VI MITIGATION WORK PLAN

SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Submitted to:
US EPA Region 5
Emergency Response Branch
Cincinnati, OH
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1.0 INTRODUCTION

This Vapor Intrusion (VI) Mitigation Work Plan has been prepared by Conestoga-Rovers & Associates (CRA) on behalf of the Respondents to the Administrative Settlement Agreement and Order on Consent for Removal Action (ASAOC or Removal Order) with United States Environmental Protection Agency (USEPA), Docket No. V-W-13-C010 (Respondents). A copy of the April 2013 USEPA Removal Order is included as Appendix A.

This Work Plan details mitigation measures that will be completed to address concentrations of volatile organic compounds (VOCs) and explosive gases detected in sub-slab soil vapor and indoor air in buildings on- and off-Site of the South Dayton Dump and Landfill Site (Site or Property) in Moraine, Ohio.

This Work Plan was prepared in accordance with the following documents:

- USEPA Vapor Intrusion Investigation Work Plan (USEPA, November 2011)
- USEPA Region 5 Vapor Intrusion Guidebook (USEPA, 2010) (USEPA Region 5 Guidance)
- Ohio Environmental Protection Agency (Ohio EPA) Sample Collection and Evaluation of Vapor Intrusion to Indoor Air Guidance Document, (Ohio EPA, May 2010)
- OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance) (EPA, November 2002)

CRA has also prepared this work plan to comply with the substantive requirements of Ohio Administrative Code (OAC) 3745-27-12 with respect to permanent monitoring for explosive gas in buildings located within the limits of waste. This mitigation work will be completed in accordance with Section 104(a)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C § 9604(a)(1), and 40 C.F.R. § 300.415 (*Removal action*) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) to abate or eliminate the immediate threats posed to public health and/or the environment.

The sub-slab depressurization system (SSDS) installations for the project will require approximately 45 working days to complete. A Project Schedule detailing milestones and task duration is presented in Section 8.

As several buildings requiring mitigation are situated on property, both on- and off-Site, that is owned and occupied by third parties, coordination of mitigation work with the owner and tenants is important, and any mitigation systems that are eventually installed will require their consent and the design of the mitigation system(s) will need to be consistent with on-going operations.

1.1 OBJECTIVES OF THE VI MITIGATION ACTIVITY

The VI Mitigation Activity is intended to directly address actual or potential releases of hazardous substance on Site, which may pose an imminent and substantial endangerment to public health, or welfare, or the environment. The VI Mitigation activity has two primary objectives:

1) Design and install a vapor abatement mitigation system in on- or off-Site residential or non-residential (commercial) structures impacted by subsurface gas migration, if the concentration(s) of contaminant(s) of concern (COCs) are greater than Ohio Department of Health (ODH)[1] sub-slab or indoor air screening levels and the presence of the COC is determined to be a result of vapor intrusion. The Respondents understand that Valley Asphalt will submit a separate Work Plan for their property and structures (i.e., Parcel 5054) to USEPA and that this work will be completed under a separate administrative order.

2) If levels of methane at the property boundary are greater than the lower explosive limit (LEL) (5 percent methane), design and install a landfill gas extraction system to prevent landfill gas migration off-Site

To achieve these two primary objectives, the followings removal activities will be completed at a minimum:

- Develop and implement a Site Health and Safety Plan.
- Conduct subsurface gas sampling (including VOCs and methane) and conduct extent of contamination sampling utilizing groundwater, soil gas, sub-slab, and indoor air sampling techniques.
- The VI abatement systems will include installation of a SSDS or crawl space depressurization system, sealing cracks in walls and floors of the basement, and

[1] ODH Health Assessment Section provided screening levels for sub-slab and indoor air contaminants of concern in a letter dated July 6, 2012. ODH screening levels for naphthalene were provided by electronic mail (email) on September 13, 2012. Revised ODH screening levels to correct the indoor air non-residential values for o-xylene were issued on October 9, 2012. The ODH letter and emails are provided in Appendix H.

sealing drains that could be a pathway for vapor intrusion. The vapor abatement mitigation systems will be designed to control levels of methane and VOCs to below ODH sub-slab and indoor air screening levels.

- The landfill gas system will be designed to control levels of methane at the property boundary to less than the lower explosive limit (5 percent methane).
- Develop and implement a performance sample plan to confirm that ODH screening levels are achieved for COCs following installation of on-site or off-Site vapor abatement mitigation system. If ODH screening levels are not achieved within 30 days of installation, Respondents will submit a Corrective Action Plan to USEPA.
- Develop and implement an operations and maintenance (O&M) plan at properties where SSDSs are installed including a long term inspection and monitoring plan.
- If necessary, develop and implement (1) a landfill gas extraction system performance sample plan including the installation of perimeter subsurface probes to confirm that methane action levels are achieved and (2) a landfill gas extraction system effluent sample plan.

1.2 SITE DESCRIPTION

The Site is located at 1901 through 2153 Dryden Road and 2225 East River Road in Moraine, Ohio. The Site location is shown on Figure 1.1. The Site is bounded to the north and west by the Miami Conservancy District (MCD) floodway (part of which is included in the definition of the Site), the Great Miami River Recreational Trail, and the Great Miami River (GMR) beyond. The Site is bounded to the east by Dryden Road with light industrial facilities beyond, to the southeast by residential and commercial properties along East River Road with a residential trailer park beyond, and to the south by undeveloped land with industrial facilities beyond.

The northern and eastern portions of the Site are currently occupied by active businesses including an operating asphalt plant at the northern portion of the Site, and several other active businesses in the northeastern portion of the Site along Dryden Road. Additional active businesses are located in the southeastern portion of the Site along East River Road, including an auto salvage yard. The Site also includes an approximately 15-acre pond (Quarry Pond).

Commercial and industrial properties bound the Site to the east and south, including an approximately 30-acre maintenance facility owned by Dayton Power and Light (DP&L). Additional commercial and industrial properties are located on the opposite bank of the

GMR to the northeast, north, northwest, west, and southwest. The Montgomery County Sewage Disposal facility is located along the opposite bank of the GMR, southwest from the Site.

Approximately 25,060 people live within a 4-mile radius of the Site. Residential properties exist more than 1,500 feet (ft) north of the Site beyond the opposite bank of the GMR. A small trailer park is located 200 ft east-southeast from the Site across Dryden Road. Six single-family residences are located on the northwest side of East River Road and are adjacent to the southeast boundary of the Site. A seventh single family home is located on the southeast side of East River Road and is within 300 ft of the Site.

A landfill was operated on the approximately 80-acre Site from the 1940s until 1996. Municipal, commercial, industrial, and residual wastes, and construction and demolition debris were disposed of at the landfill over the years. Combustible wastes were often burned.

Fill, waste, and soil at the Site contains VOCs including, but not limited to, trichloroethene (TCE), cis-1,2-dichloroethene (cis,1-2,DCE), vinyl chloride (VC), and benzene; semi-volatile organic compounds (SVOCs) including, but not limited to, polynuclear aromatic hydrocarbons (PAHs) and naphthalene; polychlorinated biphenyls (PCBs); and metals, including lead, copper, arsenic, and other inorganic chemicals. Contaminants, including VOCs, arsenic, lead, and some other chemicals detected in the landfill, have been detected in groundwater samples collected from a number of monitoring wells at and near the Site. Naphthalene and VOCs, including benzene, chlorobenzene, cis-1,2-DCE, isopropyl benzene, ethylbenzene, TCE, and VC were also detected in samples collected from soil gas probes throughout the Site.

1.2.1 GEOLOGY, HYDROGEOLOGY, TOPOGRAPHY

The Dayton area is located within the buried pre-glacial valley system that underlies the present day GMR and its tributaries in southwestern Ohio. This pre-glacial valley system is known as the Miami Valley Aquifer System. The regional overburden geology of the Dayton area consists of glacial tills, and glaciofluvial sand and gravel deposits. Norris and Spieker (1966) defined the overburden units, based on general character and relative position to be (from top to bottom):

- Ground Moraine (glacial till) – composed of silt, gravel, and clay; found primarily in the uplands area (not present at the Site)

- Upper Aquifer Zone – the saturated glaciofluvial sand and gravel zone located above a major till-rich zone
- Till-Rich Zone – composed of discontinuous fine-grained glacial till and other fine-grained materials with substantial components of sand and gravel
- Lower Aquifer Zone – the glaciofluvial sand and gravel zone located beneath the Till-Rich Zone

The subsurface geology in the vicinity of the Site, identified by CRA, consists of fill and waste underlain by glacial tills, and glaciofluvial sand and gravel deposits.

Norris and Spieker (1966) identified three principal hydrogeologic units in the Dayton area, as follows:

- Upper Aquifer Zone – the upper portion of the saturated glaciofluvial sand and gravel facies
- Till-Rich Zone – a zone of discontinuous low permeability till facies interspersed with sand and gravel facies which acts as an aquitard in some areas
- Lower Aquifer Zone – the lower portion of the saturated glaciofluvial sand and gravel facies

The subsurface hydrostratigraphy in the vicinity of the Site is consistent with the regional geology of the Miami Valley Aquifer with the exception that the Till Rich Zone is highly discontinuous beneath the Site. Monitoring wells screened above approximately 675 ft above mean sea level (AMSL) appear to be representative of the Upper Aquifer Zone. Monitoring wells screened below 675 ft AMSL appear to be representative of the Lower Aquifer Zone. Due to the stratigraphic variation of the Till Rich Zone both vertically and laterally, the implied 675 ft AMSL boundary between the Upper and Lower Aquifer Zones is approximate and may vary in elevation across the Site.

Groundwater flow in the Upper Aquifer Zone is influenced by the presence of the GMR to the north and west of the Site. Shallow groundwater (i.e., Upper Aquifer Zone) typically flows west/southwest across the Site, and/or radially (in the northern part of the Site) towards the GMR. Occasional flow slightly to the southeast has been documented during extended periods of high flow in the GMR. Depending on surface water elevations at different times of the year, shallow groundwater discharges to, or is recharged by the GMR. During flood events, groundwater flow is occasionally reversed and migrates from the GMR to the Site. Groundwater flow in the Lower Aquifer Zone is predominantly to the southwest across the Site, with occasional slight southeasterly components, and is not significantly affected by the GMR. The groundwater level elevation in the vicinity of the Site is between 700 and 725 ft AMSL (likely closer to 710 ft AMSL at the Site).

A heavily vegetated man-made embankment is present along the central (Parcel 5177) portion of the Site, and extends past the northern and western boundary of Parcel 5054, along the GMR. Portions of the berm are located on the MCD property. The grassy area between the berm and the GMR is part of the 100-year floodway and is owned by the MCD. The topography of the Site is fairly variable, with embankments along the west and north boundaries of the Site and the north boundary of the Quarry Pond, graded areas on Parcel 5054 and along Dryden and East River Roads, where the active businesses are located, a depressed area in the west-central portion of Parcel 5177, several mounded areas of fill throughout the northern portion of Parcel 5177, a ravine along the south-central part of the Parcel, and a low-lying area along the entire southern portion of the Site. An unpaved access road, oriented east-west, extends from the undeveloped City of Moraine Road Allowance through the center of the Site. Portions of the Site are within the 100-year floodway, including the majority of the Site south of the Valley Asphalt property.

1.3 SITE HISTORY

From 1941 to the present, various members of the Boesch and Grillot families have owned a major portion of the property where dumping was conducted. The majority of the properties that comprise the Site were acquired over time by Horace Boesch and Cyril Grillot.

The landfill operated from the early 1940s to 1996 and is a partially filled sand and gravel pit. The landfill contains household waste, drums, metal turnings, fly ash, foundry sand, demolition material, wooden pallets, and asphalt, and paint, paint thinner, oils, brake fluids, asbestos, solvents, transformers, and other industrial waste are known to have been brought to the Site. As the excavated areas of the Site were filled, some of the property was sold and/or leased to businesses including Valley Asphalt and other businesses along Dryden Road and East River Road. The Miami Conservancy District owns the southern part of the site including part of the Quarry Pond.

Disposal of waste materials began at the Site in the early 1940s. Materials dumped at the Site included drummed wastes. Known hazardous substances were brought to the Site, including drums containing hazardous waste from nearby facilities. Some of the drums contained cleaning solvents (1,1,1-trichloroethane [TCA], methyl ethyl ketone [MEK], and xylenes); cutting oils; paint; Stoddard solvents; and machine-tool, water based coolants. The Site previously accepted materials including oils, paint residue, brake fluids, chemicals for cleaning metals, solvents, etc. Large quantities of foundry sand and fly ash were dumped at the Site. Asbestos was also reportedly dumped at the Site.

USEPA conducted a screening site inspection of the Site in 1991. Ohio EPA conducted a site team evaluation prioritization of the landfill in 1996. In 2002, USEPA conducted an aerial photographic analysis of the Site.

In 1991, four underground storage tanks (USTs) were removed from Parcel 5054. Two 4,000-gallon steel USTs contained waste oil and gasoline, respectively. Two 3,000-gallon USTs contained diesel and kerosene, respectively.

In 1991, following a suspected release, a 20,000-gallon diesel fuel UST was removed from 1951 Dryden Road, on Parcel 5171. Custom Deliveries was operating at that location in 1991. Approximately 720 tons of soil was excavated and disposed of off-Site. A concrete pad existed below the UST and it was not removed. The UST was disposed of off-Site.

In 2000, Valley Asphalt removed five drums containing characteristic hazardous waste, PCBs, and VOCs and 2,217 tons of contaminated soils from their property (northern area of the Site) that were uncovered when a sewer line was being excavated.

USEPA proposed the Site to the National Priorities List in 2004. In 2008 to 2010, the Respondents completed several investigations at the Site, included geophysical surveys, test pit and test trench sampling, vertical aquifer sampling, landfill gas sampling, and groundwater monitoring well installation and sampling. From these investigations, the Respondents and USEPA determined that the groundwater beneath portions of the Site contains vinyl chloride, TCE, 1,2-DCE, arsenic, lead, and other chemicals. Based on the investigations, the Respondents and USEPA agreed to divide the Site work into two parts. The remedial strategy for Operable Unit One (OU1), which is shown on Figure 1.2, is expected to involve evaluating cleanup alternatives to address 55 acres of the landfill, and would include cleanup alternatives that would allow on-Site businesses to remain safely operating at the Site. In June 2012, USEPA, in consultation with Ohio EPA, determined that additional data must be collected on groundwater and potential hot spots before selecting a remedy for OU1. Additional investigation and remedy evaluation is ongoing.

1.3.1 SITE HISTORY - VAPOR INTRUSION SAMPLING

In 2009 and 2010, CRA collected soil vapor samples from 21 permanently installed soil vapor probes at the Site and on an adjacent property. The samples were submitted to an accredited laboratory and analyzed for VOCs by USEPA Method TO-15. CRA compared the soil vapor sample results to generic soil vapor screening levels that were derived by applying the USEPA Region 5 Guidance (USEPA, 2010) default soil gas-to-indoor air attenuation factor of 0.1 to the USEPA indoor air regional screening levels (RSLs). The VOCs detected in soil vapor samples at concentrations greater than the generic soil vapor screening levels were 1,1-dichloroethane (DCA); benzene; chlorobenzene; chloroform; cis-1,2-DCE; ethylbenzene; naphthalene; tetrachloroethene (PCE); TCE; vinyl chloride, and total xylenes. Exceedances of the generic soil vapor screening levels occurred at 16 of the 21 soil vapor probes.

CRA completed field screening for methane at the soil vapor probes in 2009. The soil vapor methane concentrations were compared to the upper explosive limit (UEL) (15 percent methane), and LEL (5 percent methane) for methane. Methane concentrations were greater than 10 percent of the LEL (0.5 percent methane) at 10 of the 21 soil vapor probe locations, the LEL at 5 of those 10 locations, and the UEL at 3 of those 5 soil vapor probe locations.

At the occupied building located at 2031 Dryden Road, methane was detected in a laboratory sub-slab sample at 0.97 percent, which is greater than the ODH sub-slab screening level of 0.5 percent for methane. Based on field data, methane was not detected in the indoor air. The Respondents manually measure the indoor air and sub-slab methane concentrations at this building on a weekly basis to ensure that methane concentrations do not increase and that methane is not migrating from beneath the slab into the building. On January 31, 2013, one Sierra Gas monitor (model 2001) was installed at 2031 Dryden Road. Appendix B presents the Sierra Gas monitor model 2001 specifications and manual; pictures of the installed monitor at 2031 Dryden Road; and copies of the instruction sheets provided to building tenants.

In the unoccupied storage building located at 1903 Dryden Road, methane was detected in a laboratory sub-slab sample at 6.6 percent, which is greater than 100 percent of the LEL. Based on field data, methane was not detected in the indoor air. This building is currently closed to access. On January 9, 2012, the Respondents provided email notification to USEPA and the Ohio EPA pertaining to explosive gas field readings from sub-slab soil vapor in 1903 Dryden Road warehouse probe (Probe A). On January 10, 2012, in accordance with Ohio Administrative Code (OAC) 3745-27-12, the Respondents contacted representatives of Public Health – Dayton and Montgomery County (PHDMC), City of Moraine Fire Division[2], and Moraine Police Division via telephone to provide verbal notification of the exceedance of the LEL. On January 11, 2012, the Respondents issued letters via email to the above-mentioned agencies providing written notification of the exceedance of the LEL. The Respondents manually measure the indoor air and sub-slab methane concentrations at this building on a weekly basis to ensure that methane concentrations do not increase and that methane is not migrating from beneath the slab into the building. On January 24, 2013, one Sierra Gas monitor (model 2001) was installed at 1903 Dryden Road. Appendix B presents the Sierra Gas monitor model 2001 specifications and manual; pictures of the installed monitor at 1903 Dryden Road; and copies of the instruction sheets provided to building tenants.

Vapor intrusion sampling results from 2012 documented that vapor intrusion is occurring at the Site.

- Thirteen non-residential buildings showed sub-slab TCE levels greater than the ODH screening level of 20 parts per billion by volume (ppbv), with a high TCE concentration of 5,600 ppbv. Four[3] of the thirteen non-residential buildings show indoor air TCE levels greater than the ODH indoor air screening level of 2 ppbv for TCE, with a high TCE concentration of 13 ppbv; this documents a completed exposure pathway for the four buildings.
- One non-residential building has shown a crawl space PCE concentration at 38 ppbv, which is greater than the ODH indoor air PCE screening level of 25 ppbv.
- One non-residential building (2003 Dryden Road, Parcel 5172 Building 14) showed a sub-slab 1,1-DCA level greater than the ODH sub-slab 1,1-DCA screening level of 160 ppbv, with a maximum 1,1-DCA concentration of 4,100 ppbv.
- Three non-residential buildings (1903 Dryden Road, Parcel 5054 Building 2; 2003 Dryden Road, Parcel 5172 Building 14; and 2031 Dryden Road, Parcel 5173 Building 15) showed sub-slab benzene levels greater than the ODH sub-slab benzene screening level of 20 ppbv, with a high benzene concentration of 540 ppbv in

[2] When the Respondents originally telephoned the Moraine Police Division on January 10, 2012, the Moraine Police directed the Respondents to report the issue to an individual with the City of Moraine Fire Division. Respondents reported the issue to a representative of the Moraine Police Division on January 11, 2012.

[3] One indoor air sample collected in August 2012 from 2045 Dryden Road, Parcel 5174, Building 16 contained TCE at a concentration of 50 ppbv. The confirmatory indoor air sample collected in September 2012 contained TCE at a concentration less than the ODH screening level. Based on multiple lines of evidence, the August 2012 indoor air TCE concentration appears to be anomalous and does not appear to be due to vapor intrusion.

2031 Dryden Road. An indoor air sample collected at 2003 Dryden Road, Parcel 5172 Building 14 showed a benzene concentration of 2.4 ppbv, which is greater than the ODH indoor air benzene screening level of 2 ppbv. This documents a completed exposure pathway for vapor intrusion in 2003 Dryden Road, Parcel 5172 Building 14.

- Two non-residential buildings (2015 & 2019 Dryden Road, Parcel 5172 Building 12; and 2031 Dryden Road, Parcel 5173 Building 15) showed sub-slab cis-1,2-DCE levels greater than the ODH sub-slab cis-1,2-DCE screening level of 370 ppbv, with a high cis-1,2-DCE concentration of 27,000 ppbv at 2031 Dryden Road, Parcel 5173 Building 15.
- Three non-residential buildings (1903 Dryden Road, Parcel 5054 Building 2; 2003 Dryden Road, Parcel 5172 Building 14; and 2031 Dryden Road, Parcel 5173 Building 15) showed sub-slab vinyl chloride levels greater than the ODH sub-slab vinyl chloride screening level of 20 ppbv, with a high vinyl chloride concentration of 5,500 ppbv.
- One non-residential building (2031 Dryden Road, Parcel 5173 Building 15) showed a sub-slab m,p-xylenes concentration of 2,100 ppbv, which exceeds the m,p-xylenes screening level of 2,000 ppbv; and an o-xylene sub-slab concentration of 2,000 ppbv, which equals the o-xylene screening level of 2,000 ppbv.

The maximum sub-slab and indoor air concentrations that were greater than the ODH screening levels for each building are presented on Figure 1.3. A copy of the April 2013 USEPA Removal Order is included as Appendix A.

2.0 SITE MOBILIZATION

2.1 HEALTH AND SAFETY PLAN

A Health and Safety Plan (HASP) has been established for this Site (CRA, May 2008, and associated addenda). A HASP addendum will be submitted to provide specific guidelines and establishes procedures for the protection of personnel during the investigation and system installation activities planned at the residential and non-residential properties. HASP procedures will be updated if additional information is discovered which requires alteration of the plan. The HASP is provided under separate cover, accompanying this report.

Site control measures are addressed as Section L.6.0 of the HASP.

The Site office trailer is available for team communications, emergency response, and sanitary facilities (i.e., Porta-Potty). A map to the hospital is posted in the trailer, and a first aid kit is available in the trailer. No potentially contaminated personnel or materials are allowed in the office trailer. The Site office trailer is available for meetings. The Respondents will provide sets of keys (i.e., a Site gate key and office trailer key) to USEPA and USEPA START (contractor).

2.2 PRE-WORK MEETING

A pre-work meeting will be held between the Respondents, USEPA On-Scene Coordinator (OSC), ODH Licensed Radon contractor, and other contractors to discuss this approved work plan. All participants will read and formally acknowledge the provisions of the HASP before initiating on-Site work. The following topics may be discussed in detail: provisions for Site security, mobilization, emergency procedures, delegation of responsibilities, and channels of communication.

2.3 EMERGENCY PROCEDURES

Emergency procedures have been established for this Site. Emergency procedures provide specific guidelines and establish procedures for the protection of personnel in the event of an emergency. The emergency procedures are included as Section L.7.0 of the HASP.

3.0 SAMPLING ACTIVITIES

A Quality Assurance Project Plan (QAPP) and a Field Sampling Plan (FSP) have been established for this Site (CRA, September 2008, and associated addenda), to ensure data collected during any sample investigations are reliable. Copies of the QAPP and FSP are provided under separate cover, accompanying this report.

Field sampling activities will be completed in accordance with the sampling procedures, sampling plan, and associated analysis detailed in USEPA-approved work plans.

The AOC requires subsurface gas sampling (including VOCs and methane) and sampling to determine extent of contamination utilizing groundwater, soil gas, sub-slab and indoor air sampling techniques. Groundwater sampling techniques to determine the extent of contamination are being discussed with USEPA Remedial Program and Ohio EPA representatives, and will be specified in a separate groundwater work plan. The sampling activities and techniques for soil gas, sub-slab and indoor air are presented below.

Gas sampling activities may include one or more of the following: collection of soil gas, sub-slab soil vapor, crawl space, ambient air, and/or indoor air samples. Gas samples will be collected, analyzed, and evaluated in accordance with the USEPA-modified Vapor Intrusion Investigation Work Plan (VI Investigation Work Plan) (USEPA, November 2011), and in accordance with the following procedures. Gas samples will be analyzed for the parameters included in the TO-15 list of analytes. All existing soil gas probe locations are presented on Figure 3.1. All existing sub-slab soil vapor, crawl space and indoor air sample locations for all on- and off-Site buildings included in the vapor intrusion investigation that require mitigation are presented on Figures 3.2 to 3.10.

3.1 SAMPLE COLLECTION

All SUMMA canisters used for sample collection will be either batch certified (industrial and commercial buildings) or individually certified (residential buildings) by the analytical laboratory to ensure they are free of contamination before collecting the samples.

During sample collection, CRA will check each SUMMA canister periodically to ensure that the canister pressure has not reached zero; at a minimum, the canisters will be checked several hours before the end of the sampling period. In accordance with the sub-slab soil vapor sampling protocol (Appendix J-F-36 of the FSP), some residual vacuum should be left in each canister following sample collection. A minimum 1 inch of mercury (" Hg) residual vacuum will be required for the sample to be considered valid, or the sampling will be repeated using a fresh SUMMA canister. In some instances, the canister pressure may decrease to below 5" Hg in less than the target amount of time. A SUMMA canister may be closed and sampling ended once the vacuum decreases below 5" Hg provided that at least 75 percent of the targeted sample time (i.e., 45 minutes for a 1-hour sample, 6 hours for an 8-hour sample, and 18 hours for a 24-hour sample) has elapsed. Provided the residual vacuum is a minimum of 1" Hg and the sample duration was at least 75 percent of the target duration, the sample will be considered a valid sample.

The target maximum residual vacuum is 5" Hg. If, after the required duration of sample collection (i.e., 1, 8, or 24 hours), the vacuum has not reached 5" Hg, the canister valve may be closed once the vacuum reaches a minimum of 10" Hg, as long as the specified duration of sample collection (i.e., 1, 8, or 24 hours) has elapsed. This will be considered a valid sample.

If the vacuum has not reached 10" Hg and access to the building is ending for the day, the Respondents will notify USEPA. If building access is provided for the following day, close the sample valve and record the canister vacuum and date. Return the following day, record the canister vacuum and date and complete sample collection. If building is not available for the following day, check with the laboratory if detection limits can be met and end sampling. If the detection limits cannot be achieved, re-sampling will be required.

A summary of the acceptable sample canister end pressures and times is provided in the following table:

Duration of Sampling	***Sample Canister Vacuum***	***Required Procedure***
Less than 6 Hours	Less than or equal to 5" Hg	Invalid sample. Collect new sample with new canister.
More than 6 Hours	Less than or equal to 5" Hg	Acceptable sample. End sampling.
Less than 8 Hours	Less than 10" Hg	Continue sampling until vacuum reaches 5" Hg, or 8 hours have elapsed, whichever occurs first.
More than 8 Hours	Greater than 10" Hg	End sampling when vacuum reaches 10" Hg.

Duration of Sampling	*Sample Canister Vacuum*	*Required Procedure*
Less than 24 Hours	Less than 10" Hg	Continue sampling until vacuum reaches 5" Hg, or 24 hours have elapsed, whichever occurs first.
More than 24 Hours	Greater than 10" Hg	End sampling when vacuum reaches 10" Hg.
Building access issues necessitate an end to sampling	Greater than 10" Hg	Notify USEPA. Check if building access is available the next day. If building access is available the next day: Record canister end vacuum and date, close sample valve. Record day 2 canister start vacuum and date, continue sample. If building access is not available the next day: end sampling and check with laboratory if required detection limits can be met.
Exterior soil gas sampling	Greater than 10" Hg after one hour	Continue sampling until vacuum reaches 10" Hg. Should the vacuum gauge reading remain elevated above 10" Hg for more than 30 minutes (after the initial hour has been completed), this will be taken to indicate that the initial vacuum in the canister has not sufficiently dissipated, and that the soil screened by the soil gas probe does not produce sufficient soil gas to permit sample collection. In this case, submit the sample.
Exterior soil gas sampling	Less than 1" Hg	Invalid sample. Repeat sampling using a fresh SUMMA canister.

In accordance with the SOPs, canisters will be labeled noting the unique sample designation number, date, time, and sampler's initials. A bound field logbook will be maintained to record all sampling data. The unique sample designation numbers will have the following format:

MC -38443-MMDDYY-XX-NNN

Where:

MC (Matrix Code)	–	Designates sample type (SG – soil gas; SS - sub-slab soil vapor; IA - indoor air; OA - outdoor air; CS - crawl space)
38443	–	Project reference number
MMDDYYY	–	Designates date of collection presented as month, day, year
XX	–	Sampler's first and last initials
NNN	–	Sequential sample number for event

Details of the sampling will be recorded within a standard CRA field book and on an Air Sampling Field Data Sheet (Appendix C.1). Details should include:

- SUMMA canister, flow controller and pressure gauge IDs
- Sample start time and initial SUMMA canister pressure
- Outside temperatures and barometric pressures
- PID readings within the building
- Helium leak test concentration
- Sample end time and final SUMMA canister pressure
- Unique sample designation number

If requested, a sub-slab sample and/or indoor air sample will be collected from any location where the occupants previously denied access and any new locations that may be identified as requiring sampling. Sub-slab samples will be collected from the soil vapor located beneath the concrete slab beneath the lowest level of the building.

Sampling will not be performed during storm events or within 48 hours of a significant rain event (i.e., greater than 1 inch of rain in a 24-hour period) because of the potential influence such conditions may have on indoor air, outdoor air, and sub-slab soil vapor. Information on weather conditions (including barometric pressure, air temperature, wind direction, and wind speed) in Moraine, Ohio, during the sampling event will be obtained from the National Weather Service Forecast Office or National Climatic Data Center 'website. In fine-grained soil conditions, consideration will be given to allowing a greater amount of time for rainfall events to dissipate. The vadose zone soil types at the site are mainly sand and gravel fill, with some silt and clayey silt. The Respondents' field technicians in consultation with USEPA oversight consultants will determine if more than 48 hours should be allowed to elapse following a significant rain event for probes in areas of fine grained soils.

3.2 MITIGATION SYSTEM SAMPLING

3.2.1 PROFICIENCY AIR SAMPLING

To verify that the mitigation systems are operating to reduce indoor air concentrations of VI contaminants to less than applicable criteria, the Respondents will complete post-installation proficiency air sampling. The Respondents will collect indoor air samples from all of the 8 locations with an installed vapor abatement mitigation system, specified below, 30 days, 180 days, and 1 year, following system installation.

Parcel / Map Building Number	*Address*	*Tenant*
5171 / 8	1951 Dryden Road	B&G Trucking
5171 / 9	1951 Dryden Road	B&G Trucking
5172 / 12	2015 & 2019 Dryden Road	S&J Precision, Overstreet Painting
5172 / 14	2003 Dryden Road	Bullseye Amusements
5173 / 15	2031 Dryden Road	SIM Trainer
5174 / 16	2045 Dryden Road	Command Roofing
5175 / 17	2075 Dryden Road	Former Alliance Equipment and Supply
3207 / 24	2215 & 2219 East River Rd	Globe Equipment

Valley Asphalt locations will be handled under a separate Work Plan.

The Respondents will complete annual indoor air proficiency sampling at a subset of (20 percent of operating systems, equivalent to 2 samples, at locations approved by USEPA prior to scheduling of the sampling for as long as the SSDSs remain operational. During the first year, the Respondents will collect the indoor air proficiency samples in the two buildings with the greatest sub-slab soil vapor or indoor air concentrations. During subsequent years, the Respondents will propose locations and provide a rationale for sampling at the proposed locations for USEPA approval prior to collecting the samples. Proficiency air sampling will continue until USEPA notifies the Respondents that work is complete. The Respondents will provide the results and corresponding evaluation after each sampling event to USEPA within 30 days of receiving the complete set of final analytical data. If ODH screening levels are exceeded, the Respondents will submit a Corrective Action Plan to USEPA within 30 days.

The indoor air proficiency sampling events will be performed by at least two CRA field staff and are anticipated to take approximately 2 weeks for each of the 30-day, 180-day, and 1-year sampling events. The Respondents will provide USEPA with email notification regarding scheduling, a minimum of 2 weeks in advance of proficiency sampling events.

In the event that proficiency air sampling indicates the system has not reduced or maintained concentrations below the applicable indoor air screening levels, the Respondents will evaluate the performance of the SSDS and complete any necessary system modifications within 30 days of receiving validated analytical results. System modifications may include adding an additional extraction point(s), sealing cracks in the floors, and/or sealing or fixing drains or sub-slab sampling. If ODH screening levels are exceeded, a Corrective Action Plan will be submitted to USEPA within 30 days. All system modifications will be pre-approved by USEPA prior to implementation. Following completion of system modifications, the Respondents will complete a follow-up indoor air sampling event within 30 days of completion of system modifications.

USEPA will provide letters summarizing analytical data to property owners and tenants.

3.2.2 DE MINIMIS EFFLUENT AIR SAMPLING

On January 10, 2013, Valerie Chan of CRA discussed de minimis emission and individual hazardous air pollutant (HAP) levels with Andy Roth of the Regional Air Pollution and Control Agency (RAPCA), by telephone and email.

On January 14, 2013, Andy Roth provided Valerie Chan with conservative initial calculations. Based on the greatest sub-slab TCE concentration of 5,600 ppbv (measured in a sample collected from 2015 Dryden Road, Building 12), a total SSDS flow rate of 2000 ft^3/min or less conforms to the Ohio EPA de minimis HAP emission rate of one ton per year. Accordingly, provided the total SSDS flow rate is equal to or less than 2000 ft^3/min, and maximum sub-slab soil vapor TCE concentration does not exceed 5,600 ppbv, effluent air sampling is not required by RAPCA. However, USEPA has requested that the Respondents collect an annual sample of the effluent from the SSDS at the location with the highest sub-slab soil vapor concentrations of TCE.

Following installation of the SSDSs, CRA will collect one air grab sample from each of the discharge sampling ports (i.e., each location where there is a fan/blower) of the building with the greatest sub-slab TCE concentration (i.e., 2015 Dryden Road, occupied by S&J Precision). The samples will be collected and analyzed in accordance with procedures detailed in Section 3.7 below. CRA will collect one de minimis air sample from each of the discharge sampling ports annually from the building with the greatest sub-slab TCE concentration (based on the most recent sample results available at the time), for the duration of system operation.

In addition to the collection of air samples, velocity readings will be measured at each exhaust pipe with a velocity meter. Flow rates will be calculated for each emission discharge point. The flow rate and analytical data will be used to calculate the approximately daily, monthly, and yearly emission amounts. As a conservative measure, the preliminary calculations will assume that all buildings discharge at the same rate as the worst-case building.

The effluent air sample results will be compared to State of Ohio de minimis levels, documented in Ohio Administrative Code 3745-15-05, to determine if off-gas treatment is required.

3.3 INDOOR AIR SAMPLING

As required, indoor and crawl space sampling will be performed in accordance with the SOP for indoor, outdoor, and crawl space air sampling (Appendix J-F-37 of the FSP). For mitigated buildings with areas less than 1,500 square feet, one indoor air sample will be collected. For buildings with areas greater than 1,500 square feet, multiple indoor air samples will be collected; the number of indoor air samples will be dependent upon the building configuration and locations will be chosen to minimize disruption to business operations.

On June 21 and 22, 2011, representatives of CH2M Hill, Ohio EPA, the Respondents and CRA completed building surveys at the parcels identified in the Dispute Resolution Agreement, which included a visual inspection of the parcels and the buildings located thereon. In December 2011 and July 2012, CRA completed building surveys of the remaining or additional buildings and parcels added to the scope of the VI investigation. The building surveys were completed in order to gather the information necessary to develop VI-specific CSMs for each VI Study building. The building survey included collection of data related to indoor air quality such as use or storage of cleaning products, paints, and/or petroleum hydrocarbon products, aerosol consumer products, smoking, etc.

Before sampling, the buildings will be resurveyed to determine if conditions have changed since the building surveys. Undifferentiated VOC concentrations will be measured using a ppbRAE®, or equivalent, and recorded during the building resurveys to identify potential indoor air sources or the general location of potential indoor air sources. Where possible and reasonable, the indoor air sources will be removed or containerized from the buildings prior to proficiency air sampling. The Building Physical Survey Questionnaire will be updated as necessary for each building. The completed Building Physical Survey Questionnaires for the buildings requiring mitigation are provided in Appendix D. The Building Physical Survey Questionnaire is provided in Appendix C.2.

Typically, the intake point of the indoor air sample canisters will be located at the breathing zone height, between approximately 3 to 5 feet (1 to 1.5 meters) above floor level, in the lowest level of the property (i.e., basement or first floor for slab on grade buildings). CRA will situate the indoor air sample canister as close as practical to the location of the original indoor air samples collected during the 2012 Vapor Intrusion Investigation. CRA will endeavor to situate the canisters in areas that are not subject to disturbances or locations that interfere with the occupants' operational activities which may lead to a false indication of an indoor air issue. CRA will collect indoor air samples at the actual or contingency indoor air locations specified in the figures for buildings with installed active SSDSs (Figures 3.2 through 3.10).

When indoor or crawl space air samples are collected, CRA will also collect an outdoor air sample in the vicinity of the structure as per CRA's SOP. Where samples are collected from adjacent or nearby buildings, one outdoor air sample may be sufficient for comparison to the indoor air sample results from more than one building.

Information on weather conditions (including barometric pressure, air temperature, wind direction, and wind speed) in Dayton, Ohio during the sampling event will be obtained from the National Weather Service Forecast Office or National Climatic Data Center website.

3.4 SUB-SLAB SOIL VAPOR PROBE SAMPLING

Sub-slab soil vapor probe installation and sampling, if required, will be performed in accordance with the SOP (Appendix J-F-36 of the FSP).

For buildings with areas less than 1,500 square feet, one sub-slab soil gas sample will be collected. For buildings with areas greater than 1,500 square feet, multiple sub-slab soil gas samples will be collected; the number of samples will be dependent upon the building configuration and locations will be chosen to minimize disruption to business operations.

CRA will complete leak testing prior to sub-slab soil vapor probe sample collection by injecting helium into a shroud covering the sub-slab probe, and monitoring for the presence of helium in the purged sub-slab soil vapor using a field meter.

CRA will purge stagnant air from the sub-slab soil vapor probes into Tedlar bags using a lung box sampler and pump. CRA will purge one to two liters of sub-slab soil vapor from the probe assembly, into a Tedlar bag. One liter of sub-slab soil vapor will be greater than three volumes from the sub-slab soil vapor probe assembly (probe and attached Teflon® tubing). This ensures that the sub-slab soil vapor sample is representative of actual vapor concentrations within the sub-slab bedding material.

In order to assess susceptibility of soil gas entry into a building, CRA will use a PID and LandTec GEM 2000, or equivalent, to directly survey preferential pathways for vapor migration (i.e. utility penetrations, cracks, sumps, floor drains, earthen floors, etc.). Readings will be recorded on the Air Sampling Field Data Sheet (Appendix C.1).

Information on weather conditions (including barometric pressure, air temperature, wind direction, and wind speed) in Dayton, Ohio during the sampling event will be obtained from the National Weather Service Forecast Office or National Climatic Data Center website.

3.4.1 SUB-SLAB SOIL VAPOR PROBE SAMPLING FOR METHANE

Following purging and leak checking of the sub-slab soil vapor probe, CRA will collect a second Tedlar bag sample of sub-slab soil vapor to measure post-purge/pre-sample values of methane, lower explosive limit (LEL), oxygen, and carbon dioxide, using appropriate meters. The Tedlar bag will be field screened and emptied outside the building to avoid releasing contaminants within the building.

The required sub-slab soil vapor samples will then be collected into SUMMA Canisters. Following sample collection, CRA will collect sub-slab soil vapor from the probes into

Tedlar bags with a lung box sampler and pump in order to measure post-sample methane, carbon dioxide, and oxygen values.

The following information from the USEPA (2005) Guidance for Evaluating Landfill Gas Emissions from Closed or Abandoned Facilities will be considered when selecting times for measuring methane levels: "Highest methane concentrations occur in the warmer summer months, and concentrations are higher during the heat of the day compared to measurements taken during morning hours. Landfill gas levels in soils tend to be higher during dry periods and lower after significant rainfall events."

Total VOCs in sub-slab soil vapor will be measured with a photoionization detector (PID) both times the methane, carbon dioxide, and oxygen concentrations are measured at each probe.

CRA will measure the levels of methane, carbon dioxide and oxygen using a portable combustible gas meter, specifically LandTec GEM 2000, or equivalent. CRA will measure filtered and unfiltered combustible gases with the LandTec GEM 2000. The LandTec GEM 2000 filtered measurements will be collected using a charcoal carbon filter. LandTec GEM 2000 reports the concentration of methane in units of percentage of the LEL of methane (i.e., 0 to 100 percent of LEL). The LandTec GEM 2000 measures the concentrations of oxygen, carbon dioxide, and carbon monoxide. The greatest values obtained during sampling will be recorded.

To confirm detections of methane using field instruments, separate sub-slab soil vapor or indoor air samples collected in SUMMA canisters will be submitted for analysis of fixed gases (methane, ethane, and ethene) by ASTM Method D1946. The confirmatory samples will be used to verify the detected methane readings measured with the field meters. If methane concentrations in indoor air are measured with the field meter above 25 percent of the lower explosive limit (i.e., 1.25 percent methane), an immediate or rapid response will be necessary to eliminate the explosive hazard and confirmatory laboratory samples aren't necessary.

3.5 SOIL GAS PROBE INSTALLATION AND SAMPLING

Exterior soil gas probes will be installed to evaluate landfill gas (LFG) and soil vapor concentrations, as necessary, at locations within and adjacent to the Site, as detailed in Section 5 below.

3.5.1 SOIL GAS PROBE INSTALLATION

The borehole for each soil gas probe will be advanced to a target depth in the unsaturated zone [a maximum of 20 feet below ground surface (ft bgs) or 2 feet above the historic maximum water table level, whichever occurs first]. The average depth of the unsaturated zone across the Site is approximately 20 ft bgs; therefore, a target maximum depth of 20 ft bgs is based on the need to place the gas probes in the unsaturated zone near the surface where soil vapor, if present, will diffuse and migrate.

Soil and fill materials encountered will be logged. The soil log information recorded will include a visual description of the types of materials (i.e., undisturbed native soil, spoils from quarry operations, domestic refuse, industrial refuse, metallic debris, ash, fly ash, construction and demolition debris, foundry sand, asphalt, slag, or other appropriate description), and if possible, a Unified Soil Classification System (USCS) description. Native soils will be logged using the USCS by CRA. A photograph of each core sample collected will be taken and a photographic log will be documented in the field notes. Should groundwater be encountered in any borehole, the tube will be pulled up a minimum of 2 feet above the water table. The void that is formed when the tube is pulled will be filled using No. 3 silica sand. The groundwater elevation of the nearest monitoring well will be used to determine the targeted depth of the borehole for the gas probes.

Soil samples will be collected from the surface and subsurface during the gas probe installation for the analysis of soil physical properties (i.e., grain size analyses, fraction of organic carbon content, plasticity index, porosity, permeability, and Atterburg limits). The procedures for collecting soil samples are presented in Appendix J-F-24 and J-F-34 of the FSP.

Soil vapor will not preferentially migrate through discrete intervals of fill material at the Site unless impermeable layers are present beneath or above the discrete intervals of fill material. Based on the available Site geological data, intervals that are impermeable to soil vapor have not been identified. Further, soil vapor migration to ambient air or into a building will occur from the shallow soil horizon. Accordingly, in areas where landfilled materials are not present, the screened interval of the gas probes will be installed in soil strata with a notably higher permeability than the surrounding geologic strata. The gas probe screen will be set as shallow as possible within the higher permeability stratum. In order to prevent short circuiting of ambient air into the gas probe and, consequently, dilution of soil vapor samples, the top of the gas probe screen will be installed a minimum of three feet below ground surface. The final depth of the gas probe screen will be dependent on the conditions observed at each location and will be determined in the field. The goal of soil gas sampling would be to collect and analyze soil vapor samples that are representative of soil vapor quality in the most permeable zone(s) in the vicinity of the probe, which is the zone(s) where soil vapor and non-methane organic compounds (NMOC) will migrate. If these soil borings encounter multiple, discrete permeable zones that appear to have vastly different soil vapor impacts based on field screening, then CRA will either consult with USEPA's field representatives and install more than one gas probe at that location or identify that area as potentially requiring additional investigation or remediation.

The screened interval(s) will be selected based on field observations that will identify the presence of landfill materials or, in the absence of such materials, a comparatively permeable region in the unsaturated zone that would be expected to transmit soil vapor. The selection of the most permeable zone will be based on soil descriptions and characterizations using the USCS. Where landfilled materials are present, the screen will be placed at a depth immediately above the landfilled materials. If the landfilled material extends to within three feet of the surface and it is, therefore, not possible to set the screen above the landfilled material, the screen will be placed within the landfilled material, with the screened interval set as close to the top of the landfilled materials as possible, but deep enough to minimize the breakthrough of ambient air from the surface (i.e., 3 to 5 ft bgs).

Gas probes will be installed using a 50-mm (2-inch) diameter Geoprobe dual-tube direct push technique to minimize formation disturbance. The gas probes will be completed using 13-mm (0.5-inch) diameter schedule 40 PVC continuous piping (i.e., no joints) with a screened interval length of 0.3 meters (1 foot). The void space between the screened interval and formation will be filled with No. 3 silica sand (i.e., sand pack) to approximately 0.2 meters (8-inches) above the top of the screened interval. One foot of dry granular bentonite will be placed on top of the sand pack and then hydrated bentonite will be placed to just below ground surface. The sand pack and bentonite seal will be placed as the Geoprobe is withdrawn to ensure that the formation does not collapse around the screened interval or riser. A lockable surface casing will be set in concrete at the ground surface around each gas probe. The gas probe completion details are summarized in Appendix J-F-33 of the FSP. The gas probe stratigraphic and instrumentation log templates are presented in the FSP.

3.5.2 LANDFILL GAS AND SOIL VAPOR SAMPLING

CRA will complete four rounds of landfill gas sampling of all newly installed soil gas probes. One sample round will occur in each season (i.e., in January, April, July, and

October). CRA will also complete one synoptic monitoring round of all existing and newly installed soil gas probes under worst-case barometric conditions (i.e., low pressure). The field measurements will consist of:

i) Measurement of gas pressure

ii) Screening for methane (v/v), VOCs, LEL, and oxygen (v/v)

Soil vapor probe VOC samples will be collected for laboratory analysis from newly installed soil gas probes if the soil gas probe shows a VOC detection greater than 5 parts per million (ppm) during field screening with a PID; samples will be collected from these soil gas probes during two of the four rounds, during worst-case conditions (i.e., summer and winter seasons).

The 2012 vapor intrusion investigation included comparisons of field screened methane values to analytical results for methane. The field screened methane values correlated closely to the analytical results. Therefore, the Respondents propose to accept the methane values measured in the field using a LandTec GEM 2000, or equivalent, as the true methane values. The Respondents do not propose to collect any SUMMA canister samples for methane analysis.

Information on weather conditions (including barometric pressure, air temperature, wind direction, and wind speed) in Dayton, Ohio during the sampling event will be obtained from the National Weather Service Forecast Office or National Climatic Data Center website.

The initial landfill gas and soil vapor sampling round of newly installed soil gas probes will be conducted no sooner than one week following the installation of the gas probes and in the first appropriate month (i.e., January, April, July, or October) following the installation of gas probes unless there is a specific reason to sample the probes more expeditiously. One week is considered to be more than sufficient time for any formation disturbances created by drilling activities to dissipate and for equilibrium conditions to be reestablished in the unsaturated zone. As a result, the soil vapor samples are considered representative of conditions in the sampled intervals at the time the samples are collected. The remaining sampling events will be conducted during periods of low barometric pressure, during the heat of the day in the months specified above.

3.5.2.1 MEASUREMENT OF GAS PRESSURE

A pressure gauge will be attached to the hose barb on the soil gas probe to measure the static gas pressure. The pressure gauge will be sufficiently sensitive to record gas pressure in inches of water column (w.c.). The highest value obtained during gas pressure readings will be recorded. Pressure is measured at the soil gas probe to indicate the potential for gas generation and migration; a sustained positive pressure is indicative of microbial activity when correlated to the soil gas quality measurements (methane, carbon dioxide, and oxygen). Coincidentally, a lack of pressure provides insight regarding the age of the carbon source (if present). The ambient barometric pressure will be recorded at each gas probe when soil gas pressure readings are being taken. The ambient barometric trends will also be noted (i.e., rising, falling, steady) from a local weather station during the time period of the monitoring event.

3.5.2.2 COLLECTION OF SUMMA CANISTER SOIL VAPOR SAMPLES

While no VOC sampling of soil vapor probes is currently proposed, the sampling methodology is included herein for completeness. Soil vapor probe VOC samples will be collected for laboratory analysis from newly installed soil gas probes if the soil gas probe shows a VOC detection greater than 5 parts per million (ppm) during field screening with a PID; samples will be collected from these soil gas probes during two of the four rounds, during worst-case conditions (i.e., summer and winter seasons).

If required, the samples will be collected using 6-liter capacity SUMMA canisters fitted with a laboratory calibrated critical orifice flow regulation device sized to allow the collection of the soil vapor sample over a 1-hour sample collection time.

The 2012 vapor intrusion investigation included comparisons of field screened methane values to analytical results for methane. The field screened methane values correlated closely to the analytical results. Therefore, the Respondents propose to accept the methane values measured in the field using a LandTec GEM 2000, or equivalent, as the true methane values. The Respondents do not propose to collect any SUMMA canister samples for methane analysis.

Following sample collection, CRA will collect soil vapor from the probe and measure post-sample values of methane, carbon dioxide, and oxygen. CRA will measure the levels of methane, carbon dioxide, and oxygen using a portable combustible gas meter, specifically LandTec GEM 2000 or equivalent. CRA will measure filtered and unfiltered combustible gases with the LandTec GEM 2000. The LandTec GEM 2000 filtered measurements will be collected using a charcoal carbon filter. LandTec GEM 2000 reports the concentration of methane in units of percentage of the LEL of methane (i.e., 0 to 100 percent of LEL). The LandTec GEM 2000 measures the concentrations of oxygen, carbon dioxide, and carbon monoxide. The greatest values obtained during sampling will be recorded.

The SUMMA canisters will be fitted with laboratory calibrated critical orifice flow regulation devices sized to restrict the maximum soil gas sample collection flow rate to approximately 100 milliliters per minute (mL/min), which corresponds to the lower end of the maximum soil gas sampling flow rate of 100 to 200 mL/min recommended by the California Environmental Protection Agency (CalEPA, 2003). A flow rate of 100 mL/min is recommended to limit VOC stripping from soil and prevent the short-circuiting of ambient air from ground surface that would dilute the soil vapor sample. The low flow rate of 100 mL/min will increase the likelihood that a sample representative of in situ conditions is obtained. Prior to sample collection, soil gas probe purging will be conducted a maximum flow rate of 200 mL/min. Three soil gas probe volumes (calculated based on casing and sand pack volume) will be purged to remove potentially stagnant air from the internal volume of the soil gas probe. Section J-F-11 of the FSP provides the soil gas purging and sampling procedures, including the calculation of purge volume, maximum purge volume, and maximum purging rates.

3.6 QUALITY ASSURANCE / QUALITY CONTROL SAMPLES

Field duplicate samples will be collected at a frequency of 10 percent per sample media for VOC analysis. The sample media are (1) sub-slab soil vapor and soil vapor (2) indoor air, crawl space, and outdoor air. Duplicate samples will be collected in the same manner and from the same location as the normal samples are collected. A stainless-steel T-connector will be used to connect two SUMMA canisters together so the parent and duplicate sample are collected concurrently from the same intake.

Quality assurance (QA)/quality control (QC) for the methane field screening results will be accomplished by: measuring methane twice, at least 8 hours apart, at each sub-slab soil vapor, indoor air, and crawl space air sample location.

USEPA reserves the right to collect split sub-slab or soil gas samples or side-by-side indoor air for any sample collected at the Site. The split samples will be collected in the same manner as duplicate samples.

3.7 SAMPLE ANALYSIS

The sub-slab, indoor air, outdoor air, and/or crawl space samples for VOC analysis will be collected in 6-liter SUMMA canisters equipped with flow controllers set to collect the samples over an 8-hour period for industrial and commercial buildings and a 24-hour period for residential buildings. The sampling period for soil gas samples is 1-hour, as detailed in Section 3.5.2.2 above.

The SSDS effluent grab samples for VOC analysis will be collected in 1-liter SUMMA canisters. Grab samples will be collected directly from the SSDS effluent sample ports of the building with the greatest sub-slab TCE concentration (based on the most recent sample results available at the time), for the duration of system operation. At each sampling port location, the male plug will be removed and silicon tubing will be attached to the sampling port and replaced with a male fitting with silicon tubing. The fitting will be attached from the SSDS regulator to the tubing attached to the sample port. The 1-liter SUMMA canister will be attached to the regulator. The sample port will be closed when the vacuum reading is between -10 to -1 "Hg. The grab sampler will be removed from the SUMMA canister; the fitting/tubing will be removed from the sample port and regulator. The male plug will be reattached to the sample port.

CRA will submit SUMMA canister samples under chain of custody protocols to the laboratory for VOC analysis in accordance with USEPA TO-15. The full TO-15 list will be reported for each sample. The Respondents propose to accept the methane values measured in the field using a LandTec GEM 2000, or equivalent, as the true methane values. The Respondents do not propose to collect any SUMMA canister samples for methane analysis.

3.8 CLEANUP CRITERIA

The Respondents will evaluate analytical results against ODH indoor air and sub-slab soil gas screening levels for residential and non-residential locations. ODH screening levels for naphthalene were provided by electronic mail (email) on September 13, 2012. Revised ODH screening levels to correct the indoor air non-residential values for o-xylene were issued on October 9, 2012. The ODH revised screening levels are presented in Table 3.1.

The Respondents will design and install a vapor abatement mitigation system in on- or off-Site residential or non-residential (commercial) structures impacted by subsurface gas migration, if the concentration(s) of COCs are greater than ODH sub-slab or indoor air screening levels and the presence of the COC is determined to be a result of vapor intrusion.

4.0 MITIGATION PLAN

One of the primary objectives of the VI Mitigation Activity is to design and install a vapor abatement mitigation system in on- or off-Site residential or non-residential (i.e., commercial) structures impacted by subsurface gas migration, if the concentration(s) of COC(s) are greater than ODH sub-slab or indoor air screening levels and the presence of the COC(s) is determined to be a result of vapor intrusion. Section 4.6 presents a summary of all buildings sampled during the VI Investigation and the associated mitigation decisions. The "Mitigation Summary Database" Excel file used to track the progress of mitigation is a living document, and the version current as of April 23, 2013, is included as Appendix E. This document will be updated as needed throughout the VI Mitigation Activity in order to reflect the status of the mitigation and any new information received.

Beginning on October 4, 2012, USEPA, Ohio EPA, USEPA START contractor, the Respondents, and CRA participated in weekly update conference calls regarding the Mitigation Summary Database and next steps. Appendix F presents the meeting minute summaries for the weekly conference calls.

If approved by the building tenants and owner(s), the abatement system will include installation of a SSDS or crawl space depressurization system (CSDS), sealing cracks in walls and floors of the basement or lowest building floor, and sealing drains that could be a pathway. Properties with sub-slab methane concentrations greater than 0.5 percent by volume will require an intrinsically safe SSDS. Active SSDSs will be designed and installed in the specified buildings to reduce potential indoor air inhalation issues. This is achieved by creating a lower air pressure beneath the floor slab than above the floor slab. The Respondents will work closely with an ODH Licensed Radon Contractor who will be responsible for installation to ensure proper installation and operation of the systems. The scope of work for the SSDSs will include:

Task 1 – Meeting with property owner(s) and tenants
Task 2 – Conduct a building inspection / engineering evaluation

Task 3 – Design and submit SSDS to USEPA and property owner for approval

Task 4 – Install SSDS

Task 5 – Perform Proficiency Sampling and Annual Inspections/Maintenance

4.1 TASK 1 - MEETING WITH PROPERTY OWNERS

USEPA, Respondents, their consultants and a representative from the health department (Public Health – Dayton & Montgomery County) will meet with the property owner(s) and tenants of buildings for which vapor abatement mitigation systems are planned, following the signing and execution of the AOC. The meeting topics will include:

- Presentation and discussion of 2012 vapor intrusion sampling results
- Description of a generic vapor abatement mitigation system (i.e., SSDS)
- Associated maintenance and monitoring requirements (i.e., proficiency sampling, annual inspections)
- Stipend for electricity costs due to operation of the SSDS
- Signing of Acceptance Letter
- Building inspection / engineering evaluation
- Schedule meeting with property owner to review final SSDS plan and schedule installation (approximately two weeks later)

Stipends for electricity costs are discussed in Section 4.6.4 below.

4.2 TASK 2 – CONDUCT BUILDING INSPECTIONS/ENGINEERING EVALUATIONS

The Respondents will review and confirm building plans and blueprints, if available, and conduct pre-design building inspections. This will include evaluation of the building layouts and construction components including HVAC, electrical and structural. Of particular interest are the building foundations, sub-slab layouts and orientations including materials of construction, utility connections and conduit layouts for future design purposes. Sealing of cracks may be completed at this stage, if appropriate.

4.3 TASK 3 - DESIGN SUB-SLAB DEPRESSURIZATION SYSTEM

The information obtained from the Building Physical Survey and sub-slab probe installation(s) will be used to prepare conceptual layout design drawings. The system design will include the number and location of suction points, pipe routing, discharge point(s), fan location(s), and fan sizing. The Respondents will consult with the property owner and tenant for input on their preferences for system component locations. The basic design requirements will be prepared to a level acceptable for use for contractor bidding purposes. One or more contractors will participate in inspections of the buildings or, at the contractor's discretion, will agree to rely on inspections of the buildings completed by CRA. Following the building inspections, the contractor will prepare a Design Plan, which, after it is approved by CRA and the Respondents, will be submitted to USEPA and the property owner. The designs will be based on industry standards, local code, and manufacturer information regarding equipment performance for an active depressurization system. Following receipt of USEPA approval, the contractors will proceed with the installation.

Following receipt of approvals from the property owner, tenant(s), and USEPA on the mitigation system design, the Respondents will solicit contractor proposals, and undertake contractor procurement. As noted above, the contractor will be a licensed ODH Licensed Radon Contractor. In the event that a design-build approach is adopted, the Respondents will solicit contractor proposals prior to commencing the design and will commence installation of the SSDS following receipt of approval from the property owner, tenant and USEPA.

4.4 TASK 4 – INSTALL THE SSDS

Any permitting requirements identified as part of the design phase and any required permits will be applied for and obtained prior to installation of startup of the SSDSs consistent with state and local requirements. Any electrical installation; roof, floor, and wall penetrations; epoxy coatings; and horizontal piping will be installed by licensed, bonded, and insured installers. The Respondents will commence system installations within 30 business days of USEPA approval of the Design-Build Plan by ODH-licensed and insured Radon Mitigation Specialist who will perform all work in compliance with local code requirements. The Respondents have solicited and received contractor proposals from Environmental Doctor, and The Geiler Company, Inc. The contractor will install the SSDS following methods outlined in ASTM E2121-13, "Standard Practice for Installing Radon Mitigation Systems in Existing Low-Rise Residential Buildings".

The exact design details will not be known until Tasks 1 and 2 have been completed, but a general discussion of the anticipated VI mitigation system is described below.

The SSDS in each building may consist of multiple vapor recovery points. Either fan(s) or larger blower(s) connected to extraction point(s) will be installed outside the building, mounted directly on the system piping and fastened to a supporting structure by means of mounting brackets. The fan(s) or blower(s) will operate continuously to pull a vacuum from the vapor recovery point(s). The vapors will discharge to the outdoor air above the building roof. This will allow any VOCs present to dissipate more readily. As methane is lighter than air, discharging the gases above the roof ensures that any methane that may be present will not create a localized explosion hazard near the ground surface where potential ignition sources could ignite it. A sample port and an air-velocity monitoring access point will be installed in the discharge pipe at least two feet away from any constrictions (i.e., bends, elbows, etc.) and after (i.e., above) the fan. A common external fuse panel will be installed to power the SSDS system(s). The weatherproof panel will provide an uninterruptable power source, and be secured with a lock and tamper-proof box. Equipment used to install the SSDS beneath buildings where explosive gases are present in the sub-slab vapor at concentrations greater than 10 percent of the LEL (i.e., greater than 0.5 percent methane) or where no sub-slab explosive gas data are available will be intrinsically safe, because of potential explosive situations.

Permanent vacuum monitoring points will be installed for each system, on the suction side of the fan. A permanent vacuum gauge will consist of a "U-tube" manometer, or similar device, with a minimum vacuum of 1" w.c. The permanent vacuum monitoring points will document that the sub-slab beneath the entire building has been depressurized. The Respondents will verify that manometer vacuum is in the range of 1 to 4" w.c., and will mark the operating vacuum on the manometer. The vacuum will be set to the minimum required to depressurize the entire slab and is expected to be in the range of 1 to 2" w.c. The number of vacuum monitoring points will be determined during the design process.

An SSDS vacuum greater than 4" w.c. may result in suction of air from a contaminant plume and may draw VOCs towards the building. As such, the systems will be designed and operated to be below this vacuum pressure.

Following the installation of the SSDSs, the radius of influence of each system will be checked using a digital manometer to determine if a vacuum is applied across the entire building slab. The digital manometer can be used at the sub-slab soil vapor probe locations, provided that they are located on opposite sides of the slab from the suction point. Additional sub-slab depressurization points and monitoring points can be installed if the resulting vacuum proves insufficient or more monitoring points are required.

USEPA 2008 guidance document titled "Indoor Air Vapor Intrusion Mitigation Approaches" states that the generally accepted target range for depressurization is 4 to 10 pascals or 0.0161 to 0.04" w.c., with a nominal continuous operating range of depressurization from 0.025 to 0.035" w.c. for standard permeability sub-slab material. However, differential pressure ranges as low as 0.001" w.c. is sufficient to effectively depressurize a sub-slab, according to USEPA 1993 guidance "Radon Reduction Techniques for Existing Detached Houses: Technical Guidance for Active Soil Depressurization Systems.

If the digital manometer shows a vacuum reading of negative 0.004" w.c. below the slab, then that indicates that the active system is successfully depressurizing the sub-slab area across the footprint of the building. During the operation and monitoring of the SSDSs, CRA will compare the vacuum measurements to the appropriate ranges, and if necessary, make adjustments to the SSDSs.

Following completion of the installation, a Mitigation System As-Built Report will be submitted to USEPA. This Mitigation System As-Built Report will be included in the O&M manual provided to the owner and tenant of each building or property. These reports will contain the following information:

- Data from the vacuum-radius of influence testing, including sub-slab vacuum and flow measurements
- Static pressure at the fan inlet
- Figure(s) showing the number of extraction locations and performance monitoring points
- Figure(s) showing the route for the discharge piping system(s) and the location of the exhaust fan(s) for each building
- Photographs of the SSDS header and fan(s)
- Identification of materials and equipment used for each system (piping, blower sizing, vacuum monitoring, valving, etc.)
- Procedures for startup and performance testing following system installation
- Operational goals and objectives including radius of influence and vacuum field monitoring point vacuums
- An intrinsically safe system will be installed at properties which have methane beneath the sub-slab greater than 0.5 percent

A visual inspection will be completed to verify that no air intakes have been located near the proposed exhaust discharge point(s).

The Respondents will review the system components with each property owner and, if applicable, tenant(s) following completion of system installations. If the individual property owner or tenant notices damage to the SSDS or the system is not functioning within the range marked on the permanent vacuum monitoring points, they will be able to call a CRA contact. Labels on the system components will list a telephone number for a CRA contact.

Any gaps around the extraction point penetration and utility penetrations through the foundation floor will be appropriately sealed. Other openings and cracks in the foundation will be sealed where necessary and feasible.

As specified in Section 3.2.2 above, CRA will collect an effluent air sample from each of the discharge sampling points from the extraction pipes of the building with the greatest sub-slab TCE concentration (i.e., 2015 Dryden Road, occupied by S&J Precision) on an annual basis. The effluent air sample results will be compared to State of Ohio de minimis levels, documented in OAC 3745-15-05, to determine if off-gas treatment is required.

4.5 TASK 5 - PERFORM PROFICIENCY SAMPLING AND ANNUAL INSPECTIONS/MAINTENANCE

4.5.1 MAINTENANCE OF THE SSDS

A general operation, maintenance, and monitoring (OM&M) plan will be completed within 60-days of system start-up. The OM&M plan will detail activities required to operate the SSDS, perform repairs, and a guideline to evaluate the effectiveness of system operations. The contents of the OM&M manual will include, but not be limited to:

- Operator's manual for the system
- Contact information sheet
- System life expectancy
- Fan warranty information
- Baseline sample results (January - March and July - September 2012 sampling rounds)
- Proficiency sample results
- Annual inspection log sheets

- Photographic documentation
- Copy of the Access Agreement (if available)
- Mitigation Acceptance Letter
- Mitigation System As-Built Report (including map of system)
- Key to the padlock to turn the system "on" and "off"

The general OM&M plan will include an appendix containing any system-specific information required for each building. The OM&M plans will be placed in binders to allow for easy updating of any required information and provided to property owners.

The SSDS maintenance program consists of an inspection and repair program for the system components. The Respondents will conduct a semi-annual inspection of the SSDSs in the first year of operation, and annually thereafter, to ensure proper functionality. The inspection program will include visual inspections of the SSDSs for deficiencies to verify that the system components are effectively performing their intended functions. The Inspection Checklist form, provided in Appendix C.3, will be included in the OM&M Plans:

4.5.2 MONITORING PROGRAM

The Respondents will complete a system startup monitoring program to document that the sub-slab beneath the entire area of concern in each building has been depressurized. The system startup monitoring will consist of monitoring and recording the vacuum at each of the vacuum monitoring points in each building using a digital manometer immediately following start-up.

To verify that the mitigation systems are operating to reduce indoor air concentrations of VI contaminants to less than applicable criteria, the Respondents will complete post-installation proficiency air sampling as discussed in Section 3.2. The Respondents will collect indoor air samples from all 8 locations with an installed vapor abatement mitigation system, (listed in Section 3.2.1), 30 days, 180 days, and 1 year, following system installation. The Respondents will also complete radius of influence testing at the same time as the indoor air sampling. If ODH screening levels are exceeded, the Respondents will submit a Corrective Action Plan to USEPA within 30 days. The Respondents will complete indoor air sampling at a subset (20 percent of operating systems and approved by USEPA prior to scheduling) of the buildings at a frequency of every year from SSDS installation, provided the SSDS is still required. Proficiency air sampling will continue until USEPA notifies the Respondents that work is complete. The Respondents will provide the results and corresponding evaluation after each sampling event to USEPA within 30 days of receiving the complete set of final analytical data.

4.5.3 ANNUAL INSPECTIONS OF SSDS

The Respondents will complete annual performance inspections on all SSDSs installed to ensure that they are functioning properly.

System performance inspection activities will include, but are not limited to:

- System vacuum/pressure readings will be checked to ensure the system is operating in the design range
- Sub-slab pressure field readings will be measured at permanent sub-slab sample points to ensure sub-slab depressurization is negative (for buildings with active SSDS and slab foundations)
- Visual inspection of system piping and components for damage
- Inspection of floor and wall seals, and seals around system piping penetrations, including checks for any additional areas requiring sealing
- Confirm operation of the blower fan, including checks for unusual noise or vibration
- Confirm padlock is attached to the on/off switch
- Confirm operation with tenants and inspection to determine if there have been any spills, releases, and/or operational changes that may influence the need for system operation
- Confirm copy of O&M Manual is in the building and update as necessary

A copy of the SSDS Inspection Checklist is included in Attachment C.3.

4.5.4 ELECTRICITY STIPENDS

The Respondents will provide an electricity stipend, to the individual or company that pays for electricity at each property with a SSDS installed, to off-set the cost of operating the system. The stipend will be a one-time payment for an amount calculated on a building by building basis for a duration of 5 years. The need for continued system operation and additional electricity stipends will be evaluated by the Respondents and USEPA after 5 years of operation.

4.6 VI INVESTIGATION BUILDING MITIGATION SUMMARY

In 2012, the Respondents completed vapor intrusion investigations of 33 buildings, including 7 buildings on Valley Asphalt Property (1901 and 1903 Dryden Road, Parcel 5054). The 33 buildings that were investigated are shown on Figure 4.1. In accordance with the Mitigation Summary Database Excel file, current as of April 23, 2013, of the 33 buildings investigated:

- 3 buildings are proposed for demolition, pending agreement of the owner
- 11 buildings will require a SSDS. The Respondents understand that Valley Asphalt will submit a separate Work Plan for their property and the three structures that require a SSDS (i.e., Parcel 5054) to USEPA and that this work will be completed under a separate administrative order.
- 19 buildings require no further action

The buildings are described in detail in Appendix G.

5.0 LANDFILL GAS INVESTIGATION WORK PLAN

Paragraph 16.b of AOC Docket No. V-W-13-C-010 requires the Respondents to

b. conduct subsurface gas sampling (including VOCs and methane), conduct extent of contamination sampling utilizing groundwater, soil gas, sub-slab, and indoor air sampling techniques, and complete an investigation to determine whether concentrations of methane at the property boundary are greater than the lower explosive limit (5% methane)

Additionally, Paragraph 16.e of the AOC states:

e. If, based upon the methane extent investigation conducted under paragraph 16.b of this Settlement Agreement, levels of methane at the property boundary are greater than the lower explosive limit (5% methane) and the methane is originating on the Site, design and install a landfill gas extraction system designed to prevent landfill gas migration off-site. The landfill gas system will be designed to control levels of methane at the property boundary to less than the lower explosive limit (5% methane)

This section provides the scope of work for the additional subsurface gas sampling required to confirm the levels of methane at the Property boundary in accordance with Paragraph 16.b. of the AOC.

5.1 SUMMARY OF INVESTIGATIONS COMPLETED TO DATE AND EXISTING DATA

In 2009, the Respondents installed 21 soil gas probes in the following areas:

- The central portion of the Site in areas of suspected municipal waste disposal
- on or adjacent to the Site boundary
- In the vicinity of the commercial properties along Dryden Road and west of East River Road
- In the vicinity of the former underground storage tank and drum removals

In September 2009, CRA collected soil vapor samples from the CRA soil gas probes. Figure 5.1 presents the locations of the 21 CRA soil gas probes. CRA completed three rounds of landfill gas measurement between September and December 2009. Sections 2.8 and 4.4 of the Remedial Investigation Report Operable Unit 1 (OU1) (CRA, 2010) present detailed summaries of the 2009 landfill gas investigation and results. Potentially combustible concentrations of methane (i.e., between the LEL of 5 percent and the UEL of 15 percent), or above, were measured at five locations (GP01-09, GP02-09, GP04-09, GP18-09, and GP21-09). All of these locations are well within the Site boundaries and only one of these locations is near any building (there is an unused building, i.e., the Quonset Hut or Building 2) in the vicinity of GP18-09).

In 2012, USEPA installed six nested soil gas probes along Dryden Road, and one nested soil gas probe along East River Road. Five of the probes are installed along the Site boundary on the west side of Dryden and East River Roads and two of the probes are installed along the DP&L property boundary on the east side of Dryden Road. With the exception of GP-2, USEPA recorded methane values of 0 percent from these soil gas probes in 2012. At GP-2 (12-foot and 16-foot depths), USEPA recorded methane levels ranging from 2.5 to 24.1 percent in 2012. The methane concentrations measured by USEPA declined over time. Beginning October 31, 2012 and weekly thereafter, the Respondents measured GP-2 and recorded methane values of 0 percent. Given the presence of nearby source areas unrelated to the Site, the actual source of the detected methane is unknown. The Respondents weekly methane values measured at GP-2 are presented in Table 5.1.

Figure 5.1 presents the locations of the 21 CRA and 7 USEPA soil gas probes and the locations of the buildings containing sub-slab soil vapor probes.

The Respondents completed site-wide synoptic methane monitoring rounds at a period of low barometric pressure (i.e., 28.3 to 29.13 "Hg) between October 31 and November 2, 2012, and a period of high barometric pressure (i.e., 30.2 to 30.5 "Hg) between January 8 and 10, 2013. Figures 5.2 and 5.3 present the methane monitoring results from the low and high pressure synoptic methane monitoring rounds.

5.2 ADDITIONAL INVESTIGATION REQUIRED

The purpose of the investigation is to determine whether methane is present at, and therefore, potentially migrating off-Site across the Property boundary. The existing network of soil gas probes and sub-slab soil vapor probes near the Property boundary is extensive, and provides good delineation of subsurface methane concentrations along the Property boundary in areas where there are receptors (i.e., buildings) at or adjacent to the Site. There are, however, two areas along the Property boundary where Respondents will install additional gas probes.

One such area is between GP11-09, Building 17 and soil vapor probes GP12-09 and GP-7. As detailed above, USEPA measured methane concentrations as high as 24.1 percent at soil gas probe GP-2, which is located on the opposite side of the portion of Dryden Road between GP11-09 and Building 17/GP12-09/GP-7. Recent monitoring has not detected methane at GP-2.

The second area is between soil gas probes GP20-09/GP-4 and GP-6.

In order to determine the concentrations of methane at the property boundary the Respondents will install three soil gas probes along the eastern Site boundary with Dryden Road. The proposed locations of the three soil gas probes are presented on Figure 5.1. The soil gas probes are proposed in locations at which there are gaps in the Site boundary gas probe network along Dryden Road. The soil gas probes will ensure that a soil gas data point (i.e., either a soil gas probe or sub-slab soil gas probe) is present every 200 feet along the portion of the property line where off-Site migration of methane might impact adjacent buildings.

CRA will complete four rounds of landfill gas sampling of newly installed soil gas probes. The field measurements will consist of:

iii) Measurement of gas pressure

iv) Screening for methane (v/v), VOCs, LEL, and oxygen (v/v)

Soil vapor probe VOC samples will be collected for laboratory analysis from newly installed soil vapor probes if the probe shows a VOC detection greater than 5 parts per million (ppm) during field screening with a PID; samples will be collected from these soil vapor probes during two of the four rounds, during worst-case conditions (i.e., summer and winter seasons).

The 2012 vapor intrusion investigation included comparisons of field screened methane values to analytical results for methane. The field screened methane values correlated closely to the analytical results. Therefore, the Respondents propose to accept the methane values measured in the field using a LandTec GEM 2000, or equivalent, as the true methane values. The Respondents do not propose to collect any SUMMA canister samples for methane analysis. USEPA may collect a SUMMA canister for methane analysis based on field measurements.

The Respondents will install and sample the soil gas probes in accordance with the procedures detailed in Section 3.5 above and the FSP. The Respondents will complete four rounds of landfill gas monitoring of the newly installed soil gas probes. The initial soil vapor monitoring of newly installed soil gas probes will be conducted one week following the installation of gas probes. One week is considered to be more than sufficient time for any formation disturbances created by drilling activities to dissipate and for equilibrium conditions to be reestablished in the unsaturated zone. As a result, the soil vapor samples are considered representative of conditions in the sampled intervals at the time the samples are collected. The remaining sampling events will be conducted during periods of low barometric pressure, during the heat of the day in the months specified above.

The Respondents will proceed with the installation of the soil gas probes within 20 business days of receipt of USEPA approval of the Work Plan, or the effective date of the AOC, whichever is later, dependent on sub-contractor availability and ability to arrange access with the property owners. Within 30 days of completion of the last sampling event, the Respondents will submit a Landfill Gas Delineation Investigation Report to USEPA. The Landfill Gas Delineation Investigation Report will provide the results of the investigation and, if necessary, will provide a schedule and detailed Work Plan for the design and installation of a landfill gas extraction system in accordance with the requirements of Paragraph 16.e. of the AOC.

6.0 SYSTEM DECOMMISSIONING / PROJECT CLOSE-OUT ACTIVITIES

Criteria to determine when it is appropriate to cease operation of individual vapor SSDSs will be decided at a future date. Respondents will submit criteria to USEPA for approval at a later date.

6.1 ABANDONMENT OF GAS MONITORING PROBES

In the event that a gas monitoring or sub-slab soil vapor probe becomes damaged, plugged, or otherwise rendered unusable, or alternatively at the completion of all explosive gas monitoring requirements, the respective gas probe(s) will be abandoned in accordance with the procedures stipulated in OAC 3745-9-10. Such abandonment will consist of filling the gas probe(s) with a non-shrinking grout or over-drilling the sub-slab probe(s) and filling it with cement, to mitigate the infiltration of surface waters. No gas monitoring probes will be abandoned without prior authorization from USEPA. If a damaged, plugged, or otherwise unusable probe is still required for monitoring sub-slab soil vapor conditions at a particular location, the Respondents will replace the probe following the procedures documented in Section 3.4.

7.0 PROJECT MANAGEMENT

7.1 RESPONSIBILITIES AND FUNCTIONS

The companies and individuals who will be responsible for the various aspects of the work are detailed in the organizational chart on Figure 7.1.

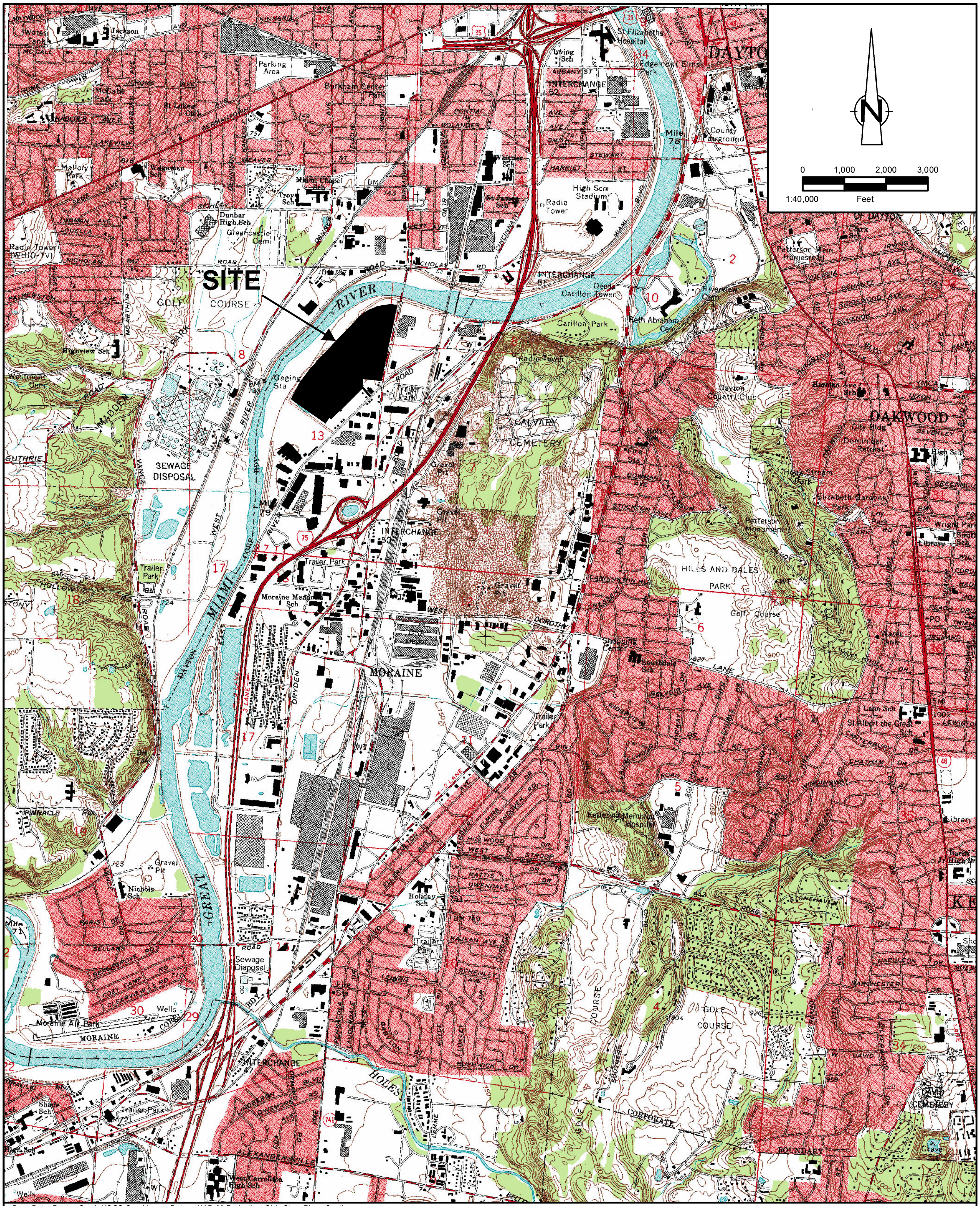
Contact numbers for each member are provided in the following table.

