping & Fabrication Facility, 12 Pixley Industrial Parkway, Town of Gates, Monroe County, New York," Stantec Consulting Services Inc., Revised June 2016.

reassess indoor air conditions at the locations which had exhibited Air Guideline exceedances in February. Results of the resampling activities indicated that PCE in indoor air had dropped to concentrations that were either very slightly above the NYSDOH Air Guideline concentration or were below the guideline, and that TCE concentrations had dropped below its guideline concentration. After reviewing the results of the February and April 2016 monitoring activities, NYDSOH determined that exposure to the VOCs detected in the 2015-2016 heating season samples were unlikely to result in adverse health effects. The results indicated that further actions were not needed to address the potential for soil vapor intrusion at the site during the 2015-2016 heating season.

Soil vapor intrusion assessment monitoring for the 2016-2017 heating season involved an initial monitoring event performed in December 2016. Two samples collected from separate spaces in the northeast portion of the building exhibited exceedances of the NYSDOH Air Guideline for PCE of 30 µg/m^3. A resampling event was conducted in February 2017 to re-assess the indoor air quality conditions in those two spaces and at two additional locations in the west-central part of the building where data quality issues had resulted in rejection of or uncertainty about the December analysis results. The results for the indoor air samples collected in February 2017 did not exceed NYSDOH Air Guidelines. The results indicated that further actions were not needed to address the potential for soil vapor intrusion at the site during the 2016-2017 heating season.

SVI assessment monitoring for the 2017-2018 heating season was performed in December 2017. As in the previous events, one or more of the chlorinated VOCs that have been identified as being present in soil and groundwater in the subsurface beneath the Site building were detected in each of the samples. However, unlike the previous events, no exceedances of NYSDOH Air Guidelines were detected. The December 2017 results indicated that immediate actions were not needed to address the potential for SVI at the Site during the 2017-2018 heating season.

SVI assessment monitoring for the 2018-2019 heating season was performed in December 2018. One nominal exceedance of the NYSDOH Air Guideline Values was detected in the northeast section of the building. The TCE concentration of 2.6 micrograms per cubic meter (µg/m^3), detected in the sample collected at the AM-IA-18 location was below the 20 µg/m^3 level considered by NYSDOH as warranting immediate and effective further action to reduce health risks associated with potential exposures of building occupants to TCE. The December 2018 results indicated that immediate actions were not needed to address the potential for SVI at the Site during the 2018-2019 heating season.

Sample location plans and sample analysis results for the IRM SMP monitoring program summarized in table form are presented in Appendix C. A description of the indoor air monitoring conducted following installation of a sub-slab depressurization system (SSDS) for the Site building is presented in Section 8 of this report.

5.0 Remedial Goals and Remedial Action Objectives

5.1 REMEDIAL GOALS

The general remedial goal for sites in the NYS Brownfield Cleanup Program is to eliminate or mitigate significant threats to the public and the environment posed by the Site contaminants through the proper application of scientific and engineering principles. Accordingly, the identified sources of contamination at the Site have been or will be eliminated or mitigated to a condition acceptable to the NYSDEC under the BCP using appropriate remedial technologies, engineering controls (ECs) and institutional controls (ICs).

5.2 REMEDIAL ACTION OBJECTIVES

The standard remedial action objectives (RAOs) for a BCP site include:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

<u>RAOs for Public Health Protection</u>

- o Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

5.3 CLEANUP OBJECTIVES

This section describes the Standards, Criteria and Guidance (SCGs) used for comparison of COC concentration results for sampled/analyzed media at the site.

The applicable SCGs used for evaluation of the identified Site conditions include:

- *Technical Guidance for Site Investigation and Remediation*, NYSDEC, Division of Environmental Remediation (DER-10), May 2010;
- *Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations,* NYSDEC, October 1993, Reissued June 1998 (with addenda dated April 2000 and June 2004);
- 6 NYCRR Part 375-6 SCOs, NYSDEC, Division of Environmental Remediation, 14 December 2006;
- *Soil Cleanup Guidance*, NYSDEC Division of Environmental Remediation, Commissioner's Policy CP-51, October 2010; and
- *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, NYSDOH, Bureau of Environmental Exposure Investigation, October 2006, as updated by May 2017 Soil Vapor/Indoor Air Matrices A, B and C.

Pursuant to 6 NYCRR 375-6.5, POGW SCOs may not be applicable to the Site should an environmental easement that imposes a groundwater use restriction be implemented for the Site. The presence on the adjacent ITT Corporation Former RFM Site, which is an off-Site source for some of the groundwater contamination at the Site, also impacts the applicability of the POGW SCOs.

5.4 TECHNICAL LIMITATIONS ON REMEDIAL ACTION OBJECTIVES IMPOSED BY SITE CONDITIONS

The alternatives that can be successfully applied to remediation of groundwater contamination at the Site are limited by the Site conditions. As documented in the Revised Feasibility Study (FS)

Report for the adjacent ITT site[2], results of sampling and analysis of bedrock cores collected during the ITT site RI indicate that the vast majority of chlorinated VOC contaminant mass that is present in the bedrock groundwater system at the ITT site and the AMSF Site as well as at the adjacent off-site property to the north is adsorbed into or stored in the dissolved state in the primary porosity of the bedrock matrix.

The FS report for the ITT site presents a detailed technical review of the data on the bedrock system and the nature of the contamination at the Site and the impact of those conditions on the availability of remedial alternatives for treatment of groundwater contamination at the Site. The report concludes that it is technically impractical to successfully apply active remedial alternatives to address the Site conditions, where a highly permeable fractured sedimentary bedrock aquifer is impacted by significant chlorinated VOC contaminant mass stored in the bedrock matrix, because there are no treatment processes known that can remediate the contamination in a timeframe that would be shorter than that which will be achieved by in-situ bio-degradation or other intrinsic chemical degradation and natural attenuation processes.

Stantec's review of the FS report for the ITT site indicates that the technical basis for its conclusions regarding the technical impracticability of active treatment alternatives is valid for the Site and is consistent both with our overall remedial experience and with widely accepted views and practices in the environmental remediation profession and the regulatory community. For the purposes of the AA completed in 2018, it was presumed that NYSDEC would accept the technical impracticability of active treatment of bedrock groundwater contamination in its selection of a remedy for the ITT site, and, given the connection and overlap between the bedrock systems at the ITT and AMSF sites, will also accept it for the AMSF Site. Alternatives for active treatment of the groundwater contamination to achieve compliance with SCGs for groundwater at the Site were therefore not considered in the AA.

5.5 BROWNFIELD CLEANUP TRACK

Four cleanup tracks are available for consideration at BCP sites which need remediation. Track 1 cleanups achieve conditions that allow for Unrestricted Use, achieve Unrestricted Use SCOs in the soil component of the remedy, and do not rely on implementation of site use restrictions or long-term ICs or ECs. Given the technical impracticability of groundwater remediation that is inherent in the site conditions, and the consequent need to address the Site groundwater conditions by imposing a groundwater use restriction for the site and by implementing other use restrictions, ECs and ICs, Track 1 cleanup options were not considered further in the AA.

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2 "Revised Feasibility Study Report, ITT Automotive Fluid Handling System Site, Site # 8-28-112, Town of Gates, NY, 3356 / 63224", O'Brien & Gere Engineers, Inc., May 2, 2016.

Remedial Goals and Remedial Action Objectives

The requirements for Cleanup Tracks 2, 3 and 4 have provisions that contemplate limitations on the future use where appropriate based on current uses and likely future uses:

- In Track 2, the soil component of the remedial program must achieve the lowest of the applicable contaminant specific SCOs set forth in 6 NYCRR Subpart 375-6.
- Track 3 allows for modifying the generic Subpart 6 SCOs to account for site-specific conditions that may vary from the generic conditions that were the basis for the Department's SCO calculations.
- Track 4 requirements include a provision for development of site-specific SCOs that are protective of public health and the environment.

In Tracks 2 and 3, long-term ICs and ECs are permissible for media other than soil. ICs and ECs are allowed as part of the soil component of the remedy only in the short-term and only to provide protection of public health and the environment during the implementation and operation of remedial measures designed to achieve applicable SCOs. Track 4 provisions allow for the use of long-term ICs and ECs to address all contaminated media.

The remedial program which is most appropriate for the Site is found in the Track 4 provisions, and the remedial alternatives that are evaluated in the AA are amenable to the cleanup requirements of Track 4.

6.0 Development and Analysis of Remedial Alternatives

6.1 INTRODUCTION

This section summarizes the alternatives evaluated for the remediation of Site conditions. The options considered included the following potential processes and technologies:

- Groundwater Monitoring: No direct remedial actions would be performed. However, a long-term groundwater monitoring program would be needed to track the progress of the gradual reduction in the extent and severity of groundwater contamination that has been shown to be occurring naturally at the Site.
- Engineering Controls: ECs include measures such as maintaining the existing building floor slab to serve as a cover for contaminated soil, maintaining the floor slab to mitigate potential for contaminated soil vapor intrusion, and implementing Sub-Slab Depressurization (SSD) to mitigate the potential for soil vapor intrusion.
- Institutional Controls: ICs include actions such as:
  - A NYSDEC-enforced environmental easement (EE) which would limit land use at the Site to Commercial or Industrial use and include appropriate restrictions on groundwater use; and
  - Development of SMPs to specify requirements and provide guidance for:
    - indoor air monitoring,
    - operation, maintenance and monitoring of SSD systems, and
    - potential future activities that could disturb the subsurface in areas of known residual impact.
- In-Situ Treatment (soil): In-situ treatment technologies for contaminated soil include such processes as in-situ chemical oxidation, enhanced in-situ bioremediation, soil vapor extraction, and thermal desorption.
- Ex-Situ Treatment (soil): Ex-situ treatment technologies for contaminated soils include excavation and off-site disposal (as well as other technologies not considered for this Site).
- Groundwater migration control with ex-situ treatment (groundwater): Involves groundwater removal (by pumping) and treatment of VOC contaminants using processes such as granular activated carbon (GAC) adsorption, air stripping, or oxidation followed by discharge of the treated water, or off-site transport and discharge of contaminated water to a Publicly-Owned Treatment Works (POTW) or licensed treatment/storage/disposal (TSD) facility for treatment.
- In-situ contaminant migration control: Involves using engineered liquid activated carbon remediation products injected into the groundwater plume downgradient of source areas to sequester dissolved phase VOC contamination and allow for its degradation by

naturally-occurring or introduced bacterial populations, thereby reducing or eliminating further downgradient migration of the contamination.

- Groundwater migration control by stormwater recharge reduction: Reduction or elimination of direct introduction of stormwater into the bedrock aquifer at the Site by modification or abandonment of on-Site stormwater recharge wells resulting in reduction or elimination of related hydraulic influences and reduced contaminant mobility.

6.2 PRELIMINARY SCREENING OF REMEDIATION METHODS, TECHNOLOGIES & APPROACHES

A number of remedial technologies and approaches were pre-screened on the basis of feasibility, pertinence to the environmental conditions and remedial action objectives for the Site, and cost effectiveness. Remedial methods, technologies and approaches considered in this pre-screening process were included on the basis of Stantec's past experience with remedial work involving similar site characteristics and contaminants, and on the basis of information obtained from the review of resources such as Presumptive/Proven Remedial Technologies for New York State's Remedial Programs, NYSDEC Division of Environmental Remediation (DER-15), 27 February 2007.

Methodologies were eliminated from further consideration if they exhibited or entailed the following inadequacies or limitations:

- unlikely to address site issues and attain remedial action objectives;
- precluded by site conditions;
- incompatible with site contaminants;
- not fully demonstrated, unreliable, or have performed poorly;
- inappropriate based on engineering judgment; or
- excessively costly without adding significant technical advantages.

Section 6.2.1 presents a description of the technologies and approaches that were excluded from a more detailed evaluation of alternatives. Methods, technologies and approaches that were retained for further evaluation are described in Section 6.2.2.

6.2.1 Excluded Alternatives

Table 1
Summary of Excluded Remedial Alternatives

Method, Technology or Approach	Description/Justification
No Action	This alternative, in which no remedial actions would be taken, was not considered. NYSDEC has determined that the site poses a significant threat to human health and the environment and that remediation of contaminants must be undertaken to address the potential risks of exposure identified at the Site.
Active groundwater treatment to achieve SCGs or reduce VOC concentrations	Alternatives for active treatment of Site groundwater to reduce or remove contamination by chlorinated VOCs were not considered given the technical limitations imposed by the Site conditions and impracticality of available treatment methods (as described above in Section 5.4).
Excavation and treatment or off-Site disposal of contaminated soil	Excavation of soil which has been identified as having contamination in excess of SCOs was not considered for the following reasons: • No exceedances of SCOs for protection of public health at commercial use sites were identified by the RI at the Site. (Note: CU SCO exceedances later identified in lawn areas were addressed by the Cover System IRM described in Section 8.) • Removal of soil exceeding POGW SCOs is not necessary to prevent further impacts to Site groundwater, given that the impacted soils will remain covered by the impervious surface represented by the building and its roof and floor, and the water table is found below the top of bedrock in the impacted areas. • Removal of soil exceeding UU SCOs is not necessary to protect unrestricted use of the site in the future, since the reasonably anticipated future use of the site will be for commercial and industrial purposes, and of necessity a use restriction will be required for the Site to address conditions related to the presence of groundwater contamination. • Removal of impacted soil for the purposes of reducing the potential for vapor intrusion will not eliminate the risk of vapor intrusion at the site, and removal of soil inside the facility building would be unnecessarily costly and disruptive to facility operations given that the remedy will include other measures that will be more effective for mitigation of the VI potential.
In-situ soil treatment alternatives including Soil vapor extraction, chemical oxidation, and thermal treatment methods	The reasons given above justifying elimination of soil removal alternatives from consideration all also apply to in-situ soil treatment. Furthermore, the effectiveness and implementability of in-situ methods would be limited by the presence of clay-bearing soil layers and the stratigraphic variability in the soil profile in the subsurface at the site. Capital and operating costs for SVE and thermal treatment options are high.

Method, Technology or Approach	Description/Justification
Alternatives for groundwater migration control along the downgradient boundary, including groundwater extraction wells, an extraction trench, permeable reactive barrier or grout curtain	Installation of a migration control system for intercepting contaminated groundwater and treating it in-situ or removing it for ex-situ treatment were not considered because of the difficulty of implementing a vertical barrier or collection trench in a highly permeable and transmissive fractured shallow bedrock aquifer with solution features and/or because of the very large volume of water that would need to be managed and treated if using an extraction system. Furthermore, given the nature of the aquifer, the hydraulic influence of the system on conditions in surrounding areas is difficult to predict. Finally, even if implementable, the costs for installing and operating such a system would not be justified given that less costly alternatives are available for addressing the potential exposures related to off-Site migration of contamination.
In-situ contaminant migration control using injectable liquid activated carbon	Use of injectable liquid activated carbon to sequester dissolved phase VOC contamination in or downgradient of areas where the bedrock matrix represents a source of ongoing contamination was not considered because this technology is not suitable for fractured, highly permeable and highly transmissive bedrock aquifers. Given the difficulty in distributing the carbon material evenly and thoroughly in fractured bedrock systems and the short-lived residence time that the material would be expected to have in the bedrock system at this Site, such an approach would not be feasible for the Site.
Using HVAC system controls for SVI mitigation	Installation and operation of heating, ventilation and air conditioning (HVAC) system components and controls can be used to maintain a positive air pressure inside a building (positive pressure relative to atmospheric and sub-slab vapor pressures). This approach is generally regarded by the regulatory community as not as effective or reliable as sub-slab depressurization. Furthermore, given the construction of the building, the high degree of subdivision of interior spaces, and the variety of existing HVAC system elements in the various spaces, such an approach would not be feasible for the Site.

6.2.2 Retained Alternatives

Table 2
Summary of Retained Alternatives

Evaluated Method, Technology, or Approach	Description
Soil:	

Containment using an Impervious Cap over Impacted Soil,
coupled with related Institutional and Engineering Controls (ICs and ECs):
	Soil containing contaminants is allowed to remain buried beneath an impervious cap of asphalt or concrete to minimize the potential for inadvertent future exposures.
	The impervious cover system represents an EC. ICs include:
	• imposition of an Environmental Easement (EE) restricting permissible Site use to commercial or industrial activities, and
	• development and implementation of an SMP specifying procedures for:
	  • maintenance and inspection of the cover system, and
	  • required procedures for limiting exposures and managing soils during future excavation or other subsurface work at the Site.

Groundwater:	
Intrinsic degradation and attenuation processes with groundwater monitoring	Remaining VOCs in the bedrock groundwater system are degraded in place by naturally-occurring processes. Utilizes periodic water-level monitoring and sampling and analysis of contaminants and other geochemical indicator parameters to monitor reductions in contaminant levels, changes in indicator parameters, changes in groundwater flow direction, and the areal extent of the contaminant plume over time.
Recharge well modifications or abandonment	Implementing changes to the stormwater recharge well network currently in operation at the Site to reduce or eliminate the hydraulic and geochemical influence of significant recharge events on the bedrock groundwater system.
ICs	- EE to include a restriction prohibiting use of Site groundwater. - SMP to specify: • groundwater monitoring program requirements • required procedures for limiting exposures during future site work that may involve contact with, or exposure to contaminants in, Site groundwater

Evaluated Method, Technology, or Approach	Description
Soil Vapor Intrusion Assessment to determine whether an off-Site vapor inhalation exposure pathway is present as a result of downgradient boundary groundwater conditions	Development and implementation of a work plan for performance of initial SVI assessments at the buildings located on the two off-site properties adjacent to the downgradient eastern Site boundary. Under BCP regulations, MFP as a BCP Volunteer would not be responsible for implementing this alternative.
Soil Vapor:	
On-Site Engineering and institutional Controls: Passive Mitigation	Includes: • performance of comprehensive sealing of floor slab penetrations and other sub-grade features in all areas of the Site building, • annual floor slab inspection and maintenance, and • annual indoor air monitoring.
Sub-slab Depressurization: Active Vapor Intrusion Mitigation	Construction of a sub-slab depressurization system (SSDS) for the AMSF Site Building.

6.3 EVALUATION OF ALTERNATIVES

The alternatives retained for further evaluation were assessed using the nine selection criteria specified in 6 NYCRR Part 375-1.8(f) and DER-10. The selection criteria include the following:

1. Protection of Human Health and the Environment: This criterion is an evaluation of the ability to protect public health and the environment, assessing how risks posed through each existing or potential pathway of exposure are eliminated, reduced or controlled through removal, treatment, engineering controls or institutional controls. The ability to achieve each of the remedial action objectives (RAOs) is evaluated.

2. Standards, Criteria, & Guidance (SCG): Compliance with SCGs addresses whether or not a remedy will meet applicable environmental laws, regulations, standards, and guidance.

3. Short-term Effectiveness & Impacts: The potential short-term adverse impacts and risks of the remedy upon the community, the workers, and the environment during the construction and/or implementation are evaluated.

4. Long-term Effectiveness & Permanence: This criterion evaluates the long-term effectiveness of the remedy after implementation.

5. Reduction of Toxicity, Mobility, or Volume: The remedy's ability to reduce the toxicity, mobility or volume of Site contamination is evaluated.

6. Implementability: The technical and administrative feasibility of implementing the remedy is evaluated. Technical feasibility includes the difficulties associated with the construction and the ability to monitor the effectiveness of the remedy. For administrative feasibility, the availability of the necessary personnel and material is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, etc. Includes the evaluation of the reliability and viability of implementation of the industrial or engineering controls necessary for a remedy.

7. Cost:
   a) Cost Effectiveness - Capital: Short-term costs of implementation, including equipment purchases and engineering/design.
   b) Cost Effectiveness - Operation, Maintenance and Monitoring: Long-term costs of operation, maintenance and monitoring activities to maintain engineering controls.

   Estimated costs for each alternative are presented in terms of net present value (NPV), where anticipated costs for future years are discounted using an annual discount rate of 7% adjusted for an annual inflation rate of 3%. For the purposes of the estimated cost calculations, it was assumed that all capital costs would be expended in Year 0 at the beginning of the remedial program and Operation, Maintenance & Monitoring (OM&M) activities would begin in Year 1.

8. Community Acceptance: This criterion evaluates the likelihood that the alternative would be accepted by members of the community in the area of the Site.

9. Land Use: This criterion evaluates the reasonably anticipated future use of the Site and its surroundings when unrestricted levels would not be achieved, and should consider the factors including applicable zoning laws and maps.

A Remedial Alternative Analysis Matrix comparing the evaluated alternatives against the nine selection criteria is presented in Table 3. Table 3 also presents a comparison of the various alternatives to each other. Conceptual design assumptions and cost estimates incorporated in the analysis are presented in Appendix D.

6.4 COMPARATIVE ANALYSIS SUMMARY

Alternative 1.0 (containment of soil exceeding UU/POGW SCOs for VOCs), Alternative 2.0 (Groundwater monitoring to address groundwater contamination), and Alternative 4.0 (performance of SVI assessments at neighboring downgradient properties) would be technically and financially feasible as components of a remedial program for the Site.

Addition of Alternative 2.1 (modification of existing recharge well RW-2 to seal the deep bedrock portions of the well) to the groundwater component of the remedy will provide additional reduction in the potential for migration of groundwater contaminants while not entailing the need for construction of a costly (and potentially infeasible) new stormwater management system that Alternatives 2.2 and 2.3 (recharge well abandonment alternatives) would require.

Alternative 3.0 (a passive SVI mitigation and monitoring program, involving floor slab penetration sealing throughout the building and a contingency for interim indoor air filtration in target spaces) is the least costly of the SVI mitigation alternatives. Alternative 3.1 (implementation of sub-slab depressurization in the key SVI target area of the building) provides active SVI mitigation at a lower cost than the two more extensive SSDS Alternatives 3.2 (expanded SSDS coverage of the entire northern half of the building) and 3.3 (full coverage of the building with SSDS).

7.0 Recommended Alternative Used as Basis for Design of IRMs

7.1 SUMMARY

Based on the results of the alternatives analysis summarized in Table 3, the following combination of remedial elements was recommended to address the contamination identified at the Site and the related potential on- and off-Site human health exposures identified by the qualitative exposure assessment:

- Institutional Controls restricting future use of the Site to industrial and commercial uses and prohibiting use of Site groundwater.
- Development and implementation of a Site Management Plan.
- Alternative 1.0: Containment of VOC-contaminated soil exceeding UU and POGW SCOs by maintaining the existing building as cover in affected areas.
- Alternative 2.0: Groundwater monitoring to track trends in the magnitude and extent of contamination in Site groundwater. The monitoring will allow for evaluation of whether the trends of improvement in Site conditions seen during the RI continue, and will allow for an improved understanding of trends and factors influencing contaminant concentrations at the downgradient, eastern site boundary.
- Alternative 2.1: Modification of recharge well RW-2 to eliminate direct injection of stormwater into the deep bedrock horizons of the contaminated bedrock aquifer and thereby reduce the potential for mobilization and migration of VOC contaminants in these horizons.
- Alternative 3.3: An SVI mitigation program that involves implementation of sub-slab depressurization throughout the entire building, with continuation of annual heating-season indoor air monitoring until the entire building was covered by the SSDS implementation.
- Alternative 4.0: Performance of initial SVI assessments at the buildings located on the two off-site properties adjacent to the downgradient eastern Site boundary (4 and 10 Pixley Industrial Parkway), followed, if necessary as determined by NYSDEC, by additional actions such as SVI mitigation or monitoring. Under BCP regulations, Maguire Family Properties, the BCP Volunteer, does not bear responsibility for a quantitative assessment of the potential for SVI exposures at adjacent off-Site downgradient properties.

7.2 CONCEPTUAL FRAMEWORK

1. *Soil*:

   A site cover currently exists in areas not occupied by buildings and will be maintained to allow for restricted commercial use of the site. Any site redevelopment will maintain the existing site cover. The site cover may include paved surface parking areas, sidewalks or soil where the upper one foot of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for restricted commercial use. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR part 375-6.7(d).

   The conceptual basis for the recommended approach included the following component.

   a. The existing building and its floor slab will be maintained to serve as a cap over the impacted areas of AOCs 1, 5B, and 6 where Site contaminants were found to exceed Unrestricted Use and Protection of Groundwater SCOs. The areas of exceedance are shown on Figure 4.

2. *Groundwater:*

   The conceptual basis for the recommended approach included the following components.

   a. Performance of a groundwater monitoring program involving annual monitoring of site-wide conditions until groundwater contaminant concentrations have fallen below applicable standards or the continuing decrease in concentrations has reached asymptotic conditions.

      The annual site-wide monitoring will be supplemented for a two-year period by semi-annual monitoring in the area on the east side of the facility. The purpose of the supplemental monitoring of groundwater quality trends in this area will be to attempt to further assess whether and how the continued use of RW-5 for stormwater management may affect off-site migration of contaminants at the eastern Site boundary.

      The groundwater monitoring program will be a component of the Site Management Plan. It is anticipated that over time results will allow for NYSDEC approval of a gradual scaling back of the scope and frequency of the monitoring required. For purposes of assessing the potential cost of the monitoring program, the following assumptions were made about its scope:

      - Years 1 and 2: Annual site-wide monitoring of 16 existing wells, with additional semi-annual monitoring of 7 east-side wells and recharge well RW-5

- Years 3 to 5: Annual site-wide monitoring of 15 wells
- Years 6 to 10: Annual site-wide monitoring of 10 wells
- Years 11 to 20: Annual site-wide monitoring of 8 wells

b. Re-drilling of Recharge Well RW-2 to its original bottom depth of approximately 149 feet to remove obstructions and debris and allow for installation of a continuous permanent grout plug up to a depth of approximately 60 feet below ground surface to seal the deeper bedrock section of the well and still allow for its continued use as an important element of the stormwater management system for the facility.

3. <u>*On-Site Soil Vapor*</u>:

Any on-site buildings will be required to have a sub-slab depressurization system, or other acceptable measures, to mitigate the migration of vapors into the building from soil and/or groundwater.

The conceptual basis for the recommended approach included the following components.

a. Perform, as feasible, a floor sealing effort to cover cracks, joints and penetrations of the floor in all areas of the Site building. The efficacy of sealing construction joints in the northern section of the building was demonstrated by results of vacuum extension / communication testing performed in March 2017. For assessing the potential cost of this effort it was assumed that it would, as feasible, involve temporarily moving aside or raising gym mats, equipment and spring floors in the Bright Raven spaces to access the underlying slab and the walls and floors of the pits in the main gym space.

b. Construct, commission and operate an SSD system to achieve SVI mitigation throughout the entire building. The basis for the SVI mitigation cost estimate details presented in Appendix D assumed a 40-foot radius of influence for each SSD suction point. It was assumed that 38 suction points would be needed for coverage of the entire building.

c. Indoor air monitoring was included in the recommended approach. The scope and duration of the monitoring would depend on the schedule for initiating SSDS operations in the building. For assessing the potential cost of the recommended alternative, it was assumed that SSDS components may be installed in phases (in different sections of the building at different times), and therefore a two-year duration was assumed for the IAM program.

4. <u>*Off-Site SVI:*</u>

a. The basis for the cost estimate for off-Site SVI assessment Alternative 4.0 includes performance of a sub-slab vapor and indoor air sampling program in each off-site building plus a contingency for SSDS installation on one of the two off-Site buildings. As indicated above, under BCP regulations a BCP Volunteer does not bear responsibility for these actions at adjacent off-Site downgradient properties.

5. *Institutional Controls*:
    a. Grant an Environmental Easement to NYSDEC elements of which would:
        i. restrict Site uses to commercial and industrial activities and
        ii. preclude usage of Site groundwater;
    b. Under the terms of the easement, implement an SMP based on the NYSDEC template with provisions for (among other standard provisions):
        i. operation of an SSDS for mitigation of SVI in the building,
        ii. periodic inspection of the Site cover (i.e., the site building floor slab) used for containment of soil with SCO exceedances,
        iii. a work plan specifying procedures for environmental monitoring during future excavations at the Site,
        iv. a monitoring and sampling plan which incorporates the groundwater and indoor air monitoring programs described in items 2 and 3 above, and
        v. an OM&M Plan for the SSDS.

8.0 Interim Remedial Measures

8.1 INITIAL IRM

An Interim Remedial Measure (IRM) Work Plan for the Site was submitted to NYSDEC in June 2019 and conditionally approved on July 24, 2019. The IRM Work Plan specified construction of two elements of the remedy recommended in the June 2018 AAR which were not already in place at the Site in July 2019. Those elements included:

- An SSDS that covers the entire building (with the exception of unheated loading docks which are not routinely occupied by site workers or visitors). A design document for the proposed SSDS was attached to the Work Plan.
- Modification of the deep bedrock interval of recharge well RW-2.

Implementation of the IRM Work Plan was initiated in August 2019 in accordance with the specifications of the IRM Work Plan, modifications to the work plan specified by NYSDEC in its approval letter, and the "Proposed Amendment to the IRM Work Plan" (September 5, 2019) accepted by NYSDEC on September 27, 2019. Stantec Consulting Services Inc. served as the certifying engineering firm for the IRM.

SSDS Implementation

The SSDS installed during the IRM consists of a network of PVC piping that connects 42 suction cavities constructed under the existing floor slab to 21 vacuum fans located on the building roof. The design of the suction point network and the selection of the locations of the 42 suction cavities were determined on the basis of results of sub-slab vacuum communication testing performed in various sections of the building prior to the SSDS construction activities, taking into account the configuration of building footers throughout the building.

After installation of the SSDS, commissioning of the system and demonstration of sub-slab depressurization of the building footprint was conducted. Full-time system operation, maintenance and monitoring began in October 2019 and has continued since then. Results of routine monitoring have documented uninterrupted operation of the system as designed since it was installed:

- No automated alarms indicating shutdown or failure of system fans have been tripped since commissioning of the system.
- Monthly monitoring of vacuum gauges for each of the system fans has indicated vacuum readings at design levels for all components of the system each month since commissioning of the system.

Two annual indoor air monitoring (IAM) events were performed following construction and commissioning of the SSDS. Sampling was performed in accordance with the terms of the Department's July 24, 2019, conditional approval of the IRM Work Plan. The IAM events were conducted in December 2019 and January 2021.

As documented in reports for each event submitted to NYSDEC, an exceedance of the NYSDOH Air Guideline for PCE was detected in both sampling events in the sample collected in the tenant space in the northeast corner of the building that is occupied by an automotive repair shop. The building questionnaire product inventory conducted for each event documented the use of an aerosol nut and bolt loosener product with PCE as its primary ingredient in the automotive repair shop. No other exceedances of a NYSDOH Air Guideline were detected in the samples from that space in either event. Furthermore, no elevated concentrations of VOCs were detected in samples collected from other tenant spaces, including spaces immediately surrounding the repair shop space.

Additionally, the results of the pressure field extension testing that had been performed following commissioning of the SSDS in 2019 had demonstrated sub-slab depressurization vacuum coverage in this part of the building. Routine monthly monitoring of system vacuum levels performed since the operation of the SSDS was initiated has demonstrated continuous operation of the SSDS as designed.

All these considerations indicated that immediate additional action was not needed to address the potential for SVI and the PCE exceedances detected in the automotive repair shop samples were most likely attributable to the aerosol product in use in the repair shop.

Recharge Well Modification

On-Site stormwater recharge well RW-2, located in the northwest corner of the Site, was modified by installation of a grout plug to seal the deep-bedrock portions of the well while maintaining the function of the well as a component of the stormwater management infrastructure for the Site. The modification of RW-2 was performed on October 2nd and 3rd, 2019.

Prior to implementing the modification of RW-2, an application for a Class V injection well permit was submitted to the U.S. Environmental Protection Agency (EPA) Underground Injection Control (UIC) program office for EPA Region 2. The application, which was submitted in accordance with the IRM Work Plan, covered all five on-Site recharge wells (RW-1 through -5). At the request of the EPA's UIC program office, Stantec submitted a UIC program injection well inventory form to replace the previously submitted application for a Class V injection well permit. The inventory form was submitted to the EPA, with a copy to NYSDEC, on October 16, 2019.

Construction Completion Report

The IRM Construction Completion Report (CCR) was issued on August 16, 2020.

8.2 COVER SYSTEM IRM

The June 2019 IRM Work Plan for the initial IRM described above specified a pre-design investigation program of supplemental surface soil sampling in lawn areas of the facility to determine, in accordance with NYSDEC guidance, whether existing surface soil conditions in the lawn areas were appropriate for the Site cover system. The cover system pre-design investigation sampling program was completed in September 2019 as specified in the IRM Work Plan. The results of the sampling program identified benzo(a)pyrene in composite samples of surface soil collected from the lawn areas on the east and south sides of the Site at concentrations that exceeded the CU SCO for benzo(a)pyrene.

A Cover System IRM was designed to bring the cover system into compliance with NYSDEC requirements for a commercial use BCP site. An IRM Work Plan for the Cover System at the Site was submitted to NYSDEC in September 2020 and conditionally approved by NYSDEC on September 25, 2020. The Cover System IRM was implemented to address cover system conditions in lawn areas on the east and south sides of the site with the B(a)P exceedances noted above.

The IRM was implemented in accordance with the specifications of the September 2020 IRM Work Plan, modifications to the work plan specified by NYSDEC in its approval letter dated September 25, 2020, and the "Implementation of Cover System IRM Work Plan – Interim Report" dated March 10, 2021.

The Cover System IRM was implemented with the following elements:

- Supplemental soil sampling of the lawn areas on the east and south sides of the Site to delineate areas of exceedance of the CU SCO for B(a)P.
- For those areas confirmed by the supplemental sampling to exhibit exceedances of a CU SCO, one or the other of the following two remedial approaches was implemented:
- In some of the cover system remedial areas, soil exceeding CU SCOs was removed and replaced with an equal thickness of imported cover material. The soil removed from these areas was moved to one of the three cover system lawn areas on the east side of the Site addressed using the second remedial approach.
- In the remaining three remedial areas, soil exceeding CU SCOs was left in place. Soil removed from the areas addressed using the first approach was placed on top of the existing surface soil to create a low-profile berm. A permeable geotextile fabric

demarcation layer was placed over the soil with CU SCO exceedances, and an overlying soil cover consisting of a minimum of one foot of imported topsoil of sufficient quality to maintain a vegetative layer was installed. The existing soil at edges of the cover areas was removed as needed to key the edge of the remediated area to the surrounding grade to achieve the required one-foot cover thickness.

- Imported cover material was pre-characterized in accordance with NYSDEC Part 375 regulations and DER-10 policy requirements to confirm its eligibility for use as soil cover.

Cover System remedial excavation activities and installation of new cover materials were completed at the Site in May and June 2021. Completion of the Cover System IRM was documented in a Construction Completion Report (CCR) submitted to NYSDEC in August 2021.

9.0 Conclusion and Recommendation

The NYSDEC had indicated that remedial action was required for the Site, and that mitigation of potential exposures to Site-related contaminants must be included in the remedy. It was concluded that the recommended alternative identified by the AA completed in 2018 would achieve the remedial action objectives. On that basis, the two IRMs described in Section 8 of this report were implemented at the Site.

Based on the results of the alternatives analysis presented in this report and the completion of the IRMs implemented at the Site, the following combination of remedial elements is recommended as a remedy for the contamination identified at the Site and the related potential on- and off-Site human health exposures identified by the qualitative exposure assessment:

- No further remedial action is necessary following completion of the IRMs.
- Institutional Controls restricting future use of the Site to industrial and commercial uses and prohibiting use of Site groundwater will be implemented. The institutional controls include those established in the Environmental Easement that was granted to NYSDEC in 2019.
- A NYSDEC-approved Site Management Plan will be developed and implemented.

The site building floor slab, outdoor pavements and a clean soil cover will be maintained to serve as a cover over residual soil contamination. Groundwater monitoring will be performed to confirm that contaminant concentrations in on-Site bedrock groundwater will continue to decline gradually as a result of intrinsic degradation and attenuation processes.

Through groundwater monitoring to track intrinsic degradation and attenuation and recharge well influence, engineering controls isolating areas of soil contamination, and discontinuation of direct injection of stormwater into the deep section of the bedrock groundwater system, the potential mobility of contaminants to off-Site locations will be gradually reduced.

Potential on-Site exposures related to vapor intrusion have been addressed by the construction and operation of the SSDS for the Site building. Monitoring of SSDS operation in accordance with the approved SMP will be performed to track the effectiveness of SVI mitigation at the site over time. The SMP will include a limited indoor air monitoring program related to the automotive repair shop area where an aerosol product containing PCE was in use, and the SMP will provide details on the frequency of monitoring and the basis for completion of the monitoring program.

Conclusion and Recommendation

An SVI assessment program, to be performed by an entity other than the Volunteer (MFP), is recommended for adjacent off-Site properties located east of the Site to determine whether potential exposures exist on those properties from vapor intrusion caused by downgradient off-Site migration of Site contaminants in groundwater.

Community acceptance will ultimately be determined by NYSDEC. However, given the industrial and commercial nature of the land uses in the surrounding area, it was anticipated the recommended alternative would be accepted by the community.

10.0 References

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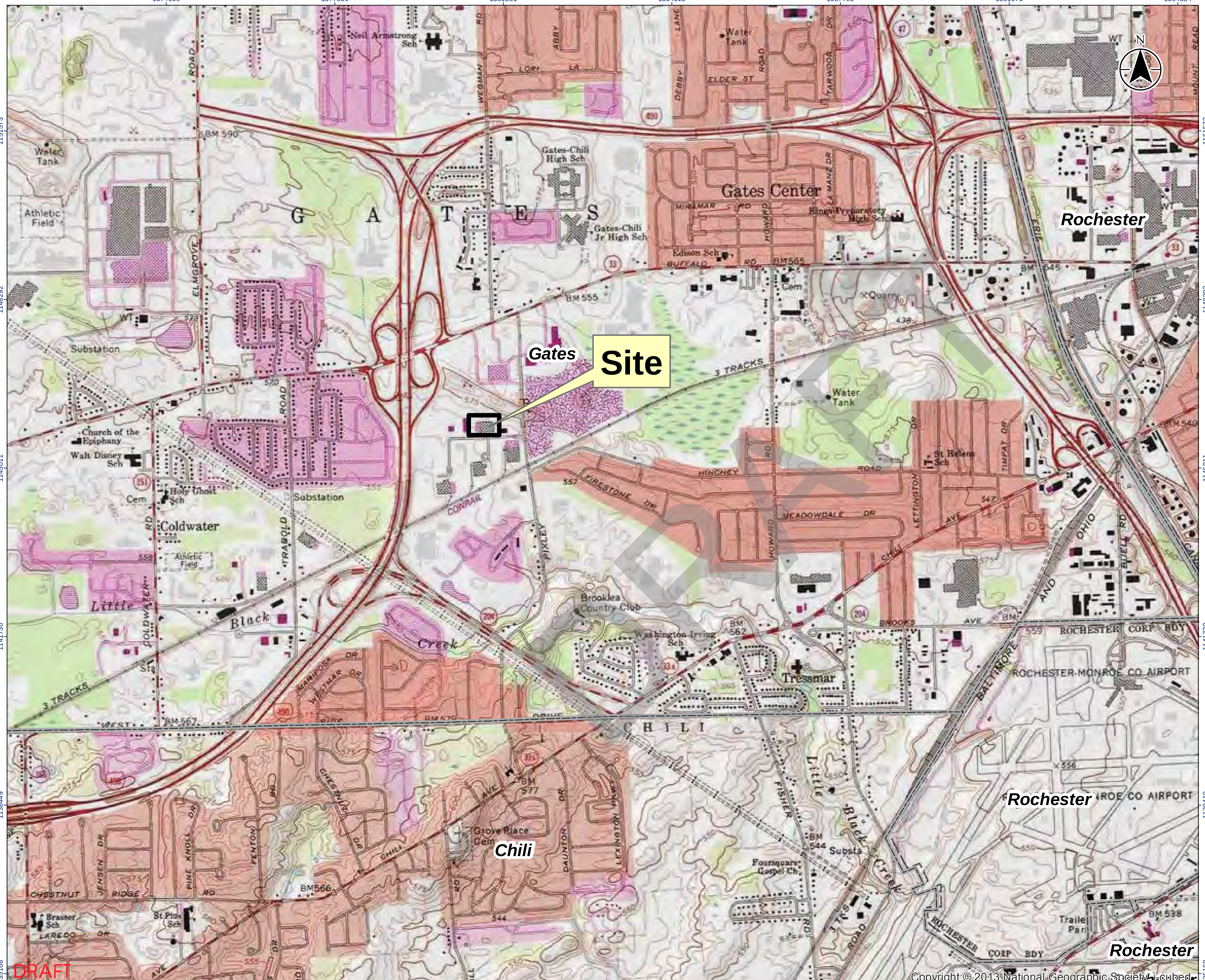
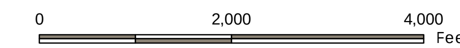
8. IRM SMP Monitoring Report for the 2019/2020 Heating Season, Brownfield Cleanup Program Site #C828101, Former Alliance Metal Stamping & Fabrication Facility, Town of Gates, Monroe County, New York. Stantec Consulting Services Inc., April 2020.
9. Interim Remedial Measure Construction Completion Report, Site #C828101, Former Alliance Metal Stamping & Fabrication Facility, Town of Gates, Monroe County, New York. Stantec Consulting Services Inc., August 2020.
10. IRM SMP Monitoring Report for the 2020/2021 Heating Season, Brownfield Cleanup Program Site #C828101, Former Alliance Metal Stamping & Fabrication Facility, Town of Gates, Monroe County, New York. Stantec Consulting Services Inc., August 2021.

11. Construction Completion Report, Cover System Interim Remedial Measure, Site #C828101, Former Alliance Metal Stamping & Fabrication Facility, Town of Gates, Monroe County, New York. Stantec Consulting Services Inc., August 2021.
12. Remedial Investigation Report, Former ITT Rochester Form Machine Facility, Site # 8-28-112, Town of Gates, New York. O'Brien & Gere Engineers, Inc., April 11, 2014.
13. Revised Feasibility Study Report, ITT Automotive Fluid Handling System Site, Site # 8-28-112, Town of Gates, NY, 3356 / 63224. O'Brien & Gere Engineers, Inc., May 2, 2016.
14. Technical Guidance for Site Investigation and Remediation (DER-10), NYSDEC, May 2010.
15. NYSDEC's Commissioner Policy CP-51 Soil Cleanup Guidance, NYSDEC, October 21, 2010.
16. NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006, as updated by May 2017 Soil Vapor/Indoor Air Matrices A, B and C.