Contact Name	***Phone #***
Steven Renninger (USEPA OSC)	513-260-7849
Leslie Patterson (USEPA RPM)	312-886-4904
Laura Marshall (Ohio EPA)	937-285-6452
Brett Fishwild (CH2M Hill)	937-220-2955
John Sherrard (Dynamac Corporation, USEPA START contractor)	513-703-3092
Mark Case (Pubic Health – Dayton / Montgomery County)	937-225-4429
Bob Frey (ODH)	614-466-1069
Adam Loney / Valerie Chan (CRA)	519-884-0510
Greg Lewis / Nate Ziegler, Jason Close, Jeremy Teepan, (CRA Cincinnati office)	513-942-4750
Greg Lewis (CRA cell)	519-200-8902

8.0 PROJECT SCHEDULE

Task	*Schedule*
Weekly Mitigation Status update conference calls with USEPA and Respondents	Thursdays
Work Plan Due Date	15 business days from the AOC Effective Date AOC Effective Date is April 8, 2013
Conduct building inspections / engineering evaluations	March 15, 2013
Ohio licensed radon subcontractor bid submission	April 12, 2013
Meeting with property owners/tenants	Following signing and execution of AOC. Anticipated dates: week of May 6th or 13th, 2013
Design sub-slab depressurization system	Within 4 weeks of meeting with property owners/tenants
Initiate Section 4.1 tasks (Meeting with Property Owners/Tenants)	Within 45 days of Work Plan approval
Initiate Installation of SSDS	Within 30 business days following USEPA approval of the final SSDS design
Progress Reports	Monthly, on the 10th day of each month, until termination of ASAOC
Oral notification of any delay in performance of ASAOC Obligations	Within 24 hours
Written notification of any delay in performance of ASAOC obligations in accordance with Paragraph 46 of the ASAOC	Within 7 days thereafter
New Sample Locations from any location where the occupants previously denied access and locations that may be identified as requiring sampling	Complete sampling with 60 days of receiving new access agreement from USEPA or property owner
O&M Manual submission to USEPA and property owners/tenants	Within 60 days of SSDS start-up
Annual SSDS Inspections	Complete within 30 days of receiving access agreements from USEPA or property owner (annually thereafter)

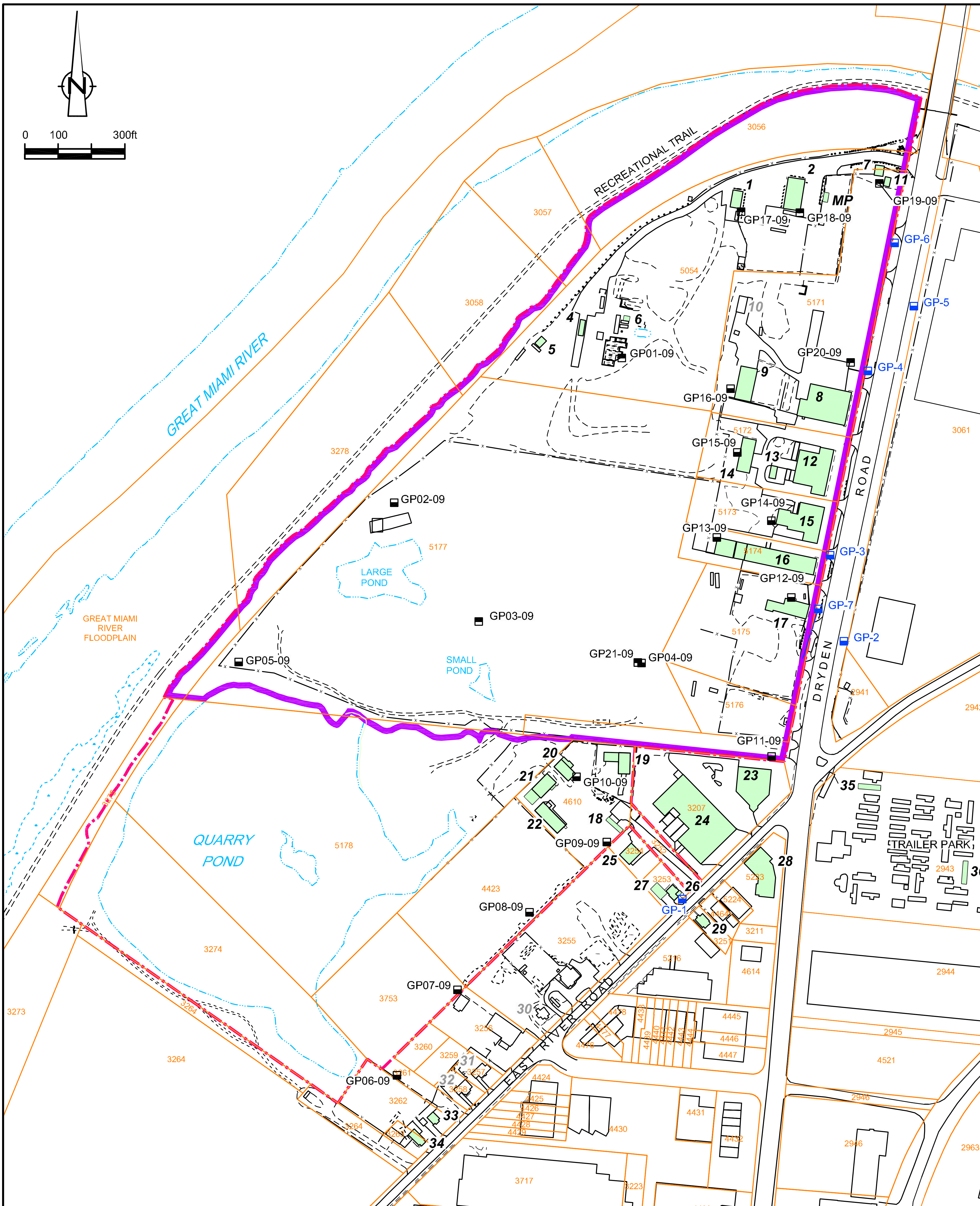
Task	*Schedule*
Proficiency indoor air sampling (new SSDS installations)	30, 180, and 365 days post-installation
Proficiency air sampling (sub-set of systems)	Beginning 2 years following SSDS installation
Submission of Corrective Action Plan	Within 30 days of receiving indoor air sampling results that are greater than ODH screening levels
SSDS Upgrades	Within 30 days of receiving validated proficiency air sampling analytical results
Indoor air proficiency sample following completion of SSDS Upgrades (if required)	Within 30 days of completion of system modifications
Provision of analytical results and corresponding evaluation to USEPA following each sampling event	Within 30 days of receiving the complete set of final analytical results
Final Report summarizing actions completed to comply with AOC	Within 60 days of completion of all work specified in Section VIII of the AOC (i.e., following completion of proficiency indoor air sampling for new SSDS installations)
Submit Landfill Gas Investigation Report	30 days after completion of last sampling event



Base Data: Dayton South USGS Quad Image Datum: NAD 83 Projection: Ohio State Plane South

figure 1.1

SITE LOCATION MAP
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio



LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- 3263 PARCEL NUMBER
- GP01-09 SHALLOW LANDFILL GAS PROBE
- GP02-09 DEEP LANDFILL GAS PROBE
- GP-1 USEPA NESTED SOIL GAS PROBE LOCATION
- 1 USEPA REMOVAL PROGRAM BUILDING NUMBER
- VI INVESTIGATED BUILDINGS
- APPROXIMATE OPERABLE UNIT 1 BOUNDARY

figure 1.2

APPROXIMATE BOUNDARY OF OPERABLE UNIT 1
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

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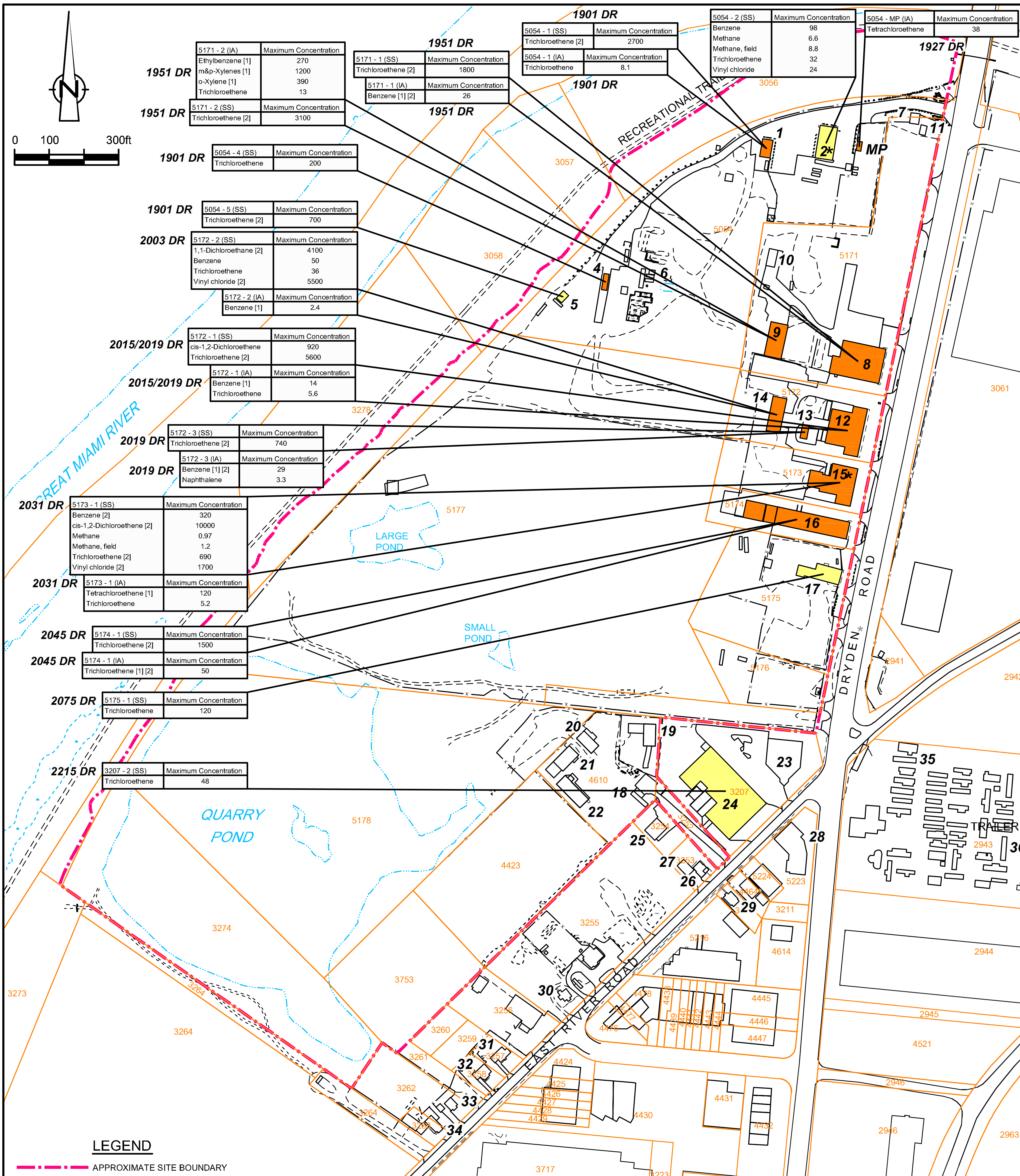


LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- BUILDING WITH SUB-SLAB SOIL VAPOR EXCEEDANCE
- BUILDING WITH INDOOR AIR VI EXCEEDANCE

[1]	INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE
[2]	THIS CONCENTRATION WAS GREATER THAN THE OHIO DEPARTMENT OF HEALTH (ODH) ACTION LEVEL
J	ESTIMATED QUANTITY
ERR	EAST RIVER ROAD
DR	DRYDEN ROAD
MAXIMUM CONCENTRATION	MAXIMUM CONCENTRATION GREATER THAN APPLICABLE SCREENING LEVEL CRITERIA AMONG ALL SUB-SLAB SOIL VAPOR PROBE OR INDOOR AIR SAMPLES COLLECTED IN 2012.
*	BUILDING REQUIRES MITIGATION DUE TO SUB-SLAB EXPLOSIVE GAS CONCENTRATIONS
1	USEPA REMOVAL PROGRAM BUILDING NUMBER

PARAMETER	ODH Screening Levels			
	Soil Gas		Indoor Air	
	Non-Residential	Residential	Non-Residential	Residential
1,1-Dichloroethane	160	37	16	3.7
Benzene	20	4	2	0.4
Chloroform (Trichloromethane)	800	200	80	20
cis-1,2-Dichloroethene	370	88	37	8.8
Methane	0.5	0.5	0.05	0.05
Methane, field	0.5	0.5	0.05	0.05
Tetrachloroethene	250	60	25	6
Trichlororthene	20	4	2	0.4
Vinyl Chloride	20	4	2	0.4

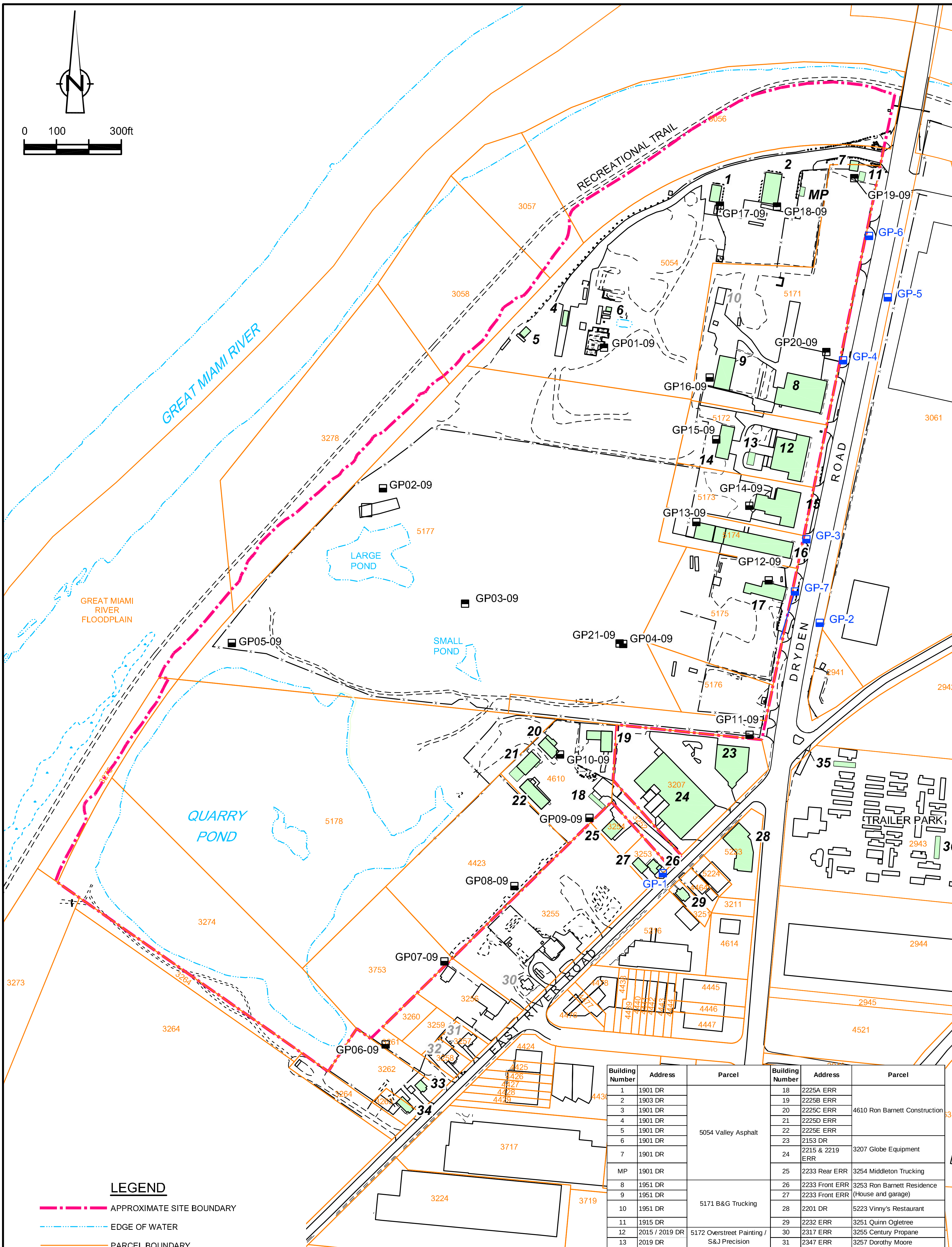
NOTE:
ALL UNITS ARE IN ppb WITH THE EXCEPTION OF METHANE WHICH IS EXPRESSED AS PERCENT BY VOLUME

figure 1.3

2012 MAXIMUM VAPOR INTRUSION EXCEEDANCES
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA001 FEB 25/2013



Building Number	Address	Parcel	Building Number	Address	Parcel
1	1901 DR	5054 Valley Asphalt	18	2225A ERR	4610 Ron Barnett Construction
2	1903 DR		19	2225B ERR	
3	1901 DR		20	2225C ERR	
4	1901 DR		21	2225D ERR	
5	1901 DR		22	2225E ERR	
6	1901 DR		23	2153 DR	3207 Globe Equipment
7	1901 DR		24	2215 & 2219 ERR	
MP	1901 DR		25	2233 Rear ERR	3254 Middleton Trucking
8	1951 DR	5171 B&G Trucking	26	2233 Front ERR	3253 Ron Barnett Residence (House and garage)
9	1951 DR		27	2233 Front ERR	
10	1951 DR		28	2201 DR	5223 Vinny's Restaurant
11	1915 DR		29	2232 ERR	3251 Quinn Ogletree
12	2015 / 2019 DR	5172 Overstreet Painting / S&J Precision	30	2317 ERR	3255 Century Propane
13	2019 DR		31	2347 ERR	3257 Dorothy Moore
14	2003 DR	5172 Bullseye Amusemets	32	2359 ERR	3258 Dorothy Moore
15	2031 DR	5173 SIM Trainer	33	2373 ERR	3262 Jim Worley
16	2045 DR	5174 Command Roofing	34	2391 ERR	3263 Jim Worley
17	2075 DR	5175 Former Alliance Equipment & Supply	35	2228 DR	2943 Village Park Community
			36	2228 DR	2943 Village Park Community

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- 3263 PARCEL NUMBER
- GP01-09 SHALLOW LANDFILL GAS PROBE
- GP02-09 DEEP LANDFILL GAS PROBE
- GP-1 USEPA NESTED SOIL GAS PROBE LOCATION
- 1 USEPA REMOVAL PROGRAM BUILDING NUMBER
- VI INVESTIGATED BUILDINGS

figure 3.1

EXISTING SOIL GAS PROBE LOCATIONS
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA008 JAN 25/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 — MONITORING WELL LOCATION
- VAS01 — VAS SAMPLING LOCATION
- GP21-09 — SHALLOW LANDFILL GAS PROBE
- GP04-09 — DEEP LANDFILL GAS PROBE
- TT1 — TEST TRENCH LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

0 20 60ft

SAMPLE ID (PARCEL - BUILDING)

Parcel 5171 - Bldg 1 - Probe C	Jan 2012	Jan 2012
	ug/m3	%
Methane, field	-	0.0
Tetrachloroethene	140	-
Trichloroethene	61	-

SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

[1] INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE

J ESTIMATED

U NOT DETECTED

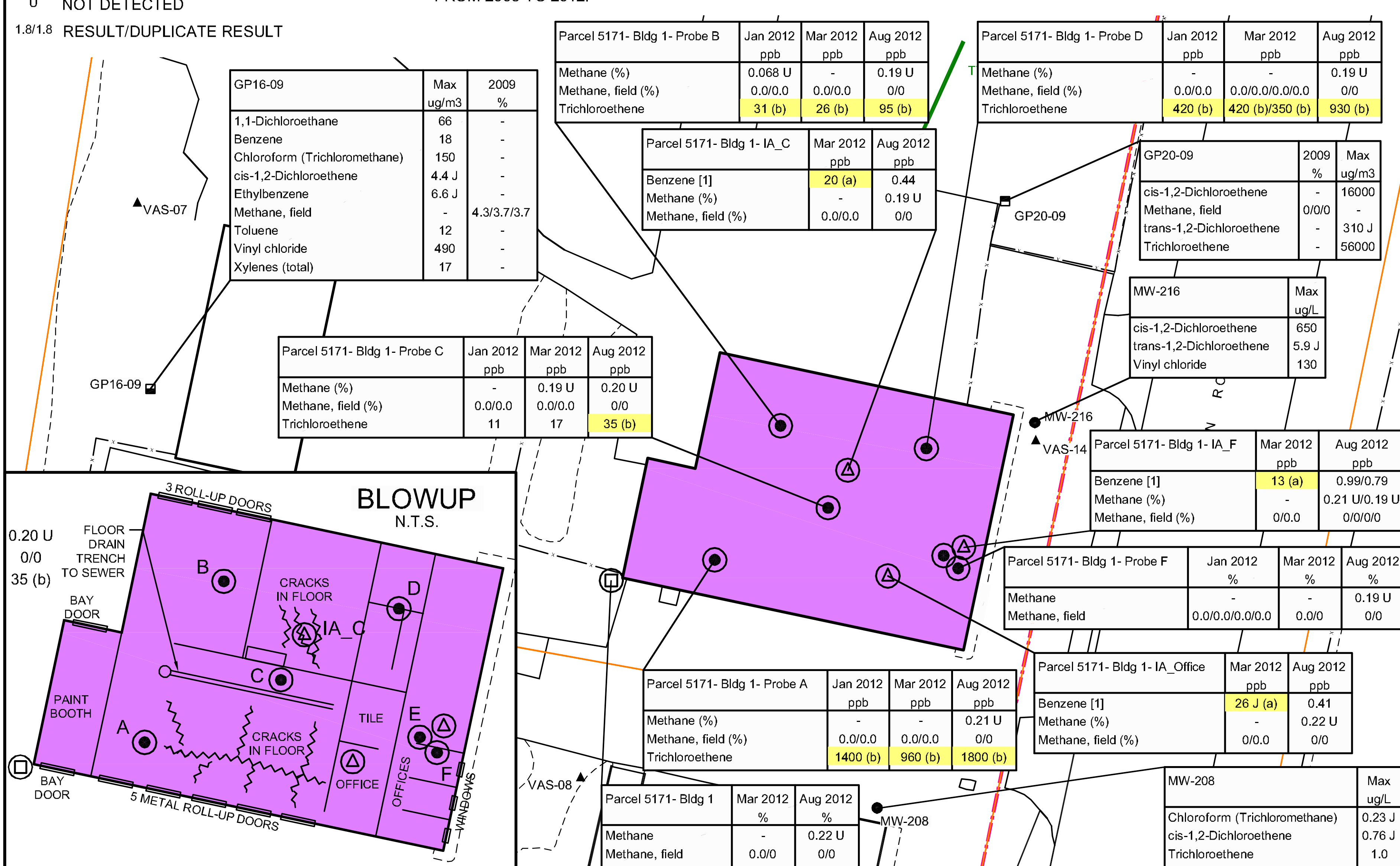
1.8/1.8 RESULT/DUPLICATE RESULT

EXCEEDANCES

Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

Chemical Name	ODH Non-residential Screening Level	
	Indoor Air (a)	Sub-Slab (b)
Benzene	2	20
Methane	0.05	0.5
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



GP16-09	Max	2009
	ug/m3	%
1,1-Dichloroethane	66	-
Benzene	18	-
Chloroform (Trichloromethane)	150	-
cis-1,2-Dichloroethene	4.4 J	-
Ethylbenzene	6.6 J	-
Methane, field	-	4.3/3.7/3.7
Toluene	12	-
Vinyl chloride	490	-
Xylenes (total)	17	-

Parcel 5171- Bldg 1- Probe B	Jan 2012	Mar 2012	Aug 2012
	ppb	ppb	ppb
Methane (%)	0.068 U	-	0.19 U
Methane, field (%)	0.0/0.0	0.0/0.0	0/0
Trichloroethene	31 (b)	26 (b)	95 (b)

Parcel 5171- Bldg 1- Probe D	Jan 2012	Mar 2012	Aug 2012
	ppb	ppb	ppb
Methane (%)	-	-	0.19 U
Methane, field (%)	0.0/0.0	0.0/0.0/0.0/0.0	0/0
Trichloroethene	420 (b)	420 (b)/350 (b)	930 (b)

Parcel 5171- Bldg 1- IA_C	Mar 2012	Aug 2012
	ppb	ppb
Benzene [1]	20 (a)	0.44
Methane (%)	-	0.19 U
Methane, field (%)	0.0/0.0	0/0

GP20-09	2009	Max
	%	ug/m3
cis-1,2-Dichloroethene	-	16000
Methane, field	0/0/0	-
trans-1,2-Dichloroethene	-	310 J
Trichloroethene	-	56000

MW-216	Max
	ug/L
cis-1,2-Dichloroethene	650
trans-1,2-Dichloroethene	5.9 J
Vinyl chloride	130

Parcel 5171- Bldg 1- Probe C	Jan 2012	Mar 2012	Aug 2012
	ppb	ppb	ppb
Methane (%)	-	0.19 U	0.20 U
Methane, field (%)	0.0/0.0	0.0/0.0	0/0
Trichloroethene	11	17	35 (b)

Parcel 5171- Bldg 1- IA_F	Mar 2012	Aug 2012
	ppb	ppb
Benzene [1]	13 (a)	0.99/0.79
Methane (%)	-	0.21 U/0.19 U
Methane, field (%)	0/0.0	0/0/0/0

Parcel 5171- Bldg 1- Probe F	Jan 2012	Mar 2012	Aug 2012
	%	%	%
Methane	-	-	0.19 U
Methane, field	0.0/0.0/0.0/0.0	0.0/0	0/0

Parcel 5171- Bldg 1- IA_Office	Mar 2012	Aug 2012
	ppb	ppb
Benzene [1]	26 J (a)	0.41
Methane (%)	-	0.22 U
Methane, field (%)	0/0.0	0/0

Parcel 5171- Bldg 1- Probe A	Jan 2012	Mar 2012	Aug 2012
	ppb	ppb	ppb
Methane (%)	-	-	0.21 U
Methane, field (%)	0.0/0.0	0.0/0.0	0/0
Trichloroethene	1400 (b)	960 (b)	1800 (b)

Parcel 5171- Bldg 1	Mar 2012	Aug 2012
	%	%
Methane	-	0.22 U
Methane, field	0.0/0	0/0

MW-208	Max
	ug/L
Chloroform (Trichloromethane)	0.23 J
cis-1,2-Dichloroethene	0.76 J
Trichloroethene	1.0

PROFILE VIEW

N.T.S.

Building Characteristics:
Commercial-use building, constructed prior to1968. Building divided into two sections. Total footprint is 13,700 sq. ft. Exterior openings - vents, fans, utility pipe penetrations, windows, 10 large bay doors, personnel doors. Occupied weekdays from 7 AM to 5 PM by 7 adult workers.
Eastern 1/4 of the building is brick, two story, office space, concrete slab-on-grade with wall-to-wall carpet. Average air tightness. Heating provided by forced air natural gas furnace, central A/C. Paint storage room in southeast corner, strong paint odor. Southern 3/4 of the building is one story, concrete block with bare concrete floor. Repair shop for large trucks with shop office on east side (tile floor and 8 ft. drop ceiling). Floor is visibly cracked in areas, floor drain present (leading to sewer) and evidence of spills throughout the shop. Flat metal roof approximately 24 ft. high. Not air tight, no weather seals present, bay doors kept open when occupied. Radiant overhead heat and used oil stove, no A/C. Strong paint odors in west side paint booth area.

figure 3.2

PARCEL 5171 - B&G TRUCKING BUILDING 8
1951 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA009 APR 24/2013

Chemical Name	ODH Non-residential Screening Level	
	Indoor Air (a)	Sub-Slab (b)
Ethylbenzene	250	2500
m&p-Xylenes	200	2000
Methane	0.05	0.5
o-Xylene	200	2000
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.

LEGEND

- APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- VAS01 ▲ VAS SAMPLING LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

SAMPLE ID (PARCEL - BUILDING)

Parcel 5171 - Bldg 2 - Probe A	Mar 2012 ug/m3	Aug 2012 ug/m3
Chloroform (Trichloromethane)	42 J	-
Methane, field	0.0/0	0
Trichloroethene	540	-

SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND
EXCEEDANCES

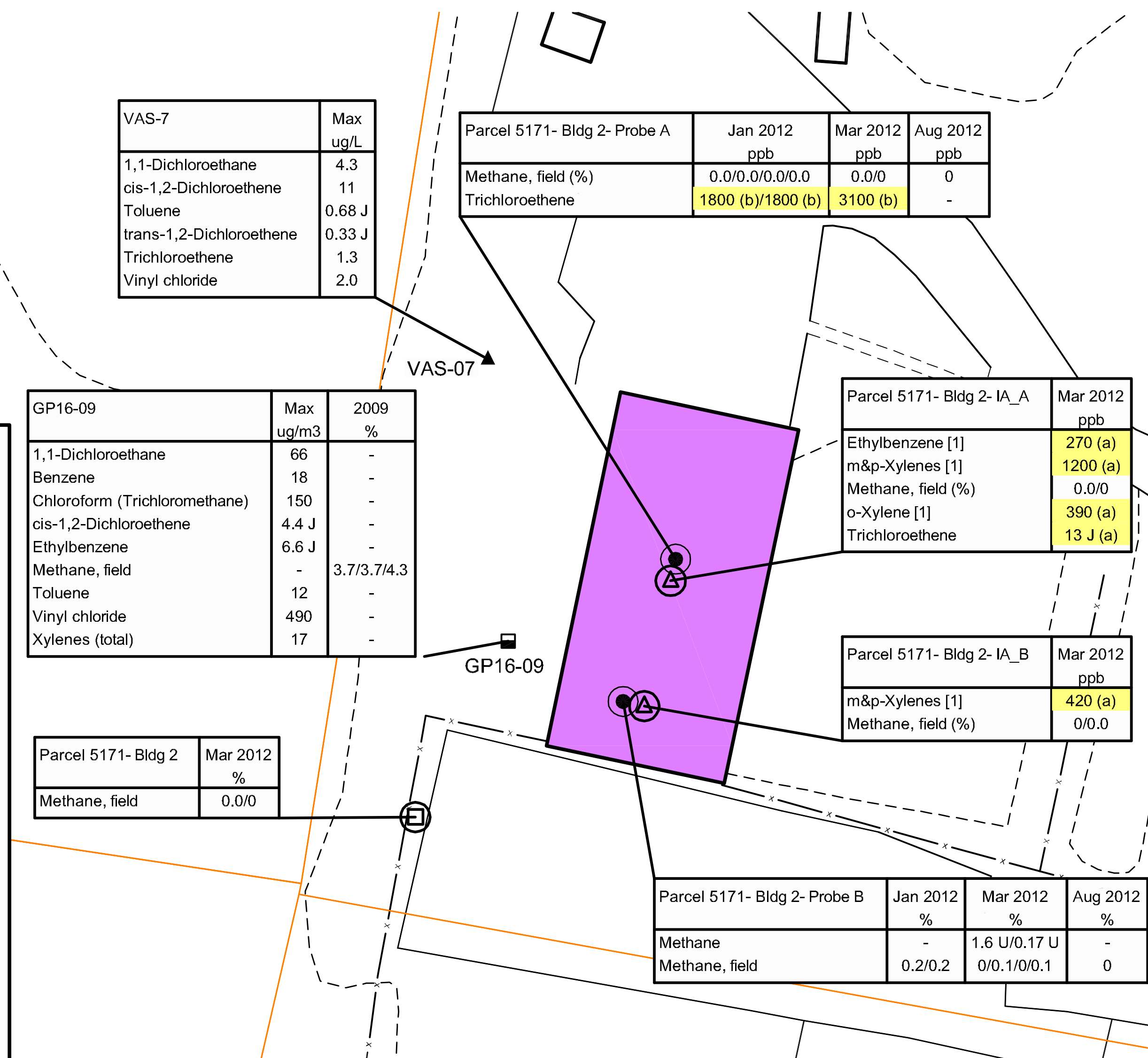
[1] INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE

J ESTIMATED

U NOT DETECTED

Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

1.8/1.8 RESULT/DUPLICATE RESULT



VAS-7	Max ug/L
1,1-Dichloroethane	4.3
cis-1,2-Dichloroethene	11
Toluene	0.68 J
trans-1,2-Dichloroethene	0.33 J
Trichloroethene	1.3
Vinyl chloride	2.0

Parcel 5171- Bldg 2- Probe A	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane, field (%)	0.0/0.0/0.0/0.0	0.0/0	0
Trichloroethene	1800 (b)/1800 (b)	3100 (b)	-

GP16-09	Max ug/m3	2009 %
1,1-Dichloroethane	66	-
Benzene	18	-
Chloroform (Trichloromethane)	150	-
cis-1,2-Dichloroethene	4.4 J	-
Ethylbenzene	6.6 J	-
Methane, field	-	3.7/3.7/4.3
Toluene	12	-
Vinyl chloride	490	-
Xylenes (total)	17	-

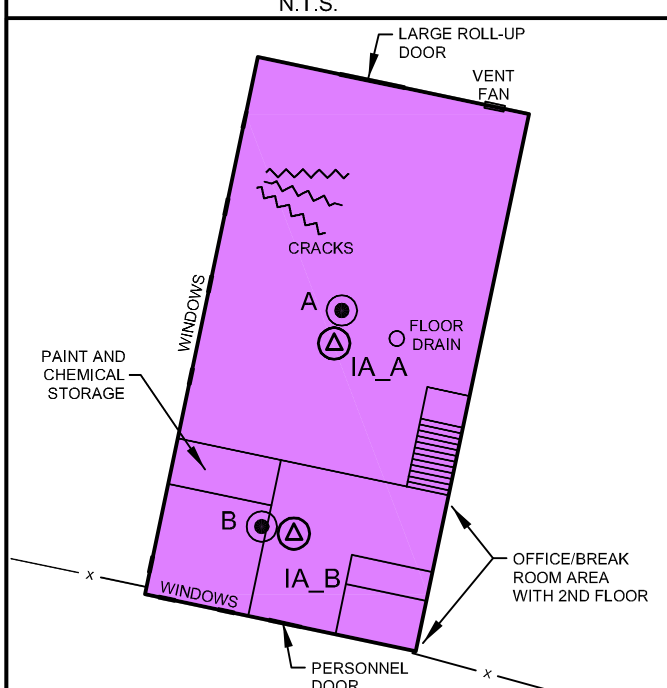
Parcel 5171- Bldg 2- IA_A	Mar 2012 ppb
Ethylbenzene [1]	270 (a)
m&p-Xylenes [1]	1200 (a)
Methane, field (%)	0.0/0
o-Xylene [1]	390 (a)
Trichloroethene	13 J (a)

Parcel 5171- Bldg 2- IA_B	Mar 2012 ppb
m&p-Xylenes [1]	420 (a)
Methane, field (%)	0/0.0

Parcel 5171- Bldg 2	Mar 2012 %
Methane, field	0.0/0

Parcel 5171- Bldg 2- Probe B	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	1.6 U/0.17 U	-
Methane, field	0.2/0.2	0/0.1/0/0.1	0

BLOW-UP
N.T.S.



PROFILE VIEW
N.T.S.

Building Characteristics:
Commercial-use concrete block building, constructed prior to 1968. Used for large truck repair with office/break room on the south side. Total footprint is 5,000 sq. ft. Slab-on-grade, unsealed poured concrete with some cracks and one large floor drain, with visible staining. One story building, approximately 20 ft. high. Southern 1/3 of building has a 2nd story within the building, storage space only. Approximately 8 ft. ceilings in 1st and 2nd floor of southern 1/3 of building. Ceiling in the shop area (northern 2/3 of building) is 20 ft. high. Heating provided by natural gas. Radiant ceiling heating system and floor fans are present. Not insulated, not air tight, bay door kept open during working hours. Exterior openings - vent fans, utility pipe penetrations, windows, 1 large bay door, personnel doors. Occupied weekdays from 7 AM to 5 PM by 2 adult workers.

figure 3.3

PARCEL 5171 - B&G TRUCKING BUILDING 9
1951 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA010 MAR 11/2013

LEGEND

APPROXIMATE SITE BOUNDARY
PARCEL BOUNDARY
SUB SLAB SOIL VAPOR BUILDING LOCATION
MW-202 MONITORING WELL LOCATION
VAS01 VAS SAMPLING LOCATION
SUB SLAB SOIL VAPOR SAMPLE LOCATION
INDOOR AIR SAMPLE LOCATION
OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

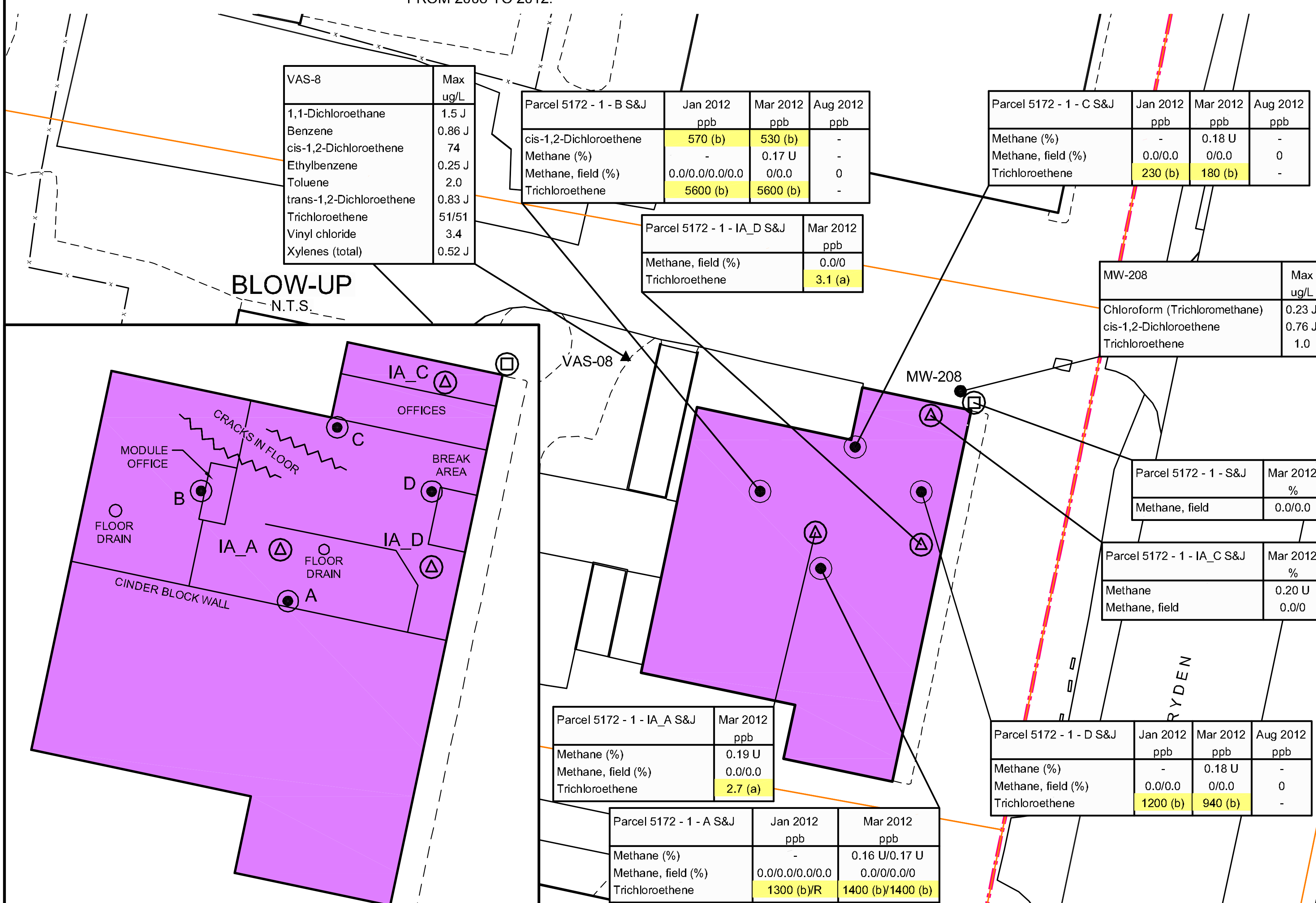
MW-208	Max
	ug/L
Chloroform (Trichloromethane)	0.23 J
cis-1,2-Dichloroethene	0.76 J
Trichloroethene	1.0

SAMPLE ID (PARCEL - BUILDING)
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

1.8/1.8 RESULT/DUPLICATE RESULT
J ESTIMATED
U NOT DETECTED
R REJECTED
EXCEEDANCES
Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

Chemical Name	ODH Non-residential Screening Level	
	Indoor Air (a)	Sub-Slab (b)
cis-1,2-Dichloroethene	37	370
Methane	0.05	0.5
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



PROFILE VIEW
N.T.S.

Building Characteristics:
Single story, industrial-use building, constructed in the 1950s. Divided into two equal sections, north and south sides. Total footprint is 11,600 sq. ft. Approximately 16 ft. high. Slab-on-grade, concrete block building with brick front. Exterior openings - windows, utility pipe penetrations, bay doors, personnel doors.
North side is the S&J Precision building. Majority of space is a metal working shop and warehouse with some office space. Bare concrete floor in shop and warehouse with cracks and 2 floor drains, staining on warehouse floor and near drain. North office space has elevated floor with floor tile (possibly asbestos) and wall-to-wall carpet on top. Heating provided by forced air natural gas furnace, central A/C. Not insulated, average air tightness, weather seals in fair condition. Occupied weekdays from 6 AM to 5 PM by 5 adult workers.
South side is the Overstreet Painting building.
See figure 3.5.

figure 3.4

PARCEL 5172 - S&J PRECISION BUILDING 12
2015 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA011 APR 15/2013

LEGEND

APPROXIMATE SITE BOUNDARY
PARCEL BOUNDARY
SUB SLAB SOIL VAPOR BUILDING LOCATION
MW-202 MONITORING WELL LOCATION
VAS01 VAS SAMPLING LOCATION
SUB SLAB SOIL VAPOR SAMPLE LOCATION
INDOOR AIR SAMPLE LOCATION
OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

Parcel 5172 - 1 - A Overstreet	Jan 2012 ug/m3	Jan 2012 %
Chloroform (Trichloromethane)	250	-
cis-1,2-Dichloroethene	2300	-
Methane, field	-	0.0

SAMPLE ID (PARCEL - BUILDING)
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND
EXCEEDANCES

[1] INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE

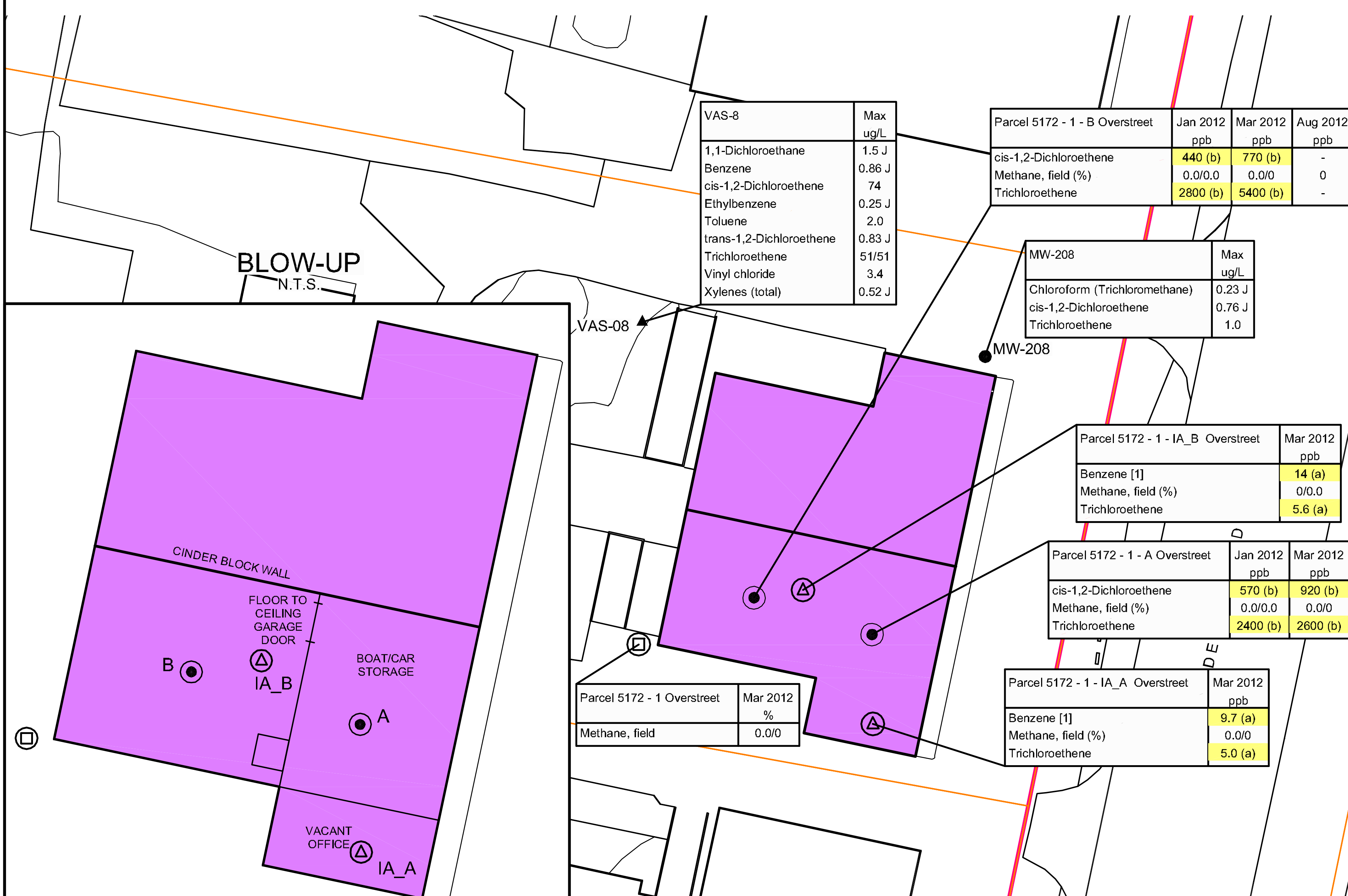
J ESTIMATED

Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

1.8/1.8 RESULT/DUPLICATE RESULT

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
Benzene	2	20
cis-1,2-Dichloroethene	37	370
Methane	0.05	0.5
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



VAS-8	Max ug/L
1,1-Dichloroethane	1.5 J
Benzene	0.86 J
cis-1,2-Dichloroethene	74
Ethylbenzene	0.25 J
Toluene	2.0
trans-1,2-Dichloroethene	0.83 J
Trichloroethene	51/51
Vinyl chloride	3.4
Xylenes (total)	0.52 J

Parcel 5172 - 1 - B Overstreet	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
cis-1,2-Dichloroethene	440 (b)	770 (b)	-
Methane, field (%)	0.0/0.0	0.0/0	0
Trichloroethene	2800 (b)	5400 (b)	-

MW-208	Max ug/L
Chloroform (Trichloromethane)	0.23 J
cis-1,2-Dichloroethene	0.76 J
Trichloroethene	1.0

Parcel 5172 - 1 - IA_B Overstreet	Mar 2012 ppb
Benzene [1]	14 (a)
Methane, field (%)	0/0.0
Trichloroethene	5.6 (a)

Parcel 5172 - 1 - A Overstreet	Jan 2012 ppb	Mar 2012 ppb
cis-1,2-Dichloroethene	570 (b)	920 (b)
Methane, field (%)	0.0/0.0	0.0/0
Trichloroethene	2400 (b)	2600 (b)

Parcel 5172 - 1 Overstreet	Mar 2012 %
Methane, field	0.0/0

Parcel 5172 - 1 - IA_A Overstreet	Mar 2012 ppb
Benzene [1]	9.7 (a)
Methane, field (%)	0.0/0
Trichloroethene	5.0 (a)

PROFILE VIEW
N.T.S.

Building Characteristics:
Single story, industrial-use building, constructed in the 1950s. Divided into two equal sections, north and south sides. Total footprint is 11,600 sq. ft. Approximately 16 ft high. Slab-on grade, concrete block building with brick front. Exterior openings - windows, utility pipe penetrations, bay doors, personnel doors. Not insulated, average air tightness, weather seals in fair condition.
North side is the S&J Precision building.
See figure 3.4.
South side is the Overstreet Painting building.
Commercial-use storage building. Primarily paint and vehicle storage with vehicle detailing space. Bare concrete floor with cracks. Heating provided by forced air natural gas furnace ceiling unit. No A/C. No regular occupancy - storage only.

figure 3.5

PARCEL 5172 - OVERSTREET PAINTING BUILDING 12
2019 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA012 APR 15/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- VAS01 VAS SAMPLING LOCATION
- GP04-09 DEEP LANDFILL GAS PROBE
- TT1 TEST TRENCH LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

Parcel 5172 - Bldg 2 - Probe C	Jan 2012 ug/m3	Jan 2012 %
Methane	-	0.066 U
Methane, field	-	0.0
Trichloroethene	13	-

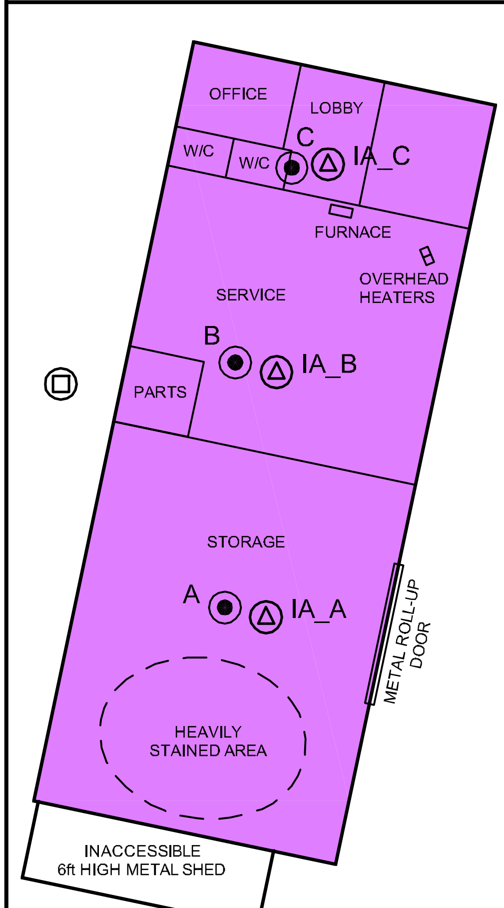
SAMPLE ID (PARCEL - BUILDING)
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

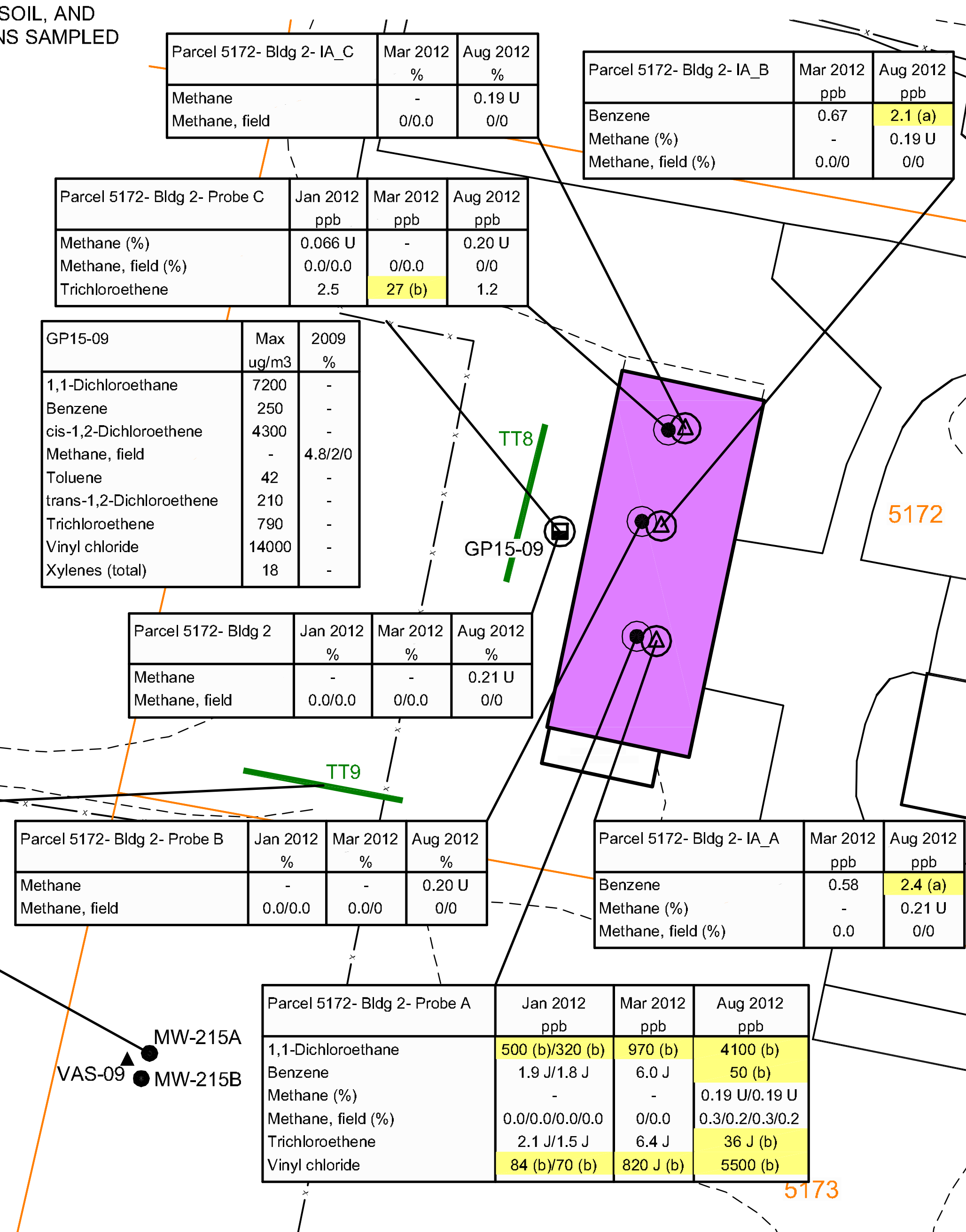
1.8/1.8 RESULT/DUPLICATE RESULT
J ESTIMATED
U NOT DETECTED
EXCEEDANCES
Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
1,1-Dichloroethane	16	160
Benzene	2	20
Methane	0.05	0.5
Trichloroethene	2	20
Vinyl chloride	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.

BLOW-UP
N.T.S.





Parcel 5172- Bldg 2- IA_C	Mar 2012 %	Aug 2012 %
Methane	-	0.19 U
Methane, field	0/0.0	0/0

Parcel 5172- Bldg 2- IA_B	Mar 2012 ppb	Aug 2012 ppb
Benzene	0.67	2.1 (a)
Methane (%)	-	0.19 U
Methane, field (%)	0.0/0	0/0

Parcel 5172- Bldg 2- Probe C	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	0.066 U	-	0.20 U
Methane, field (%)	0.0/0.0	0/0.0	0/0
Trichloroethene	2.5	27 (b)	1.2

GP15-09	Max ug/m3	2009 %
1,1-Dichloroethane	7200	-
Benzene	250	-
cis-1,2-Dichloroethene	4300	-
Methane, field	-	4.8/2/0
Toluene	42	-
trans-1,2-Dichloroethene	210	-
Trichloroethene	790	-
Vinyl chloride	14000	-
Xylenes (total)	18	-

TT-9	Max mg/kg
1,1-Dichloroethane	0.24 J
Benzene	0.15 J
Chlorobenzene	4
cis-1,2-Dichloroethene	0.89
Ethylbenzene	66
Methylene chloride	0.26 J
Naphthalene	3.9
Toluene	5.3
Trichloroethene	0.67 J
Vinyl chloride	0.22 J
Xylenes (total)	140

Parcel 5172- Bldg 2	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	-	0.21 U
Methane, field	0.0/0.0	0/0.0	0/0

Parcel 5172- Bldg 2- Probe B	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	-	0.20 U
Methane, field	0.0/0.0	0.0/0	0/0

Parcel 5172- Bldg 2- IA_A	Mar 2012 ppb	Aug 2012 ppb
Benzene	0.58	2.4 (a)
Methane (%)	-	0.21 U
Methane, field (%)	0.0	0/0

MW-215A	Max ug/L
Benzene	13
Chlorobenzene	4.2
cis-1,2-Dichloroethene	0.67 J
Ethylbenzene	23
Naphthalene	17
Toluene	100
Vinyl chloride	0.40 J
Xylenes (total)	75

Parcel 5172- Bldg 2- Probe A	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
1,1-Dichloroethane	500 (b)/320 (b)	970 (b)	4100 (b)
Benzene	1.9 J/1.8 J	6.0 J	50 (b)
Methane (%)	-	-	0.19 U/0.19 U
Methane, field (%)	0.0/0.0/0.0/0.0	0/0.0	0.3/0.2/0.3/0.2
Trichloroethene	2.1 J/1.5 J	6.4 J	36 J (b)
Vinyl chloride	84 (b)/70 (b)	820 J (b)	5500 (b)

PROFILE VIEW
N.T.S.

Building Characteristics:
Single-story, slab-on-grade, commercial use building constructed prior to 1959. Building is divided into three sections. Total footprint is 2,886 sq. ft. Average air tightness. Exterior openings - vents, utility pipe penetrations, office windows, 2 personnel doors, bay door. Attached metal shed on north side, 6 ft. high, not accessible during building survey. Northern 1/5 of the building is brick, approximately 10 ft. high with 8 ft. drop ceilings. Formerly used as office space (two separate offices). Heating provided by forced air natural gas furnace, central A/C present. Heating through floor vents, return air through wall vents. Wall-to-wall carpet in offices. Southern 4/5 of the building is concrete block, approximately 15 ft. high. Formerly used for grease filter washing and filter storage. Bare concrete floor with area of heavy staining on the north side (former wash area). Not insulated, radiant heat ceiling unit, no A/C.

figure 3.6

PARCEL 5172 - BULLSEYE AMUSEMENTS BUILDING 14
2003 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

LEGEND

- APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 — MONITORING WELL LOCATION
- VAS01 — VAS SAMPLING LOCATION
- GP04-09 — DEEP LANDFILL GAS PROBE
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

Parcel 5173- Bldg 1- Probe A	Jan 2012	Jan 2012
Methane, field	-	0.0
Tetrachloroethene	51	-
Trichloroethene	2100	-

SAMPLE ID (PARCEL - BUILDING)
SAMPLE DATE
CONCENTRATION VALUE
COMPOUND
EXCEEDANCES

[1] INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE

R REJECTED

J ESTIMATED

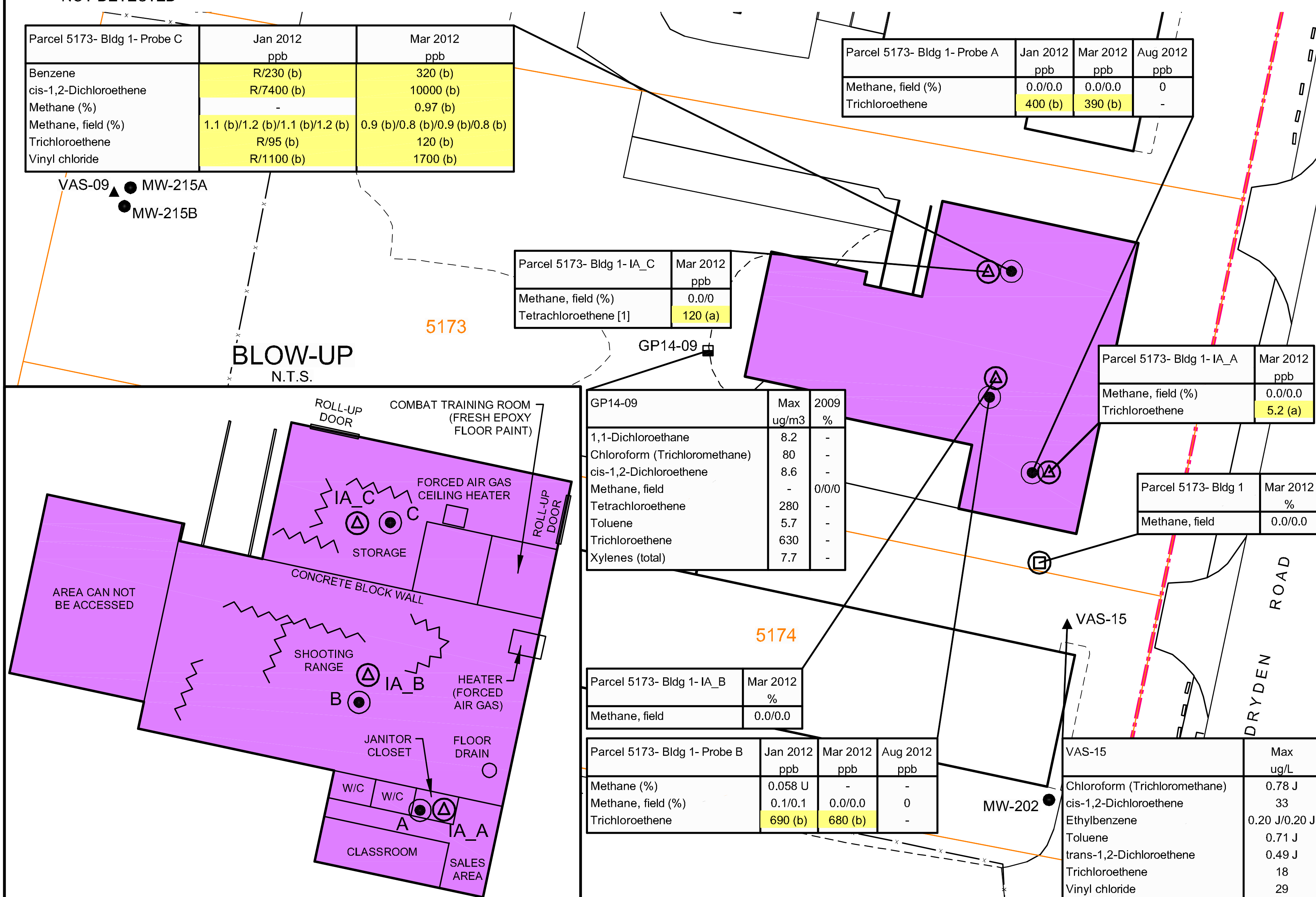
U NOT DETECTED

Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

1.8/1.8 RESULT/DUPLICATE RESULT

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	ODH Non-residential Screening Level Sub-Slab (b)
Benzene	2	20
cis-1,2-Dichloroethene	37	370
Methane	0.05	0.5
Tetrachloroethene	25	250
Trichloroethene	2	20
Vinyl chloride	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



Parcel 5173- Bldg 1- Probe C	Jan 2012 ppb	Mar 2012 ppb
Benzene	R/230 (b)	320 (b)
cis-1,2-Dichloroethene	R/7400 (b)	10000 (b)
Methane (%)	-	0.97 (b)
Methane, field (%)	1.1 (b)/1.2 (b)/1.1 (b)/1.2 (b)	0.9 (b)/0.8 (b)/0.9 (b)/0.8 (b)
Trichloroethene	R/95 (b)	120 (b)
Vinyl chloride	R/1100 (b)	1700 (b)

Parcel 5173- Bldg 1- Probe A	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane, field (%)	0.0/0.0	0.0/0.0	0
Trichloroethene	400 (b)	390 (b)	-

Parcel 5173- Bldg 1- IA_C	Mar 2012 ppb
Methane, field (%)	0.0/0
Tetrachloroethene [1]	120 (a)

Parcel 5173- Bldg 1- IA_A	Mar 2012 ppb
Methane, field (%)	0.0/0.0
Trichloroethene	5.2 (a)

GP14-09	Max ug/m3	2009 %
1,1-Dichloroethane	8.2	-
Chloroform (Trichloromethane)	80	-
cis-1,2-Dichloroethene	8.6	-
Methane, field	-	0/0/0
Tetrachloroethene	280	-
Toluene	5.7	-
Trichloroethene	630	-
Xylenes (total)	7.7	-

Parcel 5173- Bldg 1	Mar 2012 %
Methane, field	0.0/0.0

Parcel 5173- Bldg 1- IA_B	Mar 2012 %
Methane, field	0.0/0.0

Parcel 5173- Bldg 1- Probe B	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	0.058 U	-	-
Methane, field (%)	0.1/0.1	0.0/0.0	0
Trichloroethene	690 (b)	680 (b)	-

VAS-15	Max ug/L
Chloroform (Trichloromethane)	0.78 J
cis-1,2-Dichloroethene	33
Ethylbenzene	0.20 J/0.20 J
Toluene	0.71 J
trans-1,2-Dichloroethene	0.49 J
Trichloroethene	18
Vinyl chloride	29

PROFILE VIEW
N.T.S.

Building Characteristics:
Single-story commercial-use building constructed in three stages (north and center portions prior to 1956, western addition prior to 1959, southern addition prior to 1968). Total footprint is 8,250 sq. ft. Concrete block building with brick front. Slab-on-grade, bare concrete or painted concrete, fresh epoxy coat in north side combat training room, large cracks in the shooting range. Heavy staining and oil odor in storage area. Range heated by forced air natural gas ceiling units. Air handling unit pulls air from the range out the roof, operated during business hours. Forced air natural gas heat and central A/C in south section. Exterior openings - vents, fans, windows, 2 bay doors and two personnel doors. Occupied during business hours by one adult worker (4-hour shifts) and customers.

figure 3.7

PARCEL 5173 - SIM TRAINER BUILDING 15
2031 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA014 MAR 11/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 — MONITORING WELL LOCATION
- VAS01 — VAS SAMPLING LOCATION
- GP04-09 — DEEP LANDFILL GAS PROBE
- TT1 — TEST TRENCH LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

Parcel 5174- Bldg 1- IA_A	Mar 2012	Aug 2012
	%	%
Methane	0.20 U	0.21 U
Methane, field	0/0.0	0/0

SAMPLE ID (PARCEL - BUILDING)
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND
EXCEEDANCES

[1] INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE

J ESTIMATED

U NOT DETECTED

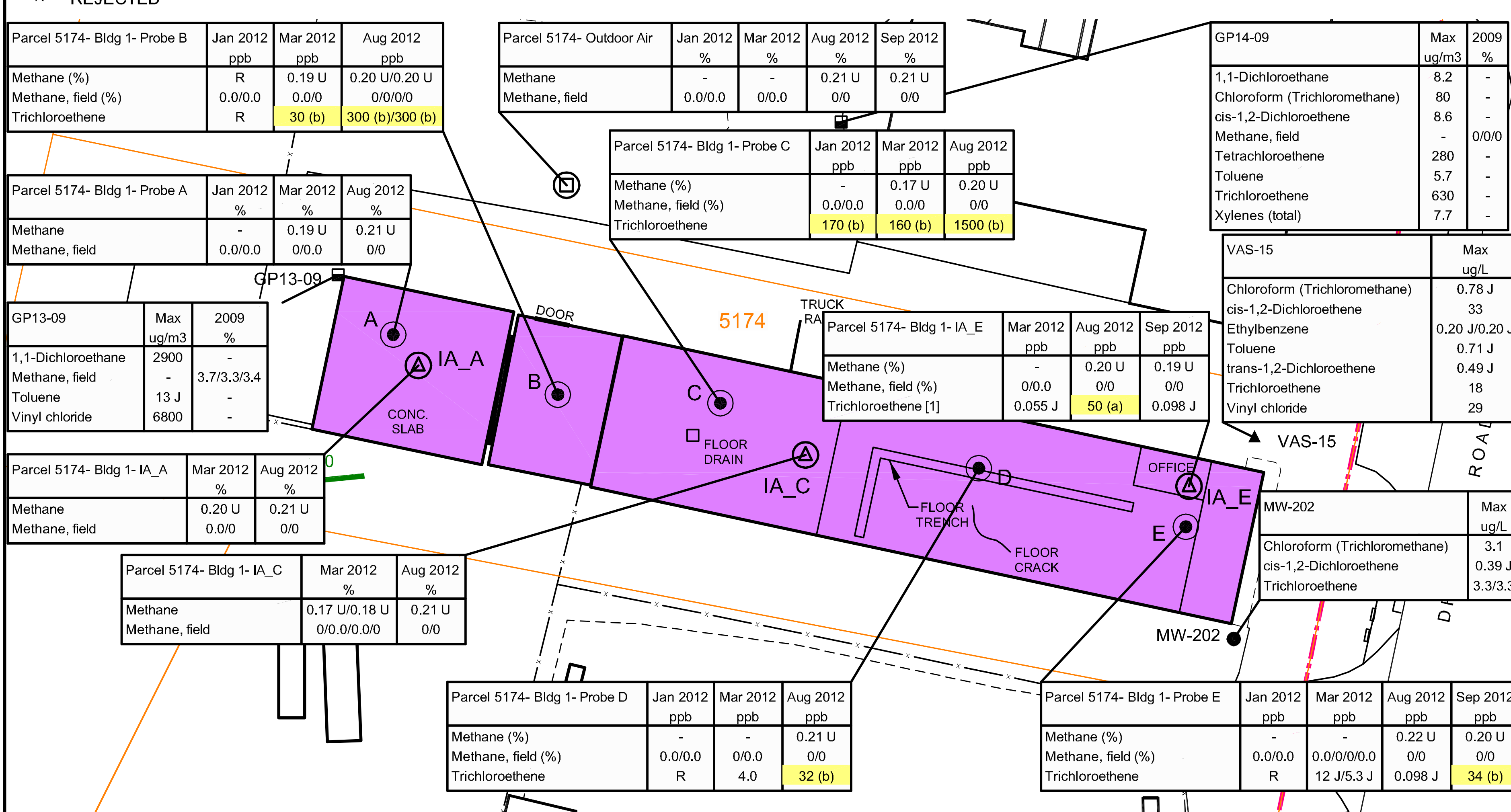
R REJECTED

Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

1.8/1.8 RESULT/DUPLICATE RESULT

Chemical Name	ODH Non-residential Screening Level	
	Indoor Air (a)	Sub-Slab (b)
Methane	0.05	0.5
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



Parcel 5174- Bldg 1- Probe B	Jan 2012	Mar 2012	Aug 2012
	ppb	ppb	ppb
Methane (%)	R	0.19 U	0.20 U/0.20 U
Methane, field (%)	0.0/0.0	0.0/0	0/0/0/0
Trichloroethene	R	30 (b)	300 (b)/300 (b)

Parcel 5174- Outdoor Air	Jan 2012	Mar 2012	Aug 2012	Sep 2012
	%	%	%	%
Methane	-	-	0.21 U	0.21 U
Methane, field	0.0/0.0	0/0.0	0/0	0/0

GP14-09	Max	2009
	ug/m3	%
1,1-Dichloroethane	8.2	-
Chloroform (Trichloromethane)	80	-
cis-1,2-Dichloroethene	8.6	-
Methane, field	-	0/0/0
Tetrachloroethene	280	-
Toluene	5.7	-
Trichloroethene	630	-
Xylenes (total)	7.7	-

Parcel 5174- Bldg 1- Probe C	Jan 2012	Mar 2012	Aug 2012
	ppb	ppb	ppb
Methane (%)	-	0.17 U	0.20 U
Methane, field (%)	0.0/0.0	0.0/0	0/0
Trichloroethene	170 (b)	160 (b)	1500 (b)

Parcel 5174- Bldg 1- Probe A	Jan 2012	Mar 2012	Aug 2012
	%	%	%
Methane	-	0.19 U	0.21 U
Methane, field	0.0/0.0	0/0.0	0/0

VAS-15	Max
	ug/L
Chloroform (Trichloromethane)	0.78 J
cis-1,2-Dichloroethene	33
Ethylbenzene	0.20 J/0.20 J
Toluene	0.71 J
trans-1,2-Dichloroethene	0.49 J
Trichloroethene	18
Vinyl chloride	29

GP13-09	Max	2009
	ug/m3	%
1,1-Dichloroethane	2900	-
Methane, field	-	3.7/3.3/3.4
Toluene	13 J	-
Vinyl chloride	6800	-

Parcel 5174- Bldg 1- IA_E	Jan 2012	Aug 2012	Sep 2012
	ppb	ppb	ppb
Methane (%)	-	0.20 U	0.19 U
Methane, field (%)	0/0.0	0/0	0/0
Trichloroethene [1]	0.055 J	50 (a)	0.098 J

Parcel 5174- Bldg 1- IA_A	Mar 2012	Aug 2012
	%	%
Methane	0.20 U	0.21 U
Methane, field	0/0.0	0/0

MW-202	Max
	ug/L
Chloroform (Trichloromethane)	3.1
cis-1,2-Dichloroethene	0.39 J
Trichloroethene	3.3/3.3

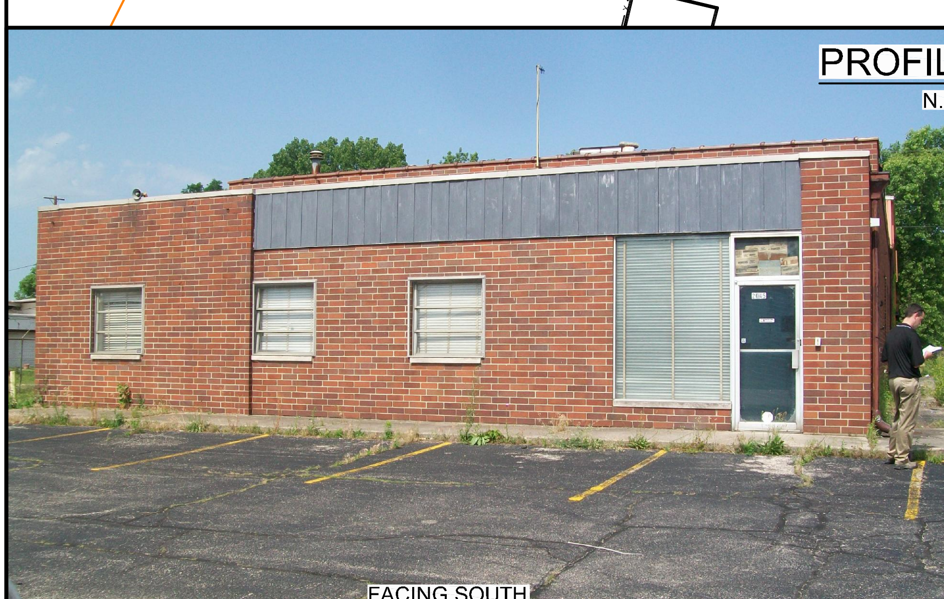
Parcel 5174- Bldg 1- IA_C	Mar 2012	Aug 2012
	%	%
Methane	0.17 U/0.18 U	0.21 U
Methane, field	0/0.0/0.0/0	0/0

Parcel 5174- Bldg 1- Probe D	Jan 2012	Mar 2012	Aug 2012
	ppb	ppb	ppb
Methane (%)	-	-	0.21 U
Methane, field (%)	0.0/0.0	0/0.0	0/0
Trichloroethene	R	4.0	32 (b)

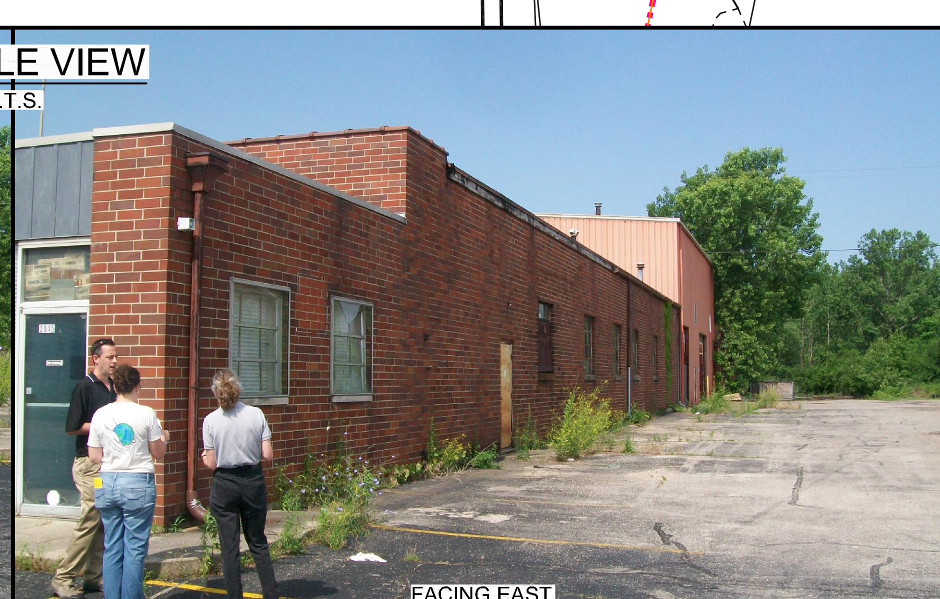
Parcel 5174- Bldg 1- Probe E	Jan 2012	Mar 2012	Aug 2012	Sep 2012
	ppb	ppb	ppb	ppb
Methane (%)	-	-	0.22 U	0.20 U
Methane, field (%)	0.0/0.0	0.0/0/0/0.0	0/0	0/0
Trichloroethene	R	12 J/5.3 J	0.098 J	34 (b)

PROFILE VIEW

N.T.S.



FACING SOUTH



FACING EAST

Building Characteristics:
Single-story, commercial-use storage building, constructed prior to 1968. 12,500 sq. ft concrete slab-on-grade building. Areas A (approximately 12 ft high) and B (approximately 16 ft high) constructed with brick, with weather seals in poor condition. Spray-on insulation (possible asbestos) used in Area B. Areas C (approximately 24 ft high) to E constructed with steel beams and metal siding. No HVAC systems in use as of June 2011. Not air tight. Damp and moldy, with visible evidence of water staining in office area A. Floor slab in poor condition, with cracks and unsealed joints throughout the building, particularly cracked in Areas D and E. Heavy floor staining in areas B through E. Exterior openings - office windows, personnel doors, sliding and roll-up doors.
Infrequent and variable occupancy by 2 adults.