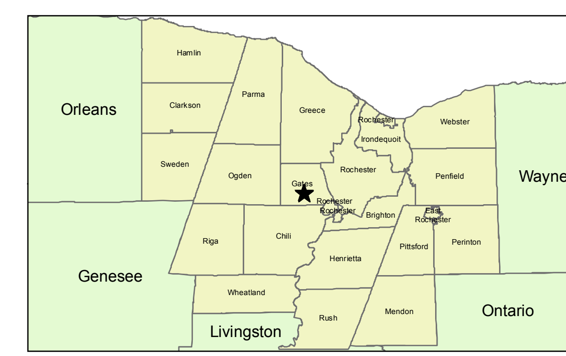
Figures





Notes

1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. USGS Map Source :This map presents land cover imagery for the world and detailed topographic maps for the United States. The map includes the National Park Service (NPS) Natural Earth physical map at 1.24km per pixel for the world at small scales, i-cubed eTOPO 1:250,000-scale maps for the contiguous United States at medium scales, and National Geographic TOPO! 1:100,000 and 1:24,000-scale maps (1:250,000 and 1:63,000 in Alaska) for the United States at large scales. The TOPO! maps are seamless, scanned images of United States Geological Survey (USGS) paper topographic maps. For more information on this map, including terms of use, visit online at http://goto.arcgisonline.com/maps/USA_Topo_Maps



Project Location:
12 Pixley Industrial Parkway
Town of Gates, NY

Prepared by AL on 2017-07-17
Technical Review by TW on 2017-07-17
Independent Review by MPS on 2017-07-17

190500647

Client/Project
Former Alliance Metal Stamping and Fabrication Facility
Brownfield Cleanup Program #C828101
Alternative Analysis Report

Figure No.
1

Title
Site Location Map

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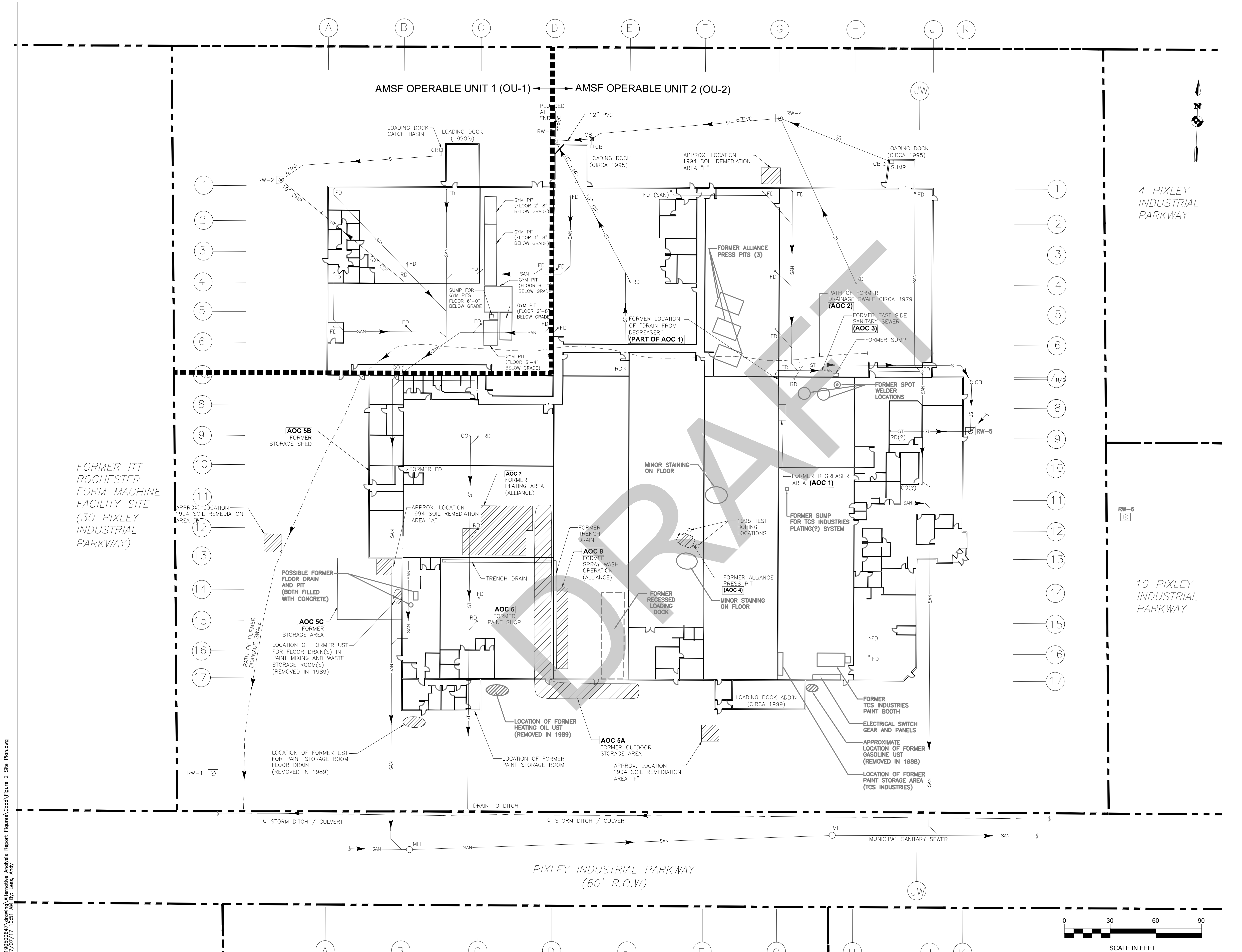

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ORIGINAL SHEET – ANSI D

Stantec

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Legend

RW-5	RECHARGE WELL
FD	FLOOR DRAIN
CO	CLEAN OUT
RD	ROOF DRAIN
CB	CATCH BASIN
— SAN —	SANITARY SEWER PIPE
— ST —	STORM WATER PIPE
	APPROXIMATE PROPERTY LINE
AOC	AREA OF CONCERN
CIP	CAST IRON PIPE
B AND 2	BUILDING COLUMN LINES

Notes

Revision | By | Appd. | YY.MM.DD

Issued	By	Appd.	YY.MM.DD
RI Report	TW	MPS	2014.10

File Name:	Dwn.	Chkd.	Dsgn.	YY.MM.DD
	APL	TW	TW	2014.10

Permit-Seal

Client/Project

FORMER ALLIANCE METAL STAMPING & FABRICATION FACILTY
BROWNFIELD CLEANUP PROGRAM SITE # C828101

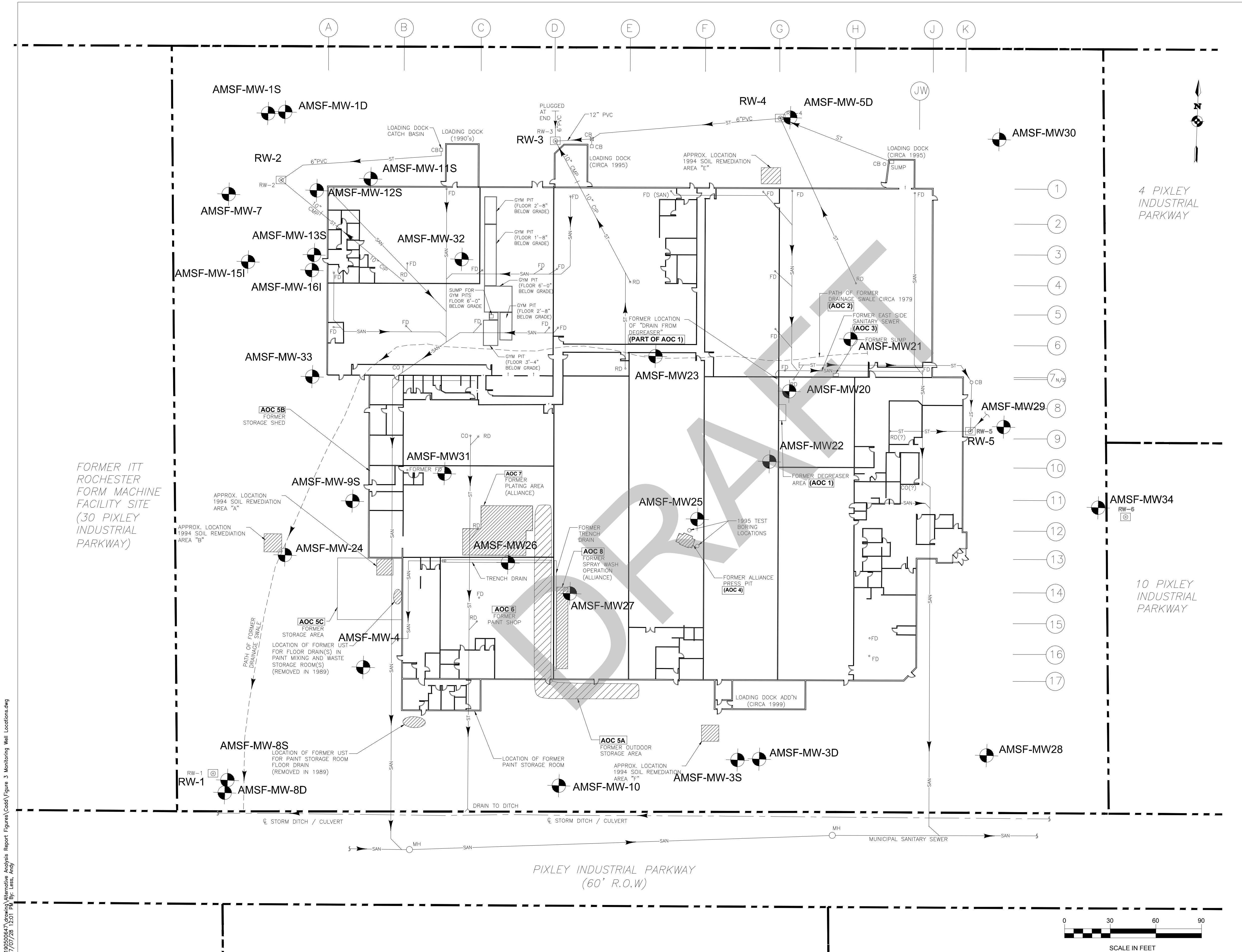
12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY
ALTERNATIVE ANALYSIS REPORT

Title

SITE PLAN

Project No.	Scale
190500647	AS SHOWN

Drawing No.	Sheet	Revision
FIG. 2	of	



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2017/07/28 12:01 PM By: Leiss, Andy

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AMSF-MW21 MONITORING WELL

Notes

Revision	By	Appd.	YY.MM.DD
RI Report	TW	MPS	2014.10

Issued	By	Appd.	YY.MM.DD
File Name:	APL	TW	TW	2014.10
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project

FORMER ALLIANCE METAL STAMPING & FABRICATION FACILITY
BROWNFIELD CLEANUP PROGRAM SITE # C828101

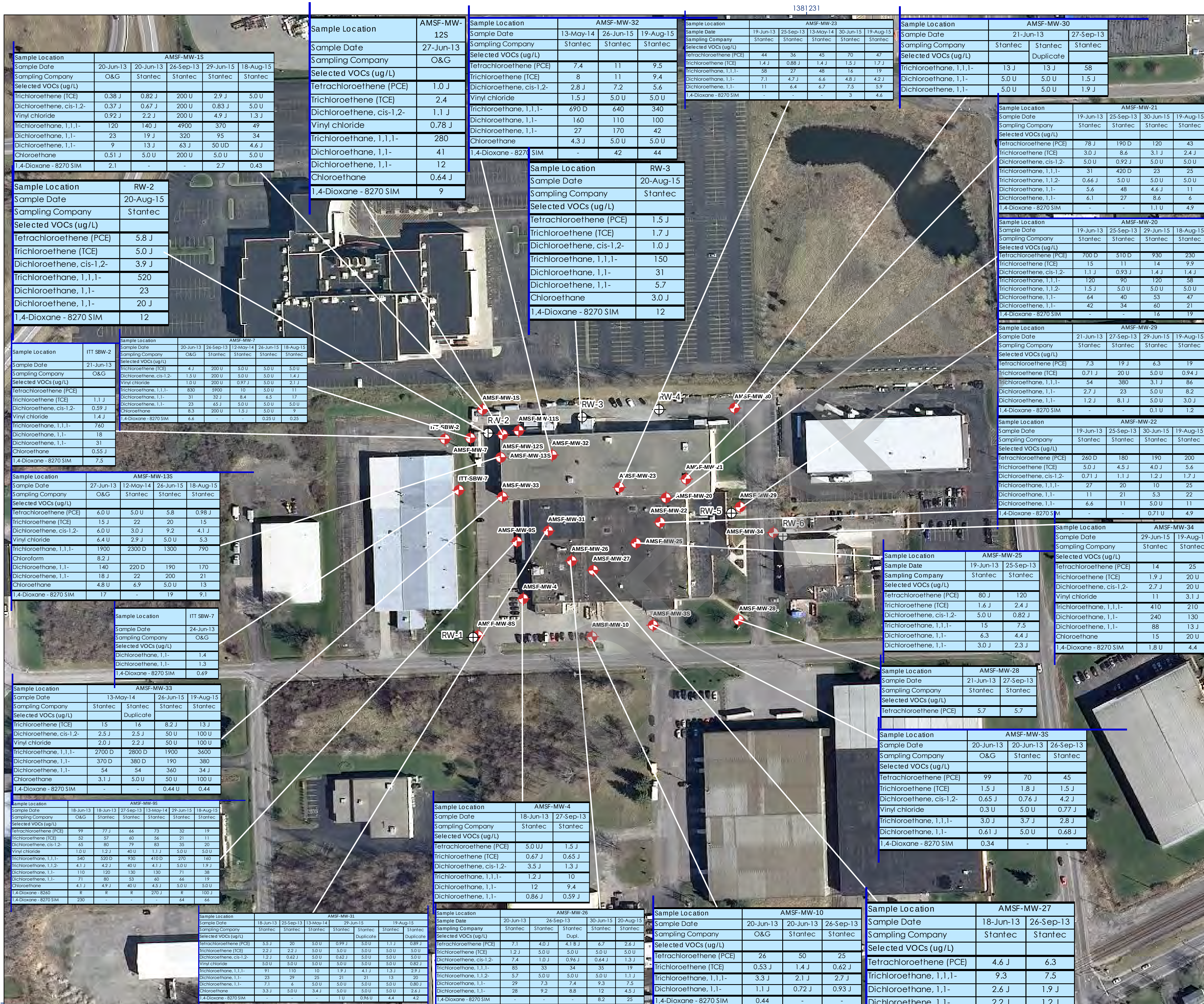
12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY
ALTERNATIVE ANALYSIS REPORT

Title

MONITORING WELL LOCATIONS

Project No.	Scale
190500647	AS SHOWN

Drawing No.	Sheet	Revision
FIG. 3	of	



Sample Location	AMSF-MW-1S				
Sample Date	20-Jun-13	20-Jun-13	26-Sep-13	29-Jun-15	18-Aug-15
Sampling Company	O&G	Stantec	Stantec	Stantec	Stantec
Selected VOCs (ug/L)					
Trichloroethene (TCE)	0.38 J	0.82 J	200 U	2.9 J	5.0 U
Dichloroethene, cis-1,2-	0.37 J	0.67 J	200 U	0.83 J	5.0 U
Vinyl chloride	0.92 J	2.2 J	200 U	4.9 J	1.3 J
Trichloroethane, 1,1,1-	120	140 J	4900	370	49
Dichloroethane, 1,1-	23	19 J	320	95	34
Dichloroethene, 1,1-	9	13 J	63 J	50 UD	4.6 J
Chloroethane	0.51 J	5.0 U	200 U	5.0 U	5.0 U
1,4-Dioxane - 8270 SIM	2.1	-	-	2.7	0.43

Sample Location	RW-2
Sample Date	20-Aug-15
Sampling Company	Stantec
Selected VOCs (ug/L)	
Tetrachloroethene (PCE)	5.8 J
Trichloroethene (TCE)	5.0 J
Dichloroethene, cis-1,2-	3.9 J
Trichloroethane, 1,1,1-	520
Dichloroethane, 1,1-	23
Dichloroethene, 1,1-	20 J
1,4-Dioxane - 8270 SIM	12

Sample Location	AMSF-MW-12S
Sample Date	27-Jun-13
Sampling Company	O&G
Selected VOCs (ug/L)	
Tetrachloroethene (PCE)	1.0 J
Trichloroethene (TCE)	2.4
Dichloroethene, cis-1,2-	1.1 J
Vinyl chloride	0.78 J
Trichloroethane, 1,1,1-	280
Dichloroethane, 1,1-	41
Dichloroethene, 1,1-	12
Chloroethane	0.64 J
1,4-Dioxane - 8270 SIM	9

Sample Location	AMSF-MW-32		
Sample Date	13-May-14	26-Jun-15	19-Aug-15
Sampling Company	Stantec	Stantec	Stantec
Selected VOCs (ug/L)			
Tetrachloroethene (PCE)	7.4	11	9.5
Trichloroethene (TCE)	8	11	9.4
Dichloroethene, cis-1,2-	2.8 J	7.2	5.6
Vinyl chloride	1.5 J	5.0 U	5.0 U
Trichloroethane, 1,1,1-	690 D	640	340
Dichloroethane, 1,1-	160	110	100
Dichloroethene, 1,1-	27	170	42
Chloroethane	4.3 J	5.0 U	5.0 U
1,4-Dioxane - 8270 SIM	-	42	44

Sample Location	RW-3
Sample Date	20-Aug-15
Sampling Company	Stantec
Selected VOCs (ug/L)	
Tetrachloroethene (PCE)	1.5 J
Trichloroethene (TCE)	1.7 J
Dichloroethene, cis-1,2-	1.0 J
Trichloroethane, 1,1,1-	150
Dichloroethane, 1,1-	31
Dichloroethene, 1,1-	5.7
Chloroethane	3.0 J
1,4-Dioxane - 8270 SIM	12

Sample Location	AMSF-MW-23				
Sample Date	19-Jun-13	25-Sep-13	13-May-14	30-Jun-15	19-Aug-15
Sampling Company	Stantec	Stantec	Stantec	Stantec	Stantec
Selected VOCs (ug/L)					
Tetrachloroethene (PCE)	44	36	45	70	47
Trichloroethene (TCE)	1.4 J	0.88 J	1.4 J	1.5 J	1.7 J
Trichloroethane, 1,1,1-	58	27	48	16	19
Dichloroethane, 1,1-	7.1	4.7 J	6.6	4.8 J	4.2 J
Dichloroethene, 1,1-	11	6.4	6.7	7.5	5.9
1,4-Dioxane - 8270 SIM	-	-	-	3	4.6

Sample Location	AMSF-MW-30		
Sample Date	21-Jun-13		27-Sep-13
Sampling Company	Stantec	Stantec Duplicate	Stantec
Selected VOCs (ug/L)			
Trichloroethane, 1,1,1-	13 J	13 J	58
Dichloroethane, 1,1-	5.0 U	5.0 U	1.5 J
Dichloroethene, 1,1-	5.0 U	5.0 U	1.9 J

Sample Location	AMSF-MW-21			
Sample Date	19-Jun-13	25-Sep-13	30-Jun-15	19-Aug-15
Sampling Company	Stantec	Stantec	Stantec	Stantec
Selected VOCs (ug/L)				
Tetrachloroethene (PCE)	78 J	190 D	120	43
Trichloroethene (TCE)	3.0 J	8.6	3.1 J	2.4 J
Dichloroethene, cis-1,2-	5.0 U	0.92 J	5.0 U	5.0 U
Trichloroethane, 1,1,1-	31	420 D	23	25
Trichloroethane, 1,1,2-	0.66 J	5.0 U	5.0 U	5.0 U
Dichloroethane, 1,1-	5.6	48	4.6 J	11
Dichloroethene, 1,1-	6.1	27	8.6	6
1,4-Dioxane - 8270 SIM	-	-	1.1 U	4.9

Sample Location	AMSF-MW-20			
Sample Date	19-Jun-13	25-Sep-13	29-Jun-15	18-Aug-15
Sampling Company	Stantec	Stantec	Stantec	Stantec
Selected VOCs (ug/L)				
Tetrachloroethene (PCE)	700 D	510 D	930	230
Trichloroethene (TCE)	15	11	14	9.9
Dichloroethene, cis-1,2-	1.1 J	0.93 J	1.4 J	1.4 J
Trichloroethane, 1,1,1-	120	90	120	58
Trichloroethane, 1,1,2-	1.5 J	5.0 U	5.0 U	5.0 U
Dichloroethane, 1,1-	64	40	53	47
Dichloroethene, 1,1-	42	34	60	21
1,4-Dioxane - 8270 SIM	-	-	16	19

Sample Location	AMSF-MW-29			
Sample Date	21-Jun-13	27-Sep-13	29-Jun-15	19-Aug-15
Sampling Company	Stantec	Stantec	Stantec	Stantec
Selected VOCs (ug/L)				
Tetrachloroethene (PCE)	7.3	19 J	6.3	19
Trichloroethene (TCE)	0.71 J	20 U	5.0 U	0.94 J
Trichloroethane, 1,1,1-	54	380	3.1 J	86
Dichloroethane, 1,1-	2.7 J	23	5.0 U	8.2
Dichloroethene, 1,1-	1.2 J	8.1 J	5.0 U	3.0 J
1,4-Dioxane - 8270 SIM	-	-	0.1 U	1.2

Sample Location	AMSF-MW-22			
Sample Date	19-Jun-13	25-Sep-13	30-Jun-15	19-Aug-15
Sampling Company	Stantec	Stantec	Stantec	Stantec
Selected VOCs (ug/L)				
Tetrachloroethene (PCE)	260 D	180	190	200
Trichloroethene (TCE)	5.0 J	4.5 J	4.0 J	5.6
Dichloroethene, cis-1,2-	0.71 J	1.1 J	1.2 J	1.7 J
Trichloroethane, 1,1,1-	27	20	10	25
Dichloroethane, 1,1-	11	21	5.3	22
Dichloroethene, 1,1-	6.6	11	5.0 U	11
1,4-Dioxane - 8270 SIM	-	-	0.71 U	4.9

Sample Location	AMSF-MW-34	
Sample Date	29-Jun-15	19-Aug-15
Sampling Company	Stantec	Stantec
Selected VOCs (ug/L)		
Tetrachloroethene (PCE)	14	25
Trichloroethene (TCE)	1.9 J	20 U
Dichloroethene, cis-1,2-	2.7 J	20 U
Vinyl chloride	11	3.1 J
Trichloroethane, 1,1,1-	410	210
Dichloroethane, 1,1-	240	130
Dichloroethene, 1,1-	88	13 J
Chloroethane	15	20 U
1,4-Dioxane - 8270 SIM	1.8 U	4.4

Sample Location	AMSF-MW-25	
Sample Date	19-Jun-13	25-Sep-13
Sampling Company	Stantec	Stantec
Selected VOCs (ug/L)		
Tetrachloroethene (PCE)	80 J	120
Trichloroethene (TCE)	1.6 J	2.4 J
Dichloroethene, cis-1,2-	5.0 U	0.82 J
Trichloroethane, 1,1,1-	15	7.5
Dichloroethane, 1,1-	6.3	4.4 J
Dichloroethene, 1,1-	3.0 J	2.3 J

Sample Location	AMSF-MW-28	
Sample Date	21-Jun-13	27-Sep-13
Sampling Company	Stantec	Stantec
Selected VOCs (ug/L)		
Tetrachloroethene (PCE)	5.7	5.7

Sample Location	AMSF-MW-3S		
Sample Date	20-Jun-13	20-Jun-13	26-Sep-13
Sampling Company	O&G	Stantec	Stantec
Selected VOCs (ug/L)			
Tetrachloroethene (PCE)	99	70	45
Trichloroethene (TCE)	1.5 J	1.8 J	1.5 J
Dichloroethene, cis-1,2-	0.65 J	0.76 J	4.2 J
Vinyl chloride	0.3 U	5.0 U	0.77 J
Trichloroethane, 1,1,1-	3.0 J	3.7 J	2.8 J
Dichloroethane, 1,1-	0.61 J	5.0 U	0.68 J
1,4-Dioxane - 8270 SIM	0.34	-	-

Sample Location	ITT SBW-2
Sample Date	21-Jun-13
Sampling Company	O&G
Selected VOCs (ug/L)	
Tetrachloroethene (PCE)	
Trichloroethene (TCE)	1.1 J
Dichloroethene, cis-1,2-	0.59 J
Vinyl chloride	1.4 J
Trichloroethane, 1,1,1-	760
Dichloroethane, 1,1-	18
Dichloroethene, 1,1-	31
Chloroethane	0.55 J
1,4-Dioxane - 8270 SIM	7.5

Sample Location	AMSF-MW-7				
Sample Date	20-Jun-13	26-Sep-13	12-May-14	26-Jun-15	18-Aug-15
Sampling Company	O&G	Stantec	Stantec	Stantec	Stantec
Selected VOCs (ug/L)					
Trichloroethene (TCE)	4 J	200 U	5.0 U	5.0 U	5.0 U
Dichloroethene, cis-1,2-	1.5 U	200 U	5.0 U	5.0 U	1.4 J
Vinyl chloride	1.0 U	200 U	0.97 J	5.0 U	2.1 J
Trichloroethane, 1,1,1-	830	5900	10	5.0 U	11
Dichloroethane, 1,1-	31	32 J	8.4	6.5	17
Dichloroethene, 1,1-	23	65 J	5.0 U	5.0 U	5.0 U
Chloroethane	8.3	200 U	1.5 J	5.0 U	9
1,4-Dioxane - 8270 SIM	6.6	-	-	0.25 U	0.25

Sample Location	AMSF-MW-13S			
Sample Date	27-Jun-13	12-May-14	26-Jun-15	18-Aug-15
Sampling Company	O&G	Stantec	Stantec	Stantec
Selected VOCs (ug/L)				
Tetrachloroethene (PCE)	6.0 U	5.0 U	5.8	0.98 J
Trichloroethene (TCE)	15 J	22	20	15
Dichloroethene, cis-1,2-	6.0 U	3.0 J	9.2	4.1 J
Vinyl chloride	6.4 U	2.9 J	5.0 U	5.3
Trichloroethane, 1,1,1-	1900	2300 D	1300	790
Chloroform	8.2 J			
Dichloroethane, 1,1-	140	220 D	190	170
Dichloroethene, 1,1-	18 J	22	200	21
Chloroethane	4.8 U	6.9	5.0 U	13
1,4-Dioxane - 8270 SIM	17	-	19	9.1

Sample Location	ITT SBW-7
Sample Date	24-Jun-13
Sampling Company	O&G
Selected VOCs (ug/L)	
Dichloroethane, 1,1-	1.4
Dichloroethene, 1,1-	1.3
1,4-Dioxane - 8270 SIM	0.69

Sample Location	AMSF-MW-33			
Sample Date	13-May-14		26-Jun-15	19-Aug-15
Sampling Company	Stantec	Stantec Duplicate	Stantec	Stantec
Selected VOCs (ug/L)				
Trichloroethene (TCE)	15	16	8.2 J	13 J
Dichloroethene, cis-1,2-	2.5 J	2.5 J	50 U	100 U
Vinyl chloride	2.0 J	2.2 J	50 U	100 U
Trichloroethane, 1,1,1-	2700 D	2800 D	1900	3600
Dichloroethane, 1,1-	370 D	380 D	190	380
Dichloroethene, 1,1-	54	54	360	34 J
Chloroethane	3.1 J	5.0 U	50 U	100 U
1,4-Dioxane - 8270 SIM	-	-	0.44 U	0.44

Sample Location	AMSF-MW-9S					
Sample Date	18-Jun-13	18-Jun-13	27-Sep-13	13-May-14	29-Jun-15	18-Aug-15
Sampling Company	O&G	Stantec	Stantec	Stantec	Stantec	Stantec
Selected VOCs (ug/L)						
Tetrachloroethene (PCE)	99	77 J	66	73	32	19
Trichloroethene (TCE)	52	57	60	56	21	11
Dichloroethene, cis-1,2-	65	80	79	83	35	20
Vinyl chloride	1.0 U	1.2 J	40 U	1.1 J	5.0 U	5.0 U
Trichloroethane, 1,1,1-	540	520 D	930	410 D	270	160
Trichloroethane, 1,1,2-	4.1 J	4.2 J	40 U	4.1 J	5.0 U	1.9 J
Dichloroethane, 1,1-	110	120	130	130	71	38
Dichloroethene, 1,1-	71	80	53	60	66	19
Chloroethane	4.1 J	4.9 J	40 U	4.5 J	5.0 U	5.0 U
1,4-Dioxane - 8260	R	R	R	270 J	R	100 J
1,4-Dioxane - 8270 SIM	230	-	-	-	64	66

Sample Location	AMSF-MW-31						
Sample Date	18-Jun-13	25-Sep-13	13-May-14	29-Jun-15		19-Aug-15	
Sampling Company	Stantec	Stantec	Stantec	Stantec	Stantec Duplicate	Stantec	Stantec Duplicate
Selected VOCs (ug/L)							
Tetrachloroethene (PCE)	5.5 J	20	5.0 U	0.99 J	5.0 U	1.1 J	0.89 J
Trichloroethene (TCE)	2.2 J	2.2 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichloroethene, cis-1,2-	1.2 J	0.62 J	5.0 U	0.62 J	5.0 U	5.0 U	5.0 U
Vinyl chloride	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.82 J
Trichloroethane, 1,1,1-	91	110	10	1.9 J	4.1 J	1.3 J	2.9 J
Dichloroethane, 1,1-	23	29	25	21	21	13	20
Dichloroethene, 1,1-	7.1	6	5.0 U	5.0 U	5.0 U	5.0 U	0.80 J
Chloroethane	3.3 J	5.0 U	3.4 J	5.0 U	5.0 U	5.0 U	2.6 J
1,4-Dioxane - 8270 SIM	-	-	-	1 U	0.96 U	4.4	4.2

Sample Location	AMSF-MW-4	
Sample Date	18-Jun-13	27-Sep-13
Sampling Company	Stantec	Stantec
Selected VOCs (ug/L)		
Tetrachloroethene (PCE)	5.0 UJ	1.5 J
Trichloroethene (TCE)	0.67 J	0.65 J
Dichloroethene, cis-1,2-	3.5 J	1.3 J
Trichloroethane, 1,1,1-	1.2 J	10
Dichloroethane, 1,1-	12	9.4
Dichloroethene, 1,1-	0.86 J	0.59 J

Sample Location	AMSF-MW-26				
Sample Date	20-Jun-13	26-Sep-13		30-Jun-15	20-Aug-15
Sampling Company	Stantec	Stantec	Stantec Dupl.	Stantec	Stantec
Selected VOCs (ug/L)					
Tetrachloroethene (PCE)	7.1	4.0 J	4.1 B J	6.7	2.6 J
Trichloroethene (TCE)	1.2 J	5.0 U	5.0 U	5.0 U	5.0 U
Dichloroethene, cis-1,2-	7.4	1.0 J	0.96 J	0.64 J	1.3 J
Trichloroethane, 1,1,1-	85	33	34	35	19
Trichloroethane, 1,1,2-	5.7	5.0 U	5.0 U	5.0 U	1.1 J
Dichloroethane, 1,1-	29	7.3	7.4	9.3	7.5
Dichloroethene, 1,1-	28	9.2	8.8	12	4.5 J
1,4-Dioxane - 8270 SIM	-	-	-	8.2	25

Sample Location	AMSF-MW-10		
Sample Date	20-Jun-13	20-Jun-13	26-Sep-13
Sampling Company	O&G	Stantec	Stantec
Selected VOCs (ug/L)			
Tetrachloroethene (PCE)	26	50	25
Trichloroethene (TCE)	0.53 J	1.4 J	0.62 J
Trichloroethane, 1,1,1-	3.3 J	2.1 J	2.7 J
Dichloroethane, 1,1-	1.1 J	0.72 J	0.93 J
1,4-Dioxane - 8270 SIM	0.44	-	-

Sample Location	AMSF-MW-27	
Sample Date	18-Jun-13	26-Sep-13
Sampling Company	Stantec	Stantec
Selected VOCs (ug/L)		
Tetrachloroethene (PCE)	4.6 J	6.3
Trichloroethane, 1,1,1-	9.3	7.5
Dichloroethane, 1,1-	2.6 J	1.9 J
Dichloroethene, 1,1-	2.2 J	1.2 J

Stantec

Legend

Shallow Bedrock Wells

N

0 200 400 Feet

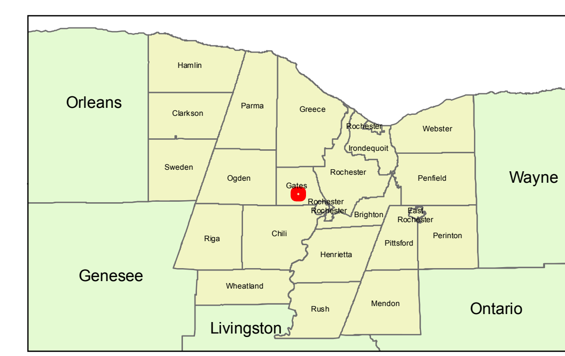
Notes

1.Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet

2. Analytical data qualifiers:
U The analyte was not detected above the laboratory's reportable detection limit shown.
B The analyte was found in associated blank as well as in the sample.
D Indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
D* Data reported from a dilution.
J The reported result is an estimated value.

3. Concentrations are reported in units of ug/L.

4. Sampling company O&G indicates O'Brien & Gere Engineers.



Project Location:
12 Pixley Industrial Parkway
Town of Gates, NY

Prepared by AL on 2017-07-28
Technical Review by TW on 2017-07-28
Independent Review by MPS on 2013-11-05

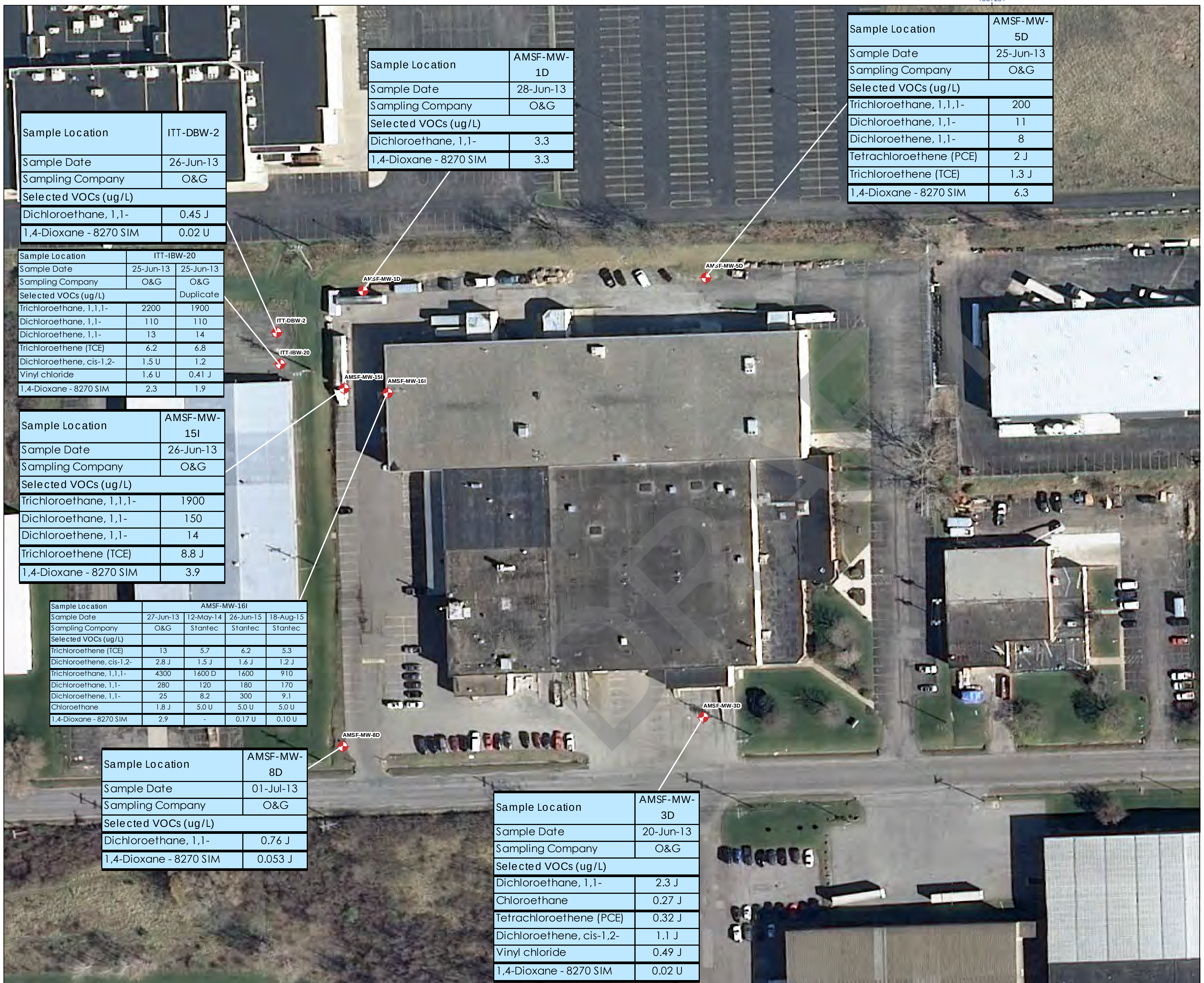
190500647

Client/Project
Former Alliance Metal Stamping and Fabrication Facility
Brownfield Cleanup Program #C828101
Alternatives Analysis

Figure No.
3A

Title
Summary of Chlorinated Ethanes and Chlorinated Ethenes in Groundwater - Shallow Bedrock Wells

U:\190500647\drawing\Alternative Analysis Report Figures\GIS\Figure 3a - Summary of Chlorinated Ethanes and Chlorinated Ethenes in Groundwater.mxd Revised: 2017-07-28 By: aless



Sample Location	ITT-DBW-2
Sample Date	26-Jun-13
Sampling Company	O&G
Selected VOCs (ug/L)	
Dichloroethane, 1,1-	0.45 J
1,4-Dioxane - 8270 SIM	0.02 U

Sample Location	ITT-IBW-20	
Sample Date	25-Jun-13	25-Jun-13
Sampling Company	O&G	O&G Duplicate
Selected VOCs (ug/L)		
Trichloroethane, 1,1,1-	2200	1900
Dichloroethane, 1,1-	110	110
Dichloroethene, 1,1-	13	14
Trichloroethene (TCE)	6.2	6.8
Dichloroethene, cis-1,2-	1.5 U	1.2
Vinyl chloride	1.6 U	0.41 J
1,4-Dioxane - 8270 SIM	2.3	1.9

Sample Location	AMSF-MW-15I
Sample Date	26-Jun-13
Sampling Company	O&G
Selected VOCs (ug/L)	
Trichloroethane, 1,1,1-	1900
Dichloroethane, 1,1-	150
Dichloroethene, 1,1-	14
Trichloroethene (TCE)	8.8 J
1,4-Dioxane - 8270 SIM	3.9

Sample Location	AMSF-MW-16I			
Sample Date	27-Jun-13	12-May-14	26-Jun-15	18-Aug-15
Sampling Company	O&G	Stantec	Stantec	Stantec
Selected VOCs (ug/L)				
Trichloroethene (TCE)	13	5.7	6.2	5.3
Dichloroethene, cis-1,2-	2.8 J	1.5 J	1.6 J	1.2 J
Trichloroethane, 1,1,1-	4300	1600 D	1600	910
Dichloroethane, 1,1-	280	120	180	170
Dichloroethene, 1,1-	25	8.2	300	9.1
Chloroethane	1.8 J	5.0 U	5.0 U	5.0 U
1,4-Dioxane - 8270 SIM	2.9	-	0.17 U	0.10 U

Sample Location	AMSF-MW-8D
Sample Date	01-Jul-13
Sampling Company	O&G
Selected VOCs (ug/L)	
Dichloroethane, 1,1-	0.76 J
1,4-Dioxane - 8270 SIM	0.053 J

Sample Location	AMSF-MW-1D
Sample Date	28-Jun-13
Sampling Company	O&G
Selected VOCs (ug/L)	
Dichloroethane, 1,1-	3.3
1,4-Dioxane - 8270 SIM	3.3

Sample Location	AMSF-MW-5D
Sample Date	25-Jun-13
Sampling Company	O&G
Selected VOCs (ug/L)	
Trichloroethane, 1,1,1-	200
Dichloroethane, 1,1-	11
Dichloroethene, 1,1-	8
Tetrachloroethene (PCE)	2 J
Trichloroethene (TCE)	1.3 J
1,4-Dioxane - 8270 SIM	6.3

Sample Location	AMSF-MW-3D
Sample Date	20-Jun-13
Sampling Company	O&G
Selected VOCs (ug/L)	
Dichloroethane, 1,1-	2.3 J
Chloroethane	0.27 J
Tetrachloroethene (PCE)	0.32 J
Dichloroethene, cis-1,2-	1.1 J
Vinyl chloride	0.49 J
1,4-Dioxane - 8270 SIM	0.02 U

Stantec

Legend

Deep Bedrock

N

0 100 200 Feet

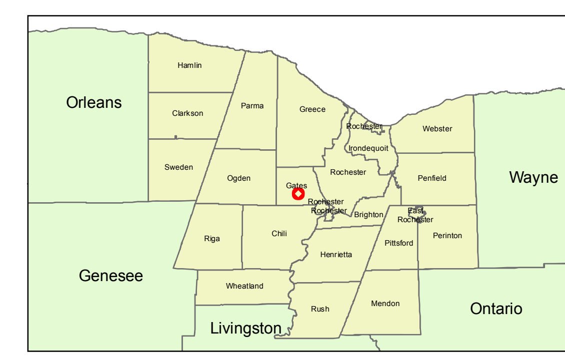
Notes

1.Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet

2. Analytical data qualifiers:
U The analyte was not detected above the laboratory's reportable detection limit shown.
B The analyte was found in associated blank as well as in the sample.
D Indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
D* Data reported from a dilution.
J The reported result is an estimated value.

3. Concentrations are reported in units of ug/L.

4. Sampling company O&G indicates O'Brien & Gere Engineers.



Project Location:
12 Pixley Industrial Parkway
Town of Gates, NY

Prepared by AL on 2014-09-23
Technical Review by TW on 2014-09-23
Independent Review by mmm on 2013-11-05

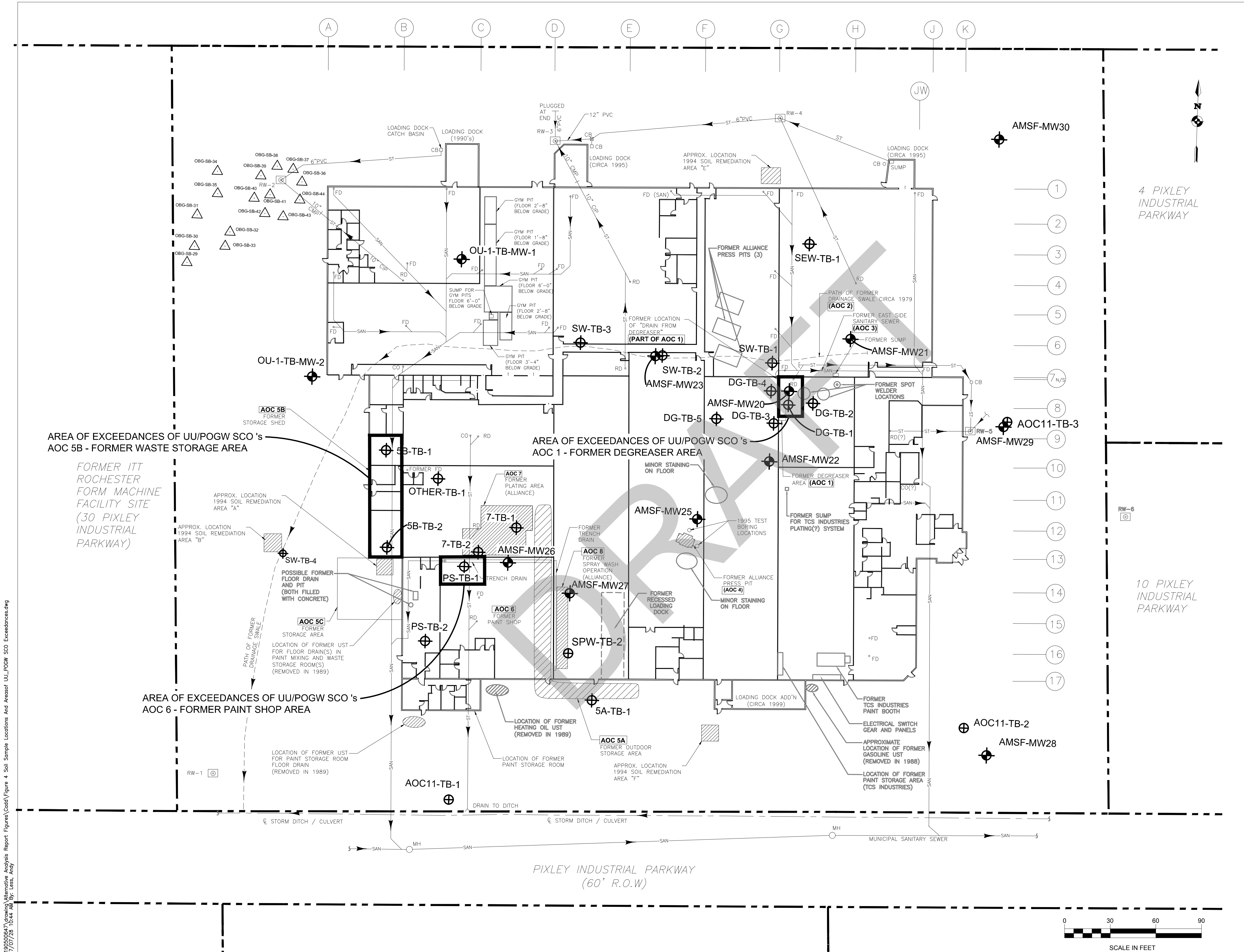
190500647

Client/Project
Former Alliance Metal Stamping and Fabrication Facility
Brownfield Cleanup Program #C828101
Alternatives Analysis

Figure No.
3B

Title
Summary of Chlorinated Ethanes and Chlorinated Ethenes in Groundwater - Intermediate & Deep Bedrock Wells

I:\190500647\drawing\Alternative Analysis Report Figures\GIS\Figure 3b - Summary of Chlorinated Ethanes and Chlorinated Ethenes in Groundwater.mxd Revised: 2017-07-28 By: aless



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Legend

- TEST BORING / MONITORING WELL
- TEST BORING
- TEST BORING WITH SURFACE SOIL SAMPLE
- SOIL BORING (O'BRIEN & GERE)
- UU/POGW SCO's = NYSDEC UNRESTRICTED USE / PROTECTION OF GROUNDWATER SOIL CLEANUP OBJECTIVES

Notes

Revision	By	Appd.	YY.MM.DD
RI Report	TW	MPS	2014.10
Issued	By	Appd.	YY.MM.DD

File Name:	APL	TW	TW	2014.10
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project

FORMER ALLIANCE METAL STAMPING & FABRICATION FACILTY
BROWNFIELD CLEANUP PROGRAM SITE # C828101

12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY
ALTERNATIVE ANALYSIS REPORT

Title

SOIL SAMPLE LOCATIONS AND AREAS OF UU / POGW SCO EXCEEDANCE

Project No.	Scale	
190500647	AS SHOWN	
Drawing No.	Sheet	Revision
FIG. 4	of	

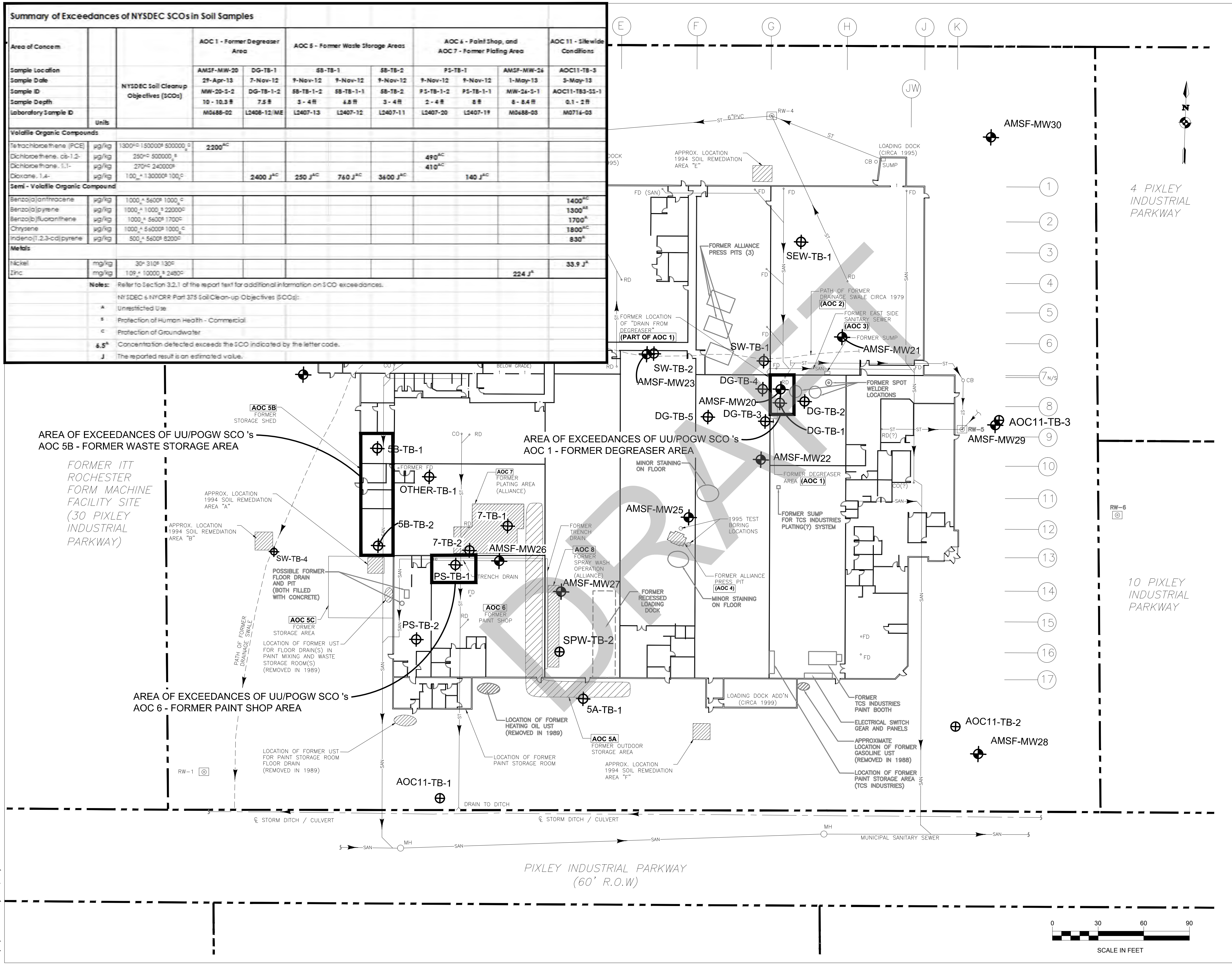
Summary of Exceedances of NYSDEC SCOs in Soil Samples

Area of Concern	Units	NYSDEC Soil Cleanup Objectives (SCOs)	AOC 1 - Former Degreaser Area		AOC 5 - Former Waste Storage Areas			AOC 6 - Paint Shop, and AOC 7 - Former Plating Area			AOC 11 - Sitewide Conditions
Sample Location			AMSF-MW-20	DG-TB-1	5B-TB-1		5B-TB-2	PS-TB-1		AMSF-MW-26	AOC11-TB-3
Sample Date			29-Apr-13	7-Nov-12	9-Nov-12	9-Nov-12	9-Nov-12	9-Nov-12	9-Nov-12	1-May-13	3-May-13
Sample ID			MW-20-S-2	DG-TB-1-2	5B-TB-1-2	5B-TB-1-1	5B-TB-2	PS-TB-1-2	PS-TB-1-1	MW-26-S-1	AOC11-TB3-SS-1
Sample Depth			10 - 10.3 ft	7.5 ft	3 - 4 ft	6.8 ft	3 - 4 ft	2 - 4 ft	8 ft	8 - 8.4 ft	0.1 - 2 ft
Laboratory Sample ID			M0688-02	L2408-12/ME	L2407-13	L2407-12	L2407-11	L2407-20	L2407-19	M0688-03	M0716-03
Volatile Organic Compounds											
Tetrachloroethene (PCE)	µg/kg	1300^{AC} 150000^{B} 500000^{C}	**2200^{AC}**								
Dichloroethene, cis-1,2-	µg/kg	250^{AC} 500000^{B}						**490^{AC}**			
Dichloroethane, 1,1-	µg/kg	270^{AC} 240000^{B}						**410^{AC}**			
Dioxane, 1,4-	µg/kg	100^{A} 130000^{B} 100^{C}		**2400 J^{AC}**	**250 J^{AC}**	**760 J^{AC}**	**3600 J^{AC}**		**140 J^{AC}**		
Semi - Volatile Organic Compound											
Benzo(a)anthracene	µg/kg	1000^{A} 5600^{B} 1000^{C}									**1400^{AC}**
Benzo(a)pyrene	µg/kg	1000^{A} 1000^{B} 22000^{C}									**1300^{AB}**
Benzo(b)fluoranthene	µg/kg	1000^{A} 5600^{B} 1700^{C}									**1700^{A}**
Chrysene	µg/kg	1000^{A} 56000^{B} 1000^{C}									**1800^{AC}**
Indeno(1,2,3-cd)pyrene	µg/kg	500^{A} 5600^{B} 8200^{C}									**830^{A}**
Metals											
Nickel	mg/kg	30^{A} 310^{B} 130^{C}									**33.9 J^{A}**
Zinc	mg/kg	109^{A} 10000^{B} 2480^{C}								**224 J^{A}**	

Notes: Refer to Section 3.2.1 of the report text for additional information on SCO exceedances.

NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs):

- A Unrestricted Use
- B Protection of Human Health - Commercial
- C Protection of Groundwater
- 6.5^{A} Concentration detected exceeds the SCO indicated by the letter code.
- J The reported result is an estimated value.



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Legend

- TEST BORING / MONITORING WELL
- TEST BORING
- TEST BORING WITH SURFACE SOIL SAMPLE
- SOIL BORING (O'BRIEN & GERE)
- UU/POGW SCO's = NYSDEC UNRESTRICTED USE / PROTECTION OF GROUNDWATER SOIL CLEANUP OBJECTIVES

Notes

Revision	By	Appd.	YY.MM.DD
RI Report	TW	MPS	2014.10
Issued	By	Appd.	YY.MM.DD

File Name:	APL	TW	TW	2014.10
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project

FORMER ALLIANCE METAL STAMPING & FABRICATION FACILITY
BROWNFIELD CLEANUP PROGRAM SITE # C828101

12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY
ALTERNATIVE ANALYSIS REPORT

Title

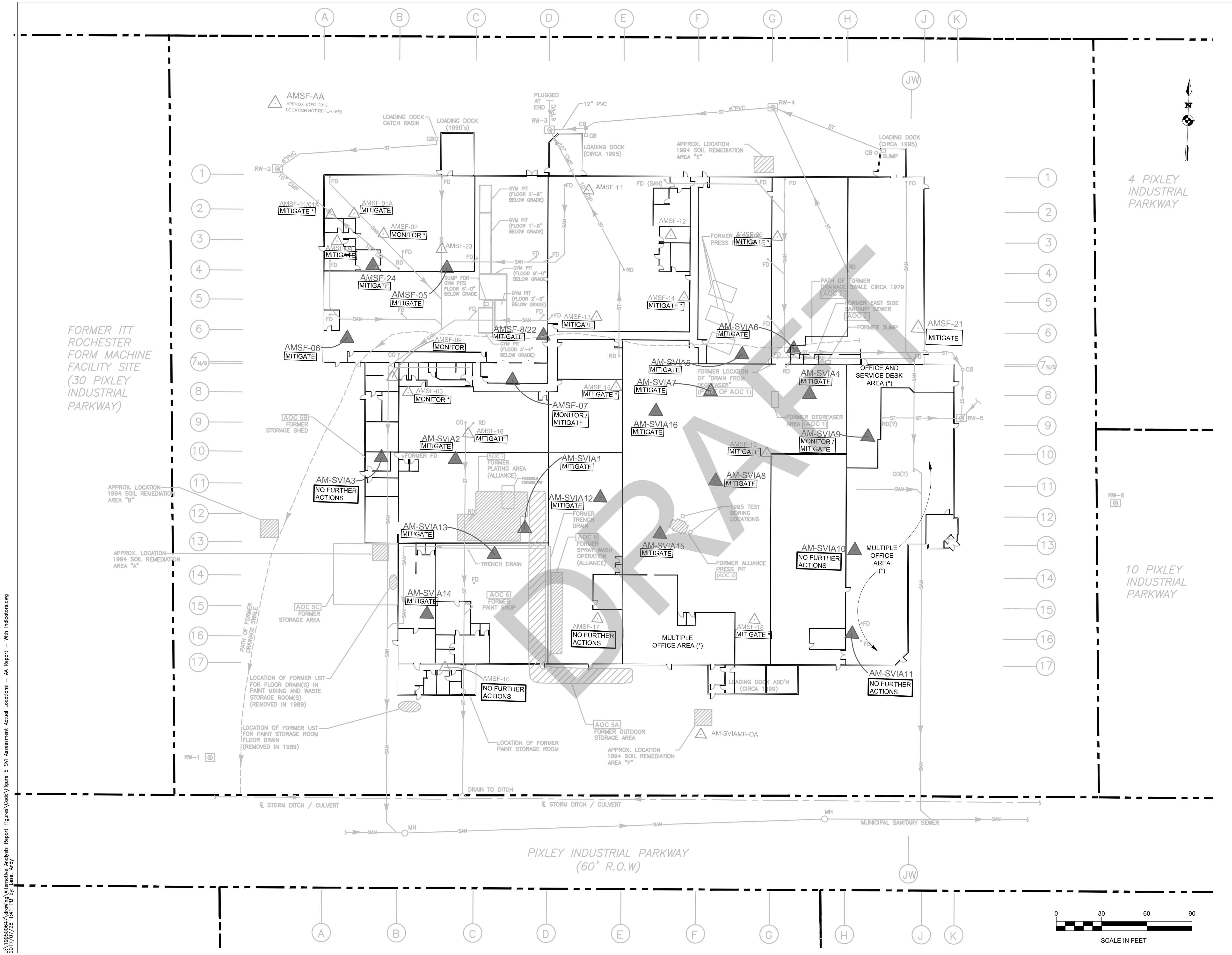
SITE PLAN
SHOWING SCO EXCEEDANCES

Project No.	Scale
190500647	AS SHOWN

Drawing No.	Sheet	Revision
FIG. 4A	of	

U:\190500647\drawing\Alternative Analysis Report Figures\Cadd\Figure 4A Soil Sample Locations And Areasof UU_POGW SCO Exceedances.dwg
2017/07/28 3:01 PM By: Less, Andy

ORIGINAL SHEET – ANSI D



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PREVIOUS SOIL VAPOR INTRUSION SAMPLE LOCATION (RFM INVESTIGATION)

PREVIOUS RI SOIL VAPOR INTRUSION SAMPLE LOCATION (FAMSF RI)

Notes

1. êThe 'Mitigate', 'Mitigate/Monitor', 'Monitor', 'Take Reasonable & Practical Actions' and 'No Further Action' labels shown for the previous sample locations are the designations which the previous results for those locations yield when evaluated using Soil Vapor / Indoor Air Matrices 1 and 2 of the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.ê
2. ê*- An asterisk indicates that the previous sampling at this location included only sub-slab vapor sampling.ê The Matrix 1 and 2 designations shown are based on the assumption that indoor air concentrations at that location were within the range applicable to the designation shown.

Revision	By	Appd.	YY.MM.DD
RI Report	TW	MPS	2014.10
Issued	By	Appd.	YY.MM.DD

File Name:	APL	TW	TW	2014.10
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project

FORMER ALLIANCE METAL STAMPING & FABRICATION FACILTY
BROWNFIELD CLEANUP PROGRAM SITE # C828101

12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY
ALTERNATIVE ANALYSIS REPORT

Title

SOIL VAPOR INTRUSION ASSESSMENT SAMPLE LOCATIONS

Project No.	Scale
190500647	AS SHOWN

Drawing No.	Sheet	Revision
FIG. 5	of	

U:\190500647\drawing\Alternative Analysis Report Figures\Cadd\Figure 5 SVI Assessment Actual Locations – AA Report – With Indicators.dwg
2017/07/28 1:41 PM By: Less, Andy

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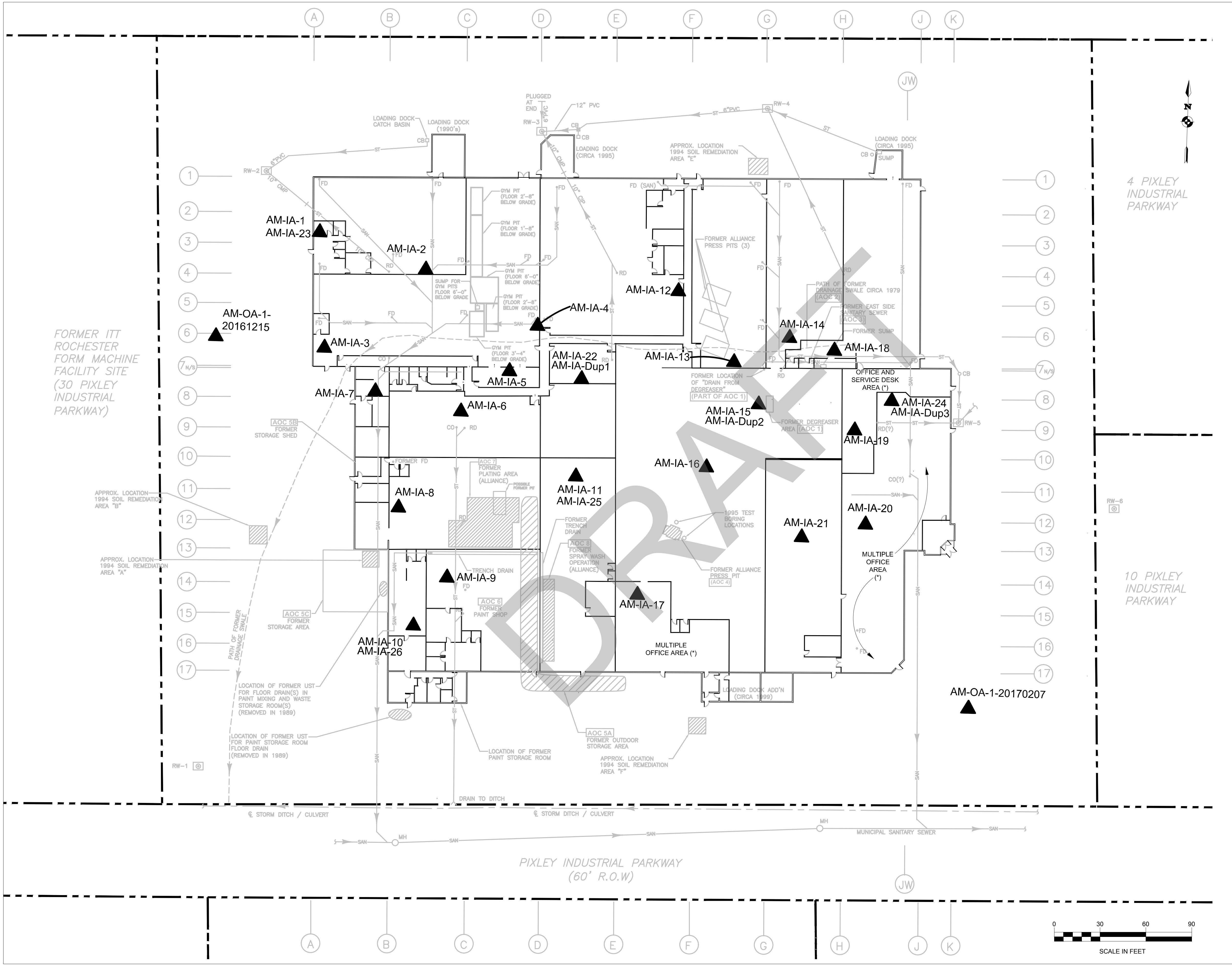

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Legend

▲ IRM INDOOR AND OUTDOOR AIR SAMPLE LOCATION

(*) ASTERISK INDICATES OFFICE AND COMMON AREAS SHOWN WITHOUT INTERIOR WALLS FOR INDIVIDUAL OFFICES, ROOMS AND HALLWAYS

Notes

Revision	By	Appd.	YY.MM.DD
SAMPLING LOCATIONS AS OF 12-15-2016	TW	MPS	16.12.15

Issued	By	Appd.	YY.MM.DD

File Name:	Dwn.	Chkd.	Dsgn.	YY.MM.DD
	APL	TW	TW	2014.10

Permit-Seal

Client/Project

FORMER ALLIANCE METAL STAMPING & FABRICATION FACILTY
BROWNFIELD CLEANUP PROGRAM SITE # C828101

12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY
ALTERNATIVE ANALYSIS REPORT

Title

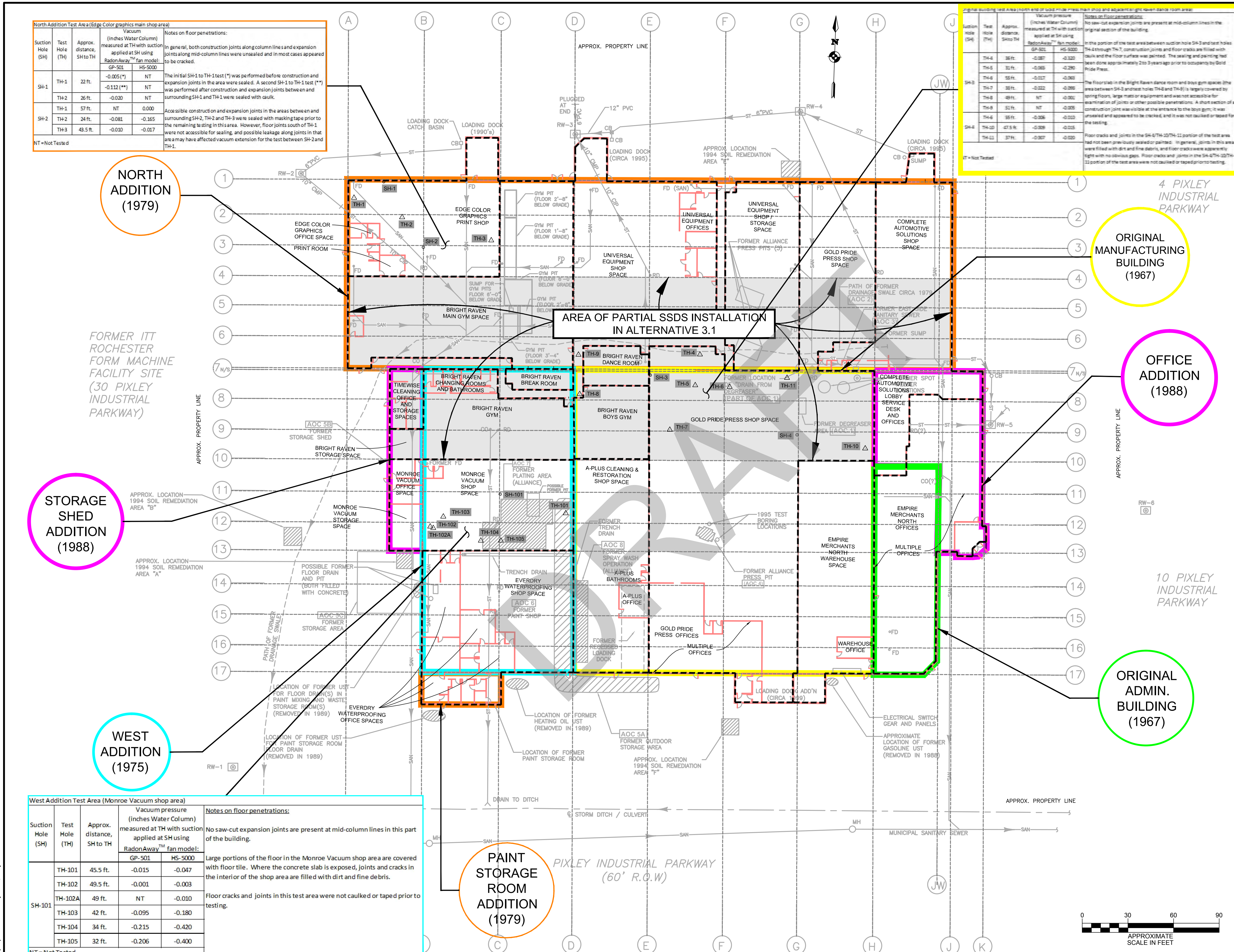
IRM SMP INDOOR AIR
MONITORING LOCATIONS

Project No.	Scale
190500647	AS SHOWN

Drawing No.	Sheet	Revision
FIG. 6	of	

U:\190500647\drawing\Alternative Analysis Report Figures\Cadd\Figure 6 Soil Vapor Intrusion Assessment Sample Actual Locations - 12-15-2016 & 2-2017.dwg
2017/07/17 11:23 AM By: Lentz, Andy

ORIGINAL SHEET - ANSI D



North Addition Test Area (Edge Color graphics main shop area)

Suction Hole (SH)	Test Hole (TH)	Approx. distance, SH to TH	Vacuum (inches Water Column) measured at TH with suction applied at SH using RadonAway™ fan model: GP-501	HS-5000
SH-1	TH-1	22 ft.	-0.005 (*)	NT
			-0.112 (**)	NT
	TH-2	26 ft.	-0.020	NT
SH-2	TH-1	57 ft.	NT	0.000
	TH-2	24 ft.	-0.081	-0.165
	TH-3	43.5 ft.	-0.010	-0.017

NT = Not Tested

Notes on floor penetrations:

In general, both construction joints along column lines and expansion joints along mid-column lines were unsealed and in most cases appeared to be cracked.

The initial SH-1 to TH-1 test (*) was performed before construction and expansion joints in the area were sealed. A second SH-1 to TH-1 test (**) was performed after construction and expansion joints between and surrounding SH-1 and TH-1 were sealed with caulk.

Accessible construction and expansion joints in the areas between and surrounding SH-2, TH-2 and TH-3 were sealed with masking tape prior to the remaining testing in this area. However, floor joints south of TH-1 were not accessible for sealing, and possible leakage along joints in that area may have affected vacuum extension for the test between SH-2 and TH-1.

Original Building Test Area (north end of Gold Pride Press main shop and adjacent Bright Raven dance room area)

Suction Hole (SH)	Test Hole (TH)	Approx. distance, SH to TH	Vacuum pressure (inches Water Column) measured at TH with suction applied at SH using RadonAway™ fan model: GP-501	HS-5000
SH-3	TH-4	36 ft.	-0.087	-0.320
	TH-5	31 ft.	-0.065	-0.290
	TH-6	55 ft.	-0.017	-0.063
	TH-7	38 ft.	-0.022	-0.098
	TH-8	49 ft.	NT	-0.001
	TH-9	52 ft.	NT	-0.005
SH-4	TH-6	55 ft.	-0.006	-0.013
	TH-10	47.5 ft.	-0.009	-0.015
	TH-11	37 ft.	-0.007	-0.020

NT = Not Tested

Notes on floor penetrations:

No saw-cut expansion joints are present at mid-column lines in the original section of the building.

In the portion of the test area between suction hole SH-3 and test holes TH-4 through TH-7, construction joints and floor cracks are filled with caulk and the floor surface was painted. The sealing and painting had been done approximately 2 to 3 years ago prior to occupancy by Gold Pride Press.

The floor slab in the Bright Raven dance room and boys gym spaces (the area between SH-3 and test holes TH-8 and TH-9) is largely covered by spring floors, large mats or equipment and was not accessible for examination of joints or other possible penetrations. A short section of a construction joint was visible at the entrance to the boys gym; it was unsealed and appeared to be cracked, and it was not caulked or taped for the testing.

Floor cracks and joints in the SH-4/TH-10/TH-11 portion of the test area had not been previously sealed or painted. In general, joints in this area were filled with dirt and fine debris, and floor cracks were apparently tight with no obvious gaps. Floor cracks and joints in the SH-4/TH-10/TH-11 portion of the test area were not caulked or taped prior to testing.

West Addition Test Area (Monroe Vacuum shop area)

Suction Hole (SH)	Test Hole (TH)	Approx. distance, SH to TH	Vacuum pressure (inches Water Column) measured at TH with suction applied at SH using RadonAway™ fan model: GP-501	HS-5000
SH-101	TH-101	45.5 ft.	-0.015	-0.047
	TH-102	49.5 ft.	-0.001	-0.003
	TH-102A	49 ft.	NT	-0.010
	TH-103	42 ft.	-0.095	-0.180
	TH-104	34 ft.	-0.215	-0.420
	TH-105	32 ft.	-0.206	-0.400

NT = Not Tested

Notes on floor penetrations:

No saw-cut expansion joints are present at mid-column lines in this part of the building.

Large portions of the floor in the Monroe Vacuum shop area are covered with floor tile. Where the concrete slab is exposed, joints and cracks in the interior of the shop area are filled with dirt and fine debris.

Floor cracks and joints in this test area were not caulked or taped prior to testing.

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Legend

- SH-4 ⊙ SUB–SLAB VACUUM COMMUNICATION TEST SUCTION HOLE
- TH-11 △ SUB–SLAB VACUUM COMMUNICATION TEST TEST HOLE
- TENANT SPACE OUTLINE
- INTERIOR WALL (GENERALLY LESS THAN FULL HEIGHT IF SHOWN WITHOUT OVER–PRINTED DASHED LINE)
- FD FLOOR DRAIN
- RD ROOF DRAIN PIPE UP
- CB CATCH BASIN
- SAN SANITARY SEWER
- ST STORM SEWER
- RW RECHARGE WELL
- CO CLEAN OUT
- MH MANHOLE

FOUNDATION WALL / GRADE BEAM/ FOOTER OUTLINES

- ORIGINAL MFG BUILDING
- ORIGINAL ADMIN BUILDING
- WEST ADDITION (1975)
- NORTH ADDITION (1979) AND PAINT STORAGE ADDITION (1979)
- OFFICE ADDITION (1988) AND STORAGE SHED ADDITION (1988)

Notes

1. The building floor plan shown on this drawing was drawn based on the floor plan shown on the following drawing: "Series: Tenant Layout, Floor: First, Title: Floor Plan, No.: TP-1", prepared by Miller Anderson Architects, Rochester, NY, date May 1999, issued 5-24-99.

2. Locations of floor drains, roof drains, catch basins and recharge wells were taken from various historic site plans (see separate *Summary of Available Building Plans* prepared by Stantec dated 4/19/12) and then field checked by Stantec personnel on 3/20/12 to confirm that they were present. Additional floor drains, roof drains, catch basins and recharge wells not shown on historic plans or drawings but noted during the field check are also shown. All locations are approximate.

3. Locations shown for underground sanitary sewer ('SAN') and storm sewer ('ST') lines and foundation features were taken from various historic site plans (see separate *Summary of Available Building Plans* prepared by Stantec dated 4/19/12). These features have not been field verified.

Revision	By	Appd.	YY.MM.DD
PROGRESS REPORT	TW	PN	2017.04
Issued	By	Appd.	YY.MM.DD

File Name:	APL	TW	TW	2016.01
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project

FORMER ALLIANCE METAL STAMPING & FABRICATION FACILTY
BROWNFIELD CLEANUP PROGRAM SITE # C828101

12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY
JULY 2017
ALTERNATIVES ANALYSIS REPORT

Title

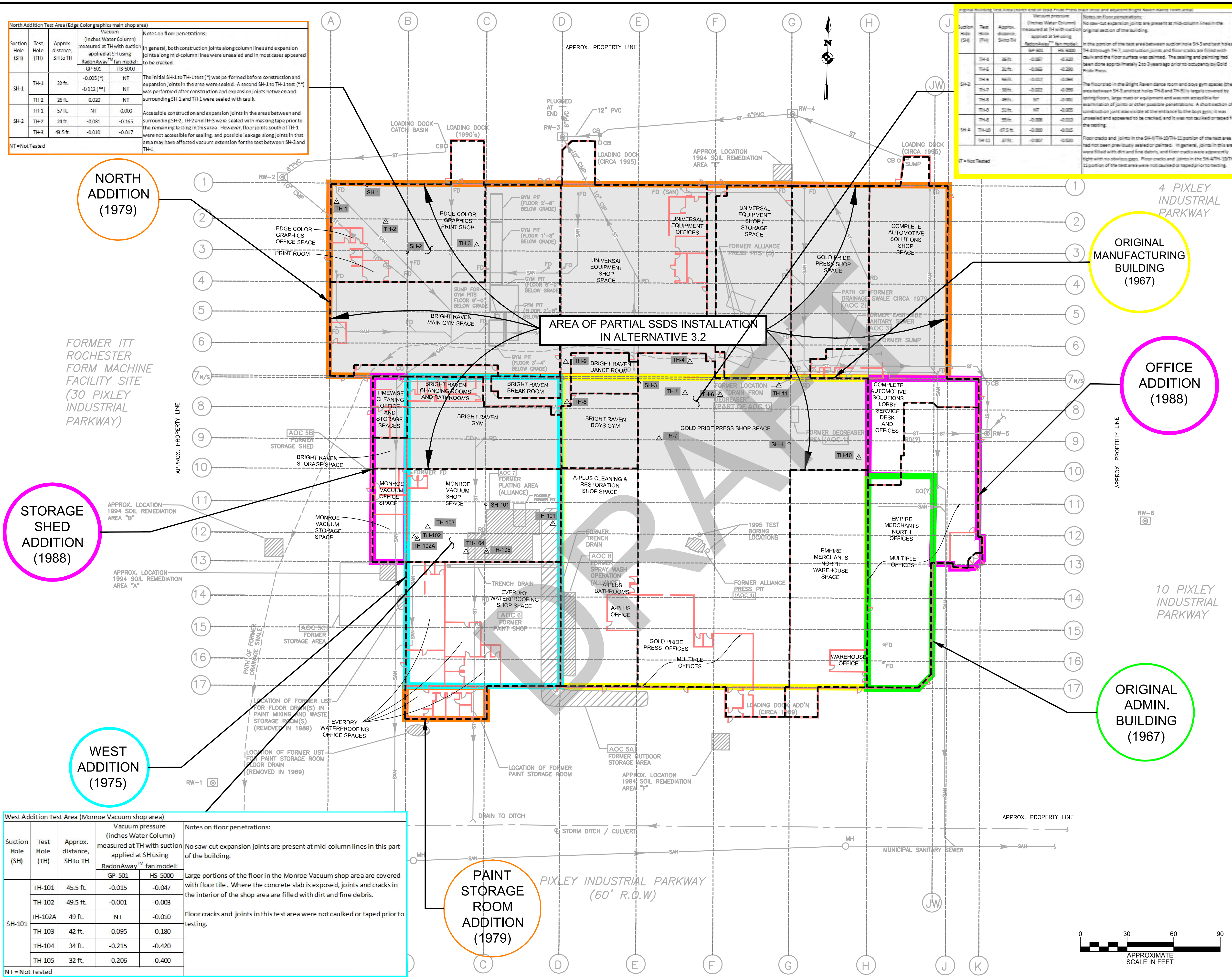
PROPOSED SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS) AREA, ALTERNATIVE 3.1

Project No. 190500647
Scale AS SHOWN

Drawing No. FIG. 7A
Sheet of
Revision 0

U:\190500647\drawing\Alternative Analysis Report Figures\Cadd\Figure 7A - Schematic Whole System Design.dwg 2017/07/28 12:30 PM By: Less, Andy

ORIGINAL SHEET – ANSI D



North Addition Test Area (Edge Color graphics main shop area)

Suction Hole (SH)	Test Hole (TH)	Approx. distance, SH to TH	Vacuum (inches Water Column) measured at TH with suction applied at SH using RadonAway™ fan model: GP-501	HS-5000
SH-1	TH-1	22 ft.	-0.005 (*)	NT
			-0.112 (**)	NT
	TH-2	26 ft.	-0.020	NT
SH-2	TH-1	57 ft.	NT	0.000
	TH-2	24 ft.	-0.081	-0.165
	TH-3	43.5 ft.	-0.010	-0.017

NT = Not Tested

Notes on floor penetrations:

In general, both construction joints along column lines and expansion joints along mid-column lines were unsealed and in most cases appeared to be cracked.

The initial SH-1 to TH-1 test (*) was performed before construction and expansion joints in the area were sealed. A second SH-1 to TH-1 test (**) was performed after construction and expansion joints between and surrounding SH-1 and TH-1 were sealed with caulk.

Accessible construction and expansion joints in the areas between and surrounding SH-2, TH-2 and TH-3 were sealed with masking tape prior to the remaining testing in this area. However, floor joints south of TH-1 were not accessible for sealing, and possible leakage along joints in that area may have affected vacuum extension for the test between SH-2 and TH-1.

Original building Test Area (north end of Gold Pride Press main shop and adjacent Bright Raven dance room area)

Suction Hole (SH)	Test Hole (TH)	Approx. distance, SH to TH	Vacuum pressure (inches Water Column) measured at TH with suction applied at SH using RadonAway™ fan model: GP-501	HS-5000
SH-3	TH-4	36 ft.	-0.087	-0.320
	TH-5	31 ft.	-0.065	-0.290
	TH-6	55 ft.	-0.017	-0.063
	TH-7	38 ft.	-0.022	-0.098
	TH-8	49 ft.	NT	-0.001
	TH-9	51 ft.	NT	-0.005
SH-4	TH-6	55 ft.	-0.006	-0.013
	TH-10	47.5 ft.	-0.009	-0.015
	TH-11	37 ft.	-0.007	-0.020

NT = Not Tested

Notes on floor penetrations:

No saw-cut expansion joints are present at mid-column lines in the original section of the building.

In the portion of the test area between suction hole SH-3 and test holes TH-4 through TH-7, construction joints and floor cracks are filled with caulk and the floor surface was painted. The sealing and painting had been done approximately 2 to 3 years ago prior to occupancy by Gold Pride Press.

The floor slab in the Bright Raven dance room and boys gym spaces (the area between SH-3 and test holes TH-8 and TH-9) is largely covered by spring floors, large mats or equipment and was not accessible for examination of joints or other possible penetrations. A short section of a construction joint was visible at the entrance to the boys gym; it was unsealed and appeared to be cracked, and it was not caulked or taped for the testing.

Floor cracks and joints in the SH-4/TH-10/TH-11 portion of the test area had not been previously sealed or painted. In general, joints in this area were filled with dirt and fine debris, and floor cracks were apparently tight with no obvious gaps. Floor cracks and joints in the SH-4/TH-10/TH-11 portion of the test area were not caulked or taped prior to testing.

West Addition Test Area (Monroe Vacuum shop area)

Suction Hole (SH)	Test Hole (TH)	Approx. distance, SH to TH	Vacuum pressure (inches Water Column) measured at TH with suction applied at SH using RadonAway™ fan model: GP-501	HS-5000
SH-101	TH-101	45.5 ft.	-0.015	-0.047
	TH-102	49.5 ft.	-0.001	-0.003
	TH-102A	49 ft.	NT	-0.010
	TH-103	42 ft.	-0.095	-0.180
	TH-104	34 ft.	-0.215	-0.420
	TH-105	32 ft.	-0.206	-0.400

NT = Not Tested

Notes on floor penetrations:

No saw-cut expansion joints are present at mid-column lines in this part of the building.

Large portions of the floor in the Monroe Vacuum shop area are covered with floor tile. Where the concrete slab is exposed, joints and cracks in the interior of the shop area are filled with dirt and fine debris.

Floor cracks and joints in this test area were not caulked or taped prior to testing.

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Consultants

Legend

- SH-4 ⊙ SUB-SLAB VACUUM COMMUNICATION TEST SUCTION HOLE
- TH-11 △ SUB-SLAB VACUUM COMMUNICATION TEST TEST HOLE
- TENANT SPACE OUTLINE
- INTERIOR WALL (GENERALLY LESS THAN FULL HEIGHT IF SHOWN WITHOUT OVER-PRINTED DASHED LINE)
- FD FLOOR DRAIN
- RD ROOF DRAIN PIPE UP
- CB CATCH BASIN
- SAN SANITARY SEWER
- ST STORM SEWER
- RW RECHARGE WELL
- CO CLEAN OUT
- MH MANHOLE

FOUNDATION WALL / GRADE BEAM/ FOOTER OUTLINES

- ORIGINAL MFG BUILDING
- ORIGINAL ADMIN BUILDING
- WEST ADDITION (1975)
- NORTH ADDITION (1979) AND PAINT STORAGE ADDITION (1979)
- OFFICE ADDITION (1988) AND STORAGE SHED ADDITION (1988)

Notes

1. The building floor plan shown on this drawing was drawn based on the floor plan shown on the following drawing: "Series: Tenant Layout, Floor: First, Title: Floor Plan, No.: TP-1", prepared by Miller Anderson Architects, Rochester, NY, date May 1999, issued 5-24-99.

2. Locations of floor drains, roof drains, catch basins and recharge wells were taken from various historic site plans (see separate *Summary of Available Building Plans* prepared by Stantec dated 4/19/12) and then field checked by Stantec personnel on 3/20/12 to confirm that they were present. Additional floor drains, roof drains, catch basins and recharge wells not shown on historic plans or drawings but noted during the field check are also shown. All locations are approximate.

3. Locations shown for underground sanitary sewer ('SAN') and storm sewer ('ST') lines and foundation features were taken from various historic site plans (see separate *Summary of Available Building Plans* prepared by Stantec dated 4/19/12). These features have not been field verified.

Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD
PROGRESS REPORT	TW	PN	2017.04

File Name:	Dwn.	Chkd.	Dsgn.	YY.MM.DD
	APL	TW	TW	2016.01

Permit-Seal

Client/Project

FORMER ALLIANCE METAL STAMPING & FABRICATION FACILTY
BROWNFIELD CLEANUP PROGRAM SITE # C828101

12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY
JULY 2017
ALTERNATIVES ANALYSIS REPORT

Title

PROPOSED SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS) AREA, ALTERNATIVE 3.2

Project No. 190500647

Scale AS SHOWN

Drawing No. FIG. 7B

Sheet of

Revision 0

U:\190500647\drawing\Alternative Analysis Report Figures\Cod\Figure 7B – Schematic Whole System Design.dwg
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ORIGINAL SHEET – ANSI D

Tables

Table 3 **Page 1 of 2**

Remedial Alternative Analysis Matrix

Alternatives Analysis Report, Former Alliance Metal Stamping & Fabrication Facility Site

			Selection Criteria:	1 - Protection of Human Health and the Environment	2 - Standards, Criteria, & Guidance (SCGs)	3 - Short-term Effectiveness & Impacts	4 - Long-term Effectiveness & Permanence	5 - Reduction of Toxicity, Mobility, or Volume
	Remedial Alternative		Components	Discussion	Discussion	Discussion	Discussion	Discussion
SOIL	1.0	**Containment of Soil with contamination exceeding Part 375 SCOs**	- Maintain Site building for cover over Impacted Soil Areas - Institute Environmental Easement restricting Site uses to commercial and industrial activities - Implement Site Management Plan (SMP) with provisions for periodic cover inspection and a work plan specifying procedures for environmental monitoring during future excavations at the Site.	- Cover eliminates contact with impacted soils, effectively prevents human exposure related to direct contact and is protective of groundwater - Potential for soil-related vapor intrusion exposures addressed by soil vapor alternatives (see below) alternatives	- Achieves compliance with Commercial SCOs	- No short term impacts Allows for continued operation of facility without disruption	Contamination at levels below commercial SCOs would remain, but concentrations are likely to decline over time.	- Mobilization of contaminants in unsaturated zone prevented by cover. - Volume and toxicity likely to be reduced slowly with time from natural degradation of VOCs.
GROUNDWATER	2.0	**Groundwater Monitoring**	- Annual sitewide groundwater monitoring - Semi-annual monitoring of wells on east side of the Site added during first two years to evaluate impact of continued use of Recharge Well RW-5 - Institutional Control (IC) prohibiting use of site groundwater	Will be protective of human health. No receptors of potential groundwater exposures are likely. Monitoring will confirm gradual reduction in site-wide contaminant concentrations and confirm that increased migration of plume is not occurring.	- Compliance with SCGs unlikely in short or medium term; however, natural attenuation and/or hydrolysis and dilution are expected to reduce contamination on-Site and along the downgradient boundary over time.	No short term impacts are anticipated. Monitoring well network already exists.	Requires Engineering and Institutional Controls to protect from exposure to groundwater contamination. Controls will insure long term effectiveness for protection of human health. High degree of uncertainty associated with timing of eventually meeting SCGs.	- Mobility of contaminants not reduced relative to current conditions. - Volume very slowly reduced through natural degradation. - Toxicity not reduced relative to current conditions.
	2.1	**Recharge Well RW-2 Modification**	- Clean out RW-2 to original bottom depth, install concrete plug to new bottom depth of 55 feet Would be implemented in conjunction with (as an addition to) Alternative 2.0 (MNA, IC, SMP)	Will be additionally protective of the environment by limiting further impacts to or contaminant migration in deep bedrock zone groundwater.	- May increase rate of natural attenuation progress in deeper bedrock in the northwest corner of the Site	- Short term impacts are unlikely - action is unlikely to alter the overall stormwater management operation for the facility.	- Will permanently isolate deeper bedrock zone from effects of direct injection of stormwater - Does not address conditions in shallow bedrock.	- May result in reduction in toxicity and volume of contaminants in the deep bedrock zone by eliminating injection of oxygenated water and thereby enhancing conditions for intrinsic anaerobic biodegradation of chlorinated VOCs. Likely to reduce mobility of of the contaminants left in place by decreasing overall flow through the deeper bedrock in the critical OU-1 area and by eliminating radial flow during major recharge events.
	2.2	**Abandonment of Recharge Well RW-2**	Clean out RW-2 to original bottom depth, abandon well, design and install new stormwater management pond and infrastructure to replace RW-2	Will eliminate future impacts and hydraulic influences from direct discharge of stormwater into bedrock system in the northwest corner of the Site.	- May increase rate of natural attenuation progress in shallow to deep bedrock in the northwest corner of the Site and possibly eastward across the center of the Site	- May have significant short term and long term impacts because it could require construction of a new on-Site stormwater management pond, which may result in reduction of usable parking space or constrict vehicle access lanes.	- Will permanently isolate shallow to deep bedrock zones in the OU-1 area from effects of direct injection of stormwater.	May result in reduction in toxicity and volume of contaminants in the deep bedrock zone by eliminating injection of oxygenated water and thereby enhancing conditions for intrinsic anaerobic biodegradation of chlorinated VOCs. Likely to reduce mobility of of the contaminants left in place by decreasing overall flow through the deeper bedrock in the critical OU-1 area and by eliminating radial flow during major recharge events.
	2.3	**Abandonment of Recharge Wells RW-2, RW-3, RW-4 and RW-5**	Clean out each well to original bottom depth, abandon well, design and install new stormwater management pond and infrastructure to replace the four wells	Will eliminate future impacts and hydraulic influences from direct discharge of stormwater into bedrock system across the northern half of the site, including along the downgradient eastern Site boundary.	- May increase rate of natural attenuation progress in shallow to deep bedrock across the northern half of the site, including along the downgradient eastern Site boundary	Moderate to high potential for additional adverse short and long term impacts to facility operations resulting from limited availability of space for construction of new stormwater management features.	- Will permanently isolate bedrock system in all critical areas in the northern half of the Site from effects of direct injection of stormwater.	- May result in reduction in toxicity and volume of contaminants throughout the bedrock system by eliminating injection of oxygenated water and thereby enhancing conditions for intrinsic anaerobic biodegradation of chlorinated VOCs - Likely to reduce mobility of the contaminants left in place by decreasing overall flow through the shallow bedrock in both the OU-1 and former Degreaser areas and by eliminating radial flow during major recharge events.
SOIL VAPOR	3.0	**VOC Vapor Intrusion Mitigation using Floor-slab sealing with annual inspection and indoor air monitoring**	- Comprehensive initial sealing of floor cracks and penetrations throughout building - SMP provisions for annual floor inspection and indoor air monitoring (IAM) throughout building - EC involving interim use of two air filtration units in target spaces	- Will signifcantly reduce potential for vapor intrusion by sealing of floor penetrations. Will protect human health through monitoring of indoor air to confirm protectiveness of floor slab.	- Past monitoring results indicate these actions should attain compliance with indoor air guidelines.	Significant short term impacts will include temporary disruptions during initial floor slab sealing of tenant operations where floor coverings are common. Inclusion of air filtration units on interim basis increases short term effectiveness.	- High degree of long-term effectiveness provided floor slab maintenance is sustained over time.	- Does not address or remove source of VOCs
	3.1	**Partial building coverage with Sub-Slab Depressurization System (SSDS)**	Same as 3.0 but with SSDS in essential area of the building between column lines 4 and 10 (refer to Figure 7A for a site plan showing the area to be covered), discontinuation of IAM in covered area after one year	Will reduce potential for human exposure by depressurizing sub-slab in portion of building at gratest risk for vapor intrusion (provided system operation remains continuous). Greater level of protectiveness than Alternative 3.0	- Past monitoring results indicate these actions should attain compliance with indoor air guidelines.	- Minor additional disruptions to tenant operations would occur during SSDS installation.	- High degree of long-term effectiveness provided system remains in continuous operation. - Will likely require periodic replacement of fans.	- Does not address or remove source of VOCs
	3.2	**Partial building coverage with Sub-Slab Depressurization System (SSDS)**	Same as 3.0 but with SSDS in northern half of building (refer to Figure 7B for a site plan showing the area to be covered), discontinuation of IAM in covered area after one year	Will reduce potential for human exposure by depressurizing sub-slab in portion of building at gratest risk for vapor intrusion (provided system operation remains continuous). Greater level of protectiveness than Alternative 3.1	- Past monitoring results indicate these actions should attain compliance with indoor air guidelines.	- Minor additional disruptions to tenant operations would occur during SSDS installation.	- High degree of long-term effectiveness provided system remains in continuous operation. - Will likely require periodic replacement of fans.	- Does not address or remove source of VOCs
	3.3	**Complete SSDS coverage of Site building** (* - see note at right)	Same as 3.0 but with SSDS covering entire building, discontinuation of IAM after second year. * - Supplemental pre-design assessment may result in request to NYSDEC to allow for limiting SSDS coverage in southeast corner of building.	Will effectively prevent human exposure by depressurizing sub-slab beneath the entire Site building (provided system operation remains continuous). Greater level of protectiveness than Alternatives 3.0 and 3.1	- Past monitoring results indicate these actions should attain compliance with indoor air guidelines.	- Minor additional disruptions to tenant operations would occur during SSDS installation.	- High degree of long-term effectiveness provided system remains in continuous operation. - Will likely require periodic replacement of fans.	- Does not address or remove source of VOCs
OFF-SITE	4.0	**SVI Assessments of Buildings on Adjacent Downgradient properties**	Develop and implement work plan for assessment of the potential for SVI in two buildings -includes contingency for implementation of SSDS in one building	- Protective of human health by first determining whether potential vapor intrusion exposure pathways are present and then allowing for development of appropriate plans for follow-up monitoing or mitigation	Will allow for comparison to SVI SCGs	- Sampling program for initial assessments will have minor to moderate but brief short-term impacts on operations in neighboring buildings. Some disruption of normal routines for occupants of the buildings would be expected.	- Long-term effectiveness cannot be assessed until after the initial SVI assessments are completed.	- Does not address or remove source of VOCs

Remedial Alternative Analysis Matrix

Alternatives Analysis Report, Former Alliance Metal Stamping & Fabrication Facility Site

Notes:

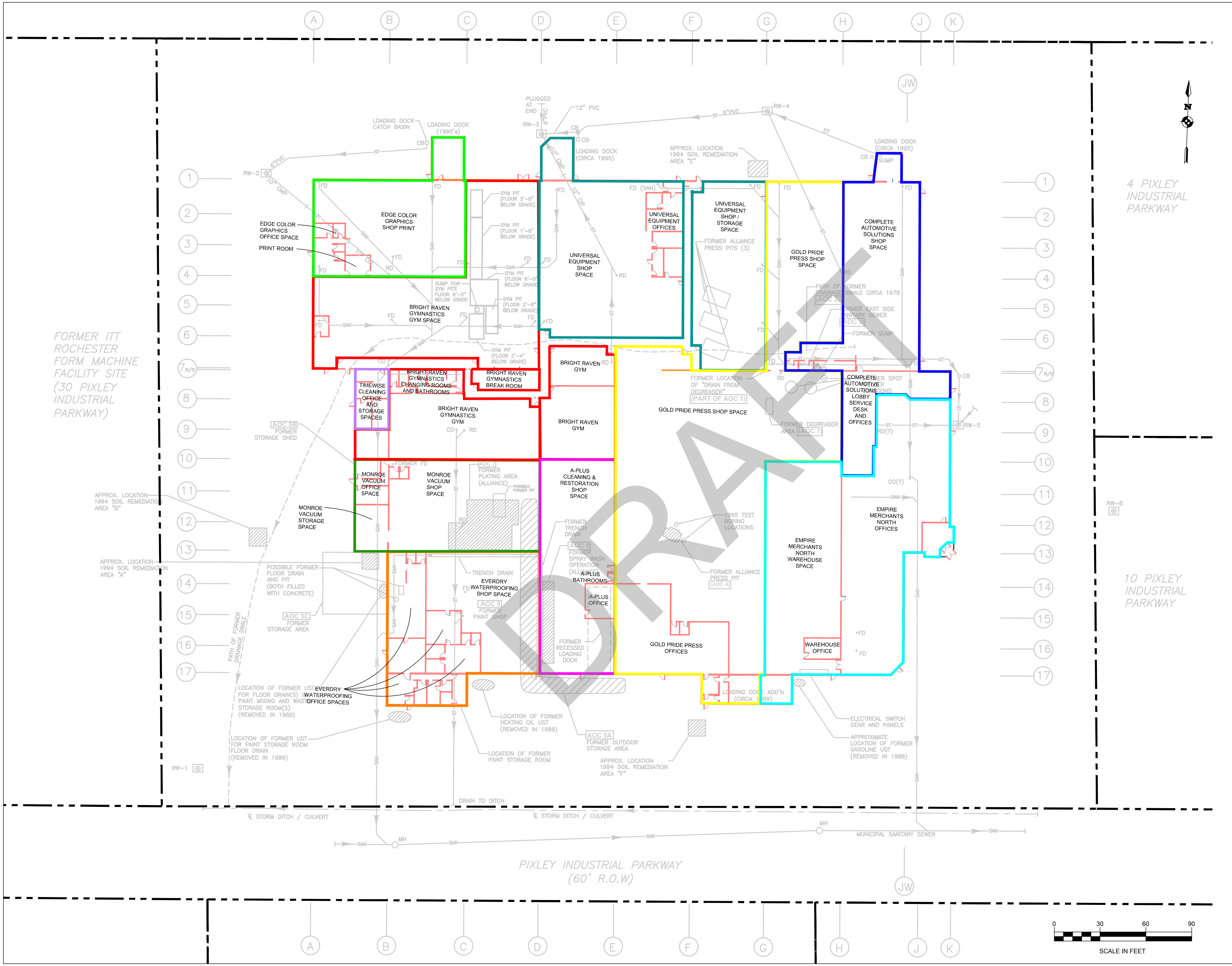
1 Refer to text for a more detailed description of selection criteria.

2 Preliminary Opinion of Probable Cost (OPC) estimates are discounted to the approximate Net Present Value

			Selection Criteria:	6 - Implementability	7a - Cost Effectiveness - Capital		7b - Cost Effectiveness - OM&M		8 - Community Acceptance	9 - Land Use	Overall Assessment and Comparison of Alternatives	
		Remedial Alternative	Components	Discussion	OPC(2)	Discussion	OPC(2)	Discussion	Discussion	Discussion	Total OPC(2) (Capital + OM&M)	Conclusions and recommendations
SOIL	1.0	**Containment of Soil with contamination exceeding Part 375 SCOs**	- Maintain Site building for cover over Impacted Soil Areas - Institute Environmental Easement restricting Site uses to commercial and industrial activities - Implement Site Management Plan (SMP) with provisions for periodic cover inspection and a work plan specifying procedures for environmental monitoring during future excavations at the Site.	- Highly implementable	$20,000	- Engineering and Legal Costs associated with development and implementation of EE and SMP	$18,587	- Low OM&M costs, related primarily to periodic inspection and reporting. Possible minor maintenance costs related to occasional cover repair not included. Assume 10 years of annual inspections	- Community acceptance likely to be high. - To be confirmed following review of public comments	- Proposed land use is commercial/industrial, which reflects current Site use and is consistent with surrounding area (assumed to be consistent with current town zoning designation of General Industrial). - Engineering and Institutional controls will be required at the Site under this alternative for an undetermined period of time.	**$38,587**	- Relatively low cost alternative well suited to the Site.
GROUNDWATER	2.0	**Groundwater Monitoring**	- Annual sitewide groundwater monitoring - Semi-annual monitoring of wells on east side of the Site added during first two years to evaluate impact of continued use of Recharge Well RW-5 - Institutional Control (IC) prohibiting use of site groundwater	- Highly implementable	$0	- Monitoring well network already exists	$228,911	- High OM&M costs reflect assumption that 20 years of monitoring will be needed to achieve compliance with SCGs or asymptotic trend in decline in contaminant	- Community acceptance for MNA is anticipated to be moderate; off-Site contaminant migration may become an issue. - To be completed following review of public comments	- Proposed land use is commercial/industrial, which reflects current Site use and is consistent with surrounding area (assumed to be consistent with current town zoning designation of General Industrial). - Engineering and Institutional controls will be required for an undetermined period of time.	**$228,911**	- The only non-"no-Action" alternative available that is well suited to the Site.
	2.1	**Recharge Well RW-2 Modification**	- Clean out RW-2 to original bottom depth, install concrete plug to new bottom depth of 55 feet Would be implemented in conjunction with (as an addition to) Alternative 2.0 (MNA, IC, SMP)	High degree of implementability. Annual groundwater monitoring of deep bedrock zone wells may provide indications of effectiveness over time.	$26,000	Low capital costs include drilling contractor fees and waste disposal costs.	$0	None	- Moderate to high acceptance expected from facility tenants, since operation of well for stormwater management is likely to be essentially unchanged. Low to moderate acceptance expected from adjacent property owners, who may prefer abandonment.	- Selection of this alternative would be consistent with existing / proposed land use.	**$26,000**	- Low-cost groundwater alternative favorable for addition to the MNA program. It will not address larger site-wide shallow bedrock issues that would be addressed to a greater degree by Alternatives 2.2 and 2.3. However, the more costly recharge-well alternatives face significant implementability challenges and are potentially disruptive to Site operations, and are unlikely to eliminate the potential for SVI at the Site.
	2.2	**Abandonment of Recharge Well RW-2**	Clean out RW-2 to original bottom depth, abandon well, design and install new stormwater management pond and infrastructure to replace RW-2	Implementability uncertain; design study necessary to determine whether new stormwater infrastructure can be successfully installed at the Site. If implementable, annual groundwater monitoring will provide indications of effectiveness over time.	$136,750	Capital costs include well abandonment and waste disposal costs, costs of design and construction of new infrastructure to replace stormawater management capacity of abandoned well.	$13,740	Annual maintenance of new stormwater detention pond (assume 30 years)	- Low to moderate acceptance expected from facility tenants, since new stormwater management infrastructure may need to occupy some space now used for parking. High acceptance expected from adjacent property owners given possible enhancement of groundwater quality conditions in the surrounding area that may result over time.	- Selection of this alternative would be consistent with existing / proposed land use.	**$150,490**	Alternatives with potential for improvement of both for OU-1 source-area and site-wide conditions; however, improvement is likely to be marginal relative to baseline conditions and is unlikely to diminish need for SVI mitigation or monitoring in the near term. Implementability uncertain (design study required to confirm feasibility), acceptance by tenants potentially low given potential disruption of traffic flows and parking.
	2.3	**Abandonment of Recharge Wells RW-2, RW-3, RW-4 and RW-5**	Clean out each well to original bottom depth, abandon well, design and install new stormwater management pond and infrastructure to replace the four wells	Implementability uncertain; design study necessary to determine whether new stormwater infrastructure can be installed at the Site. If implementable, annual groundwater monitoring will provide indications of effectiveness over time.	$274,120	Capital costs include well abandonment and waste disposal costs, costs of design and construction of new infrastructure to replace stormwater management capacity of abandoned wells.	$20,605	Annual maintenance of new stormwater detention pond (assume 30 years)	- Low to moderate acceptance expected from facility tenants, since new stormwater management infrastructure may need to occupy some space now used for parking. High acceptance expected from adjacent property owners given possible enhancement of groundwater quality conditions in the surrounding area that may result over time.	- Selection of this alternative would be consistent with existing / proposed land use.	**$294,725**	
SOIL VAPOR	3.0	**VOC Vapor Intrusion Mitigation using Floor-slab sealing with annual inspection and indoor air monitoring**	- Comprehensive initial sealing of floor cracks and penetrations throughout building - SMP provisions for annual floor inspection and indoor air monitoring (IAM) throughout building - EC involving interim use of two air filtration units in target spaces	- Moderately implementable. Will require temporary removal (or partial raising) of floor coverings and some equipment in Bright Raven tenant spaces.	$77,000	- Moderate design and construction cost but high degree of effectiveness.	$350,671	- High cost reflects 20-year annual program of IAM and reporting.	- Moderate acceptance expected from facility tenants.	- Selection of this alternative would be consistent with existing / proposed land use. - Engineering and Institutional controls will be required at the Site under this alternative for an undetermined period of time.	**$427,671**	- Favorable alternative for vapor intrusion due to good overall performance and generally high-scoring criteria. Less costly than othe SVI mitigation Alternatives but not inherently as protective. Could be augmented with SSD in phases in the future if found to be inadequately protective.
	3.1	**Partial building coverage with Sub-Slab Depressurization System (SSDS)**	Same as 3.0 but with SSDS in essential area of the building between column lines 4 and 10 (refer to Figure 7A for a site plan showing the area to be covered), discontinuation of IAM in covered area after one year	- Recent communication testing demonstrated that SSD will be readily implementable in the target area of the building.	$362,500	- Moderate design and construction cost but high degree of effectiveness.	$472,240	- Assumes 10 years of annual IAM, continuous system OM&M for 20 years.	- Moderate acceptance expected from facility tenants.	- Selection of this alternative would be consistent with existing / proposed land use. - Engineering and Institutional controls will be required at the Site under this alternative for an undetermined period of time.	**$834,740**	- Favorable alternative for vapor intrusion due to good overall performance and generally high-scoring criteria. Cost is less than the cost for Alternatives 3.2 and 3.3, and could be augmented with SSD in phases in the future if found to be inadequately protective.
	3.2	**Partial building coverage with Sub-Slab Depressurization System (SSDS)**	Same as 3.0 but with SSDS in northern half of building (refer to Figure 7B for a site plan showing the area to be covered), discontinuation of IAM in covered area after one year	- Recent communication testing demonstrated that SSD will be readily implementable in the target areas of the building.	$507,500	- High design and construction cost but high degree of effectiveness.	$619,036	- Assumes 10 years of annual IAM, continuous system OM&M for 20 years.	- Moderate acceptance expected from facility tenants.	- Selection of this alternative would be consistent with existing / proposed land use. - Engineering and Institutional controls will be required at the Site under this alternative for an undetermined period of time.	**$1,126,536**	Favorable alternative due to good overall performance and generally high-scoring criteria. High cost is less than the cost for full building coverage by SSD included in Alternative 3.3, and could be augmented up to full building coverage if found to be inadequately protective.
	3.3	**Complete SSDS coverage of Site building (* - see note at right)**	Same as 3.0 but with SSDS covering entire building, discontinuation of IAM after second year. * - Supplemental pre-design assessment may result in request to NYSDEC to allow for limiting SSDS coverage in southeast corner of building.	- Recent communication testing demonstrated that SSD will be readily implementable.	$718,750	- High design and construction cost but high degree of effectiveness.	$654,551	- Assumes 2 years of annual IAM, continuous system OM&M for 20 years.	- Moderate acceptance expected from facility tenants.	- Selection of this alternative would be consistent with existing / proposed land use. - Engineering and Institutional controls will be required at the Site under this alternative for an undetermined period of time.	**$1,373,301**	Highest cost SVI mitigation option but most protective in the short term.
OFF-SITE	4.0	**SVI Assessments of Buildings on Adjacent Downgradient properties**	Develop and implement work plan for assessment of the potential for SVI in two buildings -includes contingency for implementation of SSDS in one building	- Expected to be moderately to highly implementable .	$125,000	- Moderate capital cost includes contingency for small-scale mitigation system in one building.	$101,294	- Moderate operating cost includes contingency for small-scale mitigation system in one building for 20 years.	- Uncertain.	- Selection of this alternative would be consistent with existing / proposed land use.	**$226,294**	Favorable alternative for off-site vapor intrusion. SSDS contingency cost is highly uncertain. As a BCP Volunteer, MFP may not bear responsibility for addressing the potential for SVI at adjacent off-Site downgradient properties.

Appendix A

Summary of Current Tenant Spaces and Operations



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Legend

RW–5	RECHARGE WELL
FD	FLOOR DRAIN
CO	CLEAN OUT
RD	ROOF DRAIN
CB	CATCH BASIN
— SAN —	SANITARY SEWER PIPE
— ST —	STORM WATER PIPE
	APPROXIMATE PROPERTY LINE
AOC	AREA OF CONCERN
CIP	CAST IRON PIPE
B AND 2	BUILDING COLUMN LINES

Notes

1. REFER TO TABLE 1 FOR SUMMARY OF TENANT SPACES AND BUILDING OCCUPANCY.

Revision	By	Appd.	YY.MM.DD
RI Report	TW	MPS	2014.10
Issued	By	Appd.	YY.MM.DD

File Name:	APL	TW	TW	2014.10
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

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Client/Project

FORMER ALLIANCE METAL STAMPING & FABRICATION FACILTY
BROWNFIELD CLEANUP PROGRAM SITE # C828101

12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY
ALTERNATIVE ANALYSIS REPORT

Title

SITE PLAN SHOWING TENANT SPACES

Project No. 190500647

Scale AS SHOWN

Drawing No. FIG. A-1

Sheet of

Revision

ORIGINAL SHEET – ANSI D

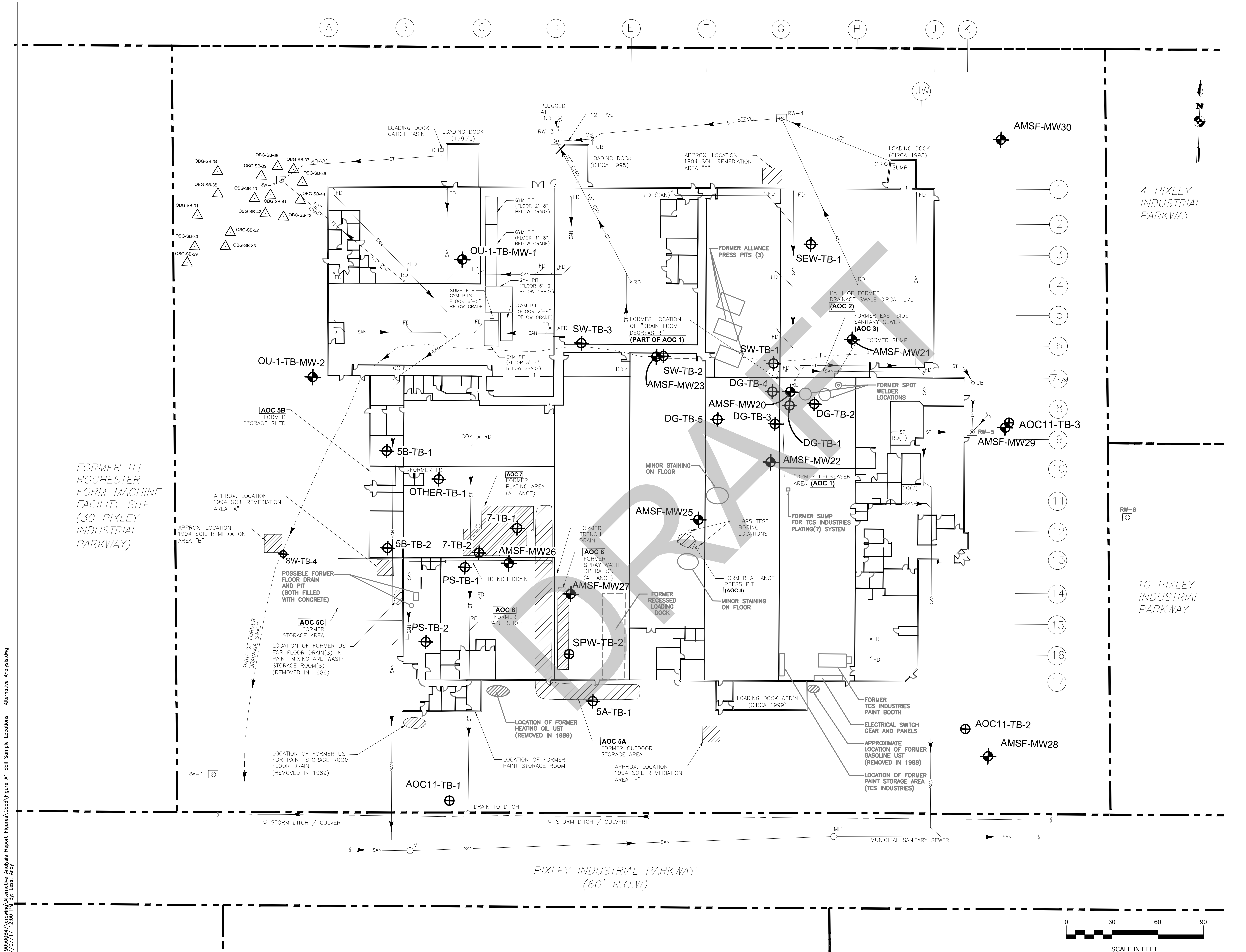
Table A-1
Tenant Spaces Summary

Alternatives Analysis Report
Former Alliance Metal Stamping and Fabrication Facility BCP Site (C828101)
12 Pixley Industrial Parkway, Gates, New York

Tenant Name and Business Type	Building Area (column bays)	Occupied Spaces (Typical activities, space characteristics)	Occupancy Summary (Typical workweek for regular employees is 5 days, single 8-hour shifts, unless otherwise noted below)			
			Regular Employees	Typical shift duration	Regular Visitors	Typical visit duration
Edge Color Graphics Inc.						
- Large format printing and preparation of display products	A2 to A/B4	Two small offices, restrooms, lobby space (low ceiling)	1 to 2	4 to 8 hours	Visitors rarely present	
	A1 to C4	Print shop (open space, high ceiling)	2 to 3	8 hours	None	
	A/B4	Small print room (low ceiling)	1	Periodically each day	None	
Bright Raven Gymnastics Inc.						
- Gymnastics instruction and recreation facility	A5	Reception desk (in main gym space)	1 or 2	3 to 8 hours	Parents	Pick-up and drop-off times
	A4 to C7, C1 to D7 * D6 to E7/8 ** D7/8 to E10 A/B8 to D10	Gym spaces (open spaces, high ceilings) * - Tumbling pits in main gym ** - Girls' gym straddles foundation wall along column line 7	2 to 8	2 to 8 hours	Students 2 to 6 years old and parents Older students (6 years and up) Summer camp (ages 6 and up) Parents	1 hour once per week 1 to 3 hrs, 1 to 3 times per week 3 hours 5 days per week 1 to 3 hours once per week
	B7 to C8	Changing rooms and restrooms (low ceiling)			Students and parents	Up to 20 minutes
	C7 to D8	Observation room (high ceiling)			Parents and siblings of students	1 to 3 hours once per week
TimeWise Cleaning						
- Residential cleaning service office and storage space	A/B7 to B9	Two office / meeting rooms, two storage / laundry rooms (low ceilings)	2 to 6	Briefly (up to 1 hour) at beginning and end of each work day	None	
Monroe Vacuum Products Inc.						
- Sales and service of vacuum pump equipment and related products	A/B10 to B11/12	Offices and restrooms (low ceiling)	1	Up to few hours per day	None	
	A/B 11/12 to B13	Storage garage (intermediate ceiling)	Rarely occupied		None	
	B10 to D13	Shop (open space, high ceiling)	2 to 4	8 hours	None	
EverDry of Upstate New York						
- Basement waterproofing contractor	B13 to B/C16	Office spaces and break area (high ceiling)	2 to 4	1 to 8 hours	None	
	B16 to B/C17 B/C15 to C17 Add'n south of B17-C17	Multiple offices, restrooms (low ceilings)	6 to 10	8 hours	Visitors rarely present	
	B/C15 to C17	Garage/Shop space (open space, high ceiling)	4 to 12	Briefly (up to 1 hour) at beginning and end of each work day	None	
A-Plus Cleaning & Restoration Inc.						
- Fire- and water-damage restoration service	D10 to E17	Storage and garage spaces (open spaces, high ceilings)	1 to 3	A few hours per day	None	
	D/E14 to E15	Office and restrooms (low ceilings)	1 or 2	A few hours per day	None	
Gold Pride Press, Inc.						
- Printing and manufacturing of paper-based marketing and packaging materials	E14 to F17, F15 to F/G17	Multiple offices, break room, restrooms (low ceilings)	**The Gold Pride Press operations were suspended in March 2017 and remain so as of July 2017.**			
	E7 to G17, G7 to H10, G1 to H6	Shop areas (open spaces, high ceilings)				
	Add'n south of F17-G17	Loading dock, employee entrance				
Empire Merchants North						
- Office and promotional-materials warehouse operations for wine and liquor distributor	G10 to H17 G/H16 to H17	Promotional materials warehouse (open space, high ceiling) Warehouse office (low ceiling)	1 or 2 (warehouse staff)	8 hours total in warehouse and warehouse office	None	
	H10 to JW17, H/J8 to K13	Offices, conference rooms, restrooms and break room (low ceilings)	10 to 15 (some on-site all day, others in and out)	Up to 8 hours	Occasional visitors for training sessions	4 hours (infrequent occurences)
Complete Automotive Solutions						
- Automotive service and repair shop	H1 to J7 G6/7 to H7	Shop area (open space, high ceiling) and adjacent locker room and restroom (low ceiling)	4 to 6	8 hours	None	
	H/J7 to K8	Customer waiting area and service desk (low ceilings)			Customers (vehicle owners)	1 to 3 hours (typ. one-time visits)
	H7 to H/J11	Offices and restrooms (low ceilings)	3 to 4	8 hours	Customers (for restrooms)	
Universal Equipment Sales Inc.						
- Manufacturing of furnishings for food service and office applications; other specialty manufacturing (pocket knives)	E/F1 to F4	Offices, restrooms (low ceilings)	1 full time, 2 in and out	8 hours	None	
	D1 to F6	Main shop area (open space, high ceiling)	2	8 hours	None	
	F1 to G7	Secondary shop area (open space, high ceiling)	1 or 2	4 to 8 hours, occasional	None	

Appendix B

Summary of Validated Soil Sample Analysis Results, Operable Unit 1



Stantec

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Consultants

Legend

- TEST BORING / MONITORING WELL
- TEST BORING
- TEST BORING WITH SURFACE SOIL SAMPLE
- SOIL BORING (O'BRIEN & GERE)

Notes

Revision	By	Appd.	YY.MM.DD
RI Report	TW	MPS	2014.10
Issued	By	Appd.	YY.MM.DD

File Name:	APL	TW	TW	2014.10
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project

FORMER ALLIANCE METAL STAMPING & FABRICATION FACILITY
BROWNFIELD CLEANUP PROGRAM SITE # C828101

12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY
ALTERNATIVE ANALYSIS REPORT

Title

SOIL SAMPLE LOCATIONS

Project No.	Scale	
190500647	AS SHOWN	
Drawing No.	Sheet	Revision
FIG. B-1	of	

ORIGINAL SHEET - ANSI D

Table B-1
Summary of OU-1 Area Soil Sample Analysis Results - VOCs
Remedial Investigation, Former Alliance Metal Stamping & Fabrication Facility Site (BCP Site #828101)
12 Pixley Industrial Parkway, Gates, New York

Area of Concern			AOC 2 - Former Drainage Swale		OU1 - Northwest Corner												
Sample Location			SW-TB-3	SW-TB-3	OU1-TB-MW-1	OU1-TB-MW-2	OU1-TB-MW-2	OBG-SB-29	OBG-SB-30	OBG-SB-30	OBG-SB-30	OBG-SB-31	OBG-SB-31	OBG-SB-32	OBG-SB-32	OBG-SB-33	OBG-SB-33
Sample Date			8-Nov-12	8-Nov-12	9-Apr-14	7-Apr-14	7-Apr-14	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04
Sample ID			SW-TB-3-2	SW-TB-3-1	AMSF-OU1-TB-MW-1	AMSF-OU1-TB-MW-2	AMSF-OU1-DUP	OBG-SB-29 (5-6.5)	DUP-3_09022004	OBG-SB-30 (4-8)	OBG-SB-30 (8-10)	OBG-SB-31 (4-6)	OBG-SB-31 (7-8.5)	OBG-SB-32 (6-7)	OBG-SB-32 (7-8.5)	OBG-SB-33 (0-2)	OBG-SB-33 (4-6)
Sample Depth			4.5 ft	11.8 ft	4 - 5 ft	7 - 7.8 ft		5-6.5 ft	8-10 ft	4-8 ft	8-10 ft	4-6 ft	7-8.5 ft	6-7 ft	7-8.5 ft	0-2	4-6
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE
Laboratory			SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM										
Laboratory Work Order		NYSDEC Soil Cleanup Objectives (SCOs)	L2407	L2407	N0572	N0572	N0572										
Laboratory Sample ID		Refer to notes on last page for	L2407-08	L2407-07RE	N0572-04	N0572-02	N0572-03										
Sample Type	Units	explanation of letter codes					Field Duplicate		Field Duplicate								
Volatile Organic Compounds																	
Acetone	µg/kg	$50^{AC}\ 500000_c^{B}$	17 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	11 U	11 U	12 U	11 U	11 U	11 U	13 U	11 U	11 U	11 U
Benzene	µg/kg	$60^{AC}\ 44000^{B}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Bromodichloromethane	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Bromoform (Tribromomethane)	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Bromomethane (Methyl bromide)	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	6 U	6 U	6 U	6 U	6 U	5 U	6 U	6 U	6 U	6 U
BTEX, Total	µg/kg	n/v	-	-	-	-	-	3 U	0.7	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Carbon Disulfide	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}\ 500000_a^{D}\ 2700^{E}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	$760^{AC}\ 22000^{B}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Chlorobenzene (Monochlorobenzene)	µg/kg	$1100^{AC}\ 500000_c^{B}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Chlorobromomethane	µg/kg	n/v	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	-	-	-	-	-	-	-	-	-	-
Chloroethane (Ethyl Chloride)	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}\ 500000_a^{D}\ 1900^{E}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	6 U	6 U	6 U	6 U	6 U	5 U	6 U	6 U	6 U	6 U
Chloroform (Trichloromethane)	µg/kg	$370^{AC}\ 350000^{B}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Chloromethane	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	6 U	6 U	6 U	6 U	6 U	5 U	6 U	6 U	6 U	6 U
Cyclohexane	µg/kg	n/v	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	-	-	-	-	-	-	-	-	-	-
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	n/v	5.3 UJ	6.8 UJ	5.5 UJ	5.9 UJ	5.0 UJ	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}\ 500000_a^{D}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichlorobenzene, 1,2-	µg/kg	$1100^{AC}\ 500000_c^{B}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,3-	µg/kg	$2400^{AC}\ 280000^{B}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,4-	µg/kg	$1800^{AC}\ 130000^{B}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	µg/kg	n/v	5.3 UJ	6.8 UJ	5.5 UJ	5.9 UJ	5.0 UJ	-	-	-	-	-	-	-	-	-	-
Dichloroethane, 1,1-	µg/kg	$270^{AC}\ 240000^{B}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloroethane, 1,2-	µg/kg	$20_m^{A}\ 30000^{B}\ 20_g^{C}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloroethene, 1,1-	µg/kg	$330^{AC}\ 500000_c^{B}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	2 J	2 J	2 J	1 J	3 U	13	3 U	3 U	3 U	3 U
Dichloroethene, cis-1,2-	µg/kg	$250^{AC}\ 500000_c^{B}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloroethene, trans-1,2-	µg/kg	$190^{AC}\ 500000_c^{B}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloropropane, 1,2-	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}\ 500000_a^{D}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloropropene, cis-1,3-	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloropropene, trans-1,3-	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Ethylbenzene	µg/kg	$1000^{AC}\ 390000^{B}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	n/v	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	-	-	-	-	-	-	-	-	-	-
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}$	5.3 UJ	6.8 UJ	5.5 UJ	5.9 UJ	5.0 UJ	6 U	6 U	6 U	6 U	6 U	5 U	6 U	6 U	6 U	6 U
Isopropylbenzene	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}\ 500000_a^{D}\ 2300^{E}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	-	-	-	-	-	-	-	-	-	-
Methyl Acetate	µg/kg	n/v	5.3 UJ	6.8 UJ	5.5 UJ	5.9 UJ	5.0 UJ	-	-	-	-	-	-	-	-	-	-
Methyl Ethyl Ketone (MEK)	µg/kg	$120^{AC}\ 500000_c^{B}\ 500000_a^{D}\ 300^{E}$	5.3 UJ	6.8 UJ	5.5 UJ	5.9 UJ	5.0 UJ	11 U	11 U	12 U	11 U	11 U	11 U	13 U	11 U	11 U	11 U
Methyl Isobutyl Ketone (MIBK)	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}\ 500000_a^{D}\ 1000^{E}$	5.3 UJ	6.8 UJ	5.5 UJ	5.9 UJ	5.0 UJ	-	-	-	-	-	-	-	-	-	-
Methyl Pentanone, 4,2-	µg/kg	n/v	-	-	-	-	-	6 U	6 U	6 U	6 U	6 U	5 U	6 U	6 U	6 U	6 U
Methyl tert-butyl ether (MTBE)	µg/kg	$930^{AC}\ 500000_c^{B}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	-	-	-	-	-	-	-	-	-	-
Methylcyclohexane	µg/kg	n/v	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	-	-	-	-	-	-	-	-	-	-
Methylene Chloride (Dichloromethane)	µg/kg	$50^{AC}\ 500000_c^{B}$	5.3 UJ	6.8 UJ	5.5 U	2.4 JL	2.1 JL	6 U	0.8 J	6 U	6 U	6 J	5 J	6 J	6 U	6 J	6 U
Styrene	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}\ 500000_a^{D}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Tetrachloroethane, 1,1,2,2-	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}\ 500000_a^{D}\ 600^{E}$	5.3 UJ	6.8 UJ	5.5 UJ	5.9 UJ	5.0 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Tetrachloroethene (PCE)	µg/kg	$1300^{AC}\ 150000^{B}\ 500000_a^{D}$	8.4 J	38 J	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Toluene	µg/kg	$700^{AC}\ 500000_c^{B}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Trichlorobenzene, 1,2,3-	µg/kg	500000_a^{D}	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	-	-	-	-	-	-	-	-	-	-
Trichlorobenzene, 1,2,4-	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}\ 500000_a^{D}\ 3400^{E}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	-	-	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	µg/kg	$680^{AC}\ 500000_c^{B}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	21	12	6	2 J	3 U	73	7	3 U	3 U	3 U
Trichloroethane, 1,1,2-	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Trichloroethene (TCE)	µg/kg	$470^{AC}\ 200000^{B}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Trichlorofluoromethane (Freon 11)	µg/kg	n/v	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	-	-	-	-	-	-	-	-	-	-
Trichlorotrifluoroethane (Freon 113)	µg/kg	$100000_a^{A}\ 500000_c^{B}\ 1000000_d^{C}\ 500000_a^{D}\ 6000^{E}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	µg/kg	$20^{AC}\ 13000^{B}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	6 U	6 U	6 U	6 U	6 U	5 U	4 J	6 U	6 U	6 U
Xylene, m & p-	µg/kg	$260_p^{A}\ 500000_{c,p}^{B}\ 1600_p^{C}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	-	-	-	-	-	-	-	-	-	-
Xylene, o-	µg/kg	$260_p^{A}\ 500000_{c,p}^{B}\ 1600_p^{C}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	-	-	-	-	-	-	-	-	-	-
Xylenes, Total	µg/kg	$260^{A}\ 500000_c^{B}\ 1600^{C}$	5.3 UJ	6.8 UJ	5.5 U	5.9 U	5.0 U	3 U	0.7 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Volatile Tentatively Identified Compounds																	
Tentatively Identified Compound	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See last page for notes.

DRAFT

Table B-1
Summary of OU-1 Area Soil Sample Analysis Results - VOCs
Remedial Investigation, Former Alliance Metal Stamping & Fabrication Facility Site (BCP Site #828101)
12 Pixley Industrial Parkway, Gates, New York

Area of Concern			OU1-Northwest Corner														
Sample Location			OBG-SB-34	OBG-SB-34	OBG-SB-35	OBG-SB-35	OBG-SB-35	OBG-SB-36	OBG-SB-36	OBG-SB-37	OBG-SB-37	OBG-SB-38	OBG-SB-38	OBG-SB-39	OBG-SB-39	OBG-SB-39	OBG-SB-40
Sample Date			2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04
Sample ID			OBG-SB-34 (2-4)	OBG-SB-34 (6-8)	DUP-4_09022004	OBG-SB-35 (2-4)	OBG-SB-35 (5-7)	OBG-SB-36 (2-4)	OBG-SB-36 (5-7)	OBG-SB-37 (3-5)	OBG-SB-37 (5-7)	OBG-SB-38 (2-4)	OBG-SB-38 (4-7.5)	DUP-5_09022004	OBG-SB-39 (2-4)	OBG-SB-39 (6-8)	OBG-SB-40 (2-4)
Sample Depth			2-4	6-8	5	2-4	5-7	2-4	5-7	3-5	5-7	2-4	4-7.5	6-8	2-4	6-8	2-4
Sampling Company			O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE
Laboratory																	
Laboratory Work Order		NYSDEC Soil Cleanup Objectives (SCOs)															
Laboratory Sample ID		Refer to notes on last page for															
Sample Type	Units	explanation of letter codes			Field Duplicate									Field Duplicate			
Volatile Organic Compounds																	
Acetone	µg/kg	50^{AC} 500000_c^{B}	11 U	12 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 J	12 U	11 U	11 J	12 U	11 U
Benzene	µg/kg	60^{AC} 44000^{B}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Bromodichloromethane	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Bromoform (Tribromomethane)	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Bromomethane (Methyl bromide)	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C}	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
BTEX, Total	µg/kg	n/v	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	7.7	3 U	3 U	3 U
Carbon Disulfide	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C} 500000_a^{D} 2700^{E}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	760^{AC} 22000^{B}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Chlorobenzene (Monochlorobenzene)	µg/kg	1100^{AC} 500000_c^{B}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Chlorobromomethane	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane (Ethyl Chloride)	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C} 500000_a^{D} 1900^{E}	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Chloroform (Trichloromethane)	µg/kg	370^{AC} 350000^{B}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Chloromethane	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C}	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Cyclohexane	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C} 500000_a^{D}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichlorobenzene, 1,2-	µg/kg	1100^{AC} 500000_c^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,3-	µg/kg	2400^{AC} 280000^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,4-	µg/kg	1800^{AC} 130000^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloroethane, 1,1-	µg/kg	270^{AC} 240000^{B}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloroethane, 1,2-	µg/kg	20_m^{A} 30000^{B} 20_g^{C}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloroethene, 1,1-	µg/kg	330^{AC} 500000_c^{B}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloroethene, cis-1,2-	µg/kg	250^{AC} 500000_c^{B}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloroethene, trans-1,2-	µg/kg	190^{AC} 500000_c^{B}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloropropane, 1,2-	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C} 500000_a^{D}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloropropene, cis-1,3-	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloropropene, trans-1,3-	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Ethylbenzene	µg/kg	1000^{AC} 390000^{B}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.7 J	3 U	3 U	3 U
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C}	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Isopropylbenzene	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C} 500000_a^{D} 2300^{E}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl Acetate	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl Ethyl Ketone (MEK)	µg/kg	120^{AC} 500000_c^{B} 500000_a^{D} 300^{E}	11 U	12 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	12 U	11 U	11 U	12 U	11 U
Methyl Isobutyl Ketone (MIBK)	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C} 500000_a^{D} 1000^{E}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl Pentanone, 4,2-	µg/kg	n/v	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Methyl tert-butyl ether (MTBE)	µg/kg	930^{AC} 500000_c^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylcyclohexane	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene Chloride (Dichloromethane)	µg/kg	50^{AC} 500000_c^{B}	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Styrene	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C} 500000_a^{D}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Tetrachloroethane, 1,1,2,2-	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C} 500000_a^{D} 600^{E}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Tetrachloroethene (PCE)	µg/kg	1300^{AC} 150000^{B} 500000_a^{D}	3 U	0.7 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	1 J	3 U	3 U	3 U
Toluene	µg/kg	700^{AC} 500000_c^{B}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	2 J	3 U	3 U	3 U
Trichlorobenzene, 1,2,3-	µg/kg	500000_a^{D}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorobenzene, 1,2,4-	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C} 500000_a^{D} 3400^{E}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	µg/kg	680^{AC} 500000_c^{B}	3 U	46	1 J	1 J	2 J	3 U	3 U	3 U	3 U	3 U	1 J	9	3 U	3 J	1 J
Trichloroethane, 1,1,2-	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Trichloroethene (TCE)	µg/kg	470^{AC} 200000^{B}	3 U	0.7 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Trichlorofluoromethane (Freon 11)	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorotrifluoroethane (Freon 113)	µg/kg	100000_a^{A} 500000_c^{B} 1000000_d^{C} 500000_a^{D} 6000^{E}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	µg/kg	20^{AC} 13000^{B}	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Xylene, m & p-	µg/kg	260_p^{A} $500000_{c,p}^{B}$ 1600_p^{C}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene, o-	µg/kg	260_p^{A} $500000_{c,p}^{B}$ 1600_p^{C}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes, Total	µg/kg	260^{A} 500000_c^{B} 1600^{C}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	5	3 U	3 U	3 U
Volatile Tentatively Identified Compounds																	
Tentatively Identified Compound	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See last page for notes.

Table B-1
Summary of OU-1 Area Soil Sample Analysis Results - VOCs
Remedial Investigation, Former Alliance Metal Stamping & Fabrication Facility Site (BCP Site #828101)
12 Pixley Industrial Parkway, Gates, New York

Area of Concern			**OU1 - Northwest Corner**								
Sample Location			**OBG-SB-40**	**OBG-SB-41**	**OBG-SB-41**	**OBG-SB-42**	**OBG-SB-42**	**OBG-SB-43**	**OBG-SB-43**	**OBG-SB-44**	**OBG-SB-44**
Sample Date			**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**
Sample ID			**OBG-SB-40 (6-7)**	**OBG-SB-41 (1-3)**	**OBG-SB-41 (5.5-7.5)**	**OBG-SB-42 (2-4)**	**OBG-SB-42 (6-7.5)**	**OBG-SB-43 (2-4)**	**OBG-SB-43 (5-7.5)**	**OBG-SB-44 (2-4)**	**OBG-SB-44 (5-7)**
Sample Depth			**6-7**	**1-3**	**5.5-7.5**	**2-4**	**6-7.5**	**2-4**	**5-7.5**	**2-4**	**5-7**
Sampling Company			**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**
Laboratory											
Laboratory Work Order		**NYSDEC Soil Cleanup Objectives (SCOs)**									
Laboratory Sample ID		Refer to notes on last page for									
Sample Type	**Units**	explanation of letter codes									
Volatile Organic Compounds											
Acetone	µg/kg	50^{AC} $500000_c{}^{B}$	12 U	11 U	11 U	12 U	11 U	11 U	11 U	11 J	11 J
Benzene	µg/kg	60^{AC} 44000^{B}	1 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Bromodichloromethane	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Bromoform (Tribromomethane)	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Bromomethane (Methyl bromide)	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	5 U
BTEX, Total	µg/kg	n/v	7.6	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Carbon Disulfide	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$ $500000_a{}^{D}$ 2700^{E}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	760^{AC} 22000^{B}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Chlorobenzene (Monochlorobenzene)	µg/kg	1100^{AC} $500000_c{}^{B}$	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Chlorobromomethane	µg/kg	n/v	-	-	-	-	-	-	-	-	-
Chloroethane (Ethyl Chloride)	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$ $500000_a{}^{D}$ 1900^{E}	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	5 U
Chloroform (Trichloromethane)	µg/kg	370^{AC} 350000^{B}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Chloromethane	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	5 U
Cyclohexane	µg/kg	n/v	-	-	-	-	-	-	-	-	-
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	n/v	-	-	-	-	-	-	-	-	-
Dibromochloromethane	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$ $500000_a{}^{D}$	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichlorobenzene, 1,2-	µg/kg	1100^{AC} $500000_c{}^{B}$	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,3-	µg/kg	2400^{AC} 280000^{B}	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,4-	µg/kg	1800^{AC} 130000^{B}	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	µg/kg	n/v	-	-	-	-	-	-	-	-	-
Dichloroethane, 1,1-	µg/kg	270^{AC} 240000^{B}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.9 J	0.6 J
Dichloroethane, 1,2-	µg/kg	$20_m{}^{A}$ 30000^{B} $20_g{}^{C}$	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloroethene, 1,1-	µg/kg	330^{AC} $500000_c{}^{B}$	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloroethene, cis-1,2-	µg/kg	250^{AC} $500000_c{}^{B}$	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloroethene, trans-1,2-	µg/kg	190^{AC} $500000_c{}^{B}$	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloropropane, 1,2-	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$ $500000_a{}^{D}$	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloropropene, cis-1,3-	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Dichloropropene, trans-1,3-	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Ethylbenzene	µg/kg	1000^{AC} 390000^{B}	0.6 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	n/v	-	-	-	-	-	-	-	-	-
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	5 U
Isopropylbenzene	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$ $500000_a{}^{D}$ 2300^{E}	-	-	-	-	-	-	-	-	-
Methyl Acetate	µg/kg	n/v	-	-	-	-	-	-	-	-	-
Methyl Ethyl Ketone (MEK)	µg/kg	120^{AC} $500000_c{}^{B}$ $500000_a{}^{D}$ 300^{E}	12 U	11 U	11 U	12 U	11 U	11 U	11 U	11 U	11 U
Methyl Isobutyl Ketone (MIBK)	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$ $500000_a{}^{D}$ 1000^{E}	-	-	-	-	-	-	-	-	-
Methyl Pentanone, 4,2-	µg/kg	n/v	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	5 U
Methyl tert-butyl ether (MTBE)	µg/kg	930^{AC} $500000_c{}^{B}$	-	-	-	-	-	-	-	-	-
Methylcyclohexane	µg/kg	n/v	-	-	-	-	-	-	-	-	-
Methylene Chloride (Dichloromethane)	µg/kg	50^{AC} $500000_c{}^{B}$	6 U	6 U	6 U	6 U	6 U	6 J	6 J	6 J	5 J
Styrene	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$ $500000_a{}^{D}$	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Tetrachloroethane, 1,1,2,2-	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$ $500000_a{}^{D}$ 600^{E}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Tetrachloroethene (PCE)	µg/kg	1300^{AC} 150000^{B} $500000_a{}^{D}$	1 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Toluene	µg/kg	700^{AC} $500000_c{}^{B}$	3 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Trichlorobenzene, 1,2,3-	µg/kg	$500000_a{}^{D}$	-	-	-	-	-	-	-	-	-
Trichlorobenzene, 1,2,4-	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$ $500000_a{}^{D}$ 3400^{E}	-	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	µg/kg	680^{AC} $500000_c{}^{B}$	32	0.9 J	3 U	2 J	4	0.7 J	3	1 J	3
Trichloroethane, 1,1,2-	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Trichloroethene (TCE)	µg/kg	470^{AC} 200000^{B}	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Trichlorofluoromethane (Freon 11)	µg/kg	n/v	-	-	-	-	-	-	-	-	-
Trichlorotrifluoroethane (Freon 113)	µg/kg	$100000_a{}^{A}$ $500000_c{}^{B}$ $1000000_d{}^{C}$ $500000_a{}^{D}$ 6000^{E}	-	-	-	-	-	-	-	-	-
Vinyl chloride	µg/kg	20^{AC} 13000^{B}	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	5 U
Xylene, m & p-	µg/kg	$260_p{}^{A}$ $500000_{c,p}{}^{B}$ $1600_p{}^{C}$	-	-	-	-	-	-	-	-	-
Xylene, o-	µg/kg	$260_p{}^{A}$ $500000_{c,p}{}^{B}$ $1600_p{}^{C}$	-	-	-	-	-	-	-	-	-
Xylenes, Total	µg/kg	260^{A} $500000_c{}^{B}$ 1600^{C}	3 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Volatile Tentatively Identified Compounds											
Tentatively Identified Compound	µg/kg	n/v	-	-	-	-	-	-	-	-	-

See last page for notes.