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

figure 3.8

PARCEL 5174 - COMMAND ROOFING BUILDING 16
2045 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

38443-62(018)GN-WA015 MAR 11/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- VAS01 VAS SAMPLING LOCATION
- GP04-09 DEEP LANDFILL GAS PROBE
- TT1 TEST TRENCH LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

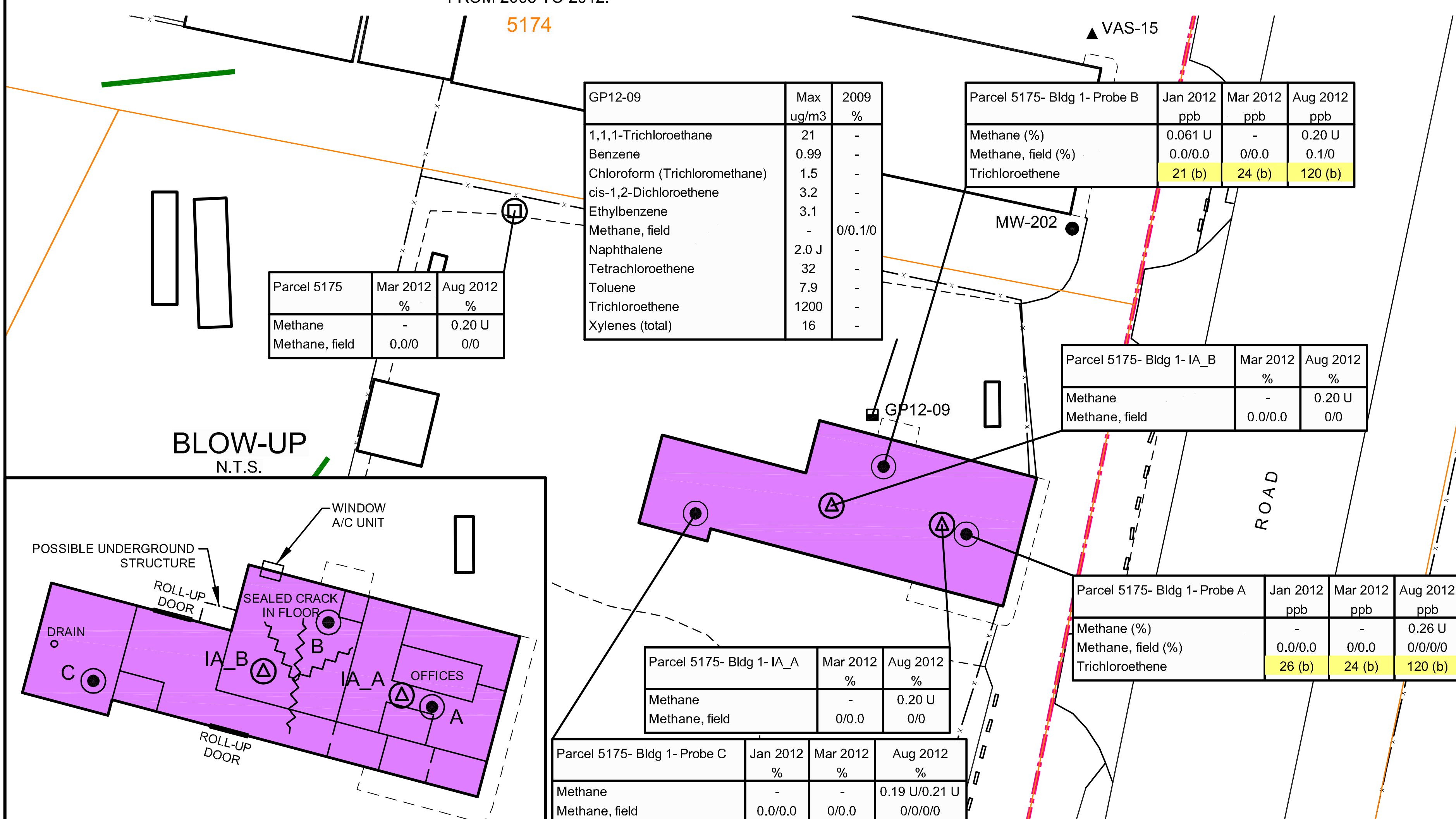
Parcel 5175- Bldg 1- Probe A	Jan 2012 ug/m3	Jan 2012 %
Methane, field	-	0.0
Trichloroethene	140	-

SAMPLE ID (PARCEL - BUILDING)
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

1.8/1.8 RESULT/DUPLICATE RESULT
J ESTIMATED
U NOT DETECTED
EXCEEDANCES
Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
Methane	0.05	0.5
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



GP12-09	Max ug/m3	2009 %
1,1,1-Trichloroethane	21	-
Benzene	0.99	-
Chloroform (Trichloromethane)	1.5	-
cis-1,2-Dichloroethene	3.2	-
Ethylbenzene	3.1	-
Methane, field	-	0/0.1/0
Naphthalene	2.0 J	-
Tetrachloroethene	32	-
Toluene	7.9	-
Trichloroethene	1200	-
Xylenes (total)	16	-

Parcel 5175	Mar 2012 %	Aug 2012 %
Methane	-	0.20 U
Methane, field	0.0/0	0/0

Parcel 5175- Bldg 1- Probe B	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	0.061 U	-	0.20 U
Methane, field (%)	0.0/0.0	0/0.0	0.1/0
Trichloroethene	21 (b)	24 (b)	120 (b)

Parcel 5175- Bldg 1- IA_B	Mar 2012 %	Aug 2012 %
Methane	-	0.20 U
Methane, field	0.0/0.0	0/0

Parcel 5175- Bldg 1- Probe A	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	-	-	0.26 U
Methane, field (%)	0.0/0.0	0/0.0	0/0/0/0
Trichloroethene	26 (b)	24 (b)	120 (b)

Parcel 5175- Bldg 1- IA_A	Mar 2012 %	Aug 2012 %
Methane	-	0.20 U
Methane, field	0/0.0	0/0

Parcel 5175- Bldg 1- Probe C	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	-	0.19 U/0.21 U
Methane, field	0.0/0.0	0/0.0	0/0/0/0

PROFILE VIEW
N.T.S.

Building Characteristics:
Single-story, commercial-use building, constructed prior to 1949. 4,557 sq. ft. slab-on-grade, unsealed concrete building, with crawl space possibly present on south side. Shallow concrete pit present in southwest corner of warehouse. Large sealed floor cracks observed in middle portion of building. Floor staining observed in warehouse and rear storage shed. Gasoline UST removed from former Conway Fence facility in 1990. Weather seals in poor condition. Overhead doors open at time of building survey. Heated by forced air natural gas furnace. Central A/C present in retail and office areas. Window unit A/C present in northern portion of building. Exterior openings - vents, fans, utility pipe penetrations, windows, overhead and personnel doors.
Occupancy - tenant about to vacate premises at time of building survey

figure 3.9

PARCEL 5175 - FORMER ALLIANCE EQUIPMENT & SUPPLY BUILDING 17
2075 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA016 MAR 4/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- GP11-09 DEEP LANDFILL GAS PROBE
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

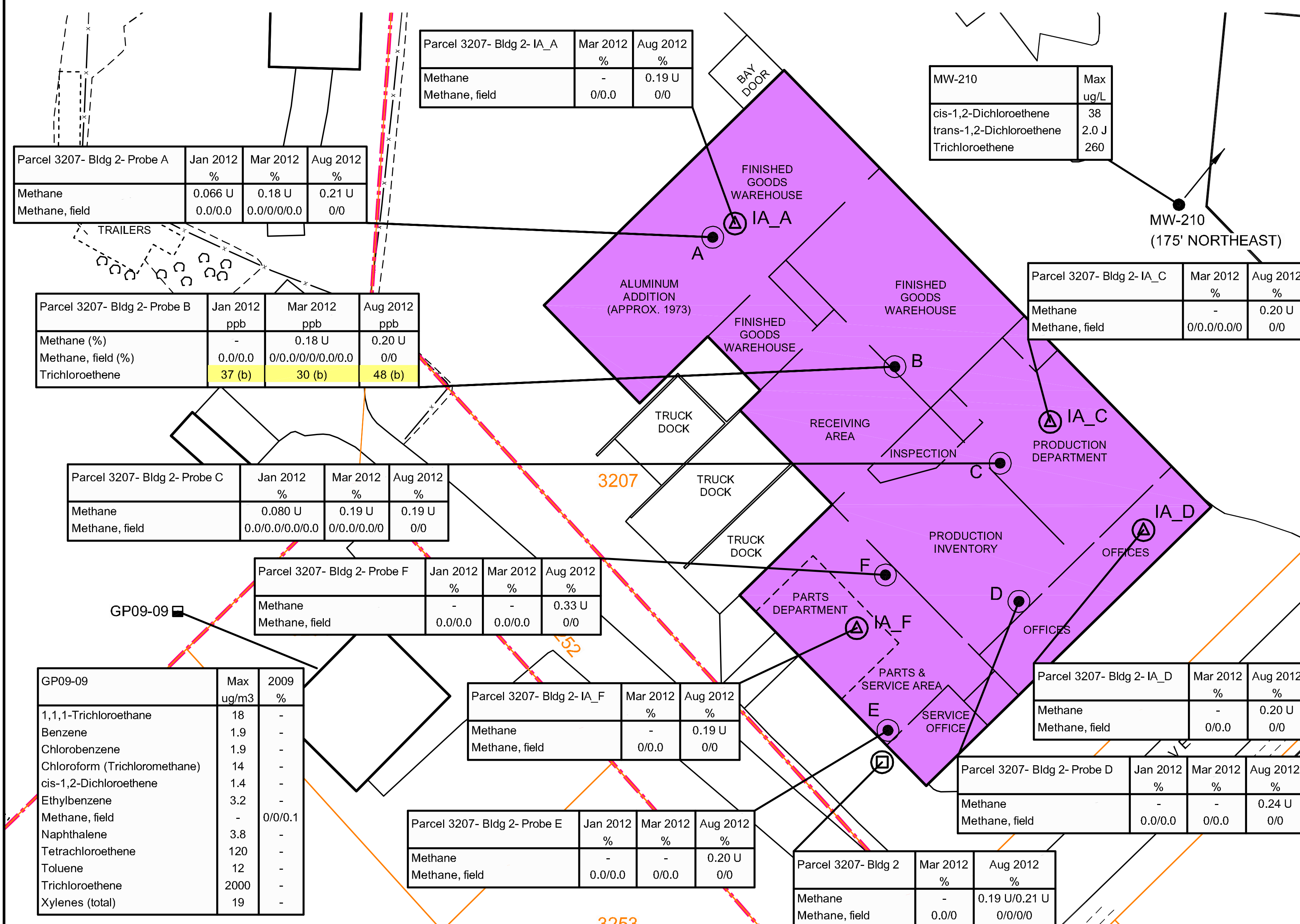
Parcel 3207- Bldg 2- IA_F	Mar 2012 %	Aug 2012 %
Methane	-	0.19 U
Methane, field	0/0.0	0/0

SAMPLE ID (PARCEL - BUILDING)
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

1.8/1.8 RESULT/DUPLICATE RESULT
J ESTIMATED
U NOT DETECTED
UJ ESTIMATED REPORTING DETECTION LIMIT
EXCEEDANCES
Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
Methane	0.05	0.5
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



Parcel 3207- Bldg 2- IA_A	Mar 2012 %	Aug 2012 %
Methane	-	0.19 U
Methane, field	0/0.0	0/0

MW-210	Max ug/L
cis-1,2-Dichloroethene	38
trans-1,2-Dichloroethene	2.0 J
Trichloroethene	260

Parcel 3207- Bldg 2- Probe A	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	0.066 U	0.18 U	0.21 U
Methane, field	0.0/0.0	0.0/0/0/0.0	0/0

Parcel 3207- Bldg 2- IA_C	Mar 2012 %	Aug 2012 %
Methane	-	0.20 U
Methane, field	0/0.0/0.0/0	0/0

Parcel 3207- Bldg 2- Probe B	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	-	0.18 U	0.20 U
Methane, field (%)	0.0/0.0	0/0.0/0/0/0.0/0.0	0/0
Trichloroethene	37 (b)	30 (b)	48 (b)

Parcel 3207- Bldg 2- Probe C	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	0.080 U	0.19 U	0.19 U
Methane, field	0.0/0.0/0.0/0.0	0/0.0/0.0/0	0/0

Parcel 3207- Bldg 2- Probe F	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	-	0.33 U
Methane, field	0.0/0.0	0.0/0.0	0/0

GP09-09	Max ug/m3	2009 %
1,1,1-Trichloroethane	18	-
Benzene	1.9	-
Chlorobenzene	1.9	-
Chloroform (Trichloromethane)	14	-
cis-1,2-Dichloroethene	1.4	-
Ethylbenzene	3.2	-
Methane, field	-	0/0/0.1
Naphthalene	3.8	-
Tetrachloroethene	120	-
Toluene	12	-
Trichloroethene	2000	-
Xylenes (total)	19	-

Parcel 3207- Bldg 2- IA_F	Mar 2012 %	Aug 2012 %
Methane	-	0.19 U
Methane, field	0/0.0	0/0

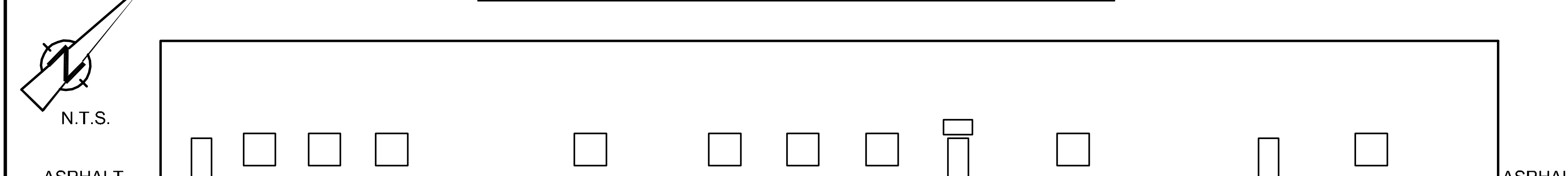
Parcel 3207- Bldg 2- IA_D	Mar 2012 %	Aug 2012 %
Methane	-	0.20 U
Methane, field	0/0.0	0/0

Parcel 3207- Bldg 2- Probe D	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	-	0.24 U
Methane, field	0.0/0.0	0/0.0	0/0

Parcel 3207- Bldg 2- Probe E	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	-	0.20 U
Methane, field	0.0/0.0	0/0.0	0/0

Parcel 3207- Bldg 2	Mar 2012 %	Aug 2012 %
Methane	-	0.19 U/0.21 U
Methane, field	0.0/0	0/0/0/0

PROFILE VIEW ALONG EAST RIVER ROAD



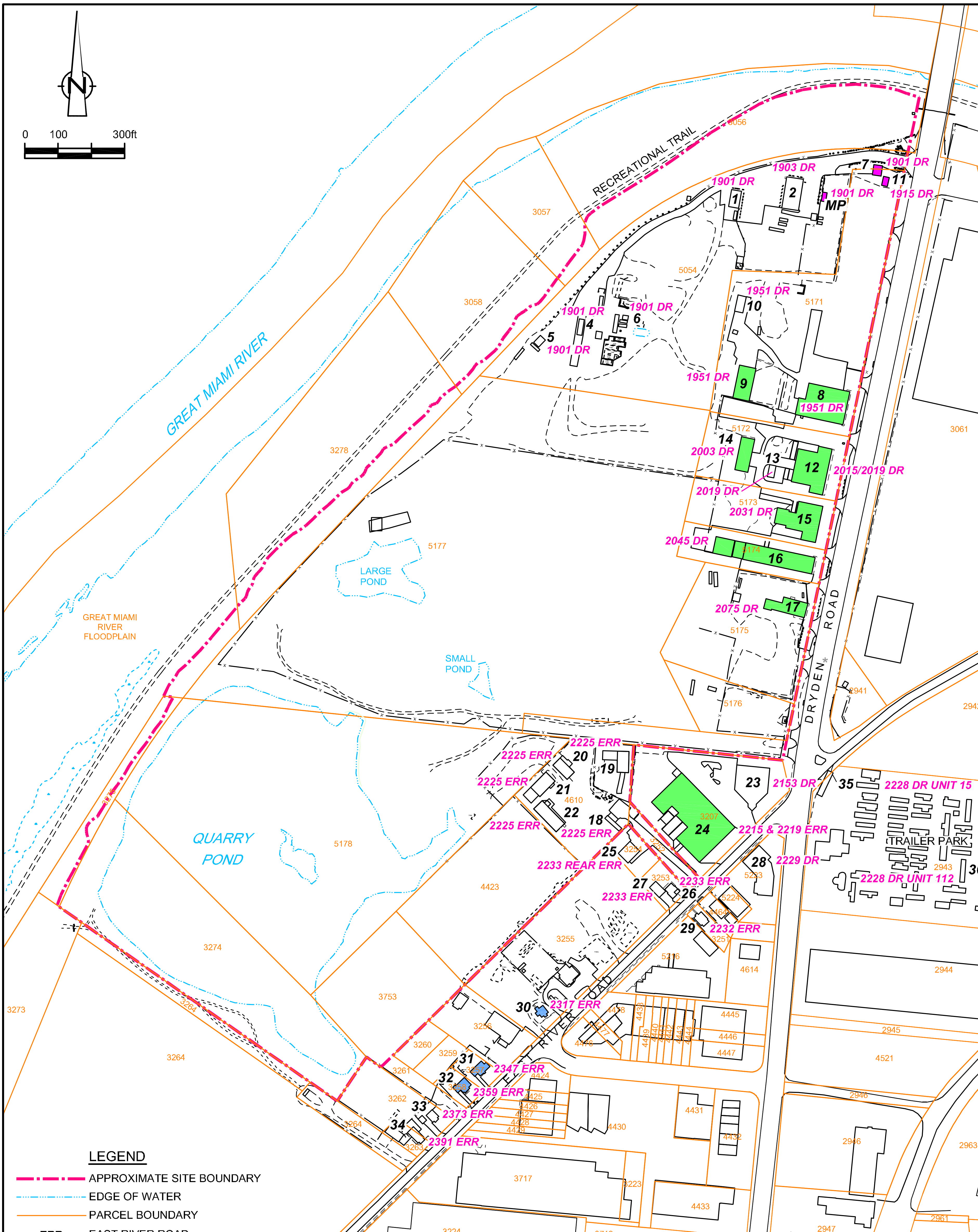
Building Characteristics:
Single-story industrial-use slab-on-grade building. Primarily assembly/warehouse space with some office space. Main portion of the building constructed prior to 1968 of concrete block. Northern addition was constructed prior to 1973 of steel frame and aluminum siding. Total footprint is 19,803 sq. ft. Building is 16 ft. high, office space has 8 ft.drop ceilings. Majority of the building has bare concrete floors, except office space is carpeted. Some large cracks in the slab are visible, some cracks are sealed. Building is not insulated, average air tightness with no weather seals present. Heating provided by forced air natural gas furnace. Central A/C provided by roof-top units. Exterior openings - vents, fans, utility pipe penetrations, windows, bay doors, and personnel doors. Windows and bay doors are open in good weather. Occupied weekdays from 7 AM to 5 PM by approximately 25 adult workers.

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

figure 3.10

PARCEL 3207 - GLOBE EQUIPMENT BUILDING 24
2215 AND 2219 EAST RIVER ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

38443-62(018)GN-WA017 MAR 4/2013



LEGEND

(dash-dot line)	APPROXIMATE SITE BOUNDARY
(dotted line)	EDGE OF WATER
(line)	PARCEL BOUNDARY
ERR	EAST RIVER ROAD
DR	DRYDEN ROAD
3263	PARCEL NUMBER
1	USEPA REMOVAL PROGRAM BUILDING NUMBER
2391 ERR	ADDRESS
(green)	VAPOR ABATEMENT MITIGATION SYSTEM PROPOSED
(magenta)	BUILDING DEMOLITION PROPOSED
(blue)	BUILDING ACCESS DENIED, NOT SAMPLED

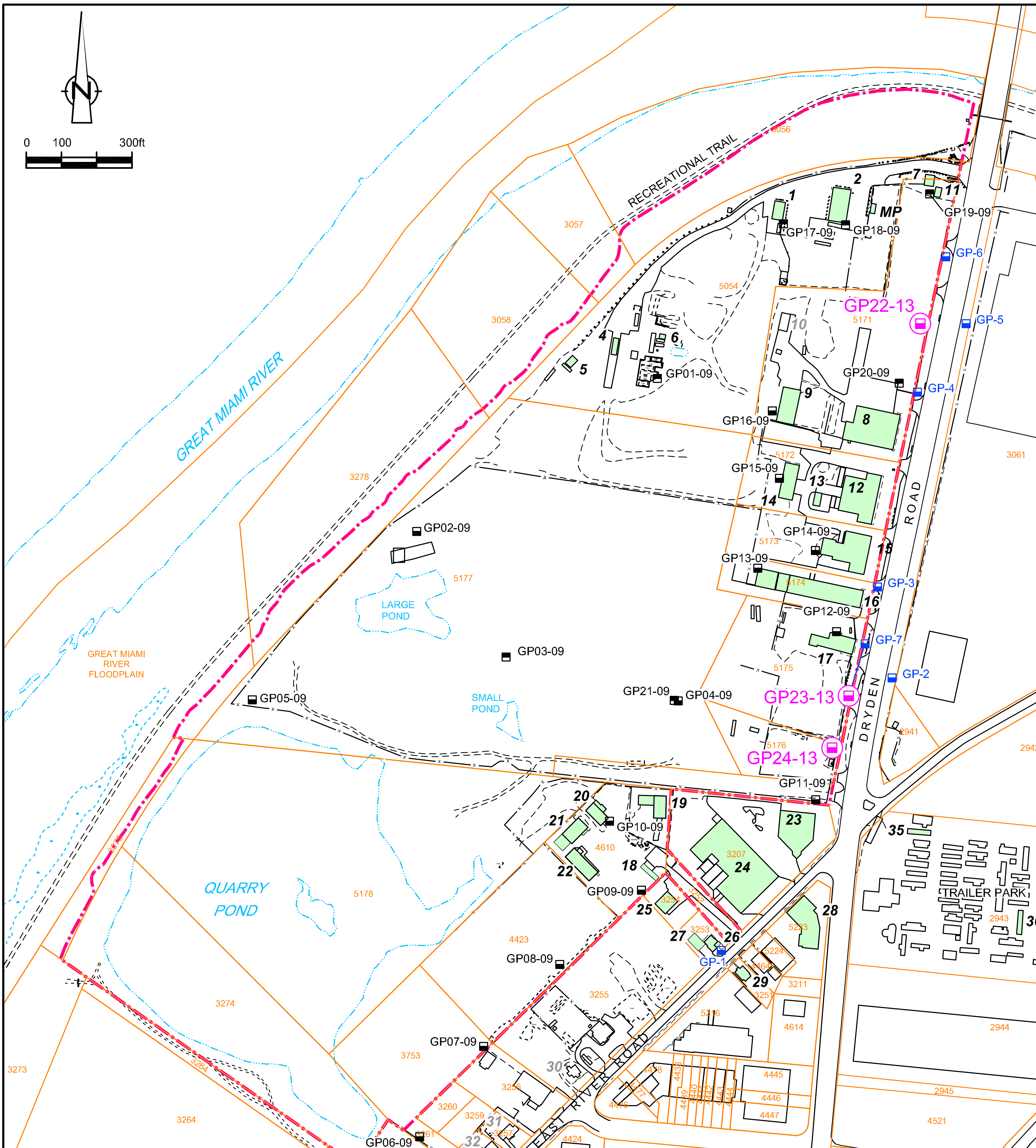
NOTE: 1901 DRYDEN ROAD PARCEL 5054 BUILDING 3 WAS DEMOLISHED IN FEBRUARY 2012.

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

figure 4.1

BUILDING MITIGATION SUMMARY
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

38443-62(018)GN-WA004 FEB 28/2013



LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- 3263 PARCEL NUMBER
- GP01-09 SHALLOW LANDFILL GAS PROBE
- GP02-09 DEEP LANDFILL GAS PROBE
- GP-1 USEPA NESTED SOIL GAS PROBE LOCATION
- 1 USEPA REMOVAL PROGRAM BUILDING NUMBER
- VI INVESTIGATED BUILDINGS
- GP24-13 PROPOSED LANDFILL GAS PROBE LOCATION

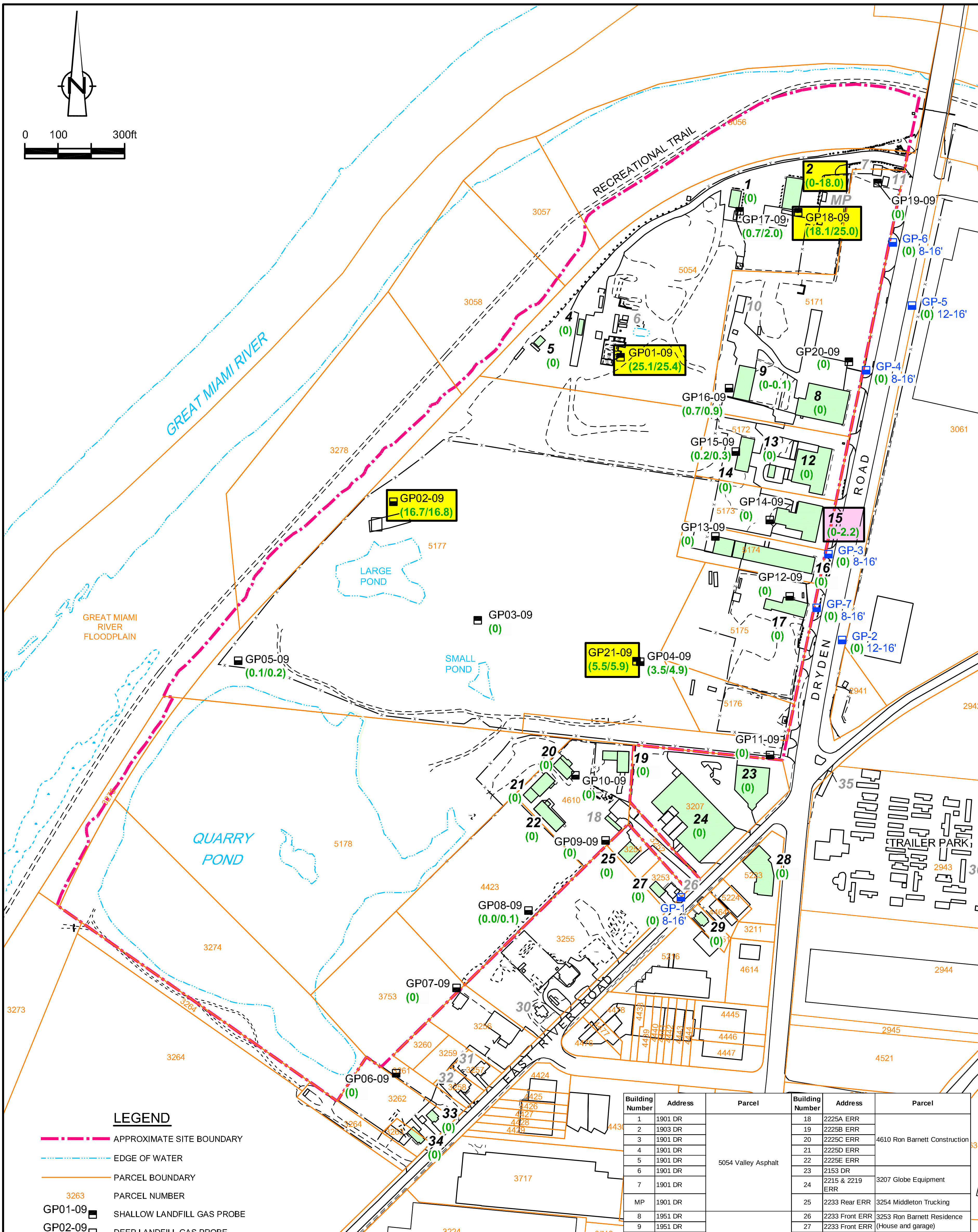
Building Number	Address	Parcel	Building Number	Address	Parcel
1	1901 DR	5054 Valley Asphalt	18	2225A ERR	4610 Ron Barnett Construction
2	1903 DR		19	2225B ERR	
3	1901 DR		20	2225C ERR	
4	1901 DR		21	2225D ERR	
5	1901 DR		22	2225E ERR	
6	1901 DR		23	2153 DR	3207 Globe Equipment
7	1901 DR		24	2215 & 2219 ERR	
MP	1901 DR		25	2233 Rear ERR	3254 Middleton Trucking
8	1951 DR	5171 B&G Trucking	26	2233 Front ERR	3253 Ron Barnett Residence (House and garage)
9	1951 DR		27	2233 Front ERR	
10	1951 DR		28	2201 DR	5223 Vinny's Restaurant
11	1915 DR		29	2232 ERR	3251 Quinn Ogletree
12	2015 / 2019 DR	5172 Overstreet Painting / S&J Precision	30	2317 ERR	3255 Century Propane
13	2019 DR		31	2347 ERR	3257 Dorothy Moore
14	2003 DR	5172 Bullseye Amusemets	32	2359 ERR	3258 Dorothy Moore
15	2031 DR	5173 SIM Trainer	33	2373 ERR	3262 Jim Worley
16	2045 DR	5174 Command Roofing	34	2391 ERR	3263 Jim Worley
17	2075 DR	5175 Former Alliance Equipment & Supply	35	2228 DR	2943 Village Park Community
			36	2228 DR	2943 Village Park Community

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

figure 5.1

PROPOSED SOIL GAS PROBE LOCATIONS
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

38443-62(018)GN-WA003 JAN 25/2013



LEGEND

APPROXIMATE SITE BOUNDARY

EDGE OF WATER

PARCEL BOUNDARY

3263 PARCEL NUMBER

GP01-09 SHALLOW LANDFILL GAS PROBE

GP02-09 DEEP LANDFILL GAS PROBE

GP-1 USEPA NESTED SOIL GAS PROBE LOCATION

1 USEPA REMOVAL PROGRAM BUILDING NUMBER

INVESTIGATED BUILDINGS WITH SUB-SLAB PROBES

(5.5/5.9) FILTERED/UNFILTERED METHANE VALUE

(0-18.0) RANGE OF METHANE VALUES MEASURED IN BUILDING SUB-SLAB PROBES

METHANE VALUE IS GREATER THAN 100% LEL (5%)

SUB-SLAB METHANE VALUE IS GREATER THAN 10% LEL (0.5%)

NOTE: ALL METHANE VALUES ARE IN UNITS OF PERCENT (%).
BAROMETRIC PRESSURE RANGED FROM 28.3" TO 29.13" Hg.

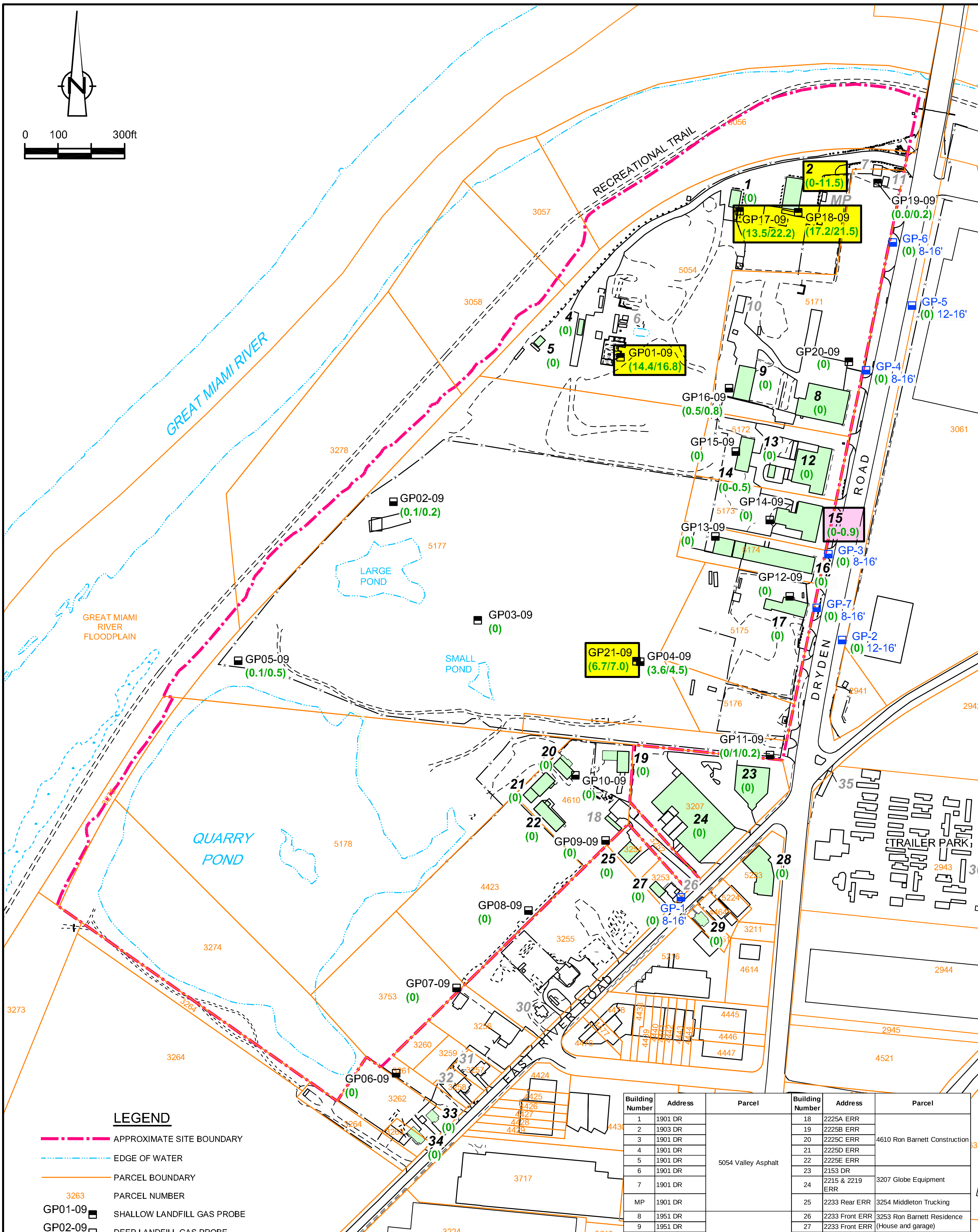
Building Number	Address	Parcel	Building Number	Address	Parcel
1	1901 DR	5054 Valley Asphalt	18	2225A ERR	4610 Ron Barnett Construction
2	1903 DR		19	2225B ERR	
3	1901 DR		20	2225C ERR	
4	1901 DR		21	2225D ERR	
5	1901 DR		22	2225E ERR	
6	1901 DR		23	2153 DR	3207 Globe Equipment
7	1901 DR		24	2215 & 2219 ERR	
MP	1901 DR		25	2233 Rear ERR	3254 Middleton Trucking
8	1951 DR	5171 B&G Trucking	26	2233 Front ERR	3253 Ron Barnett Residence (House and garage)
9	1951 DR		27	2233 Front ERR	
10	1951 DR		28	2201 DR	5223 Vinny's Restaurant
11	1915 DR		29	2232 ERR	3251 Quinn Ogletree
12	2015 / 2019 DR	5172 Overstreet Painting / S&J Precision	30	2317 ERR	3255 Century Propane
13	2019 DR		31	2347 ERR	3257 Dorothy Moore
14	2003 DR	5172 Bullseye Amusemets	32	2359 ERR	3258 Dorothy Moore
15	2031 DR	5173 SIM Trainer	33	2373 ERR	3262 Jim Worley
16	2045 DR	5174 Command Roofing	34	2391 ERR	3263 Jim Worley
17	2075 DR	5175 Former Alliance Equipment & Supply	35	2228 DR	2943 Village Park Community
			36	2228 DR	2943 Village Park Community

figure 5.2

METHANE SOIL VAPOR RESULTS
SYNOPTIC ROUND OCT. 31-NOV. 2, 2012
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA005 JAN 25/2013



LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- 3263 — PARCEL NUMBER
- GP01-09 — SHALLOW LANDFILL GAS PROBE
- GP02-09 — DEEP LANDFILL GAS PROBE
- GP-1 — USEPA NESTED SOIL GAS PROBE LOCATION
- 1 — USEPA REMOVAL PROGRAM BUILDING NUMBER
- INVESTIGATED BUILDINGS WITH SUB-SLAB PROBES
- (5.5/5.9) — FILTERED/UNFILTERED METHANE VALUE
- (0-18.0) — RANGE OF METHANE VALUES MEASURED IN BUILDING SUB-SLAB PROBES
- METHANE VALUE IS GREATER THAN 100% LEL (5%)
- SUB-SLAB METHANE VALUE IS GREATER THAN 10% LEL (0.5%)

NOTE: ALL METHANE VALUES ARE IN UNITS OF PERCENT (%).
BAROMETRIC PRESSURE RANGED FROM 30.2" TO 30.5" Hg.

Building Number	Address	Parcel	Building Number	Address	Parcel
1	1901 DR	5054 Valley Asphalt	18	2225A ERR	4610 Ron Barnett Construction
2	1903 DR		19	2225B ERR	
3	1901 DR		20	2225C ERR	
4	1901 DR		21	2225D ERR	
5	1901 DR		22	2225E ERR	
6	1901 DR		23	2153 DR	3207 Globe Equipment
7	1901 DR		24	2215 & 2219 ERR	
MP	1901 DR		25	2233 Rear ERR	3254 Middleton Trucking
8	1951 DR	5171 B&G Trucking	26	2233 Front ERR	3253 Ron Barnett Residence (House and garage)
9	1951 DR		27	2233 Front ERR	
10	1951 DR		28	2201 DR	5223 Vinny's Restaurant
11	1915 DR		29	2232 ERR	3251 Quinn Ogletree
12	2015 / 2019 DR	5172 Overstreet Painting / S&J Precision	30	2317 ERR	3255 Century Propane
13	2019 DR		31	2347 ERR	3257 Dorothy Moore
14	2003 DR	5172 Bullseye Amusemets	32	2359 ERR	3258 Dorothy Moore
15	2031 DR	5173 SIM Trainer	33	2373 ERR	3262 Jim Worley
16	2045 DR	5174 Command Roofing	34	2391 ERR	3263 Jim Worley
17	2075 DR	5175 Former Alliance Equipment & Supply	35	2228 DR	2943 Village Park Community
			36	2228 DR	2943 Village Park Community

figure 5.3

METHANE SOIL VAPOR RESULTS SYNOPTIC ROUND JAN. 7-10, 2013 SOUTH DAYTON DUMP AND LANDFILL SITE

Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA006 JAN 25/2013

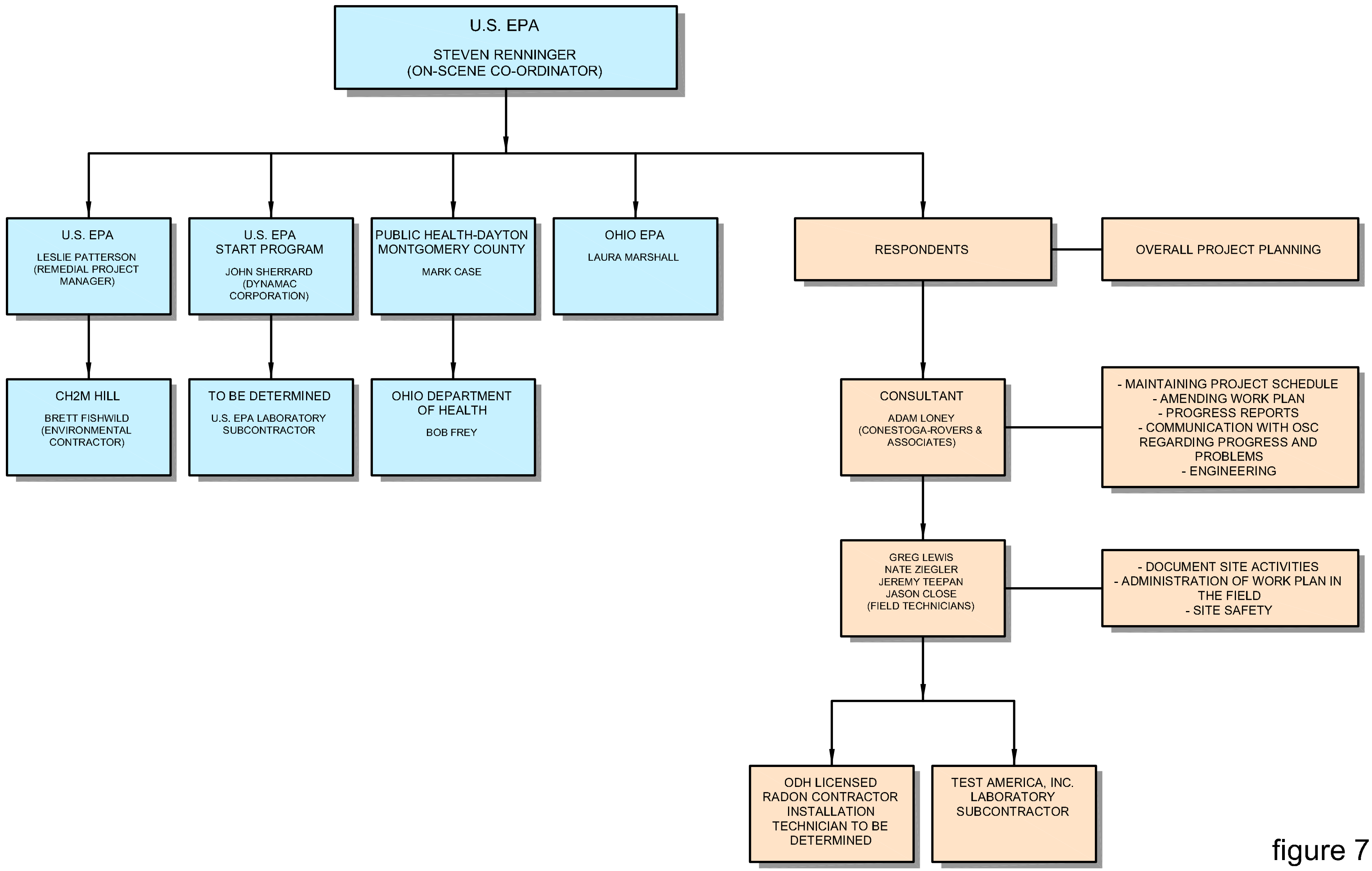


figure 7.1

ORGANIZATION CHART
PROJECT TEAM
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

38443-62(018)GN-WA002 MAR 22/2013

TABLE 3.1

OHIO DEPARTMENT OF HEALTH
SCREENING AND ACTION LEVELS
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

		RESIDENTIAL				*INDUSTRIAL / NON-RESIDENTIAL*			
		Indoor Air		***Sub-Slab***		***Indoor Air***		***Sub-Slab***	
	Units	***Screening Levels***	***Action Levels***	***Screening Levels***	***Action Levels***	***Screening Levels***	***Action Levels***	***Screening Levels***	***Action Levels***
Parameter									
Volatile Organic Compounds									
1,1-Dichloroethane	ppb	3.7	37	37	370	16	160	160	1,600
Benzene	ppb	0.4	4	4	40	2	20	20	200
Chloroform (Trichloromethane)	ppb	20	200	200	2,000	80	800	800	8,000
cis-1,2-Dichloroethene	ppb	8.8	88	88	880	37	370	370	3,700
Ethylbenzene	ppb	60	600	600	6,000	250	2,500	2,500	25,000
m&p-Xylenes	ppb	50	500	500	5,000	200	2,000	2,000	20,000
naphthalene	ppb	0.7	7	7	70	2.9	29	29	290
o-Xylene	ppb	50	500	500	5,000	200	2,000	2,000	20,000
Tetrachloroethene	ppb	6	60	60	600	25	250	250	2,500
Trichloroethene	ppb	0.4	4	4	40	2	20	20	200
Vinyl chloride	ppb	0.4	4	4	40	2	20	20	200
Gases									
Methane	%	0.05	0.05	0.5	0.5	0.05	0.05	0.5	0.5

TABLE 5.1

GP-2 FIELD MONITORING VALUES
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:	*Date:*	*Time*	*PID (ppm)*	*O_2 (%)*	*CO_2 (%)*	*CH_4[2] (%)*	*LEL (%)*	*Ambient Temperature (°F)*	*Summary of Recent Precipitation*
GP-2 (12') without filter	11/9/2012	13:54	--	4.1	10.6	0.0	0	30s - 40s	none
GP-2 (12') with filter		--	--	5.6	9.1	0.0	0		
GP-2 (16') without filter		--		2.0	11.6	0.0	0		
GP-2 (16') with filter		--		4.6	10.0	0.0	0		
GP-2 (12') without filter	11/15/2012	15:04	0.0	2.4	10.8	0.0	0	30s - 40s	none
GP-2 (12') with filter		--	0.0	2.3	10.3	0.0	0		
GP-2 (16') without filter		15:09	0.0	1.0	11.8	0.0	0		
GP-2 (16') with filter		--	0.0	0.9	11.4	0.0	0		
GP-2 (12') without filter	11/20/2012	14:35	0.0	2.2	11.3	0.0	0	50s	Trace
GP-2 (12') with filter		--	0.0	2.1	11.0	0.0	0		
GP-2 (16') without filter		14:40	0.0	0.9	12.1	0.0	0		
GP-2 (16') with filter		--	0.0	0.8	11.9	0.0	0		
GP-2 (12') without filter	11/29/2012	13:53	0.0	4.3	11.0	0.0	0	40s - 50s	none
GP-2 (12') with filter		--	0.0	4.7	11.2	0.0	0		
GP-2 (16') without filter		13:58	0.0	2.1	12.1	0.0	0		
GP-2 (16') with filter		13:58	0.0	2.0	11.9	0.0	0		
GP-2 (12') without filter	12/4/2012	16:03	0.0	6.6	9.6	0.0	0	50s	rainy (~0.3 inches)
GP-2 (12') with filter		--	0.0	6.7	8.5	0.0	0		
GP-2 (16') without filter		16:08	--	6.1	10.3	0.0	0		
GP-2 (16') with filter		--	--	6.4	9.2	0.0	0		
GP-2 (12') without filter	12/13/2012	13:44	0.0	6.6	9.7	0.0	0	40s	none
GP-2 (12') with filter		--	0.0	6.9	9.3	0.1 U	2 U		
GP-2 (16') without filter		13:39	0.0	3.7	11.8	0.0	0		
GP-2 (16') with filter		--	0.0	4.1	10.2	0.1 U	2 U		
GP-2 (12') without filter	12/18/2012	13:30	0.0	8.2	9.2	0.0	0	40s	none
GP-2 (12') with filter		--	0.0	8.1	8.9	0.0	1 [1]		
GP-2 (16') without filter		--	0.0	5.8	10.8	0.0	0		
GP-2 (16') with filter		--	0.0	5.7	10.4	0.0	1 [1]		
GP-2 (12') without filter	1/24/2013	15:34	0.0	19.9	2.6	0.0	0.0	20s	none
GP-2 (12') with filter		15:34	0.0	18.6	2.2	0.0	0.0		
GP-2 (16') without filter		15:40	0.0	15.3	7.7	0.0	0.0		
GP-2 (16') with filter		15:40	0.0	16.9	1.6	0.0	0.0		
GP-2 (12') without filter	1/31/2013	13:50	0.0	17.5	5.0	0.0	0.0	10s - 20s	none
GP-2 (12') with filter		13:50	0.0	17.1	4.2	0.0	0.0		
GP-2 (16') without filter		13:55	0.0	16.8	5.0	0.0	0.0		
GP-2 (16') with filter		13:55	0.0	17.2	3.4	0.0	0.0		
GP-2 (12') without filter	2/7/2013	15:14	0.0	15.4	5.4	0.0	0.0	20s - 50s	none
GP-2 (12') with filter		15:14	0.0	16.0	3.5	0.0	0.0		
GP-2 (16') without filter		15:17	0.0	15.0	6.4	0.0	0.0		
GP-2 (16') with filter		15:17	0.0	15.3	4.5	0.0	0.0		
GP-2 (12') without filter	2/12/2013	12:30	0.1	9.2	8.8	0.0	0.0	30s - 40s	none
GP-2 (12') with filter		12:30	0.1	9.7	8.4	0.0	0.0		
GP-2 (16') without filter		12:45	0.0	7.5	9.1	0.0	0.0		
GP-2 (16') with filter		12:45	0.0	6.9	8.2	0.0	0.0		
GP-2 (12') without filter	2/21/2013	13:45	0.0	8.8	8.5	0.0	0.0	20s	trace
GP-2 (12') with filter		13:45	0.0	9.1	8.0	0.0	0.0		
GP-2 (16') without filter		13:50	0.0	6.9	7.0	0.0	0.0		
GP-2 (16') with filter		13:50	0.0	7.0	6.7	0.0	0.0		

TABLE 5.1

GP-2 FIELD MONITORING VALUES
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:	*Date:*	*Time*	*PID (ppm)*	*O_2 (%)*	*CO_2 (%)*	*CH_4[2] (%)*	*LEL (%)*	*Ambient Temperature (°F)*	*Summary of Recent Precipitation*
GP-2 (12') without filter	2/28/2013	12:45	0.0	15.8	4.9	0.0	0.0	30s - 40s	~1 inch
GP-2 (12') with filter		12:45	0.0	15.8	5.1	0.0	0.0		
GP-2 (16') without filter		12:49	0.0	13.6	6.2	0.0	0.0		
GP-2 (16') with filter		12:49	0.0	13.5	6.2	0.0	0.0		
GP-2	3/7/2013	Inaccessible due to snow cover from road plow activity						30s	None
GP-2 (12') without filter	3/14/2013	13:45	0.0	16.2	4.3	0.0	0.0	20s - 40s	None
GP-2 (12') with filter		13:45	0.0	16.1	4.4	0.0	0.0		
GP-2 (16') without filter		13:53	0.0	13.9	6.1	0.0	0.0		
GP-2 (16') with filter		13:53	0.0	13.9	6.2	0.0	0.0		
GP-2 (12') without filter	3/21/2013	12:20	0.0	15.9	3.8	0.0	0.0	20s - 30s	Trace
GP-2 (12') with filter		12:20	0.0	15.9	3.9	0.0	0.0		
GP-2 (16') without filter		12:26	0.0	14.2	5.7	0.0	0.0		
GP-2 (16') with filter		12:26	0.0	14.1	5.9	0.0	0.0		
GP-2 (12') without filter	3/28/2013	12:10	0.0	14.6	6.1	0.0	0.0	30s - 40s	None
GP-2 (12') with filter		12:10	0.0	14.4	6.3	0.0	0.0		
GP-2 (16') without filter		12:15	0.0	12.9	7.4	0.0	0.0		
GP-2 (16') with filter		12:15	0.0	12.9	7.5	0.0	0.0		
GP-2 (12') without filter	4/4/2013	14:04	0.0	15.7	5.2	0.0	0.0	30s - 50s	None
GP-2 (12') with filter		14:04	0.0	15.6	5.1	0.0	0.0		
GP-2 (16') without filter		14:11	0.0	13.8	6.0	0.0	0.0		
GP-2 (16') with filter		14:11	0.0	13.8	6.1	0.0	0.0		
GP-2 (12') without filter	4/9/2013	13:56	0.0	13.9	5.2	0.0	0.0	50s - 80s	None
GP-2 (12') with filter		13:56	0.0	13.8	5.5	0.0	0.0		
GP-2 (16') without filter		14:03	0.0	12.2	5.9	0.0	0.0		
GP-2 (16') with filter		14:03	0.0	12.2	6.0	0.0	0.0		
GP-2 (12') without filter	4/18/2013	13:48	0.0	14.7	6.1	0.0	0.0	60s - 80s	None
GP-2 (12') with filter		13:48	0.0	14.7	6.0	0.0	0.0		
GP-2 (16') without filter		13:54	0.0	13.2	7.4	0.0	0.0		
GP-2 (16') with filter		13:54	0.0	13.3	7.2	0.0	0.0		
GP-2 (12') without filter	4/23/2013	14:45	0.0	16.3	3.8	0.0	0.0	50s - 60s	None
GP-2 (12') with filter		14:45	0.0	16.8	0.8	0.0	0.0		
GP-2 (16') without filter		14:48	0.0	15.9	4.2	0.0	0.0		
GP-2 (16') with filter		14:48	0.0	16.3	2.9	0.0	0.0		

Notes:

[1] - The explosive gas monitor baseline reading was 1 percent LEL. The meter did not zero for LEL readings and the corresponding methane readings were 0 percent; therefore, the readings of 1 percent are anomalous.
[2] - The Landtec GEM 2000 combustible gas monitor measures explosive gases as a percent of methane by volume. The presence of other hydrocarbon gases affects methane readings.
PID - Photoionization Detector
O_2 - Oxygen
CO_2 - Carbon Dioxide
CH_4 - Methane
LEL - Lower Explosive Limit
NM - Not measured
U - Qualified as non-detect due to issues with the filter
Value - Value is greater than screening levels for rapid response (USEPA, 2010).

APPENDIX A

ADMINISTRATIVE SETTLEMENT AGREEMENT
AND ORDER ON CONSENT (ASAOC)

RESPONDENTS
ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER BY CONSENT
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, MONTGOMERY COUNTY, OHIO

Hobart Corporation
Larry Silver
Langsam, Stevens, Silver & Hollaender
1616 Walnut Street, Suite 1700
Philadelphia, PA 19103-5319

NCR Corporation
Larry Silver
Langsam, Stevens, Silver & Hollaender
1616 Walnut Street, Suite 1700
Philadelphia, PA 19103-5319

Kelsey-Hayes Company
Larry Silver
Langsam, Stevens, Silver & Hollaender
1616 Walnut Street, Suite 1700
Philadelphia, PA 19103-5319

cc:

(for Respondent Kelsey-Hayes Company)
TRW Automotive
Scott Blackhurst
24175 Research Drive
Farmington Hills, MI 48335

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:

South Dayton Dump and Landfill Site
Moraine, Montgomery County, Ohio

Respondents:

Hobart Corporation
NCR Corporation
Kelsey-Hayes Company

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMOVAL ACTION

Docket No. V-W-13-C-010

Proceeding Under Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent (Settlement Agreement) is entered into voluntarily by the United States Environmental Protection Agency (U.S. EPA) and Respondents. This Settlement Agreement provides for the performance of removal actions by Respondents and the payment of certain response costs incurred by the United States at or in connection with the South Dayton Dump and Landfill Site (Site) located at 1975 Dryden Road in Moraine, Montgomery County, Ohio.

2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA), 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622. This authority has been delegated to the Administrator of the U.S. EPA by Executive Order No. 12580, January 23, 1987, 52 Federal Register 2923, and further delegated to the Regional Administrators by U.S. EPA Delegation Nos. 14-14-A, 14-14-C and 14-14-D, and to the Director, Superfund Division, Region 5, by Regional Delegation Nos. 14-14-A, 14-14-C and 14-14-D.

3. U.S. EPA has notified the State of Ohio (the "State") of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

4. U.S. EPA and Respondents recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondents in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondents do not admit, and retain the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of facts, conclusions of law, and determinations in Sections IV (Findings Of Fact) and V (Conclusions Of Law And Determinations) of this Settlement Agreement. Respondents agree to comply with and be bound by the terms of this Settlement Agreement and further agree that they will not contest the basis or validity of this Settlement Agreement or its terms.

II. PARTIES BOUND

5. This Settlement Agreement applies to and is binding upon U.S. EPA and upon Respondents and their heirs, successors and assigns. Any change in ownership or corporate status of a Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter such Respondent's responsibilities under this Settlement Agreement.

6. Respondents are jointly and severally liable for carrying out all activities required by this Settlement Agreement. In the event of the insolvency or other failure of any one or more Respondents to implement the requirements of this Settlement Agreement, the remaining Respondents shall complete all such requirements.

7. Respondents shall ensure that their contractors, subcontractors, and representatives

comply with this Settlement Agreement. Respondents shall be responsible for any noncompliance by Respondents, their contractors, subcontractors, and representatives, with this Settlement Agreement.

III. DEFINITIONS

8. Unless otherwise expressly provided in this Settlement Agreement, terms used in this Settlement Agreement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601-9675.

"Day" shall mean a calendar day unless otherwise specified. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.

"Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XXX (Effective Date).

"Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Settlement Agreement, in overseeing implementation of the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement on or after the Effective Date. Future Response Costs shall also include, but not be limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Paragraph 24 (including, but not limited to, costs and attorneys fees and any monies paid to secure access, including, but not limited to, the amount of just compensation), and Paragraph 35 (emergency response). Future Response Costs shall also include all costs, including, but not limited to, direct and indirect costs, incurred prior to the Effective Date, but paid after that date. Future Response Costs shall also include all "Interim Response Costs," and all Interest on those Past Response Costs Respondents have agreed to pay under this Settlement Agreement that has accrued pursuant to 42 U.S.C. § 9607(a) during the period from June 5, 2012 to the Effective Date.

"Respondents" shall mean Hobart Corporation, NCR Corporation and Kelsey Hayes Company.

"Interest" shall mean interest at the rate specified for interest on investments of the U.S. EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

"Interim Response Costs" shall mean all costs, including direct and indirect costs, (a) incurred and paid by the United States in connection with the Site between September 30, 2012 and the Effective Date, or (b) incurred after June 5 and prior to the Effective Date, but paid after that date.

"National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

"Paragraph" shall mean a portion of this Settlement Agreement" identified by an Arabic numeral or an upper or lower case letter.

"Parties" shall mean EPA and Respondents.

"Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States paid at or in connection with the Site from June 5, 2012 through September 30, 2012, plus Interest on all such costs through such date.

"RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901, *et seq.* (also known as the Resource Conservation and Recovery Act).

"Respondents" shall mean the Hobart Corporation, NCR Corporation and Kelsey Hayes Company.

"Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral.

"Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto (listed in Section XXIX (Severability/Integration/Attachments)). In the event of conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.

"Site" shall mean the South Dayton Dump and Landfill Superfund Site, encompassing approximately 80 acres, located at 1975 Dryden Road in Moraine, Ohio and depicted generally on the map attached as Attachment A.

"State" shall mean the State of Ohio.

"United States" shall mean the United States of America and each department, agency, and instrumentality of the United States, including U.S. EPA.

"U.S. EPA" and "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

"Waste Material" shall mean 1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); 2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); 3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and 4) any "hazardous waste" under Ohio Revised Code , Section 3734.01 (J).

"Work" shall mean all activities Respondents are required to perform under this Settlement Agreement, except those required by Section XI (Record Retention).

IV. U.S. EPA'S FINDINGS OF FACT

9. Based on available information, including the Administrative Record in this matter, U.S. EPA hereby finds that:

a. The Site is located at 1901 through 2153 Dryden Road and 2225 East River Road in Moraine, Ohio. The Site is bounded to the north and west by the Miami Conservancy District floodway (part of which is included in the definition of the Site), the Great Miami River Recreational Trail and the Great Miami River beyond. The Site is bounded to the east by Dryden Road with light industrial facilities beyond, to the southeast by residential and commercial properties along East River Road with a residential trailer park beyond, and to the south by undeveloped land with industrial facilities beyond.

b. The Site is a former industrial landfill located at 1975 Dryden Road in Moraine, Ohio. It encompasses a total of 80 acres, significant portions of which contain landfilled waste. Approximately 40 acres of the landfill have been built over and/or are being used for other commercial/industrial purposes.

c. Approximately 25,060 people live within a 4-mile radius of the Site. Six single-family residences are located on the northwest side of East River Road and are adjacent to the southeast boundary of the Site. A seventh single family home is located on the southeast side of East River Road and is within 300 feet of the Site. A trailer park with several residences is also situated approximately 300 feet southeast of the Site at the southeast intersection of Dryden Road and East River Road.

d. From 1941 to the present, various members of the Boesch and Grillot families have owned a major portion of the property where dumping was conducted. Most of the properties that comprise the Site were acquired over time by Horace Boesch and Cyril Grillot.

e. The landfill operated from the early 1940s to 1996 and includes a partially filled sand and gravel pit. The landfill contains household waste, drums, metal turnings, fly ash, foundry sand, demolition material, wooden pallets, asphalt, paint, paint thinner, oils, brake fluids, asbestos, solvents, transformers and other industrial waste. As the excavated areas of the Site were filled, some of the property was sold and/or leased to businesses including Valley Asphalt and other businesses along Dryden Road and East River Road. The Miami Conservancy District owns the southern part of the site including part of the large quarry pond.

f. Disposal of waste materials began at the Site in the early 1940s. Materials dumped at the Site included drummed wastes. Known hazardous substances were disposed at the Site, including drums containing hazardous waste from nearby facilities. Some of the drums contained cleaning solvents (1,1,1-trichloroethane ["TCA"]; methyl ethyl ketone ["MEK"]; and xylene); cutting oils; paint; stoddard solvents; and machine-tool, water-based coolants. The Site had previously accepted materials including oils, paint residue, brake fluids, chemicals for cleaning metals, solvents, etc. Large quantities of foundry sand and fly ash were dumped at the Site. Asbestos was also dumped at the Site.

g. U.S. EPA conducted a screening site inspection of the Site in 1991. Ohio EPA conducted a site team evaluation prioritization of the landfill in 1996. In 2002, U.S. EPA conducted an aerial photographic analysis of the site.

h. In 2000, Valley Asphalt removed several drums and 2,217 tons of contaminated soils from their property (northern area of the Site) that were uncovered when a sewer line was being excavated. U.S. EPA proposed the site to the National Priorities List in 2004.

i. In 2006, several potentially responsible parties (PRPs) for the Site agreed to conduct further studies and evaluate cleanup options at the Site under a Remedial Investigation/ Feasability Study (RI/FS). The RI/FS is being conducted under an Administrative Settlement Agreement and Order on Consent with U.S. EPA. In 2008, the PRPs agreed to conduct a streamlined RI/FS at the site. The PRPs conducted several investigations at the site from 2008 through 2010.

j. The 2008-2010 investigations conducted by the PRPs included geophysical surveys, test pit and test trench sampling, vertical aquifer sampling, landfill gas sampling and groundwater monitoring well installation and sampling. From these investigations, it was found that the groundwater contains vinyl chloride, trichloroethylene (TCE), 1,2-dichloroethene, arsenic, lead and other chemicals. Landfill gas contains methane, TCE and other volatile organic compounds. Based on the investigations, the PRPs agreed to divide the site work into two parts. Operable unit one (OU1) would involve evaluating cleanup alternatives to address 55 acres of the landfill, and would include cleanup alternatives that would allow on-site business to remain safely operating at the site.

k. In June 2012, U.S. EPA, in consultation with Ohio EPA, determined that additional data must be collected on groundwater and potential hot spots before selecting a remedy for OU1. U.S. EPA anticipated oversight of additional OU1 RI/FS field work, with a proposed cleanup plan and final OU1 remedy selection by March 2015.

l. Operable unit two (OU2) will involve more detailed investigations of the landfill materials in remaining site areas, surface water and sediment in the on-site Quarry Pond and the Great Miami River, floodplain soils, and off-site groundwater. U.S. EPA expects the PRPs to submit a work plan for the OU2 work in 2014.

m. In a letter dated June 5, 2012, U.S. EPA RPM Karen Cibulskis requested U.S. EPA Emergency Response Branch assistance to determine if the Site met the criteria for a time-critical removal action. The letter requested removal assistance in evaluating U.S. EPA's options for addressing current and potential vapor intrusion risks at the Site, including whether removal authority could be appropriately used to implement mitigation measures to address all or some of the current and threatened risks posed by VOCs (primarily TCE) in sub-slab soil gas at 12 commercial/industrial buildings built over the landfill, and at an adjacent commercial/industrial building. PRP Vapor intrusion sampling in January and March 2012 has shown TCE sub-slab vapor levels as high as 5,600 parts per billion by volume [ppbv] and TCE indoor air vapor levels as high as 13 ppbv, a documented completed exposure pathway.

n. At the occupied building located at 2031 Dryden Road, methane was detected in a laboratory sub-slab sample at 0.97%, which exceeds the Ohio Department of Health (ODH) sub-slab methane screening level of 0.5%. Based on field data methane was not detected in the indoor air.

o. In Building 2 located at 1903 Dryden Road, which is used for storage, methane was detected in a laboratory sub-slab sample above 100% of the LEL (sample concentration 6.6% methane by volume), but was not detected in indoor air (based on field data). Building 2 is currently closed to access.

p. On July 6, 2012, the ODH provided health-based guidance to evaluate the results of Vapor Intrusion sub-slab and indoor air sampling for chemicals of concern at the Site. The Agency for Toxic Substances and Disease Registry (ATSDR) and the ODH identified residential and non-residential sub-slab and indoor air screening levels.

q. In a letter dated July 17, 2012, the Ohio EPA expressed concerns about the risk to human health from indoor air exposure to VOCs and the risk of explosive conditions from landfill gas. Ohio EPA views the Site as a threat to the on-Site and surrounding businesses and residences, and supports the Remedial Branch's request for assistance from the Removal Branch in evaluating options for addressing current and potential vapor intrusion risks at the Site.

r. Between July 12 and August 8, 2012, U.S. EPA conducted a Removal Site Investigation at the Site including residential and non-residential sub-slab sampling and the installation of soil gas vapor probes along the Site's eastern perimeter. U.S. EPA sampling has confirmed a completed exposure pathway with respect to Vapor Intrusion.

s. Vapor intrusion sampling results from 2012 by U.S. EPA and the PRPs have documented vapor intrusion is occurring at the Site. Five non-residential buildings have shown sub-slab TCE concentrations greater than the ODH sub-slab screening level (as high as 17,000 ppbv) and indoor air TCE concentrations greater than the ODH indoor air screening level of 2 ppbv (as high as 50 ppbv). One non-residential building has shown a crawl space PCE concentration at 38 ppbv which exceeds the ODH indoor air PCE screening level of 25 ppbv. In addition, one non-residential building has shown a sub-slab methane level of 6.6%. Methane is explosive between 5% and 15%.

t. U.S. EPA has documented methane levels using field screening and soil gas samples in GP-2 (12-foot and 16-foot depths) ranging from 2.5% to 24.1%. These results are greater than the ODH sub-slab methane screening level of 0.5% and Ohio EPA's perimeter regulatory level of 5% (lower explosive limit). GP-2 is located off-Site, on the eastside of Dryden Road and adjacent to a Dayton Power & Light building. The source of the methane levels in GP-2 has not been determined.

V. U.S. EPA'S CONCLUSIONS OF LAW AND DETERMINATIONS

10. Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, U.S. EPA has determined that:

a. The South Dayton Dump and Landfill Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

b. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substance(s)" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

c. Each Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

d. Each Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is jointly and severally liable for performance of response actions and for response costs incurred and to be incurred at the Site.

i. Respondents NCR Corporation, Hobart Corporation and Kelsey-Hayes Company arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment of hazardous substances at the facility, within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3)

e. The conditions described in the Findings of Fact above constitute an actual or threatened "release" of a hazardous substance from the facility into the "environment" as defined by Sections 101(22) and 101(8) of CERCLA, 42 U.S.C.§§ 9601(22) and 9601(8).

f. The conditions present at the Site constitute a threat to public health, welfare, or the environment based upon the factors set forth in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan, as amended (NCP), 40 C.F.R. § 300.415(b)(2). These factors include, but are not limited to, the following:

i. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants; this factor is present at the Site due to the existence of vapor intrusion which occurs when vapors produced by a chemical spill or groundwater contamination plume migrate through soil into the foundations of structures and into the indoor air. When chemicals are spilled on the ground, they will seep into the soil and make their way into the groundwater. VOCs, including TCE, produce vapors that travel through soil. These vapors can enter a home or building through cracks in the foundation or into a basement with a dirt floor or concrete slab.

To date, U.S. EPA and the PRPs have conducted vapor intrusion sampling and have documented the following VOC and methane exceedances:

- One non-residential building (2003 Dryden Road – Building 2) showed a sub-slab 1,1-DCA level greater than the ODH sub-slab 1,1-DCA screening level of 160 ppbv, with a high 1,1-DCA concentration of 4,100 ppbv.
- Three non-residential buildings (1903 Dryden Road – Building 2, 2003 Dryden Road – Building 2 and 2031 Dryden Road – Building 1) showed sub-slab benzene levels greater than the ODH sub-slab benzene screening level of 20 ppbv, with a high benzene concentration of 540 ppbv in the sub-slab vapor sample collected from beneath 2031 Dryden Road-Building 1. An indoor air sample collected at 2003 Dryden Road – Building 2 showed a benzene concentration of 2.4 ppbv, which exceeds the ODH indoor air benzene screening level of 2 ppbv. This documents a completed exposure pathway for vapor intrusion.
- Two non-residential buildings (2015 Dryden Road, Building 1 and 2031 Dryden Road, Building 1) showed sub-slab cis-1,2-DCE levels greater than the ODH sub-slab cis-1,2-DCE screening level of 370 ppbv, with a high cis-1,2-DCE concentration of 27,000 ppbv at 2031 Dryden Road, Building 1.
- Three non-residential buildings (1903 Dryden Road, Building 2; 2003 Dryden Road, Building 2; and 2031 Dryden Road, Building 1) showed sub-slab vinyl chloride levels greater than the ODH sub-slab vinyl chloride screening level of 20 ppbv, with a high vinyl chloride concentration of 5,500 ppbv.
- Thirteen non-residential buildings showed sub-slab TCE levels greater than the ODH sub-slab TCE screening level of 20 ppbv, with a high TCE concentration of 17,000 ppbv. Five of the thirteen non-residential buildings show indoor air TCE levels greater than the ODH indoor air TCE screening level of 2 ppbv, with a high TCE concentration of 50 ppbv, documenting a completed exposure pathway. This indoor air TCE result is 2.5 times greater than the removal action screening level provided by ODH. In addition, one non-residential on-Site structure showed a crawl space PCE level greater than the ODH indoor air PCE screening level of 25 ppbv, with a PCE concentration of 38 ppbv.
- One non-residential building (2031 Dryden Road – Building 1) showed a sub-slab m,p-xylene sub-slab concentration of 2,100 ppbv, which exceeds the m,p-xylene screening level of 2,000 ppbv; and an o-xylene sub-slab concentration of 2,000 ppbv, which equals the o-xylene screening level of 2,000 ppbv.

- 2031 Dryden Road, Building 1 showed a sub-slab methane level of 2.2% and 1903 Dryden Road, Building 2 showed a sub-slab methane level of 6.6%, which exceeds the ODH methane sub-slab screening level of 0.5%. Methane is explosive between 5% and 15%.

- U.S. EPA observed detectable methane concentrations in one soil gas probe, GP-2, using a GEM-2000 methane meter. GP-2 contains nested soil gas sampling depths of 12-feet bgs and at 16-feet bgs. The GP-2 soil gas probe at the 12-foot depth showed methane levels ranging from 14.7% to 17.6%. The GP-2 soil gas probe at the 16-foot depth showed methane levels ranging from 22.2% to 24.1%. The methane levels in GP-2 at depths of 12 and 16 feet bgs exceed Ohio EPA's perimeter regulatory level of 5% (lower explosive limit). GP-2 is located off-Site and on the eastern side of Dryden Road.

There is actual vapor intrusion exposure occurring and there is a potential for additional vapor intrusion to occur at this Site.

TCE is a hazardous substance within the meaning of Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) because it is listed at 40 CFR Section 302.4. Historical sampling, and PRP and U.S. EPA sub-slab and indoor air sampling results indicate that TCE vapors are migrating into non-residential buildings at chronic levels that ODH considers harmful to human health.

TCE is a man-made chemical that is widely used as a cleaner to remove grease from metal parts. TCE is a nonflammable, colorless liquid with a sweet odor. Exposure to TCE at very high concentrations (particularly in closed, poorly ventilated areas) may cause headaches, lung irritation, dizziness, poor coordination (clumsiness), and difficulty speaking. According to the ODH, the evidence that TCE is a human carcinogen has been under review by health organizations since 2001. The U.S. Department of Health and Human Services considers TCE to be "reasonably anticipated to be a human carcinogen" based on limited evidence of carcinogenicity from studies of humans and sufficient evidence of carcinogenicity from studies of laboratory animals. A report recently released by the National Academies of Science National Research Council (2006) has stated that "evidence on cancer and other health risks from TCE exposure has strengthened since 2001", pointing to studies of human populations that support "the conclusion that TCE is a potential cause of kidney cancer." Other ecological studies of communities exposed to TCE in drinking water supplies in Massachusetts, New Jersey, and North Carolina have suggested an association between these exposures and elevated levels of leukemia in the exposed population.

ii. Threat of fire or explosion; this factor is present at the Site due to the existence of explosive conditions from landfill gas.

The PRPs conducted vapor intrusion sampling in January and March 2012. Sub-slab sampling showed methane percentages greater than the ODH sub-slab screening level of 0.5% at two non-residential properties:

In July 2012, U.S. EPA documented methane at 2.5% at the 16-foot depth of soil gas probe GP-2 and in August 2012, U.S. EPA documented methane at 2.2% in a sub-slab sample collected from 2031 Dryden Road. These results exceed the ODH sub-slab screening level of 0.5%.

U.S. EPA has documented methane levels in GP-2 (12-foot and 16-foot depths) ranging from 2.5% to 24.1% at off-site locations (City of Moraine property). These results are greater than the ODH sub-slab methane screening level of 0.5% and exceed Ohio EPA's perimeter regulatory level of 5% (lower explosive limit). GP-2 is located off-Site, on the eastside of Dryden Road and adjacent to a DP&L building. Methane is flammable between 5% and 15%. Methane's LEL is 5% and the UEL is 15% methane per volume of air.

At the Site, methane was detected in four laboratory sub-slab soil gas samples above 10% of the LEL (greater than 0.5% methane) at non-residential buildings at the Site. At another building, methane was detected (at 6.6%) in a laboratory sub-slab soil gas sample above 100% of the LEL (greater than 5%). This building has the potential for an explosion/fire hazard if a spark or ignition source is present. This building is now closed to access.

Because methane is extremely flammable in the presence of oxygen and an ignition source (open flame, pilot light), the main public health threat posed from methane is the physical explosion hazard posed by methane levels between 5% and 15% by volume in the air.

Ohio Revised Code (ORC) 3734.041 provides that explosive gases shall be considered to endanger human health or safety or the environment if concentrations of methane generated by the landfill in landfill structures, excluding gas control or recovery system components, exceed 25% of the LEL (or 1.25% methane in the indoor air) or if concentrations of methane generated by the landfill at the landfill boundary exceed the LEL (or 5% methane). U.S. EPA documented methane levels in GP-2 ranging from 14.7% to 24.1%. GP-2 is located about 75-feet east of the eastern boundary of the Site. These methane levels exceed the levels specified at ORC 3734.041.

iii. The unavailability of other appropriate federal or state response mechanisms to respond to the release; this factor supports the actions required by this Settlement Agreement at the Site because Ohio EPA does not have the resources to respond to this Site.

In a letter dated July 17, 2012, Ohio EPA expressed concerns about the risk to human health from indoor air exposure to VOCs and the risk of explosive conditions from landfill gas, Ohio EPA views the Site as a threat to the on-site and surrounding businesses and residences, and supports the Remedial Branch's request for assistance from the Removal Branch in evaluating options for addressing current and potential vapor intrusion risks at the South Dayton Dump and Landfill Site.

g. The removal action required by this Settlement Agreement is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this

Settlement Agreement, will be consistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.

VI. SETTLEMENT AGREEMENT AND ORDER

11. Based upon the foregoing Findings of Fact, Conclusions of Law, Determinations, and the Administrative Record for this Site, it is hereby Ordered and Agreed that Respondents shall comply with all provisions of this Settlement Agreement, including, but not limited to, all attachments to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

VII. DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND ON-SCENE COORDINATOR

12. Respondents shall retain one or more contractors to perform the Work and shall notify U.S. EPA of the name(s) and qualifications of such contractor(s) within 5 business days of the Effective Date. Respondents shall also notify U.S. EPA of the name(s) and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the Work at least 5 business days prior to commencement of such Work. U.S. EPA retains the right to disapprove of any or all of the contractors and/or subcontractors retained by Respondents. If U.S. EPA disapproves of a selected contractor, Respondents shall retain a different contractor and shall notify U.S. EPA of that contractor's name and qualifications within 3 business days of U.S. EPA's disapproval. The contractor must demonstrate compliance with ANSI/ASQC E-4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor's Quality Management Plan (QMP). The QMP should be prepared consistent with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002), or equivalent documentation as required by U.S. EPA. Any decision not to require submission of the contractor's QMP should be documented in a memorandum from the On-Scene Coordinator (OSC) and Regional quality assurance personnel to the Site file.

13. Within 5 business days after the Effective Date, Respondents shall designate a Project Coordinator who shall be responsible for administration of all actions by Respondents required by this Settlement Agreement and shall submit to U.S. EPA the designated Project Coordinator's name, address, telephone number, and qualifications. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site work. U.S. EPA retains the right to disapprove of the designated Project Coordinator. If U.S. EPA disapproves of the designated Project Coordinator, Respondents shall retain a different Project Coordinator and shall notify U.S. EPA of that person's name, address, telephone number, and qualifications within 10 business days following U.S. EPA's disapproval. Receipt by Respondents' Project Coordinator of any notice or communication from U.S. EPA relating to this Settlement Agreement shall constitute receipt by all Respondents.

14. U.S. EPA has designated Steve Renninger of the Emergency Response Branch #1,

Region 5, as its OSC and Leslie Patterson as its Alternate OSC. Except as otherwise provided in this Settlement Agreement, Respondents shall direct all submissions required by this Settlement Agreement to OSC Steve Renninger at: U.S. EPA/ERT, 26 West Martin Luther King Drive, Cincinnati, Ohio 45268; and OSC Leslie Patterson at: U.S. EPA, SR-6J, 77 West Jackson Boulevard, Chicago, Illinois 60604. All Respondents are encouraged to make their submissions to U.S. EPA electronically or on recycled paper (which includes significant post consumer waste paper content where possible) and using two-sided copies.

15. U.S. EPA and Respondents shall have the right, subject to Paragraph 13, to change their respective designated OSC or Project Coordinator. U.S. EPA shall notify the Respondents, and Respondents shall notify U.S. EPA, as early as possible before such a change is made, but in no case less than 24 hours before such a change. The initial notification may be made orally but shall be promptly followed by a written notice.

VIII. WORK TO BE PERFORMED

16. Respondents shall perform, at a minimum, the following removal activities:

a. Develop and implement a Site Health and Safety Plan;

b. Conduct subsurface gas sampling (including VOCs and methane), conduct extent of contamination sampling utilizing groundwater, soil gas, sub-slab, and indoor air sampling techniques, and complete an investigation to determine whether concentrations of methane at the property boundary are greater than the lower explosive limit (5% methane);

c. If the ODH Sub-Slab or Indoor Air Screening Level for a contaminant of concern (TCE, PCE, methane, etc) is exceeded for a residential structure, design and install a vapor abatement mitigation system in the structure(s) impacted by subsurface gas migration. The abatement system will include installation of a sub-slab depressurization system (SSDS) or crawl space depressurization system, sealing cracks in walls and floors of the basement, and sealing drains that could be a pathway. The vapor abatement mitigation system will be designed to control levels of methane and VOCs to below ODH sub-slab and indoor air screening levels;

d. If the ODH Sub-Slab or Indoor Air Screening Level for a contaminant of concern (TCE, PCE, methane, etc) is exceeded for a commercial structure, design and install a vapor abatement mitigation system in the structure(s) impacted by subsurface gas migration. The abatement system will include installation of a SSDS, sealing cracks in walls and floors, and sealing drains that could be a pathway. The vapor abatement mitigation system will be designed to control levels of methane and VOCs to below ODH sub-slab and indoor air screening levels;

e. If, based upon the methane extent investigation conducted under paragraph 16.b of this Settlement Agreement, levels of methane at the property boundary are greater than the lower explosive limit (5% methane) and the methane is originating on the Site, design and install a landfill gas extraction system designed to prevent landfill gas migration off-site. The landfill gas system will be designed to control levels of methane at the property boundary to less than the lower explosive limit (5% methane);

f. Develop and implement a performance sample plan to confirm that ODH screening levels are achieved for contaminants of concern following installation of on-site or off-site vapor abatement mitigation systems;

g. If necessary, develop and implement (1) a landfill gas extraction system performance sample plan including the installation of subsurface probes to confirm that methane action levels are achieved and (2) a landfill gas extraction system effluent sample plan.

17. Work Plan and Implementation.

a. Within 15 business days after the Effective Date, Respondents shall submit to U.S. EPA for approval a draft Work Plan for performing the removal action described in Paragraph 16 above. The draft Work Plan shall provide a description of, and an expeditious schedule for, the actions required by this Settlement Agreement. The Work Plan shall include a Quality Assurance Project Plan (QAPP). The following documents shall be used for the development of QAPPs for Region 5 Superfund sites:

- The Uniform Federal Policy for Quality Assurance Projects Plans (UFP-QAPP), OSWER Directive 9272.0-17;
- EPA Requirements for Quality Assurance Project Plans QA/R-5 (EPA/240/B-01/003), March 2001, Reissued May 2006.

The following guidance may be used in conjunction with the requirements above:

- EPA Guidance for the Quality Assurance Project Plans QA/G-5 (EPA/240/R-02/009), December 2002.
- Guidance on Choosing a Sampling Design for Environmental Data Collection EPA QA/G-5S, December 2002.

b. U.S. EPA may approve, disapprove, require revisions to, or modify the draft Work Plan in whole or in part. If U.S. EPA requires revisions, Respondents shall submit a revised draft Work Plan within 10 business days of receipt of U.S. EPA's notification of the required revisions. Respondents shall implement the Work Plan as approved in writing by U.S. EPA in accordance with the schedule approved by U.S. EPA. Once approved, or approved with modifications, the Work Plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this Settlement Agreement.

c. Respondents shall not commence any Work except in conformance with the terms of this Settlement Agreement. Respondents shall not commence implementation of the Work Plan developed hereunder until receiving written U.S. EPA approval pursuant to Paragraph 17(b).