Table B-1
Summary of OU-1 Area Soil Sample Analysis Results - VOCs
Remedial Investigation, Former Alliance Metal Stamping & Fabrication Facility Site (BCP Site #828101)
12 Pixley Industrial Parkway, Gates, New York

Notes:

NYSDEC	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Unrestricted Use Soil Cleanup Objectives
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
C	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Groundwater
D	Table 1 Supplemental Soil Cleanup Objectives - Commercial
E	Table 1 Supplemental Soil Cleanup Objectives - Protection of Groundwater
15.2	Compound was detected at the concentration shown; the concentration did not exceed applicable standards.
6.5^A	Concentration detected exceeds the standard indicated by the letter code.
56 U	The analyte was not detected above the laboratory's reportable detection limit shown (a concentration of 56 µg/kg in this example).
56 U	The analyte was not detected above the reportable detection limit shown; detection limit exceeded an applicable standard.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
a^D	SCOs for organic contaminants (volatile organic compounds, semivolatile organic compounds, and pesticides) are capped at 100 ppm for residential use, 500 ppm for commercial use, 1000 ppm for industrial use. SCOs for metals are capped at 10,000 ppm.
a^A	The SCOs for unrestricted use were capped at a maximum value of 100 mg/kg. See 6 NYCRR Part 375 TSD Section 9.3
c	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
c,p	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3. The criterion is applicable to total xylenes, and the individual isomers should be added for comparison.
d	The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg (Organics) and 10000 mg/kg (Inorganics). See 6 NYCRR Part 375 TSD Section 9.3.
f	For constituents where the calculated SCO was lower than the CRQL, the CRQL is used as the SCO value.
g	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
m	For constituents where the calculated SCO was lower than the Contract Required Quantitation Limit (CRQL), the CRQL is used as the Track 1 SCO value.
p^AC	The criterion is applicable to total xylenes, and the individual isomers should be added for comparison.
CN	This compound is a common laboratory contaminant.
J	The reported result is an estimated value.
J*	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value
JL	The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
UJ	Indicates estimated non-detect.
R	The results for 1,4-Dioxane were rejected in samples in which it was not detected due to deficiencies in the ability to analyze the sample and meet quality control critera (a deficiency inherent in the methodology due to low instrument response associated with continuing calibration standards). The presence or absence of the analyte cannot be verified.

Table B-2
Summary of OU-1 Area Soil Sample Analysis Results - SVOCs
Remedial Investigation, Former Alliance Metal Stamping & Fabrication Facility Site (BCP Site #828101)
12 Pixley Industrial Parkway, Gates, New York

Area of Concern			AOC 2 - Former Drainage Swale	OU1 - Northwest Corner												
Sample Location			SW-TB-3	OBG-SB-29	OBG-SB-29	OBG-SB-30	OBG-SB-30	OBG-SB-30	OBG-SB-31	OBG-SB-31	OBG-SB-32	OBG-SB-32	OBG-SB-33	OBG-SB-33	OBG-SB-34	OBG-SB-34
Sample Date			8-Nov-12	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04
Sample ID			SW-TB-3-2	OBG-SB-29 (2-4)	OBG-SB-29 (5-6.5)	DUP-3_09022004	OBG-SB-30 (4-8)	OBG-SB-30 (8-10)	OBG-SB-31 (4-6)	OBG-SB-31 (7-8.5)	OBG-SB-32 (6-7)	OBG-SB-32 (7-8.5)	OBG-SB-33 (0-2)	OBG-SB-33 (4-6)	OBG-SB-34 (2-4)	OBG-SB-34 (6-8)
Sample Depth			4.5 ft	2-4	5-6.5	8-10	4-8	8-10	4-6	7-8.5	6-7	7-8.5	0-2	4-6	2-4	6-8
Sampling Company			STANTEC	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE
Laboratory			SPECTRUM													
Laboratory Work Order		NYSDEC Soil Cleanup Objectives (SCOs)	L2407													
Laboratory Sample ID		Refer to notes on last page for	L2407-08													
Sample Type	Units	explanation of letter codes				Field Duplicate										
Semi - Volatile Organic Compounds																
Acenaphthene	µg/kg	$20000^{A}\ 500000_{c}^{B}\ 98000^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthylene	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 107000^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetophenone	µg/kg	n/v	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Aniline	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 330_{b}^{E}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Atrazine	µg/kg	n/v	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Azobenzene	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzaldehyde	µg/kg	n/v	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzidine	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	µg/kg	$1000_{n}^{A}\ 5600^{B}\ 1000_{g}^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	µg/kg	$1000_{n}^{A}\ 1000_{g}^{B}\ 22000^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	µg/kg	$1000_{n}^{A}\ 5600^{B}\ 1700^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	µg/kg	$100000^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	µg/kg	$800_{n}^{A}\ 56000^{B}\ 1700^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzoic acid	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 2700^{E}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzyl Alcohol	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biphenyl, 1,1'- (Biphenyl)	µg/kg	500000_{a}^{D}	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-Chloroethoxy)methane	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-Chloroethyl)ether	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-Chloroisopropyl)ether	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 435000^{E}$	280 J	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromophenyl Phenyl Ether, 4-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Butyl Benzyl Phthalate	µg/kg	$_{NS}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 122000^{E}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Caprolactam	µg/kg	n/v	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbazole	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloro-3-methyl phenol, 4-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroaniline, 4-	µg/kg	$_{NS}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 220^{E}$	***370 U***	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloronaphthalene, 2-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorophenyl Phenyl Ether, 4-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	µg/kg	$1000_{n}^{A}\ 56000^{B}\ 1000_{g}^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Cresol, o- (Methylphenol, 2-)	µg/kg	$330_{m}^{A}\ 500000_{c}^{B}\ 330_{f}^{C}$	***370 U***	-	-	-	-	-	-	-	-	-	-	-	-	-
Cresol, p- (Methylphenol, 4-)	µg/kg	$330_{m}^{A}\ 500000_{c}^{B}\ 330_{f}^{C}$	***370 U***	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	µg/kg	$330_{m}^{A}\ 560^{B}\ 1000000_{d}^{C}$	***370 U***	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzofuran	µg/kg	$7000^{A}\ 350000^{B}\ 210000^{C}\ 500000_{a}^{D}\ 6200^{E}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibutyl Phthalate (DBP)	µg/kg	$_{NS}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 8100^{E}$	840 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,2-	µg/kg	$1100^{AC}\ 500000_{c}^{B}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,3-	µg/kg	$2400^{AC}\ 280000^{B}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,4-	µg/kg	$1800^{AC}\ 130000^{B}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorobenzidine, 3,3'-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,4-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 400^{E}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethyl Phthalate	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 7100^{E}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethyl Phthalate	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 27000^{E}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethylphenol, 2,4-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitro-o-cresol, 4,6-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	740 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrophenol, 2,4-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 200^{E}$	***740 UJ***	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,4-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,6-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 1000/170_{b,s1}^{E}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Di-n-Octyl phthalate	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 120000^{E}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Dioxane, 1,4-	µg/kg	$100_{m}^{A}\ 130000^{B}\ 100_{f}^{C}$	R	400 U	370 U	370 U	380 U	370 U	380 U	370 U	430 U	380 U	380 U	370 U	370 U	410 U
Fluoranthene	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	µg/kg	$30000^{A}\ 500000_{c}^{B}\ 386000^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobenzene	µg/kg	$330_{m}^{A}\ 6000^{B}\ 3200^{C}\ 500000_{a}^{D}\ 1400^{E}$	***370 U***	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}$	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-

Table B-2
Summary of OU-1 Area Soil Sample Analysis Results - SVOCs
Remedial Investigation, Former Alliance Metal Stamping & Fabrication Facility Site (BCP Site #828101)
12 Pixley Industrial Parkway, Gates, New York

Area of Concern			**AOC 2 - Former Drainage Swale**	**OU1 - Northwest Corner**												
Sample Location			**SW-TB-3**	**OBG-SB-29**	**OBG-SB-29**	**OBG-SB-30**	**OBG-SB-30**	**OBG-SB-30**	**OBG-SB-31**	**OBG-SB-31**	**OBG-SB-32**	**OBG-SB-32**	**OBG-SB-33**	**OBG-SB-33**	**OBG-SB-34**	**OBG-SB-34**
Sample Date			**8-Nov-12**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**
Sample ID			**SW-TB-3-2**	**OBG-SB-29 (2-4)**	**OBG-SB-29 (5-6.5)**	**DUP-3_09022004**	**OBG-SB-30 (4-8)**	**OBG-SB-30 (8-10)**	**OBG-SB-31 (4-6)**	**OBG-SB-31 (7-8.5)**	**OBG-SB-32 (6-7)**	**OBG-SB-32 (7-8.5)**	**OBG-SB-33 (0-2)**	**OBG-SB-33 (4-6)**	**OBG-SB-34 (2-4)**	**OBG-SB-34 (6-8)**
Sample Depth			**4.5 ft**	**2-4**	**5-6.5**	**8-10**	**4-8**	**8-10**	**4-6**	**7-8.5**	**6-7**	**7-8.5**	**0-2**	**4-6**	**2-4**	**6-8**
Sampling Company			**STANTEC**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**
Laboratory			**SPECTRUM**													
Laboratory Work Order		**NYSDEC Soil Cleanup Objectives (SCOs)**	**L2407**													
Laboratory Sample ID		Refer to notes on last page for explanation of letter codes	**L2407-08**													
Sample Type	**Units**					**Field Duplicate**										
Hexachloroethane	µg/kg	100000_a^A 500000_c^B 1000000_d^C	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/kg	500_n^A 5600^B 8200^C	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Isophorone	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D 4400^E	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylnaphthalene, 1-	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylnaphthalene, 2-	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D 36400^E	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	µg/kg	12000^{AC} 500000_c^B	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitroaniline, 2-	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D 400^E	***740 U***	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitroaniline, 3-	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D 500^E	***740 U***	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitroaniline, 4-	µg/kg	100000_a^A 500000_c^B 1000000_d^C	740 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrobenzene	µg/kg	100000_a^A 500000_c^B 1000000_d^C 69000^D 170_b^E	***370 U***	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrophenol, 2-	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D 300^E	***370 U***	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrophenol, 4-	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D 100^E	***740 U***	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodimethylamine (NDMA)	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodi-n-Propylamine	µg/kg	100000_a^A 500000_c^B 1000000_d^C	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Nitrosodiphenylamine	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachloronitrobenzene (Quintozine)	µg/kg	500000_a^D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	µg/kg	800_m^A 6700^B 800_f^C	740 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	µg/kg	100000^A 500000_c^B 1000000_d^C	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol	µg/kg	330_m^A 500000_c^B 330_f^C	***370 U***	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	µg/kg	100000^A 500000_c^B 1000000_d^C	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyridine	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorobenzene, 1,2,4,5-	µg/kg	n/v	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorobenzene, 1,2,4-	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D 3400^E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,5-	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D 100^E	***740 U***	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,6-	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D	370 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Semi - Volatile Tentatively Identified Compounds																
Tentatively Identified Compound	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See last page for notes.

Table B-2
Summary of OU-1 Area Soil Sample Analysis Results - SVOCs
Remedial Investigation, Former Alliance Metal Stamping & Fabrication Facility Site (BCP Site #828101)
12 Pixley Industrial Parkway, Gates, New York

Area of Concern			OU1 - Northwest Corner													
Sample Location			OBG-SB-35	OBG-SB-35	OBG-SB-35	OBG-SB-36	OBG-SB-36	OBG-SB-37	OBG-SB-37	OBG-SB-38	OBG-SB-38	OBG-SB-39	OBG-SB-39	OBG-SB-39	OBG-SB-40	OBG-SB-40
Sample Date			2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04
Sample ID			DUP-4_09022004	OBG-SB-35 (2-4)	OBG-SB-35 (5-7)	OBG-SB-36 (2-4)	OBG-SB-36 (5-7)	OBG-SB-37 (3-5)	OBG-SB-37 (5-7)	OBG-SB-38 (2-4)	OBG-SB-38 (4-7.5)	DUP-5_09022004	OBG-SB-39 (2-4)	OBG-SB-39 (6-8)	OBG-SB-40 (2-4)	OBG-SB-40 (6-7)
Sample Depth			5	2-4	5-7	2-4	5-7	3-5	5-7	2-4	4-7.5	6-8	2-4	6-8	2-4	6-7
Sampling Company			O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE
Laboratory																
Laboratory Work Order		**NYSDEC Soil Cleanup Objectives (SCOs)**														
Laboratory Sample ID		Refer to notes on last page for														
Sample Type	Units	explanation of letter codes	Field Duplicate									Field Duplicate				
Semi - Volatile Organic Compounds																
Acenaphthene	µg/kg	$20000^{A}\ 500000_{c}^{B}\ 98000^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthylene	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 107000^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetophenone	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aniline	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 330_{b}^{E}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Atrazine	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Azobenzene	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzaldehyde	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzidine	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	µg/kg	$1000_{n}^{A}\ 5600^{B}\ 1000_{g}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	µg/kg	$1000_{n}^{A}\ 1000_{g}^{B}\ 22000^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	µg/kg	$1000_{n}^{A}\ 5600^{B}\ 1700^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	µg/kg	$100000^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	µg/kg	$800_{n}^{A}\ 56000^{B}\ 1700^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzoic acid	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 2700^{E}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzyl Alcohol	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biphenyl, 1,1'- (Biphenyl)	µg/kg	500000_{a}^{D}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-Chloroethoxy)methane	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-Chloroethyl)ether	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-Chloroisopropyl)ether	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 435000^{E}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromophenyl Phenyl Ether, 4-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butyl Benzyl Phthalate	µg/kg	${}_{NS}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 122000^{E}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caprolactam	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbazole	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloro-3-methyl phenol, 4-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroaniline, 4-	µg/kg	${}_{NS}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 220^{E}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloronaphthalene, 2-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorophenyl Phenyl Ether, 4-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	µg/kg	$1000_{n}^{A}\ 56000^{B}\ 1000_{g}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cresol, o- (Methylphenol, 2-)	µg/kg	$330_{m}^{A}\ 500000_{c}^{B}\ 330_{f}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cresol, p- (Methylphenol, 4-)	µg/kg	$330_{m}^{A}\ 500000_{c}^{B}\ 330_{f}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	µg/kg	$330_{m}^{A}\ 560^{B}\ 1000000_{d}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzofuran	µg/kg	$7000^{A}\ 350000^{B}\ 210000^{C}\ 500000_{a}^{D}\ 6200^{E}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibutyl Phthalate (DBP)	µg/kg	${}_{NS}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 8100^{E}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,2-	µg/kg	$1100^{AC}\ 500000_{c}^{B}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,3-	µg/kg	$2400^{AC}\ 280000^{B}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,4-	µg/kg	$1800^{AC}\ 130000^{B}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorobenzidine, 3,3'-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,4-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 400^{E}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethyl Phthalate	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 7100^{E}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethyl Phthalate	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 27000^{E}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethylphenol, 2,4-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitro-o-cresol, 4,6-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrophenol, 2,4-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 200^{E}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,4-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,6-	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 1000/170_{b,s1}^{E}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Di-n-Octyl phthalate	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}\ 120000^{E}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dioxane, 1,4-	µg/kg	$100_{m}^{A}\ 130000^{B}\ 100_{f}^{C}$	380 U	370 U	370 U	370 U	370 U	370 U	370 U	380 U	380 U	370 U	370 U	380 U	370 U	400 U
Fluoranthene	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	µg/kg	$30000^{A}\ 500000_{c}^{B}\ 386000^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobenzene	µg/kg	$330_{m}^{A}\ 6000^{B}\ 3200^{C}\ 500000_{a}^{D}\ 1400^{E}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	µg/kg	$100000_{a}^{A}\ 500000_{c}^{B}\ 1000000_{d}^{C}\ 500000_{a}^{D}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table B-2
Summary of OU-1 Area Soil Sample Analysis Results - SVOCs
Remedial Investigation, Former Alliance Metal Stamping & Fabrication Facility Site (BCP Site #828101)
12 Pixley Industrial Parkway, Gates, New York

Area of Concern			OU1 - Northwest Corner													
Sample Location			OBG-SB-35	OBG-SB-35	OBG-SB-35	OBG-SB-36	OBG-SB-36	OBG-SB-37	OBG-SB-37	OBG-SB-38	OBG-SB-38	OBG-SB-39	OBG-SB-39	OBG-SB-39	OBG-SB-40	OBG-SB-40
Sample Date			2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04
Sample ID			DUP-4_09022004	OBG-SB-35 (2-4)	OBG-SB-35 (5-7)	OBG-SB-36 (2-4)	OBG-SB-36 (5-7)	OBG-SB-37 (3-5)	OBG-SB-37 (5-7)	OBG-SB-38 (2-4)	OBG-SB-38 (4-7.5)	DUP-5_09022004	OBG-SB-39 (2-4)	OBG-SB-39 (6-8)	OBG-SB-40 (2-4)	OBG-SB-40 (6-7)
Sample Depth			5	2-4	5-7	2-4	5-7	3-5	5-7	2-4	4-7.5	6-8	2-4	6-8	2-4	6-7
Sampling Company			O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE
Laboratory																
Laboratory Work Order		NYSDEC Soil Cleanup Objectives (SCOs)														
Laboratory Sample ID		Refer to notes on last page for														
Sample Type	Units	explanation of letter codes	Field Duplicate									Field Duplicate				
Hexachloroethane	µg/kg	100000_a^A 500000_c^B 1000000_d^C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/kg	500_n^A 5600^B 8200^C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isophorone	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D 4400^E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylnaphthalene, 1-	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylnaphthalene, 2-	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D 36400^E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	µg/kg	12000^{AC} 500000_c^B	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitroaniline, 2-	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D 400^E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitroaniline, 3-	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D 500^E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitroaniline, 4-	µg/kg	100000_a^A 500000_c^B 1000000_d^C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrobenzene	µg/kg	100000_a^A 500000_c^B 1000000_d^C 69000^D 170_b^E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrophenol, 2-	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D 300^E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrophenol, 4-	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D 100^E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodimethylamine (NDMA)	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodi-n-Propylamine	µg/kg	100000_a^A 500000_c^B 1000000_d^C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Nitrosodiphenylamine	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachloronitrobenzene (Quintozine)	µg/kg	500000_a^D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	µg/kg	800_m^A 6700^B 800_f^C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	µg/kg	100000^A 500000_c^B 1000000_d^C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol	µg/kg	330_m^A 500000_c^B 330_f^C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	µg/kg	100000^A 500000_c^B 1000000_d^C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyridine	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorobenzene, 1,2,4,5-	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorobenzene, 1,2,4-	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D 3400^E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,5-	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D 100^E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,6-	µg/kg	100000_a^A 500000_c^B 1000000_d^C 500000_a^D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Semi - Volatile Tentatively Identified Compounds																
Tentatively Identified Compound	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See last page for notes.

Table B-2
Summary of OU-1 Area Soil Sample Analysis Results - SVOCs
Remedial Investigation, Former Alliance Metal Stamping & Fabrication Facility Site (BCP Site #828101)
12 Pixley Industrial Parkway, Gates, New York

Area of Concern			**OU1 - Northwest Corner**							
Sample Location			**OBG-SB-41**	**OBG-SB-41**	**OBG-SB-42**	**OBG-SB-42**	**OBG-SB-43**	**OBG-SB-43**	**OBG-SB-44**	**OBG-SB-44**
Sample Date			**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**	**2-Sep-04**
Sample ID			**OBG-SB-41 (1-3)**	**OBG-SB-41 (5.5-7.5)**	**OBG-SB-42 (2-4)**	**OBG-SB-42 (6-7.5)**	**OBG-SB-43 (2-4)**	**OBG-SB-43 (5-7.5)**	**OBG-SB-44 (2-4)**	**OBG-SB-44 (5-7)**
Sample Depth			**1-3**	**5.5-7.5**	**2-4**	**6-7.5**	**2-4**	**5-7.5**	**2-4**	**5-7**
Sampling Company			**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**	**O'BRIEN & GERE**
Laboratory										
Laboratory Work Order		**NYSDEC Soil Cleanup Objectives (SCOs)**								
Laboratory Sample ID		Refer to notes on last page for								
Sample Type	**Units**	explanation of letter codes								
Semi - Volatile Organic Compounds										
Acenaphthene	µg/kg	$20000^A\ 500000_c^B\ 98000^C$	-	-	-	-	-	-	-	-
Acenaphthylene	µg/kg	$100000_a^A\ 500000_c^B\ 107000^C$	-	-	-	-	-	-	-	-
Acetophenone	µg/kg	n/v	-	-	-	-	-	-	-	-
Aniline	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C\ 500000_a^D\ 330_b^E$	-	-	-	-	-	-	-	-
Anthracene	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C$	-	-	-	-	-	-	-	-
Atrazine	µg/kg	n/v	-	-	-	-	-	-	-	-
Azobenzene	µg/kg	n/v	-	-	-	-	-	-	-	-
Benzaldehyde	µg/kg	n/v	-	-	-	-	-	-	-	-
Benzidine	µg/kg	n/v	-	-	-	-	-	-	-	-
Benzo(a)anthracene	µg/kg	$1000_n^A\ 5600^B\ 1000_g^C$	-	-	-	-	-	-	-	-
Benzo(a)pyrene	µg/kg	$1000_n^A\ 1000_g^B\ 22000^C$	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	µg/kg	$1000_n^A\ 5600^B\ 1700^C$	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	µg/kg	$100000^A\ 500000_c^B\ 1000000_d^C$	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	µg/kg	$800_n^A\ 56000^B\ 1700^C$	-	-	-	-	-	-	-	-
Benzoic acid	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C\ 500000_a^D\ 2700^E$	-	-	-	-	-	-	-	-
Benzyl Alcohol	µg/kg	n/v	-	-	-	-	-	-	-	-
Biphenyl, 1,1'- (Biphenyl)	µg/kg	500000_a^D	-	-	-	-	-	-	-	-
Bis(2-Chloroethoxy)methane	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C$	-	-	-	-	-	-	-	-
Bis(2-Chloroethyl)ether	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C$	-	-	-	-	-	-	-	-
Bis(2-Chloroisopropyl)ether	µg/kg	n/v	-	-	-	-	-	-	-	-
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C$	-	-	-	-	-	-	-	-
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C\ 500000_a^D\ 435000^E$	-	-	-	-	-	-	-	-
Bromophenyl Phenyl Ether, 4-	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C$	-	-	-	-	-	-	-	-
Butyl Benzyl Phthalate	µg/kg	${}_{NS}^A\ 500000_c^B\ 1000000_d^C\ 500000_a^D\ 122000^E$	-	-	-	-	-	-	-	-
Caprolactam	µg/kg	n/v	-	-	-	-	-	-	-	-
Carbazole	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C$	-	-	-	-	-	-	-	-
Chloro-3-methyl phenol, 4-	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C$	-	-	-	-	-	-	-	-
Chloroaniline, 4-	µg/kg	${}_{NS}^A\ 500000_c^B\ 1000000_d^C\ 500000_a^D\ 220^E$	-	-	-	-	-	-	-	-
Chloronaphthalene, 2-	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C$	-	-	-	-	-	-	-	-
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C\ 500000_a^D$	-	-	-	-	-	-	-	-
Chlorophenyl Phenyl Ether, 4-	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C$	-	-	-	-	-	-	-	-
Chrysene	µg/kg	$1000_n^A\ 56000^B\ 1000_g^C$	-	-	-	-	-	-	-	-
Cresol, o- (Methylphenol, 2-)	µg/kg	$330_m^A\ 500000_c^B\ 330_f^C$	-	-	-	-	-	-	-	-
Cresol, p- (Methylphenol, 4-)	µg/kg	$330_m^A\ 500000_c^B\ 330_f^C$	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	µg/kg	$330_m^A\ 560^B\ 1000000_d^C$	-	-	-	-	-	-	-	-
Dibenzofuran	µg/kg	$7000^A\ 350000^B\ 210000^C\ 500000_a^D\ 6200^E$	-	-	-	-	-	-	-	-
Dibutyl Phthalate (DBP)	µg/kg	${}_{NS}^A\ 500000_c^B\ 1000000_d^C\ 500000_a^D\ 8100^E$	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,2-	µg/kg	$1100^{AC}\ 500000_c^B$	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,3-	µg/kg	$2400^{AC}\ 280000^B$	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,4-	µg/kg	$1800^{AC}\ 130000^B$	-	-	-	-	-	-	-	-
Dichlorobenzidine, 3,3'-	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C$	-	-	-	-	-	-	-	-
Dichlorophenol, 2,4-	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C\ 500000_a^D\ 400^E$	-	-	-	-	-	-	-	-
Diethyl Phthalate	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C\ 500000_a^D\ 7100^E$	-	-	-	-	-	-	-	-
Dimethyl Phthalate	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C\ 500000_a^D\ 27000^E$	-	-	-	-	-	-	-	-
Dimethylphenol, 2,4-	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C$	-	-	-	-	-	-	-	-
Dinitro-o-cresol, 4,6-	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C$	-	-	-	-	-	-	-	-
Dinitrophenol, 2,4-	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C\ 500000_a^D\ 200^E$	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,4-	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C$	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,6-	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C\ 500000_a^D\ 1000/170_{b,s1}^E$	-	-	-	-	-	-	-	-
Di-n-Octyl phthalate	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C\ 500000_a^D\ 120000^E$	-	-	-	-	-	-	-	-
Dioxane, 1,4-	µg/kg	$100_m^A\ 130000^B\ 100_f^C$	370 U	370 U	380 U	370 U	370 U	370 U	380 U	370 U
Fluoranthene	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C$	-	-	-	-	-	-	-	-
Fluorene	µg/kg	$30000^A\ 500000_c^B\ 386000^C$	-	-	-	-	-	-	-	-
Hexachlorobenzene	µg/kg	$330_m^A\ 6000^B\ 3200^C\ 500000_a^D\ 1400^E$	-	-	-	-	-	-	-	-
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C$	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	µg/kg	$100000_a^A\ 500000_c^B\ 1000000_d^C\ 500000_a^D$	-	-	-	-	-	-	-	-

Table B-2
Summary of OU-1 Area Soil Sample Analysis Results - SVOCs
Remedial Investigation, Former Alliance Metal Stamping & Fabrication Facility Site (BCP Site #828101)
12 Pixley Industrial Parkway, Gates, New York

Area of Concern			OU1 - Northwest Corner							
Sample Location			OBG-SB-41	OBG-SB-41	OBG-SB-42	OBG-SB-42	OBG-SB-43	OBG-SB-43	OBG-SB-44	OBG-SB-44
Sample Date			2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04	2-Sep-04
Sample ID			OBG-SB-41 (1-3)	OBG-SB-41 (5.5-7.5)	OBG-SB-42 (2-4)	OBG-SB-42 (6-7.5)	OBG-SB-43 (2-4)	OBG-SB-43 (5-7.5)	OBG-SB-44 (2-4)	OBG-SB-44 (5-7)
Sample Depth			1-3	5.5-7.5	2-4	6-7.5	2-4	5-7.5	2-4	5-7
Sampling Company			O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE	O'BRIEN & GERE
Laboratory										
Laboratory Work Order		NYSDEC Soil Cleanup Objectives (SCOs)								
Laboratory Sample ID		Refer to notes on last page for								
Sample Type	Units	explanation of letter codes								
Hexachloroethane	µg/kg	100000_{a}^{A} 500000_{c}^{B} 1000000_{d}^{C}	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/kg	500_{n}^{A} 5600^{B} 8200^{C}	-	-	-	-	-	-	-	-
Isophorone	µg/kg	100000_{a}^{A} 500000_{c}^{B} 1000000_{d}^{C} 500000_{a}^{D} 4400^{E}	-	-	-	-	-	-	-	-
Methylnaphthalene, 1-	µg/kg	n/v	-	-	-	-	-	-	-	-
Methylnaphthalene, 2-	µg/kg	100000_{a}^{A} 500000_{c}^{B} 1000000_{d}^{C} 500000_{a}^{D} 36400^{E}	-	-	-	-	-	-	-	-
Naphthalene	µg/kg	12000^{AC} 500000_{c}^{B}	-	-	-	-	-	-	-	-
Nitroaniline, 2-	µg/kg	100000_{a}^{A} 500000_{c}^{B} 1000000_{d}^{C} 500000_{a}^{D} 400^{E}	-	-	-	-	-	-	-	-
Nitroaniline, 3-	µg/kg	100000_{a}^{A} 500000_{c}^{B} 1000000_{d}^{C} 500000_{a}^{D} 500^{E}	-	-	-	-	-	-	-	-
Nitroaniline, 4-	µg/kg	100000_{a}^{A} 500000_{c}^{B} 1000000_{d}^{C}	-	-	-	-	-	-	-	-
Nitrobenzene	µg/kg	100000_{a}^{A} 500000_{c}^{B} 1000000_{d}^{C} 69000^{D} 170_{b}^{E}	-	-	-	-	-	-	-	-
Nitrophenol, 2-	µg/kg	100000_{a}^{A} 500000_{c}^{B} 1000000_{d}^{C} 500000_{a}^{D} 300^{E}	-	-	-	-	-	-	-	-
Nitrophenol, 4-	µg/kg	100000_{a}^{A} 500000_{c}^{B} 1000000_{d}^{C} 500000_{a}^{D} 100^{E}	-	-	-	-	-	-	-	-
N-Nitrosodimethylamine (NDMA)	µg/kg	n/v	-	-	-	-	-	-	-	-
N-Nitrosodi-n-Propylamine	µg/kg	100000_{a}^{A} 500000_{c}^{B} 1000000_{d}^{C}	-	-	-	-	-	-	-	-
n-Nitrosodiphenylamine	µg/kg	100000_{a}^{A} 500000_{c}^{B} 1000000_{d}^{C} 500000_{a}^{D}	-	-	-	-	-	-	-	-
Pentachloronitrobenzene (Quintozine)	µg/kg	500000_{a}^{D}	-	-	-	-	-	-	-	-
Pentachlorophenol	µg/kg	800_{m}^{A} 6700^{B} 800_{f}^{C}	-	-	-	-	-	-	-	-
Phenanthrene	µg/kg	100000^{A} 500000_{c}^{B} 1000000_{d}^{C}	-	-	-	-	-	-	-	-
Phenol	µg/kg	330_{m}^{A} 500000_{c}^{B} 330_{f}^{C}	-	-	-	-	-	-	-	-
Pyrene	µg/kg	100000^{A} 500000_{c}^{B} 1000000_{d}^{C}	-	-	-	-	-	-	-	-
Pyridine	µg/kg	n/v	-	-	-	-	-	-	-	-
Tetrachlorobenzene, 1,2,4,5-	µg/kg	n/v	-	-	-	-	-	-	-	-
Trichlorobenzene, 1,2,4-	µg/kg	100000_{a}^{A} 500000_{c}^{B} 1000000_{d}^{C} 500000_{a}^{D} 3400^{E}	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,5-	µg/kg	100000_{a}^{A} 500000_{c}^{B} 1000000_{d}^{C} 500000_{a}^{D} 100^{E}	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,6-	µg/kg	100000_{a}^{A} 500000_{c}^{B} 1000000_{d}^{C} 500000_{a}^{D}	-	-	-	-	-	-	-	-
Semi - Volatile Tentatively Identified Compounds										
Tentatively Identified Compound	µg/kg	n/v	-	-	-	-	-	-	-	-

See last page for notes.

Table B-2
Summary of OU-1 Area Soil Sample Analysis Results - SVOCs
Remedial Investigation, Former Alliance Metal Stamping & Fabrication Facility Site (BCP Site #828101)
12 Pixley Industrial Parkway, Gates, New York

Notes:

NYSDEC	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Unrestricted Use Soil Cleanup Objectives
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
C	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Groundwater
D	Table 1 Supplemental Soil Cleanup Objectives - Commercial
E	Table 1 Supplemental Soil Cleanup Objectives - Protection of Groundwater
15.2	Compound was detected at the concentration shown; the concentration did not exceed applicable standards.
6.5[A]	Concentration detected exceeds the standard indicated by the letter code.
360 U	The analyte was not detected above the laboratory's reportable detection limit shown (a concentration of 360 µg/kg in this example).
990 U	The analyte was not detected above the reportable detection limit shown; detection limit exceeded an applicable standard.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
NS	No SCO has been established for this compound.
a[D]	SCOs for organic contaminants (volatile organic compounds, semivolatile organic compounds, and pesticides) are capped at 100 ppm for residential use, 500 ppm for commercial use, 1000 ppm for industrial use. SCOs for metals are capped at 10,000 ppm.
a[A]	The SCOs for unrestricted use were capped at a maximum value of 100 mg/kg. See 6 NYCRR Part 375 TSD Section 9.3
b	Based on rural background study
b,s1	Based on rural background study. The value of 1.0 refers to SVOC analses while the 0.17b refers to VOC analyses.
c	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
d	The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg (Organics) and 10000 mg/kg (Inorganics). See 6 NYCRR Part 375 TSD Section 9.3.
f	For constituents where the calculated SCO was lower than the CRQL, the CRQL is used as the SCO value.
g[BC]	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
m	For constituents where the calculated SCO was lower than the Contract Required Quantitation Limit (CRQL), the CRQL is used as the Track 1 SCO value.
n	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 1 SCO value for this use of the site.
J	The reported result is an estimated value.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control critera. The presence or absence of the analyte cannot be verified.
UJ	Indicates estimated non-detect.

Table B-3
Summary of OU-1 Area Soil Sample Analysis Results - PCBs
Remedial Investigation, Former AMSF Site (BCP Site #828101)
12 Pixley Industrial Parkway, Gates, New York

Area of Concern			**AOC 2 - Former Drainage Swale**
Sample Location			**SW-TB-3**
Sample Date			**8-Nov-12**
Sample ID			**SW-TB-3-2**
Sample Depth			**4.5 ft**
Sampling Company			**STANTEC**
Laboratory			**SPECTRUM**
Laboratory Work Order		**NYSDEC Soil Cleanup Objectives (SCOs)**	**L2407**
Laboratory Sample ID			**L2407-08**
Sample Type	**Units**		
Polychlorinated Biphenyls			
Aroclor 1016	µg/kg	100_o[A] 1000_o[B] 3200_o[C]	37 U
Aroclor 1221	µg/kg	100_o[A] 1000_o[B] 3200_o[C]	37 U
Aroclor 1232	µg/kg	100_o[A] 1000_o[B] 3200_o[C]	37 U
Aroclor 1242	µg/kg	100_o[A] 1000_o[B] 3200_o[C]	37 U
Aroclor 1248	µg/kg	100_o[A] 1000_o[B] 3200_o[C]	37 U
Aroclor 1254	µg/kg	100_o[A] 1000_o[B] 3200_o[C]	37 U
Aroclor 1260	µg/kg	100_o[A] 1000_o[B] 3200_o[C]	37 U
Aroclor 1262	µg/kg	100_o[A] 1000_o[B] 3200_o[C]	37 U
Aroclor 1268	µg/kg	100_o[A] 1000_o[B] 3200_o[C]	37 U

Notes:

NYSDEC	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Unrestricted Use Soil Cleanup Objectives
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
C	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Groundwater
D	Table 1 Supplemental Soil Cleanup Objectives - Commercial
E	Table 1 Supplemental Soil Cleanup Objectives - Protection of Groundwater
15.2	Compound was detected at the concentration shown; the concentration did not exceed applicable standards.
6.5[A]	Concentration detected exceeds the standard indicated by the letter code.
0.03 U	The analyte was not detected above the laboratory's reportable detection limit shown (a concentration of 0.03 in this exa
0.50 U	The analyte was not detected above the reportable detection limit shown; detection limit exceeded an applicable stand
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
$_o$[ABC]	The criterion is applicable to total PCBs, and the individual Aroclors should be added for comparison.

Table B-4
Summary of OU-1 Area Soil Sample Analysis Results - Pesticides
Remedial Investigation, Former AMSF Site (BCP Site #828101)
12 Pixley Industrial Parkway, Gates, New York

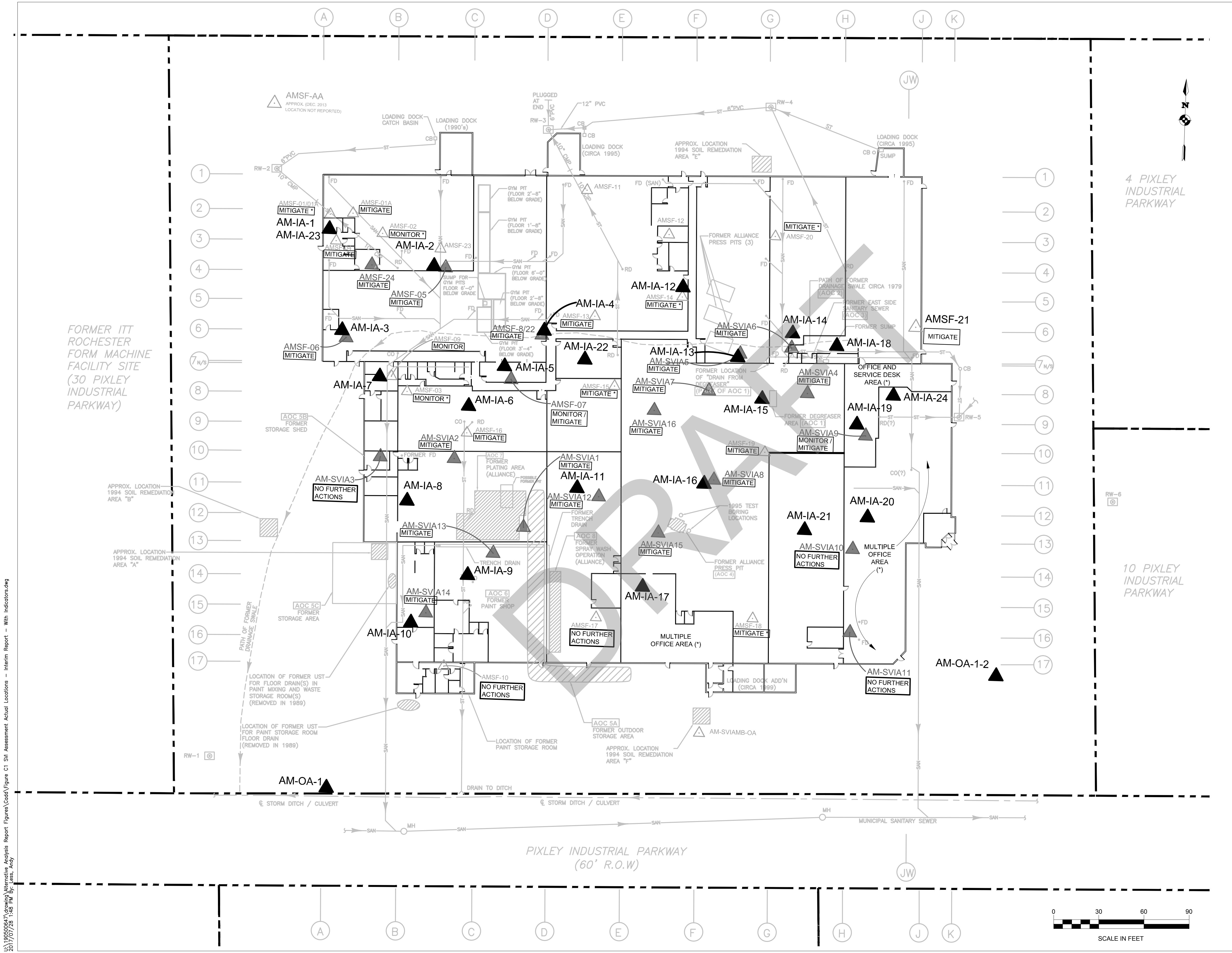
Area of Concern			AOC 2 - Former Drainage Swale
Sample Location			SW-TB-3
Sample Date			8-Nov-12
Sample ID			SW-TB-3-2
Sample Depth			4.5 ft
Sampling Company			STANTEC
Laboratory			SPECTRUM
Laboratory Work Order			L2407
Laboratory Sample ID			L2407-08
Sample Type	Units	NYSDEC Soil Cleanup Objectives (SCOs)	
Pesticides			
Alachlor	µg/kg	n/v	-
Aldrin	µg/kg	$5_n{}^A$ 680^B 190^C	1.9 U
BHC, alpha-	µg/kg	20^{AC} 3400^B	1.9 U
BHC, beta-	µg/kg	36^A 3000^B 90^C	1.9 U
BHC, delta-	µg/kg	$40_n{}^A$ $500000_c{}^B$ 250^C	1.9 U
Camphechlor (Toxaphene)	µg/kg	$100000_a{}^A$ $500000_c{}^B$ $1000000_d{}^C$	190 U
Chlordane (Total)	µg/kg	$100000_a{}^A$ $500000_c{}^B$ $1000000_d{}^C$	-
Chlordane, alpha-	µg/kg	94^A 24000^B 2900^C	1.9 U
Chlordane, trans-	µg/kg	n/v	1.9 U
DDD (p,p'-DDD)	µg/kg	$3.3_m{}^A$ 92000^B 14000^C	***3.7 U***
DDE (p,p'-DDE)	µg/kg	$3.3_m{}^A$ 62000^B 17000^C	***3.7 U***
DDT (p,p'-DDT)	µg/kg	$3.3_m{}^A$ 47000^B 136000^C	***3.7 U***
Dieldrin	µg/kg	$5_n{}^A$ 1400^B 100^C	3.7 U
Endosulfan I	µg/kg	$2400_j{}^A$ $200000_j{}^B$ 102000^C	1.9 U
Endosulfan II	µg/kg	$2400_j{}^A$ $200000_j{}^B$ 102000^C	3.7 U
Endosulfan Sulfate	µg/kg	$2400_j{}^A$ $200000_j{}^B$ $1000000_d{}^C$	3.7 U
Endrin	µg/kg	14^A 89000^B 60^C	3.7 U
Endrin Aldehyde	µg/kg	$100000_a{}^A$ $500000_c{}^B$ $1000000_d{}^C$	3.7 U
Endrin Ketone	µg/kg	$100000_a{}^A$ $500000_c{}^B$ $1000000_d{}^C$	3.7 U
Heptachlor	µg/kg	42^A 15000^B 380^C	1.9 U
Heptachlor Epoxide	µg/kg	$100000_a{}^A$ $500000_c{}^B$ $1000000_d{}^C$ $500000_a{}^D$ 20^E	1.9 U
Lindane (Hexachlorocyclohexane, gamma)	µg/kg	100^{AC} 9200^B	1.9 U
Methoxychlor (4,4'-Methoxychlor)	µg/kg	$100000_a{}^A$ $500000_c{}^B$ $1000000_d{}^C$ $500000_a{}^D$ 900000^E	19 U

Notes:

NYSDEC	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
^{A}	NYSDEC 6 NYCRR Part 375 - Unrestricted Use Soil Cleanup Objectives
^{B}	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
^{C}	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Groundwater
^{D}	Table 1 Supplemental Soil Cleanup Objectives - Commercial
^{E}	Table 1 Supplemental Soil Cleanup Objectives - Protection of Groundwater
15.2	Compound was detected at the concentration shown; the concentration did not exceed applicable standards.
6.5^A	Concentration detected exceeds the standard indicated by the letter code.
0.03 U	The analyte was not detected above the laboratory's reportable detection limit shown (a concentration of 0.03 in this example).
0.50 U	The analyte was not detected above the reportable detection limit shown; detection limit exceeded an applicable standard.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
$_a{}^D$	SCOs for organic contaminants (volatile organic compounds, semivolatile organic compounds, and pesticides) are capped at 100 ppm for residential use, 500 ppm for commercial use, 1000 ppm for industrial use. SCOs for metals are capped at 10,000 ppm.
$_a{}^A$	The SCOs for unrestricted use were capped at a maximum value of 100 mg/kg. See 6 NYCRR Part 375 TSD Section 9.3
$_c$	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
$_d$	The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg (Organics) and 10000 mg/kg (Inorganics). See 6 NYCRR Part 375 TSD Section 9.3.
$_j{}^{AB}$	This SCO is the sum of endosulfan I, endosulfan II, and endosulfan sulfate.
$_m$	For constituents where the calculated SCO was lower than the Contract Required Quantitation Limit (CRQL), the CRQL is used as the Track 1 SCO value.
$_n$	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 1 SCO value for this use of the site.
J	The reported result is an estimated value.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
UJ	Indicates estimated non-detect.

Appendix C

Summary of IRM SMP Indoor Air Monitoring Results



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Consultants

Legend

- △ PREVIOUS SOIL VAPOR INTRUSION SAMPLE LOCATION (RFM INVESTIGATION)
- ▲ (grey) PREVIOUS RI SOIL VAPOR INTRUSION SAMPLE LOCATION (FAMSF RI)
- ▲ IRM INDOOR AND OUTDOOR AIR SAMPLE LOCATION, FEBRUARY AND APRIL 2016

Notes

1. "The 'Mitigate', 'Mitigate/Monitor', 'Monitor', 'Take Reasonable & Practical Actions' and 'No Further Action' labels shown for the previous sample locations are the designations which the previous results for those locations yield when evaluated using Soil Vapor / Indoor Air Matrices 1 and 2 of the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006."
2. "* - An asterisk indicates that the previous sampling at this location included only sub-slab vapor sampling. The Matrix 1 and 2 designations shown are based on the assumption that indoor air concentrations at that location were within the range applicable to the designation shown."

Revision	By	Appd.	YY.MM.DD
RI Report	TW	MPS	2014.10
Issued	By	Appd.	YY.MM.DD

File Name:	APL	TW	TW	2014.10
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project

FORMER ALLIANCE METAL STAMPING & FABRICATION FACILITY
BROWNFIELD CLEANUP PROGRAM SITE # C828101

12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY
ALTERNATIVE ANALYSIS REPORT

Title

IRM SMP INDOOR AIR SAMPLE LOCATIONS, 2015-2016 HEATING SEASON

Project No.	Scale	
190500647	AS SHOWN	
Drawing No.	Sheet	Revision
FIG. C-1	of	

U:\190500647\drawing\Alternative Analysis Report Figures\Cadd\Figure C1 SVI Assessment Actual Locations – Interim Report – With Indicators.dwg
2017/07/28 1:48 PM By: Less, Andy

ORIGINAL SHEET – ANSI D

Table C-1
Summary of IRM SMP Indoor Air Sample Analysis Results, 2015-2016 Heating Season
Former Alliance Metal Stamping Fabrication Facility Site (#828101)
12 Pixley Industrial Parkway, Gates, New York

Sample Location			AM-IA-1	AM-IA-2		AM-IA-3	AM-IA-4	AM-IA-5	AM-IA-6	AM-IA-7	AM-IA-8	AM-IA-9	AM-IA-10	AM-IA-11	AM-IA-12	AM-IA-13		AM-IA-14		AM-IA-15				AM-IA-16	AM-IA-17
Sample Date			12-Feb-16	12-Feb-16	12-Feb-16	12-Feb-16	12-Feb-16	12-Feb-16	12-Feb-16	12-Feb-16	12-Feb-16	12-Feb-16	12-Feb-16	12-Feb-16	12-Feb-16	12-Feb-16	13-Apr-16	12-Feb-16	13-Apr-16	12-Feb-16	12-Feb-16	13-Apr-16	13-Apr-16	12-Feb-16	12-Feb-16
Sample ID			AM-IA-1	AM-IA-2	AM-IA-DUP2	AM-IA-3	AM-IA-4	AM-IA-5	AM-IA-6	AM-IA-7	AM-IA-8	AM-IA-9	AM-IA-10	AM-IA-11	AM-IA-12	AM-IA-13	AM-IA-13-2	AM-IA-14	AM-IA-14-2	AM-IA-15	AM-IA-DUP1	AM-IA-15-2	AM-IA-DUP1-2	AM-IA-16	AM-IA-17
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM
Laboratory Work Order			SC18245	SC18245	SC18245	SC18245	SC18245	SC18245	SC18245	SC18245	SC18245	SC18245	SC18245	SC18245	SC18245	SC18245	SC20314	SC18245	SC20314	SC18245	SC18245	SC20314	SC20314	SC18245	SC18245
Laboratory Sample ID			SC18245-10	SC18245-25	SC18245-15	SC18245-18	SC18245-19	SC18245-20	SC18245-01	SC18245-03	SC18245-16	SC18245-23	SC18245-21	SC18245-05	SC18245-24	SC18245-13	SC20314-07	SC18245-04	SC20314-04	SC18245-11	SC18245-17	SC20314-05	SC20314-06	SC18245-12	SC18245-22
Sample Type	Units	NYSDOH			Field Duplicate																Field Duplicate		Field Duplicate		
Site-Related Volatile Organic Compounds																									
Tetrachloroethene (PCE)	µg/m3	30[A]	1.00 D	17.16 J	1.76 J	3.66	5.29	2.03	0.75 J	2.51	0.61	0.54	4.27	1.08	20.75	**41.23[A]**	11.73	**51.88[A]**	28.82	10.78 J	**40.35 J[A]**	**30.79[A]**	**31.06[A]**	23.33	5.63
Trichloroethene (TCE)	µg/m3	2[A]	0.32 D	0.45 D	0.54	1.02	1.13	1.34	0.59 J	0.11 J	0.38	0.32	0.21	1.18	0.75	0.75	0.48	1.18	0.81	0.81	0.97	0.91	0.70	1.07	1.02
Dichloroethene, cis-1,2-	µg/m3	n/v	0.58 U D AirP	0.56 U D AirP	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	1.51	0.71	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Dichloroethene, trans-1,2-	µg/m3	n/v	0.58 U D AirP	0.56 U D AirP	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Vinyl chloride	µg/m3	n/v	0.15 U D AirP	0.14 U D AirP	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Trichloroethane, 1,1,1-	µg/m3	n/v	1.20 D	1.76 D	2.07	5.24	5.07	10.31	15.44	1.20	1.47	2.89	1.91	1.04	1.86	2.29	1.36	2.35	1.58	2.46	2.67	1.86	1.86	2.62	2.24
Dichloroethane, 1,1-	µg/m3	n/v	0.24 U D AirP	0.23 U D AirP	0.12 J	0.24	0.24	0.20	0.32	0.16 U	0.40	4.62	2.43	0.32	0.32	0.49	0.49	0.24	0.24	0.20	0.20	0.20	0.20	0.20	0.28
Dichloroethene, 1,1-	µg/m3	n/v	0.23 D	0.28 D	0.28	0.63	0.71	0.79	1.19	0.20	0.28	1.27	0.52	0.24	0.32	0.32	0.20	0.28	0.16 U	0.16 U	0.20	0.16	0.16	0.24	0.16 U
Chloroethane (Ethyl Chloride)	µg/m3	n/v	0.39 U D AirP	0.37 U D AirP	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Other Volatile Organic Compounds																									
Acetone	µg/m3	n/v	1.75 U D AirP	1.66 U D AirP	1.19 U	803.18 D DR	784.17 D DR	226.22 D DR	17.09	11.33	31.37 D DR	1.19 U	20.74	149.47 D DR	1634.88 D DR	1038.43 D DR	-	444.36 D DR	-	525.16 D DR	594.07 D DR	-	-	370.70 D DR	170.14 D DR
Acrylonitrile	µg/m3	n/v	0.32 U D AirP	0.30 U D AirP	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	-	0.22 U	-	0.22 U	0.22 U	-	-	0.22 U	0.22 U
Benzene	µg/m3	n/v	1.03 D	1.16 J	2.04 J	0.86	1.24	1.21	1.12	0.89	1.91	13.62	2.87	3.38	1.28	1.79	-	2.36	-	1.18 J	2.17 J	-	-	1.95	2.65
Benzyl Chloride	µg/m3	n/v	0.76 U D AirP	0.72 U D AirP	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	-	0.52 U	-	0.52 U	0.52 U	-	-	0.52 U	0.52 U
Bromodichloromethane	µg/m3	n/v	0.98 U D AirP	0.94 U D AirP	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	-	0.67 U	-	0.67 U	0.67 U	-	-	0.67 U	0.67 U
Bromoform (Tribromomethane)	µg/m3	n/v	1.52 U D AirP	1.45 U D AirP	1.03 U	1.03 U	1.03 U	1.03 U	1.03 U	1.03 U	1.03 U	1.03 U	1.03 U	1.03 U	1.03 U	1.03 U	-	1.03 U	-	1.03 U	1.03 U	-	-	1.03 U	1.03 U
Bromomethane (Methyl bromide)	µg/m3	n/v	0.57 U D AirP	0.54 U D AirP	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	-	0.39 U	-	0.39 U	0.39 U	-	-	0.39 U	0.39 U
Butadiene, 1,3-	µg/m3	n/v	0.32 U D AirP	0.31 U D AirP	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	-	0.22 U	-	0.22 U	0.22 U	-	-	0.22 U	0.22 U
Butylbenzene, n-	µg/m3	n/v	0.81 U D AirP	0.77 U D AirP	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	-	0.55 U	-	0.55 U	0.55 U	-	-	0.55 U	0.55 U
Butylbenzene, sec- (2-Phenylbutane)	µg/m3	n/v	0.81 U D AirP	0.77 U D AirP	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	-	0.55 U	-	0.55 U	0.55 U	-	-	0.55 U	0.55 U
Carbon Disulfide	µg/m3	n/v	2.29 U D B AirP	2.18 U D B AirP	1.56 U B	1.56 U B	1.56 U B	1.56 U B	1.56 U B	1.56 U B	1.56 U B	1.56 U B	1.56 U B	1.56 U B	1.56 U B	1.56 U B	-	1.56 U B	-	1.56 U B	1.56 U B	-	-	1.56 U B	1.56 U B
Carbon Tetrachloride (Tetrachloromethane)	µg/m3	n/v	0.46 D	0.44 J	0.82 J	0.82	0.75	0.63	1.20	1.01	0.63	0.88	0.63	0.25 U	0.63	0.69	-	0.25 NJ	-	0.69	0.69	-	-	0.75	0.82
Chlorobenzene (Monochlorobenzene)	µg/m3	n/v	0.68 U D AirP	0.64 U D AirP	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	-	0.46 U	-	0.46 U	0.46 U	-	-	0.46 U	0.46 U
Chloroform (Trichloromethane)	µg/m3	n/v	0.72 U D AirP	0.68 U D AirP	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	-	0.49 U	-	0.49 U	0.49 U	-	-	0.49 U	0.49 U
Chloromethane	µg/m3	n/v	0.30 U D AirP	0.29 U D AirP	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	-	0.21 U	-	0.21 U	0.21 U	-	-	0.21 U	0.21 U
Cyclohexane	µg/m3	n/v	0.51 U D AirP	0.48 U D AirP	1.27	1.41	1.24	0.34 U	0.34 U	0.34 U	0.69	2.48	0.76	3.13	4.54	4.47	-	12.67	-	14.63	16.38	-	-	11.60	3.65
Dibromochloromethane	µg/m3	n/v	1.25 U D AirP	1.19 U D AirP	0.85 U	0.85 U	0.85 U	0.85 U	0.85 UJ	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	-	0.85 U	-	0.85 U	0.85 U	-	-	0.85 U	0.85 U
Dichlorobenzene, 1,2-	µg/m3	n/v	0.88 U D AirP	0.84 U D AirP	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	-	0.60 U	-	0.60 U	0.60 U	-	-	0.60 U	0.60 U
Dichlorobenzene, 1,3-	µg/m3	n/v	0.88 U D AirP	0.84 U D AirP	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	-	0.60 U	-	0.60 U	0.60 U	-	-	0.60 U	0.60 U
Dichlorobenzene, 1,4-	µg/m3	n/v	0.88 U D AirP	0.84 U D AirP	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	-	0.60 U	-	0.60 U	0.60 U	-	-	0.60 U	0.36 J
Dichlorodifluoromethane (Freon 12)	µg/m3	n/v	3.78 D	3.46 D	4.20	4.85	4.30	0.49 U	0.49 U	0.49 U	3.66	0.49 U	0.49 U	0.49 U	4.45	4.99	-	5.04	-	0.49 UJ	5.04 J	-	-	5.04	5.54
Dichloroethane, 1,2-	µg/m3	n/v	0.60 U D AirP	0.57 U D AirP	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.28 J	0.32 J	-	0.57	-	0.40 UJ	0.65 J	-	-	0.57	0.61
Dichloropropane, 1,2-	µg/m3	n/v	0.68 U D AirP	0.65 U D AirP	0.46 U	0.46 U	0.46 U	0.46 U	0.46 UJ	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	-	0.46 U	-	0.46 U	0.46 U	-	-	0.46 U	0.46 U
Dichloropropene, cis-1,3-	µg/m3	n/v	0.67 U D AirP	0.64 U D AirP	0.45 U	0.45 U	0.45 U	0.45 U	0.45 UJ	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	-	0.45 U	-	0.45 U	0.45 U	-	-	0.45 U	0.45 U
Dichloropropene, trans-1,3-	µg/m3	n/v	0.67 U D AirP	0.64 U D AirP	0.45 U	0.45 U	0.45 U	0.45 U	0.45 UJ	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	-	0.45 U	-	0.45 U	0.45 U	-	-	0.45 U	0.45 U
Dichlorotetrafluoroethane, 1,2- (Freon 114)	µg/m3	n/v	1.03 U D AirP	0.98 U D AirP	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	-	0.70 U	-	0.70 U	0.70 U	-	-	0.70 U	0.70 U
Dioxane, 1,4-	µg/m3	n/v	2.65 U D AirP	2.52 U D AirP	1.80 U	1.80 U	1.80 U	1.80 U	1.80 UJ	1.80 U	1.80 U	1.80 U	1.80 U	1.80 U	1.73 J	1.80 U	-	1.80 U	-	1.80 U	1.80 U	-	-	1.80 U	1.80 U
Ethanol	µg/m3	n/v	258.31 D DR AirP	335.62 D DR AirP	307.33 D DR	148.20 D DR	127.27 D DR	48.46 D DR	5.86	4.19	12.44	37.90	24.89	11.63	85.98 D DR	97.29 D DR	-	132.74 D DR	-	148.20 D DR	170.45 D DR	-	-	140.47 D DR	116.15 D DR
Ethyl Acetate	µg/m3	n/v	5.87 D	0.50 UJ	9.19 J	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	-	2.99	-	43.96 J	0.36 UJ	-	-	0.36 U	0.36 U
Ethylbenzene	µg/m3	n/v	3.63 D	3.64 J	9.54 J	0.43 U	0.52	0.43 U	0.91	0.43 U	0.61	7.59	1.00	0.39 J	0.48	0.69	-	1.34	-	0.43 UJ	1.34 J	-	-	1.30	1.30
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/m3	n/v	1.13 U D AirP	1.08 U D AirP	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	-	0.77 U	-	0.77 U	0.77 U	-	-	0.77 U	0.77 U
Ethyltoluene, 4-	µg/m3	n/v	6.00 D	2.00 J	20.01 J	0.49 U	0.74	0.49 U	0.49 U	0.49 U	0.49 U	3.79	0.49 U	0.49 U	0.49 U	0.88	-	1.57	-	0.49 UJ	2.51 J	-	-	1.97	0.49 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	µg/m3	n/v	1.57 U D AirP	1.49 U D AirP	1.07 U	1.07 U	1.07 U	1.07 U	1.07 U	1.07 U	1.07 U	1.07 U	1.07 U	1.07 U	1.07 U	1.07 U	-	1.07 U	-	1.07 U	1.07 U	-	-	1.07 U	1.07 U
Hexane (n-Hexane)	µg/m3	n/v	3.01 D	3.91 D	4.83	4.87	5.11	2.01	0.71 J	1.02 J	2.22	8.74	5.15	10.89	15.90	8.67	-	5.43	-	1.76 UJ	5.46 J	-	-	4.79	6.03
Hexanone, 2- (Methyl Butyl Ketone)	µg/m3	n/v	0.60 U D AirP	0.57 U D AirP	0.41 U	0.41 U	0.41 U	0.41 U	0.41 UJ	0.41 U	0.41 U	0.41 U	0.41 U	1.27	1.39	0.41	-	0.41 U	-	0.41 U	0.41 U	-	-	0.41 U	0.41 U
Isopropyl Alcohol (2-Propanol)	µg/m3	n/v	11.68 D	20.86 D	23.07 D DR	37.30 D DR	34.36 D DR	31.41 D DR	18.21	4.71	750.92 D DR	20.42	12.07	21.89 D B DR	55.95 D DR	173.99 D DR	-	618.40 D DR	-	898.16 D DR	1030.67 D DR	-	-	741.10 D DR	227.73 D B DR
Isopropylbenzene	µg/m3	n/v	0.94 D	0.69 J	2.26 J	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49	0.49 U	0.49 U	0.39 J	0.59	-	1.28	-	0.49 UJ	1.72 J	-	-	1.67	0.49 U
Isopropyltoluene, p- (Cymene)	µg/m3	n/v	0.79 U D AirP	0.75 U D AirP	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	-	0.54 U	-	0.54 U	0.54 U	-	-	0.54 U	0.54 U
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/m3	n/v	4.22 D	4.57 D	5.78	2.74	3.45	2.24	0.29 U	0.97	2.80	7.70	10.79	22.82	5.25	6.37	-	6.34	-	5.31	4.28	-	-	4.63	4.01
Methyl Isobutyl Ketone (MIBK)	µg/m3	n/v	1.32 D	1.26 J	2.87 J	0.45	0.57	0.41 U	0.41 UJ	0.41 U	0.41 U	2.01 B	0.41 U	0.41 U	1.35 B	0.98	-	1.68	-	0.41 UJ	3.69 J	-	-	2.29	0.66 B
Methyl tert-butyl ether (MTBE)	µg/m3	n/v	0.53 U D AirP	0.51 U D AirP	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	-	0.36 U	-	0.36 U	0.36 U	-	-	0.36 U	0.36 U
Methylene Chloride (Dichloromethane)	µg/m3	60[A]	15.07 D B AirP	18.61 D B AirP	21.49	22.57 D DR	20.14 D DR	12.26 B	0.35 U	1.88	2.01	0.35 U	2.36 B	7.54 B	**71.53 D DR[A]**	32.64 D DR	-	20.24 B	-	17.05 B	17.43 B	-	-	16.22 B	8.47 B
Naphthalene	µg/m3	n/v	3.85 U D AirP	3.66 U D AirP	2.09 J	2.62 U	2.62 U	2.62 U	2.62 U	2.62 U	2.62 U	1.36 J	2.62 U	2.62 U	2.62 U	2.62 U	-	2.62 U	-	2.62 U	1.52 J	-	-	0.89 J	1.94 J
n-Heptane	µg/m3	n/v	0.90 D	1.09 D	1.56	1.68	1.80	1.27	0.41 UJ	0.41 U	0.98	2.54	1.35	2.83	6.15	10.29	-	40.90	-	17.50 J	42.62 J	-	-	25.00 D DR	8.20
Propene	µg/m3	n/v	0.25 U D AirP	0.24 U D AirP	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	-	0.17 U	-	0.17 U	0.17 U	-	-	0.17 U	0.17 U
Styrene	µg/m3	n/v	1.06 D	0.60 UJ	3.83 J	0.43 U	1.23	0.43 U	0.43 U	0.43 U	0.43 U	2.55	0.43 U	0.43 U	1.36	2.98	-	2.76	-	0.43 UJ	3.62 J	-	-	2.64	1.57
Tetrachloroethane, 1,1,1,2-	µg/m3	n/v	1.01 U D AirP	0.96 U D AirP	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	-	0.69 U	-	0.69 U	0.69 U	-	-	0.69 U	0.69 U
Tetrachloroethane, 1,1,2,2-	µg/m3	n/v	1.01 U D AirP	0.96 U D AirP	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	-	0.69 U	-	0.69 U	0.21 J	-	-	0.69 U	0.69 U
Tetrahydrofuran	µg/m3	n/v	0.43 U D AirP	0.66 D	0.29 U	1.39	1.36	0.29 U	0.29 U	0.29 U	1.83	7.61	7.99	0.86	3.75	2.54	-	1.80	-	2.09	0.29 U	-	-	1.53	2.54
Toluene	µg/m3	n/v	43.65 D	42.14 D	38.76 D DR	7.38	12.04	3.65	3.20 J	0.53	25.96	27.39	6.13	7.22	15.35	10.16	-	19.94	-	3.42 J	30.82 J	-	-	20.70	11.48
Trichlorobenzene, 1,2,4-	µg/m3	n/v	1.09 U D AirP	1.04 U D AirP	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	-	0.74 U	-	0.74 U	0.74 U	-	-	0.74 U	0.74 U
Trichloroethane, 1,1,2-	µg/m3	n/v	0.80 U D AirP	0.76 U D AirP	0.55 U	0.55 U	0.55 U	0.55 U	0.55 UJ	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	-	0.55 U	-	0.55 U	0.55 U	-	-	0.55 U	0.55 U
Trichlorofluoromethane (Freon 11)	µg/m3	n/v	6.18 D	7.87 D	9.33	10.12	9.67	3.26	1.80	1.85	2.47	2.36	2.47	2.47	7.59	8.26	-	6.91	-	6.86	7.42	-	-	6.35	3.32
Trichlorotrifluoroethane (Freon 113)	µg/m3	n/v	1.13 U D AirP	1.07 U D AirP	0.77 U	1.00	1.00	0.84	0.77 U	1.07	0.77 U	1.00	0.77 U	0.84	0.77	0.77 U	-	0.77	-	0.77 U	0.84	-	-	0.77 U	0.77 U
Trimethylbenzene, 1,2,4-	µg/m3	n/v	7.42 D	0.89 J	33.87 J	0.49 U	1.77	0.49 U	0.98	0.49 U	0.49 U	12.49	0.49 U	0.49 U	1.03	2.26	-	2.80	-	0.49 U	8.01	-	-	5.90	3.74
Trimethylbenzene, 1,3,5-	µg/m3	n/v	5.56 D	1.10 J	19.07 J	0.49 U	0.84	0.49 U	0.49 U	0.49 U	0.49 U	3.79	0.49 U	0.49 U	0.64	1.08	-	1.38	-	0.49 UJ	2.80 J	-	-	2.36	1.38
Xylene, m & p-	µg/m3	n/v	17.51 D	10.67 J	50.29 J	0.87 U	1.56	0.87 U	4.68	0.87 U	1.78	29.78	2.69	1.91	1.21	2.04	-	3.86	-	0.87 UJ	4.64 J	-	-	4.16	4.99
Xylene, o-	µg/m3	n/v	6.33 D	2.97 J	19.25 J	0.48	0.87	0.43 U	2.12 J	2.17 U	0.82 J	10.32	0.82	1.00	0.61	1.08 J	-	1.78	-	0.43 UJ	2.38 J	-	-	2.30	1.82

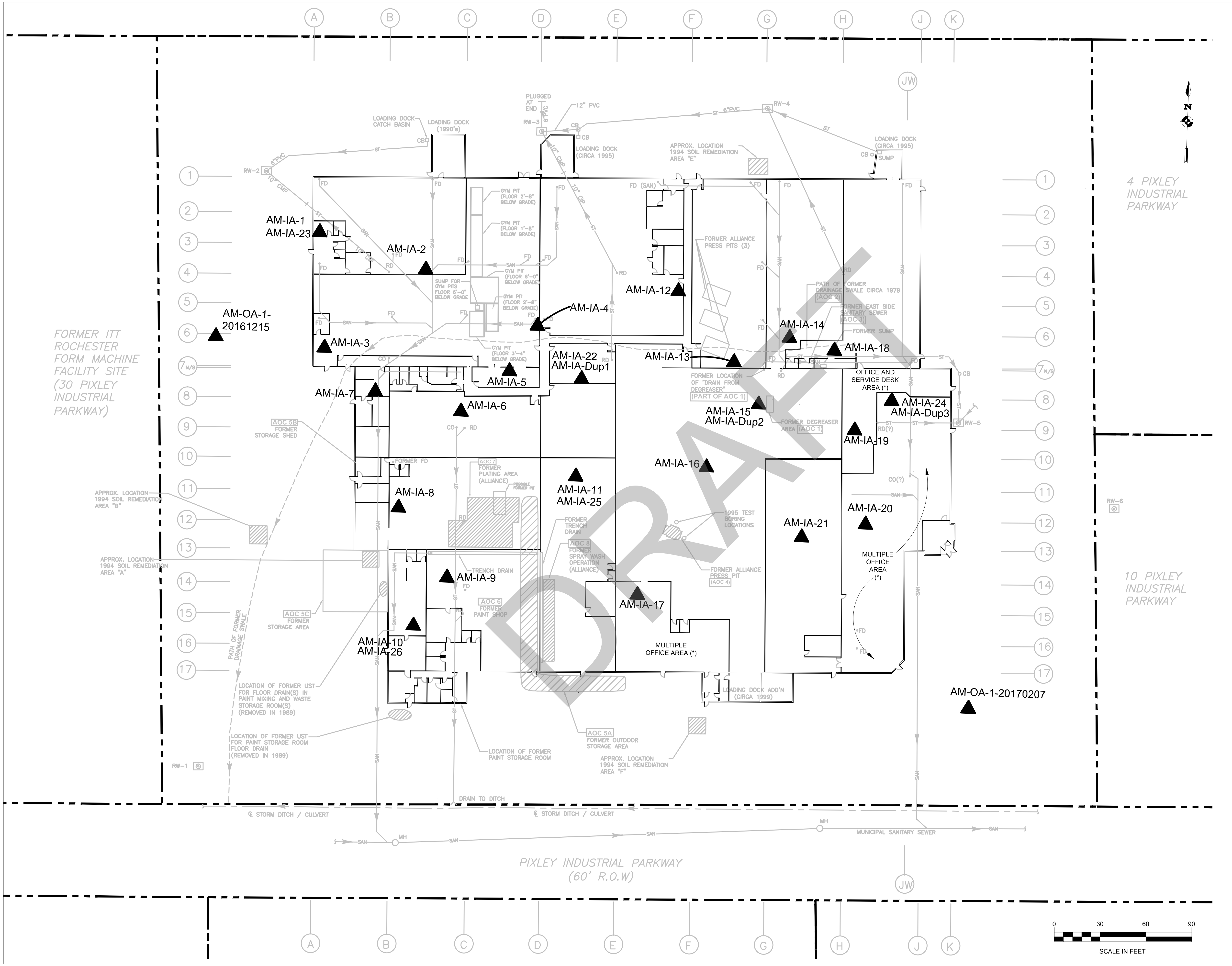
See notes on last page.

Table C-1
Summary of IRM SMP Indoor Air Sample Analysis Results, 2015-2016 Heating Season
Former Alliance Metal Stamping Fabrication Facility Site (#828101)
12 Pixley Industrial Parkway, Gates, New York

Sample Location			AM-IA-18		AM-IA-19		AM-IA-20	AM-IA-21	AM-IA-22		AM-IA-23	AM-IA-24	AM-OA-1	AM-OA-1-2
Sample Date			12-Feb-16	13-Apr-16	12-Feb-16	13-Apr-16	12-Feb-16	12-Feb-16	12-Feb-16	13-Apr-16	12-Feb-16	13-Apr-16	12-Feb-16	13-Apr-16
Sample ID			AM-IA-18	AM-IA-18-2	AM-IA-19	AM-IA-19-2	AM-IA-20	AM-IA-21	AM-IA-22	AM-IA-22-2	AM-IA-23	AM-IA-24-2	AM-OA-1	AM-OA-1-2
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM
Laboratory Work Order			SC18245	SC20314	SC18245	SC20314	SC18245	SC18245	SC18245	SC20314	SC18245	SC20314	SC18245	SC20314
Laboratory Sample ID			SC18245-06	SC20314-01	SC18245-02	SC20314-02	SC18245-14	SC18245-08	SC18245-07	SC20314-08	SC18245-09	SC20314-03	SC18245-26	SC20314-09
Sample Type	Units	NYSDOH												
Site-Related Volatile Organic Compounds														
Tetrachloroethene (PCE)	µg/m3	30[A]	**1356.24 D DR[A]**	**30.72[A]**	**50.18 D J DR[A]**	2.11 J D AirP	2.24	4.14	12.95	5.29	1.27 D	0.61	0.27 U	0.27 U
Trichloroethene (TCE)	µg/m3	2[A]	**2.36[A]**	1.50	0.70	0.28 J D AirP	0.27	0.48	**3.44[A]**	1.77	0.40 D	0.21	0.21 U	0.21 U
Dichloroethene, cis-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	1.03 UJ D AirP	0.40 U	0.40 U	0.40 U	0.40 U	0.74 U D AirP	0.40 U	0.40 U	0.40 U
Dichloroethene, trans-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	1.03 UJ D AirP	0.40 U	0.40 U	0.40 U	0.40 U	0.74 U D AirP	0.40 U	0.40 U	0.40 U
Vinyl chloride	µg/m3	n/v	0.10 U	0.10 U	0.10 U	0.27 UJ D AirP	0.10 U	0.10 U	0.10 U	0.10 U	0.19 U D AirP	0.10 U	0.10 U	0.10 U
Trichloroethane, 1,1,1-	µg/m3	n/v	1.75	0.65	1.09	1.41 UJ D AirP	0.38 J	0.44 J	4.31	0.82	1.43 D	0.55 U	0.55 U	0.55 U
Dichloroethane, 1,1-	µg/m3	n/v	0.16 U	0.16 U	0.12 J	0.42 UJ D AirP	0.40 U	0.16 U	0.28	0.12 J	0.30 U D AirP	0.16 U	0.16 U	0.16 U
Dichloroethene, 1,1-	µg/m3	n/v	0.28	0.16 U	0.20	0.41 UJ D AirP	0.16 U	0.16 U	0.83	0.16	0.30 D	0.16 U	0.16 U	0.16 U
Chloroethane (Ethyl Chloride)	µg/m3	n/v	0.26 U	0.26 U	0.26 U	0.68 UJ D AirP	0.26 U	0.26 U	0.26 U	0.26 U	0.49 U D AirP	0.26 U	0.26 U	0.26 U
Other Volatile Organic Compounds														
Acetone	µg/m3	n/v	1306.95 D DR	-	198.66 D DR	-	1.19 U	1.19 U B	976.65 D DR	-	2.22 U D AirP	-	22.19	-
Acrylonitrile	µg/m3	n/v	3.08	-	0.22 U	-	0.22 U	0.22 U	0.22 U	-	0.41 U D AirP	-	0.22 U	-
Benzene	µg/m3	n/v	26.93 D DR	-	1.72	-	1.12	1.24	1.44	-	1.19 D	-	0.89	-
Benzyl Chloride	µg/m3	n/v	0.52 U	-	0.52 U	-	0.52 U	0.52 U	0.52 U	-	0.96 U D AirP	-	0.52 U	-
Bromodichloromethane	µg/m3	n/v	0.67 U	-	0.67 U	-	0.67 U	0.67 U	0.67 U	-	1.25 U D AirP	-	0.67 U	-
Bromoform (Tribromomethane)	µg/m3	n/v	1.03 U	-	1.03 U	-	1.03 U	1.03 U	1.03 U	-	1.93 U D AirP	-	1.03 U	-
Bromomethane (Methyl bromide)	µg/m3	n/v	0.39 U	-	0.39 U	-	0.39 U	0.39 U	0.39 U	-	0.73 U D AirP	-	0.39 U	-
Butadiene, 1,3-	µg/m3	n/v	0.22 U	-	0.22 U	-	0.22 U	0.22 U	0.22 U	-	0.41 U D AirP	-	0.22 U	-
Butylbenzene, n-	µg/m3	n/v	0.55 U	-	0.55 U	-	0.55 U	0.55 U	0.55 U	-	1.03 U D AirP	-	0.55 U	-
Butylbenzene, sec- (2-Phenylbutane)	µg/m3	n/v	0.55 U	-	0.55 U	-	0.55 U	0.55 U	0.55 U	-	1.03 U D AirP	-	0.55 U	-
Carbon Disulfide	µg/m3	n/v	1.56 U B	-	1.56 U B	-	1.56 U B	1.56 U B	1.56 U B	-	2.91 U D B AirP	-	1.56 U B	-
Carbon Tetrachloride (Tetrachloromethane)	µg/m3	n/v	0.82	-	0.69	-	0.75	0.88	0.63	-	0.47 D	-	0.82	-
Chlorobenzene (Monochlorobenzene)	µg/m3	n/v	0.46 U	-	0.46 U	-	0.46 U	0.46 U	0.46 U	-	0.86 U D AirP	-	0.46 U	-
Chloroform (Trichloromethane)	µg/m3	n/v	0.49 U	-	0.49	-	0.49 U	0.49 U	0.49 U	-	0.91 U D AirP	-	0.49 U	-
Chloromethane	µg/m3	n/v	0.21 U	-	0.21 U	-	0.21 U	0.21 U	0.21 U	-	0.39 U D AirP	-	0.21 U	-
Cyclohexane	µg/m3	n/v	16.25	-	3.41	-	0.48	1.79	4.27	-	0.64 U D AirP	-	0.34 U	-
Dibromochloromethane	µg/m3	n/v	0.85 U	-	0.85 U	-	0.85 U	0.85 U	0.85 U	-	1.59 U D AirP	-	0.85 U	-
Dichlorobenzene, 1,2-	µg/m3	n/v	0.60 U	-	0.60 U	-	0.60 U	0.60 U	0.60 U	-	1.12 U D AirP	-	0.60 U	-
Dichlorobenzene, 1,3-	µg/m3	n/v	0.60 U	-	0.60 U	-	0.60 U	0.60 U	0.60 U	-	1.12 U D AirP	-	6.25	-
Dichlorobenzene, 1,4-	µg/m3	n/v	0.54 J	-	4.15	-	2.04	2.22	0.60 U	-	1.12 U D AirP	-	0.60 U	-
Dichlorodifluoromethane (Freon 12)	µg/m3	n/v	6.63	-	20.22	-	17.65	0.49 U	4.75	-	4.81 D	-	5.39	-
Dichloroethane, 1,2-	µg/m3	n/v	0.40 U	-	0.89	-	0.57	1.46	0.40 U	-	0.76 U D AirP	-	0.40 U	-
Dichloropropane, 1,2-	µg/m3	n/v	0.46 U	-	0.46 U	-	0.46 U	0.46 U	0.46 U	-	0.86 U D AirP	-	0.46 U	-
Dichloropropene, cis-1,3-	µg/m3	n/v	0.45 U	-	0.45 U	-	0.45 U	0.45 U	0.45 U	-	0.85 U D AirP	-	0.45 U	-
Dichloropropene, trans-1,3-	µg/m3	n/v	0.45 U	-	0.45 U	-	0.45 U	0.45 U	0.45 U	-	0.85 U D AirP	-	0.45 U	-
Dichlorotetrafluoroethane, 1,2- (Freon 114)	µg/m3	n/v	0.70 U	-	0.70 U	-	0.70 U	0.70 U	0.70 U	-	1.31 U D AirP	-	0.70 U	-
Dioxane, 1,4-	µg/m3	n/v	1.80 U	-	1.80 U	-	1.80 U	1.80 U	1.80 U	-	3.37 U D AirP	-	1.80 U	-
Ethanol	µg/m3	n/v	135.75 D DR	-	869.21 D DR	-	1312.29 D DR	130.48 D DR	119.16 D DR	-	312.99 D DR AirP	-	4.36	-
Ethyl Acetate	µg/m3	n/v	11.03	-	0.36 U	-	10.70	0.36 U	0.36 U	-	6.05 D	-	0.36 U	-
Ethylbenzene	µg/m3	n/v	15.82	-	1.00	-	0.43 U	0.61	0.56	-	3.97 D	-	0.43 U	-
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/m3	n/v	0.77 U	-	0.77 U	-	0.77 U	0.77 U	0.77 U	-	1.44 U D AirP	-	0.77 U	-
Ethyltoluene, 4-	µg/m3	n/v	5.80	-	0.49 U	-	0.49 U	0.79	0.49 U	-	5.51 D	-	0.49 U	-
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	µg/m3	n/v	1.07 U	-	1.07 U	-	1.07 U	1.07 U	1.07 U	-	1.99 U D AirP	-	1.07 U	-
Hexane (n-Hexane)	µg/m3	n/v	39.49 D J DR	-	2.26	-	1.76 U	1.76 U	7.79	-	3.30 U D AirP	-	0.49 J	-
Hexanone, 2- (Methyl Butyl Ketone)	µg/m3	n/v	0.41 U	-	5.70	-	0.41 U	0.41 U	0.41 U	-	0.77 U D AirP	-	0.41 U	-
Isopropyl Alcohol (2-Propanol)	µg/m3	n/v	52.02 D DR	-	89.33 D DR	-	22.99	89.82 D DR	152.88 D DR	-	13.91 D	-	8.74	-
Isopropylbenzene	µg/m3	n/v	1.52	-	0.49 U	-	0.49 U	0.34 J	0.64	-	1.29 D	-	0.49 U	-
Isopropyltoluene, p- (Cymene)	µg/m3	n/v	0.54 U	-	0.54 U	-	0.48 J	0.54 U	0.54 U	-	1.00 U D AirP	-	0.54 U	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/m3	n/v	5.75	-	18.75	-	2.65	2.60	22.03	-	3.48 D	-	6.84	-
Methyl Isobutyl Ketone (MIBK)	µg/m3	n/v	0.41 U	-	0.66	-	0.49	0.45	1.02	-	1.61 D	-	0.41 U B	-
Methyl tert-butyl ether (MTBE)	µg/m3	n/v	0.36 U	-	0.36 U	-	0.36 U	0.36 U	0.36 U	-	0.67 U D AirP	-	0.36 U	-
Methylene Chloride (Dichloromethane)	µg/m3	60[A]	9.97 B	-	9.31	-	3.72	8.16 B	27.43 D DR	-	16.35 D B AirP	-	0.35 U	-
Naphthalene	µg/m3	n/v	0.79 J	-	2.62 U	-	2.62 U	0.58 J	2.62 U	-	4.89 U D AirP	-	2.62 U	-
n-Heptane	µg/m3	n/v	83.60 D DR	-	11.76	-	1.43	6.39	10.04	-	1.15 D	-	0.41 U	-
Propene	µg/m3	n/v	0.17 U	-	0.17 U	-	0.17 U	0.17 U	0.17 U	-	0.32 U D AirP	-	0.17 U	-
Styrene	µg/m3	n/v	1.57	-	0.94	-	0.43 U	1.19	1.06	-	0.80 D	-	0.43 U	-
Tetrachloroethane, 1,1,1,2-	µg/m3	n/v	0.69 U	-	0.69 U	-	0.69 U	0.69 U	0.69 U	-	1.28 U D AirP	-	0.69 U	-
Tetrachloroethane, 1,1,2,2-	µg/m3	n/v	0.69 U	-	0.69 U	-	0.69 U	0.69 U	0.69 U	-	1.28 U D AirP	-	0.69 U	-
Tetrahydrofuran	µg/m3	n/v	2.24	-	0.29 U	-	0.29 U	0.29 U	19.46	-	0.55 U D AirP	-	0.29 U	-
Toluene	µg/m3	n/v	51.93 D DR	-	7.94	-	1.77	6.02	9.90	-	35.11 D	-	0.38	-
Trichlorobenzene, 1,2,4-	µg/m3	n/v	0.74 U	-	0.74 U	-	0.74 U	0.74 U	0.74 U	-	1.39 U D AirP	-	0.74 U	-
Trichloroethane, 1,1,2-	µg/m3	n/v	0.55 U	-	0.55 U	-	0.55 U	0.55 U	0.55 U	-	1.02 U D AirP	-	0.55 U	-
Trichlorofluoromethane (Freon 11)	µg/m3	n/v	29.39	-	67.44 D DR	-	41.08	11.63	7.25	-	7.59 D	-	2.14	-
Trichlorotrifluoroethane (Freon 113)	µg/m3	n/v	0.77 U	-	0.77 U	-	0.77 U	0.77	0.77	-	1.43 U D AirP	-	0.92	-
Trimethylbenzene, 1,2,4-	µg/m3	n/v	20.60	-	1.77	-	0.69	2.21	2.02	-	9.73 D	-	0.49 U	-
Trimethylbenzene, 1,3,5-	µg/m3	n/v	7.18	-	0.79	-	0.49 U	0.79	0.49 U	-	8.46 D	-	0.49 U	-
Xylene, m & p-	µg/m3	n/v	52.02	-	2.64	-	0.87 U	1.65	1.69	-	18.25 D	-	0.87 U	-
Xylene, o-	µg/m3	n/v	21.63	-	1.17 J	-	0.43 U	0.74	0.95	-	8.37 D	-	0.43 U	-

Notes:

NYSDOH	New York State Department of Health
[A]	Current NYSDOH Air Guideline Value
6.5[A]	Concentration exceeds the NYSDOH Air Guideline Value.
15.2	Measured concentration did not exceed the NYSDOH Air Guideline Value.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No NYSDOH guideline value has veen established.
AirP	A low volume of sample collected necessitated pressurizing the Summa can in laboratory prior to analysis, and this resulted in elevated reporting limits.
B	Indicates analyte was found in associated blank as well as in the sample.
D	Result was obtained from the analysis of a dilution.
DR	Sample dilution required for target analyte concentrations to be within the instrument calibration range.
J	The reported result is an estimated value.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
UJ	Indicates estimated non-detect.