18. Health and Safety Plan. Within 15 business days after the Effective Date, Respondents shall submit for U.S. EPA review and comment a plan that ensures the protection of the public health and safety during performance of on-site work under this Settlement Agreement. This plan shall be prepared consistent with U.S. EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration (OSHA) regulations found at 29 C.F.R. Part 1910. If U.S. EPA determines that it is appropriate, the plan shall also include contingency planning. Respondents shall incorporate all changes to the plan recommended by U.S. EPA and shall implement the plan during the pendency of the removal action.

19. Quality Assurance and Sampling.

a. All sampling and analyses performed pursuant to this Settlement Agreement shall conform to U.S. EPA direction, approval, and guidance regarding sampling, quality assurance/quality control (QA/QC), data validation, and chain of custody procedures. Respondents shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate U.S. EPA guidance. Respondents shall follow, as appropriate, "Quality Assurance/Quality Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures" (OSWER Directive No. 9360.4-01, April 1, 1990), as guidance for QA/QC and sampling. Respondents shall only use laboratories that have a documented Quality System that complies with ANSI/ASQC E-4 1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), and EPA Requirements for Quality Management Plans (QA/R-2) (EPA/240/B-01/002, March 2001, Reissued May 2006)," or equivalent documentation as determined by EPA. U.S. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program (NELAP) as meeting the Quality System requirements.

b. Upon request by U.S. EPA, Respondents shall have such a laboratory analyze samples submitted by U.S. EPA for QA monitoring. Respondents shall provide to U.S. EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

c. Upon request by U.S. EPA, Respondents shall allow U.S. EPA or its authorized representatives to take split and/or duplicate samples. Respondents shall notify U.S. EPA not less than 3 business days in advance of any sample collection activity, unless shorter notice is agreed to by U.S. EPA. U.S. EPA shall have the right to take any additional samples that U.S. EPA deems necessary. Upon request, U.S. EPA shall allow Respondents to take split or duplicate samples of any samples it takes as part of its oversight of Respondents' implementation of the Work.

20. Post-Removal Site Control. In accordance with the Work Plan schedule, or as otherwise directed by U.S. EPA, Respondents shall submit a proposal for post-removal site

control consistent with Section 300.415(*l*) of the NCP and OSWER Directive No. 9360.2-02. Upon U.S. EPA approval, Respondents shall implement such controls and shall provide U.S. EPA with documentation of all post-removal site control arrangements.

21. Reporting.

a. Respondents shall submit a written progress report to U.S. EPA concerning actions undertaken pursuant to this Settlement Agreement on the 10th day of each month after the date of receipt of U.S. EPA's approval of the Work Plan until termination of this Settlement Agreement, unless otherwise directed in writing by the OSC. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

b. Respondents shall submit in electronic format 3 copies of all plans, reports or other submissions required by this Settlement Agreement, or any approved work plan. Upon request by U.S. EPA, Respondents shall also submit such documents in hard copy.

c. Respondents who own or control property at the Site shall, at least 30 days prior to the conveyance of any interest in real property at the Site, give written notice to the transferee that the property is subject to this Settlement Agreement and written notice to U.S. EPA and the State of the proposed conveyance, including the name and address of the transferee. Respondents who own or control property at the Site also agree to require that their successors comply with the immediately preceding sentence and Sections IX (Site Access) and X (Access to Information).

22. Final Report. Within 60 days after completion of all Work required by Section VIII (Work To Be Performed) of this Settlement Agreement, Respondents shall submit for U.S. EPA review and approval a final report summarizing the actions taken to comply with this Settlement Agreement. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports" and with the guidance set forth in "Superfund Removal Procedures: Removal Response Reporting POLREPS and OSC Reports" (OSWER Directive No. 9360.3-03, June 1, 1994). The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the Settlement Agreement, a listing of quantities and types of materials removed off-site or handled on-site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action (*e.g.*, manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

> "Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the

preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

23. Off-Site Shipments.

a. Respondents shall, prior to any off-site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to the On-Scene Coordinator. However, this notification requirement shall not apply to any off-site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

i. Respondents shall include in the written notification the following information: 1) the name and location of the facility to which the Waste Material is to be shipped; 2) the type and quantity of the Waste Material to be shipped; 3) the expected schedule for the shipment of the Waste Material; and 4) the method of transportation. Respondents shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

ii. The identity of the receiving facility and state will be determined by Respondents following the award of the contract for the removal action. Respondents shall provide the information required by Paragraph 23(a) and 23(b) as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

b. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-site location, Respondents shall obtain U.S. EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondents shall only send hazardous substances, pollutants, or contaminants from the Site to an off-site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

IX. SITE ACCESS

24. If the Site, or any other property where access is needed to implement this Settlement Agreement, is owned or controlled by any of the Respondents, such Respondents shall, commencing on the Effective Date, provide U.S. EPA, the State, and their representatives, including contractors, with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to this Settlement Agreement.

25. Where any action under this Settlement Agreement is to be performed in areas

owned by or in possession of someone other than Respondents, Respondents shall use their best efforts to obtain all necessary access agreements within 20 business days after the Effective Date, or as otherwise specified in writing by the OSC. Respondents shall immediately notify U.S. EPA if after using their best efforts they are unable to obtain such agreements. For purposes of this Paragraph, "best efforts" includes the payment of reasonable sums of money in consideration of access unless an access order has already been issued by U.S. EPA with regard to the areas in question. Respondents shall describe in writing their efforts to obtain access. U.S. EPA may then assist Respondents in gaining access, to the extent necessary to effectuate the response actions described in this Settlement Agreement, using such means as U.S. EPA deems appropriate. Respondents shall reimburse U.S. EPA for all costs and attorney's fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XV (Payment of Response Costs).

26. Notwithstanding any provision of this Settlement Agreement, U.S. EPA and the State retain all of their access authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

X. ACCESS TO INFORMATION

27. Respondents shall provide to U.S. EPA, upon request, copies of all documents and information within their possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondents shall also make available to U.S. EPA, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

28. Respondents may assert business confidentiality claims covering part or all of the documents or information submitted to U.S. EPA under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by U.S. EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to U.S. EPA, or if U.S. EPA has notified Respondents that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondents.

29. Respondents may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege or protection from disclosure recognized by federal law. If the Respondents assert such a privilege or protection from disclosure in lieu of providing documents, they shall provide U.S. EPA with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the

name and title of each addressee and recipient; 5) a description of the contents of the document, record, or information; and 6) the privilege or protection from disclosure asserted by Respondents. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged or confidential.

30. No claim of privilege or confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.

XI. RECORD RETENTION

31. Until 6 years after Respondents' receipt of U.S. EPA's notification pursuant to Section XXVI (Notice of Completion of Work), each Respondent shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Until 6 years after Respondents' receipt of U.S. EPA's notification pursuant to Section XXVI (Notice of Completion of Work), Respondents shall also instruct their contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work.

32. At the conclusion of this document retention period, Respondents shall notify U.S. EPA at least 60 days prior to the destruction of any such records or documents, and, upon request by U.S. EPA, Respondents shall deliver any such records or documents to U.S. EPA. Respondents may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege or protection from disclosure recognized by federal law. If Respondents assert such a privilege, or protection from disclosure they shall provide U.S. EPA with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or information; and 6) the privilege or protection from disclosure asserted by Respondents. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged or confidential.

33. Each Respondent hereby certifies individually that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Site since the earlier of notification of potential liability by U.S. EPA or the State or the filing of suit against it regarding the Site and that it has fully complied with any and all U.S. EPA requests for information pursuant to Sections 104(e) and

122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

XII. COMPLIANCE WITH OTHER LAWS

34. Respondents shall perform all actions required pursuant to this Settlement Agreement in accordance with all applicable local, state, and federal laws and regulations except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 6921(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j).

In accordance with 40 C.F.R. § 300.415(j), all on-Site actions required pursuant to this Settlement Agreement shall, to the extent practicable, as determined by U.S. EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements (ARARs) under federal environmental or state environmental or facility siting laws. Respondents shall identify ARARs in the Work Plan subject to U.S. EPA approval.

XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

35. In the event of any action or occurrence during performance of the Work that causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action. Respondents shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondents shall also immediately notify the OSC or, in the event of his/her unavailability, the Regional Duty Officer, Region 5 at (312) 353-2318, of the incident or Site conditions. In the event that Respondents fail to take appropriate response action as required by this Paragraph, and U.S. EPA takes such action instead, Respondents shall reimburse U.S. EPA all costs of the response action not inconsistent with the NCP pursuant to Section XV (Payment of Response Costs).

36. In addition, in the event of any release of a hazardous substance from the Site, Respondents shall immediately notify the OSC at (312) 353-2318 and the National Response Center at (800) 424-8802. Respondents shall submit a written report to U.S. EPA within 7 business days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, *et seq*.

XIV. AUTHORITY OF ON-SCENE COORDINATOR

37. The OSC shall be responsible for overseeing Respondents' implementation of this

Settlement Agreement. The OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any Work required by this Settlement Agreement, or to direct any other removal action undertaken at the Site. Absence of the OSC from the Site shall not be cause for stoppage of work unless specifically directed by the OSC.

XV. PAYMENT OF RESPONSE COSTS

38. Payment for Past Response Costs.

a. Within 30 days after the Effective Date, Respondents shall pay to U.S. EPA $85,968.57 for Past Response Costs. Payment shall be made to U.S. EPA by Fedwire Electronic Funds Transfer (EFT) to:

Federal Reserve Bank of New York,
ABA # 021030004
Account = 68010727
SWIFT address = FRNYUS33,
33 Liberty Street,
New York, NY, 10045

Field Tag 4200 of the Fedwire message; should read "D 68010727 Environmental Protection Agency"

and shall reference Site/Spill ID Number B52B and the EPA docket number for this action.

When the Past Response Costs identified in the above Paragraph are less than $10,000, payment may, in lieu of the described EFT method, be made by official bank check made payable to "U.S. EPA Hazardous Substance Superfund". Each check, or a letter accompanying each check, shall identify the name and address of the party(ies) making payment, the Site name, U.S. EPA Region 5, the Site/Spill ID Number B52B, and, if any, the U.S. EPA docket number for this action, and shall be sent to:

U.S. Environmental Protection Agency
Superfund Payments
Cincinnati Finance Center
P.O. Box 979076
St. Louis, MO 63197-9000

b. At the time of payment, Respondents shall send notice that such payment has been made to the Director, Superfund Division, U.S. EPA Region 5, 77 West Jackson Blvd., Chicago, Illinois, 60604-3590 and to Thomas C. Nash, Associate Regional Counsel, 77 West Jackson Boulevard, C-14J, Chicago, Illinois, 60604-3590, and to the EPA Cincinnati Finance Center by email at acctsreceivable.cinwd@epa.gov, or by mail to: Cincinnati Finance Center, 26 Martin Luther King

Drive, Cincinnati, Ohio 45268. Such notice shall reference Site/Spill ID Number B52B and the EPA docket number for this action.

c. The total amount to be paid by Respondents pursuant to Paragraph 38(a) shall be deposited by U.S. EPA in the South Dayton Dump and Landfill Site Special Account to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by U.S. EPA to the U.S. EPA Hazardous Substance Superfund.

39. Payments for Future Response Costs.

a. Respondents shall pay U.S. EPA all Future Response Costs not inconsistent with the NCP. On a periodic basis, U.S. EPA will send Respondents a bill requiring payment that consists of an Itemized Cost Summary. Respondents shall make all payments within 30 days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 41 of this Settlement Agreement according to the following procedures

i. Respondents shall make all payments required by this Paragraph to U.S. EPA by Fedwire EFT to:

Federal Reserve Bank of New York,
ABA # 021030004
Account = 68010727
SWIFT address = FRNYUS33,
33 Liberty Street,
New York, NY, 10045

Field Tag 4200 of the Fedwire message; should read "D 68010727 Environmental Protection Agency" and shall reference Site/Spill ID Number B52B and the EPA docket number for this action.

ii. If the amount demanded in the bill is $10,000 or less, Respondents may, in lieu of the procedures in subparagraph 39(a)(i), make all payments required by this Paragraph by official bank check made payable to "U.S. EPA Hazardous Substance Superfund". Each check, or a letter accompanying each check, shall identify the name and address of the party(ies) making payment, the Site name, U.S. EPA Region 5, the Site/Spill ID Number B52B, and, if any, the U.S. EPA docket number for this action, and shall be sent to:

U.S. Environmental Protection Agency
Superfund Payments
Cincinnati Finance Center
P.O. Box 979076
St. Louis, MO 63197-9000

b. At the time of payment, Respondents shall send notice that payment has been made to the Director, Superfund Division, U.S. EPA Region 5, 77 West Jackson Blvd., Chicago, Illinois, 60604-3590 and to Thomas C. Nash, Associate Regional Counsel, 77 West Jackson Boulevard, C-14J, Chicago, Illinois, 60604-3590, and to the EPA Cincinnati Finance Office by email at acctsreceivable.cinwd@epa.gov, or by mail to: Cincinnati Finance Office, 26 Martin Luther King Drive, Cincinnati, Ohio 45268. Such notice shall reference Site/Spill ID Number B52B and the EPA docket number for this action.

c. The total amount to be paid by Respondents pursuant to Paragraph 38(a) shall be deposited in the South Dayton Dump and Landfill Special Account within the U.S. EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by U.S. EPA to the U.S. EPA Hazardous Substance Superfund.

40. In the event that the payment for Past Response Costs is not made within 30 days of the Effective Date, or the payments for Future Response Costs are not made within 30 days of Respondents' receipt of a bill, Respondents shall pay Interest on the unpaid balance. The Interest on Past Response Costs shall begin to accrue on the Effective Date and shall continue to accrue until the date of payment. The Interest on Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondents' failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties pursuant to Section XVIII (Stipulated Penalties).

41. Respondents may contest payment of any Future Response Costs billed under Paragraph 39 if they determine that U.S. EPA has made a mathematical error, or included a cost item that is not within the definition of Future Response Costs, or if they believe U.S. EPA incurred excess costs as a direct result of a U.S. EPA action that was inconsistent with a specific provision or provisions of the NCP. Such objection shall be made in writing within 30 days of receipt of the bill and must be sent to the OSC. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Respondents shall within the 30-day period pay all uncontested Future Response Costs to U.S. EPA in the manner described in Paragraph 38. Simultaneously, Respondents shall establish, in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the Federal Deposit Insurance Corporation (FDIC), and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondents shall send to the U.S. EPA OSC a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, Respondents shall initiate the Dispute Resolution procedures in Section XVI (Dispute Resolution). If U.S. EPA prevails in the dispute, within 5 days of the resolution of the dispute,

Respondents shall pay the sums due (with accrued interest) to U.S. EPA in the manner described in Paragraph 39. If Respondents prevail concerning any aspect of the contested costs, Respondents shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to U.S. EPA in the manner described in Paragraph 39. Respondents shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XVI (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondents' obligation to reimburse U.S. EPA for its Future Response Costs.

XVI. DISPUTE RESOLUTION

42. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.

43. If Respondents object to any U.S. EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, they shall notify U.S. EPA in writing of their objection(s) within 10 days of such action, unless the objection(s) has/have been resolved informally. This written notice shall include a statement of the issues in dispute, the relevant facts upon which the dispute is based, all factual data, analysis or opinion supporting Respondents' position, and all supporting documentation on which such party relies. U.S. EPA and Respondents shall have 10 days from U.S. EPA's receipt of Respondents' written objection(s) to resolve the dispute through formal negotiations. The period for formal negotiations may be extended at the sole discretion of U.S. EPA. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by both parties, be incorporated into and become an enforceable part of this Settlement Agreement. If the parties are unable to reach a written agreement by the conclusion of the formal negotiation period, U.S. EPA shall provide its Statement of Position, including supporting documentation, no later than 10 days after the formal negotiation period concludes. In the event that these 10-day time periods for exchange of written documents may cause a delay in the work, they shall be shortened upon, and in accordance with, notice by U.S. EPA. An administrative record of any dispute under this Section shall be maintained by U.S. EPA. The record shall include the written notification of such dispute, and any Statement of Position served pursuant to this Paragraph. Upon review of the administrative record, the Director of the Superfund Division, U.S. EPA Region 5, shall resolve the dispute consistent with the NCP and the terms of this Settlement Agreement and issue a written decision.. U.S. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement.

44. Respondents' obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondents shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with U.S. EPA's decision, whichever occurs.

XVII. FORCE MAJEURE

45. Respondents agree to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless the performance is delayed by a *force majeure*. For purposes of this Settlement Agreement, a *force majeure* is defined as any event arising from causes beyond the control of Respondents, or of any entity controlled by Respondents, including but not limited to their contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Respondents' best efforts to fulfill the obligation. *Force majeure* does not include financial inability to complete the Work or increased cost of performance.

46. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondents shall notify U.S. EPA orally within 24 hours of when Respondents first knew that the event might cause a delay. Within 7 days thereafter, Respondents shall provide to U.S. EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondents' rationale for attributing such delay to a *force majeure* event if they intend to assert such a claim; and a statement as to whether, in the opinion of Respondents, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall be grounds for U.S. EPA to deny Respondents an extension of time for performance. Respondents shall have the burden of demonstrating by a preponderance of the evidence that the event is a force majeure, that the delay is warranted under the circumstances, and that best efforts were exercised to avoid and mitigate the effects of the delay.

47. If U.S. EPA agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Settlement Agreement that are affected by the *force majeure* event will be extended by U.S. EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any other obligation. If U.S. EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, U.S. EPA will notify Respondents in writing of its decision. If U.S. EPA agrees that the delay is attributable to a *force majeure* event, U.S. EPA will notify Respondents in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

XVIII. STIPULATED PENALTIES

48. Respondents shall be liable to U.S. EPA for stipulated penalties in the amounts set forth in Paragraphs 49 and 50 for failure to comply with the requirements of this Settlement Agreement specified below, unless excused under Section XVII (Force Majeure). "Compliance"

by Respondents shall include completion of the activities under this Settlement Agreement or any work plan or other plan approved under this Settlement Agreement identified below in accordance with all applicable requirements of law, this Settlement Agreement, and any plans or other documents approved by U.S. EPA pursuant to this Settlement Agreement within the specified time schedules established by and approved under this Settlement Agreement.

49. Stipulated Penalty Amounts - Work.

a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Paragraph 49(b):

Penalty Per Violation Per Day	Period of Noncompliance
$750.00	1st through 14th day
$1500.00	15th through 30th day
$ 2,500.00	31st day and beyond

b. Compliance Milestones: Date and time deadlines for compliance milestones are as specified below:

i. Within 15 days of the Effective Date of this Settlement Agreement, develop for EPA approval a Site Health and Safety Plan;

ii. Within 15 days of the Effective Date of this Settlement Agreement, develop for EPA approval a Quality Assurance Project Plan (QAPP);

iii. Within 15 days of the Effective Date of this Settlement Agreement, develop for EPA approval a plan to conduct subsurface gas sampling (including VOCs and methane) and extent of contamination sampling utilizing groundwater, soil gas, sub-slab, and indoor air sampling techniques;

iv. Within 15 days of the Effective Date of this Settlement Agreement, develop for EPA approval a plan to design and install a vapor abatement mitigation system in the structure(s) impacted by subsurface gas migration if the ODH Sub-Slab or Indoor Air Screening Level for a contaminant of concern (TCE, PCE, methane, etc) is exceeded for a residential structure. The abatement system will include installation of a SSDS or crawl space depressurization system, sealing cracks in walls and floors of the basement, and sealing drains that could be a pathway. The vapor abatement mitigation system will be designed to control levels of methane and VOCs to below ODH sub-slab and indoor air screening levels;

v. Within 15 days of the Effective Date of this Settlement Agreement , develop for EPA approval a plan to design and install a vapor abatement mitigation system in the structure(s) impacted by subsurface gas migration if the ODH Sub-Slab or Indoor Air Screening Level for a contaminant of concern (TCE, PCE, methane, etc) is exceeded for a commercial structure. The abatement system will include installation of a SSDS, sealing cracks in walls and floors, and sealing drains that could be a pathway. The vapor abatement mitigation system will be designed to control levels of methane and VOCs to below ODH sub-slab and indoor air screening levels;

vi. Based upon the approved schedule in the methane extent investigation conducted under paragraph 16.b of this Settlement Agreement, develop for EPA approval a plan to design and install a landfill gas extraction system designed to prevent landfill gas migration off-site if levels of methane at the property boundary are greater than the lower explosive limit (5% methane). The landfill gas system will be designed to control levels of methane at the property boundary to less than the lower explosive limit (5% methane);

vii. Within 15 days of the Effective Date of this Settlement Agreement, develop for EPA approval a performance sample plan to confirm that ODH screening levels are achieved for contaminants of concern following installation of on-site or off-site vapor abatement mitigation systems;

viii. Based upon the approved schedule in the methane extent investigation conducted under paragraph 16.b of this Settlement Agreement, develop for EPA approval 1) a landfill gas extraction system performance sample plan including the installation of subsurface probes to confirm that methane action levels are achieved and (2) a landfill gas extraction system effluent sample plan.

50. Stipulated Penalty Amounts - Reports. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate reports pursuant to Paragraphs 21 and 22:

Penalty Per Violation Per Day	Period of Noncompliance
$ 300.00	1st through 14th day
$ 500.00	15th through 30th day
$ 1,000.00	31st day and beyond

51. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: 1) with respect to a deficient submission under Section VIII (Work to be Performed), during the period, if any, beginning on the 31st day after U.S. EPA's receipt of such submission

until the date that U.S. EPA notifies Respondents of any deficiency; and 2) with respect to a decision by the Director of the Superfund Division, Region 5, under Paragraph 43 of Section XVI (Dispute Resolution), during the period, if any, beginning on the 21st day after U.S. EPA submits its written statement of position until the date that the Director of the Superfund Division issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

52. Following U.S. EPA's determination that Respondents have failed to comply with a requirement of this Settlement Agreement, U.S. EPA may give Respondents written notification of the failure and describe the noncompliance. U.S. EPA may send Respondents a written demand for payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether U.S. EPA has notified Respondents of a violation.

53. All penalties accruing under this Section shall be due and payable to U.S. EPA within 30 days of Respondents' receipt from U.S. EPA of a demand for payment of the penalties, unless Respondents invoke the dispute resolution procedures under Section XVI (Dispute Resolution). Respondents shall make all payments required by this Section by official bank check made payable to "U.S. EPA Hazardous Substance Superfund". Each check, or a letter accompanying each check, shall identify the name and address of the party(ies) making payment, the Site name, U.S. EPA Region 5, the Site/Spill ID Number B52B, and, if any, the U.S. EPA docket number for this action, and shall be sent to:

U.S. Environmental Protection Agency
Superfund Payments
Cincinnati Finance Center
P.O. Box 979076
St. Louis, MO 63197-9000

and shall indicate that the payment is for stipulated penalties, and shall reference the name and address of the party(ies) making payment. At the time of payment, copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s), shall be sent to U.S. EPA as provided in Paragraph 39(b).

54. The payment of penalties shall not alter in any way Respondents' obligation to complete performance of the Work required under this Settlement Agreement.

55. Penalties shall continue to accrue during any dispute resolution period, but need not be paid until 20 days after the dispute is resolved by agreement or by receipt of U.S. EPA's decision.

56. If Respondents fail to pay stipulated penalties when due, U.S. EPA may institute proceedings to collect the penalties, as well as Interest. Respondents shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 53. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any

way limiting the ability of U.S. EPA to seek any other remedies or sanctions available by virtue of Respondents' violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Sections 106(b) and 122(*l*) of CERCLA, 42 U.S.C. §§ 9606(b) and 9622(*l*), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that U.S. EPA shall not seek civil penalties pursuant to Section 106(b) or 122(*l*) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided in this Section, except in the case of a willful violation of this Settlement Agreement. Should Respondents violate this Settlement Agreement or any portion hereof, U.S. EPA may carry out the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604, and/or may seek judicial enforcement of this Settlement Agreement pursuant to Section 106 of CERCLA, 42 U.S.C. § 9606. Notwithstanding any other provision of this Section, U.S. EPA may, in its unreviewable discretion, waive in writing any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

XIX. COVENANT NOT TO SUE BY U.S. EPA

57. In consideration of the actions that will be performed and the payments that will be made by Respondents under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, U.S. EPA covenants not to sue or to take administrative action against Respondents pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work, Past Response Costs, and Future Response Costs. This covenant not to sue shall take effect upon receipt by U.S. EPA of the Past Response Costs due under Section XV (Payment of Response Costs) of this Settlement Agreement and any Interest or Stipulated Penalties due for failure to pay Past Response Costs as required by Sections XV (Payment of Response Costs) and XVIII (Stipulated Penalties) of this Settlement Agreement. This covenant not to sue is conditioned upon the complete and satisfactory performance by Respondents of their obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Section XV (Payment of Response Costs). This covenant not to sue extends only to Respondents and does not extend to any other person.

XX. RESERVATIONS OF RIGHTS BY U.S. EPA

58. Except as specifically provided in this Settlement Agreement, nothing in this Settlement Agreement shall limit the power and authority of U.S. EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing in this Settlement Agreement shall prevent U.S. EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring the Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law.

59. The covenant not to sue set forth in Section XIX (Covenant Not to Sue by U.S. EPA)

above does not pertain to any matters other than those expressly identified therein. U.S. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondents with respect to all other matters, including, but not limited to:

a. claims based on a failure by Respondents to meet a requirement of this Settlement Agreement;

b. liability for costs not included within the definitions of Past Response Costs or Future Response Costs;

c. liability for performance of response action other than the Work;

d. criminal liability;

e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;

f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and

g. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.

XXI. COVENANT NOT TO SUE BY RESPONDENTS

60. Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Past Response Costs, Future Response Costs, or this Settlement Agreement, including, but not limited to:

a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the Ohio Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or

c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Work, Past Response Costs, or Future Response Costs.

These covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to any of the reservations set forth in Paragraphs 59 (b), (c), and (e) - (g), but only to the extent that Respondents' claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

61. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

XXII. OTHER CLAIMS

62. By issuance of this Settlement Agreement, the United States and U.S. EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents. The United States or U.S. EPA shall not be deemed a party to any contract entered into by Respondents or their directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.

63. Except as expressly provided in Section XIX (Covenant Not to Sue by U.S. EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondents or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

64. No action or decision by U.S. EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXIII. EFFECT OF SETTLEMENT/CONTRIBUTION

65. Nothing in this Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement Agreement. Each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

66. a. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and that Respondents are entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), or as may otherwise be provided by law, for

"matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work, Past Response Costs, and Future Response Costs. Nothing in this Settlement Agreement shall diminish the right of any Respondent to seek or obtain contribution or cost recovery under CERCLA or other law from any other Respondent for response actions or costs other than the matters addressed in this Settlement Agreement.

b. The Parties further agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which the Respondents have, as of the Effective Date, resolved their liability to the United States for the Work, Past Response Costs, and Future Response Costs.

67. Each Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement Agreement, notify U.S. EPA in writing no later than 60 days prior to the initiation of such suit or claim. Each Respondent also shall, with respect to any suit or claim brought against it for matters related to this Settlement Agreement, notify U.S. EPA in writing within 10 days of service of the complaint or claim upon it. In addition, each Respondent shall notify U.S. EPA within 10 days of service or receipt of any Motion for Summary Judgment and within 10 days of receipt of any order from a court setting a case for trial, for matters related to this Settlement Agreement.

68. In any subsequent administrative or judicial proceeding initiated by U.S. EPA, or by the United States on behalf of U.S. EPA, for injunctive relief, recovery of response costs, or other relief relating to the Site, Respondents shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, *res judicata*, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the covenant by U.S. EPA set forth in Section XIX.

69. Effective upon signature of this Settlement Agreement by a Respondent, such Respondent agrees that the time period after the date of its signature shall not be included in computing the running of any statute of limitations potentially applicable to any action brought by the United States related to the "matters addressed" as defined in Paragraph 66 and that, in any action brought by the United States related to the "matters addressed," such Respondent will not assert, and may not maintain, any defense or claim based upon principles of statute of limitations, waiver, laches, estoppel, or other defense based on the passage of time after its signature of this Settlement Agreement. If U.S. EPA gives notice to Respondents that it will not make this Settlement Agreement effective, the statute of limitations shall begin to run again commencing ninety days after the date such notice is sent by U.S. EPA.

XXIV. <u>INDEMNIFICATION</u>

70. Respondents shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or

causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondents agree to pay the United States all costs incurred by the United States, including but not limited to attorney's fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, subcontractors and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondents in carrying out activities pursuant to this Settlement Agreement. Neither Respondents nor any such contractor shall be considered an agent of the United States. The Federal Tort Claims Act (28 U.S.C. §§ 2671, 2680) provides coverage for injury or loss of property, or injury or death caused by the negligent or wrongful act or omission of an employee of U.S. EPA while acting within the scope of his or her employment, under circumstances where U.S. EPA, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred.

71. The United States shall give Respondents notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondents prior to settling such claim.

72. Respondents waive all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Respondents shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

XXV. MODIFICATIONS

73. The OSC may make modifications to any plan or schedule in writing or by oral direction. Any oral modification will be memorialized in writing by U.S. EPA promptly, but shall have as its effective date the date of the OSC's oral direction. Any other requirements of this Settlement Agreement may be modified in writing by mutual agreement of the parties.

74. If Respondents seek permission to deviate from any approved work plan or schedule, Respondents' Project Coordinator shall submit a written request to U.S. EPA for approval outlining the proposed modification and its basis. Respondents may not proceed with the requested deviation until receiving oral or written approval from the OSC pursuant to Paragraph 73.

75. No informal advice, guidance, suggestion, or comment by the OSC or other U.S. EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondents shall relieve Respondents of their obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXVI. NOTICE OF COMPLETION OF WORK

76. When U.S. EPA determines, after U.S. EPA's review of the Final Report, that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including, *e.g.*, post-removal site controls, payment of Future Response Costs, and record retention, U.S. EPA will provide written notice to Respondents. If U.S. EPA determines that such Work has not been completed in accordance with this Settlement Agreement, U.S. EPA will notify Respondents, provide a list of the deficiencies, and require that Respondents modify the Work Plan if appropriate in order to correct such deficiencies. Respondents shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the U.S. EPA notice. Failure by Respondents to implement the approved modified Work Plan shall be a violation of this Settlement Agreement.

XXVII. FINANCIAL ASSURANCE

77. Within 30 days of the Effective Date, Respondents shall establish and maintain financial security, initially in the amount of $1,797,591 in one or more of the following forms, in order to secure the full and final completion of Work by Respondents:

a. A surety bond guaranteeing payment unconditionally guaranteeing payment and/or performance of the Work;

b. One or more irrevocable letters of credit equaling the total estimated cost of the Work, payable to or at the direction of U.S. EPA, issued by one or more financial institution(s) acceptable in all respects to EPA;

c. A trust fund administered by a trustee acceptable in all respects to U.S. EPA;

d. A policy of insurance issued by an insurance carrier acceptable in all respects to U.S. EPA, which ensures the payment and/or performance of the Work;

e. A written guarantee to fund or perform the Work provided by one or more parent corporations of respondents, or by one or more unrelated corporations that have a substantial business relationship with at least one of Respondents, including a demonstration that any such guarantor company satisfies the requirements of 40 C.F.R. Part 264.143(f) with respect to the Estimated Cost of the Work (plus the amount(s) of any other federal or state environmental obligations financially assured through the use of a financial test or guarantee) that it proposes to guarantee hereunder; or

f. A demonstration of sufficient financial resources to pay for the Work made by one or more Respondents, which shall consist of a demonstration that any such Respondent satisfies the requirements of 40 C.F.R. Part 264.143(f).

g. Any and all financial assurance instruments provided pursuant to this Section shall be in form and substance satisfactory to U.S. EPA, determined in U.S. EPA's sole discretion. Within 30 days of the Effective Date, Respondents shall submit copies of all executed and/or otherwise finalized instruments or other documents required in order to make the selected performance guarantee(s) legally binding to U.S. EPA. In the event that U.S. EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the mechanism(s) evidencing such assurances) are inadequate, Respondents shall, within 30 days of receipt of notice of U.S. EPA's determination, obtain and present to U.S. EPA for approval one of the other forms of financial assurance listed in Paragraph 77, above. In addition, if at any time U.S. EPA notifies Respondents that the anticipated cost of completing the Work has increased, then, within 30 days of such notification, Respondents shall obtain and present to U.S. EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondents' inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.

h. If Respondents seek to demonstrate the ability to complete the Work through a guarantee or demonstration by a third party pursuant to Paragraph a of this Section, Respondents' guarantor shall (a) demonstrate to U.S. EPA's satisfaction that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f); and (b) resubmit sworn statements conveying the information required by 40 C.F.R. Part 264.143(f) annually thereafter within 90 days of the end of the guarantor's fiscal year or such other date as agreed by U.S. EPA, to U.S. EPA. For the purposes of this Settlement Agreement, wherever 40 C.F.R. Part 264.143(f) references "sum of current closure and post-closure costs estimates and the current plugging and abandonment costs estimates," the dollar amount to be used in the relevant financial test calculations shall be the current cost estimate of $1,797,591 for the Work at the Site plus any other RCRA, CERCLA, TSCA, or other federal environmental obligations financially assured by the relevant Respondent or guarantor to EPA by means of passing a financial test.

i. If, after the Effective Date, Respondents can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph h of this Section, Respondents may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondents shall submit a proposal for such reduction to U.S. EPA, in accordance with the requirements of this Section, and may reduce the amount of the security upon approval by U.S. EPA. In the event of a dispute, Respondents may seek dispute resolution pursuant to Section XV (Dispute Resolution) and may reduce the amount of the security in accordance with the written decision resolving the dispute.

j. Respondents may change the form of financial assurance provided under this Section at any time, upon notice to and approval by U.S. EPA, provided that the new form of assurance meets the requirements of this Section. In the event of a dispute, Respondents may seek dispute resolution pursuant to Section XVI (Dispute Resolution), and may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

k. Respondents may not release, cancel, or discontinue any performance guarantee provided pursuant to this Section except as provided in this Paragraph. If Respondents receive written notice from U.S. EPA in accordance with Paragraph 76 that the Work has been fully completed in accordance with the terms of this Settlement Agreement, Respondents may thereafter release, cancel, or discontinue the performance guarantee provided pursuant to this Section. In the event of a dispute, Respondents may seek dispute resolution pursuant to Section XVI (Dispute Resolution), and may release, cancel, or discontinue the performance guarantee required hereunder only in accordance with the written decision resolving the dispute.

XXVIII. INSURANCE

78. At least 7 days prior to commencing any on-Site work under this Settlement Agreement, Respondents shall secure, and shall maintain for the duration of this Settlement Agreement, comprehensive general liability insurance and automobile insurance with limits of 2 million dollars, combined single limit. Within the same time period, Respondents shall provide U.S. EPA with certificates of such insurance and a copy of each insurance policy. In addition, for the duration of the Settlement Agreement, Respondents shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondents in furtherance of this Settlement Agreement. If Respondents demonstrate by evidence satisfactory to U.S. EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondents need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXIX. SEVERABILITY/INTEGRATION/ATTACHMENTS

79. If a court issues an order that invalidates any provision of this Settlement Agreement or finds that Respondents have sufficient cause not to comply with one or more provisions of this Settlement Agreement, Respondents shall remain bound to comply with all provisions of this Settlement Agreement not invalidated or determined to be subject to a sufficient cause defense by the court's order.

80. This Settlement Agreement and its attachments constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The parties acknowledge that there are no

representations, agreements or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following attachment is incorporated into this Settlement Agreement: Attachment A, Site Map.

XXX. EFFECTIVE DATE

81. This Settlement Agreement shall be effective upon receipt by Respondents of a copy of this Settlement Agreement signed by the Director, Superfund Division, U.S. EPA Region 5. The undersigned representatives of Respondents each certify that they are fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the party they represent to this document.

The undersigned representatives of Respondents each certify that they are fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the party they represent to this document.

SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Agreed this 28 day of Feb, 2013

For Respondent NCR Corporation

By Jennifer M. Daniels

Title SVP General Counsel and Secretary

SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Agreed this 1 day of February, 2013.

For Respondent Kelsey Hayes Company

By Robin Walker-Lee
ROBIN WALKER-LEE

Title EVP, General Counsel
and Secretary

**SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO**

Agreed this 22 day of Feb, 2013.

For Respondent Hobart Corporation

By [signature]

Philip J. McGovern

Title Vice President & Secretary

IN THE MATTER OF:

SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

It is so ORDERED and Agreed this 5 day of April, 2013.

BY: ______________________________

for Richard C. Karl, Director
Superfund Division
United States Environmental Protection Agency
Region 5

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

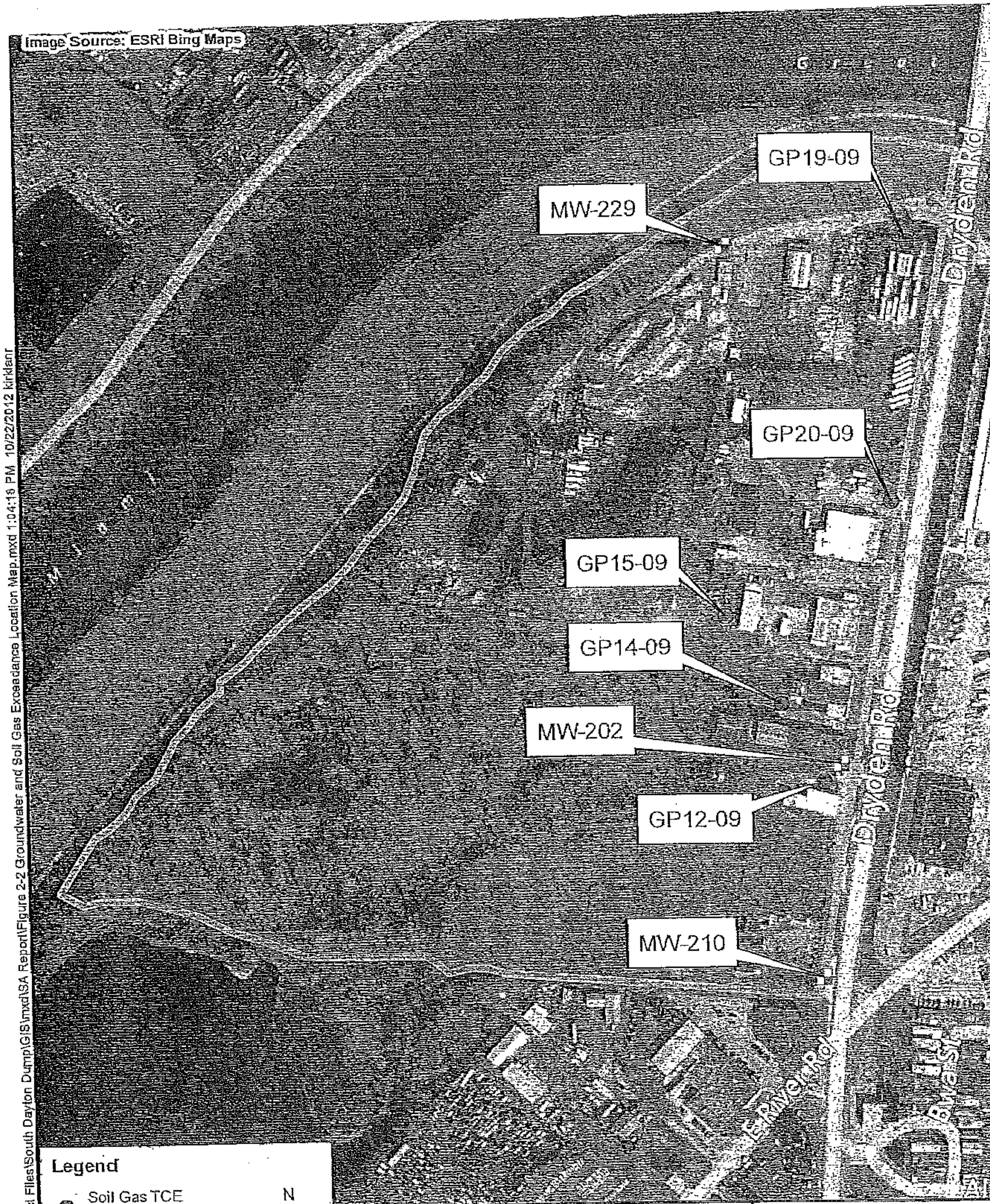
ADMINISTRATIVE RECORD
FOR
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, MONTGOMERY COUNTY, OHIO

ORIGINAL
MARCH 13, 2013
SEMS ID: 902659

NO.	SEMS ID	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	255879	03/30/03	Techlaw Inc	U.S. EPA	Techlaw Inc.- Draft Title Search Addendum - Reference #6	42
2	262758	08/15/06	Karl, R., U.S. EPA	Respondents	Administrative Settlement Agreement & Order On Consent For Ri/Fs (Signed) - V-W-06-C-852	106
3	437166	06/09/11	CRA	U.S. EPA	Cra - Fig 3: 2009 & 2010 Soil Vapor Sampling Results That Exceed EPA Screening Levels (VOCS)	1
4	437167	06/09/11	CRA	U.S. EPA	Cra - Fig 3: 2009 & 2010 Soil Vapor Sampling Results That Exceed EPA Screening Levels (Methane)	1
5	437168	11/04/11	Cibulskis, K., U.S. EPA	K., Conestoga - Rovers & Associates	EPA - Modified Vapor Intrusion Study Work Plan W/Cover Letter	125
6	437169	06/01/12	U.S. EPA	Public	EPA - Site Summary/Fact Sheet	3
7	437170	06/01/12	Ohio Dept. of Health	Public	Fact Sheet: Methane: Answers To FAQS	2
8	437171	06/05/12	Cibulskis, K., U.S. EPA	Renninger, S., U.S. EPA	EPA Memo Re: Request For Removal Assistance In Evaluating Vapor Intrusion Data & Removal Authority	2

9	437172	06/21/12	Ohio Dept. of Health	Public	Fact Sheet: Trichloroethylene (TCE): Answers To FAQs	2
10	437173	07/06/12	Frey, R., Ohio Dept. of Health	Renninger, S., U.S. EPA	OH Dept Of Health Letter Re: Transmittal Of Screening Levels For Contaminants Of Concern In Indoor & Sub-Slab Soil Gas	4
11	437174	07/17/12	Marshal , L., Ohio Dept. of Health	Durno, M., U.S. EPA	OH EPA Letter Re: Oh EPA'S S Support Of Us EPA'S June 5, 2012 Request For Removal Assistance In Evaluating Current And Potential Vapor Intrusion Risks	1
12	437175	08/03/12	Renninger, S., U.S. EPA	Marshal , L., Ohio Dept. of Health	EPA Letter Re: Request For OH EPA To Identify Any/All State Arars	2
13	902161	05/17/00	Herring, M., U.S. EPA	U.S. EPA	Intra Office Mail Re: Valley Asphalt Grant Of Easement To The Montgomery County Commissioners	1
14	902162	10/29/12	Sherrard, J., Weston Solutions	Renninger, S., U.S. EPA	Site Assessment Report For The South Dayton Landfill Site	121
15	437265	10/09/12	Renninger, S., U.S. EPA	Karl, R., U.S. EPA	Action Memo - Request For Approval And Funding For A Time-Critical Removal Action **(REDACTED)**	47

ATTACHMENT A



Legend

- Soil Gas TCE Exceedance
- Groundwater TCE Exceedance
- Operable Unit 1

0 400 Feet

N

Prepared for: **U.S. EPA REGION V**

Contract No.: EP-S5-06-04
TDD: S05-0008-1206-002
DCN: 1868-2A-AYCA

Prepared By: **WESTON SOLUTIONS, INC**

4710-A Interstate Drive
Cincinnati, Ohio 45246

Figure 2-2
Groundwater and Soil Gas TCE Exceedance Location Map
South Dayton Landfill Site
Moraine, Montgomery County, Ohio

FILE: C:\START Project Files\South Dayton Dump\GIS\mxd\SA Report\Figure 2-2 Groundwater and Soil Gas Exceedance Location Map.mxd 1:04:18 PM 10/22/2012 kirklanr

bcc: Docket Analyst, ORC (C-14J)
Tom Nash, ORC (C-14J)
Steve Renninger, (G-41)
Carol Ropski, ESS 1 (SE-5J)
Leslie Patterson, (SR-6J)
Mike Rafati, (SE-5J)
Margaret Herring (SE-5J)
John Maritote, (SE-5J)
Richard Hackley, PAAS (MF-10J)
Records Center (SRC-7J)

Lori Weidner
U.S. EPA
Cincinnati Finance Center, NWD
26 West Martin Luther King Drive
Cincinnati, OH 45268-0001

Mr. Lindy Nelson
U.S. Department of the Interior
Office of Environmental Policy and Compliance
U.S. Custom House, Room 244
Philadelphia Region
200 Chestnut Street
Philadelphia, PA 19106

APPENDIX B

SIERRA GAS MONITOR MODEL 2001 SPECIFICATIONS

PHOTO 1: METHANE MONITOR CLOSE-UP IN SIM TRAINER, 2031 DRYDEN ROAD

PHOTO 2: METHANE MONITOR STORAGE LOCATION IN SIM TRAINER, 2031 DRYDEN ROAD

Appendix B

PHOTOGRAPHIC LOG
SIERRA GAS MONITOR MODEL 2001
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

PHOTO 3: METHANE MONITOR SETUP IN SIM TRAINER, 2031 DRYDEN ROAD

PHOTO 4: METHANE MONITOR SETUP IN VALLEY ASPHALT, 1903 DRYDEN ROAD

Appendix B

PHOTOGRAPHIC LOG
SIERRA GAS MONITOR MODEL 2001
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

CRA

PHOTO 5: METHANE MONITOR WAREHOUSE LOCATION IN VALLEY ASPHALT, 1903 DRYDEN ROAD

Appendix B

PHOTOGRAPHIC LOG
SIERRA GAS MONITOR MODEL 2001
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SUMMARY
INSTRUCTIONS REGARDING COMBUSTIBLE GAS INDICATORS

If you hear a continuous alarm and the red light is on then do the following:

1) Call the Fire Department, 911 or (937) 535-1140.

2) Turn off any sources of ignition or open flame such as a gas stove or end operations in an active firing range.

3) Have everyone leave the building. Wait outside until the fire department arrives.

For further information see the detailed instructions.

South Dayton Dump and Landfill

Combustible Gas Indicator Fact Sheet

The group of companies (the Respondents) responsible for investigating and addressing environmental conditions at the South Dayton Dump and Landfill Site (Site) has completed work under the direction of the U.S. Environmental Protection Agency (U.S. EPA) and the Ohio Environmental Protection Agency (Ohio EPA). In addition to completing the site clean-up work, the Respondents are monitoring environmental conditions at and near the Site. This fact sheet provides information about monitoring efforts.

COMBUSTIBLE GAS INDICATORS

To ensure that the very protective environmental health and safety standards put in place by the agencies continue to be met, the Respondents have installed combustible gas indicator units, or CGI units, in multiple buildings on or adjacent to the landfill. These units were installed to monitor for methane prior to the installation of the landfill gas system. The participation of community members in this process is important—and greatly appreciated.

The ongoing operation and monitoring of the CGI units is covered under the attached Instructions Regarding Combustible Gas Indicators.

If your unit does sound, please leave your building immediately. Do not switch on or off any lights or appliances before leaving your building. From outside your building using a cell phone or a neighbor's telephone, call 911. The local fire department will respond and determine the nature of the sounding.

CALIBRATION & SCREENING

The routine calibration, or adjustment, and screening activities take place every three months and consist of the following steps:

- Calibrating the unit. To calibrate the CGI unit, a 1 percent concentration of methane is applied directly to the unit for approximately 5 to 10 seconds. This step is intended to set off the CGI unit alarm. If the test results in a sounding then the unit is functioning properly. The amount of methane used in this routine test does not present any health or safety concerns, and will not build up in a residence. If a CGI unit is not functioning properly, then the resident will be informed immediately and the unit will be repaired or replaced as soon as possible; and
- Screening for migration points. To ensure that the CGI unit is positioned properly, each building is screened for potential migration points such as cracks in the walls and floors. Depending upon the size and locations of these potential migration points, the unit may be repositioned to help ensure accurate readings.

ADDITIONAL INFORMATION

The Respondents remain committed to continuing to work with the community and to protecting the health and safety of Site neighbors as the clean up continues. The continuing involvement of neighbors in activities such as sampling and operation of the CGI units is a key contributor to a thorough and swift clean-up process.

Please feel free to contact Mr. Nate Ziegler or Mr. Greg Lewis of Conestoga-Rovers & Associates at (513) 942-4750 if you have any questions about activities at the landfill or the information in this fact sheet.

INSTRUCTIONS REGARDING COMBUSTIBLE GAS INDICATORS

The Combustible Gas Indicator (CGI) is used to monitor the presence of combustible gases, such as methane. If methane concentrations in air exceed 5% (50,000 parts per million or ppm) then explosive conditions could exist. This concentration is referred to as the lower explosive limit.

The CGI is calibrated to a methane concentration of 0.05% (500 ppm) in air. This concentration is one-hundredth of the lower explosive limit.

The CGI has two lights (red and green). The green light should be on at all times to indicate that the unit is functional. The CGI also has an audible alarm.

Three alarm conditions are possible as explained below:

WARM UP ALARM

When power is first connected to the module, both the red and green lights will flash alternately and the audible alarm will sound. The alarm will oscillate and then become continuous and will last for several seconds (10-15). Note that this will happen if the power is turned off and then turned on.

TROUBLE ALARM

If the CGI malfunctions then the red and green lights will flash alternately and the audible alarm will sound discontinuously (on, off, on, off, etc.).

If this alarm condition exists, the unit will need to be replaced or recalibrated. Please disconnect power to the unit and contact one of the following to arrange for service:

Nate Ziegler	(513) 942-4750 or (513) 476-5418
Greg Lewis	(513) 942-4750 or (513) 200-8902

GAS ALARM

The red light will turn on and the audible alarm will sound continuously if methane is detected (above 0.5%).

In this event, the following procedures should be followed:

1. Call the local fire department at 911 or (937) 535-1140 and tell them:
    - Your name and address
    - That you are located near the South Dayton Dump and Landfill Site
    - That your methane alarm has gone off
2. Turn off any sources of ignition or open flame such as a gas stove or end operations in an active firing range.
3. Notify any other people in the building and have everyone leave the building. You may choose to leave the door open to allow the building to ventilate. Wait outside until the fire department arrives.

The fire department personnel will likely ventilate the building and check for the presence of combustible gas. They will then tell you if it is safe to return to the building.

If you have any questions, please contact Mr. Nate Ziegler or Mr. Greg Lewis at (513) 942-4750 or the alternate phone numbers previously specified.

The U.S. EPA contact is Leslie Patterson in Chicago at (312) 886-4904.

sierra monitor corporation

Model 200X Series
Gas Sensor Monitors
Model 2001 - Combustible Gas
Model 2003 - Hydrogen Sulfide
Model 2006 - Carbon Monoxide

The Model 200X Series are compact, solid-state, fixed-installation single alarm monitors designed for continuous area monitoring of Combustible Gas, Hydrogen Sulfide, or Carbon Monoxide.

The Model 200X Series consists of three separate gas monitors, Model 2001 for Combustibles Model 2003 Hydrogen Sulfide and Model 2006 for Carbon Monoxide. A red LED (light-emitting diode) and audible alarm activate when the concentration of gas exceeds the factory-set (and user-adjustable) level. A green LED indicator on the monitor shows that power is connected and it is a safe condition.

The standard configuration has a buzzer and normally operating open relay, a fail-safe normally operating closed relay is field selectable.

All the electronic circuitry needed to operate the monitor, except the DC input power, is contained in a compact unit. It may be mounted in any orientation. For a single-monitor installation and a local alarm, the accompanying AC-to-DC power supply may be plugged into a standard AC source. The monitors accept 9 - 24 VDC.

Semiconductor-Type Sensor

A solid-state semiconductor-type sensor and associated electronic circuitry ensure trouble-free, long-term operation. There are no pumps, filters or chemical cells to replace or maintain. Except periodic calibration to verify the alarm setting, no attention is required after installation. The user may adjust the alarm level by using a different calibration gas concentration.

A sensor self-check feature will flash the LEDs on and off alternatively and sound an interrupted tone as a warning should the sensor fail (open circuit).

Remote Alarm Available

If a remote alarm is desired, the Model 2102 Dual Channel Alarm Panel can be connected up to 500 feet from the monitors.

Features

- Self-check feature signals sensor failure
- Optional normally operating closed relay
- No chemical cells to replace, no periodic maintenace other than routine claibration
- All the electronic circuitry needed to operate the monitor contained compact unit, power suplly plugs into standard AC source

Benefits

- Reliable operation
- Fail-safe configuration
- Maintenance free operation
- Quick easy installation and connection to alarm panel

Sierra Monitor Corporation 1991 Tarob Court Milpitas, CA 95035 (408) 262-6611 (800) 727-4377 Fax: (408) 262-9042

Model 2001 Combustibles Gas Monitor

The Model 2001 can detect a wide range of combustibles. Typical applications include combustible gas monitoring in basements near waste dumps, manhole, tanks, parking garages and vehicle maintenance facilities, laboratories, chemical plants, and more.

Model 2003 Hydrogen Sulfide Monitor

The Model 2003 can be used in such typical applications as waste water treatment plants, laboratories and chemical plants.

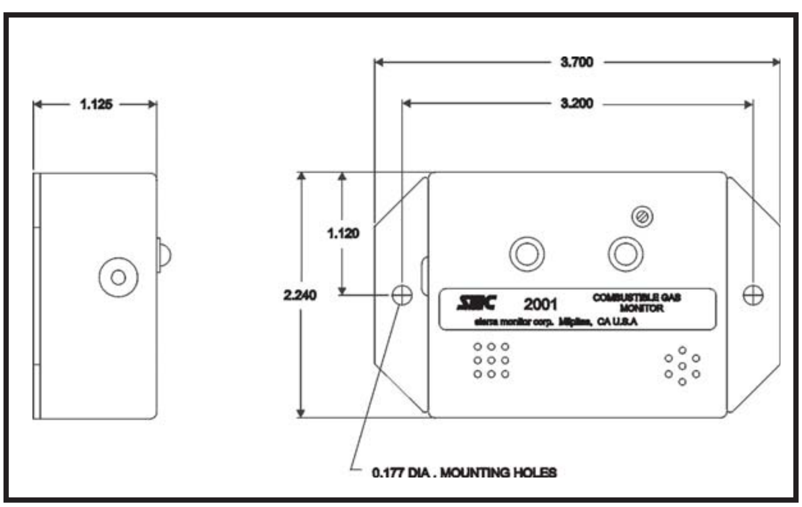
Model 2006 Carbon Monoxide Monitor

The Model 2006 Carbon Monoxide Gas Sensor Module can be used to provide an early warning of CO accumulation in tanks, laboratories, chemical plants, parking garages, vehicle test facilities and more.

SPECIFICATIONS

INDICATORS:	
Visual:	Green LED for Monitor “ON"/Safe Red LED for Alarm LEDs oscillate on/off for sensor failure
Audible:	Sustained alarm tone for as long as gas is present. Interrupted tone or sensor failure.
SENSOR TYPE:	Solid-State Metal Oxide Semiconductor
RANGE;	(at 50% relative humidity)
Model 2001	300-2,000 ppm Hydrogen 500-10,000 ppm Methane
Model 2003	10-50 ppm Hydrogen Sulfide (H_2S)
Model 2006	50-500 ppm Carbon Monoxide (CO)
FACTORY ALARM SETPOINT:	
Model 2001	1000 ppm Methane
Model 2003	50 ppm H_2S
Model 2006	100 ppm CO
INPUT:	9 - 24VDC (±1V), 250 mA Plug-in 120 VAC AC/DC Power Supply is provided

OUTPUT:	0.5 AMP dry contact. 100 VDC, 130 VAC Nominal 5 volts DC, source 25 mA, SAFE and ALARM signals 70 dB buzer. TTL interface to Model 2102 Alarm Panel is user configurable.
RESPONSE TIME:	
Model 2001	Less than 30 seconds
Model 2003	Less than 60 seconds
Model 2006	Less than 30 seconds
PERIODIC MAINTENANCE:	None, other than routine calibration
OPERATING TEMPERATURE RANGE:	-4°F to158°F -20°C to 70°C
ENCLOSURE MATERIAL:	Aluminum
SIZE:	3.7 x 2.2 x 1.1 in. (9.4 x 5.7 x 2.8 cm)
WEIGHT:	3.8 oz (108 g)
APPROVAL:	UL 61010-1:2001 CSA-C22.2



ORDERING INFORMATION

Combustible Gas	2001-00
Hydrogen Sulfide	2003-00
Carbon Monoxide	2006-00

GAS SENSOR MODULES

MODELS 201-00
MODELS 203-00
MODELS 206-00

MODELS 2001-00
MODELS 2003-00
MODELS 2006-00

Sierra Monitor Corporation
1991 Tarob Court, Milpitas, CA 95035
(408) 262-6611
(800) 727-4377
Fax: (408) 262-9042
www.sierramonitor.com

GAS SENSOR MODULES

MODELS 201-00
MODELS 203-00
MODELS 204-00

MODELS 2001-00
MODELS 2003-00
MODELS 2006-00

Products are TUV approved to EN61010-1:2001 and have only been evaluated for safety for ordianry locations and not evaluated for performance.

APPLICABILITY & EFFECTIVITY

This manual provides instructions for the following Sierra Monitor products:

Model	Description
201-00	Combustible Gas Monitor - Outdoor
203-00	Hydrogen Sulfide Monitor - Outdoor
206-00	Carbon Monoxide Monitor - Outdoor
2001-00	Combustible Gas Monitors - Indoor
2003-00	Hydrogen Sulfide Monitors - Indoor
2006-00	Carbon Monoxide Monitor - Indoor

The instructions are effective for the above models as of November 2002

Instruction Manual Part Number: T10002
Rev E4

TABLE OF CONTENTS

1.0 PRODUCT DESCRIPTION

1.1 Introduction

The Sierra Monitor Gas Sensor Modules consist of two series of fixed-installation, single-alarm products, the 20X Series is an explosion proof outdoor model, and the 200X Series is in a general purpose indoor enclosure. Both series include monitors for Combustible Gas, Hydrogen Sulfide, and Carbon Monoxide. Both series also include a dry contact relay. See Table 1.1 for a full list of available configurations.
This manual provides instructions for both 20X and 200X series Gas Sensor Modules.

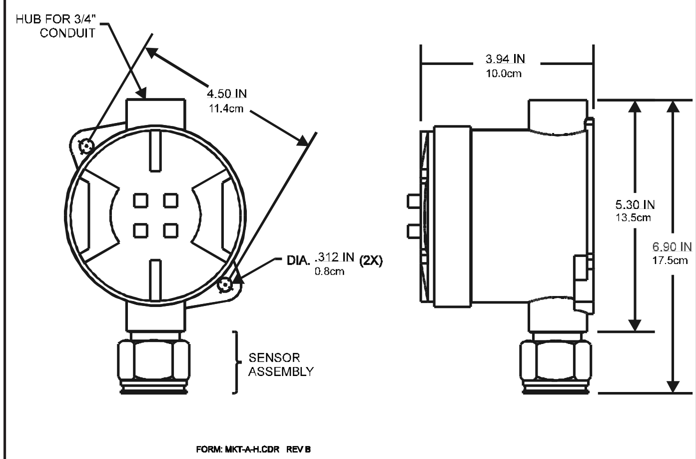


Figure 1.1 Outline View - 20X Series

1.2 Application

The Gas Sensor Modules are designed for qualitative continuous area monitoring of Combustible Gas, Hydrogen Sulfide or Carbon Monoxide where the gas being monitored is not normally present.

If the equipment is used in a manner not specified by Sierra Monitor Corporation, the protection provided by the unit is impaired.

1.3 Configuration

1. Model 20X Series

The Model 20X series consists of three separate gas modules, Model 201 for Combustibles, Model 203 for Hydrogen Sulfide and Model 206 for Carbon Monoxide. An alarm signal is activated when the concentration of gas exceeds the factory-set (and user-adjustable) level. The signal may be used to activate a remote alarm, fan or process controller.

Contact Sierra Monitor for specifics on the devices that can be interfaced with these gas sensor modules. In addition, all versions include, as standard, a 0.5 amp, dry contact relay, which can be configured as normal operating open or fail safe, normally operating closed.

A durable, cast aluminum explosion-proof enclosure houses the sensor electronics. The enclosure provides sealing for hazardous areas - Class I, Division 1, Groups C, D. The sensor with a porous metal cover is assembled in an aluminum housing that screws directly into the electronics enclosure. The cover protects the sensor and acts as a flame-arrestor. The monitor can be installed up to 500 feet from the remote power source.

Model	Gas	Outdoor	Indoor	TTL	Relay	Buzzer
201-00	Combustibles	X		X	X	
203-00	H_2S	X		X	X	
206-00	CO	X		X	X	
2001-00	Combustibles		X	X	X	X
2003-00	H_2S		X	X	X	X
2006-00	CO		X	X	X	X

Table 1.1 Gas Module Configurations

2. Model 200X Series

The Model 200X Series consists of three separate gas monitors, Model 2001 for Combustibles, Model 2003 for Hydrogen Sulfide and Model 2006 for Carbon Monoxide. A red LED (light-emitting diode) and audible 70 dB alarm activate when the concentration of gas exceeds the factory-set (and user-adjustable) level. A green LED indicator on the monitor shows that power is connected and it is a safe condition.

The standard configuration has a buzzer and normally operating open relay. This configuration can be changed by the user. (See table 2.1)

The 200X-00 series module includes a AC-to-DC power supply that may be plugged into a standard AC source. The device may also accept 9 - 24 VDC.

End user must use a Listed/Certified Class 2 output power source. For indoor applications, where the 200X is used, a Class 2 power supply is provided.

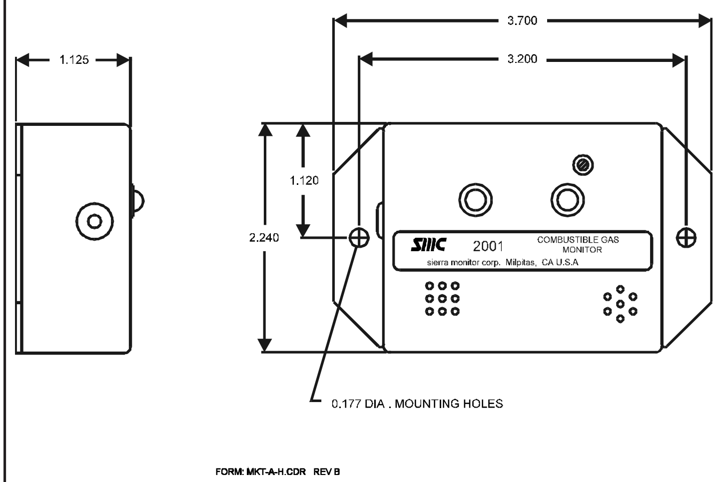


Figure 1.2
Outline View - 200X Series

3. Semiconductor-Type Sensor

A solid-state semiconductor-type sensor and associated electronic circuitry ensure trouble-free, long-term operation. All the electronic circuitry needed to operate the monitor, except the DC input power, is contained in a compact unit. There are no pumps, filters, or chemical cells to replace or maintain. Except for periodic calibration to verify the alarm setting, no attention is required after installation. The user may adjust the alarm level by applying a different calibration gas concentration.

A sensor self-check feature will flash the alarms on and off alternatively should the sensor fail (open circuit). The alarm flash includes LEDs, audible alarm, relay and alarm signal as applicable. On both the 20X and 200X series, the alarm output oscillates to indicate sensor failure.

4. Remote Alarm Available

If a remote alarm is desired, Sierra Monitor's Alarm Panel, Model 2102 Dual Channel can be connected up to 500 feet away from the monitors.

2.0 QUICK START

2.1 Overview

The Gas Sensor Module has been supplied factory calibrated and ready for immediate installation and operation. An installer familiar with installation and operation of gas detection products can use this section to begin immediate use of the monitor.

2.2 Wiring

Each module requires four-conductor wiring (two wires for power and two wires for the signal). See section 6.3 and Table 2.1 for wiring instructions.

2.3 Module Installation

1. Model 20X Series

The module can either be installed on the end of a 3/4" conduit, or attached to a vertical surface using the mounting flange on the enclosure. Two important warnings:

- **The installation must meet any hazardous environmental codes for AC/DC Electrical instrumentation.**
- **The sensor module enclosure mounting must be far enough away from any vertical surface to allow removal and replacement of the sensor assembly which is threaded into the second 3/4" conduit hub.**

2. Model 200X Series

The Model 200X series are designed to mount on any indoor vertical surface. Mount the monitor in the desired location using the adhesive backing provided with the module or with screws through the mounting flange. All units are shipped with the plug-in AC/DC power supply connected to the monitor so the operator simply plugs the power supply into a nearby AC outlet.

- **Installation must be in accordance with all local codes, and/or NEC.**

2.4 Wiring Connection

Terminal positions on the electronics board are as follows:

Terminal	Function
TB1-1	+ VDC (9 – 24)
TB1-2	GND (0VDC)
TB2-1	Relay NC (Normally Closed) or Output to Model 2102 Safe
TB2-2	Relay Common
TB2-3	Relay NO (Normally Open) or Output to Model 2102 Alarm

Table 2.1

Refer to section 6.3 for details on wiring the gas sensor module to a power supply or alarm panel.

2.5 Start-up & Operation

To begin operation of the Gas Sensor Module plug in the AC/DC power supply module (for the Model 200X Series) or provide 9 - 24 VDC from a regulated power supply such as one of the Sierra Monitor Alarm Panels, 2102-XX. Use any Listed/Certified Class 2 output power source each time the sensor module is powered up it will perform a warm-up for 2 - 60 minutes.

During warm-up the monitor will, first, cycle through safe/alarm/safe condition at one hertz. This will be followed by a short period of continuous alarm before warm-up is completed.

(NOTE: For Models 206 and 2006 that have been off power for extended periods, the warm-up alarm may sound for several hours.)

2.6 Configuration

The default configuration for each module is to operate with a buzzer and a normally operating open (NOO) relay. The user can change this configuration using the jumpers provided. Refer to table 6.2.

3.0 OPERATION

3.1 Introduction

Under normal conditions the gas sensor module does not require operator or technician intervention. The following are conditions under which the module requires attention:

- Routine periodic calibration
- Sensor replacement on a planned schedule or when a sensor failure occurs.
- Periodic cleaning as necessary.

3.2 Alarms

Three alarm conditions are possible. These can be detected visually at the optional Sierra Monitor controller and at the module (externally on the 200X Series or internally on the electronics board of the 20X Series).

Warm-Up Alarm

Oscillating (On/Off) contact closure and "red/green" visual indication when power is first connected to the module, followed by a continuous closure of approximately 2-60 minutes indicating warm-up.

Buzzer	Relay	Relay Fail Safe
On/Off	Oscilating	Oscilating

Gas Alarm

Sustained contact closure and solid red light (once the warm-up time is completed) indicating the presence of gas at, or above, the pre-set alarm limit.
Table 2.1

Buzzer	Relay	Relay Fail Safe
On	Closed	Open

Trouble Alarm

Interrupted contact closure and "red/green" visual indication (once the warm-up time is completed) after unit has been in operation, indicating either a failed sensor or calibration problems.

Buzzer	Relay	Relay Fail Safe
On/Off	Oscilating	Oscilating

4.0 CALIBRATION

4.1 Factory Calibration

The module has been factory calibrated to alarm as indicated in Table 4.1 or as marked on the calibration tag shipped with the module.

Calibration			
Model	**Time**	**Gas**	**cc/min**
201/2001	30 sec.	1000 ppm CH4	50
203/2003	1 min.	50 ppm H2S	50
206/2006	1 min.	100 ppm CO	50

Table 4.1

4.2 Frequency of Calibration

The manufacturer recommends that the calibration of each gas sensor module be verified monthly during the first three months of operation and then quarterly. More frequent checks are necessary during periods of extreme humidity and temperature changes. The monitor should have operated continuously (uninterrupted) for at least 24 hours prior to calibration adjustment.

4.3 Calibration Process

The output signal of the gas sensor module is calibrated using a calibration gas mixture containing a known concentration of the gas of interest and a balance of air. The concentration of the span gas must be within the full scale of the sensor module and must be equal to the alarm point desired.

Calibration requires application of the span gas to the sensor and adjustment of the sensitivity adjustment potentiometer.

Warning: During calibration the alarm will turn on and remote alarms connected to the alarm relays will be activated. Disable the remote alarm if necessary.

4.4 Equipment Required

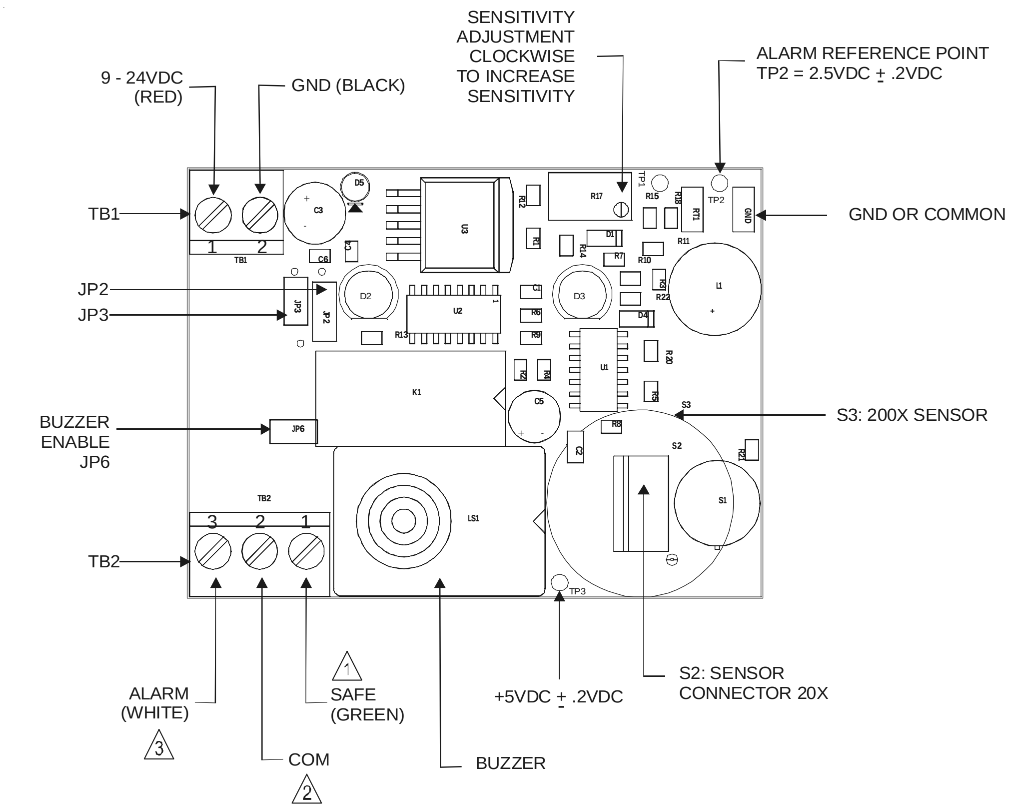
The following tools and equipment will be required for calibration:

- Jewelers Screwdriver
- Calibration Gas
- Calibration gas delivery system

For accurate calibration use a gas mixture at the required concentration mixed in an air balance, rather than with an inert gas like nitrogen. This gas and the required delivery equipment such as the Model 1200-26 Calibrator is available from Sierra Monitor Corporation.

4.5 Calibration Procedure

1. The monitor should be in the safe condition prior to calibration (green LED “ON”).
   - **Be sure that the area is non-hazardous before proceeding.**
   - **Disable alarm devices**
2. On the 20X, remove the cover prior to exposing the sensor with gas. On the 200X series (see Figure 1.1 or 1.2) the sensor is in the lower right hand corner of the electronics board and the cover does not need to be removed.
3. Apply calibration gas directly to the sensor.
4. If the monitor alarms (red LED “ON”) within one minute and stops within one minute of the removal of the calibration gas, the monitor is in calibration and requires no adjustment.
5. If the monitor fails to alarm within one minute of the application of the gas, use a jeweler’s screwdriver to adjust the sensitivity adjustment potentiometer (R4, Fig. 4.1) clockwise until the alarm turns “ON”.
6. If the monitor fails to stop alarming within one minute of removal of the gas, adjust the potentiometer counterclockwise until the alarm stops.
7. After adjustment, repeat the application and removal of gas to verify calibration.
8. When the calibration is complete, reconnect any alarm equipment as necessary.



1 WHEN IN SAFE CONDITION, VOLTAGE DC = 4.0 ± .5V

2 COMMON RELAY CONTACT

3 WHEN IN ALARM CONDITION, VOLTAGE DC = 4.0 ± .5V

Figure 4.1
Electronics Board

5.0 SERVICE

5.1 Enclosure Replacement

The Model 20X enclosure should be replaced if the lid threads or conduit threads have been damaged, or if the enclosure has corroded sufficiently that it no longer meets the required NEMA classification.

To replace the enclosure follow the electronics board and sensor removal instructions, remove the damaged enclosure from its conduit or wall mounting, install a new enclosure and continue the electronics board and sensor assembly replacement instructions.

5.2 Electronics Board Replacement

The electronics assembly should be replaced when it is determined that it is unreliable, noisy or cannot be adjusted for calibration. This may occur due to age, corrosion or failed components.

To replace the electronics assembly in the Model 20X Series:

1. Confirm that the system power has been removed.
2. Remove the lid of the main enclosure.
3. Disconnect the sensor from the plug on the lower right hand corner of the board.
4. Disconnect power and signal wires from terminal strip TB1 and the wires at TB2.
5. Press closed the two plastic holders retaining the electronics board and remove the board.
6. Reverse the preceding steps to install the new electronics board.
7. Restore power and allow a minimum of 30-60 minutes for stabilization before recalibration if the unit was off power for less than 60 minutes.

To replace the electronics assembly in the Model 200X Series:

1. Confirm that the system power has been removed.
2. Remove unit from mounting surface.
3. Remove the cover of the main enclosure by removing the two small screws on the top and bottom of the enclosure.
4. Disconnect power and signal wires from terminal strip TB1 and the wires from TB2.
5. Remove the two screws retaining the electronics board from the back of the enclosure.
6. If you are not replacing the sensor, unplug it from the electronics board.
7. Reverse the preceding steps to install the new electronics board.
8. Restore power and allow a minimum of 30-60 minutes for stabilization before recalibration if the unit was off power for less than 60 minutes.

5.3 Sensor Replacement

The gas sensor needs replacement when:

- It is no longer possible to obtain correct calibration
- The failed sensor alarm (oscillating red/green LED) is on
- The sensor output signal is noisy, causing incorrect gas alarms.

To replace the sensor on the Model 20X series:

1. Confirm that the system power has been removed.
2. Remove the cover from the main enclosure.
3. Unplug the sensor connector on the lower right hand corner of the electronics board.
4. Unscrew the sensor assembly from the end of the enclosure.
5. Reverse the preceding steps to install the new sensor assembly.
6. Restore power and allow a minimum of 24 hours for stabilization before recalibration. The calibration should be re-verified after 6 days of continuous operation.

To replace the sensor on the Model 200X series:

1. Confirm that the system power has been removed.

2. Remove the cover from the main enclosure.

3. Unplug the sensor from the lower right hand corner of the electronics board.

4. Reverse the preceding steps to install the new sensor assembly.

5. Restore power and allow a minimum of 24 hours for stabilization before recalibration. The calibration should be re-verified after 6 days of continuous operation.

6.0 INSTALLATION

6.1 Gas Sensor Module Locations

The gas sensor module is a diffusion type sensor that should be located close to the anticipated source or destination of the gas hazard. For heavy gases such as H_2S install the module within 24 inches of the ground. For lighter gases such as CO and combustible gases use a higher elevation.

After optimum locations are determined based on the above recommendations, consideration should be given to placing the sensors in locations that are accessible for calibration service. Slight adjustments to the location of the sensor may have little impact on effectivity but major effect on accessibility.

6.2 Mounting

1. Model 20X Series

Where possible sensor modules should be installed with the sensor facing vertically down. The lid of the sensor module should face out for easy access.

Sensors may be mounted directly onto the end of a vertical conduit, or bracketed to a vertical surface using the two mounting flanges. Insure that the body of the enclosure is at least 1" from the wall so that the sensor assembly can be rotated for removal and replacement.

2. Model 200X Series

Where possible sensor modules should be installed on a vertical surface. The module can be mounted either using screws through the mounting flanges or using an adhesive tape provided with the unit.

These modules are intended for use with the plug-in AC/DC power supply shipped connected to the unit. The module should be mounted in an area convenient for the plug-in power supply. The power supply is removed if connecting the module to a Sierra Monitor Alarm Panel. If the power supply provided by Sierra Monitor is not used, user must employ any wiring methods according to the US NEC and the Canadian CEC and Class 2 power source requirements.

6.3 Wiring

Interconnect wiring from the controller to the module is by 4 conductor 22 AWG (or lower AWG) cable, conduit as necessary. Shielding is not required.

For installations where the distance from the controller to the sensor is greater than 500 feet, 18 AWG cable is recommended.

The terminal strip on the electronics board in the module. The wiring must be connected as indicated in Figure 6.1 depending upon the controller or relay configuration being used.

6.4 Power Supply

The power supplied by the controlling device or an external power supply must meet the following specifications:

Voltage:	9 - 24 VDC (It must be a Listed/Certified Class 2 output power source.
Current:	250 mA

The Model 200X Series includes a plug-in AC/DC power supply.

Terminal	Function
TB1-1	+ VDC (9 – 24)
TB1-2	GND (0VDC)
TB2-1	Relay NC (Normally Closed) or Output to Model 2102 Safe
TB2-2	Relay Common
TB2-3	Relay NO (Normally Open) or Output to Model 2102 Alarm

Table 6.1

6.5 Alarm Configuration

The Model 20X/200X allows the user to select the alarm/output configuration using jumpers. Please refer to table 6.2 to determine how to configure the monitor for your required condition.

Model 20X or 200X Configured with Alarm Relay Output				
Configuration Jumpers				
Buzzer Active		Relay Operation		
Yes	No	Normally Not Energized		Normally Energized
Default		Default		
Install Jumper JP6	Remove Jumper JP6 (Best for 20X)	Install Jumper JP2 pins 1-2		Install Jumper JP2 pins 2-3
Wiring Terminations				
Power Supply		Output Terminals		
TB1-1	TB1-2	TB2-1	TB2-2	TB2-3
+ DCV (9-24 VDC)	0 DC Common	NC	Common	NO
Model 20X or 200X Configured for Interface to Model 2102 Alarm Panel				
Configuration Jumpers				
Buzzer Active		Relay Operation		Interface Selection
Yes	No	Normally Not Energized	Normally Energized	Model 2102
Default		Default		
Install Jumper JP6	Remove Jumper JP6 (Best for 20X)	N/A	N/A	Install Jumpers JP3 pins 1-2 JP2 pins 1-2
Wiring Terminations				
Power Supply		Output Terminals		
TB1-1	TB1-2	TB2-1	TB2-3	TB2-2
+ DCV To Model 2102 Terminal J5 -2 or J6-2	0 DC To Model 2102 Terminal J5 -3 or J6-3	Safe To Model 2102 Terminal J5 -1 or J6-1	Alarm To Model 2102 Terminal J5 -4 or J6-4	Not Used

Table 6.2
Jumper Configuration and Wiring Terminations

In addition, the TB2 contacts need to be properly selected to ensure that the Model 2102 receives the correct alarm signal from the Model 20X/200X. (See Table 6.3)

Relay Operation			
Normally Not Energized			
	TB2-1 NC	TB2-2 Common	TB2-3 NO
No Power	Connected		Open
Sensor Fail	Oscillating		
Safe	Connected		Open
Alarm	Open	Connected	
Normally Energized - Fail Safe			
	TB2-1 NC	TB2-2 Common	TB2-3 NO
No Power	Connected		Open
Sensor Fail	Oscillating		
Safe	Open	Connected	
Alarm	Connected		Open

Table 6.3
Relay Operating States

6.6 Explosion Proof Installation

Where area classification requires explosion proof (NEMA-7) installation, a sealing fitting will be required immediately above the gas sensor module enclosure.