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Consultants

Legend

▲ IRM INDOOR AND OUTDOOR AIR SAMPLE LOCATION

(*) ASTERISK INDICATES OFFICE AND COMMON AREAS SHOWN WITHOUT INTERIOR WALLS FOR INDIVIDUAL OFFICES, ROOMS AND HALLWAYS

Notes

Revision	By	Appd.	YY.MM.DD
SAMPLING LOCATIONS AS OF 12-15-2016	TW	MPS	16.12.15

Issued	By	Appd.	YY.MM.DD

File Name:	APL	TW	TW	2014.10
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project

FORMER ALLIANCE METAL STAMPING & FABRICATION FACILITY
BROWNFIELD CLEANUP PROGRAM SITE # C828101

12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY
ALTERNATIVE ANALYSIS REPORT

Title

IRM SMP INDOOR AIR
SAMPLE LOCATIONS
2016-2017 HEATING SEASON

Project No. 190500647

Scale AS SHOWN

Drawing No. Sheet Revision

FIG. C-2 of

U:\190500647\drawing\Alternative Analysis Report Figures\Cadd\Figure C2 SVI Assessment Actual Locations – Interim Report – With Indicators.dwg
2017/07/17 12:06 PM By: Lees, Andy

ORIGINAL SHEET – ANSI D

Table C-2
Summary of IRM SMP Indoor Air Sample Analysis Results, 2016-2017 Heating Season
Former Alliance Metal Stamping and Fabrication Facility BCP Site (C828101)
12 Pixley Industrial Parkway, Gates, New York

Tenant Space	Units	NYSDOH Air Guideline Value	Edge Color Graphics			Bright Raven Gymnastics								TimeWise Cleaning	Monroe Vacuum	Everdry Waterproofing			A Plus Cleaning & Restoration	
Sample Location			AM-IA-1 and AM-IA-23		AM-IA-2	AM-IA-3	AM-IA-4	AM-IA-5	AM-IA-6	AM-IA-22				AM-IA-7	AM-IA-8	AM-IA-9	AM-IA-10 and AM-IA-26		AM-IA-11	
Sample Date			15-Dec-16	15-Dec-16	15-Dec-16	15-Dec-16	15-Dec-16	15-Dec-16	15-Dec-16	15-Dec-16		07-Feb-17		15-Dec-16	15-Dec-16	15-Dec-16	15-Dec-16	15-Dec-16	15-Dec-16	07-Feb-17
Sample ID			AM-IA-1-20161215	AM-IA-23-20161215	AM-IA-2-20161215	AM-IA-3-20161215	AM-IA-4-20161215	AM-IA-5-20161215	AM-IA-6-20161215	AM-IA-22-20161215	AM-IA-DUP1-20161215	AM-IA-22-20170207	AM-IA-DUP1-20170207	AM-IA-7-20161215	AM-IA-8-20161215	AM-IA-9-20161215	AM-IA-10-20161215	AM-IA-26-20161215	AM-IA-11-20161215	AM-IA-11-20170207
Laboratory			SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM
Laboratory Sample ID			SC29757-01	SC29757-02	SC29757-03	SC29757-04	SC29757-05	SC29757-06	SC29757-07	SC29757-08	SC29757-09	SC31554-07	SC31554-03	SC29757-10	SC29757-11	SC29757-12	SC29757-13	SC29757-15	SC29757-28	SC31554-09
Sample Type											Field Duplicate		Field Duplicate							
Site-Related Volatile Organic Compounds																				
Tetrachloroethene (PCE)	µg/m3	30	1.06 J	0.54 J	1.50	3.02	2.85	0.27 U	0.19 J	R (235.99 E)	R (6.01)	8.95 J	5.73 J	0.27 U	1.63	0.35	0.38	0.42 J D AirP	0.71 J D AirP	16.75 J+
Trichloroethene (TCE)	µg/m3	2	0.27	0.21 U	0.21 U	0.22	0.21 U	0.21 U	0.21 U	R (6.56)	R (0.21 U)	0.11 U	0.15	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U D AirP	0.37 U D AirP	0.25 J+
Dichloroethene, cis-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	R (5.99)	R (0.40 U)	0.40 U	0.40 U	0.40 U	0.42	0.61	0.40 U	0.77 U D AirP	0.68 U D AirP	0.40 U
Dichloroethene, trans-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.77 U D AirP	0.68 U D AirP	0.40 U
Vinyl chloride	µg/m3	n/v	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.05 U	0.05 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U D AirP	0.18 U D AirP	0.05 U
Trichloroethane, 1,1,1-	µg/m3	n/v	1.43 U	0.91 U	2.16	7.31	7.15	2.43	18.50	8.46 J	4.11 J	0.72 J+	0.45 J	1.14	3.53	1.70	1.11	0.86 J D AirP	0.89 J D AirP	1.12 J+
Dichloroethane, 1,1-	µg/m3	n/v	0.16 U	0.16 U	0.16 U	0.16 U	0.24	0.16 U	0.16 U	0.16 U	0.16 U	0.10 J+	0.08 U	0.16 U	0.16 U	3.13	1.30	1.23 D AirP	0.28 U D AirP	0.15 J+
Dichloroethane, 1,1-	µg/m3	n/v	0.16 U	0.16 U	0.39	0.99	0.86	0.25	1.01	1.03 J	0.16 UJ	0.08 J+	0.08 U	0.16 U	0.16 U	0.85	0.16 U	0.12 J D AirP	0.27 U D AirP	0.08 U
Chloroethane (Ethyl Chloride)	µg/m3	n/v	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.51 U D AirP	0.45 U D AirP	0.26 U
Other Volatile Organic Compounds																				
Methylene Chloride (Dichloromethane)	µg/m3	60	1.25 U	2.12 U	1.45 U	1.33 U	1.38 U	1.55 U	1.32 U	2.30 UJ	1.20 J	1.53 J	1.10	0.81	1.74	2.42	1.86 J	0.67 UJ D AirP	2.06 J D AirP	0.95 J

Location Sort	Units	NYSDOH Air Guideline Value	Universal Equipment			Former Gold Pride Press				Complete Automotive Solutions				Empire Merchants North				Outdoor Air Samples	
Sample Location			AM-IA-12		AM-IA-13	AM-IA-14	AM-IA-15		AM-IA-16	AM-IA-17	AM-IA-18		AM-IA-19	AM-IA-20	AM-IA-21	AM-IA-24			
Sample Date			15-Dec-16	07-Feb-17	15-Dec-16	15-Dec-16	15-Dec-16	15-Dec-16	15-Dec-16	15-Dec-16	15-Dec-16	07-Feb-17	15-Dec-16	15-Dec-16	15-Dec-16	15-Dec-16	15-Dec-16	15-Dec-16	07-Feb-17
Sample ID			AM-IA-12-20161215	AM-IA-12-20170207	AM-IA-13-20161215	AM-IA-14-20161215	AM-IA-15-20161215	AM-IA-DUP2-20161215	AM-IA-16-20161215	AM-IA-17-20161215	AM-IA-18-20161215	AM-IA-18-20170207	AM-IA-19-20161215	AM-IA-20-20161215	AM-IA-21-20161215	AM-IA-24-20161215	AM-IA-DUP3-20161215	AM-OA-1-20161215	AM-OA-1-20170207
Laboratory			SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM
Laboratory Sample ID			SC29757-16	SC31554-05	SC29757-17	SC29757-18	SC29757-19	SC29757-20	SC29757-21	SC29757-22	SC29757-23	SC31554-10	SC29757-24	SC29757-25	SC29757-26	SC29757-27	SC29757-30	SC29757-29	SC31554-01
Sample Type								Field Duplicate									Field Duplicate		
Site-Related Volatile Organic Compounds																			
Tetrachloroethene (PCE)	µg/m3	30	**37.84**	3.53	14.44	27.53	26.18	28.82	20.61	8.41	**61.84**	14.24 J+	7.87	1.56	6.22	1.71 J	1.15 J	0.27 U	0.52
Trichloroethene (TCE)	µg/m3	2	0.71	0.11	0.39	0.65	0.33	0.21 U	1.01	0.37	0.64	0.11 U	0.32	0.23	0.26	0.30	0.18 J	0.21 U	0.69
Dichloroethene, cis-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Dichloroethene, trans-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Vinyl chloride	µg/m3	n/v	0.10 U	0.05 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.05 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.05 J
Trichloroethane, 1,1,1-	µg/m3	n/v	4.96	0.35 J	1.00	1.52	1.48	1.64	1.64	1.21	1.58	0.28 J+	0.71	0.25 J	2.89	0.49 J	0.20 J	0.55 U	0.55 U
Dichloroethane, 1,1-	µg/m3	n/v	0.16 U	0.08 U	0.18	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.08 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.06 J
Dichloroethene, 1,1-	µg/m3	n/v	0.16 U	0.08 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.08 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.08 U
Chloroethane (Ethyl Chloride)	µg/m3	n/v	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 UJ	0.26 UJ	0.26 U	0.26 UJ	0.26 UJ	0.26 UJ	0.26 U	0.26 U	0.26 U	0.26 U
Other Volatile Organic Compounds																			
Methylene Chloride (Dichloromethane)	µg/m3	60	4.55	1.13	1.44	1.14 J+	3.89 J	1.17 J	1.22 J+	0.85 J+	0.72 J+	0.69 UJ	0.59 J+	0.44 J+	0.99 J+	1.39	1.20	0.30 J	0.48

Notes:

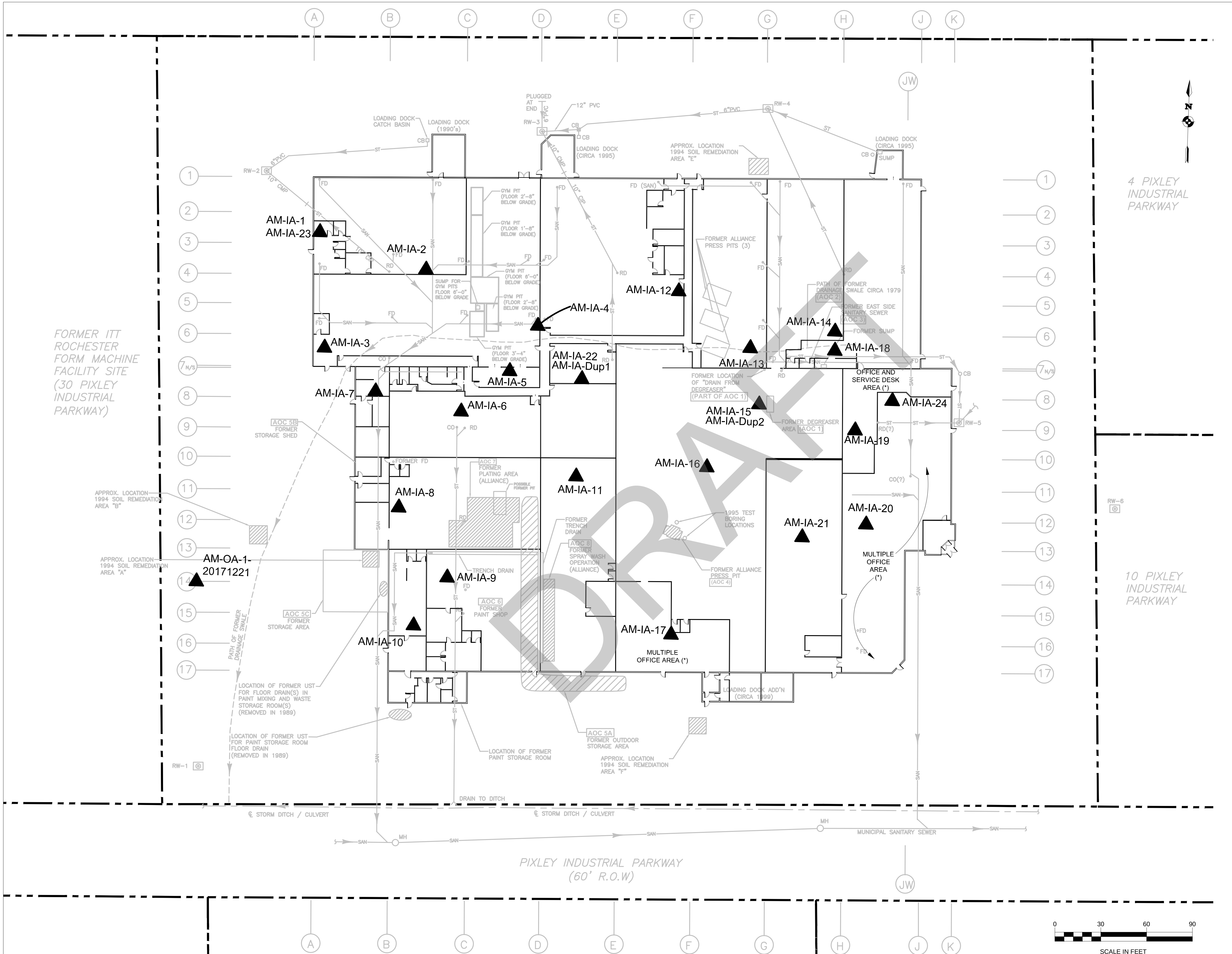
NYSDOH	New York State Department of Health
µg/m3	micrograms per cubic meter
n/v	No Air Guideline value established

Results key:

6.5	Concentration exceeds the NYSDOH Air Guideline Value.
15.2	Measured concentration did not exceed the NYSDOH Air Guideline Value.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reported quantitation limit.

Data qualifier flags:

D	Result was obtained from the analysis of a Dilution.
E	Concentration for this analyte is an Estimated value due to an exceedance of the calibration range for that compound or interferences resulting in a biased final concentration.
J	Detected above the Method Detection Limit but below the Reporting Limit; therefore, the reported result is an estimated value.
J+	The analyte was positively identified; the concentration shown is an estimated value that may be biased high.
UJ	Analyte not detected; quantitation limit shown is approximate.
R	The data are unusable. Results shown in parentheses are rejected due to serious deficiencies in meeting quality control limits. The analyte may or may not be present.
AirP	Low sample volume necessitated pressurizing the sample canister in lab prior to analysis resulting in elevated reporting limits.



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▲ IRM INDOOR AND OUTDOOR AIR SAMPLE LOCATION

(*) ASTERISK INDICATES OFFICE AND COMMON AREAS SHOWN WITHOUT INTERIOR WALLS FOR INDIVIDUAL OFFICES, ROOMS AND HALLWAYS

Notes

Revision	By	Appd.	YY.MM.DD
REVISED IRM-SMP REPORT - 2017-2018 HEATING SEASON	TW	MPS	18.01.16
SAMPLING LOCATIONS AS OF 12-15-2016	TW	MPS	16.12.15

Issued	By	Appd.	YY.MM.DD

File Name:	APL	TW	TW	2016.01
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project

FORMER ALLIANCE METAL STAMPING & FABRICATION FACILTY
BROWNFIELD CLEANUP PROGRAM SITE # C828101

12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY

ALTERNATIVES ANALYSIS REPORT

Title

IRM SMP Indoor Air Sample Locations, 2017-2018 Heating Season

Project No. 190500647
Scale AS SHOWN

Drawing No. FIG. C-3
Sheet of
Revision

U:\190500647\drawing\IRM-SMP Report\Cadd\Figure 4 Soil Vapor Intrusion Assessment Sample Actual Locations – 2017 & 2-2018.dwg
2018/01/16 11:58 AM By: Less, Andy

Table C-3
Summary of IRM SMP Indoor Air Sample Analysis Results, 2017-2018 Heating Season
Former Alliance BCP Site (C828101)
12 Pixley Industrial Parkway, Gates, New York

Tenant Space			Edge Color Graphics			Bright Raven Gymnastics						TimeWise Cleaning
Sample Location			AM-IA-1	AM-IA-2	AM-IA-23	AM-IA-3	AM-IA-4	AM-IA-5	AM-IA-6	AM-IA-22		AM-IA-7
Sample Date			21-Dec-17	21-Dec-17	21-Dec-17	21-Dec-17	21-Dec-17	21-Dec-17	21-Dec-17	21-Dec-17	21-Dec-17	21-Dec-17
Sample ID			AM-IA-1-20171221	AM-IA-2-20171221	AM-IA-23-20171221	AM-IA-3-20171221	AM-IA-4-20171221	AM-IA-5-20171221	AM-IA-6-20171221	AM-IA-22-20171221	AM-IA-DUP1-20171221	AM-IA-7-20171221
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory		NYSDOH	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM
Laboratory Work Order		Air	SC42747	SC42747	SC42747	SC42747	SC42747	SC42747	SC42747	SC42747	SC42747	SC42747
Laboratory Sample ID		Guideline	SC42747-01	SC42747-02	SC42747-03	SC42747-13	SC42747-14	SC42747-15	SC42747-16	SC42747-17	SC42747-18	SC42747-24
Sample Type	Units	Value									Field Dupl.	
Site-Related Volatile Organic Compounds												
Tetrachloroethene (PCE)	µg/m3	30	0.67	0.67	0.67	5.05 J	4.82	5.07	0.68	0.09 J	0.14 J D	0.14 U
Trichloroethene (TCE)	µg/m3	2	0.11 U	0.11 U	0.11 U	0.16 J	0.11	0.10 J	0.11 U	0.11 U	0.18 U D	0.15
Dichloroethene, cis-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	0.82 UJ	0.40 U	0.40 U	0.40 U	0.40 U	0.65 U D	0.40 U
Dichloroethene, trans-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	0.82 UJ	0.40 U	0.40 U	0.40 U	0.40 U	0.65 U D	0.40 U
Vinyl Chloride	µg/m3	n/v	0.05 U	0.05 U	0.05 U	0.11 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.08 U D	0.05 U
Trichloroethane, 1,1,1-	µg/m3	n/v	2.76	2.76	2.80	7.97 J	8.62	9.38	11.08	0.55 U	0.90 U D	19.10
Dichloroethane, 1,1-	µg/m3	n/v	0.07 J	0.07 J	0.07 J	0.20 J	0.20	0.20	0.08 J	0.08 U	0.13 U D	0.07 J
Dichloroethene, 1,1-	µg/m3	n/v	0.17	0.18	0.17	0.53 J	1.23	- (0.53 E)	0.31	0.08 U	0.13 U D	0.39
Chloroethane (Ethyl Chloride)	µg/m3	n/v	0.26 U	0.26 U	0.26 U	0.55 UJ	0.26 U	0.26 U	0.26 U	0.26 U	0.44 U D	0.26 U
Other Volatile Organic Compounds												
Methylene Chloride (Dichloromethane)	µg/m3	60	0.92	0.58	0.67	1.20 J	0.79	0.94	0.35 U	0.35 U	0.57 U D	0.35 U

Tenant Space			Monroe Vacuum	Everdry Waterproofing		A Plus Cleaning & Restoration	Universal Equipment		Excelsus (Former Gold Pride Press)				
Sample Location			AM-IA-8	AM-IA-9	AM-IA-10	AM-IA-11	AM-IA-12	AM-IA-13	AM-IA-14	AM-IA-15		AM-IA-16	AM-IA-17
Sample Date			21-Dec-17	21-Dec-17	21-Dec-17	22-Dec-17	21-Dec-17	21-Dec-17	21-Dec-17	21-Dec-17	21-Dec-17	21-Dec-17	21-Dec-17
Sample ID			AM-IA-8-20171221	AM-IA-9-20171221	AM-IA-10-20171221	AM-IA-11-20171221	AM-IA-12-20171221	AM-IA-13-20171221	AM-IA-14-20171221	AM-IA-15-20171221	AM-IA-DUP2-20171221	AM-IA-16-20171221	AM-IA-17-20171221
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory		NYSDOH	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM
Laboratory Work Order		Air	SC42747	SC42747	SC42747	SC42747	SC42747	SC42747	SC42747	SC42747	SC42747	SC42747	SC42747
Laboratory Sample ID		Guideline	SC42747-25	SC42747-07	SC42747-08	SC42747-09	SC42747-10	SC42747-11	SC42747-20	SC42747-21	SC42747-22	SC42747-04	SC42747-05
Sample Type	Units	Value									Field Dupl.		
Site-Related Volatile Organic Compounds													
Tetrachloroethene (PCE)	µg/m3	30	0.21 U	0.18 J+	0.38 J+	2.73	5.37	6.50	25.29	0.14 U	0.14 U	14.92	0.15
Trichloroethene (TCE)	µg/m3	2	0.23	0.05 J	0.16 U D	0.11 U	0.11 U	0.12	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Dichloroethene, cis-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.61 U D	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Dichloroethene, trans-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.61 U D	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Vinyl Chloride	µg/m3	n/v	0.05 U	0.05 U	0.08 U D	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Trichloroethane, 1,1,1-	µg/m3	n/v	0.57	0.57	1.40 D	0.38 J	0.75	0.55 U	1.27	0.55 U	0.55 U	1.43	0.55 U
Dichloroethane, 1,1-	µg/m3	n/v	0.15	1.24	2.63 D	0.08 U	0.06 J	0.08 U	0.07 J	0.08 U	0.08 U	0.07 J	0.08 U
Dichloroethene, 1,1-	µg/m3	n/v	0.08 U	0.12	0.21 D	0.08 U	0.06 J	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Chloroethane (Ethyl Chloride)	µg/m3	n/v	0.26 U	0.26 U	0.40 U D	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 UJ	0.26 UJ
Other Volatile Organic Compounds													
Methylene Chloride (Dichloromethane)	µg/m3	60	0.35 U	0.51	0.51 J D	1.04	1.66	0.60	1.03	0.32 J	0.35 U	1.19	0.58

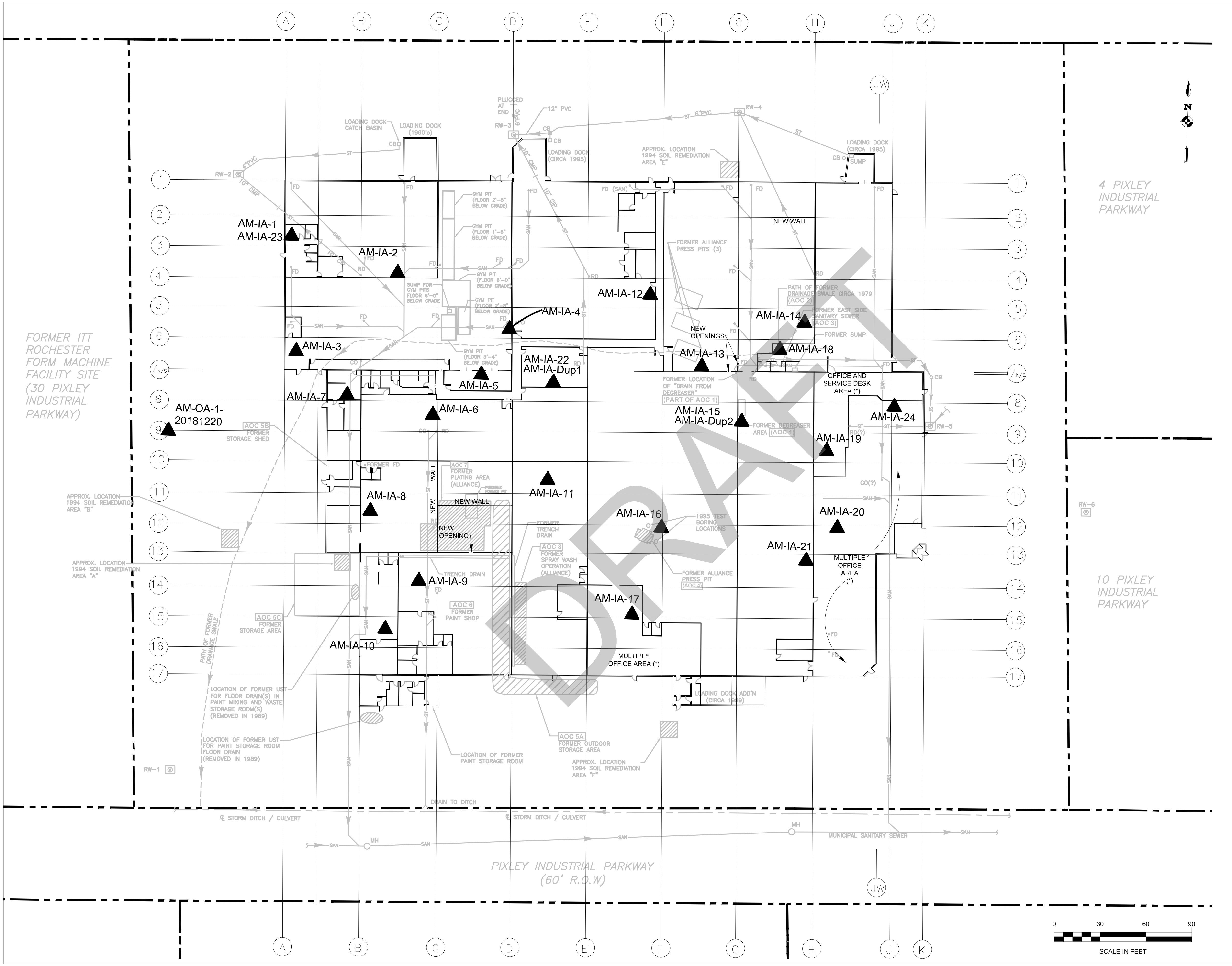
Tenant Space			Complete Automotive Solutions		Empire Merchants North			Outdoor Air
Sample Location			AM-IA-18	AM-IA-19	AM-IA-20	AM-IA-21	AM-IA-24	AM-OA-1-20171221
Sample Date			21-Dec-17	21-Dec-17	21-Dec-17	21-Dec-17	21-Dec-17	21-Dec-17
Sample ID			AM-IA-18-20171221	AM-IA-19-20171221	AM-IA-20-20171221	AM-IA-21-20171221	AM-IA-24-20171221	AM-OA-1-20171221
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory		NYSDOH	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM
Laboratory Work Order		Air	SC42747	SC42747	SC42747	SC42747	SC42747	SC42747
Laboratory Sample ID		Guideline	SC42747-06	SC42747-23	SC42747-26	SC42747-19	SC42747-27	SC42747-12
Sample Type	Units	Value						
Site-Related Volatile Organic Compounds								
Tetrachloroethene (PCE)	µg/m3	30	0.29	0.56	0.23 U	0.07 J	0.18 U	0.09 J+
Trichloroethene (TCE)	µg/m3	2	0.11 U	0.11 U	0.12	0.11 U	0.17	0.11 U
Dichloroethene, cis-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Dichloroethene, trans-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Vinyl Chloride	µg/m3	n/v	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Trichloroethane, 1,1,1-	µg/m3	n/v	0.55 U	0.55 U	0.24 J	0.55 U	0.55 U	0.55 U
Dichloroethane, 1,1-	µg/m3	n/v	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Dichloroethene, 1,1-	µg/m3	n/v	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Chloroethane (Ethyl Chloride)	µg/m3	n/v	0.26 UJ	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Other Volatile Organic Compounds								
Methylene Chloride (Dichloromethane)	µg/m3	60	0.51	0.35 U	0.70	0.59	0.35 U	0.49

Notes:

NYSDOH	New York State Department of Health
µg/m3	micrograms per cubic meter
n/v	No Air Guideline value established

Results key:

-	Laboratory result shown in parentheses is not reportable because it exceeded the established linear range of calibration for the instrument.
15.2	Measured concentration did not exceed the NYSDOH Air Guideline Value.
0.03 U	Analyte was not detected at a concentration greater than the quantitation limit shown (0.03 µg/m3 in this example).
D	Result was obtained from the analysis of a Dilution.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is an estimated value that may be biased high.
UJ	The analyte was analyzed for but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.



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▲ IRM INDOOR AND OUTDOOR AIR SAMPLE LOCATION

(*) ASTERISK INDICATES OFFICE AND COMMON AREAS SHOWN WITHOUT INTERIOR WALLS FOR INDIVIDUAL OFFICES, ROOMS AND HALLWAYS

Notes

Revision	By	Appd.	YY.MM.DD
REVISED IRM-SMP REPORT - 2018-2019 HEATING SEASON	TW	MPS	19.03.01
REVISED IRM-SMP REPORT - 2017-2018 HEATING SEASON	TW	MPS	18.01.16
SAMPLING LOCATIONS AS OF 12-15-2016	TW	MPS	16.12.15

Issued	By	Appd.	YY.MM.DD

File Name:	APL	TW	TW	2016.01
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project

FORMER ALLIANCE METAL STAMPING & FABRICATION FACILTY
BROWNFIELD CLEANUP PROGRAM SITE # C828101

12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY
IRM-SMP MONITORING REPORT
2018-2019 HEATING SEASON

Title

SAMPLE LOCATION MAP
(DECEMBER 2018)

Project No.	Scale
190500647	AS SHOWN

Drawing No.	Sheet	Revision
FIG. C-4	of	

U:\190500647\drawing\IRM-SMP Report\Cadd\Figure 4 Soil Vapor Intrusion Assessment Sample Actual Locations -12-2018.dwg
2019/04/01 9:58 AM By: Less, Andy

ORIGINAL SHEET - ANSI D

Table C-4
Summary of IRM SMP Indoor Air Sample Analysis Results
Former Alliance Metal Stamping and Fabrication Facility BCP Site (C828101)
12 Pixley Industrial Parkway, Gates, New York

Tenant Space			Edge Color Graphics									Bright Raven Gymnastics					
Sample Location			AM-IA-1			AM-IA-23 (collocated with AM-IA-1)			AM-IA-2			AM-IA-3			AM-IA-4		
Sample Date			15-Dec-16	21-Dec-17	20-Dec-18	15-Dec-16	21-Dec-17	20-Dec-18	15-Dec-16	21-Dec-17	20-Dec-18	15-Dec-16	21-Dec-17	20-Dec-18	15-Dec-16	21-Dec-17	20-Dec-18
Sample ID (* - minus "AM-IA" prefix)			*-1-20161215	*-1-20171221	*-1-20181220	*-23-20161215	*-23-20171221	*-23-20181220	*-2-20161215	*-2-20171221	*-2-20181220	*-3-20161215	*-3-20171221	*-3-20181220	*-4-20161215	*-4-20171221	*-4-20181220
Laboratory		NYSDOH	SPECTRUM	SPECTRUM	TALBUR	SPECTRUM	SPECTRUM	TALBUR	SPECTRUM	SPECTRUM	TALBUR	SPECTRUM	SPECTRUM	TALBUR	SPECTRUM	SPECTRUM	TALBUR
Laboratory Sample ID		Guideline	SC29757-01	SC42747-01	200-46850-16	SC29757-02	SC42747-03	200-46850-17	SC29757-03	SC42747-02	200-46850-18	SC29757-04	SC42747-13	200-46850-19	SC29757-05	SC42747-14	200-46850-20
Sample Type	Units	Value															
Site-Related Volatile Organic Compou																	
Tetrachloroethene (PCE)	µg/m3	30	1.06 J	0.67	1.9 J	0.54 J	0.67	2.0 J	1.50	0.67	1.8 J	3.02	5.05 J	3.5	2.85	4.82	4.1 J
Trichloroethene (TCE)	µg/m3	2	0.27	0.11 U	0.38 U	0.21 U	0.11 U	0.38 U	0.21 U	0.11 U	0.38 U	0.22	0.16 J	0.38 U	0.21 U	0.11	0.58 U
Dichloroethene, cis-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.82 UJ	0.40 U	0.40 U	0.40 U	0.62 U
Dichloroethene, trans-1,2-	µg/m3	n/v	0.40 U	0.40 U	1.6 U	0.40 U	0.40 U	1.6 U	0.40 U	0.40 U	1.6 U	0.40 U	0.82 UJ	1.6 U	0.40 U	0.40 U	2.5 U
Vinyl Chloride	µg/m3	n/v	0.10 U	0.05 U	0.40 U	0.10 U	0.05 U	0.40 U	0.10 U	0.05 U	0.40 U	0.10 U	0.11 UJ	0.40 U	0.10 U	0.05 U	0.62 U
Trichloroethane, 1,1,1-	µg/m3	n/v	1.43 U	2.76	3.2	0.91 U	2.80	3.3	2.16	2.76	3.1	7.31	7.97 J	6.1	7.15	8.62	7.8
Dichloroethane, 1,1-	µg/m3	n/v	0.16 U	0.07 J	1.6 U	0.16 U	0.07 J	1.6 U	0.16 U	0.07 J	1.6 U	0.16 U	0.20 J	0.30 J	0.24	0.20	0.44 J
Dichloroethene, 1,1-	µg/m3	n/v	0.16 U	0.17	0.45	0.16 U	0.17	0.44	0.39	0.18	0.46	0.99	0.53 J	0.79	0.86	1.23	1.2
Chloroethane (Ethyl Chloride)	µg/m3	n/v	0.26 U	0.26 U	2.6 U	0.26 U	0.26 U	2.6 U	0.26 U	0.26 U	2.6 U	0.26 U	0.55 UJ	2.6 U	0.26 U	0.26 U	4.1 U
Other Volatile Organic Compounds																	
Methylene Chloride (Dichloromethane)	µg/m3	60	1.25 U	0.92	1.5 J	2.12 U	0.67	3.5 U	1.45 U	0.58	1.5 J	1.33 U	1.20 J	2.2 J	1.38 U	0.79	3.1 J

Tenant Space			Bright Raven Gymnastics (continued)														TimeWise Cleaning		
Sample Location			AM-IA-5			AM-IA-6			AM-IA-22								AM-IA-7		
Sample Date			15-Dec-16	21-Dec-17	20-Dec-18	15-Dec-16	21-Dec-17	20-Dec-18	15-Dec-16		7-Feb-17		21-Dec-17		20-Dec-18		15-Dec-16	21-Dec-17	20-Dec-18
Sample ID (* - minus "AM-IA" prefix)			*-5-20161215	*-5-20171221	*-5-20181220	*-6-20161215	*-6-20171221	*-6-20181220	*-22-20161215	*-DUP1-20161215	*-22-20170207	*-DUP1-20170207	*-22-20171221	*-DUP1-20171221	*-22-20181220	*-DUP1-20181220	*-7-20161215	*-7-20171221	*-7-20181220
Laboratory		NYSDOH	SPECTRUM	SPECTRUM	TALBUR	SPECTRUM	SPECTRUM	TALBUR	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	TALBUR	TALBUR	SPECTRUM	SPECTRUM	TALBUR
Laboratory Sample ID		Guideline	SC29757-06	SC42747-15	200-46850-21	SC29757-07	SC42747-16	200-46850-22	SC29757-08	SC29757-09	SC31554-07	SC31554-03	SC42747-17	SC42747-18	200-46850-23	200-46850-24	SC29757-10	SC42747-24	200-46850-25
Sample Type	Units	Value								Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate			
Site-Related Volatile Organic Compounds																			
Tetrachloroethene (PCE)	µg/m3	30	0.27 U	5.07	2.3	0.19 J	0.68	0.66 J	R (235.99 E)	R (6.01)	8.95 J	5.73 J	0.09 J	0.14 J D	6.4 J	9.0	0.27 U	0.14 U	1.4 U
Trichloroethene (TCE)	µg/m3	2	0.21 U	0.10 J	0.46	0.21 U	0.11 U	0.19 U	R (6.56)	R (0.21 U)	0.11 U	0.15	0.11 U	0.18 U D	1.9	1.1 U	0.21 U	0.15	0.19 U
Dichloroethene, cis-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.20 U	0.40 U	0.40 U	0.20 U	R (5.99)	R (0.40 U)	0.40 U	0.40 U	0.40 U	0.65 U D	1.2 U	1.2 U	0.40 U	0.40 U	0.20 U
Dichloroethene, trans-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.79 U	0.40 U	0.40 U	0.79 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.65 U D	4.7 U	4.8 U	0.40 U	0.40 U	0.79 U
Vinyl Chloride	µg/m3	n/v	0.10 U	0.05 U	0.20 U	0.10 U	0.05 U	0.20 U	0.10 U	0.10 U	0.05 U	0.05 U	0.05 U	0.08 U D	1.2 U	1.2 U	0.10 U	0.05 U	0.20 U
Trichloroethane, 1,1,1-	µg/m3	n/v	2.43	9.38	4.7	18.50	11.08	7.3	8.46 J	4.11 J	0.72 J+	0.45 J	0.55 U	0.90 U D	6.5 U	6.5 U	1.14	19.10	9.2
Dichloroethane, 1,1-	µg/m3	n/v	0.16 U	0.20	0.25 J	0.16 U	0.08 J	0.17 J	0.16 U	0.16 U	0.10 J+	0.08 U	0.08 U	0.13 U D	4.8 U	4.9 U	0.16 U	0.07 J	0.81 U
Dichloroethene, 1,1-	µg/m3	n/v	0.25	-	0.56	1.01	0.31	0.55	1.03 J	0.16 UJ	0.08 J+	0.08 U	0.08 U	0.13 U D	0.83 U	0.83 U	0.16 U	0.39	0.48
Chloroethane (Ethyl Chloride)	µg/m3	n/v	0.26 U	0.26 U	1.3 U	0.26 U	0.26 U	1.3 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.44 U D	7.9 U	7.9 U	0.26 U	0.26 U	1.3 U
Other Volatile Organic Compounds																			
Methylene Chloride (Dichloromethane)	µg/m3	60	1.55 U	0.94	3.7	1.32 U	0.35 U	4.1	2.3 UJ	1.20 J	1.53 J	1.10	0.35 U	0.57 U D	10 U	10 U	0.81	0.35 U	1.7 U

Tenant Space			Former Monroe Vacuum (vacant in December 2018)			Everdry Waterproofing						A Plus Cleaning & Restoration			
Sample Location			AM-IA-8			AM-IA-9			AM-IA-10			AM-IA-11			
Sample Date			15-Dec-16	21-Dec-17	20-Dec-18	15-Dec-16	21-Dec-17	20-Dec-18	15-Dec-16	21-Dec-17	20-Dec-18	15-Dec-16	7-Feb-17	22-Dec-17	20-Dec-18
Sample ID (* - minus "AM-IA" prefix)			*-8-20161215	*-8-20171221	*-8-20181220	*-9-20161215	*-9-20171221	*-9-20181220	*-10-20161215	*-10-20171221	*-10-20181220	*-11-20161215	*-11-20170207	*-11-20171221	*-11-20181220
Laboratory		NYSDOH	SPECTRUM	SPECTRUM	TALBUR	SPECTRUM	SPECTRUM	TALBUR	SPECTRUM	SPECTRUM	TALBUR	SPECTRUM	SPECTRUM	SPECTRUM	TALBUR
Laboratory Sample ID		Guideline	SC29757-11	SC42747-25	200-46850-26	SC29757-12	SC42747-07	200-46850-27	SC29757-13	SC42747-08	200-46850-28	SC29757-28	SC31554-09	SC42747-09	200-46850-29
Sample Type	Units	Value													
Site-Related Volatile Organic Compou															
Tetrachloroethene (PCE)	µg/m3	30	1.63	0.21 U	1.0 J	0.35	0.18 J+	0.23 J	0.38	0.38 J+	0.98 J	0.71 J D AirP	16.75 J+	2.73	1.1 J
Trichloroethene (TCE)	µg/m3	2	0.21 U	0.23	0.19 U	0.21 U	0.05 J	0.19 U	0.21 U	0.16 U D	0.19 U	0.37 U D AirP	0.25 J+	0.11 U	0.19 U
Dichloroethene, cis-1,2-	µg/m3	n/v	0.42	0.40 U	0.20 U	0.61	0.40 U	0.25	0.40 U	0.61 U D	0.24	0.68 U D AirP	0.40 U	0.40 U	0.20 U
Dichloroethene, trans-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.79 U	0.40 U	0.40 U	0.79 U	0.40 U	0.61 U D	0.79 U	0.68 U D AirP	0.40 U	0.40 U	0.79 U
Vinyl Chloride	µg/m3	n/v	0.10 U	0.05 U	0.20 U	0.10 U	0.05 U	0.20 U	0.10 U	0.08 U D	0.20 U	0.18 U D AirP	0.05 U	0.05 U	0.20 U
Trichloroethane, 1,1,1-	µg/m3	n/v	3.53	0.57	1.1 U	1.70	0.57	1.1 U	1.11	1.40 D	0.60 J	0.89 J D AirP	1.12 J+	0.38 J	1.1 U
Dichloroethane, 1,1-	µg/m3	n/v	0.16 U	0.15	0.14 J	3.13	1.24	0.62 J	1.30	2.63 D	1.4	0.28 U D AirP	0.15 J+	0.08 U	0.81 U
Dichloroethene, 1,1-	µg/m3	n/v	0.16 U	0.08 U	0.14 U	0.85	0.12	0.15	0.16 U	0.21 D	0.24	0.27 U D AirP	0.08 U	0.08 U	0.14 U
Chloroethane (Ethyl Chloride)	µg/m3	n/v	0.26 U	0.26 U	1.3 U	0.26 U	0.26 U	1.3 U	0.26 U	0.40 U D	1.3 U	0.45 U D AirP	0.26 U	0.26 U	1.3 U
Other Volatile Organic Compounds															
Methylene Chloride (Dichloromethane)	µg/m3	60	1.74	0.35 U	1.9	2.42	0.51	31	1.86 J	0.51 J D	6.2	2.06 J D AirP	0.95 J	1.04	1.2 J

Notes:

NYSDOH	New York State Department of Health
µg/m3	micrograms per cubic meter
n/v	No Air Guideline value established

Results key:

6.5	Concentration exceeds the NYSDOH Air Guideline Value.
15.2	Measured concentration did not exceed the NYSDOH Air Guideline Value.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reported quantitation limit.

Data qualifier flags:

D	Result was obtained from the analysis of a Dilution.
E	Concentration for this analyte is an Estimated value due to an exceedance of the calibration range for that compound or interferences resulting in a biased final concentration.
J	Detected above the Method Detection Limit but below the Reporting Limit; therefore, the reported result is an estimated value.
J+	The analyte was positively identified; the concentration shown is an estimated value that may be biased high.
UJ	Analyte not detected; quantitation limit shown is approximate.
R	The data are unusable. Results shown in parentheses are rejected due to serious deficiencies in meeting quality control limits. The analyte may or may not be present.
AirP	Low sample volume necessitated pressurizing the sample canister in lab prior to analysis resulting in elevated reporting limits.

Table C-4
Summary of IRM SMP Indoor Air Sample Analysis Results
Former Alliance Metal Stamping and Fabrication Facility BCP Site (C828101)
12 Pixley Industrial Parkway, Gates, New York

Tenant Space			Universal Equipment				Excelsus											
Sample Location			AM-IA-12				AM-IA-13			AM-IA-14			AM-IA-15					
Sample Date			15-Dec-16	7-Feb-17	21-Dec-17	20-Dec-18	15-Dec-16	21-Dec-17	20-Dec-18	15-Dec-16	21-Dec-17	20-Dec-18	15-Dec-16		21-Dec-17		20-Dec-18	
Sample ID (* - minus "AM-IA" prefix)			*-12-20161215	*-12-20170207	*-12-20171221	*-12-20181220	*-13-20161215	*-13-20171221	*-13-20181220	*-14-20161215	*-14-20171221	*-14-20181220	*-15-20161215	*-DUP2-20161215	*-15-20171221	*-DUP2-20171221	*-15-20181220	*-DUP2-20181220
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory		NYSDOH	SPECTRUM	SPECTRUM	SPECTRUM	TALBUR	SPECTRUM	SPECTRUM	TALBUR	SPECTRUM	SPECTRUM	TALBUR	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	TALBUR	TALBUR
Laboratory Work Order		Air	SC29757	SC31554	SC42747	200-45850-1	SC29757	SC42747	200-45850-1	SC29757	SC42747	200-45850-1	SC29757	SC29757	SC42747	SC42747	200-45850-1	200-45850-1
Laboratory Sample ID		Guideline	SC29757-16	SC31554-05	SC42747-10	200-46850-2	SC29757-17	SC42747-11	200-46850-3	SC29757-18	SC42747-20	200-46850-4	SC29757-19	SC29757-20	SC42747-21	SC42747-22	200-46850-5	200-46850-6
Sample Type	Units	Value												Field Duplicate		Field Duplicate		Field Duplicate
Site-Related Volatile Organic Compou																		
Tetrachloroethene (PCE)	µg/m3	30	**37.84**	3.53	5.37	6.2 J	14.44	6.50	9.6	27.53	25.29	12	26.18	28.82	0.14 U	0.14 U	9.5	9.0
Trichloroethene (TCE)	µg/m3	2	0.71	0.11	0.11 U	1.3 U	0.39	0.12	0.31	0.65	0.11 U	0.41	0.33	0.21 U	0.11 U	0.11 U	0.27	0.46
Dichloroethene, cis-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	1.4 U	0.40 U	0.40 U	0.20 U	0.40 U	0.40 U	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.20 U	0.20 U
Dichloroethene, trans-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	5.6 U	0.40 U	0.40 U	0.79 U	0.40 U	0.40 U	0.79 U	0.40 U	0.40 U	0.40 U	0.40 U	0.79 U	0.79 U
Vinyl Chloride	µg/m3	n/v	0.10 U	0.05 U	0.05 U	1.4 U	0.10 U	0.05 U	0.20 U	0.10 U	0.05 U	0.20 U	0.10 U	0.10 U	0.05 U	0.05 U	0.20 U	0.20 U
Trichloroethane, 1,1,1-	µg/m3	n/v	4.96	0.35 J	0.75	7.7 U	1.00	0.55 U	0.99 J	1.52	1.27	0.98 J	1.48	1.64	0.55 U	0.55 U	0.88 J	0.86 J
Dichloroethane, 1,1-	µg/m3	n/v	0.16 U	0.08 U	0.06 J	5.7 U	0.18	0.08 U	0.28 J	0.16 U	0.07 J	0.19 J	0.16 U	0.16 U	0.08 U	0.08 U	0.15 J	0.13 J
Dichloroethene, 1,1-	µg/m3	n/v	0.16 U	0.08 U	0.06 J	0.99 U	0.16 U	0.08 U	0.14 U	0.16 U	0.08 U	0.14 U	0.16 U	0.16 U	0.08 U	0.08 U	0.14 U	0.14 U
Chloroethane (Ethyl Chloride)	µg/m3	n/v	0.26 U	0.26 U	0.26 U	9.4 U	0.26 U	0.26 U	1.3 U	0.26 U	0.26 U	1.3 U	0.26 U	0.26 U	0.26 U	0.26 U	1.3 U	1.3 U
Other Volatile Organic Compounds																		
Methylene Chloride (Dichloromethane)	µg/m3	60	4.55	1.13	1.66	5.1 J	1.44	0.60	2.9	1.14 J+	1.03	1.7	3.89 J	1.17 J	0.32 J	0.35 U	1.7 J	2.6

Tenant Space			Excelsus (continued)							Complete Automotive Solutions						
Sample Location			AM-IA-16			AM-IA-17				AM-IA-18				AM-IA-19		
Sample Date			15-Dec-16	21-Dec-17	20-Dec-18	15-Dec-16	21-Dec-17	20-Dec-18		15-Dec-16	7-Feb-17	21-Dec-17	20-Dec-18	15-Dec-16	21-Dec-17	20-Dec-18
Sample ID (* - minus "AM-IA" prefix)			*-16-20161215	*-16-20171221	*-16A-20181220	*-17-20161215	*-17-20171221	*-17-20181220	*-17A-20181220	*-18-20161215	*-18-20170207	*-18-20171221	*-18-20181220	*-19-20161215	*-19-20171221	*-19-20181220
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory		NYSDOH	SPECTRUM	SPECTRUM	TALBUR	SPECTRUM	SPECTRUM	TALBUR	TALBUR	SPECTRUM	SPECTRUM	SPECTRUM	TALBUR	SPECTRUM	SPECTRUM	TALBUR
Laboratory Work Order		Air	SC29757	SC42747	200-45850-1	SC29757	SC42747	200-45850-1	200-45850-1	SC29757	SC31554	SC42747	200-45850-1	SC29757	SC42747	200-45850-1
Laboratory Sample ID		Guideline	SC29757-21	SC42747-04	200-46850-14	SC29757-22	SC42747-05	200-46850-8	200-46850-15	SC29757-23	SC31554-10	SC42747-06	200-46850-9	SC29757-24	SC42747-23	200-46850-10
Sample Type	Units	Value														
Site-Related Volatile Organic Compou																
Tetrachloroethene (PCE)	µg/m3	30	20.61	14.92	8.8 J	8.41	0.15	4.2	4.4	**61.84**	14.24 J+	0.29	29	7.87	0.56	1.1 J
Trichloroethene (TCE)	µg/m3	2	1.01	0.11 U	0.59 J	0.37	0.11 U	0.19 U	0.19 U	0.64	0.11 U	0.11 U	**2.6**	0.32	0.11 U	0.19 U
Dichloroethene, cis-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.20 UJ	0.40 U	0.40 U	0.20 U	0.20 U	0.40 U	0.40 U	0.40 U	1.7 U	0.40 U	0.40 U	0.20 U
Dichloroethene, trans-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.79 UJ	0.40 U	0.40 U	0.79 U	0.79 U	0.40 U	0.40 U	0.40 U	6.6 U	0.40 U	0.40 U	0.79 U
Vinyl Chloride	µg/m3	n/v	0.10 U	0.05 U	0.20 UJ	0.10 U	0.05 U	0.20 U	0.20 U	0.10 U	0.05 U	0.05 U	1.7 U	0.10 U	0.05 U	0.20 U
Trichloroethane, 1,1,1-	µg/m3	n/v	1.64	1.43	1.1 UJ	1.21	0.55 U	0.66 J	0.58 J	1.58	0.28 J+	0.55 U	9.1 U	0.71	0.55 U	1.1 U
Dichloroethane, 1,1-	µg/m3	n/v	0.16 U	0.07 J	0.81 UJ	0.16 U	0.08 U	0.11 J	0.11 J	0.16 U	0.08 U	0.08 U	6.8 U	0.16 U	0.08 U	0.81 U
Dichloroethene, 1,1-	µg/m3	n/v	0.16 U	0.08 U	0.14 UJ	0.16 U	0.08 U	0.14 U	0.14 U	0.16 U	0.08 U	0.08 U	1.2 U	0.16 U	0.08 U	0.14 U
Chloroethane (Ethyl Chloride)	µg/m3	n/v	0.26 U	0.26 UJ	1.3 UJ	0.26 UJ	0.26 UJ	1.3 U	1.3 U	0.26 UJ	0.26 U	0.26 UJ	11 U	0.26 UJ	0.26 U	1.3 U
Other Volatile Organic Compounds																
Methylene Chloride (Dichloromethane)	µg/m3	60	1.22 J+	1.19	1.7 J	0.85 J+	0.58	1.6 J	1.4 J	0.72 J+	0.69 UJ	0.51	15 U	0.59 J+	0.35 U	1.7 U