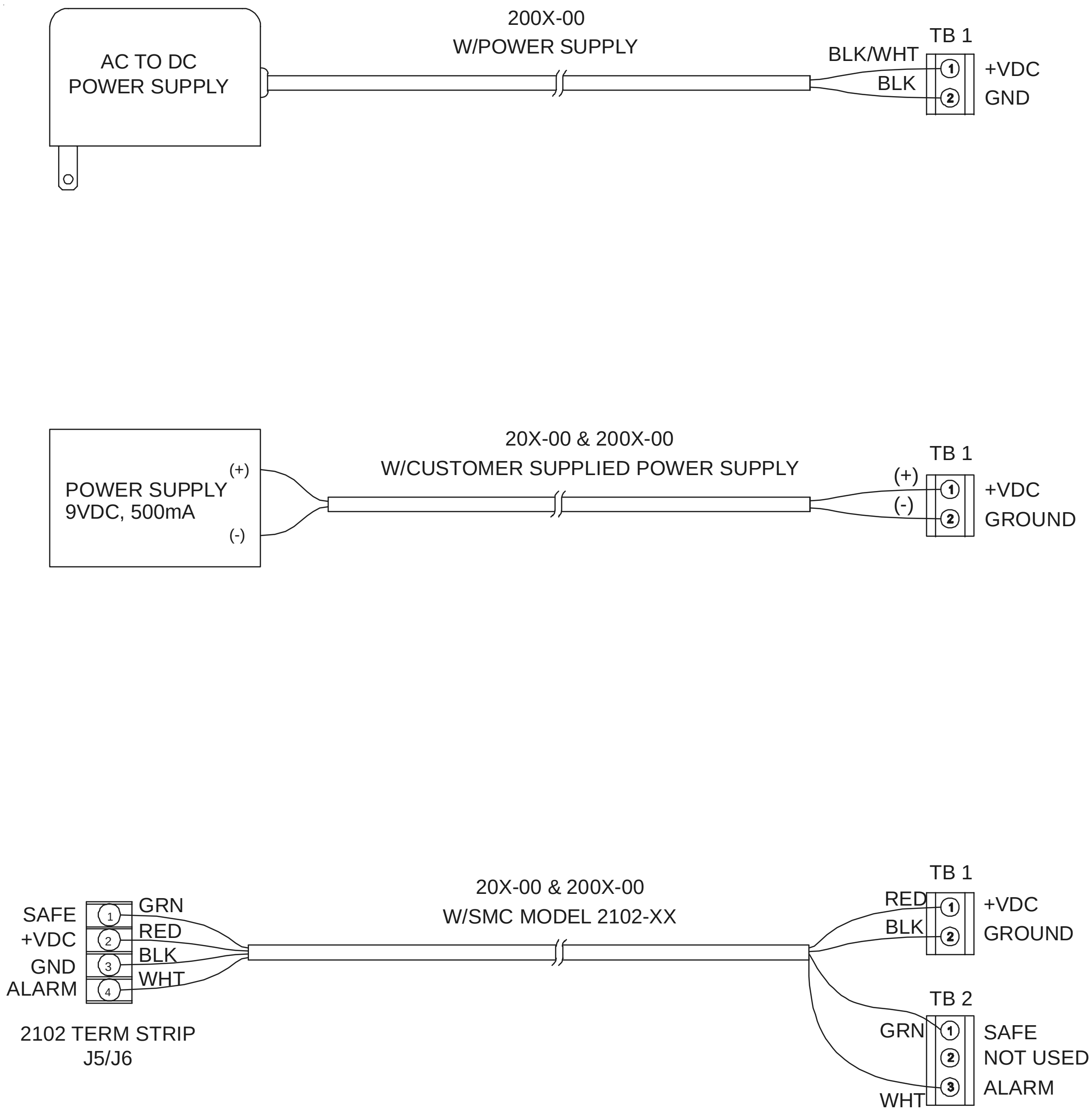


Figure 6.1
Interconnect Wiring Table

7.0 SPECIFICATIONS

Sensor Type:	Solid-State Metal Oxide Semiconductor
Visual Indicators:	
	Green LED for Monitor "ON/Safe", Red LED for Alarm LEDs oscillate ON/OFF for sensor failure (LEDs are external on the 200X Series, and internal for calibration on 20X Series)
Input:	
	9 - 24 VDC ($\pm$1V), 250 mA 200X Series includes a Class 2 plug-in 120 VAC AC/DC Power Supply. Wiring methods should follow US NEC and the Canadian CEC and Class 2 power source requirements. Alternative power supplies should be Listed/Certified Class 2 output power source.
Range:	(at 50% relative humidity)
Model 201/2001	300-2,000 ppm Hydrogen, 500-10,000 ppm Methane
Model 203/2003	10-50 ppm Hydrogen Sulfide (H_2S)
Model 206/2006	50-500 ppm Carbon Monoxide (CO)
Factory Alarm Setpoint:	
Model 201/2001	1000 ppm Methane
Model 203/2003	50 ppm H_2S
Model 206/2006	100 ppm CO
Output:	
20X/200X-00 Series	0.5 amp dry contact, normally open, 100 VDC, 130 VAC and audible buzzer Nominal 5 volts DC, source 25 mA, SAFE and ALARM signals are user configurable
Response Time:	
Model 201/2001	Less than 30 seconds
Model 203/2003	For 50 ppm alarm, if 50 ppm H2S is present: 1-4 minutes, if >250ppm H2S is present: 30-90 seconds
Model 206/2006	Less than 30 seconds
Periodic Maintenance:	None, other than routine calibration
Operating Temperature Range:	-4^{o}F to 158^{o}F (-20^{o}C to 70^{o}C)
Enclosure Material:	
Model 20X Series	Cast aluminum for protection against galvanic corrosion
Model 200X Series	Stamped aluminum sheet metal
Size:	
Model 20X Series	6.75 x 4.0 x 3.5 in. (17.1 x 10.2 x 6.0 cm)
Model 200X Series	2.7 x 2.2 x 1.0 in. (7.0 x 5.7 x 2.5 cm)
Weight:	
Model 20X Series	24 oz (678 g)
Model 200X Series	3.8 oz (108 g)

8.0 LIMITED WARRANTY

SIERRA MONITOR CORPORATION warrants its products to be free from defects in workmanship or material under normal use and service for two years after date of shipment. SMC will repair or replace without charge any equipment found to be defective during the warranty period. Final determination of the nature and responsibility for defective or damaged equipment will be made by SMC personnel.

All warranties hereunder are contingent upon proper use in the application for which the product was intended and do not cover products which have been modified or repaired without SMC approval or which have been subjected to accident, improper maintenance, installation or application, or on which original identification marks have been removed or altered. This Limited Warranty also will not apply to interconnecting cables or wires, consumables (ie. calibration gases, batteries, sensors), nor to any damage resulting from battery leakage.

In all cases SMC's responsibility and liability under this warranty shall be limited to the cost of the equipment. The purchaser must obtain shipping instructions for the prepaid return of any item under this warranty provision and compliance with such instruction shall be a condition of this warranty.

Except for the express warranty stated above, SMC disclaims all warranties with regard to the products sold hereunder including all implied warranties of merchantability and fitness and the express warranties stated herein are in lieu of all obligations or liabilities on the part of SMC for damages including, but not limited to, consequential damages arising out of/or in connection with the use or performance of the product.

9.0 INDEX

Appendix A

Cross Sensitivity Reference Chart
for Combustible Gas Sensor Modules (201 & 2001)

Combustible Gas Modules will alarm in the presence of each of the listed gases at the concentration listed.

Gas	Concentration (PPM)
Methane	1000
Acetone	350
Acetonitrile	1000
Acrylonitrile	1000
Acetylene	4000
Acetic Acid	700
n-Butane	800
I-Butane	800
I-Butanol	700
2-Butanol	1000
1-Butanol	1000
t-Butanol	2000
Butanoic Acid	500
n-Butylamine	1500
Butylene	2000
Chloroform	160
Chlorobenzene	150
Chlorocyclohexane	100
Cyclohexane	1200
Cyclopentane	700
Diethylamine	800
Diethylketone	700
Dipropylether	400
Ethane	300
Ethanol	300
Ethylene	600
Ethyl Chloride	70
Ethylnitrile	1500
Formic Acid	2000
Freon 113	55

Gas	Concentration (PPM)
n-Heptane	1500
n-Hexane	1100
1-Hexanol	1500
Hydrogen	400
Methanol	500
Methylene Chloride	90
Methyl Bromide	150
Methyl Chloride	150
Methyl Ethyl Ketone	500
Methyl Propyl Ketone	500
Nitroethane	1000
Nitromethane	2000
1-Pentanol	1200
Pentanoic Acid	500
Propanal	500
Propane	900
n-Propanol	300
i-Propanol	800
Propanoic Acid	200
n-Propylamine	1500
i-Propylamine	1000
Propyl Chloride	100
Propylene	2000
Pyridine	1000
Tetrachloroethylene	150
Trichlorethylene	70
Triethylamine	800

Appendix B

Accessories and replacement parts

Alarm Panels

Model 2102-00	Alarm Panel - 2 channel
Model 2102-01	Alarm Panel - 2 channel with audible

Calibration Accessories

1200-26	Gas Sensor Calibrator w/2 gas cylinders (specify gas type/conc)
1290-03	Gas Cylinder - Methane 5000 PPM
1290-04	Gas Cylinder - Methane 1000 PPM
1290-05	Gas Cylinder - Carbon Monoxide 100 ppm
1290-07	Gas Cylinder - Hydrogen 500 PPM

Replacement parts

SPD21513	Sensor for 203-00
SPD22034	Sensor for 201-00
SPD22035	Sensor for 206-00
SPD22107-201	Electronics Assembly for 201-00
SPD22107-206	Electronics Assembly for 206-00
SPF22107-2001	Electronics Assembly for 2001-00
SPF22107-2003	Electronics Assembly for 2003-00
SPF22107-2006	Electronics Assembly for 2006-00
SPD32057-1	Enclosure for 20X
SPF33003	Sensor for 2001-00
SPF33007	Sensor for 2006-00
SPF33008	Sensor for 2003-00
SPF69020	Power Supply 9 VDC for 200X

Sierra Monitor Corporation
1991 Tarob Court, Milpitas, CA 95035
(408) 262-6611

Appendix C

Reference Model

The list provides a reference to the older 20X/200X part numbers.

Model #	Gas	Outdoor	Indoor	Jumpers Are Set For
201-00	Combustibles	X		2102 Configuration, without Buzzer, without Relay
201-10	Combustibles	X		Normally Open; without Buzzer
201-11	Combustibles	X		Normally Closed; without Buzzer
203-00	H2S	X		2102 Configuration, without Buzzer, without Relay
203-10	H2S	X		Normally Open; without Buzzer
203-11	H2S	X		Normally Closed; without Buzzer
206-00	CO	X		2102 Configuration, without Buzzer, without Relay
206-10	CO	X		Normally Open; without Buzzer
206-11	CO	X		Normally Closed; without Buzzer
2001-00	Combustibles		X	2102 Configuration with Buzzer, without Relay
2001-10	Combustibles		X	Normally Open; without Buzzer
2001-11	Combustibles		X	Normally Closed; without Buzzer
2003-00	H2S		X	2102 Configuration with Buzzer, without Relay
2003-10	H2S		X	Normally Open; without Buzzer
2003-11	H2S		X	Normally Closed; without Buzzer
2006-00	CO		X	2102 Configuration with Buzzer, without Relay
2006-10	CO		X	Normally Open; without Buzzer
2006-11	CO		X	Normally Closed; without Buzzer

Chan, Valerie

From: Chan, Valerie
Sent: Thursday, April 25, 2013 1:18 PM
To: 'John Sherrard'; 'Laura.Marshall@epa.state.oh.us'
Cc: 'Renninger, Steven'; 'Patterson.Leslie@epamail.epa.gov'; Loney, Adam; Project Email Hold
Subject: FW: Suspension of weekly methane monitoring ~COR-038443-62~
Attachments: 038443-62Misc-CGI Fact Sheet.docx; 038443-62Misc-Instructions.docx; 038443-62Misc-Sum.docx

Hello,

Answers to the questions about the methane monitors at the South Dayton Dump and Landfill Site are as follows:

What CH4 concentration is it set to alarm at?
The monitor is set to alarm at 0.05% methane / 500 ppm / 1% of the LEL.

What happens when it alarms? Is it solely an audible alarm at the unit? (Would someone at the front desk at Sim Trainer hear it?)
The alarm consists of a 70 dB buzzer, which emits a sustained alarm tone for as long as the gas is present. The meter also contains visual indicators: green for 'on' and safe modes; red for alarm. The alarm would likely not be audible if shooting was ongoing in the Sim Trainer range; however, should be audible at all other times.

Is it monitored remotely at all?
Not currently, but the Respondents are taking measures to obtain and install remote alarm panels (Sierra Gas Alarm Panel Model 2102-1) for both meters

What is the action plan if it alarms? Immediate and contingency responses?
Please refer to attachments for action plan steps

What is the calibration schedule? How often will CRA check on the unit to make sure it is up and operating?
The calibration schedule follows manufacturer recommendations: monthly for first three months of operation, quarterly thereafter. CRA has completed calibrations on March 21, and April 18, 2013.

Is there a battery backup for when the power goes out?
Not currently. Respondents are taking measures to obtain battery back-up (Uninterrupted Power Supply) systems for both meters

Thank you,
Valerie

Valerie Chan, P. Eng.
Conestoga-Rovers & Associates (CRA)
651 Colby Drive
Waterloo, ON N2V 1C2

Phone: 519.884.0510
Fax: 519.884.0525
www.CRAworld.com

From: John Sherrard [mailto:JSherrard@css-dynamac.com]
Sent: Thursday, April 04, 2013 2:27 PM
To: Chan, Valerie; Loney, Adam
Subject: Ssuspension of weekly methane monitoring

Adam and Valerie,

In order for OSC Renninger to make a decision whether weekly methane monitoring can be suspended at the two properties that have the LEL monitors, please answer the questions below from Ohio EPA

John Sherrard
Civil/Env. Engineer – Senior Project Manager
Dynamac Corporation
3923 North Cliff Lane
Cincinnati, OH 45220
513.703.3092
jsherrard@css-dynamac.com (new email address)

From: Marshall, Laura [mailto:Laura.Marshall@epa.state.oh.us]
Sent: Tuesday, March 19, 2013 10:41 AM
To: Leslie Patterson (Patterson.Leslie@epamail.epa.gov); Steven Renninger <Renninger.Steven@epamail.epa.gov> (Renninger.Steven@epamail.epa.gov)
Cc: John Sherrard
Subject: FW: March 14, 2013 Weekly Conference Call Meeting Minutes - South Dayton Dump & Landfill Site

Steve and Leslie,

I have looked at CRA's rationale and request to terminate the weekly methane monitoring in the two buildings at South Dayton Dump.

There are several issues with the reasoning within the request.

First, using the cited "explosive gas threshold limits" as the threshold for discontinuing monitoring may not be appropriate. At the site, we have additional threshold limits from ODH of 0.05% methane in indoor air, and 0.5% methane in sub-slab.

Second, there are concerns with the statement that methane sub-slab values have not been greater that 25% of the LEL from December 27, 2012 to February 28, 2012. First, while the sub-slab concentrations were less than 25% of the LEL during that period, they were not less than the 0.5% methane sub-slab ODH action level. Secondly, the reduction in sub-slab values during this time may just be a temporary, seasonal condition. No information is provided to show that this is not the case

However, it is valid to consider whether it is appropriate to reduce or discontinue the weekly sub-slab methane monitoring in the Valley Asphalt Bldg 2 and the Sim Trainer buildings. The weekly monitoring is disruptive to the tenants. Are the methane alarms in the buildings sufficient monitoring of the situation?

To determine whether the explosive gas alarms alone are sufficient monitoring, we need more information about the alarms. The only information we have is the name of the alarm. We should know some details about the alarms:

What CH4 concentration is it set to alarm at?

What happens when it alarms? Is it solely an audible alarm at the unit? (Would someone at the front desk at Sim Trainer hear it?)

Is it monitored remotely at all?

What is the action plan if it alarms? Immediate and contingency responses?
What is the calibration schedule? How often will CRA check on the unit to make sure it is up and operating?
Is there a battery backup for when the power goes out?

Perhaps CRA already has an O&M plan prepared for the units that they could share that would answer a lot of these questions.

Would you guys be available to discuss the issue prior to the call with CRA on Thursday afternoon? My schedule is fairly open until then, so just let me know.
Thanks,
Laura

APPENDIX C

FORMS

C.1 AIR SAMPLING FIELD DATA SHEET

C.2 BUILDING PHYSICAL SURVEY QUESTIONNAIRE

C.3 SSDS INSPECTION CHECKLIST

APPENDIX C.1

AIR SAMPLING FIELD DATA SHEET

AIR SAMPLING FIELD DATA SHEET

A) General Information

Date: ________________________________

Address: ________________________________

Sample Identification Number: ________________________________

Sample Canister Location: ________________________________

Sampler: ________________________________

Sample source:
- Indoor Air ❑ Sub-Slab ❑ Crawl Space ❑
- Exterior Soil Gas ❑ Outdoor Ambient Air ❑

Shipping Date: ________________________________

Canister Type: 6 L Summa Canister
Canister Serial No.: ________________________________

Flow Controller Serial No.: ________________________________

Were "Instructions for Occupants" followed? ❑ Yes ❑ No
If 'No', provide brief explanation: ________________________________

Indoor business activities conducted during sampling might interfere with sample results? ❑ Yes ❑ No

Building doors or windows were open during summer sample collection (typical business operations) ❑ Yes ❑ No

B) Meteorological & Ambient Conditions

Ambient Temperature: High _________ Low _______

Barometric Pressure: ____________ mm Hg

Average Humidity: ____________ % (percent)

Average Wind Direction: ____________ Average Wind Speed: ____________ mph

Outdoor air Methane (%): ____________ Outdoor CO2 (%): ____________

Inside / Crawl Space / Outdoor Air Sample Measurements (Circle one):

	Before Sampling	After Sampling	Preferential Pathways
Time:			
PID Reading (ppm):			
O_2 (%):			
CO_2 (%):			
Methane (%) (LandTec):			
Com. Gases (% LEL, LandTec)			
Com. Gases (% LEL, RKI)			

C) Purge Data

Purging Rate: ______________

Purge Start Time: ______________ Purge End Time: ______________

Duration of Purging: ____________

Purged Volume: _______________

Helium Leak Test

Time: _________________

Concentration (ppm): _________________ Pass / Fail

Post-purge Data

PID Reading (ppm): ___________

O_2 (%): ___________

CO_2 (%): ___________

Methane (%) (LandTec): ___________

Com. Gases (% LEL, LandTec) ____________

Com. Gases (% LEL, RKI) ____________

D) Sub-Slab Soil Vapor Sampling Information

	Pre-Sample / Start[1]	Post-Sample / Stop
Canister Vacuum ("Hg or mm Hg)[2]:	_______________	_______________
Time:	_______________	_______________
PID Reading (ppm):	_______________	_______________
O_2 (%):	_______________	_______________
CO_2 (%):	_______________	_______________
Methane (%) (LandTec):	_______________	_______________
Com. Gases (% LEL, LandTec)	_______________	_______________
Com. Gases (% LEL, RKI)	_______________	_______________
Basement Depth (ft below grade):	_______________	
Window Marked:	Yes/No	

[1] Collect and record pre-sample combustible gas values if SS sampling is started on a different day from helium leak tests.

[2] Final Canister vacuum must be between 1 to 10 "Hg

Was there significant precipitation[3] within 12 hours prior to (or during) the sampling event?

❑ Yes ❑ No

Describe the general weather conditions: ______________________________________
____
____

Provide Drawing of Sample Location(s) in Building

G) Comments

____
____
____

[3] Significant precipitation – more than 1 inch of rain in 24 hours.

APPENDIX C.2

BUILDING PHYSICAL SURVEY QUESTIONNAIRE

BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Date: ______________________ Time: ________________ Inspector: ____

Address: ____

Building Owner: ________________________________

Occupant Name: _________________________________

Contact Name: _________________________________

Phone Number: _________________________________

Time resident/employed in home/building? __________

Occupation: _______________________________________

Number and Age of Occupants Adults: ___________

Children: ___________

Site Layout: Parcel Number: ______ **Building:** ______

BUILDING TYPE: One-Story ____ Two-Storey ______ Multi-Storey ______ Brick _____ Siding _____ Stucco ____

(Circle One) Residential / Industrial / Commercial / Multi-use / Other (specify) ______________________________

If residential, what type (circle): Single family / Condo / Multi-family / Other (specify) _________________________

If multiple units, how many? _________

If commercial, what is the business? ___________________________ Hours of Occupation/Occupancy? _____________

Does the commercial property include residences (i.e., multi-use)? Y / N

If yes, how many? _____

DESCRIBE BUILDING: ____ **YEAR CONSTRUCTED**: ____________

Is the building insulated? Y/N How air tight? Tight / Average / Not Tight

Previous Uses: ____

WEATHER SEALS: General Condition: Good ______ Fair ______ Poor ______ Not Present ______

Are doors/windows kept open to allow for outdoor-to-indoor air exchange? ____________________________________

BASEMENT/: BOTTOM FLOOR	None	Finished	Unfinished	Depth below reference point (meters)	Floor covering
		❑			
Partial	❑	❑	❑	_________________	_____________
Full	❑	❑	❑	_________________	_____________
Crawl space	❑	N/A	N/A	_________________	_____________
Slab-on-grade	❑	❑	❑	_________________	_____________

Is the basement/bottom floor used as a living/work space area? (circle) Y / N

Number of floors at or above grade: _______

Depth of basement below grade: _______ ft. Basement Size: _______ ft^2

Foundation construction: Poured concrete ❑ Concrete block ❑ Cinder block ❑ Stone ❑

BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Foundation walls: Poured ❑ Block ❑ Stone ❑ Other ________________________

Foundation walls: Unsealed ❑ Sealed ❑ Sealed with __________________________________

Integrity of foundation walls: Good ❑ Fair ❑ Poor ❑

The basement/bottom floor is: Wet ❑ Damp ❑ Dry ❑ Moldy ❑

Any visual evidence of leakage through basement/bottom floor walls or floor Yes ❑ No ❑

Floor Construction: Poured concrete ❑ Wood ❑ Earth ❑ Brick ❑ Other: _______

Floor condition (cracks, drains): ____

Condition at floor/wall joint (if visible): ____

Any exterior openings from the basement/bottom floor:

❑ Vents ❑ Fans ❑ Windows
❑ Wall openings ❑ Utility pipe penetrations ❑ Other: ____________________

Type of ground cover outside of building: grass / concrete / asphalt / other (specify): _______

Sub-slab vapor/moisture barrier in place? Yes / No / Don't know Type of barrier: ________________

RADON SYSTEM: ❑ Yes ❑ No Is the system active or passive? Active / Passive

Do you have a sump?: Yes ❑ No ❑ Where: ____________________________(*show on figure*)

If yes, sealed ❑ open ❑ NA ❑ If yes, is there water in the sump?: Yes ❑ No ❑

Have there ever been a fire in the building?: Yes ❑No ❑

If yes, describe its location and extent: ____

Is there a laundry room located inside the house/building?: Yes ❑ No ❑

If yes, describe its location: ____

WATER AND SEWAGE

Is this building serviced with municipal water? Yes ❑ No ❑

Water well present?: Yes ❑ No ❑ Don't know ❑ Is well used for drinking water? Yes ❑ No ❑

Well location: ____________________ (*show on figure*) What do you use the well for?: ________________

Do you have a cistern?: Yes ❑ No ❑ Don't know ❑

If yes, describe its location: ____

Do you have a septic system?: Yes ❑ No ❑

If yes, describe its location: ______________________________________ (*show on figure*)

If yes, describe how septic system is cleaned: ____________________________________

GARAGE: Is there an attached garage? ❑ Yes ❑ No Describe: ____________________________

HEATING, VENTILLATION, AND AIR CONDITIONING

Type of heating system(s) used (circle all that apply, note primary)

Hot air circulation	❑	Heat pump	❑	Hot water baseboard	❑
Space heaters	❑	Stream radiation	❑	Radiant floor	❑
Electric baseboard	❑	Wood stove	❑	Outdoor wood boiler	❑

FURNACE: Location:____

Type: Gas	❑	Forced air	❑	Wood	❑
Oil	❑	Hot water	❑	Propane	❑
Electric	❑	Coal	❑	Other: ____________	

Does furnace have outside combustion air vent? _______________

Do you have a fireplace? Yes ❑ No ❑ Does fireplace have an outside combustion air vent? Yes ❑ No ❑

Do you use kerosene space heaters? Yes ❑ No ❑

AIR CONDITIONER: None ❑ Central ❑ Window units ❑

(If yes, which rooms and capacities?) ____

SPILL/CONTAMINANT SOURCE INFORMATION

Visual evidence of spills/releases: ____

Type of petroleum/VOC release? ____

When did the release occur? ____

What areas of the building have been impacted by the release? ____________________________

Are there any odors? ❑ Yes ❑ No If yes, describe the odors: ____________________________

Where are the release-related odors found? ____________________________________

Photo	*Direction*	*Subject*

Building Layout:
Parcel Number___________; Building ___________
Mark the following on the below Figure: Additions or Modifications; door/windows/loading docks kept open for air exchange; building compartmentalization, including size and locations of compartments

Building Occupant Questions (to be asked at time of sampling)

1. When was the last time dry-cleaned clothes were brought into the house/building?
   ❑ 0 to 5 days ago ❑ 6 to 10 days ago ❑ More than 10 days ago ❑ Don't dry-clean

2. When was your carpet installed?
   ❑ In the last six months ❑ More than six months ago ❑ No Carpet
   If yes, where and when was the carpet installed? ______________________

3. When was the last time your carpet was cleaned?
   ❑ In the last six months ❑ More than six months ago ❑ Never

4. Do you have any spot removers in the building?
   ❑ Yes ❑ No Details: ______________________

5. Do your hobbies include model building, arts and crafts, model railroading, or others that require paints, thinners, or glue? ❑ Yes ❑ No Details: ______________________

6. Do you perform automotive or other vehicle maintenance or repair at the building?
   ❑ Yes ❑ No Details: ______________________

7. Please review the following list and check items you know are in the building

❑ Latex caulk	❑ Latex paint	❑ Vinyl cove molding
❑ Linoleum tile	❑ Black rubber molding	❑ Vinyl edge molding
❑ Polystyrene foam insulation	❑ Adhesive removers	❑ Aerosol spray paints
❑ Other paints	❑ Air fresheners	❑ Degreasers
❑ Deodorants	❑ Disinfectants	❑ Furniture Polish
❑ Solvents	❑ Caulking	

8. Do you have pesticides in the building? ❑ Yes ❑ No ❑ Unsure

9. Do you have any spray insecticides in the building? ❑ Yes ❑ No ❑ Unsure

10. Have you painted any area of the interior of the building in the last 12 months? ❑ Yes ❑ No
    If yes, where and when? ______________________
    If yes, please indicate what paint you used ❑ Enamel ❑ Vinyl ❑ Latex
    ❑ Other: ______________________

11. Have you painted the exterior of your building in the last 12 months? ❑ Yes ❑ No
    If yes, please indicate what paint you used ❑ Enamel ❑ Vinyl ❑ Latex
    ❑ Other: ______________________

12. Where do you store your paint, thinner, pesticides, insecticides?

	Paint	*Thinner*	*Pesticides*	*Insecticides*
Garage	❑	❑	❑	❑
Basement	❑	❑	❑	❑
Storage shed	❑	❑	❑	❑
Other	❑	❑	❑	❑
Don't store these items	❑	❑	❑	❑

13. Have you purchased one of the following items in the last 12 months for the building?

❑ Rubberized door mat ❑ Computer ❑ Wiring

❑ Plastic shower curtain ❑ Printer ❑ Linoleum

❑ Wood stains or paint ❑ VCR

14. Do you have a computer printer in the building? ❑ Yes ❑ No If yes, what type? ______________________

15. Do you have a VCR/DVD in the building? ❑ Yes ❑ No

If yes, do you use cleaners to maintain it? ❑ Yes ❑ No If yes, what type? ______________________

16. Do you have pets residing in this building? ❑ Yes ❑ No

If yes, what type? __________________________________ If yes, number: ________________________________

17. Does anyone in the building smoke? ❑ Yes ❑ No

18. Have air fresheners been used recently? ❑ Yes ❑ No

When & what type of air fresheners were used? ____________________________

19. Is there a kitchen exhaust fan? ❑ Yes ❑ No

If yes, where does the kitchen exhaust fan vent? _____________________________

20. Is there a bathroom exhaust fan? ❑ Yes ❑ No

If yes, where does the bathroom exhaust vent? ______________________________

21. Are there odors in the building? ❑ Yes ❑ No

If yes, please describe: ____

22. Questions asked by Occupant that require follow-up. ____

____

____

____

APPENDIX C.3

SSDS INSPECTION CHECKLIST

SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS)
ROUTINE INSPECTION CHECKLIST
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Inspection Date ____________________
Inspection Time ____________________
Inspector's Name ____________________
Inspector's Affiliation ____________________

Property Address ____________________
Tenant Business / Tenant Representative Name __________ / __________
Owner's Name ____________________
Owner's Address (if different from Property) ____________________

Temperature (Ambient) (°F) ____________________
Temperature (Building Interior) (°F) ____________________
Barometric Pressure ("Hg) ____________________
Weather Conditions ____________________

SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS)
ROUTINE INSPECTION CHECKLIST
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

PART 1 - ROUTINE INSPECTIONS **General System Operation**	
System Run Time (kwh)	

SSDS Exterior Fan Operation *(circle the appropriate observed condition)*		
Exterior Exhaust Fan 1	Operating	Not Operating
Exterior Exhaust Fan 2	Operating	Not Operating
Exterior Exhaust Fan 3	Operating	Not Operating
Exterior Exhaust Fan 4	Operating	Not Operating
Exterior Exhaust Vent Piping	Intact	Damaged
Exterior Caulking	Intact	Damaged
Are there any unusual fan vibrations?	Yes (Provide details)	No

SSDS Interior System Components *(circle the observed condition for each system component)*		
Exhaust Sampling Ports - General	Intact	Damaged
Exhaust Sample Tubing - Water present?	Yes	No
Extraction Point Drywall Enclosures	Intact	Damaged
Audible Vacuum Leaks Near/From Extraction Points	Yes	No
Water Present/Water Damage Observed Near Extraction Points	Yes	No
Electrical System Components in Mechanical Room	Intact	Damaged
Observable Caulking	Intact	Damaged
Inspection of Vacuum Gauges (Magnehelics)	Intact	Damaged
Floor Conditions near Extraction Points (i.e. Cracking, etc.)	Intact	Damaged
Conditions of Piping Joints (i.e. Cracking, separation, etc.)	Intact	Damaged
Labeling of SSDS System and Electrical Components	Intact	Damaged
Any heaving or subsidence at suction point(s)?	Yes	No

SSDS System Monitoring and Sample Point Inspection *(record the influent and effluent vacuum measurements and note whether its operating within acceptable range)*		
Component Identification	Vacuum Measurements *(influent/effluent)*	Vacuum Outside of Range**
Exterior Exhaust Fan 1	/	Yes No
Exterior Exhaust Fan 2	/	Yes No
Exterior Exhaust Fan 3	/	Yes No
Exterior Exhaust Fan 4	/	Yes No

*** Note: Vacuum Measurements should be collected in inches of water using the Magnehelic gauges**

**** Note: The acceptable vacuum range for each Exterior Exhaust Fan is 0.5 to 10 inches of water. If vacuum is outside this range, call for service.**

SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS)
ROUTINE INSPECTION CHECKLIST
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Please include any comments or observations here. At a minimum, if you answered 'damaged' or 'not operating' to any of the checklist items above, please provide further information.

Has the tenant observed any change in fan noise or vibration?	Yes	No

Has the tenant observed any lack of differential pressure in the manometer?	Yes	No

Has the tenant turned the fan off for any period of time?	Yes	No

If yes, please explain the reasons.

Have any modifications or upgrades been made to the heating, ventilation, or air conditioning (HVAC) system since the last inspection?	Yes	No

If yes, please explain the changes made to the HVAC system.

Have any changes or upgrades been made to the building or has any new construction occurred since the last inspection?	Yes	No

If so, please explain the changes made to the building system.

SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS)
ROUTINE INSPECTION CHECKLIST
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

PART 2 - MEASUREMENTS **SSDS System Monitoring and Sample Point Inspection**		
Sub-Slab/Monitoring Point Identification	Vacuum Measurement *(inches of water)*	Damaged, Leaking, or Vacuum Outside of Range**
SS-1		Yes No
SS-2		Yes No
SS-3		Yes No
SS-4		Yes No
SS-5		Yes No
SS-6		Yes No
SS-7		Yes No
SS-8		Yes No
SS-9		Yes No
SS-10		Yes No
SS-11		Yes No
MP-3		Yes No
MP-4		Yes No
MP-5		Yes No
MP-7		Yes No
MP-8		Yes No
MP-9		Yes No
MP-10		Yes No
MP-11		Yes No
MP-12		Yes No
MP-13		Yes No

****Note: Vacuum should exceed 0.001 inches water at each location. The optimal range is 0.0161 to 1.2 inches of water. If vacuum is outside this range, call for service.**

Is the system manometer steady?	Yes	No

Please include any comments or observations here. If you answer 'yes' to any of the checklist items above, please provide further explanation.

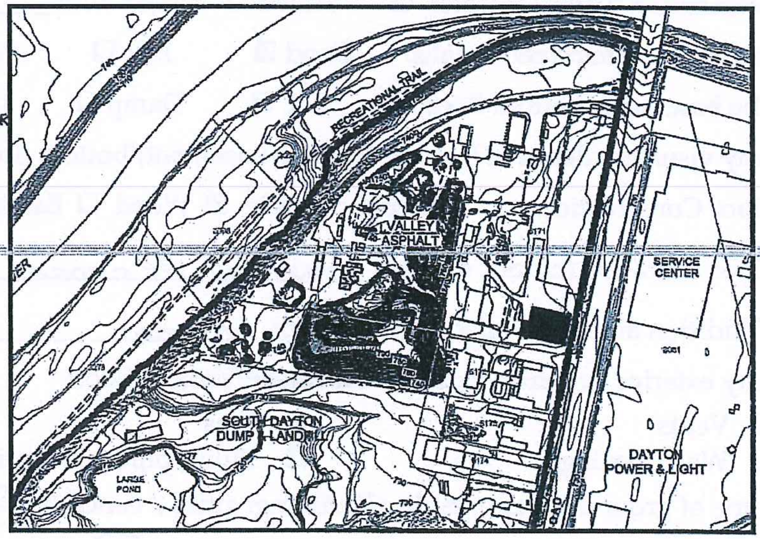
APPENDIX D

COMPLETED BUILDING PHYSICAL SURVEYS FOR BUILDINGS REQUIRING MITIGATION

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Date: June 22, 2011 Time: 13:30 Inspector: Adam Loney, CRA

Address: 1951 Dryden Road Site Layout: Parcel Number: 5171 Building: 1



Building Owner: Boesch & Grillot

Occupant Name: B+G Trucking / Dayton Tractor & Crane (rent one office)

Contact Name: Bruce Mangeot / Dave

~~Phone Number: 937-294-9944~~

Time resident/employed in home/building? since 1991

Occupation: Heavy Truck Repair

Number and Age of Occupants Adults: 7

Children: Ø

BUILDING TYPE: One-Story Repair shop Two-Storey (office only) ✓ Multi-Storey ___ Brick ✓ Siding ___ Stucco ___

(Circle One) Residential / Industrial / Commercial / Multi-use / Other (specify) ___

If residential, what type (circle): Single family / Condo / Multi-family / Other (specify) ___

If multiple units, how many? N/A

If commercial, what is the business? Heavy truck repair Hours of Occupation/Occupancy? 7-5 M-F

Does the commercial property include residences (i.e., multi-use)? Y / N

If yes, how many? N/A

visible in 1968 aerial w/ existing footprint

DESCRIBE BUILDING: brick, offices in front, large bays in rear **YEAR CONSTRUCTED:** ~50 yrs old.

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

Previous Uses: GMC Truck Dealer, trucking company

WEATHER SEALS: General Condition: Good ___ Fair ✓ (office) Poor ___ Not Present ✓ (shop)

Are doors/windows kept open to allow for outdoor-to-indoor air exchange? shop doors kept open

BASEMENT/: BOTTOM FLOOR	None	Finished	Unfinished	Depth below reference point (meters)	Floor covering
	☒				
Partial	☐	☐	☐		
Full	☐	☐	☐		
Crawl space	☐	N/A	N/A		
Slab-on-grade	☒	☐	☐	N/A	carpet in office area

Is the ~~basement~~/bottom floor used as a ~~living~~/work space area? (circle) Y / N

2nd floor is not used

Number of floors at or above grade: 1 (2 in office area)

Depth of basement below grade: N/A ft. Floor ~~Basement~~ Size: 13,700 ft²

one of the front offices is rented by a craning contractor - Dayton Tractor & Crane

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Foundation construction: Poured concrete ☑ Concrete block ☐ Cinder block ☐ Stone ☐

~~Foundation~~ walls: Poured ☐ Block ☑ Stone ☐ Other ____

~~Foundation~~ walls: Unsealed ☑ Sealed ☐ Sealed with ____

Integrity of ~~foundation~~ walls: Good ☑ Fair ☐ Poor ☐

The ~~basement~~/bottom floor is: Wet ☐ Damp ☐ Dry ☑ Moldy ☐

office area is brick w/ finished interior walls
Shoparea is cement block walls

Any visual evidence of leakage through basement/bottom floor walls or floor Yes ☐ No ☑

Floor Construction: Poured concrete ☑ Wood ☐ Earth ☐ Brick ☐ Other: ____

Floor condition (cracks, drains): a number of cracks are present, 3 drains in largest bay lead to sum

Condition at floor/wall joint (if visible): no seal

Any exterior openings from the ~~basement~~/bottom floor:

☒ Vents ☒ Fans ☒ Windows
☐ Wall openings ☒ Utility pipe penetrations ☒ Other: bay + man doors

Type of ground cover outside of building: grass / concrete / asphalt / other (specify): gravel

Sub-slab vapor/moisture barrier in place? Yes / No / Don't know Type of barrier: ____

RADON SYSTEM: ☐ Yes ☒ No Is the system active or passive? Active / Passive

Do you have a sump?: Yes ☑ No ☐ Where: large bay ____ *(show on figure)*

If yes, sealed ☒ (not airtight) open ☐ NA ☐ If yes, is there water in the sump?: Yes ☐ No ☐ unknown

Have there ever been a fire in the building?: Yes ☐ No ☐ unknown

If yes, describe its location and extent: N/A

Is there a laundry room located inside the house/building?: Yes ☐ No ☒

If yes, describe its location: N/A

WATER AND SEWAGE Municipal water & sewer

Is this building serviced with municipal water? Yes ☑ No ☐

Water well present?: Yes ☐ No ☑ Don't know ☐ Is well used for drinking water? Yes ☐ No ☐ N/A

Well location: N/A *(show on figure)* What do you use the well for?: N/A

Do you have a cistern?: Yes ☐ No ☑ Don't know ☐

If yes, describe its location: N/A

Do you have a septic system?: Yes ☐ No ☑

If yes, describe its location: N/A ____ *(show on figure)*

If yes, describe how septic system is cleaned: N/A

GARAGE: Is there an attached garage? ☐ Yes ☑ No Describe: ____

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

HEATING, VENTILLATION, AND AIR CONDITIONING

Type of heating system(s) used (circle all that apply, note primary)

Hot air circulation	☒	Heat pump	☐	Hot water baseboard	☐
Space heaters	☐	Stream radiation	☐	Radiant ~~floor~~ Overhead	☒ (Shop)
Electric baseboard	☐	Used Oil ~~Wood~~ stove	☒	Outdoor wood boiler	☐

FURNACE: Location: ______

Type: Gas (office)	☒	Forced air	☐	Wood	☐
Oil (Used Oil)	☒	Hot water	☐	Propane	☐
Electric	☐	Coal	☐	Other: ______	

Does furnace have outside combustion air vent? ______

Do you have a fireplace? Yes ☐ No ☒ Does fireplace have an outside combustion air vent? N/A Yes ☐ No ☐

Do you use kerosene space heaters? Yes ☐ No ☒

AIR CONDITIONER: None ☐ Central ☒ Window units ☐

(If yes, which rooms and capacities?) office area only

SPILL/CONTAMINANT SOURCE INFORMATION

Visual evidence of spills/releases: spills on floor in truck bay area, pobled liquid under two truck

Type of petroleum/VOC release? brake/hydraulic fluids, possibly others

When did the release occur? various. Ohio EPA believes Mr. Girard mentioned property had a UST which was removed.

What areas of the building have been impacted by the release? shop floor

Are there any odors? ☑ Yes ☐ No If yes, describe the odors: oily odours, strong paint odor in NE office area

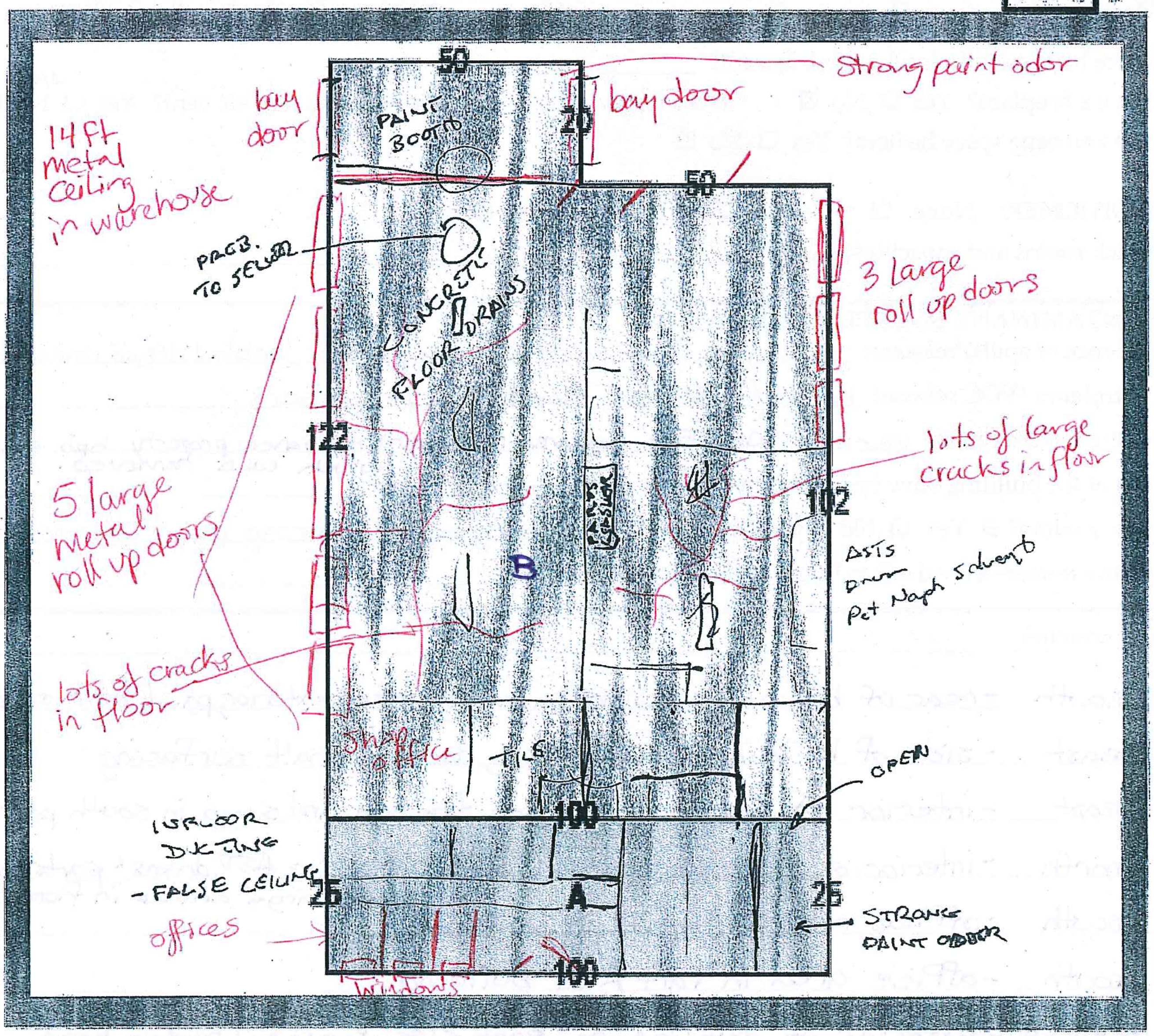
Where are the release-related odors found? throughout shop

Photo	*Direction*	*Subject*
333	south	- rear of building showing paved + grassed exterior, paint booth exhaust at right
342	east	- side of building showing bay doors, asphalt surfacing
343	east	- interior of building showing trench and sump in south portion
344	north	- interior of north-east portion of shop showing AST, drums + parts washer (at right) (note large cracks in floor)
345	south	- office area in Part B of building
346	south	- office area in Part A of building
347	southwest	- exterior of building on east side facing Dryden Road

Building Layout:
Parcel Number__5171__; Building _1__
Mark the following on the below Figure: Additions or Modifications; door/windows/loading docks kept open for air exchange; building compartmentalization, including size and locations of compartments

PARID: 144 26420 0001
PARCEL LOCATION: 1951 DRYDEN RD
NBHD CODE: C1302000

1 of 2



A MULTI-USE OFFICE, 2500 Sq. Ft. B AUTO PARTS/SERVICE, 11200 Sq. Ft.

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Date: June 22, 2011 Time: 13:50 Inspector: Adam Loney, CRA

Address: 1951 Dryden Rd. Site Layout: Parcel Number: 5171 Building: 2

Building Owner: Boesch & Grillot

Occupant Name: B+G Trucking

Contact Name: Bruce Mangeot / Dave

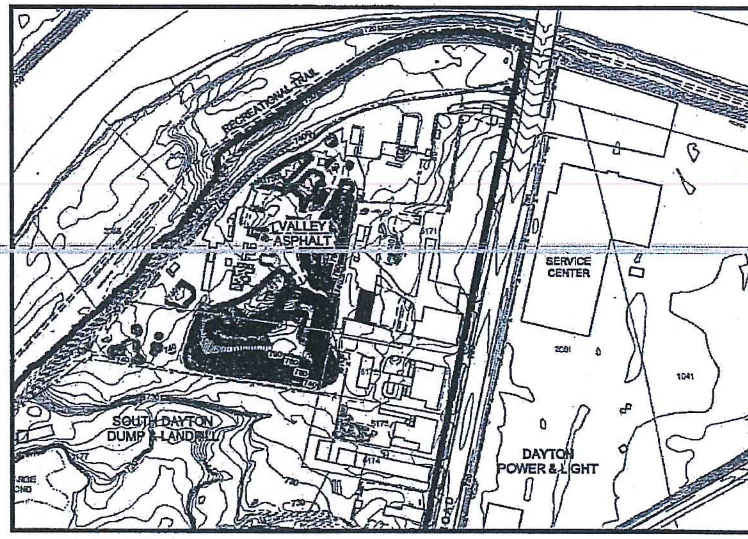
Phone Number: 937-294-9944

Time resident/employed in home/building? since 1991

Occupation: Truck Repair

Number and Age of Occupants Adults: 2

Children: 0



BUILDING TYPE: One-Story ✓ 1½ Two-Storey (small attic over offices) ______ Multi-Storey ______ Brick ✓ (conc. block) Siding ______ Stucco ____

(Circle One) Residential / Industrial / Commercial / Multi-use / Other (specify) ____________

If residential, what type (circle): Single family / Condo / Multi-family / Other (specify) ____________

If multiple units, how many? N/A

If commercial, what is the business? Heavy truck repair & body shop Hours of Occupation/Occupancy? 7-5 M-F

Does the commercial property include residences (i.e., multi-use)? Y / N

If yes, how many? _____

DESCRIBE BUILDING: cinder block, slab on grade **YEAR CONSTRUCTED:** pre-1968 -visible in 1968 aerial w/ existing footprint

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

Previous Uses: wrecking yards

WEATHER SEALS: General Condition: Good ______ Fair ______ Poor ______ Not Present ✓

Are doors/windows kept open to allow for outdoor-to-indoor air exchange? doors kept open in warm weather

BASEMENT/: BOTTOM FLOOR	None		Finished	Unfinished	Depth below reference point (meters)	Floor covering
		☒				
	Partial	☐	☐	☐		
	Full	☐	☐	☐		
	Crawl space	☐	N/A	N/A		
	Slab-on-grade	☒	☐	☐		none

Is the basement/bottom floor used as a living/work space area? (circle) Y / N

Number of floors at or above grade: 1½

Depth of basement below grade: N/A ft. ~~Basement~~ Floor Size: 5,000 ft²

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Foundation construction: Poured concrete ☑ Concrete block ☐ Cinder block ☐ Stone ☐

~~Foundation~~ walls: Poured ☐ Block ☑ Stone ☐ Other ____________

~~Foundation~~ walls: Unsealed ☑ Sealed ☐ Sealed with ____________

Integrity of ~~foundation~~ walls: Good ☐ Fair ☑ Poor ☐

The ~~basement/~~bottom floor is: Wet ☐ Damp ☐ Dry ☑ Moldy ☐

Any visual evidence of leakage through ~~basement/~~bottom floor walls or floor Yes ☐ No ☑

Floor Construction: Poured concrete ☑ Wood ☐ Earth ☐ Brick ☐ Other: ______ unsealed floor joints

Floor condition (cracks, drains): some cracking, large drain in middle - believe it goes to sanitary but not sure

Condition at floor/wall joint (if visible): no seal

Any exterior openings from the ~~basement~~/bottom floor:

☑ Vents ☐ Fans ☑ Windows

☐ Wall openings ☑ Utility pipe penetrations ☒ Other: man + bay doors

Type of ground cover outside of building: grass / concrete / asphalt / other (specify): gravel

Sub-slab vapor/moisture barrier in place? Yes / No / Don't know Type of barrier: ____________

RADON SYSTEM: ☐ Yes ☒ No Is the system active or passive? Active / Passive

Do you have a sump?: Yes ☒ No ☒ Where: ____________ *(show on figure)*

If yes, sealed ☒ open ☒ NA ☐ (main drain in bay) If yes, is there water in the sump?: Yes ☐ No ☐ no access

Have there ever been a fire in the building?: Yes ☐ No ☐ unknown

If yes, describe its location and extent: N/A

Is there a laundry room located inside the house/building?: Yes ☐ No ☒

If yes, describe its location: N/A

WATER AND SEWAGE Municipal water & sewer

Is this building serviced with municipal water? Yes ☒ No ☐

Water well present?: Yes ☐ No ☒ Don't know ☐ Is well used for drinking water? Yes ☐ No ☐ N/A

Well location: N/A *(show on figure)* What do you use the well for?: N/A

Do you have a cistern?: Yes ☐ No ☒ Don't know ☐

If yes, describe its location: N/A

Do you have a septic system?: Yes ☐ No ☒

If yes, describe its location: N/A *(show on figure)*

If yes, describe how septic system is cleaned: N/A

GARAGE: Is there an attached garage? ☐ Yes ☒ No Describe: ____________

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

HEATING, VENTILLATION, AND AIR CONDITIONING

radient ceiling heat

Type of heating system(s) used (circle all that apply, note primary)

Hot air circulation	☑	Heat pump	☐	Hot water baseboard	☐
Space heaters	☐	Stream radiation	☐	Radiant floor	☐
Electric baseboard	☐	Wood stove	☐	Outdoor wood boiler	☐

FURNACE: Location: ____________________

Type:	Gas	☑	Forced air	☐	Wood	☐
	Oil	☐	Hot water	☐	Propane	☐
	Electric	☐	Coal	☐	Other: ____	

Does furnace have outside combustion air vent? yes

Do you have a fireplace? Yes ☐ No ☒ Does fireplace have an outside combustion air vent? Yes ☐ No ☐ N/A

Do you use kerosene space heaters? Yes ☐ No ☒

Floor fans

AIR CONDITIONER: None ☒ Central ☐ Window units ☐

(If yes, which rooms and capacities?) N/A

SPILL/CONTAMINANT SOURCE INFORMATION

Visual evidence of spills/releases: staining on floor in bays

Type of petroleum/VOC release? unknown

When did the release occur? unknown

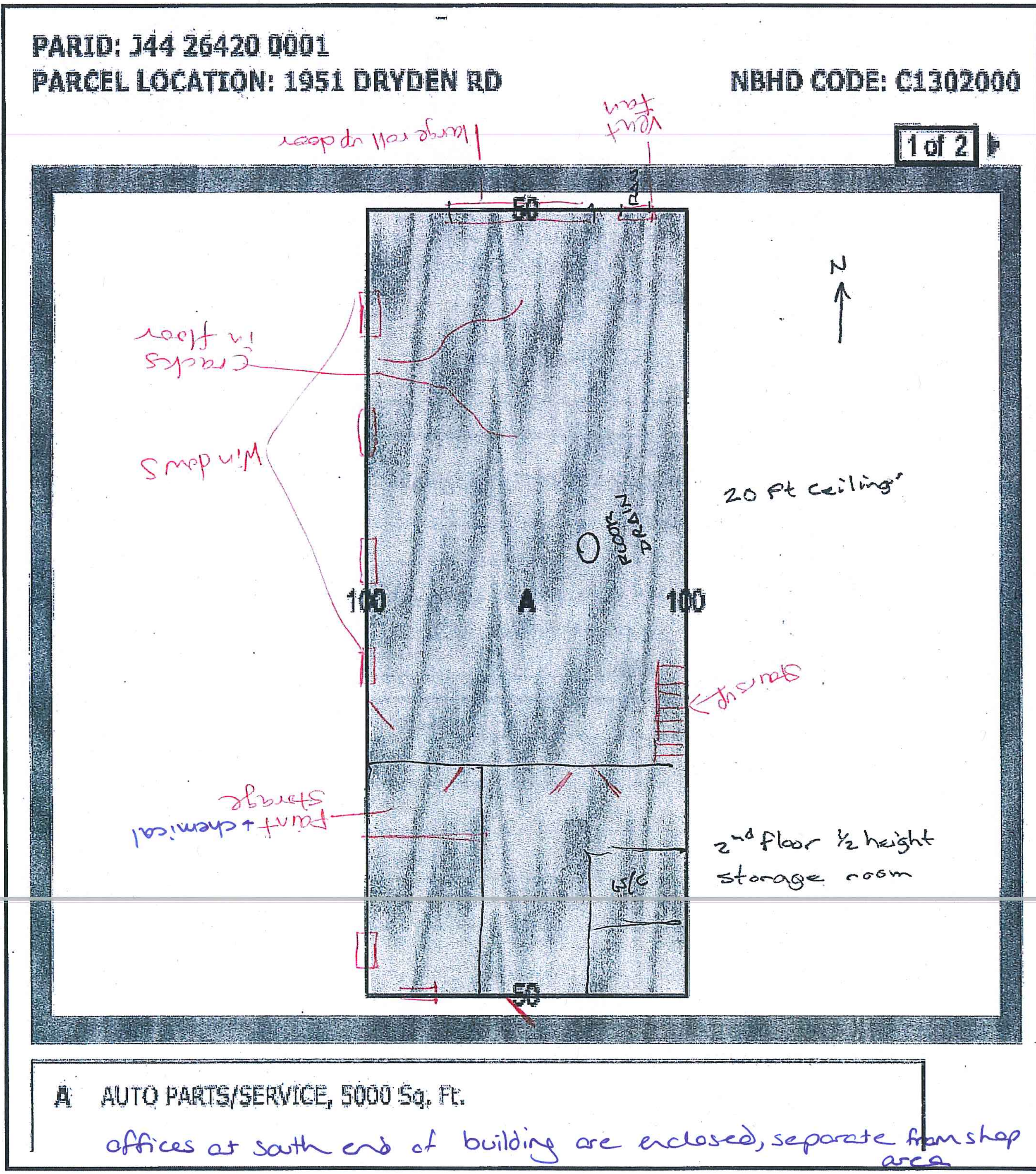
What areas of the building have been impacted by the release? bay floors

Are there any odors? ☐ Yes ☒ No If yes, describe the odors: N/A

Where are the release-related odors found? N/A

Photo	*Direction*	*Subject*
334	south	- exterior of building showing asphalt paving, open bay door, block construction
335	south	- interior of building showing sump cover, floor staining, concrete pour cuts
336	northeast	- rear of building showing extension of conc. pad, block construction
337	south	- chemical storage area
338	north	- building exterior, asphalt surface w/ narrow landscaped strip
339	west	- mezzanine area above office portion
340	south	- office area

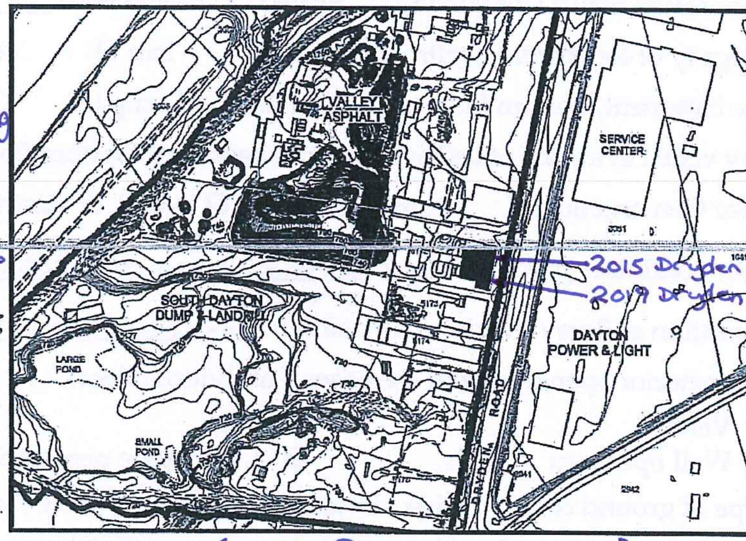
Building Layout:
Parcel Number___5171___; Building __2___
Mark the following on the below Figure: Additions or Modifications; door/windows/loading docks kept open for air exchange; building compartmentalization, including size and locations of compartment



FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Date: June 21, 2011 Time: 11:00 Inspector: Adam Loney, CRA

Address: 2015 Dryden Road / 2019 Dryden **Site Layout: Parcel Number:** 5172 **Building:** 1



Building Owner: Boesch & Grillot

Occupant Name: S&J Precision / Overstreet Painting

Contact Name: Forest Freeze / Tammy Hogg

Phone Number: 937-296-0068 / 937-847-8566

-could not access Overstreet Painting-appears same as Precision side

Time resident/employed in home/building? since 1998

Occupation: Precision machining, grinding

Number and Age of Occupants Adults: 5

Children: 0

(brick front, block sides)

BUILDING TYPE: One-Story ✓ Two-Storey ____ Multi-Storey ____ Brick ✓ Siding ____ Stucco ____

(Circle One) Residential / Industrial / Commercial / Multi-use / Other (specify) ____

If residential, what type (circle): Single family / Condo / Multi-family / Other (specify) ____

If multiple units, how many? N/A

If commercial, what is the business? precision machining Hours of Occupation/Occupancy? 6-5

Does the commercial property include residences (i.e., multi-use)? Y / N

If yes, how many? ____ -central square visible in 1956 aerial

DESCRIBE BUILDING: one-storey open, middle partition **YEAR CONSTRUCTED:** ____

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

Previous Uses: electronic retail, water cutting (Dayton Waterjet)

WEATHER SEALS: General Condition: Good ____ Fair ✓ Poor ____ Not Present ____

Are doors/windows kept open to allow for outdoor-to-indoor air exchange? doors can be left open

BASEMENT/: BOTTOM FLOOR	None	Finished	Unfinished	Depth below reference point (meters)	Floor covering
		☑			
Partial	☐	☐	☐		
Full	☐	☐	☐		
Crawl space	☐	N/A	N/A		
Slab-on-grade	☑	☐	☐	N/A	carpet, tile (possibly asbestos in office + concrete elsewhere

Is the ~~basement/~~bottom floor used as a ~~living/~~work space area? (circle) Y / N

Number of floors at or above grade: 1

Depth of basement below grade: N/A ft. Floor ~~Basement~~ Size: 5,800 ft²

Foundation construction: Poured concrete ☐ Concrete block ☑ Cinder block ☐ Stone ☐

~~Foundation~~ walls: Poured ☐ Block ☑ Stone ☐ Other ____________

~~Foundation~~ walls: Unsealed ☑ Sealed ☐ Sealed with ____________

Integrity of ~~foundation~~ walls: Good ☑ Fair ☐ Poor ☐

The ~~basement~~/bottom floor is: Wet ☐ Damp ☐ Dry ☑ Moldy ☐

Any visual evidence of leakage through ~~basement~~/bottom floor walls or floor Yes ☐ No ☑

Floor Construction: Poured concrete ☑ Wood ☐ Earth ☐ Brick ☐ Other: ______

Floor condition (cracks, drains): 2 drains, not sure where they go, rear drain is large + stained, some cracks

Condition at floor/wall joint (if visible): unsealed

Any exterior openings from the basement/bottom floor:

☐ Vents ☐ Fans ☑ Windows
☐ Wall openings ☑ Utility pipe penetrations ☑ Other: maint bay doors

Type of ground cover outside of building: grass / concrete / asphalt / other (specify): ______

Sub-slab vapor/moisture barrier in place? Yes / No / Don't know Type of barrier: ____________

RADON SYSTEM: ☐ Yes ☑ No Is the system active or passive? Active / Passive

Do you have a sump?: Yes ☐ No ☑ Where: N/A (*show on figure*)

If yes, sealed ☐ open ☐ NA ☑ If yes, is there water in the sump?: Yes ☐ No ☐

Have there ever been a fire in the building?: Yes ☐ No ☐

If yes, describe its location and extent: unknown

Is there a laundry room located inside the house/building?: Yes ☐ No ☑

If yes, describe its location: N/A

WATER AND SEWAGE Municipal water & sewer

Is this building serviced with municipal water? Yes ☑ No ☐

Water well present?: Yes ☐ No ☑ Don't know ☐ Is well used for drinking water? Yes ☐ No ☐ N/A

Well location: N/A (*show on figure*) What do you use the well for?: ____________

Do you have a cistern?: Yes ☐ No ☑ Don't know ☐

If yes, describe its location: N/A

Do you have a septic system?: Yes ☐ No ☑

If yes, describe its location: N/A (*show on figure*)

If yes, describe how septic system is cleaned: N/A

GARAGE: Is there an attached garage? ☐ Yes ☑ No Describe: N/A

– can of perc

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

HEATING, VENTILLATION, AND AIR CONDITIONING

Type of heating system(s) used (circle all that apply, note primary)

Hot air circulation	☒	Heat pump	☐	Hot water baseboard	☐
Space heaters	☐	Stream radiation	☐	Radiant floor	☐
Electric baseboard	☐	Wood stove	☐	Outdoor wood boiler	☐

FURNACE: Location: ____

Type:	Gas	☒	Forced air	☒	Wood	☐
	Oil	☐	Hot water	☐	Propane	☐
	Electric	☐	Coal	☐	Other: ____	

Does furnace have outside combustion air vent? yes

Do you have a fireplace? Yes ☐ No ☒ Does fireplace have an outside combustion air vent? N/A Yes ☐ No ☐

Do you use kerosene space heaters? Yes ☐ No ☒

floor vents in office area

AIR CONDITIONER: None ☐ Central ☒ Window units ☐

(If yes, which rooms and capacities?) N/A

SPILL/CONTAMINANT SOURCE INFORMATION

Visual evidence of spills/releases: some staining on floor in warehouse at rear of building

Type of petroleum/VOC release? unknown

When did the release occur? unknown

What areas of the building have been impacted by the release? limited areas of floor

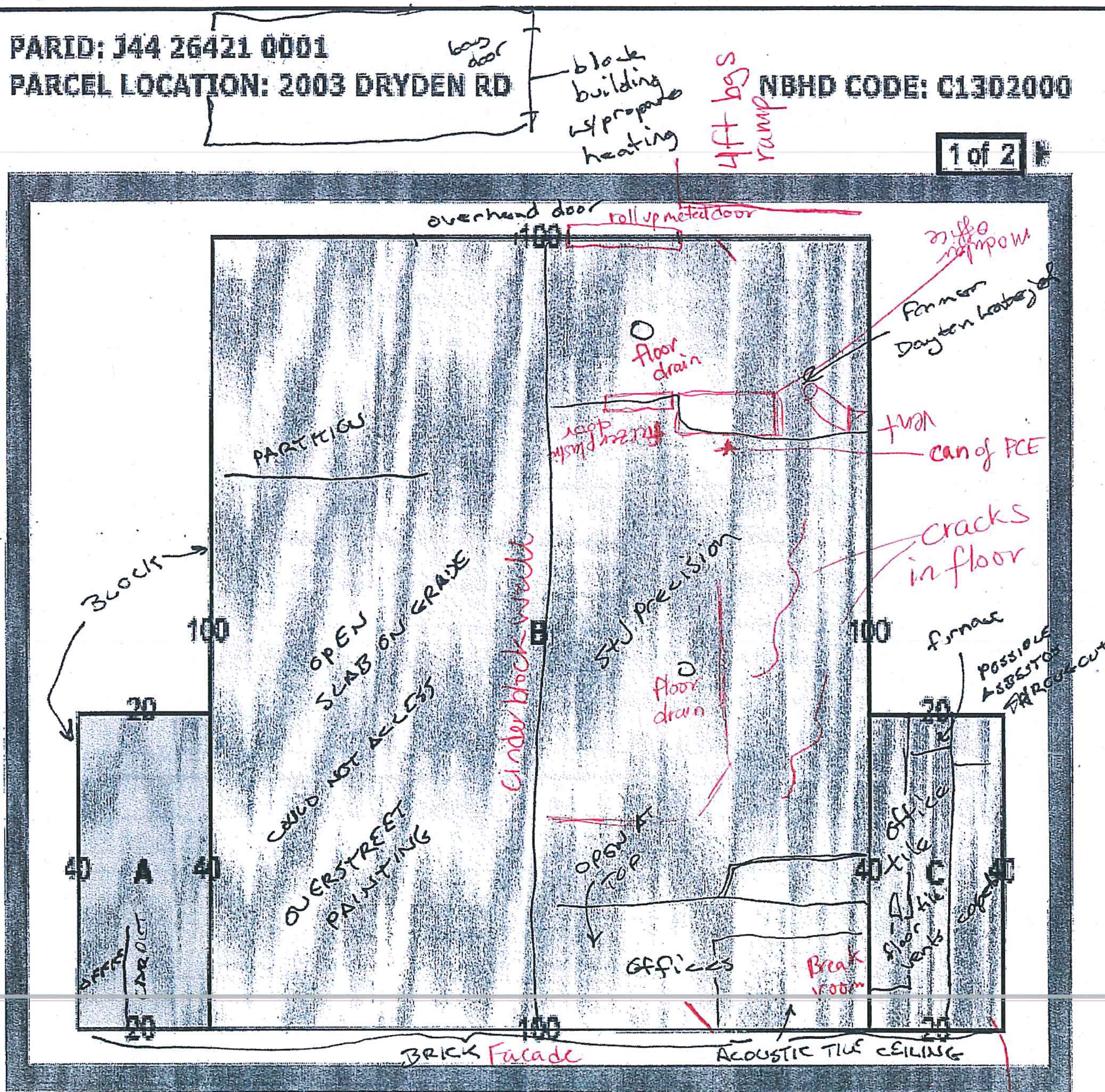
Are there any odors? ☐ Yes ☒ No If yes, describe the odors: N/A

Where are the release-related odors found? N/A

Photo	*Direction*	*Subject*
086	northwest	- exterior of building
087	west	- building floor, small cracks + drain visible
088	northeast	- floor cracks
089	west	- large drain w/ staining in warehouse area
090	east	- looking east in warehouse area, note propane forklift, floor staining
091	north	- exterior pit (reportedly drains quickly after rain events)
092	west	- thru maintenance bay door, A-Evans at rear, Overstreet outbuilding at left
093	north	- chemicals storage cabinet, includes IPA + PCE containers
094	northeast	- shop area towards door to office area
095	north	- into office area (separated by block wall), suspect ACM floor tile in office

096	down	- hot air vent, clay tile ducting under slab, vent cut through slab
097	west	- main entryway, open at top to shop area beyond
098	west	- building exterior

Building Layout:
Parcel Number___5172___; Building __1___
Mark the following on the below Figure: Additions or Modifications; door/windows/loading docks kept open for air exchange; building compartmentalization, including size and locations of compartments



A MULTI-USE OFFICE, 800 Sq. Ft. B MANUFACTURING, 10000 Sq. Ft.

C MULTI-USE OFFICE, 800 Sq. Ft.

floor in C is elevated
HVAC floor vents in C

Area C is a separate enclosed office space.

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Date: December 9, 2011 Time: ~~08:00~~ ________ Inspector: ______________________

Address: _____2019 Dryden Road____________________ **Site Layout: Parcel Number:** ___5172___ **Building:** __1__

Building Owner: ____Boesch & Grillot____________

Occupant Name: __Don Overstreet______________

Contact Name: __Don Overstreet______________

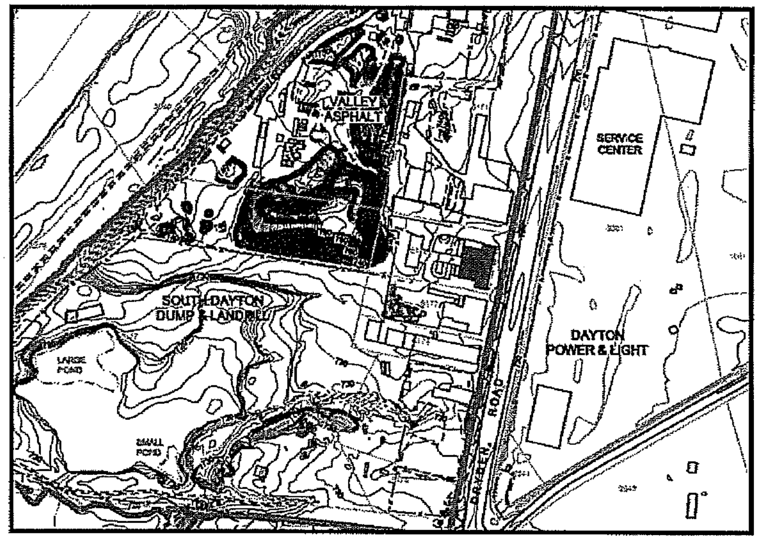
Phone Number: ____937-439-5514____________

Time resident/employed in home/building? __________

Occupation: PAINT / CAR / BOAT STORAGE

Number and Age of Occupants Adults: __________

Children: __________



BUILDING TYPE: One-Story _X_ Two-Storey _____ Multi-Storey _____ Brick _____ Siding _____ Stucco _____

(Circle One) Residential / Industrial / Commercial / Multi-use / Other (specify) STORAGE

If residential, what type (circle): Single family / Condo / Multi-family / Other (specify) __________

If multiple units, how many? ________

If commercial, what is the business? ____________________ Hours of Occupation/Occupancy? MINIMAL

Does the commercial property include residences (i.e., multi-use)? Y / N

If yes, how many? _____

DESCRIBE BUILDING: ______________________________ **YEAR CONSTRUCTED:** __________

Is the building insulated Y / N How air tight? Tight / Average / Not Tight

Previous Uses: UNKNOWN

WEATHER SEALS: General Condition: Good _X_ Fair _____ Poor _____ Not Present _____

Are doors/windows kept open to allow for outdoor-to-indoor air exchange? No

BASEMENT/: BOTTOM FLOOR None	☐	Finished	Unfinished	Depth below reference point (meters)	Floor covering
Partial	☐	☐	☐	________	________
Full	☐	☐	☐	________	________
Crawl space	☐	N/A	N/A	________	________
Slab-on-grade	☑	☐	☐	________	________

Is the basement/bottom floor used as a living/work space area? (circle) Y / N

Number of floors at or above grade: 1

Depth of basement below grade: _______ ft. Basement Size: _______ ft^2

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Foundation construction: Poured concrete ☒ Concrete block ☐ Cinder block ☐ Stone ☐

Foundation walls: Poured ☐ Block ☐ Stone ☐ Other ____________

Foundation walls: Unsealed ☐ Sealed ☐ Sealed with ____________

Integrity of foundation walls: Good ☐ Fair ☐ Poor ☐

The basement/bottom floor is: Wet ☐ Damp ☐ Dry ☐ Moldy ☐

Any visual evidence of leakage through basement/bottom floor walls or floor Yes ☐ No ☐

Floor Construction: Poured concrete ☒ Wood ☐ Earth ☐ Brick ☐ Other: ______

Floor condition (cracks, drains): CRACKS

Condition at floor/wall joint (if visible): GOOD WHERE VISIBLE

Any exterior openings from the basement/bottom floor:

☐ Vents ☐ Fans ☐ Windows

☐ Wall openings ☐ Utility pipe penetrations ☐ Other: ____________

Type of ground cover outside of building: grass / concrete / asphalt / other (specify): ______

Sub-slab vapor/moisture barrier in place? Yes / No / Don't know Type of barrier: ____________

RADON SYSTEM: ☐ Yes ☐ No Is the system active or passive? Active / Passive

Do you have a sump?: Yes ☐ No ☐ Where: ____________ (*show on figure*)

If yes, sealed ☐ open ☐ NA ☐ If yes, is there water in the sump?: Yes ☐ No ☐

Have there ever been a fire in the building?: Yes ☐ No ☐

If yes, describe its location and extent: ____________

Is there a laundry room located inside the house/building?: Yes ☐ No ☐

If yes, describe its location: ____________

WATER AND SEWAGE

Is this building serviced with municipal water? Yes ☐ No ☐

Water well present?: Yes ☐ No ☐ Don't know ☐ Is well used for drinking water? Yes ☐ No ☐

Well location: ____________ (*show on figure*) What do you use the well for?: ____________

Do you have a cistern?: Yes ☐ No ☐ Don't know ☐

If yes, describe its location: ____________

Do you have a septic system?: Yes ☐ No ☐

If yes, describe its location: ____________ (*show on figure*)

If yes, describe how septic system is cleaned: ____________

GARAGE: Is there an attached garage? ☐ Yes ☐ No Describe: ____________

HEATING, VENTILLATION, AND AIR CONDITIONING

Type of heating system(s) used (circle all that apply, note primary)

Hot air circulation	☒	Heat pump	☐	Hot water baseboard	☐
Space heaters	☐	Stream radiation	☐	Radiant floor	☐
Electric baseboard	☐	Wood stove	☐	Outdoor wood boiler	☐

FURNACE: Location: HANGING FROM CEILING REAR STORAGE AREA

Type: Gas	☒	Forced air	☐	Wood	☐
Oil	☐	Hot water	☐	Propane	☐
Electric	☐	Coal	☐	Other: ______	

Does furnace have outside combustion air vent? YES

Do you have a fireplace? Yes ☐ No ☐ Does fireplace have an outside combustion air vent? Yes ☐ No ☐

Do you use kerosene space heaters? Yes ☐ No ☐

AIR CONDITIONER: None ☒ Central ☐ Window units ☐

If yes, which rooms and capacities?) ______

SPILL/CONTAMINANT SOURCE INFORMATION

Visual evidence of spills/releases: ______

Type of petroleum/VOC release? ______

When did the release occur? ______

What areas of the building have been impacted by the release? ______

Are there any odors? ☐ Yes ☐ No If yes, describe the odors: ______

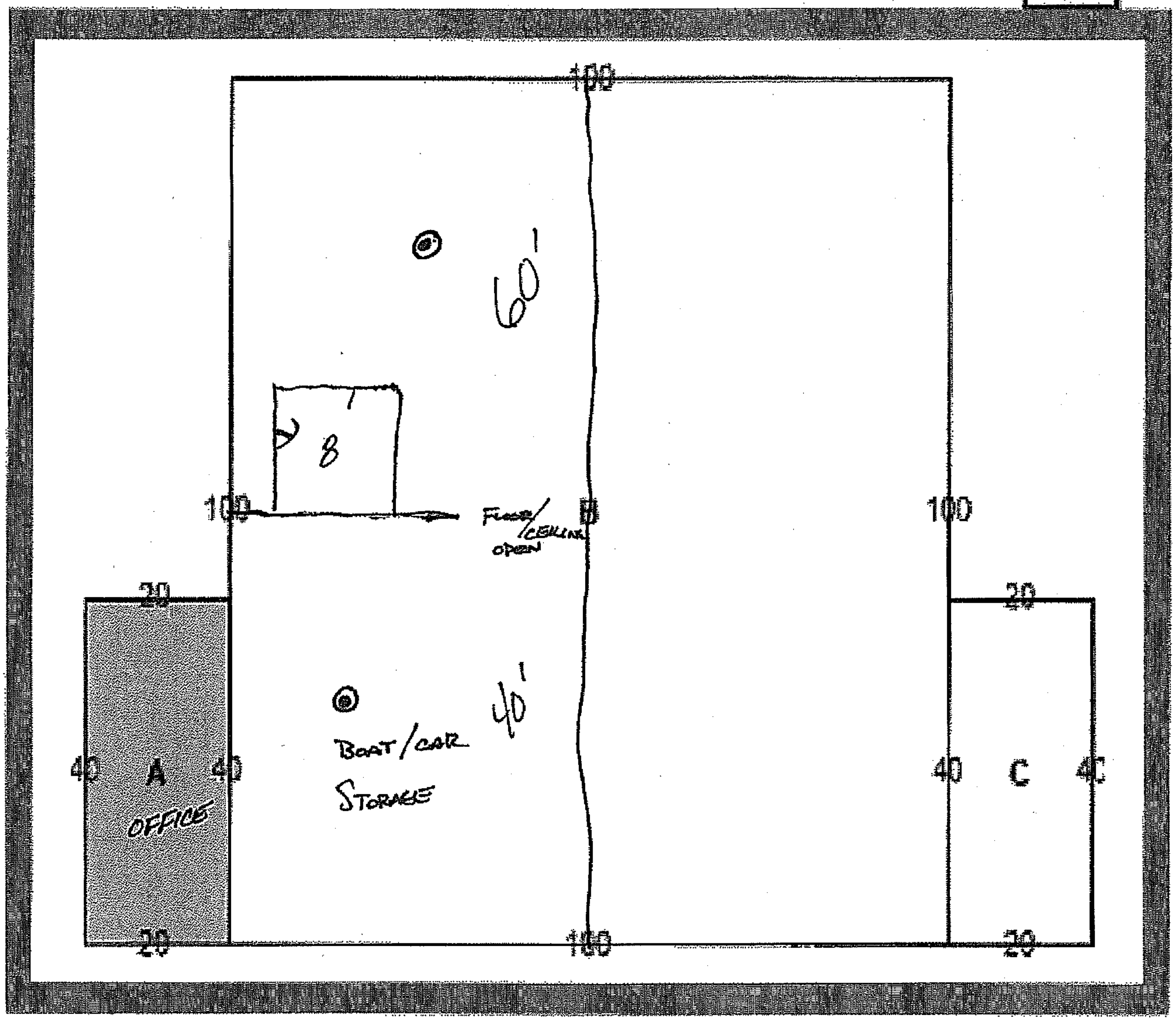
Where are the release-related odors found? ______

Photo	*Direction*	*Subject*

Building Layout:
Parcel Number___5172___; Building __1___
Mark the following on the below Figure: Additions or Modifications; door/windows/loading docks kept open for air exchange; building compartmentalization, including size and locations of compartments

PARID: 344 26421 0001
PARCEL LOCATION: 2003 DRYDEN RD **NBHD CODE: C1302000**

1 of 2



A MULTI-USE OFFICE, 800 Sq. Ft. B MANUFACTURING, 10000 Sq. Ft.
C MULTI-USE OFFICE, 800 Sq. Ft.

Building Occupant Questions (to be asked at time of sampling)

1. When was the last time dry-cleaned clothes were brought into the house/building?
   - ☐ 0 to 5 days ago ☐ 6 to 10 days ago ☐ More than 10 days ago ☐ Don't dry-clean

2. When was your carpet installed?
   - ☐ In the last six months ☐ More than six months ago ☐ No Carpet

   If yes, where and when was the carpet installed? __________

3. When was the last time your carpet was cleaned?
   - ☐ In the last six months ☐ More than six months ago ☐ Never

4. Do you have any spot removers in the building?
   - ☐ Yes ☐ No Details: __________

5. Do your hobbies include model building, arts and crafts, model railroading, or others that require paints, thinners, or glue? ☐ Yes ☐ No Details: PAINT STORAGE

6. Do you perform automotive or other vehicle maintenance or repair at the building?
   - ☐ Yes ☐ No Details: VEHICLE DETAILING

7. Please review the following list and check items you know are in the building

☒ Latex caulk	☒ Latex paint	☐ Vinyl cove molding
☐ Linoleum tile	☐ Black rubber molding	☐ Vinyl edge molding
☐ Polystyrene foam insulation	☐ Adhesive removers	☐ Aerosol spray paints
☒ Other paints	☐ Air fresheners	☐ Degreasers
☐ Deodorants	☐ Disinfectants	☐ Furniture Polish
☒ Solvents	☒ Caulking	

8. Do you have pesticides in the building? ☐ Yes ☐ No ☐ Unsure

9. Do you have any spray insecticides in the building? ☐ Yes ☐ No ☐ Unsure

10. Have you painted any area of the interior of the building in the last 12 months? ☒ Yes ☐ No

    If yes, where and when? __________

    If yes, please indicate what paint you used ☐ Enamel ☐ Vinyl ☒ Latex ☐ Other: __________

11. Have you painted the exterior of your building in the last 12 months? ☐ Yes ☐ No

    If yes, please indicate what paint you used ☐ Enamel ☐ Vinyl ☐ Latex ☐ Other: __________

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

12. Where do you store your paint, thinner, pesticides, insecticides?

	Paint	*Thinner*	*Pesticides*	*Insecticides*
Garage	☐	☐	☐	☐
Basement	☐	☐	☐	☐
Storage shed	☐	☐	☐	☐
Other	☒	☐	☐	☐
Don't store these items	☐	☐	☐	☐

13. Have you purchased one of the following items in the last 12 months for the building?

☐ Rubberized door mat ☐ Computer ☐ Wiring
☐ Plastic shower curtain ☐ Printer ☐ Linoleum
☐ Wood stains or paint ☐ VCR

14. Do you have a computer printer in the building? ☐ Yes ☐ No If yes, what type? ______

15. Do you have a VCR/DVD in the building? ☐ Yes ☐ No
If yes, do you use cleaners to maintain it? ☐ Yes ☐ No If yes, what type? ______

16. Do you have pets residing in this building? ☐ Yes ☐ No
If yes, what type? ______ If yes, number: ______

17. Does anyone in the building smoke? ☐ Yes ☐ No

18. Have air fresheners been used recently? ☐ Yes ☐ No
When & what type of air fresheners were used? ______

19. Is there a kitchen exhaust fan? ☐ Yes ☐ No
If yes, where does the kitchen exhaust fan vent? ______

20. Is there a bathroom exhaust fan? ☐ Yes ☐ No
If yes, where does the bathroom exhaust vent? ______

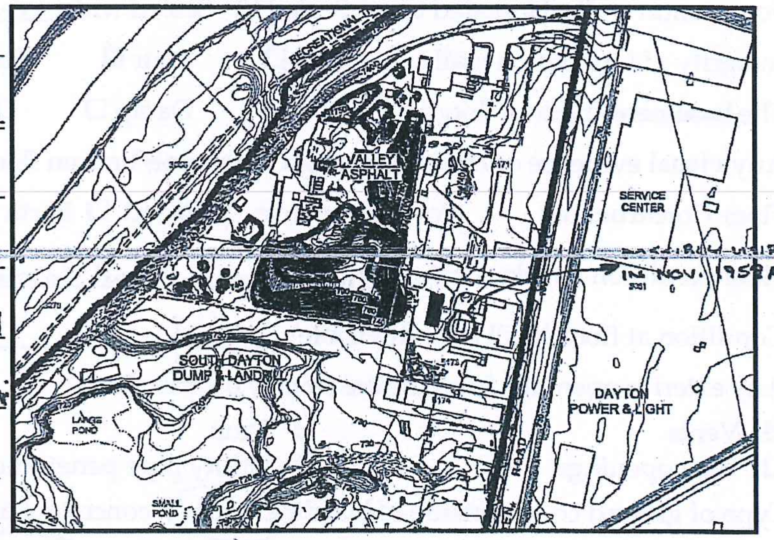
21. Are there odors in the building? ☐ Yes ☐ No
If yes, please describe: ______

22. Questions asked by Occupant that require follow-up. ______

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Date: June 22, 2011 Time: 10:00 am Inspector: Adam Loney

Address: 2003 Dryden Road **Site Layout: Parcel Number: 5172 Building: 2**



Building Owner: Boesch & Grillot

Former Occupant Name: A-Evans Air Filter Service Comp.

Contact Name: Terry Evans

~~Phone Number: 937-643-0468~~

Time resident/employed in home/building? now moved out

Occupation: Filter Supply & Grease Filter Clea[ning]

Number and Age of Occupants Adults: 0

Children: 0

BUILDING TYPE: One-Story ✓ Two-Storey ____ Multi-Storey ____ Brick (conc. block) ✓ Siding ____ Stucco ____

(Circle One) Residential / Industrial / Commercial / Multi-use / Other (specify) ____

If residential, what type (circle): Single family / Condo / Multi-family / Other (specify) ____

If multiple units, how many? N/A

If commercial, what is the business? Air Filter supply + cleaning of grease filters use grease cutters Hours of Occupation/Occupancy? moved out

Does the commercial property include residences (i.e., multi-use)? Y / N

If yes, how many? N/A

DESCRIBE BUILDING: Conc. block w/ offices in front, shop in rear 16-20' ceiling in warehouse, low false ceiling **YEAR CONSTRUCTED:** pre-1959 - visible in Nov. 1959 aerial photo

Is the building insulated? Y/N Not on warehouse side - little if any in offices How air tight? Tight / Average / Not Tight

Previous Uses: possibly car storage, custom Finishing sign visible on exterior wall, Tip Top Metal Fab sign as well on interior wall

WEATHER SEALS: General Condition: Good ____ Fair ✓ Poor ____ Not Present ____

Are doors/windows kept open to allow for outdoor-to-indoor air exchange? windows inoperable/vapor sealed w/ plas[tic] doors left open

BASEMENT/: BOTTOM FLOOR	None	Finished	Unfinished	Depth below reference point (meters)	Floor covering
Partial	☐	☐	☐	N/A	
Full	☐	☐	☐		
Crawl space	☐	N/A	N/A		
Slab-on-grade	☒	☐	☐		carpet in office, concrete in shop

Is the ~~basement~~/bottom floor used as a living/work space area? (circle) Y / N

Number of floors at or above grade: 1

Depth of basement below grade: N/A ft. Building ~~Basement~~ Size: 2,886 ft² (excluding shed)

Section B office area Brick

Foundation construction: Poured concrete ☑ Concrete block ☐ Cinder block ☐ Stone ☐

Foundation walls: Poured ☐ Block ☑ Stone ☐ Other ______

Foundation walls: Unsealed ☐ Sealed ☑ Sealed with unknown, grey paint/sealer

Integrity of foundation walls: Good ☐ Fair ☑ Poor ☐

The ~~basement~~/bottom floor is: Wet ☐ Damp ☐ Dry ☑ Moldy ☐

Any visual evidence of leakage through ~~basement~~/bottom floor walls or floor Yes ☐ No ☑

Floor Construction: Poured concrete ☑ Wood ☐ Earth ☐ Brick ☐ Other: ______

Floor condition (cracks, drains): numerous small to mid-sized cracks

Condition at floor/wall joint (if visible): good

Any exterior openings from the ~~basement~~/bottom floor:

☒ Vents ☐ Fans ☑ Windows: in office portion

☐ Wall openings ☒ Utility pipe penetrations ☒ Other: Baydoor windows don't open

Type of ground cover outside of building: grass / concrete / asphalt driveway / other (specify): gravel

Sub-slab vapor/moisture barrier in place? Yes / No / Don't know Type of barrier: N/A

RADON SYSTEM: ☐ Yes ☒ No Is the system active or passive? Active / Passive

Do you have a sump?: Yes ☐ No ☒ Where: N/A (*show on figure*)

If yes, sealed ☐ open ☐ NA ☒ If yes, is there water in the sump?: Yes ☐ No ☐

Have there ever been a fire in the building?: Yes ☐ No ☐

If yes, describe its location and extent: no evidence of one

Is there a laundry room located inside the house/building?: Yes ☐ No ☒

If yes, describe its location: N/A

WATER AND SEWAGE Municipal water & sewer

Is this building serviced with municipal water? Yes ☒ No ☐

Water well present?: Yes ☐ No ☒ Don't know ☐ Is well used for drinking water? Yes ☐ No ☐

Well location: N/A (*show on figure*) What do you use the well for?: N/A

Do you have a cistern?: Yes ☐ No ☒ Don't know ☐

If yes, describe its location: N/A

Do you have a septic system?: Yes ☐ No ☒

If yes, describe its location: N/A (*show on figure*)

If yes, describe how septic system is cleaned: N/A

GARAGE: Is there an attached garage? ☐ Yes ☒ No Describe: ______

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

HEATING, VENTILLATION, AND AIR CONDITIONING

Type of heating system(s) used (circle all that apply, note primary)

Hot air circulation	☒	Heat pump	☐	Hot water baseboard	☐
Space heaters	☐	Stream radiation	☐	Radiant floor	☐
Electric baseboard	☐	Wood stove	☐	Outdoor wood boiler	☐

FURNACE: Location: warehouse along common wall w/ offices

Type:	Gas	☒	Forced air	☒	Wood	☐
	Oil	☐	Hot water	☐	Propane	☐
	Electric	☐	Coal	☐	Other:	

Does furnace have outside combustion air vent? yes, through roof

Do you have a fireplace? Yes ☐ No ☒ Does fireplace have an outside combustion air vent? Yes ☐ No ☐

Do you use kerosene space heaters? Yes ☐ No ☒

In office area heat from floor vents
return air through wall vents.

AIR CONDITIONER: None ☐ Central ☒ Window units ☐

(If yes, which rooms and capacities?) in office area only

SPILL/CONTAMINANT SOURCE INFORMATION

Visual evidence of spills/releases: dark staining around grease filter wash area, may have been a vent for other equipment

Type of petroleum/VOC release?

When did the release occur? incidental spills/splashes during normal operations

What areas of the building have been impacted by the release? south wall + immediately adjacent floor are

Are there any odors? ☐ Yes ☒ No If yes, describe the odors: N/A

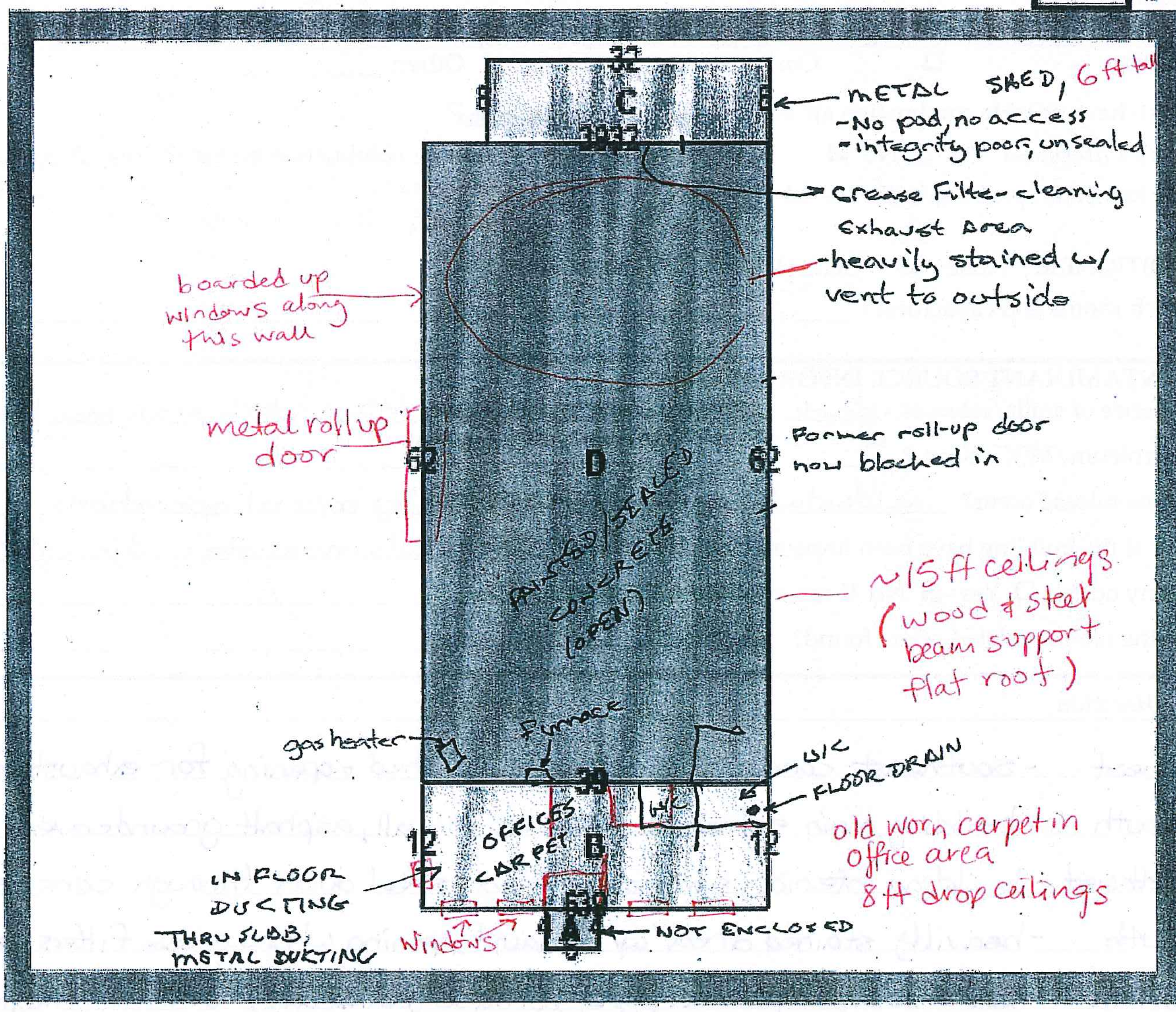
Where are the release-related odors found? N/A

Photo	*Direction*	*Subject*
303	west	- southeast corner of bldg., attached shed + opening for exhaust fan
304	south	- building main entrance, cracks in wall, asphalt groundcover
305	northwest	- building interior, carpet, in floor steel ducts through concrete
307	south	- heavily stained area w/ exhaust opening where grease filters were washed
308	north	- warehouse/shop area, gas furnace (behind door) + overhead heater
309	southwest	- building exterior, note old "Custom Finishing" sign + roof vents for furnaces

Building Layout:
Parcel Number___5172___; Building __2___
Mark the following on the below Figure: Additions or Modifications; door/windows/loading docks kept open for air exchange; building compartmentalization, including size and locations of compartments

PARID: J44 26421 0001
PARCEL LOCATION: 2003 DRYDEN RD **NBHD CODE: C1302000**

1 of 2



A	CANOPY ROOF/SLAB, 0 Sq. Ft.	**B**	MULTI-USE OFFICE, 468 Sq. Ft.
C	UTILITY BLDG-METAL, 0 Sq. Ft.	**D**	MANUFACTURING, 2418 Sq. Ft.

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Date: June 21, 2011 Time: 13:30 Inspector: Adam Loney CRA

Address: 2031 Dryden Rd. **Site Layout: Parcel Number:** 5173 **Building:** 1

Building Owner: Boesch & Grillot

Occupant Name: SimTrainer

Contact Name: Jeff Pedro

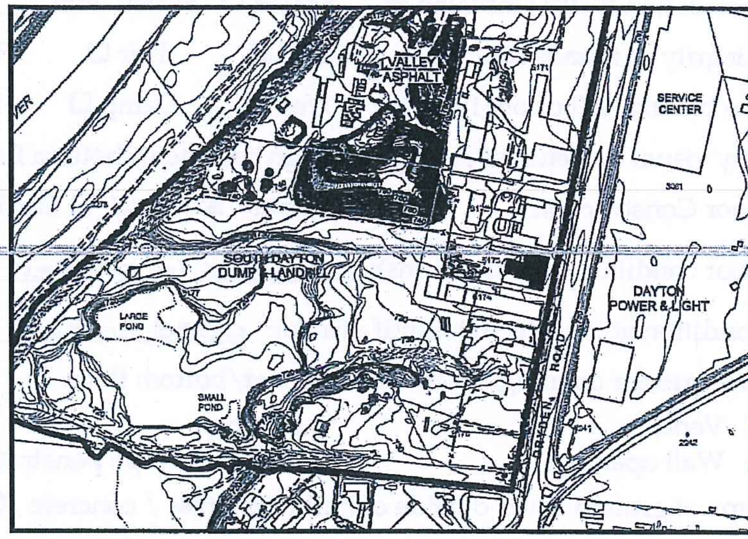
Phone Number: 937-293-3914

Time resident/employed in home/building? 7yrs

Occupation: Combat Training/Gun Range

Number and Age of Occupants Adults: 1 employee + customers

Children: Ø



BUILDING TYPE: One-Story ✓ Two-Storey ____ Multi-Storey ____ Brick ✓ block Siding ____ Stucco ____

(Circle One) Residential / Industrial / Commercial / Multi-use / Other (specify) ____

If residential, what type (circle): Single family / Condo / Multi-family / Other (specify) ____

If multiple units, how many? N/A

If commercial, what is the business? gun range since 2004 Hours of Occupation/Occupancy? 4 hr. shifts

Does the commercial property include residences (i.e., multi-use)? Y / N

If yes, how many? N/A

-eastern two portions visible in 1956
-western addition visible in 1959 (N...
-southern addition visible in 1968

DESCRIBE BUILDING: brick facade, block sides + rear, N portion largely unused **YEAR CONSTRUCTED:** pre 1956

Is the building insulated? Y/N How air tight? Tight / Average / Not Tight

Previous Uses: machine shop, possibly, Kubota on old mailbox

WEATHER SEALS: General Condition: Good ____ Fair ____ Poor ____ Not Present ____

Are doors/windows kept open to allow for outdoor-to-indoor air exchange? no

BASEMENT/: BOTTOM FLOOR	None	Finished	Unfinished	Depth below reference point (meters)	Floor covering
	☒				
Partial	☐	☐	☐		
Full	☐	☐	☐		
Crawl space	☐	N/A	N/A		
Slab-on-grade	☒	☐	☐	N/A	

Is the ~~basement/~~bottom floor used as a ~~living/~~work space area? (circle) Y / N

Number of floors at or above grade: 1

Depth of basement below grade: N/A ft. Floor ~~Basement~~ Size: 8,250 ft²

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Foundation construction: Poured concrete ☒ Concrete block ☐ Cinder block ☐ Stone ☐

~~Foundation~~ walls: Poured ☐ Block ☒ Stone ☐ Other ______

~~Foundation~~ walls: Unsealed ☒ Sealed ☐ Sealed with ______

Integrity of ~~foundation~~ walls: Good ☒ Fair ☐ Poor ☐

The ~~basement~~/bottom floor is: Wet ☐ Damp ☐ Dry ☒ Moldy ☐

Any visual evidence of leakage through basement/bottom floor walls or floor Yes ☐ No ☒

Floor Construction: Poured concrete ☒ Wood ☐ Earth ☐ Brick ☐ Other: ______

Floor condition (cracks, drains): cracks in center of range & north side storage area

Condition at floor/wall joint (if visible): good, no seal

Any exterior openings from the ~~basement~~/bottom floor:

☒ Vents ☒ Fans ☒ Windows

☐ Wall openings ☐ Utility pipe penetrations ☒ Other: 2 roll up doors in north side storage area

Type of ground cover outside of building: grass / concrete / asphalt / other (specify): ______

Sub-slab vapor/moisture barrier in place? Yes / No / Don't know Type of barrier: N/A

RADON SYSTEM: ☐ Yes ☒ No Is the system active or passive? Active / Passive

Do you have a sump?: Yes ☐ No ☒ Where: N/A *(show on figure)*

If yes, sealed ☐ open ☐ NA ☒ If yes, is there water in the sump?: Yes ☐ No ☐

Have there ever been a fire in the building?: Yes ☐No ☐

If yes, describe its location and extent: not aware of any/no visual evidence

Is there a laundry room located inside the house/building?: Yes ☐ No ☒

If yes, describe its location: N/A

WATER AND SEWAGE Municipal water & sewer

Is this building serviced with municipal water? Yes ☒ No ☐

Water well present?: Yes ☐ No ☒ Don't know ☐ Is well used for drinking water? Yes ☐ No ☐ N/A

Well location: N/A *(show on figure)* What do you use the well for?: N/A

Do you have a cistern?: Yes ☐ No ☒ Don't know ☐

If yes, describe its location: N/A

Do you have a septic system?: Yes ☐ No ☒

If yes, describe its location: N/A *(show on figure)*

If yes, describe how septic system is cleaned: N/A

GARAGE: Is there an attached garage? ☐ Yes ☒ No Describe: N/A

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

HEATING, VENTILLATION, AND AIR CONDITIONING Separate furnace for classroom/sales area

Type of heating system(s) used (circle all that apply, note primary)

Hot air circulation	☒	Heat pump	☐	Hot water baseboard	☐
Space heaters	☐	Stream radiation	☐	Radiant floor	☐
Electric baseboard	☐	Wood stove	☐	Outdoor wood boiler	☐

FURNACE: Location: ______

Type:	Gas	☒	Forced air	☒	Wood	☐
	Oil	☐	Hot water	☐	Propane	☐
	Electric	☐	Coal	☐	Other: ______	

Does furnace have outside combustion air vent? ______

Do you have a fireplace? Yes ☐ No ☒ Does fireplace have an outside combustion air vent? Yes ☐ No ☐

Do you use kerosene space heaters? Yes ☐ No ☐

- also have air handling unit blowing any time range is operating to vent range

AIR CONDITIONER: None ☐ Central ☒ Window units ☐ Air is pushed in where people stand to shoot & sucked out ~~where~~ in range area

(If yes, which rooms and capacities?) in office/classroom area

SPILL/CONTAMINANT SOURCE INFORMATION

Visual evidence of spills/releases: heavy staining in northern portion

Type of petroleum/VOC release? unknown

When did the release occur? unknown

What areas of the building have been impacted by the release? northern portion at a minimum

Are there any odors? ☑ Yes ☐ No If yes, describe the odors: oil odor in northern portion

Where are the release-related odors found? northern portion

Photo	*Direction*	*Subject*
100	southwest	- view of building exterior, asphalt paving, brick & block walls
103	northwest	- building exterior, note furnace vent thru roof
104	south	- building exterior, loading bay, unused portion at far right
106	south	- unused addition at rear of building
108	west	- range area, armour plate + kevlar walls, coated concrete floor
111	down	- cracks in floor in ~~rear of~~ rarely used northern portion
112	east	- northern portion of building, heaving stained floor
113	north ~~west~~	- northern portion showing staining & cracks
114	west	- northern portion - possible drain, chemical storage
118	west	- range floor showing cracks
121	west	- possible sump lid at back of range area
122	north	- area between range armour wall and block wall of building at west end

Building Layout:

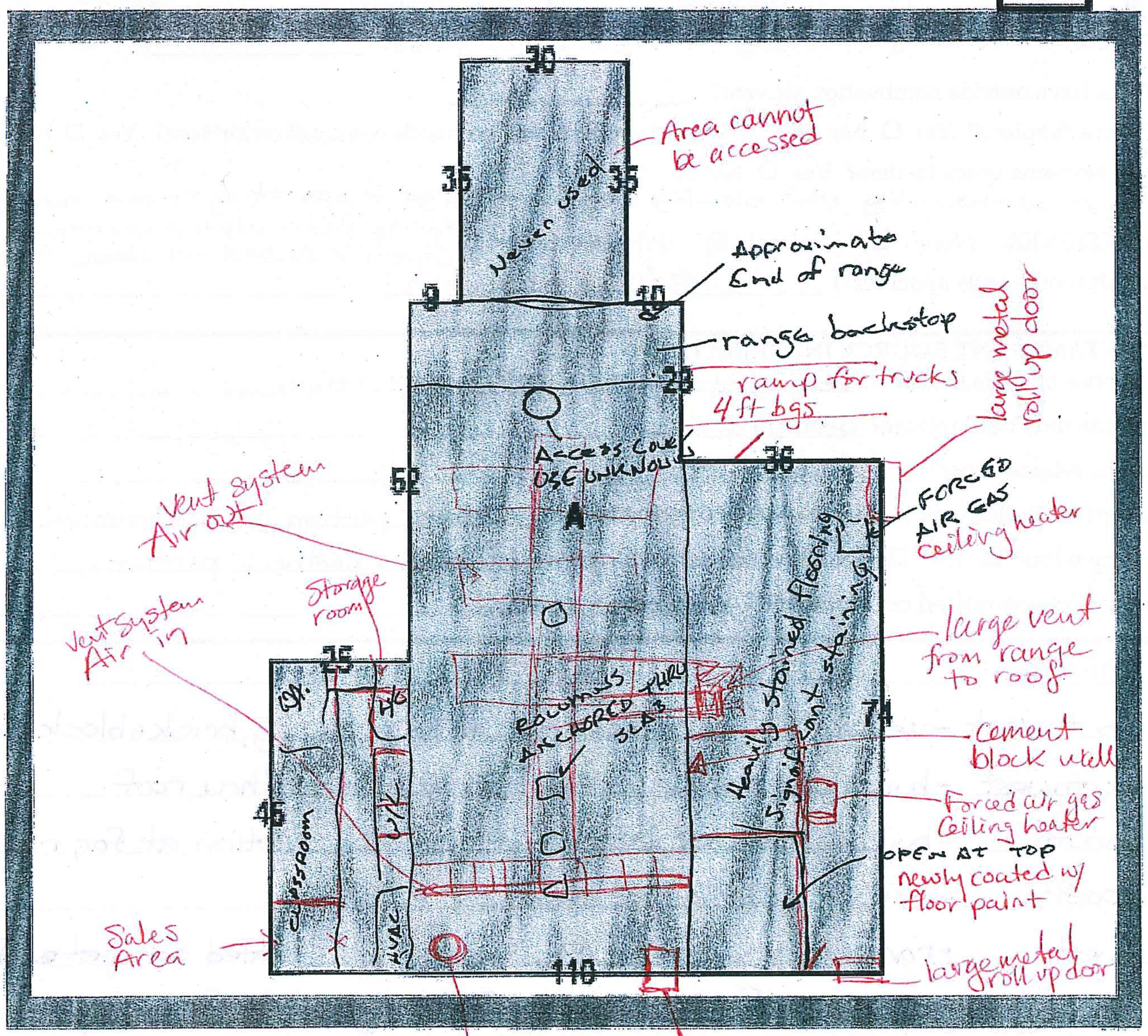
Parcel Number___5173___; Building _____

Mark the following on the below Figure: Additions or Modifications; door/windows/loading docks kept open for air exchange; building compartmentalization, including size and locations of compartments

PARID: J44 26421 0002

PARCEL LOCATION: 2031 DRYDEN RD **NBHD CODE: C1302000**

1 of 1



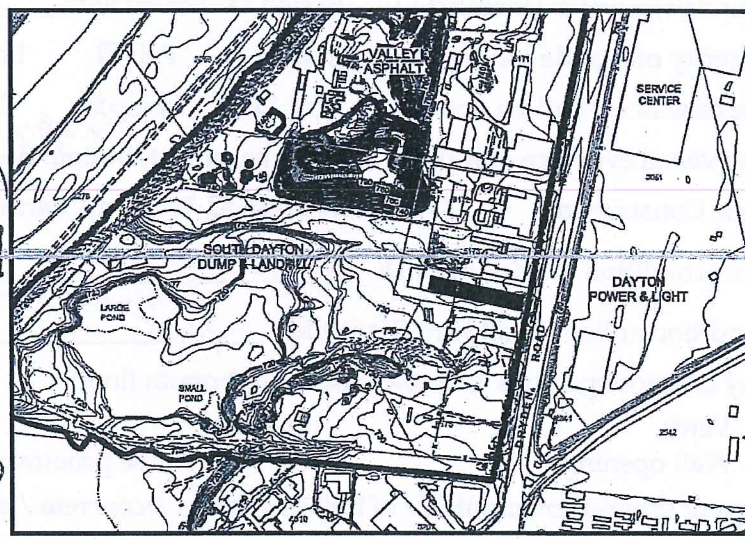
A MANUFACTURING, 8250 Sq. Ft.

Ohio EPA notes the sales and classroom area in south portion of building is enclosed from rest of the building. West 30×35 end of building is not used. Unfinished northern area used for storage and some class instruction

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Date: June 22, 2011 Time: 11:00 Inspector: Adam Loney, CRA

Address: 2045 Dryden Road Site Layout: Parcel Number: 5174 Building: 1



Building Owner: Boesch & Grillot

Occupant Name: Command Roofing

Contact Name: Rob Hodge / Don Philpot (owner)

~~Phone Number: 937-298-1155~~ [Cell ~~937-604-2922~~]

Time resident/employed in home/building? ~3 yrs

Occupation: Industrial/Commercial Roofing

Number and Age of Occupants Adults: Ø (occas. 1-2)

Children: Ø

BUILDING TYPE: One-Story ✓ Two-Storey ____ Multi-Storey ____ Brick ✓ (Parts A, B) Siding ✓ (Part C, D, E) Stucco ____

(Circle One) Residential / Industrial / Commercial / Multi-use / Other (specify) ~~vacant~~

If residential, what type (circle): Single family / Condo / Multi-family / Other (specify) ____

If multiple units, how many? N/A Only accessed to pick up materials

If commercial, what is the business? roofing supply storage ~3yr Hours of Occupation/Occupancy? variable but infrequent

Does the commercial property include residences (i.e., multi-use)? Y / N

If yes, how many? N/A

DESCRIBE BUILDING: 3 stages of construction A+B, D, E, and C* **YEAR CONSTRUCTED:** pre-1968, C may have been later - visible w/ existing footprint ~~one possible addition~~ in 198[illegible]

Is the building insulated? Y* N U/K How air tight? Tight / Average / Not Tight

Previous Uses: Buckeye boiler built boilers at facility for many years

WEATHER SEALS: General Condition: Good ____ Fair ____ Poor ✓ (office) Not Present ✓ (shop)

Are doors/windows kept open to allow for outdoor-to-indoor air exchange? only when moving material in and out otherwise unoccupied

BASEMENT/: BOTTOM FLOOR	None	Finished	Unfinished	Depth below reference point (meters)	Floor covering
Partial	☐	☐	☐		
Full	☐	☐	☐		
Crawl space	☐	N/A	N/A		
Slab-on-grade	☒	☐	☐	carpet (moldy) in office (A), concrete elsewhere	

Is the ~~basement~~/bottom floor used as a ~~living~~/work space area? (circle) Y / N

Number of floors at or above grade: 1

Depth of basement below grade: N/A ft. Building ~~Basement~~ Size: ~12,500 ft²

- possible UST

* spray on insulation present in parts B ~~C~~ of building from 5 ft ~~[illegible]~~ to ceiling

I think it was just in B

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Foundation construction: Poured concrete ☑ Concrete block ☐ Cinder block ☐ Stone ☐ C, D, E

Foundation walls: Poured ☐ Block ☑ Stone ☐ Other ______ Steel beam w/ Metal siding

Foundation walls: Unsealed ☐ Sealed ☐ Sealed with ______

Integrity of foundation walls: Good ☐ Fair ☑ Poor ☐ - could not enter building

The basement/bottom floor is: Wet ☐ Damp ☒ in office - Dry ☒ Moldy ☒ in office

Any visual evidence of leakage through basement/bottom floor walls or floor Yes ☒ in office No ☐

Floor Construction: Poured concrete ☒ Wood ☐ Earth ☐ Brick ☐ Other: ______

Floor condition (cracks, drains): very bad condition, slab is crumbly in D&E, cracks throughout unsealed joints

Condition at floor/wall joint (if visible): poor

Any exterior openings from the basement/bottom floor:

☐ Vents ☐ Fans ☒ Windows office area

☐ Wall openings ☐ Utility pipe penetrations ☒ Other: roll up door & sliding door

Type of ground cover outside of building: grass / concrete / asphalt / other (specify): ______

Sub-slab vapor/moisture barrier in place? Yes / No / Don't know Type of barrier: ______

RADON SYSTEM: ☐ Yes ☒ No Is the system active or passive? Active / Passive

Do you have a sump?: Yes ☐ No ☒ Where: ______ (*show on figure*)

If yes, sealed ☐ open ☐ NA ☐ If yes, is there water in the sump?: Yes ☐ No ☐

Have there ever been a fire in the building?: Yes ☐ No ☐ No evidence of one

If yes, describe its location and extent: ______

Is there a laundry room located inside the house/building?: Yes ☐ No ☒

If yes, describe its location: ______

WATER AND SEWAGE municipal water & sewer → but not used - service turned off

Is this building serviced with municipal water? Yes ☒ No ☐

Water well present?: Yes ☐ No ☒ Don't know ☐ Is well used for drinking water? Yes ☐ No ☐

Well location: ______ (*show on figure*) What do you use the well for?: ______

Do you have a cistern?: Yes ☐ No ☒ Don't know ☐

If yes, describe its location: ______

Do you have a septic system?: Yes ☐ No ☒

If yes, describe its location: ______ (*show on figure*)

If yes, describe how septic system is cleaned: ______

GARAGE: Is there an attached garage? ☐ Yes ☒ No Describe: ______

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

HEATING, VENTILATION, AND AIR CONDITIONING

Type of heating system(s) used (circle all that apply, note primary) - currently not electricity, water, or heat in building

Hot air circulation	❑	Heat pump	❑	Hot water baseboard	❑
Space heaters	❑	Stream radiation	❑	Radiant floor	❑
Electric baseboard	❑	Wood stove	❑	Outdoor wood boiler	❑

FURNACE: Location:__________

Type: Gas	❑	Forced air	❑	Wood	❑
Oil	❑	Hot water	❑	Propane	❑
Electric	❑	Coal	❑	Other: ______	

Does furnace have outside combustion air vent? ________

Do you have a fireplace? Yes ❑ No ☒ Does fireplace have an outside combustion air vent? Yes ❑ No ❑

Do you use kerosene space heaters? Yes ❑ No ☒

HVAC in office area not in use
heat from floor vents
return air through wall vents

AIR CONDITIONER: None ☒ Central ❑ Window units ❑

(If yes, which rooms and capacities?) ________

SPILL/CONTAMINANT SOURCE INFORMATION

Visual evidence of spills/releases: floor is heavily stained throughout B-E, water staining in A

Type of petroleum/VOC release? unknown

When did the release occur? unknown

What areas of the building have been impacted by the release? most of B-E

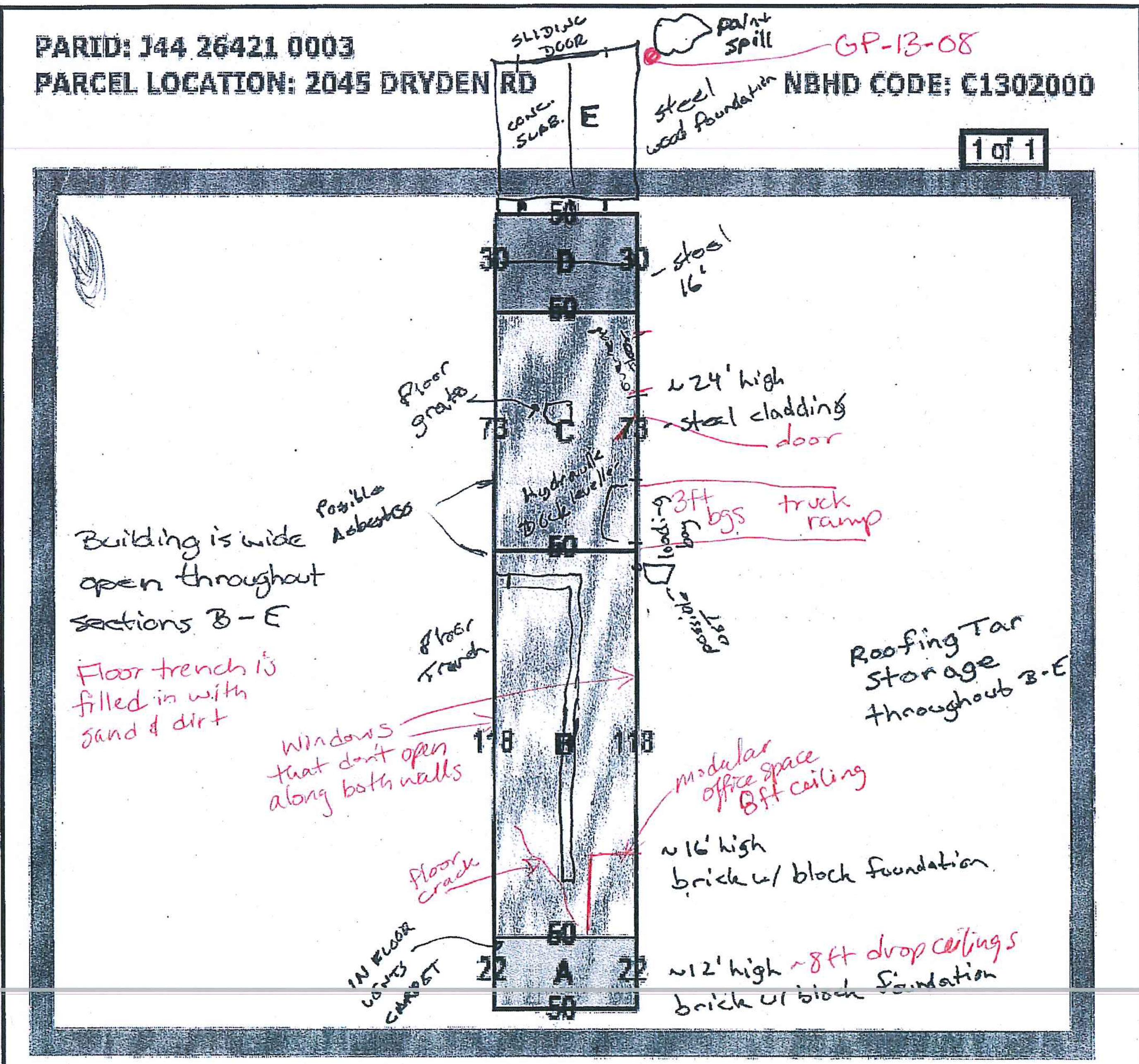
Are there any odors? ☒ Yes ❑ No If yes, describe the odors: - paint odour, faint pervasive oily odour

Where are the release-related odors found? - mold odor in offices

Photo	*Direction*	*Subject*
064	northwest	- building exterior; grass + asphalt surface, brick construction at front
065	west	- building entrance
066	southwest	- north building exterior showing various additions (Parts A, B, C)
068	southwest	- from left: Parts C, D + E of building, weathered asphalt surface
069	south	- union b/w Parts B + C, possible vent pipe + fill port (in ground) at center
073	east	- Part E showing construction, incl. wood at base. GP-13-09 in foreground
311	west	- interior of Part E
312	south	- interior of Part E showing floor staining
314	south	- interior of Part D showing floor staining + tar buckets
316	west	- interior of Part C showing floor grate

317	southwest	- interior of Part B showing floor trench + staining (trench fill w/ sand)
318	east	- modular office area in Part B
319	north	- washroom in Part B, reportedly disconnected

Building Layout:
Parcel Number__5174__; Building _1_
Mark the following on the below Figure: Additions or Modifications; door/windows/loading docks kept open for air exchange; building compartmentalization, including size and locations of compartments



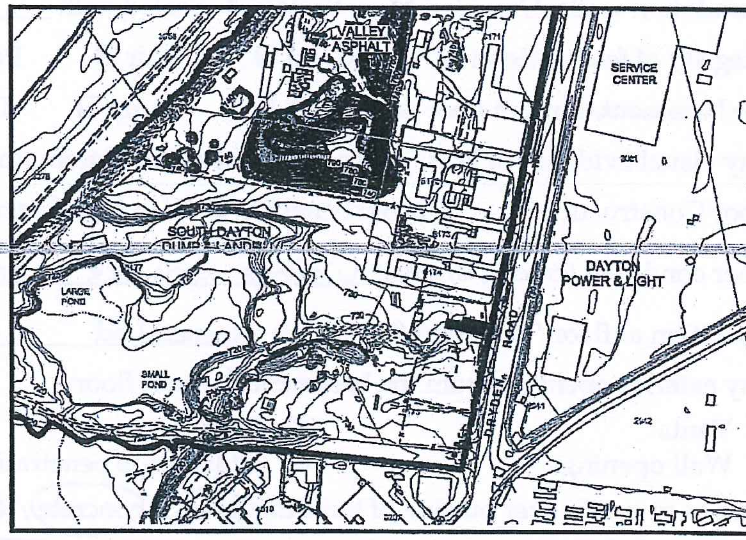
A	MULTI-USE OFFICE, 1100 Sq. Ft.	B	LIGHT MANUFACTURING, 5900 Sq. Ft.
C	LIGHT MANUFACTURING, 3650 Sq. Ft.	D	LIGHT MANUFACTURING, 1500 Sq. Ft.

Part A is finished as offices, but is currently unused.

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Date: June 22, 2011 Time: 12:00 Inspector: Adam Loney

Address: 2075 Dryden Rd. **Site Layout: Parcel Number:** 5175 **Building:** 1



Building Owner: Boesh & Grilot

Occupant Name: N/A

Contact Name: N/A

Phone Number: N/A

Time ~~resident/~~employed in ~~home/~~building? Tenant is moving out + building will be vacant

Occupation: Equipment Sales + Rental

Number and Age of Occupants Adults: 0

Children: 0

BUILDING TYPE: One-Story ✓ Two-Storey ____ Multi-Storey ____ Brick ____ Siding ____ Stucco ____

(Circle One) Residential / Industrial / Commercial / Multi-use / Other (specify)

If residential, what type (circle): Single family / Condo / Multi-family / Other (specify)

If multiple units, how many? N/A Alliance Equipment + Supply easternmost portion possibly visible in 1949 aeri

If commercial, what is the business? Equipment Sales + Rental Hours of Occupation/Occupancy? rarely occupied

Does the commercial property include residences (i.e., multi-use)? Y / N*

If yes, how many? N/A *possible that tenant had been sleeping in building

DESCRIBE BUILDING: concrete block on slab, divided into offices, retail area, and storage/shop area **YEAR CONSTRUCTED:** pre-1949

Is the building insulated? Y/N How air tight? Tight / Average / Not Tight

Previous Uses:

WEATHER SEALS: General Condition: Good ____ Fair ____ Poor ✓ Not Present ____

Are doors/windows kept open to allow for outdoor-to-indoor air exchange? overhead doors open at time of visit

BASEMENT/: BOTTOM FLOOR	None	Finished	Unfinished	Depth below reference point (meters)	Floor covering
Partial	☐	☐	☐		
Full	☐	☐	☐		
Crawl space	☐?	N/A	N/A	-floor is somewhat elevated (~2' on south side) so there may be a small crawl space	
Slab-on-grade	☒	☐	☐		carpet in offices, concrete in retail, whse

Is the ~~basement/~~bottom floor used as a ~~living~~/work space area? (circle) Y / N

Number of floors at or above grade: 1

Depth of basement below grade: N/A ft. Floor ~~Basement~~ Size: 4,557 ft²

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Foundation construction: Poured concrete ☑ Concrete block ☐ Cinder block ☐ Stone ☐

~~Foundation~~ walls: Poured ☐ Block ☑ Stone ☐ Other steel cladding for addition at rear

~~Foundation~~ walls: Unsealed ☒ Sealed ☐ Sealed with ______

Integrity of ~~foundation~~ walls: Good ☐ Fair ☒ Poor ☐

The ~~basement/~~bottom floor is: Wet ☐ Damp ☐ Dry ☒ Moldy ☐

Any visual evidence of leakage through ~~basement/~~bottom floor walls or floor Yes ☐ No ☒

Floor Construction: Poured concrete ☒ Wood ☐ Earth ☐ Brick ☐ Other: ______

Floor condition (cracks, drains): visible cracks in areas where concrete visible, no drains observed

Condition at floor/wall joint (if visible): unsealed

Any exterior openings from the ~~basement/~~bottom floor:

☒ Vents ☒ Fans ☒ Windows

☐ Wall openings ☒ Utility pipe penetrations ☒ Other: overhead & man doors

Type of ground cover outside of building: grass / concrete / asphalt / other (specify): gravel

Sub-slab vapor/moisture barrier in place? Yes / No / Don't know Type of barrier: unlikely

RADON SYSTEM: ☐ Yes ☒ No Is the system active or passive? Active / Passive

Do you have a sump?: Yes ☐ No ☒* Where: shallow concrete pit at SW corner of warehouse (*show on figure*)

If yes, sealed ☐ open ☒ NA ☐ If yes, is there water in the ~~sump~~ pit?: Yes ☐ No ☒

Have there ever been a fire in the building?: Yes ☐ No ☐ no evidence of one

If yes, describe its location and extent: N/A

Is there a laundry room located inside the house/building?: Yes ☐ No ☒

If yes, describe its location: N/A

WATER AND SEWAGE Municipal water & sewer

Is this building serviced with municipal water? Yes ☒ No ☐

Water well present?: Yes ☐ No ☒ Don't know ☐ Is well used for drinking water? Yes ☐ No ☐ N/A

Well location: N/A (*show on figure*) What do you use the well for?: N/A

Do you have a cistern?: Yes ☐ No ☒ Don't know ☐

If yes, describe its location: N/A

Do you have a septic system?: Yes ☐ No ☒

If yes, describe its location: N/A (*show on figure*)

If yes, describe how septic system is cleaned: N/A

GARAGE: Is there an attached garage? ☒ Yes ☒ No Describe: ______
the addition is a garage

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

HEATING, VENTILLATION, AND AIR CONDITIONING

Type of heating system(s) used (circle all that apply, note primary)

Hot air circulation	☒	Heat pump	☐	Hot water baseboard	☐
Space heaters	☐	Stream radiation	☐	Radiant floor	☐
Electric baseboard	☐	Wood stove	☐	Outdoor wood boiler	☐

FURNACE: Location: ____________________

Type:					
Gas	☒	Forced air	☒	Wood	☐
Oil	☐	Hot water	☐	Propane	☐
Electric	☐	Coal	☐	Other: ____________	

Does furnace have outside combustion air vent? yes

Do you have a fireplace? Yes ☐ No ☒ Does fireplace have an outside combustion air vent? Yes ☐ No ☐ N/A

Do you use kerosene space heaters? Yes ☐ No ☒

AIR CONDITIONER: None ☐ Central ☒ Window units ☒

(If yes, which rooms and capacities?) centra retail area, window unit unknown, offices - central air - capacity not listed

SPILL/CONTAMINANT SOURCE INFORMATION

Visual evidence of spills/releases: staining on floor in warehouse area and rear storage shed

Type of petroleum/VOC release? unknown

When did the release occur? unknown

What areas of the building have been impacted by the release? rear storage area + rear of warehouse

Are there any odors? ☐ Yes ☒ No If yes, describe the odors: ____________________

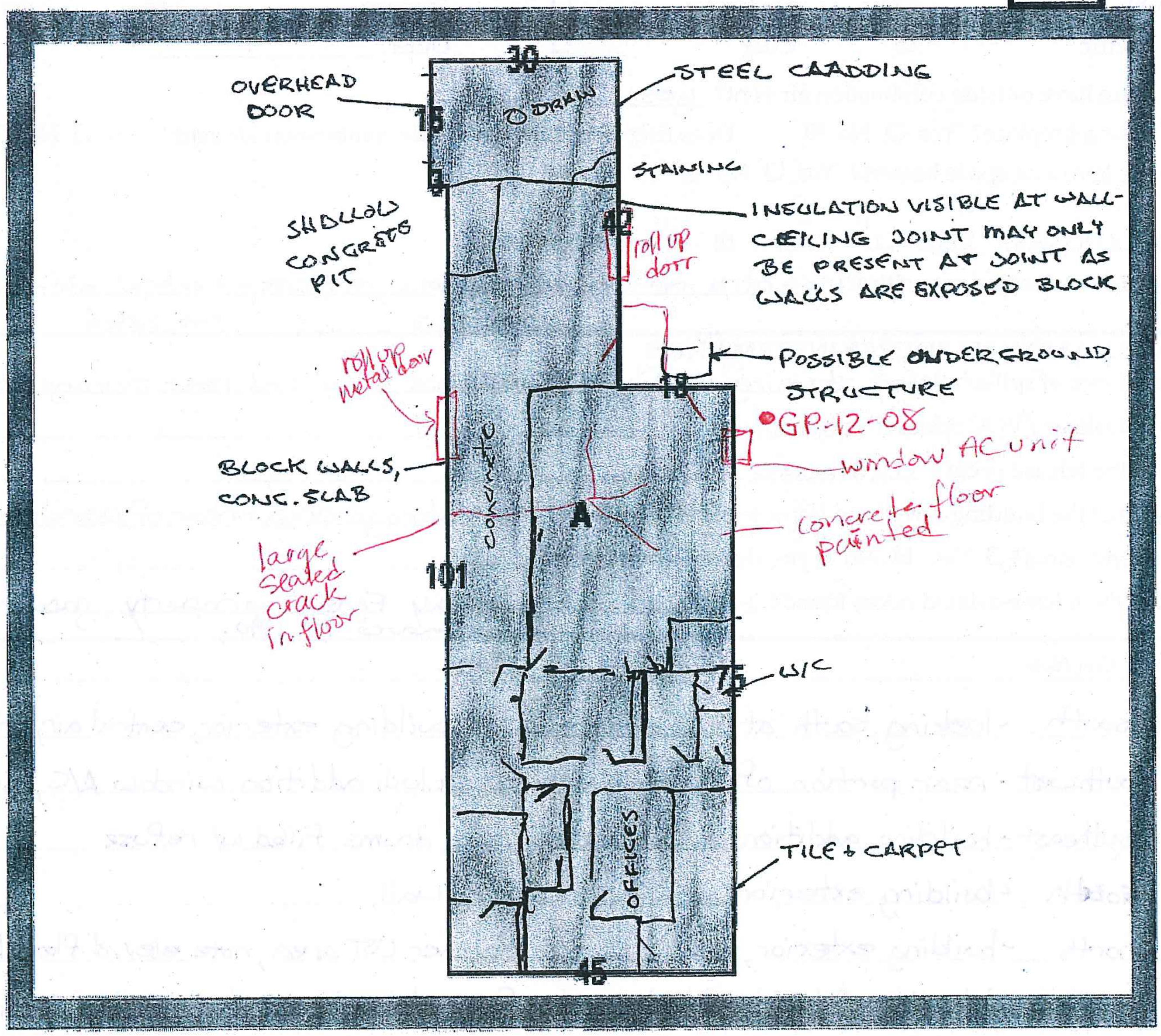
Where are the release-related odors found? N/A. Former Conway Fence property; gasoline UST was removed in 1990.

Photo	*Direction*	*Subject*
075	south	- looking south at front portion of building exterior, central air, gravel, window
077	southwest	- rear portion of building exterior, includ. addition, window A/C, bay door
078	southeast	- building addition, grass surrounding, drums filled w/ refuse
080	south	- building exterior, cracks in block wall
084	north	- building exterior, looking across former UST area, note elev. d floor slab at bay door
329	north	- interior of build. addition, note floor slab, drum, staining in NE corner
330	west	- interior of warehouse portion, note paints + other chemicals
331	west	- interior of central retail area, coated floor slab w/ large cracks
332	south	- office area w/ carpet

Building Layout:
Parcel Number___5175___; Building _____
Mark the following on the below Figure: Additions or Modifications; door/windows/loading docks kept open for air exchange; building compartmentalization, including size and locations of compartments

PARID: J44 26421 0004
PARCEL LOCATION: 2075 DRYDEN RD
NBHD CODE: C1302000

1 of 1



A WAREHOUSE, 4557 Sq. Ft.

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Date: June 21, 2011 Time: 14:45 Inspector: Adam Loney, CRA

Address: 2215 East River Rd. (+2219) Site Layout: Parcel Number: 3207 Building: 2

Building Owner: Globe Equipment via Holding Company

Occupant Name: Globe Equipment

Contact Name: Hilton Garner/Kevin Wagoman

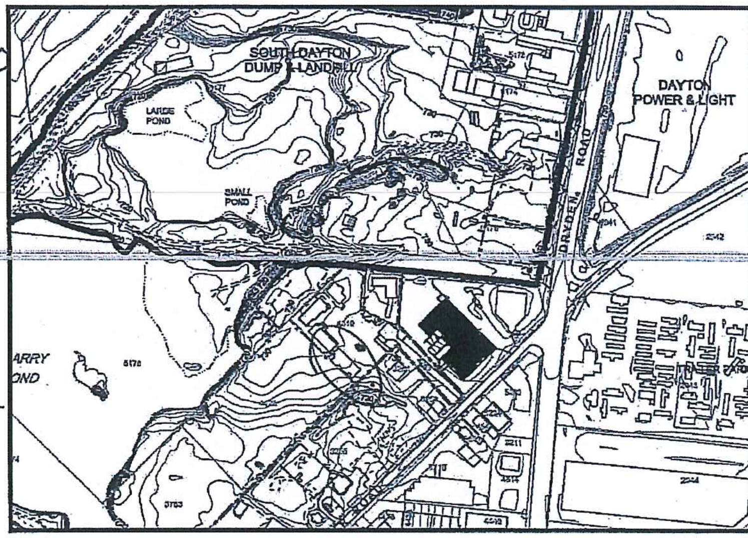
~~Phone Number: 937-299-5493 ext 208/213~~

Time resident/employed in home/building? 6-7 yrs

Occupation: Food processing equip mfg + storage

Number and Age of Occupants Adults: 25

Children: 0



BUILDING TYPE: One-Story ✓ Two-Storey ____ Multi-Storey ____ Brick ✓ (concrete block) Siding ✓ (steel cladding on north add'l) Stucco ____

(Circle One) Residential / Industrial / Commercial / Multi-use / Other (specify) ____________

If residential, what type (circle): Single family / Condo / Multi-family / Other (specify) ____________

If multiple units, how many? N/A

If commercial, what is the business? Deli-slicing equipment Hours of Occupation/Occupancy? 7-5 M-F

Does the commercial property include residences (i.e., multi-use)? Y / N

If yes, how many? N/A

DESCRIBE BUILDING: assembly, warehousing, office **YEAR CONSTRUCTED:** -southern portion visible in 1968 -northern portion visible in 1973

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

Previous Uses: machine shop

WEATHER SEALS: General Condition: Good ____ Fair ____ Poor ____ Not Present ✓

Are doors/windows kept open to allow for outdoor-to-indoor air exchange? office windows + bay doors open in good weather

BASEMENT/: BOTTOM FLOOR	None	Finished	Unfinished	Depth below reference point (meters)	Floor covering
	☒				
Partial	☐	☐	☐		
Full	☐	☐	☐		
Crawl space	☐	N/A	N/A		
Slab-on-grade	☒	☐	☐	exposed concrete	

Is the ~~basement~~/bottom floor used as a living/work space area? (circle) Y N

Number of floors at or above grade: 1

Depth of basement below grade: N/A ft. ~~Basement~~ Floor Size: 19,803 ft²

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

Foundation construction: Poured concrete ☒ Concrete block ☑ Cinder block ☐ Stone ☐ back addition is aluminum

~~Foundation~~ walls: Poured ☐ Block ☒ Stone ☐ Other ______

~~Foundation~~ walls: Unsealed ☒ Sealed ☐ Sealed with ______

Integrity of ~~foundation~~ walls: Good ☒ Fair ☐ Poor ☐

The ~~basement~~/bottom floor is: Wet ☐ Damp ☐ Dry ☒ Moldy ☐

Any visual evidence of leakage through basement/bottom floor walls or floor Yes ☐ No ☒

Floor Construction: Poured concrete ☑ Wood ☐ Earth ☐ Brick ☐ Other: ______

Floor condition (cracks, drains): cracks throughout, Some large cracks, some sealed cracks

Condition at floor/wall joint (if visible): no seal

Any exterior openings from the ~~basement~~/bottom floor:

☒ Vents ☒ Fans ☒ Windows

☐ Wall openings ☒ Utility pipe penetrations ☒ Other: bay doors

Type of ground cover outside of building: grass / concrete / asphalt / other (specify): ______

Sub-slab vapor/moisture barrier in place? Yes / No / Don't know Type of barrier: ______

RADON SYSTEM: ☐ Yes ☑ No Is the system active or passive? Active / Passive

Do you have a sump?: Yes ☐ No ☒ Where: ______ (*show on figure*)

If yes, sealed ☐ open ☐ NA ☒ If yes, is there water in the sump?: Yes ☐ No ☐

Have there ever been a fire in the building?: Yes ☐ No ☐ no evidence of one

If yes, describe its location and extent: N/A

Is there a laundry room located inside the house/building?: Yes ☐ No ☒

If yes, describe its location: N/A

WATER AND SEWAGE Municipal water & sewer

Is this building serviced with municipal water? Yes ☒ No ☐

Water well present?: Yes ☐ No ☒ Don't know ☐ Is well used for drinking water? Yes ☐ No ☐ N/A

Well location: N/A (*show on figure*) What do you use the well for?: N/A

Do you have a cistern?: Yes ☐ No ☒ Don't know ☐

If yes, describe its location: N/A

Do you have a septic system?: Yes ☐ No ☒

If yes, describe its location: N/A (*show on figure*)

If yes, describe how septic system is cleaned: N/A

GARAGE: Is there an attached garage? ☐ Yes ☒ No Describe: N/A

FORM 1: BUILDING PHYSICAL SURVEY QUESTIONNAIRE

HEATING, VENTILLATION, AND AIR CONDITIONING

Type of heating system(s) used (circle all that apply, note primary)

Hot air circulation	☒	Heat pump	☐	Hot water baseboard	☐
Space heaters	☐	Stream radiation	☐	Radiant floor	☐
Electric baseboard	☐	Wood stove	☐	Outdoor wood boiler	☐

FURNACE: Location: ______________________

Type: Gas	☒	Forced air	☒	Wood	☐
Oil	☐	Hot water	☐	Propane	☐
Electric	☐	Coal	☐	Other: ________	

Does furnace have outside combustion air vent? yes

Do you have a fireplace? Yes ☐ No ☒ Does fireplace have an outside combustion air vent? Yes ☐ No ☐ N/A

Do you use kerosene space heaters? Yes ☐ No ☒

AIR CONDITIONER: None ☐ Central ☒ Window units ☐ rooftop AC units for offices & warehouse

(If yes, which rooms and capacities?) offices, warehouse bays

SPILL/CONTAMINANT SOURCE INFORMATION

Visual evidence of spills/releases: no reportable spills

Type of petroleum/VOC release? N/A

When did the release occur? N/A

What areas of the building have been impacted by the release? N/A

Are there any odors? ☐ Yes ☒ No If yes, describe the odors: N/A

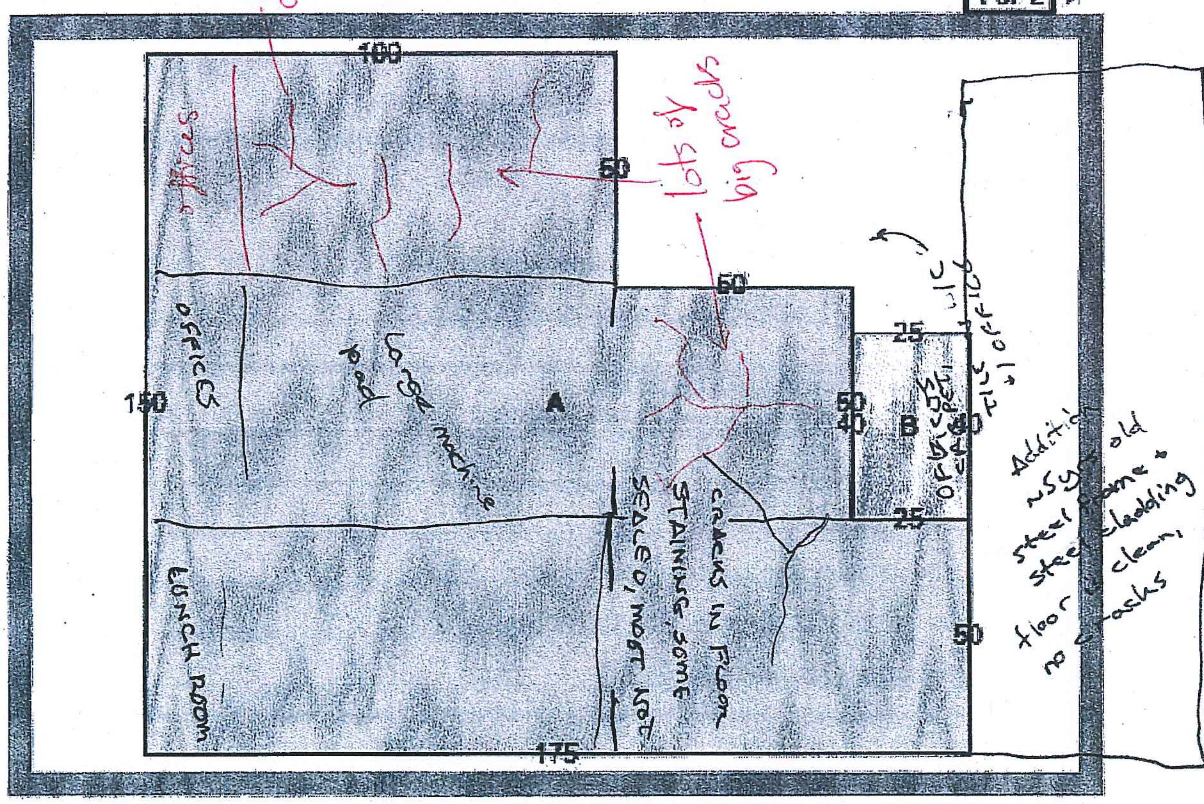
Where are the release-related odors found? N/A

Photo	*Direction*	*Subject*
135	west	- Floor in north portion of building (centre of Part A)
136	West	- Up ramp to newer addition
137+8	down	- Floor cracks in Part A + B
140	north	- From Part B into Part A
141-4	various	- Part A floor showing cracks throughout building
145-6	~~east~~ north	- Floor drains in W/C in southern portion of Part A along east wall
150	south	- at left, original Part A; at right, later addition
151	southeast	- building exterior

Building Layout:
Parcel Number__3207__; Building __2__
Mark the following on the below Figure: Additions or Modifications; door/windows/loading docks kept open for air exchange; building compartmentalization, including size and locations of compartments

PARID: J44 04105 0001
PARCEL LOCATION: 2153 EAST RIVER RD
NBHD CODE: C1300000

1 of 2

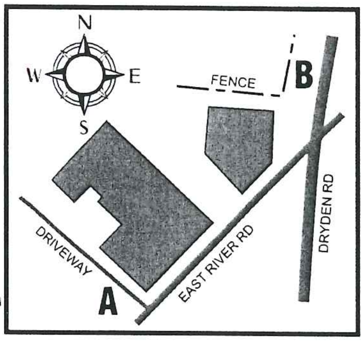


A	LIGHT MANUFACTURING, 18803 Sq. Ft.	B	LIGHT MANUFACTURING, 1000 Sq. Ft.

carpet in office areas
~8 ft ceiling in office areas
~16 ft ceiling in warehouse

Office area at SE end of building is enclosed, separate from the production and warehousing area.

Please include Fire map



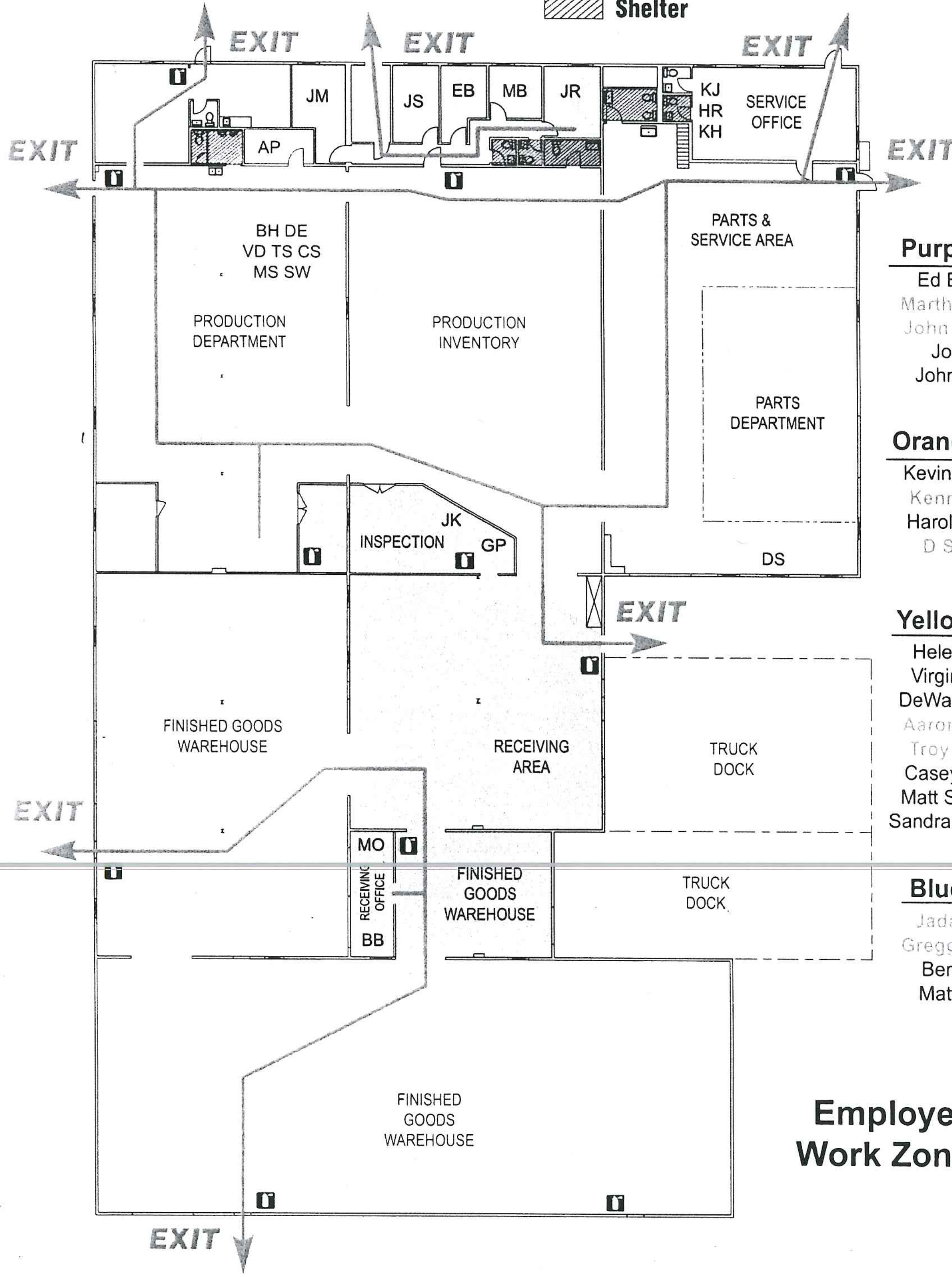
Fire and Emergency Evacuation Route & Weather Emergency Shelter Areas

Globe Food Equipment Production Facilities Building

All personnel will meet at nearest location:
A. North End of building on Dryden Rd.
B. South End of building on East River Rd.

Fire Extinguisher

Weather Emergency Shelter



Purple Zone
Ed Brinkman
Martha Burgess
John McDowell
Joe Reilly
John Skapiak

Orange Zone
Kevin Hannahs
Kenny Jones
Harold Rogers
D Slaidins

Yellow Zone
Helen Buford
Virginia Dean
DeWayne Eslick
Aaron Paschal
Troy Schlenk
Casey Schmidt
Matt Stickelman
Sandra Williamson

Blue Zone
Jada Knight
Gregg Pearson
Bert Bloom
Matt Oswalt

Employee Work Zones

APPENDIX E

MITIGATION SUMMARY DATABASE
DATED APRIL 23, 2013

TABLE E.1

ON-SITE MITIGATION SUMMARY DATABASE
APRIL 23, 2013
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Number on Map	Building Address	Owner Name & Address	Occupant Name & Address	cc. Other Party(ies) Requiring Notification	Parcel/Building No.	Comments	Type	Methane Screening Level	TCE Screening Levels (10^{-5} levels)		Date Sampled By CRA January, March, August, and September 2012			Mitigation Decision	Date Sample Result Letter Mailed	Date of Mitigation Meeting (SSDS Access Agreement)	Date of Mitigation Recon Meeting (SSDS Subcontractor)	Date Mitigation Installation Plan Submitted to U.S. EPA	Approval Date of U.S. EPA Mitigation Plan	Date of SSDS Installation	Post-Mitigation Radius of Influence Vacuum Readings	30-day Proficiency SS/IA Sampling	180-day Proficiency SS/IA Sampling	1-year Proficiency SS/IA Sampling	Date O&M Manual submitted to property owner	Date of 1-year SSDS Inspection	Date of SSDS upgrade (if necessary)
									Sub-Slab (in ppb)	Indoor Air (in ppb)	Max Methane in Sub-Slab	Max TCE Sub-Slab (in ppb)	Max TCE Indoor Air (in ppb)														
8	1951 Dryden Road	Tim Hoffman Dinsmore & Shohl LLP 1100 Courthouse Plaza SW 10 N. Ludlow Street Dayton, OH 45402	Bruce Mangeot B&G Equipment & Truck Repair, Inc. 1951 Dryden Road Moraine, OH 45439	Tina Ortiz Mark Fornes Realty, Inc. 7755 Paragon Rd. Suite 106 Dayton, OH 45459	5171 Building 1	B&G Trucking - single story commercial-use building	Non-Residential	0.5%	20	2	ND	1,800	1.5	Mitigation - SSDS Part of Work Plan	UPS on 10-23-12 EPA Letter sent via UPS on 10-25-12		3/15/13										
9	1951 Dryden Road	Tim Hoffman Dinsmore & Shohl LLP 1100 Courthouse Plaza SW 10 N. Ludlow Street Dayton, OH 45402	Bruce Mangeot B&G Equipment & Truck Repair, Inc. 1951 Dryden Road Moraine, OH 45439	Tina Ortiz Mark Fornes Realty, Inc. 7755 Paragon Rd. Suite 106 Dayton, OH 45459	5171 Building 2	B&G Trucking - slab-on-grade	Non-Residential	0.5%	20	2	ND	3,100	13	Mitigation - SSDS Part of Work Plan	UPS on 10-23-12		3/15/13										
10	1951 Dryden Road	Tim Hoffman Dinsmore & Shohl LLP 1100 Courthouse Plaza SW 10 N. Ludlow Street Dayton, OH 45402	Bruce Mangeot B&G Equipment & Truck Repair, Inc. 1951 Dryden Road Moraine, OH 45439	Tina Ortiz Mark Fornes Realty, Inc. 7755 Paragon Rd. Suite 106 Dayton, OH 45459	5171 Building 3	B&G Trucking. Fabric covered canvas steel frame with retractable flaps, on asphalt	Non-Residential	No Samples Required						NFA - No possibility of gas buildup given building construction													
11	1951 Dryden Road	Tim Hoffman Dinsmore & Shohl LLP 1100 Courthouse Plaza SW 10 N. Ludlow Street Dayton, OH 45402	Bruce Mangeot B&G Equipment & Truck Repair, Inc. 1951 Dryden Road Moraine, OH 45439	Tina Ortiz Mark Fornes Realty, Inc. 7755 Paragon Rd. Suite 106 Dayton, OH 45459	5171 Building 4	B&G Trucking. Crawl Space	Non-Residential	0.5%	20	2	ND	Crawl Space sampling only	ND	Discuss with building owner. Demolition proposed.	UPS on 10-23-12												
12	2015 and 2019 Dryden Road	Tim Hoffman Dinsmore & Shohl LLP 1100 Courthouse Plaza SW 10 N. Ludlow Street Dayton, OH 45402	Don Overstreet Overstreet Painting 2019 Dryden Road Moraine, OH 45439	Tina Ortiz Mark Fornes Realty, Inc. 7755 Paragon Rd. Suite 106 Dayton, OH 45459	5172 Building 1 Overstreet	Vacant	Non-Residential	0.5%	20	2	NA	5,400	5.6	Mitigation - SSDS Part of Work Plan	UPS on 10-23-12		3/15/13										
			Forest Freeze / John Haymaker S&J Precision 2015 Dryden Road Moraine, OH 45439		5172 Building 1 S&J		Non-Residential	0.5%	20	2	ND	5,600	3.1		UPS on 10-23-12 EPA Letter sent via UPS on 10-25-12		3/15/13										
13	2019 Dryden Road	Tim Hoffman Dinsmore & Shohl LLP 1100 Courthouse Plaza SW 10 N. Ludlow Street Dayton, OH 45402	Don Overstreet Overstreet Painting 2019 Dryden Road Moraine, OH 45439	Tina Ortiz Mark Fornes Realty, Inc. 7755 Paragon Rd. Suite 106 Dayton, OH 45459	5172 Building 3 Overstreet	Storage. Vacant	Non-Residential	0.5%	20	2	ND	740	0.98	Discuss with building owner. NFA as building not designed for occupancy	UPS on 10-23-12												
14	2003 Dryden Road	Tim Hoffman Dinsmore & Shohl LLP 1100 Courthouse Plaza SW 10 N. Ludlow Street Dayton, OH 45402	Brian Clark Bullseye Amusements 2003 Dryden Road Moraine, OH 45439	Tina Ortiz Mark Fornes Realty, Inc. 7755 Paragon Rd. Suite 106 Dayton, OH 45459	5172 Building 2	Single story slab-on-grade Note: Benzene SS = 50 ppbv (20 ppbv limit) and IA = 2.4 ppbv (2 ppbv limit)	Non-Residential	0.5%	20	2	ND	36	0.079	Mitigation - SSDS Part of Work Plan	UPS on 10-23-12		3/15/13										
15	2031 Dryden Road	Tim Hoffman Dinsmore & Shohl LLP 1100 Courthouse Plaza SW 10 N. Ludlow Street Dayton, OH 45402	Jeff Pedro SIM Trainer 2031 Dryden Road Moraine, OH 45439	Tina Ortiz Mark Fornes Realty, Inc. 7755 Paragon Rd. Suite 106 Dayton, OH 45459	5173 Building 1	SIM Trainer: On-slab	Non-Residential	0.5%	20	2	0.97%	690	5.2	Mitigation - SSDS (intrinsically safe) Part of Work Plan	UPS on 10-23-12 EPA Letter sent via UPS on 10-25-12		3/15/13										
16	2045 Dryden Road	Tim Hoffman Dinsmore & Shohl LLP 1100 Courthouse Plaza SW 10 N. Ludlow Street Dayton, OH 45402		Tina Ortiz Mark Fornes Realty, Inc. 7755 Paragon Rd. Suite 106 Dayton, OH 45459	5174 Building 1	Command Roofing: On-slab	Non-Residential	0.5%	20	2	ND	1,500	50	Mitigation - SSDS Part of Work Plan	UPS on 10-23-12		3/15/13										
17	2075 Dryden Road	Tim Hoffman Dinsmore & Shohl LLP 1100 Courthouse Plaza SW 10 N. Ludlow Street Dayton, OH 45402		Tina Ortiz Mark Fornes Realty, Inc. 7755 Paragon Rd. Suite 106 Dayton, OH 45459	5175 Building 1	Slab-on-grade: Former Alliance Equipment and Supply - Vacant	Non-Residential	0.5%	20	2	ND	120	0.18	Mitigation - SSDS Part of Work Plan Discuss with Bldg owners. NFA while vacant, evaluate need for mitigation before future occupancy	UPS on 10-23-12		3/15/13										

TABLE E.1

ON-SITE MITIGATION SUMMARY DATABASE
APRIL 23, 2013
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Number on Map	Building Address	Owner Name & Address	Occupant Name & Address	cc. Other Party(ies) Requiring Notification	Parcel/Building No.	Comments	Type	Methane Screening Level	TCE Screening Levels (10^{-5} levels) Sub-Slab (in ppb)	TCE Screening Levels (10^{-5} levels) Indoor Air (in ppb)	Date Sampled By CRA: January, March, August, and September 2012 Max Methane in Sub-Slab	Max TCE Sub-Slab (in ppb)	Max TCE Indoor Air (in ppb)	Mitigation Decision	Date Sample Result Letter Mailed
18	2225A East River Road	Ron Barnett 2225 East River Road Dayton, OH 45439			4610 Building A	Ron Barnett Construction. Residential Trailer	Residential	0.5%	4	0.4	Crawl space sampling. IA screening levels apply.		0.022	CRA completed collecting a crawl space sample, IA sample and outdoor air sample during the week of 1/7/13	UPS on 11-30-12
19	2225B East River Road	Ron Barnett 2225 East River Road Dayton, OH 45439			4610 Building B	Ron Barnett Construction	Non-Residential	0.5%	20	2	ND	ND	Not sampled	No Further Action required	
20	2225C East River Road	Ron Barnett 2225 East River Road Dayton, OH 45439			4610 Building C	Ron Barnett Construction	Non-Residential	0.5%	NA - Methane monitoring only		ND	NA - Methane monitoring only		No Further Action required	
21	2225D East River Road	Ron Barnett 2225 East River Road Dayton, OH 45439			4610 Building D	Ron Barnett Construction. Storage only	Non-Residential	0.5%	NA - Methane monitoring only		ND	NA - Methane monitoring only		No Further Action required	
22	2225E East River Road	Ron Barnett 2225 East River Road Dayton, OH 45439			4610 Building E	Ron Barnett Construction. Car repair building	Non-Residential	0.5%	20	2	ND	ND	NA	No Further Action required	

Number on Map	Date of Mitigation Meeting (SSDS Access Agreement)	Date of Mitigation Recon Meeting (SSDS Subcontractor)	Date Mitigation Installation Plan Submitted to U.S. EPA	Approval Date of U.S. EPA Mitigation Plan	Date of SSDS Installation	Post-Mitigation Radius of Influence Vacuum Readings	30-day Proficiency SS/IA Sampling	180-day Proficiency SS/IA Sampling	1-year Proficiency SS/IA Sampling	Date O&M Manual submitted to property owner	Date of 1-year SSDS Inspection	Date of SSDS upgrade (if necessary)
18												
19												
20												
21												
22												

Notes:

Results that are bolded and highlighted red are greater than the Ohio Department of Health screening levels.