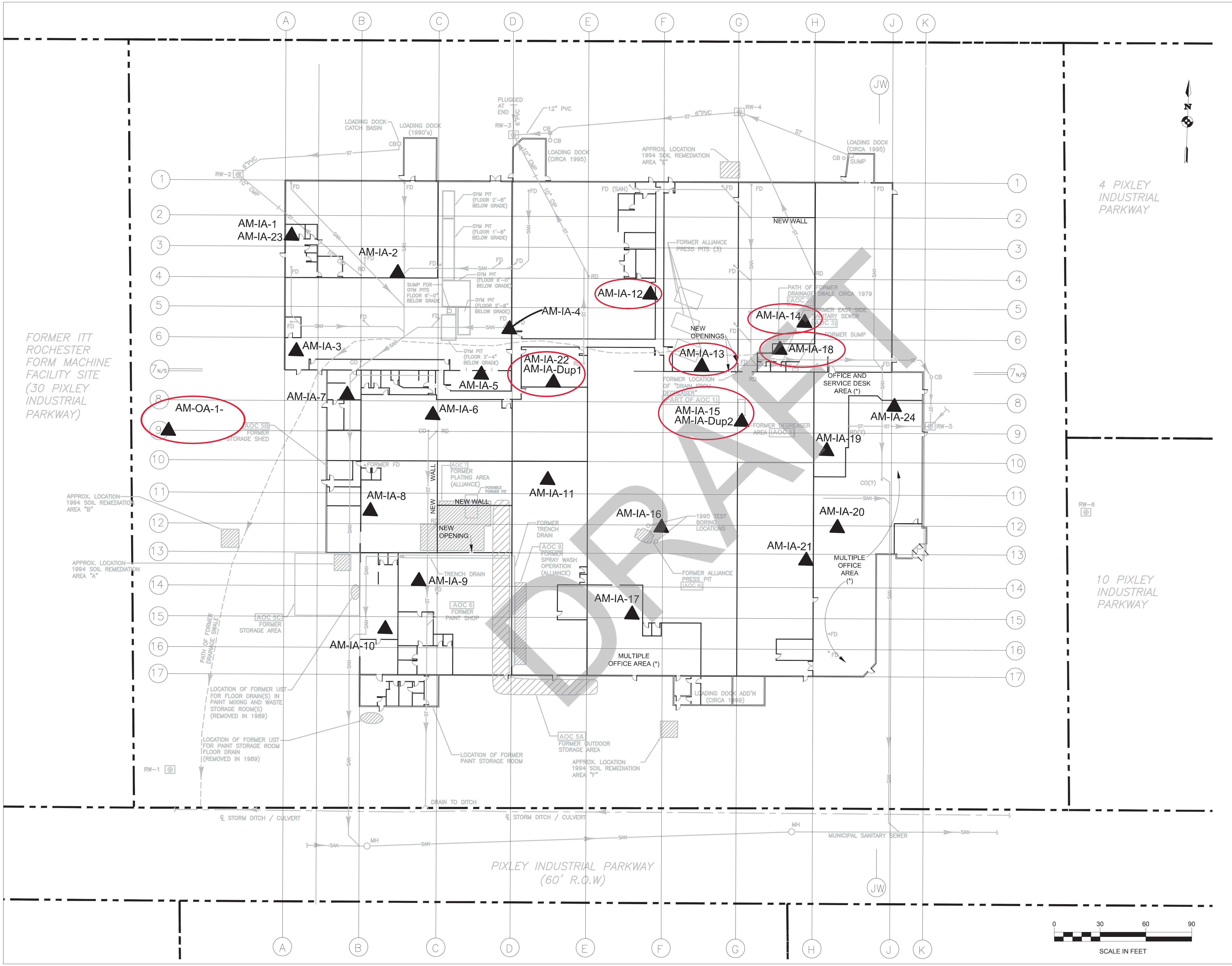
Tenant Space			Empire Merchants North										Outdoor Air Samples			
Sample Location			AM-IA-20			AM-IA-21			AM-IA-24				AM-OA-1-20161215	AM-OA-1-20170207	AM-OA-1-20171221	AM-OA-1-20181220
Sample Date			15-Dec-16	21-Dec-17	20-Dec-18	15-Dec-16	21-Dec-17	20-Dec-18	15-Dec-16		21-Dec-17	20-Dec-18	15-Dec-16	7-Feb-17	21-Dec-17	20-Dec-18
Sample ID (* - minus "AM-IA" prefix)			*-20-20161215	*-20-20171221	*-20-20181220	*-21-20161215	*-21-20171221	*-21-20181220	*-24-20161215	*-DUP3-20161215	*-24-20171221	*-24-20181220	AM-OA-1-20161215	AM-OA-1-20170207	AM-OA-1-20171221	AM-OA-1-20181220
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory		NYSDOH	SPECTRUM	SPECTRUM	TALBUR	SPECTRUM	SPECTRUM	TALBUR	SPECTRUM	SPECTRUM	SPECTRUM	TALBUR	SPECTRUM	SPECTRUM	SPECTRUM	TALBUR
Laboratory Work Order		Air	SC29757	SC42747	200-45850-1	SC29757	SC42747	200-45850-1	SC29757	SC29757	SC42747	200-45850-1	SC29757	SC31554	SC42747	200-45850-1
Laboratory Sample ID		Guideline	SC29757-25	SC42747-26	200-46850-11	SC29757-26	SC42747-19	200-46850-12	SC29757-27	SC29757-30	SC42747-27	200-46850-13	SC29757-29	SC31554-01	SC42747-12	200-46850-1
Sample Type	Units	Value								Field Duplicate						
Site-Related Volatile Organic Compou																
Tetrachloroethene (PCE)	µg/m3	30	1.56	0.23 U	0.44 J	6.22	0.07 J	1.3 J	1.71 J	1.15 J	0.18 U	0.57 J	0.27 U	0.52	0.09 J+	1.4 U
Trichloroethene (TCE)	µg/m3	2	0.23	0.12	0.19 U	0.26	0.11 U	0.19 U	0.30	0.18 J	0.17	0.19 U	0.21 U	0.69	0.11 U	0.19 U
Dichloroethene, cis-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.20 U	0.40 U	0.40 U	0.20 U	0.40 U	0.40 U	0.40 U	0.20 U	0.40 U	0.40 U	0.40 U	0.20 U
Dichloroethene, trans-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.79 U	0.40 U	0.40 U	0.79 U	0.40 U	0.40 U	0.40 U	0.79 U	0.40 U	0.40 U	0.40 U	0.79 U
Vinyl Chloride	µg/m3	n/v	0.10 U	0.05 U	0.20 U	0.10 U	0.05 U	0.20 U	0.10 U	0.10 U	0.05 U	0.20 U	0.10 U	0.05 J	0.05 U	0.20 U
Trichloroethane, 1,1,1-	µg/m3	n/v	0.25 J	0.24 J	1.1 U	2.89	0.55 U	1.1 U	0.49 J	0.20 J	0.55 U	1.1 U	0.55 U	0.55 U	0.55 U	1.1 U
Dichloroethane, 1,1-	µg/m3	n/v	0.16 U	0.08 U	0.81 U	0.16 U	0.08 U	0.81 U	0.16 U	0.16 U	0.08 U	0.81 U	0.16 U	0.06 J	0.08 U	0.81 U
Dichloroethene, 1,1-	µg/m3	n/v	0.16 U	0.08 U	0.14 U	0.16 U	0.08 U	0.14 U	0.16 U	0.16 U	0.08 U	0.14 U	0.16 U	0.08 U	0.08 U	0.14 U
Chloroethane (Ethyl Chloride)	µg/m3	n/v	0.26 UJ	0.26 U	1.3 U	0.26 UJ	0.26 U	1.3 U	0.26 U	0.26 U	0.26 U	1.3 U	0.26 U	0.26 U	0.26 U	1.3 U
Other Volatile Organic Compounds																
Methylene Chloride (Dichloromethane)	µg/m3	60	0.44 J+	0.70	0.78 J	0.99 J+	0.59	1.2 J	1.39	1.20	0.35 U	1.7 U	0.30 J	0.48	0.49	1.7 U

Notes:
NYSDOH New York State Department of Health
µg/m3 micrograms per cubic meter
n/v No Air Guideline value established

Results key:
6.5 Concentration exceeds the NYSDOH Air Guideline Value.
15.2 Measured concentration did not exceed the NYSDOH Air Guideline Value.
0.03 U Analyte was not detected at a concentration greater than the laboratory reported quantitation limit.

Data qualifier flags:
D Result was obtained from the analysis of a Dilution.
E Concentration for this analyte is an Estimated value due to an exceedance of the calibration range for that compound or interferences resulting in a biased final concentration.
J Detected above the Method Detection Limit but below the Reporting Limit; therefore, the reported result is an estimated value.
J+ The analyte was positively identified; the concentration shown is an estimated value that may be biased high.
UJ Analyte not detected; quantitation limit shown is approximate.
R The data are unusable. Results shown in parentheses are rejected due to serious deficiencies in meeting quality control limits. The analyte may or may not be present.
AirP Low sample volume necessitated pressurizing the sample canister in lab prior to analysis resulting in elevated reporting limits.

DRAFT



Stantec
61 Commercial Street
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Legend

▲ IRM INDOOR AND OUTDOOR AIR SAMPLE LOCATION

(*) ASTERISK INDICATES OFFICE AND COMMON AREAS SHOWN WITHOUT INTERIOR WALLS FOR INDIVIDUAL OFFICES, ROOMS AND HALLWAYS

Red ovals designate sample locations for December 2019 monitoring event

Notes

Revision	By	Appd.	YY.MM.DD
REVISED IRM-SMP REPORT - 2018-2019 HEATING SEASON	TW	MPS	19.03.01
REVISED IRM-SMP REPORT - 2017-2018 HEATING SEASON	TW	MPS	18.01.16
SAMPLING LOCATIONS AS OF 12-15-2016	TW	MPS	16.12.15

Issued	By	Appd.	YY.MM.DD

File Name:	Dwn.	Chkd.	Dsgn.	YY.MM.DD
	APL	TW	TW	2016.01

Permit-Seal

Client/Project

FORMER ALLIANCE METAL STAMPING & FABRICATION FACILITY
BROWNFIELD CLEANUP PROGRAM SITE # C828101

12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY

IRM SMP MONITORING REPORT
2019-2020 HEATING SEASON

Title

SAMPLE LOCATION MAP
(DECEMBER 2019)

Project No. 190500647

Scale AS SHOWN

Drawing No.

Sheet

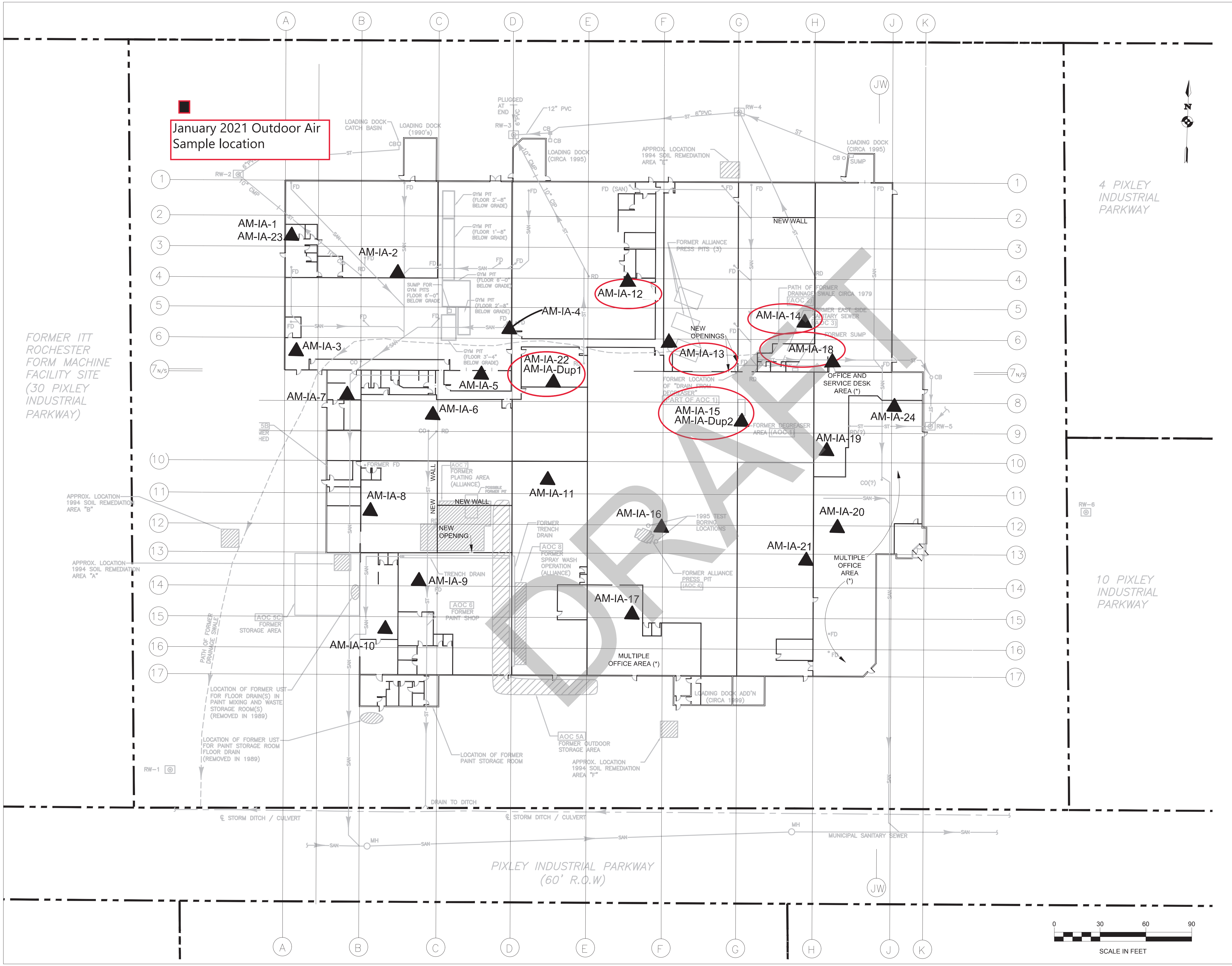
Revision

FIG. C-5

of

U:\190500647\drawing\IRM-SMP Report\Cadd\Figure 4 Soil Vapor Intrusion Assessment Sample Actual Locations -12-2018.dwg
2019/04/01 9:58 AM By: Less, Andy

ORIGINAL SHEET - ANSI D



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Legend

▲ IRM INDOOR AND OUTDOOR AIR SAMPLE LOCATION

(*) ASTERISK INDICATES OFFICE AND COMMON AREAS SHOWN WITHOUT INTERIOR WALLS FOR INDIVIDUAL OFFICES, ROOMS AND HALLWAYS

Red ovals indicate locations of January 2021 indoor air samples

Notes

Revision	By	Appd.	YY.MM.DD
REVISED IRM-SMP REPORT - 2020-2021 HEATING SEASON	TW	DH	21.08
REVISED IRM-SMP REPORT - 2018-2019 HEATING SEASON	TW	MPS	19.03.01
REVISED IRM-SMP REPORT - 2017-2018 HEATING SEASON	TW	MPS	18.01.16
SAMPLING LOCATIONS AS OF 12-15-2016	TW	MPS	16.12.15

Issued	By	Appd.	YY.MM.DD

File Name:	APL	TW	TW	2016.01
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project

FORMER ALLIANCE METAL STAMPING & FABRICATION FACILITY
BROWNFIELD CLEANUP PROGRAM SITE # C828101

12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY

IRM SMP MONITORING

Title

SAMPLE LOCATION MAP
(JANUARY 2021)

Project No. 190500647 | Scale AS SHOWN

Drawing No. | Sheet | Revision

FIG. C-6 of

ORIGINAL SHEET – ANSI D

Table C-5
Summary of Indoor Air Sample Analysis Results, 2016 to 2021
Former AMSF Facility BCP Site (C828101)
12 Pixley Industrial Parkway, Gates, New York

Tenant Space			Excelsus (formerly Universal Equipment)						Excelsus									
Sample Location			AM-IA-12						AM-IA-13					AM-IA-14				
Sample Date			15-Dec-16	7-Feb-17	21-Dec-17	20-Dec-18	13-Dec-19	22-Jan-21	15-Dec-16	21-Dec-17	20-Dec-18	13-Dec-19	22-Jan-21	15-Dec-16	21-Dec-17	20-Dec-18	13-Dec-19	22-Jan-21
Sample ID (* - minus "AM-IA" prefix)			*-12-20161215	*-12-20170207	*-12-20171221	*-12-20181220	*-12-20191213	AM-IA-12-202101	*-13-20161215	*-13-20171221	*-13-20181220	*-13-20191213	AM-IA-13-202101	*-14-20161215	*-14-20171221	*-14-20181220	*-14-20191213	AM-IA-14-202101
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory		NYSDOH	SPECTRUM	SPECTRUM	SPECTRUM	TALBUR	TALBUR	TALBUR	SPECTRUM	SPECTRUM	TALBUR	TALBUR	TALBUR	SPECTRUM	SPECTRUM	TALBUR	TALBUR	TALBUR
Laboratory Work Order		Air	SC29757	SC31554	SC42747	200-45850-1	200-51936-1	200-56983-1	SC29757	SC42747	200-45850-1	200-51936-1	200-56983-1	SC29757	SC42747	200-45850-1	200-51936-1	200-56983-1
Laboratory Sample ID		Guideline	SC29757-16	SC31554-05	SC42747-10	200-46850-2	200-51936-2	200-56983-2	SC29757-17	SC42747-11	200-46850-3	200-51936-3	200-56983-3	SC29757-18	SC42747-20	200-46850-4	200-51936-4	200-56983-4
Sample Type	Units	Value																
Site-Related Volatile Organic Compou																		
Tetrachloroethene (PCE)	µg/m3	30	**37.84**	3.53	5.37	6.2 J	2.9	3.1	14.44	6.50	9.6	4.2	2.9	27.53	25.29	12	5.9	6.2
Trichloroethene (TCE)	µg/m3	2	0.71	0.11	0.11 U	1.3 U	0.19 U	0.20 U	0.39	0.12	0.31	0.20	0.20 U	0.65	0.11 U	0.41	0.28	0.31
Dichloroethene, cis-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	1.4 U	0.20 U	0.20 U	0.40 U	0.40 U	0.20 U	0.20 U	0.20 U	0.40 U	0.40 U	0.20 U	0.20 U	0.20 U
Dichloroethene, trans-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	5.6 U	0.79 U	0.79 U	0.40 U	0.40 U	0.79 U	0.79 U	0.79 U	0.40 U	0.40 U	0.79 U	0.79 U	0.79 U
Vinyl Chloride	µg/m3	n/v	0.10 U	0.05 U	0.05 U	1.4 U	0.20 U	0.20 U	0.10 U	0.05 U	0.20 U	0.20 U	0.20 U	0.10 U	0.05 U	0.20 U	0.20 U	0.20 U
Trichloroethane, 1,1,1-	µg/m3	n/v	4.96	0.35 J	0.75	7.7 U	1.1 U	1.1 U	1.00	0.55 U	0.99 J	0.35 J	1.1 U	1.52	1.27	0.98 J	1.1 U	1.1 U
Dichloroethane, 1,1-	µg/m3	n/v	0.16 U	0.08 U	0.06 J	5.7 U	0.81 U	0.81 U	0.18	0.08 U	0.28 J	0.21 J	0.81 U	0.16 U	0.07 J	0.19 J	0.81 U	0.81 U
Dichloroethene, 1,1-	µg/m3	n/v	0.16 U	0.08 U	0.06 J	0.99 U	0.14 U	0.20 U	0.16 U	0.08 U	0.14 U	0.14 U	0.20 U	0.16 U	0.08 U	0.14 U	0.14 U	0.20 U
Chloroethane (Ethyl Chloride)	µg/m3	n/v	0.26 U	0.26 U	0.26 U	9.4 U	1.3 U	1.3 U	0.26 U	0.26 U	1.3 U	0.43 J	1.3 U	0.26 U	0.26 U	1.3 U	0.38 J	1.3 U
Other Volatile Organic Compounds																		
Methylene Chloride (Dichloromethane)	µg/m3	60	4.55	1.13	1.66	5.1 J	1.3 J	1.7 U	1.44	0.60	2.9	1.7 U	1.7 U	1.14 J+	1.03	1.7	0.98 J	1.7 U

Tenant Space			Excelsus (continued)								Complete Automotive Solutions					
Sample Location			AM-IA-15								AM-IA-18					
Sample Date			15-Dec-16		21-Dec-17		20-Dec-18		13-Dec-19	22-Jan-21	15-Dec-16	7-Feb-17	21-Dec-17	20-Dec-18	13-Dec-19	22-Jan-21
Sample ID (* - minus "AM-IA" prefix)			*-15-20161215	*-DUP2-20161215	*-15-20171221	*-DUP2-20171221	*-15-20181220	*-DUP2-20181220	*-15-20191213	AM-IA-15-202101	*-18-20161215	*-18-20170207	*-18-20171221	*-18-20181220	*-18-20191213	AM-IA-18-202101
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory		NYSDOH	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	TALBUR	TALBUR	TALBUR	TALBUR	SPECTRUM	SPECTRUM	SPECTRUM	TALBUR	TALBUR	TALBUR
Laboratory Work Order		Air	SC29757	SC29757	SC42747	SC42747	200-45850-1	200-45850-1	200-51936-1	200-56983-1	SC29757	SC31554	SC42747	200-45850-1	200-51936-1	200-56983-1
Laboratory Sample ID		Guideline	SC29757-19	SC29757-20	SC42747-21	SC42747-22	200-46850-5	200-46850-6	200-51936-5	200-56983-5	SC29757-23	SC31554-10	SC42747-06	200-46850-9	200-51936-6	200-56983-1
Sample Type	Units	Value		Field Duplicate		Field Duplicate		Field Duplicate								
Site-Related Volatile Organic Compou																
Tetrachloroethene (PCE)	µg/m3	30	26.18	28.82	0.14 U	0.14 U	9.5	9.0	2.9	3.6	**61.84**	14.24 J+	0.29	29	**1500 J**	**810 D**
Trichloroethene (TCE)	µg/m3	2	0.33	0.21 U	0.11 U	0.11 U	0.27	0.46	0.19 U	0.20 U	0.64	0.11 U	0.11 U	**2.6**	0.27	0.20 U
Dichloroethene, cis-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.40 U	0.40 U	1.7 U	0.20 U	0.20 U
Dichloroethene, trans-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	0.40 U	0.79 U	0.79 U	0.79 U	0.79 U	0.40 U	0.40 U	0.40 U	6.6 U	0.79 U	0.79 U
Vinyl Chloride	µg/m3	n/v	0.10 U	0.10 U	0.05 U	0.05 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.05 U	0.05 U	1.7 U	0.20 U	0.20 U
Trichloroethane, 1,1,1-	µg/m3	n/v	1.48	1.64	0.55 U	0.55 U	0.88 J	0.86 J	1.1 U	1.1 U	1.58	0.28 J+	0.55 U	9.1 U	1.1 U	1.1 U
Dichloroethane, 1,1-	µg/m3	n/v	0.16 U	0.16 U	0.08 U	0.08 U	0.15 J	0.13 J	0.81 U	0.81 U	0.16 U	0.08 U	0.08 U	6.8 U	0.81 U	0.81 U
Dichloroethene, 1,1-	µg/m3	n/v	0.16 U	0.16 U	0.08 U	0.08 U	0.14 U	0.14 U	0.14 U	0.20 U	0.16 U	0.08 U	0.08 U	1.2 U	0.14 U	0.20 U
Chloroethane (Ethyl Chloride)	µg/m3	n/v	0.26 U	0.26 U	0.26 U	0.26 U	1.3 U	1.3 U	0.46 J	1.3 U	0.26 UJ	0.26 U	0.26 UJ	11 U	1.3 U	1.3 U
Other Volatile Organic Compounds																
Methylene Chloride (Dichloromethane)	µg/m3	60	3.89 J	1.17 J	0.32 J	0.35 U	1.7 J	2.6	1.4 J	1.1 J	0.72 J+	0.69 UJ	0.51	15 U	1.7 U	1.7 U

Tenant Space			Bright Raven Gymnastics													
Sample Location			AM-IA-22													
Sample Date			15-Dec-16		7-Feb-17		21-Dec-17		20-Dec-18		13-Dec-19		22-Jan-21			
Sample ID (* - minus "AM-IA" prefix)			*-22-20161215	*-DUP1-20161215	*-22-20170207	*-DUP1-20170207	*-22-20171221	*-DUP1-20171221	*-22-20181220	*-DUP1-20181220	*-22-20191213	*-DUP1-20191213	AM-IA-22-202101	AM-IA-15-202101		
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		
Laboratory		NYSDOH	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	SPECTRUM	TALBUR	TALBUR	TALBUR	TALBUR	TALBUR	TALBUR		
Laboratory Work Order		Air	SC29757	SC29757	SC31554	SC31554	SC42747	SC42747	200-45850-1	200-45850-1	200-51936-1	200-51936-1	200-56983-1	200-56983-1		
Laboratory Sample ID		Guideline	SC29757-08	SC29757-09	SC31554-07	SC31554-03	SC42747-17	SC42747-18	200-46850-23	200-46850-24	200-51936-7	200-51936-8	200-56983-7	200-56983-8		
Sample Type	Units	Value		Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate		
Site-Related Volatile Organic Compou																
Tetrachloroethene (PCE)	µg/m3	30	R (235.99 E)	R (6.01)	8.95 J	5.73 J	0.09 J	0.14 J D	6.4 J	9.0	3.1	2.8	7.0	6.8		
Trichloroethene (TCE)	µg/m3	2	R (6.56)	R (0.21 U)	0.11 U	0.15	0.11 U	0.18 U D	1.9	1.1 U	0.19 U	0.19 U	0.20 U	0.20 U		
Dichloroethene, cis-1,2-	µg/m3	n/v	R (5.99)	R (0.40 U)	0.40 U	0.40 U	0.40 U	0.65 U D	1.2 U	1.2 U	0.20 U	0.20 U	0.20 U	0.20 U		
Dichloroethene, trans-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.65 U D	4.7 U	4.8 U	0.79 U	0.79 U	0.79 U	0.79 U		
Vinyl Chloride	µg/m3	n/v	0.10 U	0.10 U	0.05 U	0.05 U	0.05 U	0.08 U D	1.2 U	1.2 U	0.20 U	0.20 U	0.20 U	0.20 U		
Trichloroethane, 1,1,1-	µg/m3	n/v	8.46 J	4.11 J	0.72 J+	0.45 J	0.55 U	0.90 U D	6.5 U	6.5 U	1.1 U	1.1 U	1.1 U	1.1 U		
Dichloroethane, 1,1-	µg/m3	n/v	0.16 U	0.16 U	0.10 J+	0.08 U	0.08 U	0.13 U D	4.8 U	4.9 U	0.81 U	0.81 U	0.81 U	0.81 U		
Dichloroethene, 1,1-	µg/m3	n/v	1.03 J	0.16 UJ	0.08 J+	0.08 U	0.08 U	0.13 U D	0.83 U	0.83 U	0.14 U	0.14 U	0.20 U	0.20 U		
Chloroethane (Ethyl Chloride)	µg/m3	n/v	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.44 U D	7.9 U	7.9 U	1.3 U	1.3 U	1.3 U	1.3 U		
Other Volatile Organic Compounds																
Methylene Chloride (Dichloromethane)	µg/m3	60	2.3 UJ	1.20 J	1.53 J	1.10	0.35 U	0.57 U D	10 U	10 U	1.2 J	1.1 J	1.7 U	1.7 U		

Tenant Space			Outdoor Air Samples					
Sample Location								
Sample Date			15-Dec-16	7-Feb-17	21-Dec-17	20-Dec-18	13-Dec-19	22-Jan-21
Sample ID (* - minus "AM-IA" prefix)			AM-OA-1-20161215	AM-OA-1-20170207	AM-OA-1-20171221	AM-OA-1-20181220	AM-OA-1-20191213	AM-OA-1-202101
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory		NYSDOH	SPECTRUM	SPECTRUM	SPECTRUM	TALBUR	TALBUR	TALBUR
Laboratory Work Order		Air	SC29757	SC31554	SC42747	200-45850-1	200-51936-1	200-56983-1
Laboratory Sample ID		Guideline	SC29757-29	SC31554-01	SC42747-12	200-46850-1	200-51936-1	200-56983-6
Sample Type	Units	Value						
Site-Related Volatile Organic Compou								
Tetrachloroethene (PCE)	µg/m3	30	0.27 U	0.52	0.09 J+	1.4 U	0.28 J	1.4 U
Trichloroethene (TCE)	µg/m3	2	0.21 U	0.69	0.11 U	0.19 U	0.19 U	0.20 U
Dichloroethene, cis-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	0.20 U	0.20 U	0.20 U
Dichloroethene, trans-1,2-	µg/m3	n/v	0.40 U	0.40 U	0.40 U	0.79 U	0.79 U	0.79 U
Vinyl Chloride	µg/m3	n/v	0.10 U	0.05 J	0.05 U	0.20 U	0.20 U	0.20 U
Trichloroethane, 1,1,1-	µg/m3	n/v	0.55 U	0.55 U	0.55 U	1.1 U	1.1 U	1.1 U
Dichloroethane, 1,1-	µg/m3	n/v	0.16 U	0.06 J	0.08 U	0.81 U	0.81 U	0.81 U
Dichloroethene, 1,1-	µg/m3	n/v	0.16 U	0.08 U	0.08 U	0.14 U	0.14 U	0.20 U
Chloroethane (Ethyl Chloride)	µg/m3	n/v	0.26 U	0.26 U	0.26 U	1.3 U	1.3 U	1.3 U
Other Volatile Organic Compounds								
Methylene Chloride (Dichloromethane)	µg/m3	60	0.30 J	0.48	0.49	1.7 U	1.7 U	1.7 U

Notes:

NYSDOH	New York State Department of Health
µg/m3	micrograms per cubic meter
n/v	No Air Guideline value established

Results key:

6.5	Concentration exceeds the NYSDOH Air Guideline Value.
15.2	Measured concentration did not exceed the NYSDOH Air Guideline Value.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reported quantitation limit.

Data qualifier flags:

D	Result was obtained from the analysis of a Dilution.
E	Concentration for this analyte is an Estimated value due to an exceedance of the calibration range for that compound or interferences resulting in a biased final concentration.
J	Detected above the Method Detection Limit but below the Reporting Limit; therefore, the reported result is an estimated value.
J+	The analyte was positively identified; the concentration shown is an estimated value that may be biased high.
UJ	Analyte not detected; quantitation limit shown is approximate.
R	The data are unusable. Results shown in parentheses are rejected due to serious deficiencies in meeting quality control limits. The analyte may or may not be present.

Appendix D

Conceptual Design and Estimated Cost Assumptions for Remedial Alternatives

Former Alliance Metal Stamping & Fabrication Facility Site
Brownfield Cleanup Program
Alternatives Analysis Report

Appendix D

Remedial Alternative Cost Estimate Detail

Alternative 1.0: Impacted Soil Containment, Institutional and Engineering Controls

	Cost Totals	
	Current Dollars	Net Present Value (1)
I. Capital Costs		
Assumptions:		
- Implementation in Year 0		
- Impervious cap (building floor slab) currently in place		
Costs:		
- Engineering and legal costs associated with development of Environmental Easement and Site Management Plan	$20,000	$20,000
Capital Costs Subtotal		***$20,000***
II. Operation, Maintenance & Monitoring (OM&M)		
Assumptions:		
- Annual inspections for 10 years beginning in Year 1		
- Annual reporting		
- Costs of occasional minor cover repair - assume $1,500 in years 5 and 10		
Costs:		
- Periodic inspections and reporting (10 events x $2,000 per event)	$20,000	$16,322
- Periodic maintenance of cover	$3,000	$2,265
OM&M Costs Subtotal		***$18,587***
Remedial Alternative 1.0 Total:		***$38,587***

1. Net Present Value (NPV) estimated using an annual discount rate of 7% adjusted for an annual inflation rate of 3%.

Former Alliance Metal Stamping & Fabrication Facility Site
Brownfield Cleanup Program
Alternatives Analysis Report

Appendix D
Remedial Alternative Cost Estimate Detail

Alternative 2.0: Groundwater Monitoring

	Cost Totals	
	Current Dollars	Net Present Value (1)
I. Capital Costs		
Assumptions:		
- Monitoring wells already in place from RI		
- Costs for development of SMP and EE covered under Alternative 1.0		
Costs:		
- None	$0	$0
Capital Costs Subtotal		***$0***
II. Operation, Maintenance & Monitoring (OM&M)		
Assumptions:		
- 20 year monitoring period:		
Years 1 and 2: Annual site-wide monitoring of 16 wells, add'l semi-annual monitoring of 8 east-side wells		
Years 3 to 5: Annual site-wide monitoring of 15 wells		
Years 6 to 10: Annual site-wide monitoring of 10 wells		
Years 11 to 20: Annual site-wide monitoring of 8 wells		
- Low-flow sampling methodology, analysis for VOCs,		
- Annual reporting		
- IDW discharge to POTW, including waste sampling, permitting and discharge fee		
- Periodic well repair, rehab and/or replacement, and abandonment		
Costs:		
- Analytical ($80 each sample, VOCs only):		
Years 1 and 2: 24 wells per year	$3,840	$3,629
Years 3 to 5: 15 wells	$3,600	$3,094
Years 6 to 10: 10 wells	$4,000	$2,955
Years 11 to 20: 8 wells	$6,400	$3,572
- IDW management (22 events, $2,000/event)	$44,000	$27,475
- Sampling field crew - $2,000 per 2-person crew day:		
Years 1 and 2: Annual = 5 days; semi-annual = 3 days	$32,000	$30,229
Years 3 to 5: Annual = 4 days	$24,000	$20,619
Years 6 to 10: Annual = 3 days	$30,000	$22,153
Years 11 to 20: Annual = 2 days	$40,000	$22,298
- Field equipment rental ($250/day)		
Years 1 and 2: Annual = 5 days; semi-annual = 3 days	$10,000	$3,780
Years 3 to 5: Annual = 4 days	$3,000	$2,578
Years 6 to 10: Annual = 3 days	$3,750	$2,771
Years 11 to 20: Annual = 2 days	$5,000	$2,791
- Well maintenance/abandonment (6 events, $3,000 per event)	$18,000	$12,298
- Reporting: 20 years x $5,000/year	$100,000	$68,669
OM&M Costs Subtotal		***$228,911***
Remedial Alternative 2.0 Total:		***$228,911***

1. Net Present Value estimated using annual discount rate of 7% adjusted for 3% inflation rate.

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Alternative 2.1: Groundwater Migration Control

- Modify Recharge Well RW-2

	Cost Totals	
	Current Dollars	Net Present Value[1]
I. Capital Costs		
Assumptions:		
- Implementation in Year 0		
- Debris in RW-2 cleaned out to original bottom depth (149 ft bgs)		
- Cement plug installed from bottom to 55 ft bgs		
- Removed debris tested and disposed offsite as hazardous waste		
- Water removed tested and disposed offsite (assume discharge to municipal sewer)		
Costs:		
- Drilling Contractor Fees	$18,000	$18,000
- Laboratory Costs	$2,000	$2,000
- Debris disposal	$3,000	$3,000
- Design/oversight, obtain permits to discharge wastewater	$3,000	$3,000
Capital Costs Subtotal		***$26,000***
II. Operation, Maintenance & Monitoring (OM&M)		
Assumptions:		
- No ongoing OM&M		
Costs:		
- none	$0	$0
OM&M Costs Subtotal		***$0***
Remedial Alternative 2.1 Total:		***$26,000***

1. Net Present Value (NPV) estimated using an annual discount rate of 7% adjusted for an annual inflation rate of 3%.

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Alternative 2.2: Groundwater Migration Control

- Abandon Recharge Well RW-2, replace with new infrastructure

	Cost Totals	
I. Capital Costs	**Current Dollars**	**Net Present Value(1)**
Assumptions:		
- Implementation in Year 0		
Well abandonment		
- Debris in well cleaned out to original bottom depth		
- Cement plug installed from bottom depth to top of casing		
- Removed debris tested and disposed offsite		
- Assume as haz. waste		
- Water removed tested and disposed offsite (assume discharge to municipal sewer)		
- Catch basins filled with structural fill, surface repaired to match surrounding conditions		
New infrastructure for stormwater management		
- Design/oversight, obtain permits		
- Construct retention system and discharge infrastructure		
- Rehabillitate RW-1, connect to retention structure		
- Connect existing roof drains to new infrastructure		
Costs:		
New infrastructure for stormwater management		
- Install and connect	$95,000	$95,000
- Design/oversight, obtain permits = 25%	$23,750	$23,750
Abandon Recharge Wells		
- Drilling Contractor Fees	$9,000	$9,000
- Laboratory Costs	$2,000	$2,000
- Debris disposal	$3,000	$3,000
- Design/oversight, obtain permits to discharge	$4,000	$4,000
Capital Costs Subtotal		***$136,750***
II. Operation, Maintenance & Monitoring (OM&M)		
Assumptions:		
- Ongoing /annual maintenance of new stormwater management system		
Costs:		
- Estimated at $1000 per year for 20 years	$20,000	$13,740
OM&M Costs Subtotal		***$13,740***
Remedial Alternative 2.2 Total:		***$150,490***

1. Net Present Value (NPV) estimated using an annual discount rate of 7% adjusted for an annual inflation rate of 3%.

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<u>Alternative 2.3: Groundwater Migration Control</u>

- Abandon Recharge Wells RW-2, RW-3, RW-4 and RW-5, replace with new infrastructure

	Cost Totals	
I. Capital Costs	**Current Dollars**	**Net Present Value[1]**
Assumptions:		
- Implementation in Year 0		
<u>Well abandonment</u>		
- Debris in wells cleaned out to original bottom depth		
- Cement plugs installed from bottom depth to top of casing		
- Removed debris tested and disposed offsite		
- RW-2 debris as haz. waste, other debris as non-hazardous		
- Water removed tested and disposed offsite (assume discharge to municipal sewer)		
- Catch basins filled with structural fill, surface repaired to match surrounding conditions		
<u>New infrastructure for stormwater management</u>		
- Design/oversight, obtain permits		
- Construct retention system and discharge infrastructure		
- Rehabillitate RW-1, connect to retention structure		
- Connect existing roof drains to new infrastructure		
Costs:		
<u>New infrastructure for stormwater management</u>		
- Install and connect	$190,000	$190,000
- Design/oversight, obtain permits = 25%	$47,500	$47,500
<u>Abandon Recharge Wells</u>		
- Drilling Contractor Fees	$20,000	$20,000
- Laboratory Costs	$3,600	$3,600
- Debris disposal	$5,300	$5,300
- Design/oversight, obtain permits to discharge	$7,720	$7,720
Capital Costs Subtotal		***$274,120***
II. Operation, Maintenance & Monitoring (OM&M)		
Assumptions:		
- Ongoing /annual maintenance of new stormwater management system		
Costs:		
- Estimated at $1500 per year for 20 years	$30,000	$20,605
OM&M Costs Subtotal		**$20,605**
Remedial Alternative 2.3 Total:		***$294,725***

1. Net Present Value (NPV) estimated using an annual discount rate of 7% adjusted for an annual inflation rate of 3%.

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<u>Alternative 3.0: Soil Vapor Intrusion Mitigation</u>

Comprehensive floor slab sealing with annual IAM program

	Cost Totals	
I. Capital Costs	**Current Dollars**	**Net Present Value**[1]
Assumptions:		
- Implementation in Year 0		
- Comprehensive sealing of floor penetrations		
- Obtain and install 2 air filtration units		
- Costs for development of SMP and EE covered uner Alternative 1.0		
Costs:		
- Comprehensive floor sealing event	$72,000	$72,000
- Air Filtration Units (2 units x $2,500 each)	$5,000	$5,000
Capital Costs Subtotal		***$77,000***

II. Operation, Maintenance & Monitoring (OM&M)

	Current Dollars	Net Present Value
Assumptions:		
- Annual floor inspection and IAM program for 20 years		
- Operation of Air filtration units for 5 years		
Costs:		
- Annual monitoring and reporting ($25,000/year X 20 years)	$500,000	$343,300
- 5 years maintenance and operation, air filtration units	$8,250	$7,371
OM&M Costs Subtotal		***$350,671***

Remedial Alternative 3.0 Total:	***$427,671***

1. Net Present Value (NPV) estimated using an annual discount rate of 7% adjusted for an annual inflation rate of 3%.

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Alternative 3.1: Soil Vapor Intrusion Mitigation
Column line 7 target area coverage by SSDS

	Cost Totals	
	Current Dollars	**Net Present Value[1]**
I. Capital Costs		
Assumptions:		
- Implementation in Year 0		
- Comprehensive sealing of floor penetrations		
- Obtain and install 2 air filtration units		
- Costs for development of SMP and EE covered under Alternative 1.0		
- Install SSDS in Areas of concern along Column line 7		
Costs:		
- Comprehensive floor sealing event	$72,000	$72,000
- Air Filtration Units (2 units x $2,500 each)	$5,000	$5,000
- Install SSDS and components (assume 16 fans)	$213,000	$213,000
Capital Costs Subtotal		***$290,000***
Design/oversight, obtain permits Subtotal		***$72,500***
II. Operation, Maintenance & Monitoring (OM&M)		
Assumptions:		
- Annual floor inspection and IAM program for 5 years		
- Operation of Air filtration units for 2 years		
Costs:		
- Annual monitoring and reporting for 10 years	$250,000	$203,958
- SSDS OM&M for 20 years ($19,000 / year x 20 years)	$300,000	$260,911
- 5 years maintenance and operation, air filtration units	$8,250	$7,371
OM&M Costs Subtotal		***$472,240***
Remedial Alternative 3.1 Total:		***$834,740***

1. Net Present Value (NPV) estimated using an annual discount rate of 7% adjusted for an annual inflation rate of 3%.

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Alternative 3.2: Soil Vapor Intrusion Mitigation
Coverage of north half of building by SSDS

	Cost Totals: Current Dollars	Cost Totals: Net Present Value[1]
I. Capital Costs		
Assumptions:		
- Implementation in Year 0		
- Comprehensive sealing of floor penetrations		
- Obtain and install 2 air filtration units		
- Costs for development of SMP and EE covered under Alternative 1.0		
- Install SSDS in Areas of concern in northern half of building		
Costs:		
- Comprehensive floor sealing event	$72,000	$72,000
- Air Filtration Units (2 units x $2,500 each)	$5,000	$5,000
- Install SSDS and components (assume 25 fans)	$329,000	$329,000
Capital Costs Subtotal		***$406,000***
Design/oversight, obtain permits Subtotal		***$101,500***
II. Operation, Maintenance & Monitoring (OM&M)		
Assumptions:		
- Annual floor inspection and IAM program for 5 years		
- Operation of Air filtration units for 2 years		
Costs:		
- Annual monitoring and reporting for 10 years	$250,000	$203,958
- SSDS OM&M for 20 years ($30,000 / year x 20 years)	$600,000	$411,960
- 2 years maintenance and operation, air filtration units	$3,300	$3,118
OM&M Costs Subtotal		***$619,036***
Remedial Alternative 3.2 Total:		***$1,126,536***

1. Net Present Value (NPV) estimated using an annual discount rate of 7% adjusted for an annual inflation rate of 3%.

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Alternative 3.3: Soil Vapor Intrusion Mitigation

Complete building coverage by SSDS

	Cost Totals: Current Dollars	Cost Totals: Net Present Value(1)
I. Capital Costs		
Assumptions:		
- Implementation in Year 0		
- Comprehensive sealing of floor penetrations		
- Obtain and install 2 air filtration units		
- Costs for development of SMP and EE covered under Alternative 1.0		
- Install SSDS to cover entire building		
Costs:		
- Comprehensive floor sealing event	$72,000	$72,000
- Air Filtration Units (2 units x $2,500 each)	$5,000	$5,000
- Install SSDS and components (assume 38 fans)	$498,000	$498,000
Capital Costs Subtotal		***$575,000***
Design/oversight, obtain permits Subtotal		***$143,750***
II. Operation, Maintenance & Monitoring (OM&M)		
Assumptions:		
- Annual IAM program for 2 years		
- Operation of Air filtration units for 2 years		
Costs:		
- Annual monitoring and reporting for 2 years	$50,000	$47,232
- SSDS OM&M for 20 years ($44,000 / year x 20 years)	$880,000	$604,201
- 2 years maintenance and operation, air filtration units	$3,300	$3,118
OM&M Costs Subtotal		***$654,551***
Remedial Alternative 3.3 Total:		***$1,373,301***

1. Net Present Value (NPV) estimated using an annual discount rate of 7% adjusted for an annual inflation rate of 3%.

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Alternative 4.0: Soil Vapor Intrusion Assessment, Off-Site Properties

Assess potential for SVI at 4 and 10 Pixley Industrial Parkway Buildings

	Cost Totals	
I. Capital Costs	**Current Dollars**	**Net Present Value[1]**
Assumptions:		
Implementation in Year 0		
Prepare SVI Assessment Work Plans for each building		
Implement Work Plans		
Need for further actions to be determined, assume contingency for SSDS in one bldg.		
Costs:		
Prepare SVI Assessment Work Plans	$5,000	$5,000
Implement Work Plans, Write report	$20,000	$20,000
Contingency for Installation of SSDS in one building	$100,000	$100,000
Capital Costs Subtotal		***$125,000***
II. Operation, Maintenance & Monitoring (OM&M)		
Assumptions:		
Contingency for operation of one SSDS System, if required		
Costs:		
- OM&M of SSDS, assume 20 years	$120,000	$82,400
- Annual monitoring and reporting, assume 2 years	$20,000	$18,894
OM&M Costs Subtotal		***$101,294***
Remedial Alternative 4.0 Total:		***$226,294***

1. Net Present Value (NPV) estimated using an annual discount rate of 7% adjusted for an annual inflation rate of 3%.