NA = Not Analyzed
ND = Not Detected
ppb = Parts per billion
TCE = Trichloroethylene
PCE = Tetrachloroethene
NFA = No further action required

TABLE E.2

OFF-SITE MITIGATION SUMMARY DATABASE
APRIL 23, 2013
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Number on Map	Address	Owner Name & Address	Occupant Name & Address	Parcel/Building No.	Comments	Type	Methane Screening Level	Screening Levels (10^{-5} levels)		Date Sampled By CRA			Next Step	Date Sample Result Letter Mailed	Date of Mitigation Meeting (SSDS Access Agreement)	Date of Mitigation Recon Meeting (SSDS Subcontractor)	Date Mitigation Installation Plan Submitted to U.S. EPA	Approval Date of U.S. EPA Mitigation Plan	Date of SSDS Installation	Post-Mitigation Radius of Influence Vacuum Readings	____-day Proficiency SS/IA Sampling	____-day Proficiency SS/IA Sampling	1-year Proficiency SS/IA Sampling	Date O&M Manual submitted to property owner	Date of 1-year SSDS Inspection	Date of SSDS upgrade (if necessary)
										January, March, August, and September 2012																
								Sub-Slab (in ppb)	Indoor Air (in ppb)	Max Methane in Sub-Slab	Max Sub-Slab (in ppb)	Max Indoor Air (in ppb)														
23	2153 Dryden Road	Walloon Holdings LLC 2153 Dryden Road Moraine, OH 45439	Hilton Garner 2153 Dryden Road Dayton, OH 45439	3207 Building 1	Globe Equipment	Non-Residential	0.5%	20 (TCE)	2 (TCE)	ND	2.8 (TCE)	0.093 (TCE)	No Further Action required	UPS on 12-10-12												
24	2215 and 2219 East River Road	Walloon Holdings LLC 2153 Dryden Road Moraine, OH 45439	Hilton Garner 2153 Dryden Road Dayton, OH 45439	3207 Building 2	Globe Equipment	Non-Residential	0.5%	20 (TCE)	2 (TCE)	ND	48 (TCE)	0.37 (TCE)	Mitigation - SSDS Part of Work Plan			3/15/13										
25	2233 Rear East River Road	Ronald Barnett 2233 East River Road Dayton, OH 45439	Middleton Trucking Inc. 2233 E. River Rd. Moraine, OH 45439	3254 Building 1	Middleton Trucking	Non-Residential	0.5%	20 (Benzene)	2 (Benzene)	ND	0.61 J (Benzene)	2.7 (Benzene)	CRA collected an additional SS sample in Jan 2013. Benzene was not detected. Benzene VI not occurring. No Further Action required	UPS on 4-4-13												
26	2233 Front East River Road	Ronald Barnett 2233 East River Road Dayton, OH 45439		3253 Building 1	Ron Barnett's house. Concrete basement floor in poor condition.	Residential	0.05%	4 (Benzene)	0.4 (Benzene)	ND	Indoor Air sampling only	0.5 (benzene)	CRA collected an additional IA sample in Jan 2013. Benzene was not detected. Benzene VI not occurring. No Further Action required	UPS on 4-4-13												
27	2233 Front East River Road	Ronald Barnett 2233 East River Road Dayton, OH 45439		3253 Building 2	Ron Barnett's garage	Residential	0.5%	4 (TCE)	0.4 (TCE)	ND	NA - Methane monitoring only		No Further Action required													
28	2229 Dryden Road	Vinny Nyhan Vinny's Bar & Grille 2229 Dryden Road Moraine, OH 45439		5223 Building 1	Vinny's Restaurant	Non-Residential	0.5%	20 (TCE)	2 (TCE)	ND	ND (TCE)	0.089 (TCE)	No Further Action required	UPS CRA and EPA sample result letters on 12-10-12												
29	2232 East River Road	Quinn Ogletree 5031 West Sparrow Road Springfield, OH 45502		3251 Building 1	Quinn Ogletree	Residential	0.5%	4 (Benzene) 200 (Chloroform)	0.4 (Benzene) 20 (Chloroform)	ND	ND (Benzene) 0.96 (Chloroform)	0.99 (Benzene) 140 (Chloroform)	CRA completed installing a new SS probe and resampled during the week of 1/7/13 Benzene and Chloroform both ND. VI not occurring. USEPA collected a split SS sample	UPS CRA and EPA sample results letters on 4-4-13												
30	2317 East River Road	2305 East River Road Moraine, OH 45439	2317 East River Road Moraine, OH 45439	3255 Building 1	Century Propane	Residential	0.5%	Access was not granted in July 2012																		
31	2347 East River Road	Dorothy Moore 2347 East River Road Moraine, OH 45439		3257 Building 1	Dorothy Moore	Residential	0.5%	Access was not granted in July 2012																		
32	2359 East River Road	Dorothy Moore 2347 East River Road Moraine, OH 45439	2359 East River Road Moraine, OH 45439	3258 Building 1	Dorothy Moore	Residential	0.5%	Access was not granted in July 2012																		

TABLE E.2

OFF-SITE MITIGATION SUMMARY DATABASE
APRIL 23, 2013
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Number on Map	Address	Owner Name & Address	Occupant Name & Address	Parcel/Building No.	Comments	Type	Methane Screening Level	Screening Levels (10^{-5} levels)		Date Sampled By CRA January, March, August, and September 2012			Next Step	Date Sample Result Letter Mailed	Date of Mitigation Meeting (SSDS Access Agreement)	Date of Mitigation Recon Meeting (SSDS Subcontractor)	Date Mitigation Installation Plan Submitted to U.S. EPA	Approval Date of U.S. EPA Mitigation Plan	Date of SSDS Installation	Post-Mitigation Radius of Influence Vacuum Readings	____-day Proficiency SS/IA Sampling	____-day Proficiency SS/IA Sampling	1-year Proficiency SS/IA Sampling	Date O&M Manual submitted to property owner	Date of 1-year SSDS Inspection	Date of SSDS upgrade (if necessary)
								Sub-Slab (in ppb)	Indoor Air (in ppb)	Max Methane in Sub-Slab	Max Sub-Slab (in ppb)	Max Indoor Air (in ppb)														
33	2373 East River Road	Jim Worley 2335 East River Road Moraine, OH 45439	Occupant 2373 East River Road Moraine, OH 45439	3262 Building 1	Jim Worley	Residential	0.5%	4 (Benzene)	0.4 (Benzene)	ND	ND (Benzene)	0.89 /0.64 (Benzene - indoor / outdoor air)	CRA collected an additional SS sample in Jan 2013. Benzene was not detected. Benzene VI not occurring. No Further Action required	UPS on 4-4-13												
34	2391 East River Road	Jim Worley 2335 East River Road Moraine, OH 45439	Occupant 2391 East River Road Moraine, OH 45439	3263 Building 1	Jim Worley	Residential	0.5%	4 (TCE) 60 (PCE)	0.4 (TCE) 6 (PCE)	ND	ND (TCE) 21 (PCE)	ND (TCE) 0.15 (PCE)	No Further Action required	UPS on 12-6-12 to owner and occupant EPA sample result letter UPS on 12-10-12												
35	2228 Dryden Road	Richard Rife Village Park Community Ltd. 3711 Stutsman Road Bellbrook, OH 45305	Occupant 2228 Dryden Road Unit 15 Moraine, OH 45439	2943 Unit 15	Village Park Community	Residential	0.5%	4 (TCE) 4 (Benzene) 60 (PCE)	0.4 (TCE) 0.4 (Benzene) 6 (PCE)	ND	Crawl Space sampling only	ND (TCE) 0.19 (Benzene) 0.063 (PCE)	No Further Action required	UPS on 12-6-12 to owner and occupant												
36	2228 Dryden Road	Richard Rife Village Park Community Ltd. 3711 Stutsman Road Bellbrook, OH 45305	Occupant 2228 Dryden Road Unit 112 Moraine, OH 45439	2943 Unit 112	Village Park Community	Residential	0.5%	4 (TCE) 4 (Benzene) 60 (PCE)	0.4 (TCE) 0.4 (Benzene) 6 (PCE)	ND	Crawl Space sampling only	ND (TCE) 0.17 (Benzene) 0.042 (PCE)	No Further Action required	UPS on 12-6-12 to owner and occupant												

Notes:
Results that are bolded and highlighted red are greater than the Ohio Department of Health screening levels.
NA = Not Analyzed
ND = Not Detected
ppb = Parts per billion
TCE = Trichloroethylene
PCE = Tetrachloroethene
NFA = No further action required

APPENDIX F

WEEKLY MITIGATION STATUS UPDATE
CONFERENCE CALL SUMMARIES & MINUTES

From	Loney, Adam	**Date**	Thursday, October 11, 2012 7:35:14 PM
To	'Steven Renninger'; 'Leslie Patterson'; 'John Sherrard'; 'Brown, Ken'; 'jrc@e-emi.com'; 'Bryan Heath'; 'Paul Jack'; Quigley, Steve; Chan, Valerie; 'Steven Renninger'; 'Leslie Patterson'; 'John Sherrard'; 'Brown, Ken'; 'jrc@e-emi.com'; 'Bryan Heath'; 'Paul Jack'; Marshall, Laura		
Cc	Project Email Hold		
Subject	Call Summary and Action Items: Weekly Conference call to discuss Vapor Intrusion Mitigation - South Dayton Dump & Landfill ~COR-038443-62~		

The following is a brief summary of this afternoon's call and the action items arising therefrom.

During the call CRA and EPA provided updates on the status of the sample letters and the draft order respectively. CRA circulated a markup of the draft sample letter and example summary tables with the Respondents comments incorporated. The draft order is expected within the next few weeks. EPA and Respondents agreed not to provide laboratory data reports with results letters but to make them available upon request. A table containing all of the data will be provided with each letter.

Action Items for the Oct 18 call:

John to provide any comments on the draft results and sample letter markups provided

CRA to send Summary Tables to John for remaining Result Letters (#1)
John will complete Sample Result Letters (#1)
CRA will draft Sample Result Letter (#2) for EPA review
Goal is to send all letters by the end of October

If you have any questions or comments on the summary, please don't hesitate to call me.

Regards, Adam

Adam Loney, P. Eng.

Conestoga-Rovers & Associates (CRA)

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From	Loney, Adam	**Date**	Thursday, October 18, 2012 3:16:41 PM
To	'Steven Renninger'; 'Leslie Patterson'; 'John Sherrard'; 'Brown, Ken'; 'jrc@e-emi.com'; 'Bryan Heath'; 'Paul Jack'; Quigley, Steve; Chan, Valerie; 'Steven Renninger'; 'Leslie Patterson'; 'John Sherrard'; 'Brown, Ken'; 'jrc@e-emi.com'; 'Bryan Heath'; 'Paul Jack'; Marshall, Laura		
Cc	Project Email Hold		
Subject	October 18, 2012 Call Summary and Action Items: Weekly Conference call to discuss Vapor Intrusion Mitigation - South Dayton Dump & Landfill		

The following is a brief summary of this afternoon's call and the action items arising therefrom.

During the call CRA and EPA provided updates on the status of the sample letters and the draft order respectively. CRA circulated a markup of the draft sample letter for buildings with no exceedances (sample letter 2) and Dynamac provided a revised version of the example summary letter for buildings requiring mitigation with the Respondents comments incorporated.

The draft order is expected to be mailed this week.

Action Items for the Oct 25 call:

CRA will provide Summary Tables and Sample Location figures in batches to John starting Oct. 19 – focus will be on buildings requiring mitigation based on indoor air results or explosive gas concentrations and then on buildings requiring mitigation due to sub-slab results, and lastly, for buildings not requiring mitigation at this time.

John to provide any comments on the draft results and sample letter markups provided

John will complete Sample Result Letters (#1) and start distributing
Goal is to send all letters by the end of October

CRA commencing work on mitigation work plan and will provide a schedule for distribution of the work plan during Oct. 25 call.

If you have any questions or comments on the summary, please don't hesitate to call me.

Regards, Adam

Adam Loney, P. Eng.

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From	Loney, Adam	**Date**	Thursday, October 25, 2012 9:27:23 PM
To	'Steven Renninger'; 'Leslie Patterson'; 'John Sherrard'; 'Brown, Ken'; 'jrc@e-emi.com'; 'Bryan Heath'; 'Paul Jack'; Quigley, Steve; Chan, Valerie; 'Steven Renninger'; 'Leslie Patterson'; 'John Sherrard'; 'Brown, Ken'; 'jrc@e-emi.com'; 'Bryan Heath'; 'Paul Jack'; 'Marshall, Laura'		
Cc	Project Email Hold		
Subject	October 25, 2012 Call Summary and Action Items: Weekly Conference call to discuss Vapor Intrusion Mitigation - South Dayton Dump & Landfill ~COR-038443-62~		

The following is a brief summary of this afternoon's call and the action items arising therefrom.

During the call CRA and EPA provided updates on the status of the sample letters and the draft order respectively. The Respondents discussed a few concerns regarding technical aspects of the draft order and there was general agreement that the issues could be resolved. EPA clarified that the word "perimeter" in the draft order, with respect to the potential landfill gas collection system did not necessarily require that any landfill gas system be installed at the edge of the site provided the system prevented off-Site migration of methane at concentrations greater than 5%v/v. EPA/Dynamac circulated copies of the EPA sample letters and provided an example work plan from the Behr site which will serve as a template for this work plan.

<u>Action Items for the Nov 1 call:</u>

- CRA will provide Summary Tables and Sample Location figures to John for the remaining, primarily off-Site buildings, including the residential and commercial buildings where follow-up sampling was completed in September

- Required mitigation measures for the remaining buildings sampled in September will be discussed during the Nov 1 call and the master table updated accordingly

- John will distribute the remaining Sample Result Letters upon receipt of the tables from CRA - goal is to send all letters by the end of next week

- CRA commencing work on mitigation work plan and will provide sections to EPA to review as they are completed. Section 1 is anticipated to be ready for next week.

- CRA to investigate and report on feasibility of installing methane monitors in two buildings with sub-slab methane concentrations greater than 0.5 %

- CRA to provide QAPP and HASP to EPA and Dynamac, who will review to see if they are sufficient for the needs of the removal action

- Project Spreadsheet Update – add any new buildings requiring mitigation, update status of letters and make additional changes as required

If you have any questions or comments on the summary, please don't hesitate to call me.

Regards, Adam

***Adam Loney, P. Eng*.**

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From	Loney, Adam	**Date**	Thursday, November 01, 2012 3:10:58 PM
To	'Steven Renninger'; 'Leslie Patterson'; 'John Sherrard'; 'Brown, Ken'; 'jrc@e-emi.com'; 'Bryan Heath'; 'Paul Jack'; Quigley, Steve; Chan, Valerie; 'Marshall, Laura'		
Cc	Project Email Hold		
Subject	November 1, 2012 Call Summary and Action Items: Weekly Conference call to discuss Vapor Intrusion Mitigation - South Dayton Dump & Landfill ~COR-038443-62~		

The following is a brief summary of this afternoon's call and the action items arising therefrom.

During the call CRA and EPA provided updates on the status of the sample letters and the draft order. The Respondents and EPA discussed the data for the follow-up sampling completed in September.

<u>Action Items for the Nov 8 call:</u>

- Required mitigation measures for the remaining buildings sampled in September will be discussed during the Nov 8 call and the master table updated accordingly. Acetaldehyde was detected in a number of sub-slab, indoor air, and ambient air samples and may be related to laboratory issues or non-site related sources

- John will distribute the remaining Sample Result Letters over the next 1 to 2 weeks

- CRA continuing work on mitigation work plan and will provide sections to EPA to review as they are completed. Section 1 will be provided this week with other sections to follow.

- CRA to provide a schedule for installing methane monitors in two buildings with sub-slab methane concentrations greater than 0.5 %.

- EPA to review QAPP and HASP to determine if they are sufficient for the needs of the removal action. CRA to prepare an addendum for installation of vapor mitigation systems

- EPA to provide draft mitigation measures letter to Respondents in next 1 to 2 weeks

- Project Spreadsheet Update – add any new buildings requiring mitigation, update status of letters and make additional changes as required

If you have any questions or comments on the summary, please don't hesitate to call me.

Regards, Adam

Adam Loney, P. Eng.

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From	Marshall, Laura	**Date**	Thursday, November 08, 2012 9:53:57 AM
To	Loney, Adam; Steven Renninger; Leslie Patterson; John Sherrard; Brown, Ken; jrc@e-emi.com; Bryan Heath; Paul Jack; Quigley, Steve; Chan, Valerie		
Cc	Project Email Hold		
Subject	RE: November 1, 2012 Call Summary and Action Items: Weekly Conference call to discuss Vapor Intrusion Mitigation - South Dayton Dump & Landfill ~COR-038443-62~		

If you all think it is an appropriate agenda item, I would like to hear an update on CRA's synoptic soil gas screening measurements during the call this afternoon.

From	Loney, Adam	**Date**	Thursday, November 08, 2012 3:31:12 PM
To	'Steven Renninger'; 'Leslie Patterson'; 'John Sherrard'; 'Brown, Ken'; 'jrc@e-emi.com'; 'Bryan Heath'; 'Paul Jack'; Quigley, Steve; Chan, Valerie; 'Marshall, Laura'		
Cc	Project Email Hold		
Subject	November 8, 2012 Call Summary and Action Items: Weekly Conference call to discuss Vapor Intrusion Mitigation - South Dayton Dump & Landfill ~COR-038443-62~		

The following is a brief summary of this afternoon's call and the action items arising therefrom.

During the call EPA provided updates on the status of the sample letters and the draft order. The Respondents and EPA discussed the data for the synoptic methane monitoring round completed in the previous week. Prior to the call, CRA circulated a memorandum documenting the available information regarding acetaldehyde detections in VI Investigation Samples. CRA provided an update on the status of the methane monitors for the Buildings 2 (Quonset Hut) and 15 (SimTrainer). Monitors have been spec'd and can be installed within a month.

<u>Action Items for the Nov 15 call:</u>

- Next steps for buildings with acetaldehyde exceedances and benzene exceedances in indoor air samples but not sub-slab samples will be discussed during the Nov 15 call and the master table updated accordingly. Acetaldehyde was detected in a number of sub-slab, indoor air, and ambient air samples and may be related to laboratory issues or non-site related sources. At several locations benzene was detected above the ODH screening levels in indoor air samples but was either not detected or was present at lower concentrations in sub-slab samples

- John will distribute the remaining Sample Result Letters and EPA anticipates this will be complete by the next call

- CRA continuing work on mitigation work plan and will provide sections to EPA to review as they are completed. Sections 2 and 3 will be provided this week with other sections to follow.

- EPA expects to provide comments on Section 1 of the draft mitigation work plan prior to the next call

- CRA to proceed to order methane monitors and speak to affected building owners/tenants. CRA will then install methane monitors in two buildings with sub-slab methane concentrations greater than 0.5 %.

- CRA to resample EPA soil gas probe GP-2 to confirm methane readings of 0% methane. CRA will attempt to sample under low and high pressure conditions

- CRA will circulate a figure showing the methane concentrations measured at all locations during the synoptic methane monitoring round

- EPA to review QAPP and HASP to determine if they are sufficient for the needs of the removal action. CRA to prepare an addendum for installation of vapor mitigation systems

- EPA to provide draft mitigation measures letter to Respondents

- Project Spreadsheet Update – add any new buildings requiring mitigation, update status of letters and make additional changes as required

If you have any questions or comments on the summary, please don't hesitate to call me. Next week's call will be at 1:30 ET/12:30 CT on Thursday November 15, 2012. I will circulate an Outlook reminder.

Regards, Adam

From	Loney, Adam	**Date**	Thursday, November 08, 2012 2:19:00 PM
To	'Steven Renninger'; 'Leslie Patterson'; 'John Sherrard'; 'Brown, Ken'; 'jrc@e-emi.com'; 'Bryan Heath'; 'Paul Jack'; Quigley, Steve; Chan, Valerie; 'Marshall, Laura'; 'Steven Renninger'; 'Leslie Patterson'; 'John Sherrard'; 'Brown,		

Cc	Ken'; 'jrc@e-emi.com'; 'Bryan Heath'; 'Paul Jack'; 'Marshall, Laura'
Subject	RE: Weekly Conference call to discuss Vapor Intrusion Mitigation - South Dayton Dump & Landfill ~COR-038443-62~

Please find attached a brief memo that summarizes the available information regarding the acetaldehyde detections at the site.

<<038443-61 Acetaldehyde Memo.pdf>>

Regards, Adam

CONESTOGA-ROVERS & ASSOCIATES

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MEMORANDUM

TO:	File	REF. NO.:	038443-61
FROM:	Adam Loney//	DATE:	November 7, 2012

RE: **Acetaldehyde Background Summary**
South Dayton Dump and Landfill, Moraine, Ohio (Site)

Conestoga-Rovers & Associates (CRA) has prepared this memorandum to document the available data for acetaldehyde arising from the Vapor Intrusion (VI) Investigation at the Site. Acetaldehyde has been detected in several indoor air, sub-slab soil vapor, and ambient air samples collected within, adjacent to, and under buildings at or near the Site. CRA recommends that the acetaldehyde data be rejected and no further analysis for acetaldehyde (or other TICs) be completed. This memorandum explains the rationale behind this recommendation.

Acetaldehyde is not part of the United States Environmental Protection Agency (USEPA) Toxic Organics (TO) Compendium Method TO-15: Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS) (TO-15 Method). However, at USEPA's request, CRA requested that the lab report any tentatively identified compounds (TICs) detected in air samples collected during the second round of the VI Investigation. Acetaldehyde was detected as a TIC in the following samples:

			Sample Type:	*Sub-Slab*	*Indoor Air/ Crawl Space*	*Outdoor Air*
	Criteria:	*Acetaldehyde ODH Screening Level (Residential (R))*		25	2.5	2.5
		Acetaldehyde ODH Screening Level (Non-Residential (NR))		110	11	11
Location	*Address*	*Owner/Tenant*	*Sample Date:*			
Building 4	1901 Dryden	Valley Asphalt (NR)		100 UJ	37 J	15 J
Building 18	2225A East River	Ron Barnett Residential Trailer (R)	7/31/2012	N/A	8 J	5.2 J
Building 28	2229 Dryden	Vinny's Restaurant (NR)	9/11/2012	28 J	22 J	22 J
Building 29	2232 East River	Quinn Ogletree (R)	9/13/2012	36 J	86 J	15 J
Building 33	2373 East River	Jim Worley (R)	9/12/2012	60 J	31 J	20 J
Building 34	2391 East River	Jim Worley (R)	9/12/2012	43 J	26 J	20 J
Building 35	2228 Dryden	Village Park Community Unit 15 (R)	7/31/2012	N/A	4.5 JN	4.8 JN
Building 35	2228 Dryden	Village Park Community Unit 15 (R)	9/11/2012	N/A	47 J	10 UJ

Notes:

- All analytical results are in units of parts per billion by volume (ppb)

\# - Concentration was greater than applicable ODH Screening Level

\# UJ - Not-detected. Reporting detection limit was greater than applicable ODH Screening Level

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN - The listed value of the tentatively identified compound is an approximate concentration
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
N/A - Not applicable – Samples were collected from the crawl space beneath a trailer and reported as indoor air samples.

The data in the above table show that acetaldehyde was detected at similar concentrations in indoor air, sub-slab, and outdoor air samples. In several cases, the acetaldehyde concentration in the indoor air sample was greater than the concentration in the sub-slab sample. If acetaldehyde originated in the soil vapor, it would be expected to be present at the greatest concentrations in the soil vapor and at lesser concentrations in the indoor and ambient air. The data in the table above indicate that the source of acetaldehyde is not soil vapor.

The Region 5 Vapor Intrusion Guidance and other relevant USEPA and Ohio EPA guidance indicates that the use of an attenuation factor of 0.1 (i.e., dilution by 10 times) between sub-slab and indoor air is typically a conservative means of estimating indoor air concentrations based on sub-slab results. During the VI Investigation, CRA collected sub-slab and indoor air samples for radon in order to determine building-specific attenuation factors. The building-specific attenuation factors were all less than 0.1 and were frequently on the order of 0.01, indicating that contaminants diffusing from the sub-slab to indoor air are being diluted by up to 100 times. Analytical results for known sub-slab contaminants such as trichloroethylene (TCE) and tetrachloroethylene (PCE) demonstrate similar attenuation factors between sub-slab and indoor air samples.
Therefore, the acetaldehyde results presented above are not consistent with a sub-slab source of acetaldehyde diffusing into indoor air.

The laboratory stated that acetaldehyde is not a commonly-requested analyte and they do not have data on the typical concentrations of acetaldehyde in Summa canister samples. The laboratory stated further, "based on the poor behavior of this analyte, as noted in the project narrative, the reported concentration has greater uncertainty than other target analytes."

The laboratory reported that acetaldehyde is included in the calibration; however, it is a "poor reacting compound" with a high reporting limit and method performance has not been established for acetaldehyde. Three of the sample canisters could not be certified clean for acetaldehyde as the calibration failed for acetaldehyde. Therefore, there is a significant possibility that the acetaldehyde detections are, at least in part, due to issues with the laboratory analysis for this compound.

Acetaldehyde is also ubiquitous in the environment. The USEPA Chemical Summary for Acetaldehyde (USEPA, 1994) states the following with respect to acetaldehyde:

> *Acetaldehyde is released into air or wastewater from facilities producing or using the chemical (HSDB 1994). Acetaldehyde is also released to the environment from the combustion and photo-oxidation of hydrocarbons (HSDB 1994). Acetaldehyde is an intermediate product of respiration in higher plants and occurs naturally*

in many foods, such as ripe fruits that have tart tastes before ripening, and coffee (HSDB 1994). Acetaldehyde is a component of cigarette smoke (HSDB 1994).

USEPA further reported concentrations of acetaldehyde in ambient air between 5.2 parts per billion (ppb) and
170 ppb. Therefore, it is likely that the acetaldehyde detected in the air samples collected during the VI Investigation is, at least in part, due to sources other than Site contaminants.

Acetaldehyde is not a known Site contaminant and is not persistent in the environment. In soil, acetaldehyde will volatilize rapidly in near-surface and surface soil, leach into the ground, or undergo microbial degradation (USEPA, 1994). Acetaldehyde in water will rapidly degrade or volatilize (USEPA, 1994). Based on the above information, the acetaldehyde concentrations detected in sub-slab, indoor air, and ambient air samples do not appear to be Site contaminants. CRA recommends that the acetaldehyde data be rejected and no further analysis for acetaldehyde be completed.

From	Loney, Adam	**Date**	Thursday, November 15, 2012 5:44:37 PM
To	'Steven Renninger'; 'Leslie Patterson'; 'John Sherrard'; 'Brown, Ken'; 'jrc@e-emi.com'; 'Bryan Heath'; 'Paul Jack'; Quigley, Steve; Chan, Valerie; 'Marshall, Laura'		
Cc	Project Email Hold		
Subject	November 15, 2012 Call Summary and Action Items: Weekly Conference call to discuss Vapor Intrusion Mitigation - South Dayton Dump & Landfill ~COR-038443-62~		

The following is a brief summary of this afternoon's call and the action items arising therefrom.

During the call EPA provided updates on the status of the sample letters and the draft order. CRA provided an update on the status of the methane monitors for the Buildings 2 (Quonset Hut) and 15 (SimTrainer). Monitors have been ordered and should arrive within 3 to 4 weeks.

Action Items for the Nov 29 call:

- Next steps for buildings with acetaldehyde exceedances and benzene exceedances in indoor air samples but not sub-slab samples will be discussed during the Nov 29 call and the master table updated accordingly. CRA will propose next steps.

- John will distribute the remaining Sample Result Letters and EPA anticipates this will be complete by the next call

- CRA continuing work on mitigation work plan and will provide sections to EPA to review as they are completed. Sections 2 and 3 will be provided this week with other sections to follow.

- CRA has ordered methane monitors and will speak to affected building owners/tenants. Monitors expected in 3 to 4 weeks.

- CRA to resample EPA soil gas probe GP-2 to confirm methane readings of 0% methane. CRA will attempt to sample under low and high pressure conditions

- CRA will circulate a figure showing the methane concentrations measured at all locations during the synoptic methane monitoring round

- EPA to review QAPP and HASP to determine if they are sufficient for the needs of the removal action. CRA to prepare an addendum for installation of vapor mitigation systems

- EPA to provide draft mitigation measures letter to Respondents

- Project Spreadsheet Update – add any new buildings requiring mitigation, update status of letters and make additional changes as required

If you have any questions or comments on the summary, please don't hesitate to call me. The next call will be at 2:00 ET/1:00 CT on Thursday November 29, 2012.

Regards, Adam

***Adam Loney, P. Eng*.**

Conestoga-Rovers & Associates (CRA)

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From	Chan, Valerie
Date	Thursday, November 29, 2012 7:14:08 PM
To	Renninger.Steven@epamail.epa.gov; 'Patterson.Leslie@epamail.epa.gov'; John Sherrard; BrownKen; Jim Campbell; Heath, Bryan; Jack; Quigley, Steve; Loney, Adam; 'Laura.Marshall@epa.state.oh.us'
Cc	Project Email Hold
Subject	November 29, 2012 Call Summary and Action Items: Weekly Conference call to discuss Vapor Intrusion Mitigation - South Dayton Dump & Landfill ~COR-038443-62~

The following is a brief summary of this afternoon's call and the action items arising therefrom.

During the call, EPA provided updates on the status of the sample letters and the draft order. The revised draft AOC will be sent out to PRPs for comment.
EPA and Ohio Department of Health (ODH) agreed acetaldehyde was not a chemical of concern for the Site, and we will no longer evaluate or consider acetaldehyde.
CRA received the methane monitors (Sierra Monitor model 2001) and will install the monitors in Buildings 2 (1903 Dryden Road, Valley Asphalt Quonset Hut) and 15 (2031 Dryden Road, SIM Trainer).

<u>Action Items for the December 6 call:</u>

- EPA will provide the project Mitigation Summary spreadsheet for use as a basis for further discussion or revisions. Acetaldehyde will be removed from the spreadsheet.
- Next steps for buildings with benzene exceedances in indoor air samples but not sub-slab samples will be discussed during the Dec. 6th call and the master table updated accordingly. The Respondents will submit a list of related properties with proposed steps and supporting rationale.
- CRA continuing work on mitigation work plan and will provide sections to EPA to review as they are completed. Section 4 will be discussed during the Dec. 6th call. Section 4 will include a description of each property. EPA provided comments on Section 1 to 3 prior to the call. The Respondents will either provide the existing Field Sampling Plan (FSP) to EPA for review with the aim of using the FSP for the needs of the removal action, or will attach the relevant FSP sections and standard operating procedures (SOPs) into appendices of the VI Mitigation Work Plan.
- CRA will take and distribute pictures of the methane monitors following installation.
- EPA to review QAPP and HASP to determine if they are sufficient for the needs of the removal action. CRA to prepare an addendum for installation of vapor mitigation systems

If you have any questions or comments on the summary, please don't hesitate to call me. The next call will be at 2:00 ET/1:00 CT on Thursday, December 6, 2012.

Thank you,
Valerie

From	Loney, Adam	**Date**	Thursday, December 06, 2012 5:58:12 PM
To	Chan, Valerie; 'Renninger.Steven@epamail.epa.gov'; 'Patterson.Leslie@epamail.epa.gov'; 'John Sherrard'; 'BrownKen'; 'Jim Campbell'; 'Heath, Bryan'; 'Jack'; Quigley, Steve; 'Laura.Marshall@epa.state.oh.us'		
Cc	Project Email Hold		
Subject	December 6, 2012 Call Summary and Action Items: Weekly Conference call to discuss Vapor Intrusion Mitigation - South Dayton Dump & Landfill ~COR-038443-62~		

The following is a brief summary of this afternoon's call and the action items arising therefrom. Prior to the call, the Respondents submitted a list of properties with benzene exceedances in indoor air samples but not sub-slab samples with proposed steps and supporting rationale. These buildings were discussed during the call. The Respondents and EPA agreed on next steps for these buildings and the master table will be updated accordingly. Following the call, the Respondents have updated the list and it is included below.

During the call, EPA provided updates on the status of the sample letters and the draft order. The revised draft AOC will be sent out to PRPs for signature, hopefully within a week.

Action Items for the December 13 call:

- EPA will provide the project Mitigation Summary spreadsheet for use as a basis for further discussion or revisions.
- Next steps for buildings with benzene exceedances in indoor air samples but not sub-slab samples will be discussed during the Dec. 6th call and the master table updated accordingly. The Respondents will submit a list of related properties with proposed steps and supporting rationale.
- CRA continuing work on mitigation work plan and will provide sections to EPA to review as they are completed. Section 4 will be discussed during the Dec. 6th call. Section 4 will include a description of each property. EPA provided comments on Section 1 to 3 prior to the call. The Respondents will either provide the existing Field Sampling Plan (FSP) to EPA for review with the aim of using the FSP for the needs of the removal action, or will attach the relevant FSP sections and standard operating procedures (SOPs) into appendices of the VI Mitigation Work Plan.
- CRA will take and distribute pictures of the methane monitors following installation.
- EPA to review QAPP and HASP to determine if they are sufficient for the needs of the removal action. CRA to prepare an addendum for installation of vapor mitigation systems

As discussed during the call, the Respondents have updated the summary including proposed next steps for buildings where indoor air concentrations indicate a benzene or chloroform exceedance. The following table details the on- and off-Site buildings that were discussed during today's call. The values in brackets are the Ohio Department of Health (ODH) screening level criteria.

Building Number on map	Parcel / Building	Address	Tenant	SS Concentration (ODH screening level) ppb	IA Concentration (ODH Screening level) ppb	Agreed Next Step
18	4610 / A	2225A East	Residential	N/A – crawl	Benzene 0.46	Sample crawl

		River Rd	trailer	space only	(0.4)	space, indoor air, and outdoor air
25	3254	2233 Rear East River Rd.	Middleton Trucking	Benzene 0.61 J (20)	Benzene 2.7 (2)	Install new SS probe. Sample new SS probe only
26	3253	2233 Front East River Rd.	Ron Barnett residence	N/A – indoor air sampling only	Benzene 0.5 (0.4)	Resample indoor and outdoor air during winter sample event.
28	5223	2229 Dryden Road	Vinny's Restaurant	No exceedances with removal of acetaldehyde		No further action
29	3251	2232 East River Rd.	Quinn Ogletree	Benzene ND (4) Chloroform 0.96 (200)	Benzene 0.99 (0.4) Chloroform 140 (20)	Install new SS probe. Sample new SS probe only
33	3262	2373 East River Rd.	Jim Worley	Benzene ND (4)	Benzene 0.86 (0.4) Indoor air Benzene 0.89 (0.4) Crawl space Benzene 0.64 (0.4) Outdoor air	Install new SS probe Sample new SS only
34	3263	2391 East River Rd	Jim Worley	Benzene ND (4)	Benzene 0.39 (0.4) Indoor air Benzene 0.64 (0.4) Outdoor Air	No further sampling recommended.
35	2943 / Unit 15	Village Park Community	Resident	No exceedances with removal of acetaldehyde		No further action

If you have any questions or comments on the summary, please don't hesitate to call me. The next call will be at 2:00 ET/1:00 CT on Thursday, December 13, 2012.

Thank you,
Adam

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From	Loney, Adam	**Date**	Thursday, January 03, 2013 1:57:59 PM
To	'Renninger.Steven@epamail.epa.gov'; 'Patterson.Leslie@epamail.epa.gov'; 'John Sherrard'; 'BrownKen'; 'Jim Campbell'; 'Heath, Bryan'; 'Jack'; Quigley, Steve; 'Laura.Marshall@epa.state.oh.us'		
Cc	Project Email Hold; Chan, Valerie		
Subject	December 20, 2012 Call Summary and Action Items: Weekly Conference call to discuss Vapor Intrusion Mitigation - South Dayton Dump & Landfill ~COR-038443-62~		

The following is a brief summary of the December 20, 2012 call and the action items arising therefrom. My apologies for the delay in providing this summary.

During the call, EPA provided updates on the status of the sample letters and the draft order. The revised draft AOC will be sent out to PRPs for signature soon. The sample letters are now complete.

<u>Action Items for the January 3 call:</u>

- EPA will provide the project sub-slab depressurization system acceptance letter for review and comment.
- CRA continuing work on mitigation work plan and will provide sections to EPA to review as they are completed.
- CRA will install the methane monitors at Valley Asphalt and SIM Trainer once they reopen after the holidays and will take and distribute pictures of the methane monitors following installation.
- EPA to review QAPP and HASP to determine if they are sufficient for the needs of the removal action. CRA to prepare an addendum for installation of vapor mitigation systems

Regards, Adam

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From	Loney, Adam	**Date**	Thursday, January 03, 2013 2:23:45 PM
To	'Renninger.Steven@epamail.epa.gov'; 'Patterson.Leslie@epamail.epa.gov'; 'John Sherrard'; 'BrownKen'; 'Jim Campbell'; 'Heath, Bryan'; 'Jack'; Quigley, Steve; 'Laura.Marshall@epa.state.oh.us'		
Cc	Project Email Hold; Chan, Valerie		
Subject	January 3, 2013 Call Summary and Action Items: Weekly Conference call to discuss Vapor Intrusion Mitigation - South Dayton Dump & Landfill ~COR-038443-62~		

The following is a brief summary of the January 3, 2013 call and the action items arising therefrom.

During the call, EPA provided updates on the status of the sample letters and the draft order. The revised draft AOC was sent out to PRPs for signature on or about December 26, 2012.

Action Items for the January 3 call:

- Respondents will provide any comments on the project sub-slab depressurization system (SSDS) acceptance letter for EPA consideration.
- CRA to provide a table summarizing the approximate annual electricity costs for each SSDS to be installed. EPA will use these values in the SSDS acceptance letters.
- CRA continuing work on mitigation work plan and will provide sections to EPA to review as they are completed. Sections 5 and 6 are anticipated to be provided next week, with Section 7, a standalone section regarding the Landfill Gas Migration Investigation, expected the following week.
- CRA will install the methane monitors at Valley Asphalt and SIM Trainer once they reopen after the holidays and will take and distribute pictures of the methane monitors following installation.
- EPA to review QAPP and HASP to determine if they are sufficient for the needs of the removal action. CRA to prepare an addendum for installation of vapor mitigation systems.
- CRA to complete resampling of selected buildings for benzene during the week of January 8, 2013. John Sherrard of Dynamac to coordinate with Greg Lewis of CRA regarding collection of split samples if required.
- High pressure synoptic methane monitoring round to be completed week of January 8, 2013, weather permitting.

Regards, Adam

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CONESTOGA-ROVERS & ASSOCIATES

MEETING MINUTES

Reference No. 038443-62-03

PROJECT: South Dayton Dump & Landfill - Vapor Intrustion Mitigation

RE: Weekly Status Call

LOCATION: Teleconference DATE: January 10, 2013 TIME: 2:00 pm ET

Participants:

Steve Renninger	USEPA	Leslie Patterson	USEPA
John Sherrard	Dynamac	Laura Marshall	Ohio EPA
Bryan Heath	NCR	Jim Campbell	EMI (for ITW)
Valerie Chan	CRA	Adam Loney	CRA

Distribution:

☒File ☒Participants	Ken Brown, ITW	Paul Jack, TRW	Steve Quigley, CRA

Item	*Description*	*Action By*
1	Roll Call	
2	AOC Update	
3	Work Plan Update – Sections 5, 6, and 7 provided to EPA, landfill gas work plan section to follow	CRA
4	Spreadsheet Update – J. Sherrard summarized changes and will circulate prior to each meeting with any changes from CRA	CRA/Dynamac
5	Spreadsheet Update future work – none pending	
6	Installation of 2 LEL meters – CRA continuing to negotiate with tenants/owners	CRA
7	System install agreement form – Respondents/CRA to provide comments to EPA (completed 01/10/13)	CRA
8	CRA to email electricity stipend calculations (completed 01/11/13)	CRA
9	Begin scheduling system install meetings – pending finalization of AOC	All

☐ Attachments: ______

Prepared By: Adam Loney Date Issued: January 17, 2013

CONESTOGA-ROVERS
& ASSOCIATES

This confirms and records CRA's interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within 7 days of the date issued, we will assume that this recorded interpretation or description is complete and accurate.

From	Loney, Adam	**Date**	Friday, January 18, 2013 9:19:22 AM
To	'Renninger.Steven@epamail.epa.gov'		
Cc	'Patterson.Leslie@epamail.epa.gov'; 'Laura.Marshall@epa.state.oh.us'; John Sherrard; 'BrownKen'; 'Jim Campbell'; 'Heath, Bryan'; 'Jack'; Quigley, Steve; Chan, Valerie; Project Email Hold		
Subject	January 17, 2013 Weekly Conference Call Minutes - South Dayton Dump & Landfill Site ~COR-038443-62~		

Please find attached the minutes from yesterday's VI Mitigation Status update call for the South Dayton Dump.

If you have any questions or comments on the minutes, please don't hesitate to call me. The next call will be this coming Thursday at 2:00 pm ET (1:00 pm CT). The call in number and access code will remain the same.

Regards, Adam

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MEETING MINUTES

Reference No. 038443-62-03

PROJECT: South Dayton Dump & Landfill - Vapor Intrusion Mitigation

RE: Weekly Status Call

LOCATION: Teleconference DATE: January 17, 2013 TIME: 2:00 pm ET

Participants:

Leslie Patterson	USEPA	Laura Marshall	Ohio EPA
John Sherrard	Dynamac	Ken Brown	ITW
Valerie Chan	CRA	Adam Loney	CRA

Distribution:

☒File ☒Participants	Jim Campbell,	Paul Jack, TRW	Steve Quigley, CRA
Steve Renninger, USEPA	Bryan Heath, NCR		

Item	*Description*	*Action By*
1	Roll Call	
2	AOC Update – revision to remove Valley Asphalt as a Respondent. Revised Draft expected during week of January 21st for signatures and finalization	
3	Work Plan Update – Sections 5, 6, and 7 provided to EPA, landfill gas work plan section to follow during week of January 21st	CRA
4	Spreadsheet Update / Work completed this week – • CRA discussion with Valley Asphalt management resulted in permission to install the methane monitor in the Quonset Hut, once on-Site personnel are informed. Installation anticipated week of January 21st. • CRA left a message with the SIM Trainer realty company and will continue to follow-up.	CRA/Dynamac
5	Spreadsheet Update future work – • Methane monitor anticipated to be installed at Valley Asphalt during the week of Jan 21st • Follow-up with SIM Trainer realty company to discuss methane monitor installation • Analytical data from January confirmatory sampling expected by CRA on January 25th; Dynamac submitted their sample on a 1-week turn-around time. Results to be discussed on January 31st	CRA/Dynamac
6	Installation of 2 LEL meters – see description for items 4 and 5	CRA
7	System install agreement form – Respondents/CRA provided comments to EPA (completed 01/10/13). Respondents/CRA comments resent to USEPA and Dynamac on January 17, 2013	CRA

Item	Description	Action By
8	Begin scheduling system install meetings – proposed for week of February 4th or 11th but likely delayed due to ongoing discussions regarding the AOC. Respondents agree to schedule meetings following the finalization of AOC	All

☐ Attachments: ______

Prepared By: Adam Loney   Date Issued: January 18, 2013

This confirms and records CRA's interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within 7 days of the date issued, we will assume that this recorded interpretation or description is complete and accurate.

CONESTOGA-ROVERS & ASSOCIATES

MEETING MINUTES

Reference No. 038443-62-03

PROJECT: South Dayton Dump & Landfill - Vapor Intrustion Mitigation

RE: Weekly Status Call

LOCATION: Teleconference DATE: January 24, 2013 TIME: 2:00 pm ET

Participants:

Steve Renninger	USEPA	Leslie Patterson	USEPA
Laura Marshall	Ohio EPA	John Sherrard	Dynamac
Jim Campbell	EMI for ITW	Adam Loney	CRA
Valerie Chan	CRA		

Distribution:

☒File ☒Participants	Ken Brown, ITW	Paul Jack, TRW	Steve Quigley, CRA
Bryan Heath, NCR			

Item	*Description*	*Action By*
1	Roll Call.	
2	AOC Update – Revised Draft expected during week of January 28st for signatures and finalization, with references to Valley Asphalt removed.	USEPA/ Dynamac
3	Work Plan Update – Sections 5 landfill gas work plan section provided to USEPA. USEPA will work on a separate work plan with Valley Asphalt.	CRA/Dynamac
4	Spreadsheet Update / Work completed this week – • CRA discussion with Valley Asphalt management resulted in permission to install the methane monitor in the Quonset Hut, once on-Site personnel are informed. Installation completed on January 24. • CRA left a message with the SIM Trainer realty company and will continue to follow-up. • Analytical results for January confirmatory sampling expected on January 25.	CRA/Dynamac
5	Spreadsheet Update future work – • Follow-up with SIM Trainer realty company to discuss methane monitor installation. • Analytical data from January confirmatory sampling expected by CRA on January 25th; Dynamac submitted their sample on a 1-week turn-around time. Results to be discussed on January 31st.	CRA/Dynamac
6	Installation of 2 LEL meters – see description for items 4 and 5	CRA

Item	*Description*	*Action By*
7	System install agreement form – Respondents/CRA provided comments to EPA (completed 01/10/13). Respondents/CRA comments resent to USEPA and Dynamac on January 17, 2013. Dynamac will finalize letters.	CRA/Dynamac
8	Begin scheduling system install meetings – proposed for end of February, following the finalization of AOC. Possible locations include the City of Moraine offices; Marriott conference room (Courtyard Dayton, 2006 Edwin C Moses Blvd); or Moraine Civic Center (3050 Kreitzer Road). Plan to have proposed Ohio licensed radon contractors walk through one Site building.	All

☐ Attachments: ______________________

Prepared By: Valerie Chan Date Issued: January 29, 2013

This confirms and records CRA's interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within 7 days of the date issued, we will assume that this recorded interpretation or description is complete and accurate.

CONESTOGA-ROVERS & ASSOCIATES

MEETING MINUTES

Reference No. 038443-62-03

PROJECT: South Dayton Dump & Landfill - Vapor Intrustion Mitigation

RE: Weekly Status Call

LOCATION: Teleconference DATE: January 31, 2013 TIME: 2:00 pm ET

Participants:

Steve Renninger	USEPA	Leslie Patterson	USEPA
Laura Marshall	Ohio EPA	John Sherrard	Dynamac
Jim Campbell	EMI for ITW	Steve Quigley	CRA
Valerie Chan	CRA	Bryan Heath	NCR

Distribution:

☒File ☒Participants	Ken Brown, ITW	Paul Jack, TRW	Adam Loney, CRA

Item	*Description*	*Action By*
1	Roll Call.	
2	AOC Update – • January 30: Final AOC sent to Respondents (Larry Silver) for signatures. Respondents have 7 days to sign. • 1 week is anticipated for USEPA signatures. • Mitigation Work Plan is due following execution of AOC; estimated due date is approximately one month away. • USEPA verbally confirmed that the AOC does not include, and the Group is not responsible for, mitigation of Valley Asphalt buildings or property.	USEPA/ Dynamac/ Respondents
3	Work Plan Update – • USEPA is reviewing Sections 5, 6, and 7 of the Mitigation Work Plan section. • A link to the Field Sampling Plan (FSP) was provided to USEPA on Jan. 25. Respondents propose to streamline Mitigation Work Plan by not including the FSP, QAPP, or HASP as appendices.	Dynamac/CRA

CONESTOGA-ROVERS & ASSOCIATES

Item	*Description*	*Action By*
4	CRA Work completed this week – • CRA installed the methane monitor at SIM Trainer, 2031 Dryden Road today. Pictures will be distributed • Analytical results for January confirmatory sampling were expected on January 25, but have not yet been received from the lab. • CRA distributed vendor pre-qualification packages to prospective Ohio licensed radon contractors to ensure health and safety standards of sub-contractors are acceptable and streamline the subcontractor selection process.	CRA
5	CRA work to be completed next week • Discussion of draft analytical data from January confirmatory sub-slab sampling, related to benzene indoor air exceedances, scheduled for February 7th conference call.	CRA
6	Installation of 2 LEL meters • Item completed. see description for item 4	CRA
7	System install agreement form – USEPA finalize letters.	Dynamac
8	Begin scheduling system install meetings – proposed for end of February or early March, following the finalization of AOC. • Possible locations include the City of Moraine offices; Marriott conference room (Courtyard Dayton, 2006 Edwin C Moses Blvd); or Moraine Civic Center (3050 Kreitzer Road). • Laura Marshall will provide contact information for Chuck Haught to John Sherrard. Chuck Haught has indicated that the Moraine Civic Center can be used at no charge. • John Sherrard will visit the Moraine Civic Center to determine if the room will suffice for the proposed meetings.	All

☐ Attachments: ______

Prepared By: Valerie Chan Date Issued: January 31, 2013

This confirms and records CRA's interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within 7 days of the date issued, we will assume that this recorded interpretation or description is complete and accurate.

MEETING MINUTES

Reference No. 038443-62-03

PROJECT: South Dayton Dump & Landfill - Vapor Intrustion Mitigation

RE: Weekly Status Call

LOCATION: Teleconference DATE: February 14, 2013 TIME: 2:00 pm ET

Participants:

Steve Renninger	USEPA	Leslie Patterson	USEPA
Laura Marshall	Ohio EPA	John Sherrard	Dynamac
Jim Campbell	EMI for ITW	Steve Quigley	CRA
Ken Brown	ITW	Bryan Heath	NCR
Adam Loney	CRA		

Distribution:

☒File ☒Participants	Valerie Chan, CRA	Paul Jack, TRW	

Item	*Description*	*Action By*
1	Roll Call.	
2	AOC Update – • January 30: Final AOC sent to Respondents (Larry Silver) for signatures. Respondents have 7 days to sign. • 1 week is anticipated for USEPA signatures. • Mitigation Work Plan is due following execution of AOC; estimated due date is approximately three weeks away.	USEPA/ Dynamac/ Respondents
3	Work Plan Update – • USEPA is reviewing Sections 5, 6, and 7 of the Mitigation Work Plan section. • A link to the Field Sampling Plan (FSP) was provided to USEPA on Jan. 25. Respondents propose to streamline Mitigation Work Plan by not including the FSP, QAPP, or HASP as appendices.	Dynamac/ USEPA
4	CRA Work completed this week – • Analytical results for January confirmatory sampling were received on February 4, 2013 and data validation has been completed – no exceedances were noted. • CRA distributed vendor pre-qualification packages to prospective Ohio licensed radon contractors to ensure health and safety standards of sub-contractors are acceptable and streamline the subcontractor selection process and continues to discuss work with prospective contractors.	CRA

CONESTOGA-ROVERS
& ASSOCIATES

Item	*Description*	*Action By*
5	CRA work to be completed next week - • Continue with subcontractor selection process.	CRA
6	Begin scheduling system install meetings – proposed for end of March or early April, following the finalization of AOC and approval of work plan. • Possible locations include the City of Moraine offices; Marriott conference room (Courtyard Dayton, 2006 Edwin C Moses Blvd); or Moraine Civic Center (3050 Kreitzer Road). • John Sherrard will visit the Moraine Civic Center to determine if the room will suffice for the proposed meetings.	All

☐ Attachments: ______________________

Prepared By: Adam Loney   Date Issued: February 20, 2013

This confirms and records CRA's interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within 7 days of the date issued, we will assume that this recorded interpretation or description is complete and accurate.

CONESTOGA-ROVERS & ASSOCIATES

MEETING MINUTES

Reference No. 038443-62-03

PROJECT: South Dayton Dump & Landfill - Vapor Intrusion Mitigation

RE: Weekly Status Call

LOCATION: Teleconference DATE: February 21, 2013 TIME: 2:00 pm ET

Participants:

Steve Renninger	USEPA	Leslie Patterson	USEPA
Laura Marshall	Ohio EPA	John Sherrard	Dynamac
Ken Brown	ITW	Adam Loney	CRA
Valerie Chan	CRA		

Distribution:

☒File ☒Participants	Steve Quigley, CRA	Paul Jack, TRW	Jim Campbell, EMI for ITW
	Bryan Heath, NCR		

Item	*Description*	*Action By*
1	Roll Call.	
2	AOC Update – • 2 of 3 Respondents have signed the AOC.	Respondents
3	Work Plan Update – • USEPA submitted comments on the VI Mitigation Work Plan to CRA on February 15, 2013. Respondents will review and discuss comments during the next conference call. • USEPA requested that the Respondents submit the general topics of comments prior to the next conference call.	Dynamac/ USEPA
4	CRA Work completed this week – • CRA proposed to complete site visits to the 8 buildings proposed for mitigation on February 28. CRA would be accompanied by prospective Ohio licensed radon contractors (The Geiler Company Inc., and Environmental Doctor), as well as flooring contractors. The purpose of the site visits were detailed in CRA emails to USEPA OSC and Dynamac. • USEPA agreed to the site visit with reservations. The CRA site visit should not take precedence over the USEPA meetings with property owners and tenants anticipated for the late March or April – Respondents agreed.	CRA / USEPA

Item	*Description*	*Action By*
5	CRA work to be completed next week - • Review and address USEPA comments on the VI Mitigation Work Plan. • Complete proposed site visit to 8 buildings proposed for mitigation (see previous item).	CRA
6	Begin scheduling system install meetings – proposed for end of March or early April, following the finalization of AOC and approval of work plan - • Possible locations include the City of Moraine offices; Marriott conference room (Courtyard Dayton, 2006 Edwin C Moses Blvd); or Moraine Civic Center (3050 Kreitzer Road). • John Sherrard will visit the Moraine Civic Center to determine if the room will suffice for the proposed meetings.	All

☐ Attachments: ______________________________

Prepared By: Adam Loney   Date Issued: February 27, 2013

This confirms and records CRA's interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within 7 days of the date issued, we will assume that this recorded interpretation or description is complete and accurate.

MEETING MINUTES

Reference No. 038443-62-03

PROJECT:	South Dayton Dump & Landfill - Vapor Intrustion Mitigation
RE:	Weekly Status Call
LOCATION:	Teleconference

DATE: February 28, 2013 TIME: 2:00 pm ET

Participants:

Steve Renninger	USEPA	Leslie Patterson	USEPA
Laura Marshall	Ohio EPA	Bryan Heath	NCR
Jim Campbell	EMI for ITW	Adam Loney	CRA
Valerie Chan	CRA		

Distribution:

☒File ☒Participants	Steve Quigley, CRA	Paul Jack, TRW	Ken Brown, ITW

Item	*Description*	*Action By*
1	Roll Call.	
2	AOC Update – • Respondents have signed the AOC and delivery to EPA is pending.	Respondents

3	Work Plan Update –
	• USEPA submitted comments on the VI Mitigation Work Plan to CRA on February 15, 2013. Respondents will review and discuss comments during the next conference call
	• USEPA and Respondents discussed the following issues and arrived at the noted resolutions:
	  • Rationale for new requirement to sample all soil gas probes four times and relevance to the objectives of the Order – agreed that new probes will be sampled as discussed in the original draft and following the landfill gas migration investigation, Respondents will complete a synoptic monitoring round under worst-case barometric conditions
	  • Confirm that de minimis sampling of exhaust is not required at all for HAP emissions unless the effluent flow rate threshold is exceeded – confirmed that that is RAPCA's requirement; however, USEPA would like to see data for de minimis sampling as per the revised text
	  • Discuss requirement for PID monitoring within buildings – purpose is to identify possible sources of indoor air contamination which may confound evaluation of VI
		CRA

CONESTOGA-ROVERS & ASSOCIATES

Item	*Description*	*Action By*
	• Discuss request to include a solar panel pilot project – not required	
4	CRA Work completed this week – • CRA continued to revise the VI Mitigation Work Plan to address USEPA and Ohio EPA comments	CRA / USEPA
5	CRA work to be completed next week - • Continue to review and address USEPA comments on the VI Mitigation Work Plan • Complete proposed site visit to 8 buildings proposed for mitigation (see previous item).	CRA
6	Begin scheduling system install meetings – proposed for end of March or early April, following the finalization of AOC and approval of work plan. • Possible locations include the City of Moraine offices; Marriott conference room (Courtyard Dayton, 2006 Edwin C Moses Blvd); or Moraine Civic Center (3050 Kreitzer Road). • John Sherrard will visit the Moraine Civic Center to determine if the room will suffice for the proposed meetings.	All

☐ Attachments: ______

Prepared By: Adam Loney Date Issued: March 6, 2013

This confirms and records CRA's interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within 7 days of the date issued, we will assume that this recorded interpretation or description is complete and accurate.

CONESTOGA-ROVERS & ASSOCIATES

MEETING MINUTES

Reference No. 038443-62-03

PROJECT: South Dayton Dump & Landfill - Vapor Intrusion Mitigation

RE: Weekly Status Call

LOCATION: Teleconference DATE: March 7, 2013 TIME: 2:00 pm ET

Participants:

Steve Renninger	USEPA	Leslie Patterson	USEPA
Laura Marshall	Ohio EPA	Bryan Heath	NCR
Jim Campbell	EMI for ITW	John Sherrard	Dynamac
Steve Quigley	CRA		

Distribution:

☒File ☒Participants	Adam Loney, CRA	Paul Jack, TRW	Ken Brown, ITW
	Valerie Chan, CRA		

Item	*Description*	*Action By*
1	Roll Call	
2	AOC Update – • The AOC is being signed by USEPA, the Effective Date will be towards the end of March	USEPA
3	Work Plan Update – • Respondents are preparing responses and will submit the revised Work Plan to USEPA by March 15	CRA
4	CRA Work completed this week – • Revising the Work Plan	CRA / USEPA
5	CRA work to be completed next week - • Continue to address USEPA comments on and revise the VI Mitigation Work Plan	CRA
6	Schedule for system install meetings – • These will occur roughly one week post Work Plan approval, approximately three to four weeks from now (approximately the first or second week of April) • John Sherrard will visit the Moraine Civic Center to determine if the room will suffice for the proposed meetings	All

☐ Attachments: ____________

Prepared By: Steve Quigley Date Issued: March 7, 2013

This confirms and records CRA's interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within 7 days of the date issued, we will assume that this recorded interpretation or description is complete and accurate.

MEETING MINUTES

Reference No. 038443-62-03

PROJECT: South Dayton Dump & Landfill - Vapor Intrustion Mitigation

RE: Weekly Status Call

LOCATION: Teleconference DATE: March 14, 2013 TIME: 2:00 pm ET

Participants:

Leslie Patterson	USEPA	Laura Marshall	Ohio EPA
Adam Loney	CRA	Ken Brown	ITW
Jim Campbell	EMI for ITW	John Sherrard	Dynamac
Bryan Heath	NCR	Valerie Chan	CRA

Distribution:

☒File ☒Participants	Steve Renninger, USEPA	Paul Jack, TRW	Steve Quigley, CRA

Item	*Description*	*Action By*
1	Roll Call	
2	AOC Update – • The AOC is being signed by USEPA, the Effective Date will be towards the end of March.	Respondents
3	Work Plan Update – • Respondents are reviewing the revised Work Plan and will submit the revised Work Plan to USEPA by March 22.	CRA
4	CRA Work completed this week – • Revising the Work Plan. • Completing a site visit on March 15 with potential Ohio licensed Radon subcontractors.	CRA
5	CRA work to be completed next week - • Complete addressing USEPA comments on the VI Mitigation Work Plan and provide a revised draft to USEPA. • Prepare a table summarizing required site visits and sampling for a typical mitigation Site building. • CRA proposed to cease weekly methane monitoring of 1903 Dryden Road, Valley Asphalt Parcel 5054 Building 2 (Quonset Hut) and 2031 Dryden Road, SIM Trainer Parcel 5173 Building 1as methane monitors were installed in these buildings in January 2013.	CRA

CONESTOGA-ROVERS
& ASSOCIATES

Item	Description	Action By
5	CRA work to be completed next week - (cont'd.) Ohio Administrative Code (OAC) 3745-27-12(E)(5)(e) details criteria to be used to determine when contingency monitoring is no longer warranted. "The criteria shall include a minimum of four sequential monitoring events which no longer exceed the explosive gas threshold limit, over a minimum period of two weeks". OAC 3745-27-12(E)(5)(a) establishes the following explosive gas threshold limits: (i) One hundred per cent of the lower explosive limit (5% CH4 v/v) at or within the facility boundary. (ii) Twenty-five per cent of the lower explosive limit (1.25% CH4 v/v) in structures. The methane sub-slab values measured at SIM Trainer have never been equal or greater than 100% of the LEL (5% methane), and have not been greater than 25% of the LEL from December 27, 2012 to February 28, 2012. The measured methane indoor air values at SIM Trainer were always non-detect (0% methane). The measured methane indoor air values at Valley Asphalt's Quonset Hut were always non-detect. The building is not designed for occupancy, and access to the building has been restricted. The methane monitor installed in the building will detect any issues as they arise. For the reasons detailed above, CRA proposes to cease weekly methane monitoring at SIM Trainer and Valley Asphalt. This proposal will be discussed during the March 21st conference call.	CRA
6	Schedule for system install meetings – • These will occur roughly one week post Work Plan approval, approximately the first or second week of April. • John Sherrard will visit the Moraine Civic Center to determine if the room will suffice for the proposed meetings.	All

☐ Attachments: ______

Prepared By: Valerie Chan Date Issued: March 15, 2013

This confirms and records CRA's interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within 7 days of the date issued, we will assume that this recorded interpretation or description is complete and accurate.

CONESTOGA-ROVERS & ASSOCIATES

MEETING MINUTES

Reference No. 038443-62-03

PROJECT: South Dayton Dump & Landfill - Vapor Intrustion Mitigation

RE: Weekly Status Call

LOCATION: Teleconference DATE: March 28, 2013 TIME: 2:00 pm ET

Participants:

Steve Renninger	USEPA	Leslie Patterson	USEPA
Laura Marshall	Ohio EPA	Jim Campbell	EMI for ITW
Bryan Heath	NCR	Adam Loney	CRA
Valerie Chan	CRA		

Distribution:

☒File ☒Participants	John Sherrard, Dynamac	Paul Jack, TRW	Steve Quigley, CRA
Ken Brown, ITW			

Item	*Description*	*Action By*
1	Roll Call	
2	AOC Update – • The AOC has been signed by three parties, and is being signed by USEPA; the Effective Date will be soon • A Unilateral Administrative Order (UAO) was issued to and acknowledged by Valley Asphalt	Respondents
3	Work Plan Update – • Respondents submitted the revised Work Plan to USEPA on March 28, 2013 • USEPA would like the Respondents to discuss the following options for Valley Asphalt's vapor intrusion mitigation work: 1) Valley Asphalt would submit a separate work plan 2) Valley Asphalt would complete mitigation under the CRA work plan	CRA
4	CRA Work completed this week – • Began revising figures from Vapor Intrusion Investigation Report to incorporate them into Vapor Mitigation Work Plan • Incorporated USEPA and Ohio EPA comments on draft Work Plan	CRA
5	CRA work to be completed next week - • Revising the Work Plan figures for all investigated buildings to report results in parts per billion (ppb). • Discuss CRA proposal to cease weekly sub-slab methane monitoring at Valley Asphalt Quonset Hut (1903 Dryden Road), and SIM Trainer (2031 Dryden Road) during next conference call	CRA

Item	Description	Action By
6	Schedule for system install meetings – • These will occur roughly one week post Work Plan approval, approximately the first or second week of April • John Sherrard will visit the Moraine Civic Center to determine if the room will suffice for the proposed meetings	All

☐ Attachments: ______________________

Prepared By: Valerie Chan   Date Issued: April 2, 2013

This confirms and records CRA's interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within 7 days of the date issued, we will assume that this recorded interpretation or description is complete and accurate.

CONESTOGA-ROVERS & ASSOCIATES

MEETING MINUTES

Reference No. 038443-62-03

PROJECT: South Dayton Dump & Landfill - Vapor Intrustion Mitigation

RE: Weekly Status Call

LOCATION: Teleconference DATE: April 4, 2013 TIME: 2:00 pm ET

Participants:

Steve Renninger	USEPA	Leslie Patterson	USEPA
Bryan Heath	NCR	Jim Campbell	EMI for ITW
Valerie Chan	CRA	John Sherrard	Dynamac

Distribution:

☒File ☒Participants	Adam Loney, CRA	Paul Jack, TRW	Steve Quigley, CRA
Ken Brown, ITW	Laura Marshall, Ohio EPA		

Item	*Description*	*Action By*
1	Roll Call	
2	AOC Update – • The AOC will be signed by the USEPA Division Director by the end of this week, and mailed out to Respondents next week. • S. Renninger summarized some key dates specified in the AOC: - Under Paragraph 81, the effective date of the AOC is when signed copies are received by the Respondents. - Within 5 days of the effective date, Respondents need to designate a contractor. The Respondents can designate a prime contractor (i.e., CRA), and other VI mitigation subcontractors will be handled under the VI Mitigation Work Plan. - Paragraph 13: within 5 business days after the effective date, Project Coordinator (i.e., Adam Loney) must be designated by Respondents. - Paragraph 17: within 15 business days, the draft Work Plan and HASP must be submitted.	USEPA / Respondents
3	Work Plan Update – • USEPA are reviewing the draft Work Plan, submitted on March 28, 2013. • Bids from subcontractors are due on April 15, 2013. • CRA will add criteria to the Work Plan specifying the methane levels which require intrinsically safe systems.	CRA
4	CRA Work completed this week – • Began revising figures from Vapor Intrusion Investigation Report to incorporate them into Vapor Mitigation Work Plan.	CRA

Item	Description	Action By
5	CRA work to be completed next week - • Provide answers to Ohio EPA questions regarding cessation of weekly sub-slab methane monitoring at Valley Asphalt Quonset Hut (1903 Dryden Road), and SIM Trainer (2031 Dryden Road).	CRA
6	Schedule for system install meetings – • Anticipated in April or May. • These will occur roughly one week post Work Plan approval, approximately week of April 22 or 29. • J. Sherrard and S. Renninger will visit the Moraine Civic Center to determine if the room will suffice for the proposed meetings.	All

☐ Attachments: ______

Prepared By: Valerie Chan Date Issued: April 5, 2013

This confirms and records CRA's interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within 7 days of the date issued, we will assume that this recorded interpretation or description is complete and accurate.

CONESTOGA-ROVERS & ASSOCIATES

MEETING MINUTES

Reference No. 038443-62-03

PROJECT: South Dayton Dump & Landfill - Vapor Intrusion Mitigation

RE: Weekly Status Call

LOCATION: Teleconference DATE: April 11, 2013 TIME: 2:00 pm ET

Participants:

Steve Renninger	USEPA	Leslie Patterson	USEPA
Laura Marshall	Ohio EPA	Jim Campbell	EMI for ITW
Ken Brown	ITW	John Sherrard	Dynamac
Adam Loney	CRA	Valerie Chan	CRA

Distribution:

☒File ☒Participants	Bryan Heath, NCR	Paul Jack, TRW	Steve Quigley, CRA

Item	*Description*	*Action By*
1	Roll Call	
2	AOC Update – • Respondents received AOC. Confirmation receipts will determine effective date. • AOC clarifications: - Paragraph 12 requirements for Quality Management Plan (QMP) submissions are waived for subcontractors, as agreed between Respondents and USEPA. - Paragraph 78 requires a copy of insurance certificates and policies. As discussed, CRA will provide an insurance certificate identifying the nature and extent of coverage. The full insurance policy is available for review upon request. - The current Progress Report submission format is acceptable to OSC.	USEPA / Respondents
3	Work Plan Update – • USEPA are reviewing the draft Work Plan. USEPA comments are expected on Friday, April 12th. • The revised draft work plan will be submitted to USEPA within 15 business days of the AOC effective date, and will constitute the formal submittal of the draft Work Plan in accordance with AOC Paragraph 17. • The QAPP and HASP will be submitted again as a formal submittal but are acceptable to USEPA	CRA
4	CRA Work completed this week – • None.	CRA

CONESTOGA-ROVERS & ASSOCIATES

Item	*Description*	*Action By*
5	CRA work to be completed next week - • Provide answers to Ohio EPA questions regarding cessation of weekly sub-slab methane monitoring at Valley Asphalt Quonset Hut (1903 Dryden Road), and SIM Trainer (2031 Dryden Road). • Bid evaluation from Ohio licensed radon subcontractors. • Discussion with Respondents regarding Valley Asphalt VI Mitigation work. • Review USEPA comments and revise VI Mitigation Work Plan.	CRA
6	Schedule for system install meetings - • J. Sherrard determined the Moraine Civic Center is sufficient for meetings. • Anticipated in 1st or 2nd week of May.	All

☐ Attachments: ______

Prepared By: Valerie Chan   Date Issued: April 15, 2013

This confirms and records CRA's interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within 7 days of the date issued, we will assume that this recorded interpretation or description is complete and accurate.

APPENDIX G

CONCEPTUAL SITE MODELS FOR VI INVESTIGATION BUILDINGS

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On June 21 and 22, 2011, representatives of CH2M Hill, Ohio EPA, the Respondents, and CRA completed a Building Survey, which included a visual inspection of the Site Parcels and the buildings located thereon. CRA used the information obtained during the Building Survey to develop a CSM for each building. The CSM evaluated building use and design, the presence of underground utilities, floor slab condition, foundation footings, and vadose zone soil conditions known from nearby investigative installations.

The locations of samples collected are shown on the respective figures for each building (Figures G.1 to G.33). The respective figures for each building also show the maximum detected concentrations of selected compounds in nearby Upper Aquifer Zone soil gas, soil, and groundwater locations sampled between 2008 and 2011. As discussed during the July 26, 2011 conference call between the Respondents, USEPA, Ohio EPA, and CH2M Hill, the selected compounds include 1,1,1-trichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, benzene, chlorobenzene, chloroform, ethylbenzene, methylene chloride, naphthalene, tetrachloroethene (PCE), trichloroethene (TCE), toluene, vinyl chloride, and xylenes.

A description of each building is provided below. Tables G.1 and G.2 present summaries of the vapor intrusion investigation sub-slab and indoor air analytical results for industrial buildings, respectively. Tables G.3 and G.4 present summaries of the sub-slab and indoor air analytical results for residential buildings, respectively.

1.0 PARCEL 5054 - VALLEY ASPHALT

1.1 PARCEL 5054 - VALLEY ASPHALT BUILDING 1

The building is a single-story, commercial-use building, constructed before 1993 (Figure G.1). The building footprint is 1,500 ft^2. It is an office building with six single offices, bathrooms, and a kitchenette. The drop ceiling is 8 feet high. It is a brick building with steel cladding. The building has a concrete on-grade slab; there is wall-to-wall carpeting in the majority of the building. The building is relatively air tight, with sealed windows that are inoperable. The building is centrally heated by a forced air natural gas furnace. Exterior openings include vents, utility pipe penetrations, windows (inoperable), and two personnel doors. The building has not been occupied for the past four or five years.

Analytical results for this building indicate there are VI-related concentrations of TCE in sub-slab soil vapor (350 - 2,700 ppb) and indoor air (0.41 - 8.1 ppb). No further action is planned while the building is vacant, and mitigation may be proposed in future, if occupancy is planned. The Respondents understand that Valley Asphalt will submit a separate Work Plan for their property and structures (i.e., Parcel 5054) to USEPA and that this work will be completed under a separate administrative order.

1.2 PARCEL 5054 - VALLEY ASPHALT PLANT BUILDING 2

The building is a commercial/ industrial-use building constructed before 1959 (Figure G.2). The building footprint is 4,888 ft^2. The concrete slab is on-grade with unsealed joints. The building is divided into two sections with a cracked cinder block wall between them. The building has not been regularly occupied for more than 10 years. The northern portion (approximately one quarter) of the building is a brick, single-story building. It was used formerly as office space with several separate offices. The office area is carpeted and has a strong moldy/musty odor. This section of the building is relatively air tight, with sealed windows. This portion of the building is centrally heated by a forced air natural gas furnace and is cooled by a ground unit A/C that is located outside the east wall. Exterior opening include utility pipe penetrations, windows, and two personnel doors (one to the warehouse portion of the building).

The southern portion (approximately three-quarters) of the building is a steel double-arch Quonset hut that is used as storage space. It has a bare concrete floor with cracks in areas. This section of the building is unsealed and is not airtight. There is no HVAC system in this section of the building. Exterior openings include vents, wall openings, fans, utility pipe penetrations, windows (several of which were broken during the June 2011 building survey but found to be repaired during a September 2011 site visit), and bay and personnel doors. This section of the building has recently been used for storage.

Analytical results for this building indicate there is a combustible gas issue in the sub-slab beneath the southern portion of the building with methane results ranging from 6.6 to 8.8 percent methane, which is greater than the LEL of 5 percent methane. Additionally, the maximum sub-slab soil vapor concentrations of benzene (ND - 98 ppb), TCE (22 - 32 ppb), and vinyl chloride (ND - 24 J[1] ppb) were greater than ODH sub-slab soil vapor screening levels. The indoor air concentrations of benzene (0.31 - 0.32 ppb), TCE (ND), and vinyl chloride (ND) were less than the indoor air ODH screening levels. It is proposed that the building be mitigated with an intrinsically safe SSDS. The Respondents understand that Valley Asphalt will submit a separate Work Plan for their property and structures (i.e., Parcel 5054) to USEPA and that this work will be completed under a separate administrative order.

1.3 PARCEL 5054 - VALLEY ASPHALT PLANT BUILDING 3

The building was demolished in February 2012, and therefore, has been removed from further discussion in this Work Plan.

1.4 PARCEL 5054, MURPHY'S PLUMBING BUILDING MP

The building is a single-story commercial-use building, constructed prior to the 1950s (Figure G.3). During the June 2011 building survey, the building was being used as office and storage space. The building footprint is 365 ft^2. It is on a raised foundation with wood siding. The building is not air tight, with unsealed windows. Exterior openings include windows and one personnel door. No HVAC systems are present in the building. The building has been vacant since July 1, 2011, with no occupancy.

The maximum crawl space concentration of PCE (ND - 38 ppb) was greater than the ODH indoor air screening level (25 ppb). The Respondents propose to demolish the building. The Respondents understand that Valley Asphalt will submit a separate

1 J – Estimated concentration

Work Plan for their property and structures (i.e., Parcel 5054) to USEPA and that this work will be completed under a separate administrative order.

1.5 PARCEL 5054 - VALLEY ASPHALT PLANT BUILDING 4

The building is an industrial-use building, constructed prior to 1993 (Figure G.4). It is a pre-fabricated split-level building on top of a poured concrete basement that is half below grade. The building footprint is 280 ft^2. The basement is unfinished, and contains paint storage on shelves. The main level is used as the control room for the asphalt plant; there is office space and a bathroom. Electric baseboards heat the building. Window A/C units are also present in the control room. Exterior openings from the basement include utility pipe penetrations and a personnel door that is sometimes left open. The building is occupied weekdays during business hours by two adult workers.

The sub-slab soil vapor concentrations of TCE (46 – 240 ppb) were greater than the ODH screening level (20 ppb); the indoor air concentrations of TCE (ND – 0.093 J ppb) were less than the ODH indoor air screening level (2 ppb). It is proposed that the building be mitigated with a SSDS. The Respondents understand that Valley Asphalt will submit a separate Work Plan for their property and structures (i.e., Parcel 5054) to USEPA and that this work will be completed under a separate administrative order.

1.6 PARCEL 5054 - VALLEY ASPHALT PLANT BUILDING 5

The building is a single-story, industrial-use building with steel cladding (Figure G.5). The building was constructed before 1968 and originally was located near Valley Asphalt Building 1; it was moved to its present location before 1993. The building footprint is 594 ft^2. The building contains a testing laboratory and a small office. The ceiling is 8 feet high. The building has a concrete on-grade slab. The concrete flooring is coated or painted and contains some thin cracks. The building is relatively airtight with sealed windows. Exterior openings include vents, fans, windows (inoperable), and a personnel door. A forced air natural gas furnace centrally heats the building. Window A/C units are also present in the laboratory and office. One adult worker (office) occupies the building during weekday work hours, and approximately four adult workers may occasionally occupy the laboratory at various times.

The sub-slab soil vapor concentrations of TCE (240 - 700 ppb) were greater than the ODH screening and action levels of 20 ppb and 200 ppb, respectively; the indoor air TCE concentrations (ND - 0.11 J ppb) were less than the ODH indoor air screening level (2 ppb). It is proposed that the building be mitigated with a SSDS. The Respondents understand that Valley Asphalt will submit a separate Work Plan for their property and structures (i.e., Parcel 5054) to USEPA and that this work will be completed under a separate administrative order.

1.7 PARCEL 5054 - VALLEY ASPHALT PLANT BUILDING 6

The building is a single-story, industrial-use storage building constructed before 2005 (Figure G.6). The building footprint is 218 ft^2. It has a steel frame with steel cladding and an earthen on-grade floor. The building is not insulated, and is not air tight. No HVAC systems are present in the building. Exterior openings include vents and one personnel door. The building is used for chemical storage. The building is used for storage only and has no regular occupancy.

No analytical results were collected from this building because it is not designed for occupancy. The Respondents measured methane in the indoor air of the building, methane values were 0 percent. No further action is required.

1.8 PARCEL 5054, BUILDING 7

The building is a single-story industrial-use garage and storage building constructed before 1968 (Figure G.7). The building footprint is 822 ft^2. It is constructed of concrete block. The building is not insulated, and is not airtight. A forced air natural gas wall mounted heater is present. A sump with a drain pipe is present. Exterior openings include vents, utility pipe penetrations, and a bay door with broken panels. The building is used for storage only, and does not appear to have been occupied for an extended period of time.

No analytical results were collected from this building because it is not designed for occupancy. The Respondents measured methane in the indoor air of the building, methane values were 0 percent. No further action is required.

2.0 PARCEL 5171 - B&G TRUCKING

2.1 PARCEL 5171 - B&G TRUCKING BUILDING 8

The building is a commercial-use building constructed prior to 1968 (Figure G.8). The building footprint is 13,700 ft^2. The building has a concrete on-grade slab with unsealed joints. Seven adult workers occupy the building weekdays from 7 a.m. to 5 p.m. The building is divided into two sections. The eastern side (approximately one quarter) is a brick two-story building. There are multiple offices, a reception area, and a paint storage room (northeastern corner). During the building survey, strong paint odors were observed in the paint storage room. There is wall-to-wall carpet in the offices. This section of the building is relatively airtight with sealed windows. A forced air natural gas furnace heats this section of the building, and there is central A/C. Exterior openings include utility pipe penetrations, windows, and three personnel doors (one to the shop area).

The western side (approximately three-fourths) is a one-story concrete block building. It is a repair shop for large trucks, with a shop office on the eastern side and a paint booth on the western side. The ceiling is 24 feet high; the shop office has an 8-foot drop ceiling. The shop floor is bare concrete, and there are visible cracks in areas. A floor drain leads to the sewer. There is evidence of spills on the truck bay area floor. The shop office has a tile floor. This section of the building is not insulated and not airtight. There is an overhead radiant heating system and used oil stove in the shop. During the building survey, strong paint odors were observed in the paint booth. Exterior openings include vents, fans, utility pipe penetrations, 10 bay doors large metal roll-up doors, and personnel doors. The bay doors are kept open during work hours.

The sub-slab soil vapor concentrations of TCE (26 – 1,800 ppb) were greater than the ODH screening and/or action levels of 20 ppb and 200 ppb, respectively; the TCE concentrations for indoor air samples (ND – 0.96 ppb) were less than the ODH indoor air screening level (2 ppb). The Respondents propose to mitigate the building with a SSDS.

2.2 PARCEL 5171 - B&G TRUCKING BUILDING 9

The building is a single-story commercial-use building, constructed prior to 1968 (Figure G.9). The building footprint is 5,000 ft^2. The building is used for large truck repairs with an office and break room area on the southern side. The concrete slab is on-grade with unsealed joints; there is one large floor drain, a ramp, and there are visible cracks and staining in areas. The building is 20 feet high. There is a second story within the building over the office and break room area; the ceilings are 8 feet high. The shop area ceiling is 20 feet high. A forced air natural gas furnace in the office area centrally heats the building. An overhead radiant heating system and floor fans are present in the shop area. The building is not insulated and is not air tight. Exterior openings include vents, utility pipe penetrations, windows, personnel doors, and one large roll-up door. The roll-up door is kept open during work hours. The building is occupied weekdays from 7 a.m. to 5 p.m. by two adult workers.

Analytical results for this building indicate there are VI-related concentrations of TCE in sub-slab soil vapor (1,800 - 3,100 ppb) and indoor air (13 J ppb). The Respondents propose to mitigate the building with a SSDS.

2.3 PARCEL 5171 - B&G TRUCKING BUILDING 10

The building is a single-story commercial-use structure, erected prior to 2000 (Figure G.10). The building footprint is 1,250 ft^2. The building is composed of a canvas steel frame, covered with fabric and placed on asphalt, with retractable canvas flaps at both ends, and is used for sandblasting. The structure floor is cracked and damp. No HVAC systems are present in the structure. The building is occupied as needed weekdays from 7 a.m. to 5 p.m.

As the building is not and cannot be sealed or closed to such an extent that vapors could accumulate, the Respondents and EPA agreed that the building would be removed from further consideration during the VI Investigation. Accordingly, the building is not discussed further in this Work Plan.

2.4 PARCEL 5171, B&G TRUCKING BUILDING 11

The building is a single-story, storage building (Figure G.11). The building may have been used as an office. The building footprint is approximately 336 ft^2. The building has a concrete block foundation, with a crawl space. The building is wood framed, with siding and unsealed floor joints. No HVAC systems are present. Exterior openings include broken windows, a vent, and a personnel door. The building appears to have been vacant for several years and is in rotted condition, with a musty/moldy odor. It is surrounded by dense vegetation, and asphalt ground cover.

The crawl space concentrations were less than the ODH indoor air screening levels, indicating no further action is required; however, the Respondents propose to demolish the building.

3.0 PARCEL 5172

3.1 PARCEL 5172 - S&J PRECISION AND OVERSTREET PAINTING BUILDING 12

The building is a single-story, industrial-use building, constructed in the 1950s (Figure G.12). The building is divided into two equal sections: north and south sides. The total building footprint is 11,600 ft^2. The building is concrete block with a brick front. The building has a concrete on-grade slab. The ceilings are 16 feet high. Exterior openings include utility pipe penetrations, windows, and personnel and bay doors.

S&J Precision uses the north side of the building. It is mainly comprised of a metal working shop with a warehouse and some office space. The shop and warehouse have bare concrete floors; there are visible cracks in areas. The building floor contains two floor drains. The rear drain and warehouse floor are stained. The office space on the north side has an elevated floor with floor tile (likely asbestos containing) and wall-to-wall carpeting on top. The building is not insulated, relatively air tight, with sealed windows. The building is centrally heated by a forced air natural gas furnace, with clay tile ducting beneath the slab. Central air conditioning is also present. The building is occupied weekdays from 6 a.m. to 5 p.m. by five adult workers.

Overstreet Painting uses the south side of the building. The building is used for paint and vehicle storage, with vehicle detailing space. The building has bare concrete floors with visible cracks. The building is relatively air tight, with sealed windows. The building is heated by a forced air natural gas furnace ceiling unit. The building is used for storage only and has no regular occupancy.

Analytical results for this building indicate there are VI-related concentrations of TCE in sub-slab soil vapor (180 – 5,400 ppb) and indoor air (1.6 – 5.6 ppb) that were greater than the ODH screening levels (20 ppb and 2 ppb for sub-slab soil vapor and indoor air, respectively). Several of the sub-slab soil vapor concentrations of cis-1,2-dichloroethane (cis-1,2-DCE) (ND – 920 ppb) were greater than the ODH screening level (370 ppb), the indoor air concentrations of cis-1,2-DCE (ND – 0.35 ppb) were less than the ODH indoor air screening level (37 ppb). The Respondents propose to mitigate the building with a SSDS.

3.2 PARCEL 5172 – OVERSTREET PAINTING BUILDING 13

The building is a single-story storage building (Figure G.13). The building footprint is approximately 900 ft^2. The building is of concrete block construction, with a concrete floor. The floor is in good condition, with no cracks or drains. The building not insulated, and is relatively air tight, with sealed windows. The building is heated by forced air natural gas furnace ceiling units. The building is used for storage of painting supplies and scaffolding. Rubber and dust odors were noted during the building survey. Exterior openings include a garage door and personnel door. The building is used for storage only and has no regular occupancy.

As the building has no regular occupancy, USEPA agreed that the building could be removed from further consideration.

3.3 PARCEL 5172 - BULLSEYE AMUSEMENTS BUILDING 14

The building is a single-story, commercial-use building, constructed prior to 1959 (Figure G.14). As of the June 2011 building survey, the building recently had become vacant; A-Evans Filter Service used it formerly. Bullseye Amusements has occupied the building since A-Evans Filter Service departed. The building footprint is 2,886 ft^2. The building has a concrete on-grade slab with sealed joints. The building is divided into three sections.

The northern section (approximately one-fifth of the total floor area) is a one-story brick building. It was used formerly as office space; there are two single offices. The building is 10 feet high with 8-foot drop ceilings. There is wall-to-wall carpeting. A forced air natural gas furnace centrally heats this section of the building; it is heated from floor vents, with ducting apparently running beneath the slab and return air through wall vents. Central A/C is also present. Exterior openings include utility pipe penetrations, office windows, and two personnel doors (one to the shop).

After completion of the building survey in June 2011, the remainder of the building (approximately four-fifths) was partitioned into two separate sections, the central and southern sections. The remainder of the building is a one-story concrete block building that is 15 feet high. There is a 6-foot-high metal shed attached to the south side; it could not be accessed during the building survey. The bare concrete floor has an area of heavy staining in the former wash area on the north side. There are numerous small- to mid-sized floor cracks. This section of the building formerly was used for grease filter washing and filter storage. Exterior openings include vents, utility pipe penetrations, a bay door, and two personnel doors. The southern section is used for storage of service trucks, and video and pinball games. The southern section is not insulated, not airtight, and not heated. The central section is used for parts storage, and as a service area for pinball and video games and jukeboxes. An overhead gas heater heats the central section.

Analytical results for this building indicate there are VI-related concentrations of benzene in sub-slab soil vapor (ND – 50 ppb) and indoor air (0.58 – 2.4 ppb). Several of the sub-slab soil vapor concentrations of 1,1-dichloroethane (1,1-DCA) (ND – 4,100 ppb), TCE (1.2 - 36 J ppb), and vinyl chloride (ND – 5,500 ppb) were greater than ODH screening levels (160 ppb for 1,1-DCA, 20 ppb for TCE, 20 ppb for vinyl chloride). The Respondents propose to mitigate the building with a SSDS.

4.0 PARCEL 5173 - SIM TRAINER BUILDING 15

The building is a single-story commercial-use building (Figure G.15). It was constructed in three stages: the northern and central portions were constructed before 1956, the western addition was constructed before 1959, and the southern addition was constructed before 1968. The building is used as a shooting range. The southern section is office and classroom space. The central section is the shooting range. The northern section is primarily storage space with a combat training room. The western section is not used and is not accessible. The building footprint is 8,250 ft^2. The building has a concrete on-grade slab with unsealed joints.

The majority of the building has exposed concrete floors. At the time of the building survey, the combat training room floor had been freshly coated with epoxy paint. The floor in the shooting range had been painted. There are large floor cracks present in the center of shooting range and north storage area. In the northern portion of the building, heavy floor staining is visible, and a persistent oil odor is noticeable. The building is heated by forced air natural gas ceiling units. An additional air handling unit operates during shooting range hours; air is vented from the range out to the roof and fresh air is supplied where customers stand to shoot. Central A/C is also present in the office and classroom areas, supplied by a separate furnace. Exterior openings include vents, fans, windows, and two roll-up doors. One adult worker (4-hour shifts) and customers occupy the building during business hours.

Analytical results for this building indicate there are levels of combustible gas in the sub-slab beneath the northern portion of the building with methane results ranging from 0.8 to 1.2 percent methane, which is greater than the 10 percent of LEL (0.5 percent methane). Additionally, several of the sub-slab soil vapor concentrations of benzene (ND – 320 ppb), cis-1,2-DCE (ND - 10,000 ppb), TCE (95 – 690 ppb), and vinyl chloride (ND – 1,700) were greater than ODH screening and action levels. The maximum indoor air TCE concentration (ND – 5.2 ppb) was greater than the ODH indoor air screening level (2 ppb), indicating a completed VI-pathway. The Respondents propose to mitigate the building with an intrinsically safe SSDS.

5.0 PARCEL 5174 - COMMAND ROOFING BUILDING 16

The building is a single-story, commercial-use storage building, constructed prior to 1968 (Figure G.16). The building is used by Command Roofing for roofing material storage. There is a former office space on the eastern side that is not currently in use. The building footprint is 12,500 ft^2. The building has a concrete on-grade slab. Areas A to E are shown on Figure 32. Areas A (approximately 12 feet in height) and B (approximately 16 feet in height) are constructed with brick, and contain poorly sealed windows. Spray-on insulation, possibly containing asbestos, is present in Area B. Areas C (approximately 24 feet in height) to E were constructed with steel beams and metal siding. No HVAC systems were in use as of June 2011. The building is not air tight, and is damp and moldy, with visible evidence of water staining in office Area A. The building floor slab is in poor condition, with cracks and unsealed joints throughout the building, and is particularly fractured in Areas D and E. Through Areas B and E, heavy floor staining is present. Exterior openings include office windows, personnel doors, sliding and roll-up doors. Two adult workers infrequently occupy the building at variable times for short periods for material pickup.

On June 22, 2011, CRA completed a building physical survey of the Command Roofing Property on Parcel 5174 Building 1 at 2045 Dryden Road. Representatives of CH2M Hill, USEPA's oversight consultant, and the Ohio Environmental Protection Agency (Ohio EPA) were present during this inspection. During this investigation, CRA observed structures consistent with an above ground vent pipe and in-ground fill port. A previous tenant of the Command Roofing Property was Buckeye Boiler, a pressure vessel manufacturer. The dates of occupancy of Buckeye Boiler and the nature of other historical tenants are unknown.

On December 8, 2011, CRA contracted Blood Hound Inc. (Blood Hound) to locate utilities at the Command Roofing Property for the Vapor Intrusion Investigation. Blood Hound also used a small cart-mounted ground-penetrating radar unit to screen the area adjacent to the suspected fill port and vent pipe. Blood Hound detected the presence of a subsurface structure, consistent with the size and shape of an UST. The location of the suspected UST was north of the Command Roofing Property building, immediately east of the truck ramp. The size of the UST was estimated to be 9 feet (ft) by 15 ft, oriented in an east - west direction, with an approximate capacity in the range of 2,000 to 2,500 gallons.

Laura Marshall of the Ohio EPA contacted Bryan Duzack of the Bureau of Underground Storage Tank Regulations (BUSTR) to request records of the tank. BUSTR did not have any records of USTs for the Command Roofing Property address. Bryan Duzack stated BUSTR does not have jurisdiction over tanks used to store fuel oil for consumptive purposes. The Respondents understand that Ohio EPA has requested that the property owners undertake an investigation of the suspected UST but that this investigation has not yet occurred.

The sub-slab soil vapor concentration of TCE (30 – 1,500 ppb)[2] were greater than ODH screening and action levels (20 and 200 ppb, respectively). The Respondents propose to mitigate the building with a SSDS.

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[2] TCE was measured on one occasion in indoor air at a concentration of 50 ppb, which was greater than the ODH action level of 20 ppb; however, the confirmatory sample result (0.098J ppb) was less than the ODH screening level (2 ppb). Based on multiple lines of evidence, the indoor air TCE concentration of 50 ppb is considered anomalous and is likely due to background sources.

6.0 PARCEL 5175 - FORMER ALLIANCE EQUIPMENT AND SUPPLY BUILDING 17

The building is a single-story, commercial-use building, constructed prior to 1949 (Figure G.17). Alliance Equipment and Supply used the building formerly, but the building was being vacated in June 2011; however, the Respondents understand that a new tenant may have leased or rented the property. The building footprint is 4,557 ft^2. The building has a concrete on-grade slab with unsealed joints. The building is constructed of concrete block. There is a former office area on the eastern side. The central section is retail and warehouse/storage space. The western section (rear storage shed) is an addition constructed of steel frame with plywood walls and steel cladding.

A crawl space may be present on the south side. There is a shallow concrete pit present in the southwest corner of the warehouse. Large sealed floor cracks are present in the middle portion of the building. The office area has wall-to-wall carpeting that is in poor condition. CRA observed floor staining in the warehouse and rear storage shed. In 1990, a gasoline UST was removed from the former Conway Fence facility on this Parcel. The window seals are in poor condition. At the time of the building survey, the overhead doors were open. The building is centrally heated by a forced air natural gas furnace. Central air conditioning is also present in the retail and office areas. A window-mounted air conditioning unit is present in the northern portion of building. Exterior openings include vents, fans, utility pipe penetrations, windows, and overhead and personnel doors.

Several of the sub-slab soil vapor concentrations of TCE (0.074 J – 120 ppb) were greater than the ODH screening level (20 ppb). The indoor air concentrations of TCE (ND – 0.18 J) were less than the ODH indoor air screening level (2 ppb). The Respondents propose to mitigate the building with a SSDS.

7.0 PARCEL 4610

7.1 PARCEL 4610 - RESIDENTIAL BUILDING 18

The building is a single-story, residential trailer constructed in the early 1990s (Figure G.18). It is designed as a residential trailer; there are two bedrooms, a bathroom, a kitchen, and a living room. The trailer is 685 ft^2 placed over a concrete pad with a crawl space enclosed by wood skirting, which is in poor condition. The concrete and wood appear damp. The trailer is insulated and relatively air tight, with sealed windows. The building is centrally heated by a forced air propane furnace. Central air conditioning is also provided. Exterior openings include vents, utility pipe penetrations, windows, doors.

The maximum crawl space benzene concentration (0.15 J – 0.46 ppb) was greater than the ODH indoor air screening level (0.4 ppb). The Respondents collected confirmatory crawl space, indoor air and outdoor air samples in January 2013. The confirmatory sample benzene concentrations (0.24 to 0.37 ppb) were less than the ODH indoor air screening level. No further action is required.

7.2 PARCEL 4610 - RON BARNETT CONSTRUCTION BUILDING 19

The building is a single-story, commercial-use storage building constructed before 1993 (Figure G.19). The building is primarily warehouse space (one large open space with no partitions) that is used for storing estate sale items with a modular office that currently is not in use. There is an attached open garage with a dirt floor. The building footprint is 1,800 ft^2 (excluding the garage). It is a wood frame building with steel beams covered with steel cladding. The ceiling is 20 feet high. The building has a concrete on-grade slab with concrete block foundation walls, which are in poor condition. The building floor is exposed concrete and contains large cracks. The building is not air tight. No central HVAC systems are present in the building. A window air conditioning unit is located in the modular office and draws air from the warehouse. Exterior openings include a large sliding door, and a personnel door. The building is occasionally occupied two to three times per month, by an adult worker picking up or dropping off storage items.

The sub-slab soil vapor concentrations were less than the ODH screening levels. No further action is required.

7.2 PARCEL 4610 - RON BARNETT CONSTRUCTION BUILDING 20

The building is a single-story commercial-use storage building, constructed in the early 1990s (Figure G.20). The building is primarily warehouse space (one large open space with no partitions) that is used for storage; a van, a trailer, and other miscellaneous items were observed during the building survey. There is a former bathroom in the northwestern corner that is no longer in use; the plumbing is shut off. There is an attached open lean-to with a dirt floor. The building footprint is 1,088 ft^2. The ceiling is 16 feet high. The concrete slab is on-grade with unsealed joints; there is no floor covering. Floor cracks are present. It is a wood frame building covered with steel cladding. The building is insulated and is not air tight. No HVAC systems are present in the building. Exterior openings include a sliding door and a personnel door. The building is used for storage only and has no regular occupancy.

No analytical results were collected from this building because it is not designed for occupancy. The Respondents measured methane in the sub-slab soil vapor and indoor air of the building, methane values were 0 percent. No further action is required.

7.3 PARCEL 4610 - RON BARNETT CONSTRUCTION BUILDING 21

The building is a single-story commercial-use storage building, with construction completed in the early 1990s (Figure G.21). The building is entirely warehouse space with a plywood partition that is open at the top. The building is used for storage; a car, a lawn tractor, and other miscellaneous items were observed during the building survey. There is an attached open garage with a dirt floor. The building footprint is 1,200 ft^2, excluding the garage. The building has a concrete on-grade slab with sealed joints; there is no floor covering. Floor cracks are present. It is a wood frame building covered with steel cladding. The building is not airtight. No HVAC systems are present in the building. Exterior openings include two sliding bay doors and personnel doors. The building is used for storage only and has no regular occupancy.

No analytical results were collected from this building because it is not designed for occupancy. The Respondents measured methane in the sub-slab soil vapor and indoor air of the building, methane values were 0 percent. No further action is required.

7.4 PARCEL 4610 - RON BARNETT CONSTRUCTION BUILDING 22

The building is a single-story commercial-use building constructed by the early 1990s (Figure G.22). The building is divided into three sections; the majority of the building is a car repair garage, there is a small storage area, and there is an office space with a bathroom. The building footprint is 1,200 ft^2. The ceiling is 20 feet high in the garage and storage area. The ceiling in the office is 8 feet high; the area above the office is used for storage (accessible from the storage area). The building has a 4-inch-thick concrete on-grade slab with unsealed joints; there is no floor covering. Significant floor cracks are present in the office and adjacent storage area. It is a wood and steel frame building covered with steel cladding. The building is not air tight, with a sealed window in the office and no weather seals in the storage area.

The office portion of the building is heated by electric baseboards and cooled by a window A/C unit. A wood stove is in the center of the building, which vents through the roof. Exterior openings include utility pipe penetrations, windows, sliding bay doors, overhead garage doors, and a personnel door. The overhead door is open when the garage is in use. The garage is occupied during variable hours (mostly occasional evenings and weekends) by two adult workers. The office may be occupied during normal working hours by one adult worker.

The sub-slab soil vapor concentrations were less than the ODH screening levels. No further action is required.

8.0 PARCEL 3207 - GLOBE EQUIPMENT

8.1 PARCEL 3207 - GLOBE EQUIPMENT BUILDING 23

The building is a single-story, commercial/ industrial-use building comprised primarily of office space with some assembly/warehouse space (Figure G.23). The building was constructed in 2004 over the historic location of former gasoline retail station and automobile salvage yard. The building footprint is 9,954 square feet (ft^2). The building has a concrete on-grade slab; unsealed joints can be seen in assembly/warehouse space. The office space has wall-to-wall carpeting. The building is insulated and relatively air tight with sealed, inoperable windows. A sub-slab vapor barrier is reportedly present. The building is heated by forced air natural gas units located on the roof. Central air conditioning is also provided by rooftop units. Exterior openings include vents, utility pipe penetrations, man doors, and a roll-up door in the warehouse. The building is occupied weekdays from 8 a.m. to 5 p.m. by approximately 15 adult workers.

The sub-slab soil vapor and indoor air concentrations were less than the ODH screening levels. No further action is required.

8.2 PARCEL 3207 - GLOBE EQUIPMENT BUILDING 24

The building is a single-story industrial-use building comprised primarily of warehouse/assembly space with some office space (Figure G.24). Before 1968, the main portion of the building was constructed of concrete block. The northern addition was constructed before 1973 of steel frame and aluminum siding. The building footprint is 19,803 ft^2, and the ceilings are 16 feet high with 8-foot drop ceilings in the office space. The building has a concrete on-grade slab with unsealed joints. The majority of the building has bare concrete floors, except the office space is carpeted. Some large floor cracks are visible, with some cracks sealed. The building is not insulated, and is relatively air tight with unsealed windows and bay doors that are open in good weather. The building is centrally heated by a forced air natural gas furnace. Central air conditioning is also provided by rooftop units. Exterior openings include vents, fans, utility pipe penetrations, windows, bay doors, and personnel doors. The building is occupied weekdays from 7:00 a.m. to 5:00 p.m. by approximately 25 adult workers.

Several of the sub-slab soil vapor concentrations of TCE (ND – 48 ppb) were greater than the ODH screening level (20 ppb). The indoor air concentrations of TCE (ND – 0.37) were less than the ODH indoor air screening level (2 ppb). The Respondents propose to mitigate the building with a SSDS.

9.0 PARCEL 3254 - MIDDLETON TRUCKING BUILDING 25

The building is a single-story, commercial-use building comprised primarily of a heavy truck repair garage with a small office and a bathroom (Figure G.25). The building was constructed before 1968. The building footprint is 2,000 ft^2, and the ceiling (an exposed sheet metal roof) is 12 feet high. The concrete block walls are unsealed and cracked in areas. The building has a concrete on-grade slab. The majority of the concrete shop floor contains large cracks and is heavily stained. CRA observed the heaviest staining at the rear of the building, adjacent to an aboveground storage tank (AST) and air compressor. The building is neither insulated nor air tight, and has unsealed windows. Overhead natural gas heaters and a wood stove vented through the west wall heat the building. Exterior openings include vents, fans, utility pipe penetrations, six windows, a man door, and a large overhead door. The overhead door is open during business hours. The building is occupied weekdays from 8:00 a.m. to 5:00 p.m. by three to four adult workers. The parts washer in the building may have used chlorinated solvents historically but now only uses mineral spirits.

The indoor air concentrations of benzene (2.1 – 2.7 ppb) were greater than the ODH screening level (2 ppb); however, sub-slab soil vapor concentrations (ND – 0.61 J ppb) were less than the ODH screening level (20 ppb). Based on multiple lines of evidence, the indoor air concentration of benzene is likely due to background sources. The Respondents installed a new sub-slab soil vapor probe and collected a sub-slab soil vapor sample in January 2013. The January 2013 sub-slab soil vapor sample benzene concentration (0.059 J ppb) was less than the ODH screening level, which confirmed the VI pathway is not complete. No further action is required.

10.0 PARCEL 3253

10.1 PARCEL 3253 - HOUSE, BUILDING 26

The building is a two-story, residential, single-family house constructed in the 1800s (Figure G.26). The building has a stone foundation and vinyl siding. The basement of the house is 926 ft^2 and is damp and unfinished, with a thin concrete floor that contains an approximately 2-foot-diameter hole. The discharge end of a condensate pipe is located over the large hole in the basement concrete floor. The building is constructed of stone and mortar foundation walls (unsealed), which are in poor condition. The building is relatively air tight with sealed windows. The building is centrally heated by a forced air natural gas furnace, and fireplace, and cooled by central A/C. Exterior openings include utility pipe penetrations, two windows, and two man doors (one exterior and one to the house). The building is constantly occupied by one adult resident. The basement does not appear to be used for storage and CRA did not observe any potential background sources of indoor air contaminants within the basement.

The maximum indoor air concentration of benzene (0.21 – 0.50 ppb) was greater than the ODH screening level (0.4 ppb). The Respondents collected a confirmatory indoor air sample in January 2013. The benzene concentration (0.29 ppb) of the confirmatory indoor air sample was less than the ODH screening level. No further action is required.

10.2 PARCEL 3253 - GARAGE, BUILDING 27

The building is a single-story, two-car garage constructed in the early 1990s (Figure G.27). The building footprint is 1,128 ft^2. The building has a concrete on-grade slab with 4-inch high, poured concrete foundation walls (unsealed), and vinyl -siding. The concrete slab is composed of six separate poured sections with unsealed joints. The building is relatively air tight with sealed windows. No HVAC systems are present in the building. Exterior openings include two windows, overhead and personnel doors. The building is used for storage only and has no regular occupancy.

No analytical results were collected from this building because it is not designed for occupancy. The Respondents measured methane in the sub-slab soil vapor and indoor air of the building, methane values were 0 percent. No further action is required.

11.0 PARCEL 5223 – VINNY'S BAR AND GRILL, BUILDING 28

The building is a single-story commercial building (Figure G.28). The building footprint is 8,349 ft^2. The building is insulated, but not air tight. Heating is provided by a natural gas furnace, and central air conditioning is present. Within the building linoleum tile, caulking, degreases, pesticides and spray insectidies are stored.

The sub-slab soil vapor and indoor air concentrations were less than the ODH screening levels. No further action is required.

12.0 PARCEL 3251 - HOUSE, BUILDING 29

The building is a two-story, residential building (Figure G.29). The building footprint is 1,128 ft^2. The building is constructed of poured concrete, with siding. The basement floor contains a sump and small drain. The building is insulated with average air tightness. The building is heated by a forced air natural gas furnace, a fireplace, and kerosene space heaters, and cooled by central air conditioning. Exterior openings include windows and doors. The building is occupied by two adult residents. The building occupant(s) smoke. Smoke and food odors were observed during the building survey completed in July 2012.

The indoor air concentrations of benzene (0.76 - 0.99 ppb) and chloroform (120 - 140 ppb) were greater than the ODH screening levels (0.4 ppb and 20 ppb for benzene and chloroform, respectively); however, sub-slab soil vapor concentrations of benzene (ND) and chloroform (0.43 - 0.96 ppb) were less than the ODH sub-slab soil vapor screening levels. Based on multiple lines of evidence, the indoor air concentrations of benzene and chloroform are likely due to background sources. The Respondents installed a new sub-slab soil vapor probe and collected a sub-slab soil vapor sample in January 2013. Benzene (0.056 U[3]) and chloroform (0.038 U) were not detected in the January 2013 sample, which confirmed the VI pathway is not complete. No further action is required.

[3] U – Not detected

13.0 PARCEL 3262 - HOUSE, BUILDING 33

The building is a single-story, residential building constructed in the early 1950s (Figure G.30). The building footprint is 625 ft^2. The building foundation is constructed of poured concrete. CRA observed visible evidence of leakage through the basement walls. The basement floor contains an open sump and is cracked. The building is insulated, but is not air tight. The building is cooled by an air conditioning unit in the main floor front room. Exterior openings include utility pipe penetrations, wall openings, windows and doors.

The indoor air and crawl space concentrations of benzene (0.54 – 0.89 ppb) and outdoor air concentrations of benzene (0.36 – 0.64 ppb) were greater than the ODH screening level (0.4 ppb); however, sub-slab soil vapor concentrations of benzene (ND) were less than the ODH sub-slab soil vapor screening level. Based on multiple lines of evidence, the indoor air concentrations of benzene are likely due to background sources. The Respondents installed a new sub-slab soil vapor probe and collected a sub-slab soil vapor sample in January 2013. The concentration of benzene (0.078 U) was non-detect and was less than the ODH screening level, which confirmed the VI pathway was not complete.

14.0 PARCEL 3263 - HOUSE, BUILDING 34

The building is a single-story, residential building (Figure G.31). The building footprint is 590 ft^2. The building foundation is constructed of poured concrete, and the foundation walls are in poor condition. The building is insulated, but is not air tight. CRA observed visible evidence of leakage through the basement walls. The building is heated by a natural gas furnace. Exterior openings include utility pipe penetrations, wall openings, windows and doors.

The sub-slab soil vapor and indoor air concentrations were less than the ODH screening levels. No further action is required.

15.0 PARCEL 2943 - RESIDENTIAL BUILDING 35

The building is a single-story, residential trailer (Figure G.32). The trailer is placed over a concrete pad with a crawl space enclosed by wood skirting. Exterior openings include vents, utility pipe penetrations, windows, doors.

The crawl space concentrations were less than the ODH indoor air screening levels. No further action is required.

16.0 PARCEL 2943 - RESIDENTIAL BUILDING 36

The building is a single-story, residential trailer (Figure G.33). The trailer is placed over a concrete pad with a crawl space enclosed by wood skirting. The building is insulated and cooled by central A/C. Exterior openings include vents, utility pipe penetrations, windows, doors.

The crawl space concentrations were less than the ODH indoor air screening levels. No further action is required.

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
Methane (%)	0.05	0.5
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.

LEGEND

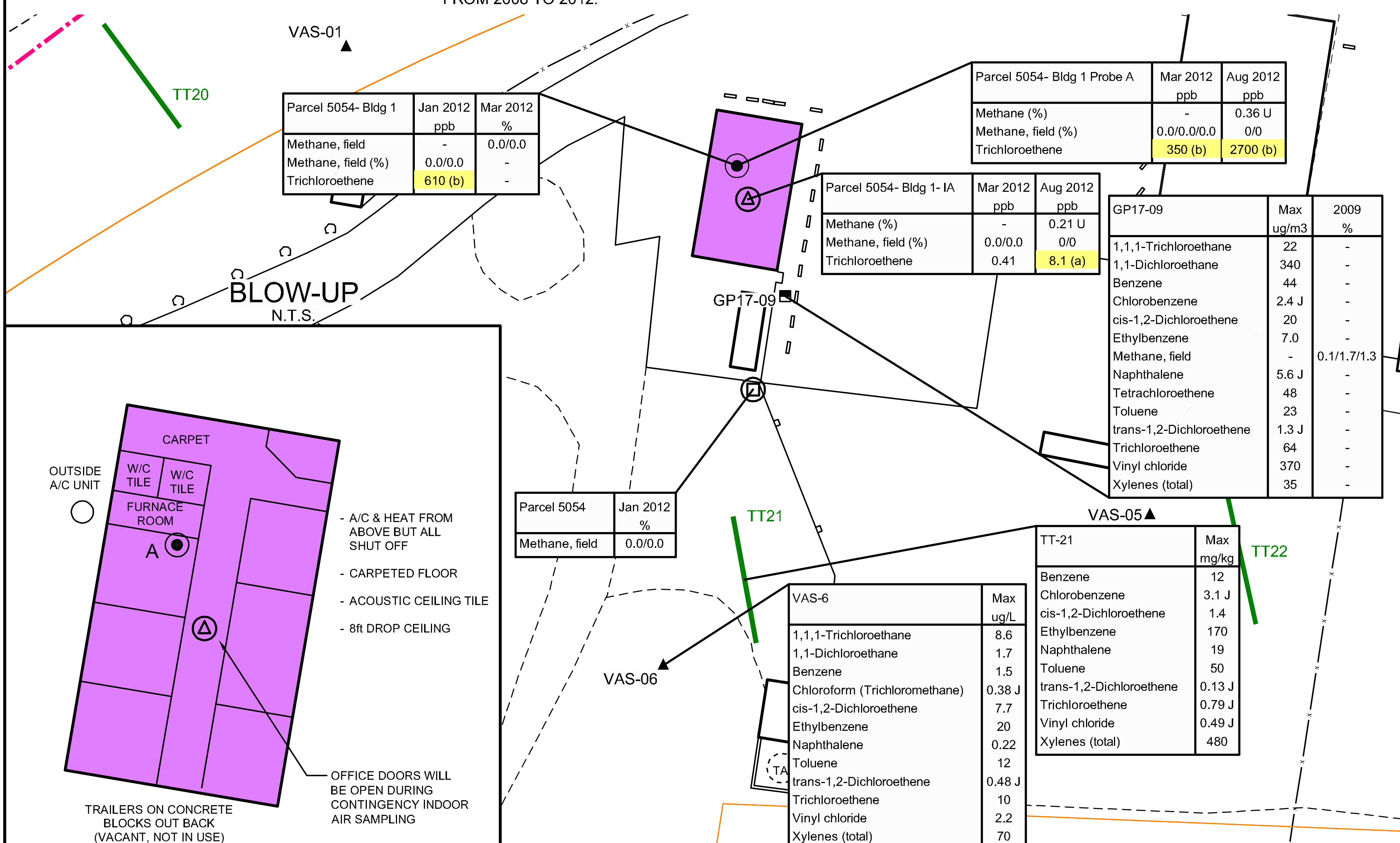
- APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- VAS01 ▲ VAS SAMPLING LOCATION
- GP21-09 SHALLOW LANDFILL GAS PROBE
- TEST TRENCH LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

Parcel 5054- Bldg 1	Jan 2012 ug/m3	Mar 2012 ug/m3
Chloroform (Trichloromethane)	7.7 J	0.19 U
Methane, field	0.0/0.0	0.0/0.0
Total HI	38 (k)	-

SAMPLE ID (PARCEL - BUILDING)
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

1.8/1.8 RESULT/DUPLICATE RESULT
J ESTIMATED
U NOT DETECTED
EXCEEDANCES
Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.



Parcel 5054- Bldg 1	Jan 2012 ppb	Mar 2012 %
Methane, field	-	0.0/0.0
Methane, field (%)	0.0/0.0	-
Trichloroethene	610 (b)	-

Parcel 5054- Bldg 1 Probe A	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	-	0.36 U
Methane, field (%)	0.0/0.0/0.0	0/0
Trichloroethene	350 (b)	2700 (b)

Parcel 5054- Bldg 1- IA	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	-	0.21 U
Methane, field (%)	0.0/0.0	0/0
Trichloroethene	0.41	8.1 (a)

GP17-09	Max ug/m3	2009 %
1,1,1-Trichloroethane	22	-
1,1-Dichloroethane	340	-
Benzene	44	-
Chlorobenzene	2.4 J	-
cis-1,2-Dichloroethene	20	-
Ethylbenzene	7.0	-
Methane, field	-	0.1/1.7/1.3
Naphthalene	5.6 J	-
Tetrachloroethene	48	-
Toluene	23	-
trans-1,2-Dichloroethene	1.3 J	-
Trichloroethene	64	-
Vinyl chloride	370	-
Xylenes (total)	35	-

Parcel 5054	Jan 2012 %
Methane, field	0.0/0.0

TT-21	Max mg/kg
Benzene	12
Chlorobenzene	3.1 J
cis-1,2-Dichloroethene	1.4
Ethylbenzene	170
Naphthalene	19
Toluene	50
trans-1,2-Dichloroethene	0.13 J
Trichloroethene	0.79 J
Vinyl chloride	0.49 J
Xylenes (total)	480

VAS-6	Max ug/L
1,1,1-Trichloroethane	8.6
1,1-Dichloroethane	1.7
Benzene	1.5
Chloroform (Trichloromethane)	0.38 J
cis-1,2-Dichloroethene	7.7
Ethylbenzene	20
Naphthalene	0.22
Toluene	12
trans-1,2-Dichloroethene	0.48 J
Trichloroethene	10
Vinyl chloride	2.2
Xylenes (total)	70

PROFILE VIEW

N.T.S.

Building Characteristics:
Single-story commercial-use building, constructed prior to 1993. Footprint is 1,500 sq. ft. Primarily office space (6 single offices) with bathrooms and kitchenette. 8 ft. drop ceilings. Brick building with steel cladding, windows are inoperable. Concrete slab-on-grade, covered with wall-to-wall carpeting. Average air tightness, weather seals in fair condition. Heating provided by forced air natural gas furnace, central A/C from exterior ground unit. Exterior openings - vents, utility pipe penetrations, 2 personnel doors.
Building has been vacant for 4 to 5 years.

figure G.1

PARCEL 5054 - VALLEY ASPHALT PLANT BUILDING 1
1901 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA027 APR 4/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- BH01-09 SOIL BORING LOCATION
- VAS01 VAS SAMPLING LOCATION
- GP21-09 SHALLOW LANDFILL GAS PROBE
- GP04-09 DEEP LANDFILL GAS PROBE
- TT1 TEST TRENCH LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

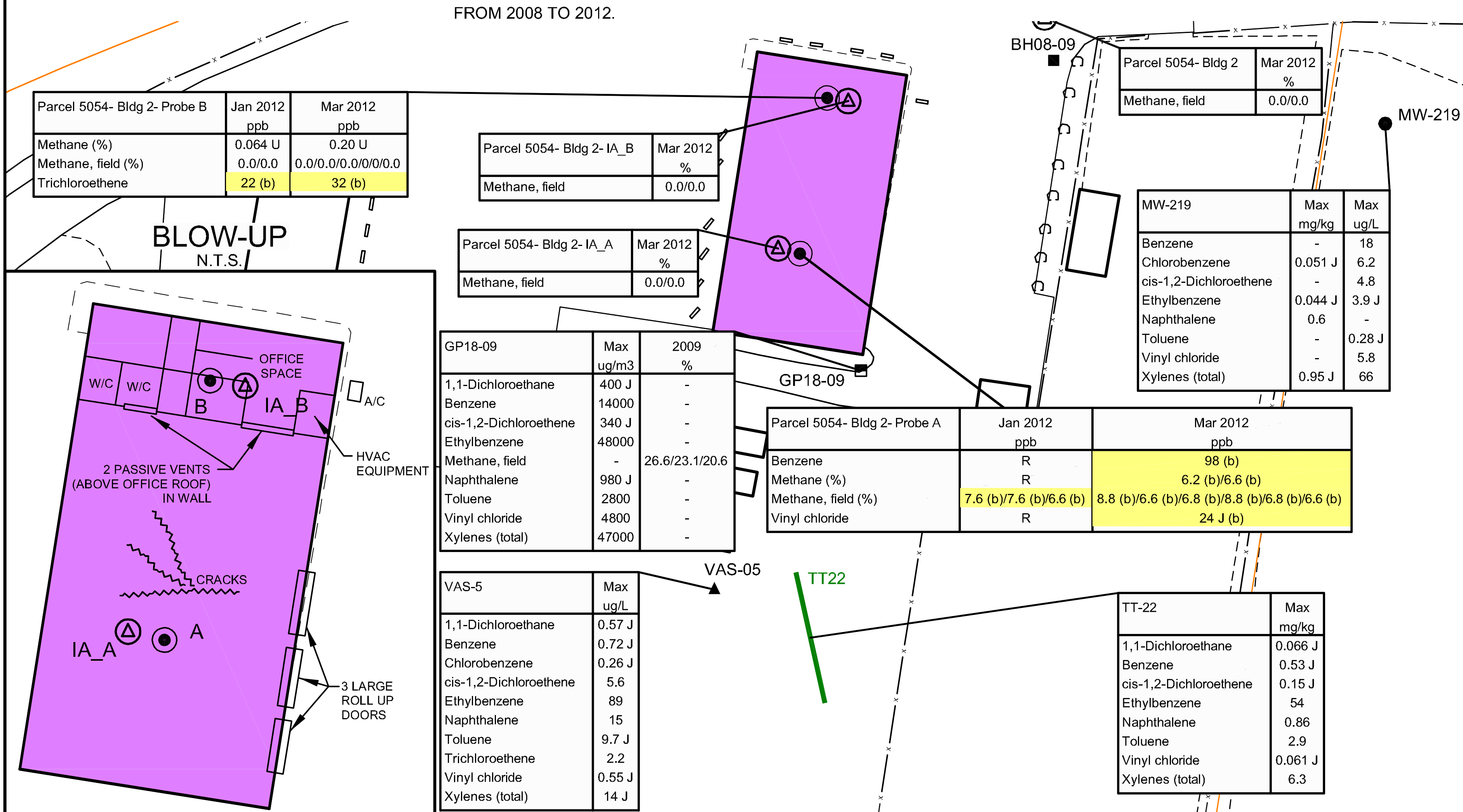
Parcel 5054- Bldg 2- Probe B	Jan 2012	Mar 2012
	ug/m3	ug/m3
Methane	0.064 U	0.20 U
Methane, field	0.0/0.0	0.0
Total Hi	1	2 (m)

SAMPLE ID (PARCEL - BUILDING)
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

- 1.8/1.8 RESULT/DUPLICATE RESULT
- J ESTIMATED
- U NOT DETECTED
- R REJECTED
- EXCEEDANCES
- Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
Benzene	2	20
Methane (%)	0.05	0.5
Trichloroethene	2	20
Vinyl chloride	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



Parcel 5054- Bldg 2- Probe B	Jan 2012	Mar 2012
	ppb	ppb
Methane (%)	0.064 U	0.20 U
Methane, field (%)	0.0/0.0	0.0/0.0/0.0/0/0/0.0
Trichloroethene	22 (b)	32 (b)

Parcel 5054- Bldg 2- IA_B	Mar 2012
	%
Methane, field	0.0/0.0

Parcel 5054- Bldg 2- IA_A	Mar 2012
	%
Methane, field	0.0/0.0

Parcel 5054- Bldg 2	Mar 2012
	%
Methane, field	0.0/0.0

MW-219	Max mg/kg	Max ug/L
Benzene	-	18
Chlorobenzene	0.051 J	6.2
cis-1,2-Dichloroethene	-	4.8
Ethylbenzene	0.044 J	3.9 J
Naphthalene	0.6	-
Toluene	-	0.28 J
Vinyl chloride	-	5.8
Xylenes (total)	0.95 J	66

GP18-09	Max ug/m3	2009 %
1,1-Dichloroethane	400 J	-
Benzene	14000	-
cis-1,2-Dichloroethene	340 J	-
Ethylbenzene	48000	-
Methane, field	-	26.6/23.1/20.6
Naphthalene	980 J	-
Toluene	2800	-
Vinyl chloride	4800	-
Xylenes (total)	47000	-

Parcel 5054- Bldg 2- Probe A	Jan 2012	Mar 2012
	ppb	ppb
Benzene	R	98 (b)
Methane (%)	R	6.2 (b)/6.6 (b)
Methane, field (%)	7.6 (b)/7.6 (b)/6.6 (b)	8.8 (b)/6.6 (b)/6.8 (b)/8.8 (b)/6.8 (b)/6.6 (b)
Vinyl chloride	R	24 J (b)

VAS-5	Max ug/L
1,1-Dichloroethane	0.57 J
Benzene	0.72 J
Chlorobenzene	0.26 J
cis-1,2-Dichloroethene	5.6
Ethylbenzene	89
Naphthalene	15
Toluene	9.7 J
Trichloroethene	2.2
Vinyl chloride	0.55 J
Xylenes (total)	14 J

TT-22	Max mg/kg
1,1-Dichloroethane	0.066 J
Benzene	0.53 J
cis-1,2-Dichloroethene	0.15 J
Ethylbenzene	54
Naphthalene	0.86
Toluene	2.9
Vinyl chloride	0.061 J
Xylenes (total)	6.3

PROFILE VIEW

N.T.S.

Building Characteristics:
Single-story commercial/industrial-use building, constructed prior to 1959. Building divided into two sections with cracked cinder block wall between. Footprint is 4,888 sq. ft. Exterior openings - vents, fans, utility pipe penetrations, windows, bay doors, personnel doors. Building has been vacant for over 10 years.
Northern 1/4 of the building is brick, single story, office space, concrete slab-on-grade with wall-to-wall carpet (strong moldy/musty odor). Average air tightness. Heating provided by forced air natural gas furnace, central A/C from exterior ground unit.
Southern 3/4 of the building is steel, double-arch Quonset hut with bare concrete floor (visibly cracked in areas), used for storage. Not air tight, no weather seals present, broken windows.
No HVAC.

figure G.2

PARCEL 5054 - VALLEY ASPHALT PLANT BUILDING 2
1903 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA028 APR 4/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 — MONITORING WELL LOCATION
- BH01-09 — SOIL BORING LOCATION
- VAS01 — VAS SAMPLING LOCATION
- GP21-09 — SHALLOW LANDFILL GAS PROBE
- CRAWL SPACE AIR SAMPLE LOCATION
- PROPOSED CONTINGENCY INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION
- NV — NO VALUE

0 20 50ft

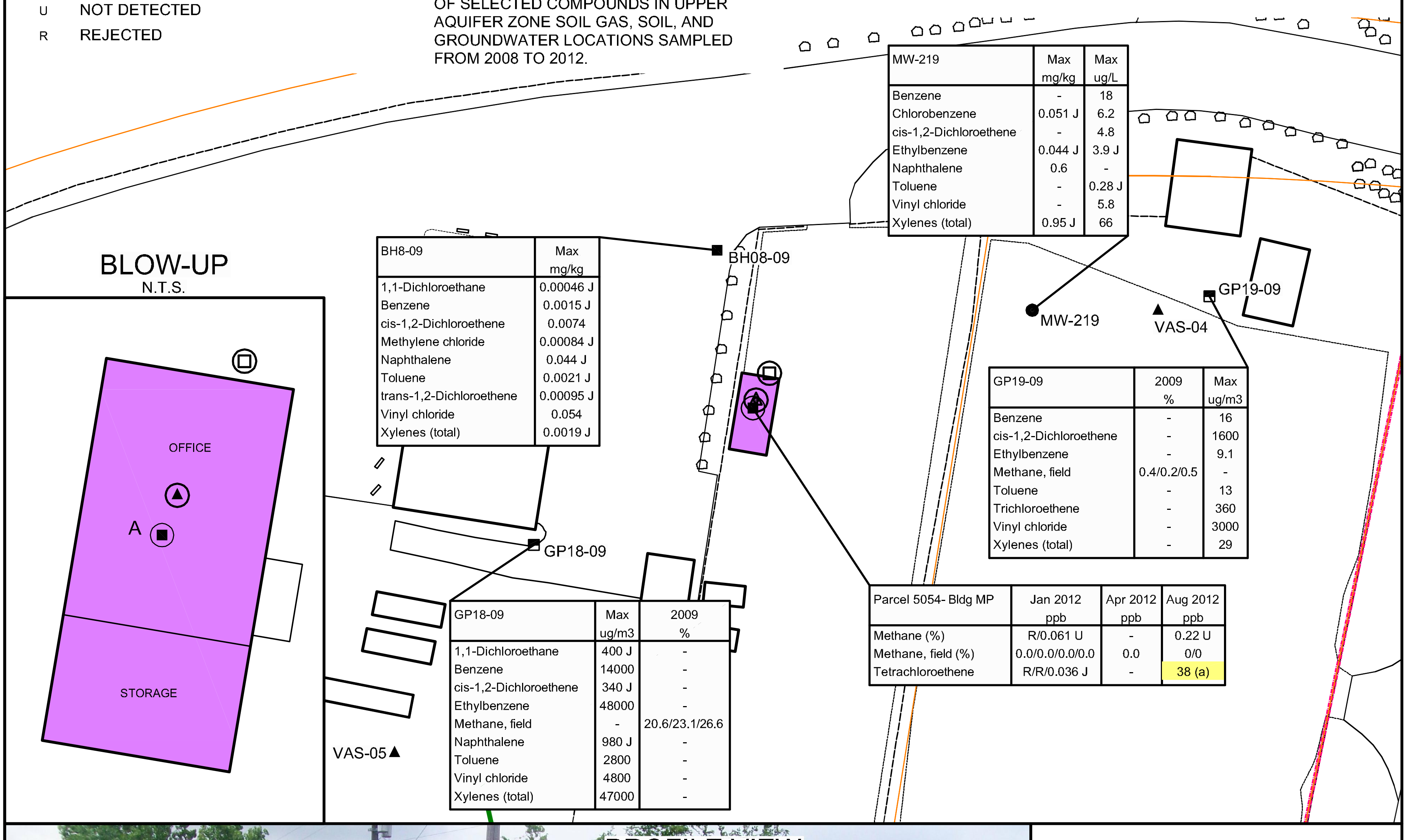
GP09-09	9/15/2009 ug/L
Tetrachloroethene	2000 (B)

SAMPLE ID
SAMPLE DATE
SAMPLE UNIT
CRITERIA
CONCENTRATION VALUE
COMPOUND
EXCEEDANCES

- 1.8/1.8 — RESULT/DUPLICATE RESULT
- J — ESTIMATED
- U — NOT DETECTED
- R — REJECTED
- Max — MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
Methane (%)	0.05	0.5
Tetrachloroethene	25	250

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



MW-219	Max mg/kg	Max ug/L
Benzene	-	18
Chlorobenzene	0.051 J	6.2
cis-1,2-Dichloroethene	-	4.8
Ethylbenzene	0.044 J	3.9 J
Naphthalene	0.6	-
Toluene	-	0.28 J
Vinyl chloride	-	5.8
Xylenes (total)	0.95 J	66

BH8-09	Max mg/kg
1,1-Dichloroethane	0.00046 J
Benzene	0.0015 J
cis-1,2-Dichloroethene	0.0074
Methylene chloride	0.00084 J
Naphthalene	0.044 J
Toluene	0.0021 J
trans-1,2-Dichloroethene	0.00095 J
Vinyl chloride	0.054
Xylenes (total)	0.0019 J

GP19-09	2009 %	Max ug/m3
Benzene	-	16
cis-1,2-Dichloroethene	-	1600
Ethylbenzene	-	9.1
Methane, field	0.4/0.2/0.5	-
Toluene	-	13
Trichloroethene	-	360
Vinyl chloride	-	3000
Xylenes (total)	-	29

GP18-09	Max ug/m3	2009 %
1,1-Dichloroethane	400 J	-
Benzene	14000	-
cis-1,2-Dichloroethene	340 J	-
Ethylbenzene	48000	-
Methane, field	-	20.6/23.1/26.6
Naphthalene	980 J	-
Toluene	2800	-
Vinyl chloride	4800	-
Xylenes (total)	47000	-

Parcel 5054- Bldg MP	Jan 2012 ppb	Apr 2012 ppb	Aug 2012 ppb
Methane (%)	R/0.061 U	-	0.22 U
Methane, field (%)	0.0/0.0/0.0/0.0	0.0	0/0
Tetrachloroethene	R/R/0.036 J	-	38 (a)

PROFILE VIEW
N.T.S.

Building Characteristics:
Single-story commercial-use building. 365 sq. ft building on raised foundation, with wood siding, constructed prior to 1950s. No weather seals present, not air tight. Exterior openings - windows, door. No HVAC systems present.
Occupancy - vacant since July 1, 2011.

figure G.3

PARCEL 5054 - MURPHY'S PLUMBING BUILDING MP
1927 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA034 APR 4/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- VAS01 VAS SAMPLING LOCATION
- GP21-09 SHALLOW LANDFILL GAS PROBE
- TT1 TEST TRENCH LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

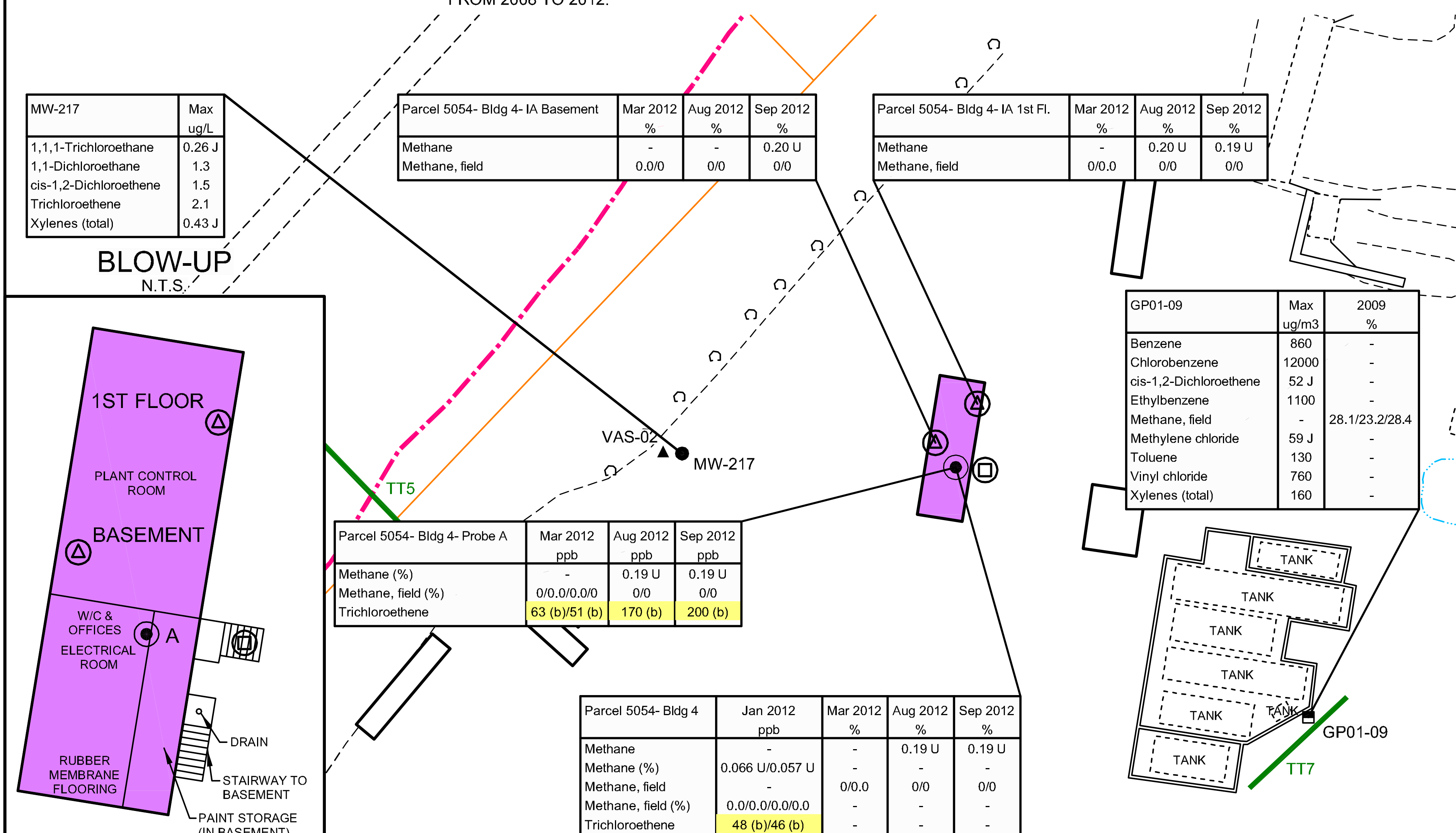
Parcel 5054- Bldg 4- IA Basement	Aug 2012 ug/m3	Sep 2012 ug/m3
Methane (%)	-	0.20 U
Methane, field (%)	0/0	0/0

SAMPLE ID (PARCEL - BUILDING)
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

1.8/1.8 RESULT/DUPLICATE RESULT
J ESTIMATED
U NOT DETECTED
EXCEEDANCES
Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
Methane (%)	0.05	0.5
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



MW-217	Max ug/L
1,1,1-Trichloroethane	0.26 J
1,1-Dichloroethane	1.3
cis-1,2-Dichloroethene	1.5
Trichloroethene	2.1
Xylenes (total)	0.43 J

Parcel 5054- Bldg 4- IA Basement	Mar 2012 %	Aug 2012 %	Sep 2012 %
Methane	-	-	0.20 U
Methane, field	0.0/0	0/0	0/0

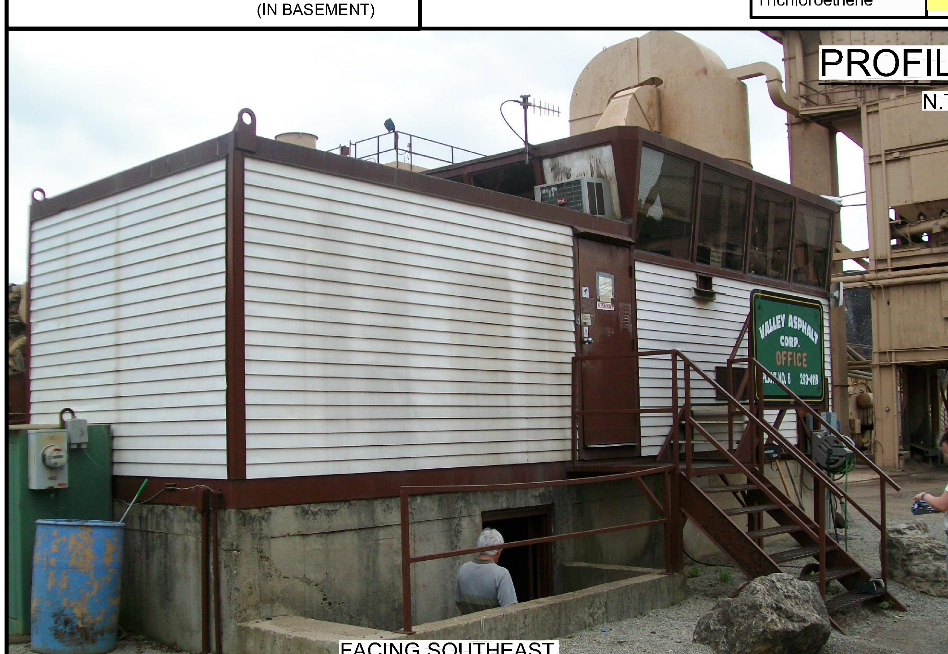
Parcel 5054- Bldg 4- IA 1st Fl.	Mar 2012 %	Aug 2012 %	Sep 2012 %
Methane	-	0.20 U	0.19 U
Methane, field	0/0.0	0/0	0/0

GP01-09	Max ug/m3	2009 %
Benzene	860	-
Chlorobenzene	12000	-
cis-1,2-Dichloroethene	52 J	-
Ethylbenzene	1100	-
Methane, field	-	28.1/23.2/28.4
Methylene chloride	59 J	-
Toluene	130	-
Vinyl chloride	760	-
Xylenes (total)	160	-

Parcel 5054- Bldg 4- Probe A	Mar 2012 ppb	Aug 2012 ppb	Sep 2012 ppb
Methane (%)	-	0.19 U	0.19 U
Methane, field (%)	0/0.0/0.0/0	0/0	0/0
Trichloroethene	63 (b)/51 (b)	170 (b)	200 (b)

Parcel 5054- Bldg 4	Jan 2012 ppb	Mar 2012 %	Aug 2012 %	Sep 2012 %
Methane	-	-	0.19 U	0.19 U
Methane (%)	0.066 U/0.057 U	-	-	-
Methane, field	-	0/0.0	0/0	0/0
Methane, field (%)	0.0/0.0/0.0/0.0	-	-	-
Trichloroethene	48 (b)/46 (b)	-	-	-

PROFILE VIEW
N.T.S.



FACING SOUTHEAST


FACING SOUTH

Building Characteristics:
Split-level, pre-fabricated building on top of poured concrete basement (half below grade). Industrial use, constructed prior to 1993. Footprint is 280 sq. ft. Basement is unfinished, paint storage on shelves. Office space on main level has electric baseboard heat and a window A/C unit with average air tightness. One personnel door to the basement (sometimes left open) and one to the main level. Occupied during weekday work hours by 2 adult workers.

figure G.4
PARCEL 5054 - VALLEY ASPHALT PLANT BUILDING 4
1901 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA030 APR 9/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- VAS01 VAS SAMPLING LOCATION
- TT1 TEST TRENCH LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

TT-5	Max mg/kg
cis-1,2-Dichloroethene	0.00062 J
Naphthalene	0.38

- SAMPLE ID (PARCEL - BUILDING)
- SAMPLE DATE
- SAMPLE UNIT
- CONCENTRATION VALUE
- COMPOUND
- EXCEEDANCES
- Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.
- 1.8/1.8 RESULT/DUPLICATE RESULT

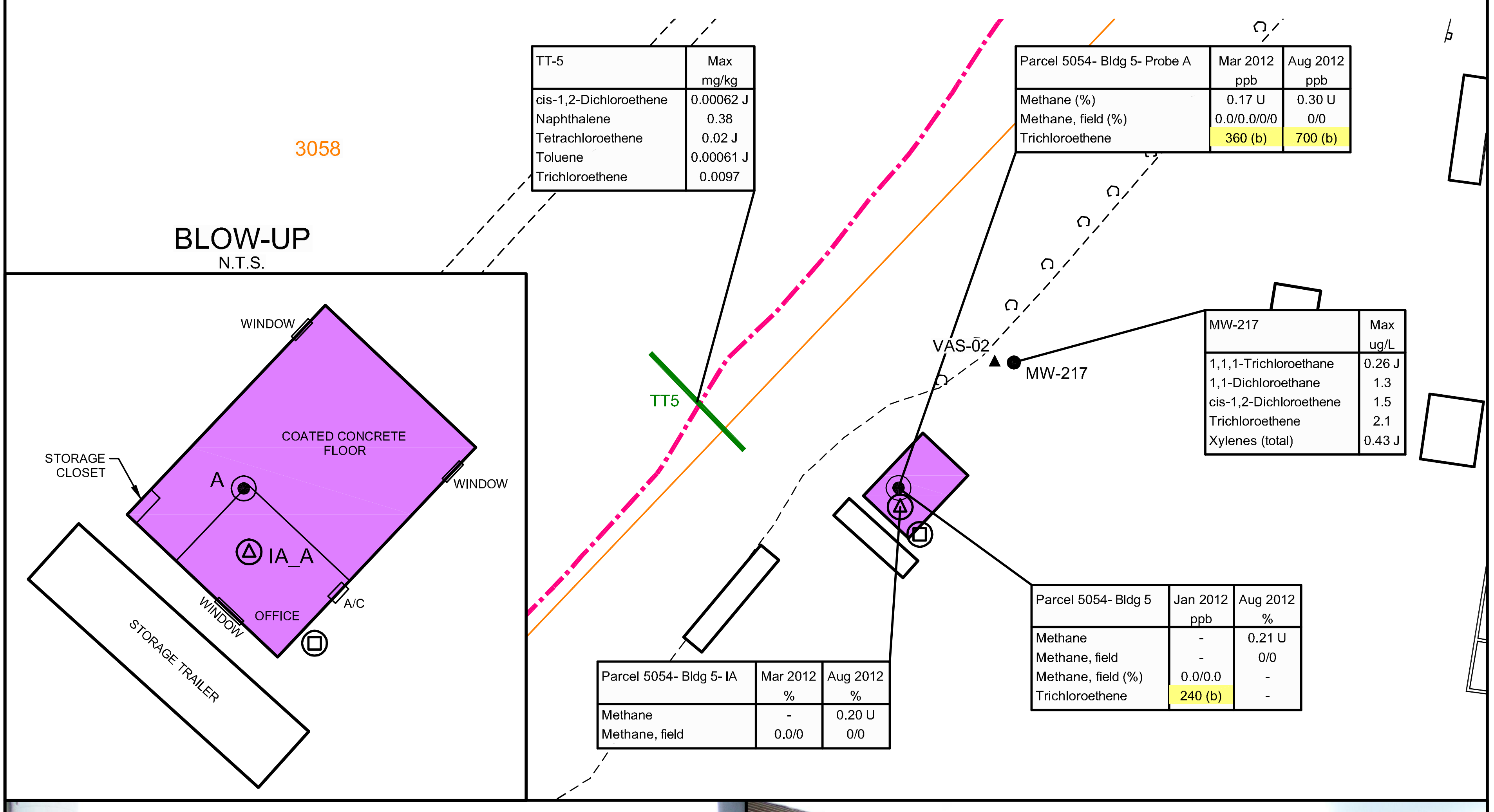
[1] INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE

J ESTIMATED

U NOT DETECTED

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
Methane (%)	0.05	0.5
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



TT-5	Max mg/kg
cis-1,2-Dichloroethene	0.00062 J
Naphthalene	0.38
Tetrachloroethene	0.02 J
Toluene	0.00061 J
Trichloroethene	0.0097

Parcel 5054- Bldg 5- Probe A	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	0.17 U	0.30 U
Methane, field (%)	0.0/0.0/0/0	0/0
Trichloroethene	360 (b)	700 (b)

MW-217	Max ug/L
1,1,1-Trichloroethane	0.26 J
1,1-Dichloroethane	1.3
cis-1,2-Dichloroethene	1.5
Trichloroethene	2.1
Xylenes (total)	0.43 J

Parcel 5054- Bldg 5	Jan 2012 ppb	Aug 2012 %
Methane	-	0.21 U
Methane, field	-	0/0
Methane, field (%)	0.0/0.0	-
Trichloroethene	240 (b)	-

Parcel 5054- Bldg 5- IA	Mar 2012 %	Aug 2012 %
Methane	-	0.20 U
Methane, field	0.0/0	0/0

PROFILE VIEW
N.T.S.

FACING EAST

FACING SOUTH

Building Characteristics:
Single-story, industrial use building with steel cladding. Footprint is 594 sq. ft. Approximately 8 ft. high ceilings, inoperable windows. The building contains a testing laboratory and a small office. Building was constructed prior to 1968 (originally located near Building 1), then moved to its current location prior to 1993. Concrete slab-on-grade, freshly epoxy coated floor with some thin cracks. Average air tightness with weather seals in fair condition. Heating provided by forced air natural gas furnace. Window A/C units in laboratory and office.
Exterior openings - vents, fans, and one personnel door. Occupied during weekday work hours by 1 adult worker (office) and variable but rare occupancy by 4 adult workers (laboratory).

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

figure G.5

PARCEL 5054 - VALLEY ASPHALT PLANT BUILDING 5
1901 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

38443-62(018)GN-WA031 APR 4/2013

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
Methane (%)	0.05	0.5

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.

LEGEND

APPROXIMATE SITE BOUNDARY
EDGE OF WATER
PARCEL BOUNDARY
SUB SLAB SOIL VAPOR BUILDING LOCATION
MW-202 MONITORING WELL LOCATION
GP21-09 SHALLOW LANDFILL GAS PROBE
TP1 TEST PIT LOCATION
TT1 TEST TRENCH LOCATION
INDOOR AIR SAMPLE LOCATION
NV NO VALUE

TT-7	Max mg/kg
Benzene	0.094 J
Chlorobenzene	47

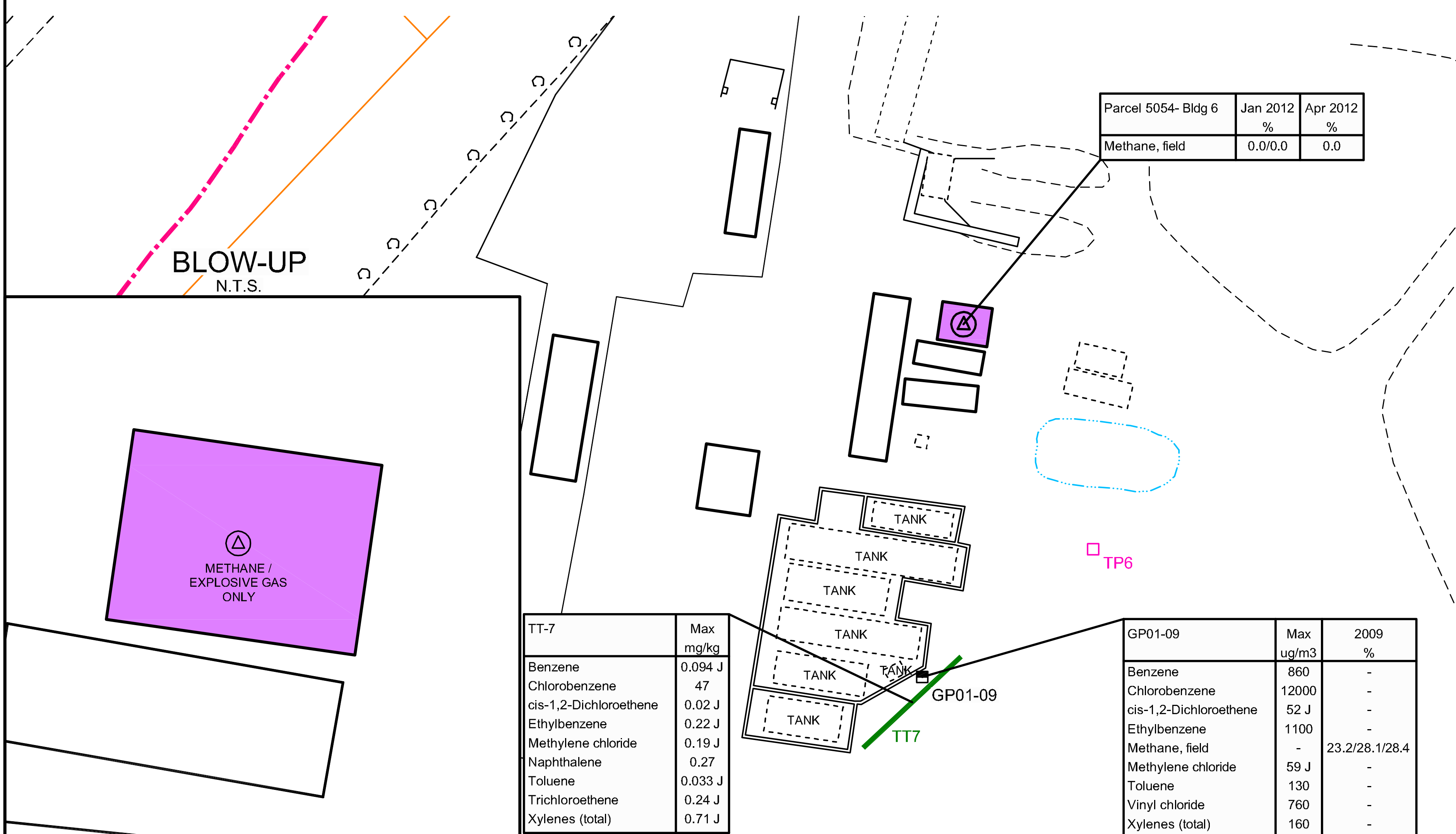
SAMPLE ID
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND
EXCEEDANCES

J ESTIMATED

Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

1.8/1.8 RESULT/DUPLICATE RESULT

0 20 50ft



Parcel 5054- Bldg 6	Jan 2012 %	Apr 2012 %
Methane, field	0.0/0.0	0.0

TT-7	Max mg/kg
Benzene	0.094 J
Chlorobenzene	47
cis-1,2-Dichloroethene	0.02 J
Ethylbenzene	0.22 J
Methylene chloride	0.19 J
Naphthalene	0.27
Toluene	0.033 J
Trichloroethene	0.24 J
Xylenes (total)	0.71 J

GP01-09	Max ug/m3	2009 %
Benzene	860	-
Chlorobenzene	12000	-
cis-1,2-Dichloroethene	52 J	-
Ethylbenzene	1100	-
Methane, field	-	23.2/28.1/28.4
Methylene chloride	59 J	-
Toluene	130	-
Vinyl chloride	760	-
Xylenes (total)	160	-

PROFILE VIEW
N.T.S.

Building Characteristics:
Single-story industrial-use building with steel panels. 218 sq. ft. steel-frame, steel-sided storage shed with earthen floor, constructed prior to 2005. No insulation, not air tight. No HVAC systems present. Exterior openings - vents and personnel door. Building used for chemical storage.
No regular occupancy, storage only

figure G.6
PARCEL 5054 - VALLEY ASPHALT PLANT BUILDING 6
1901 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA032 APR 4/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- BH01-09 SOIL BORING LOCATION
- VAS01 VAS SAMPLING LOCATION
- GP21-09 SHALLOW LANDFILL GAS PROBE
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION
- NV NO VALUE

0 20 50ft

GP19-09	2009 %	Max ug/m3
Benzene	-	16
cis-1,2-Dichloroethene	-	1600

SAMPLE ID
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

1.8/1.8 RESULT/DUPLICATE RESULT

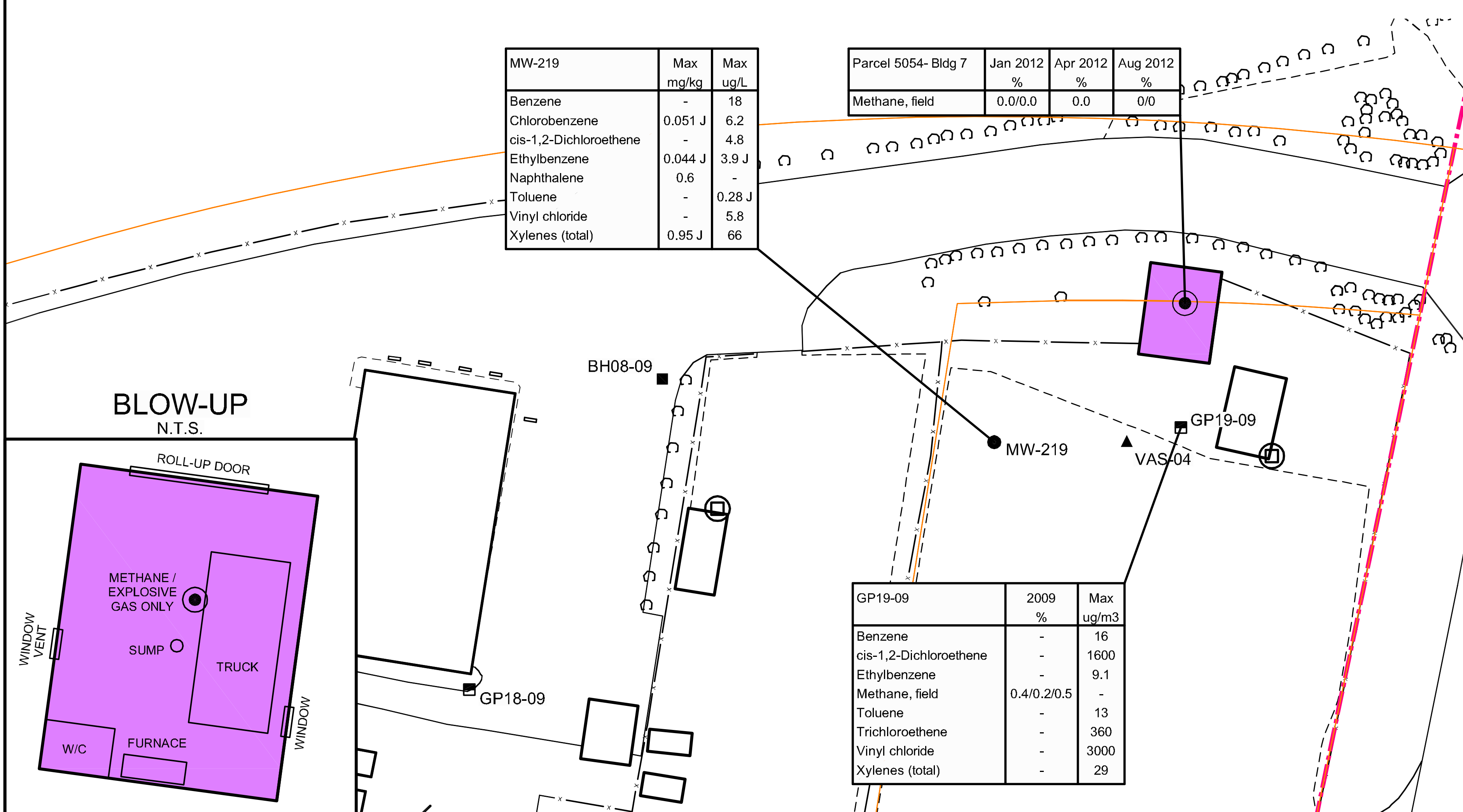
EXCEEDANCES

J ESTIMATED

Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
Methane (%)	0.05	0.5

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



MW-219	Max mg/kg	Max ug/L
Benzene	-	18
Chlorobenzene	0.051 J	6.2
cis-1,2-Dichloroethene	-	4.8
Ethylbenzene	0.044 J	3.9 J
Naphthalene	0.6	-
Toluene	-	0.28 J
Vinyl chloride	-	5.8
Xylenes (total)	0.95 J	66

Parcel 5054- Bldg 7	Jan 2012 %	Apr 2012 %	Aug 2012 %
Methane, field	0.0/0.0	0.0	0/0

GP19-09	2009 %	Max ug/m3
Benzene	-	16
cis-1,2-Dichloroethene	-	1600
Ethylbenzene	-	9.1
Methane, field	0.4/0.2/0.5	-
Toluene	-	13
Trichloroethene	-	360
Vinyl chloride	-	3000
Xylenes (total)	-	29

PROFILE VIEW
N.T.S.

Building Characteristics:
Single-story industrial-use garage and storage building. 822 sq. ft. concrete block constructed prior to 1968. A sump with drain pipe present. Heating provided by forced air natural gas wall-mounted heater. Exterior openings - vents, wall openings, utility pipe penetrations, and apparently inoperable bay door with broken panels.
Building use is for storage only.

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

figure G.7

PARCEL 5054 - BUILDING 7
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

38443-62(018)GN-WA033 APR 4/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 — MONITORING WELL LOCATION
- VAS01 — VAS SAMPLING LOCATION
- GP21-09 — SHALLOW LANDFILL GAS PROBE
- GP04-09 — DEEP LANDFILL GAS PROBE
- TT1 — TEST TRENCH LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

N

0 20 60ft

SAMPLE ID (PARCEL - BUILDING)

Parcel 5171 - Bldg 1 - Probe C	Jan 2012 ug/m3	Jan 2012 %
Methane, field	-	0.0
Tetrachloroethene	140	-
Trichloroethene	61	-

SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

[1] INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE

J ESTIMATED

U NOT DETECTED

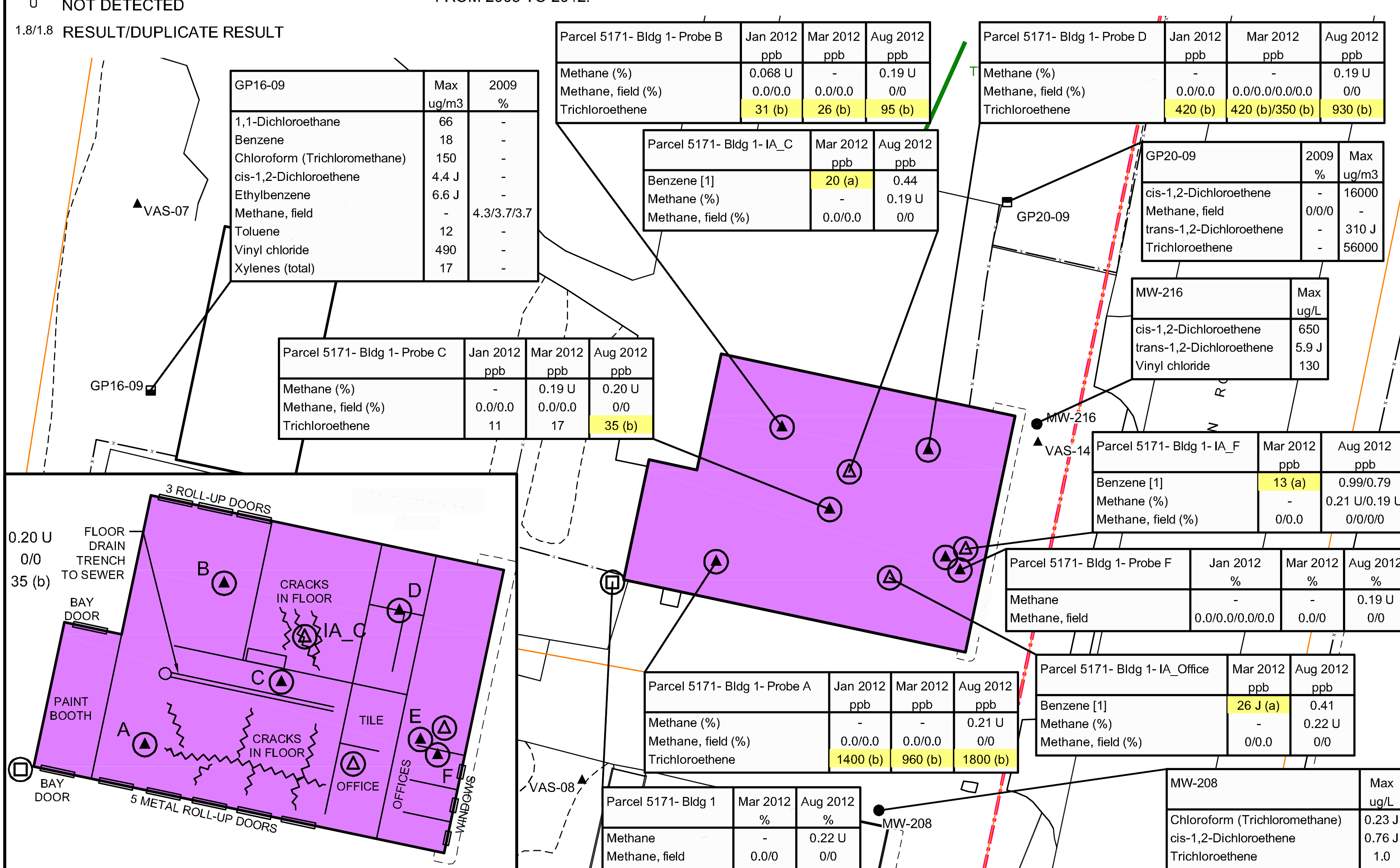
1.8/1.8 RESULT/DUPLICATE RESULT

EXCEEDANCES

Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
Benzene	2	20
Methane	0.05	0.5
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



GP16-09	Max ug/m3	2009 %
1,1-Dichloroethane	66	-
Benzene	18	-
Chloroform (Trichloromethane)	150	-
cis-1,2-Dichloroethene	4.4 J	-
Ethylbenzene	6.6 J	-
Methane, field	-	4.3/3.7/3.7
Toluene	12	-
Vinyl chloride	490	-
Xylenes (total)	17	-

Parcel 5171- Bldg 1- Probe B	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	0.068 U	-	0.19 U
Methane, field (%)	0.0/0.0	0.0/0.0	0/0
Trichloroethene	31 (b)	26 (b)	95 (b)

Parcel 5171- Bldg 1- Probe D	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	-	-	0.19 U
Methane, field (%)	0.0/0.0	0.0/0.0/0.0/0.0	0/0
Trichloroethene	420 (b)	420 (b)/350 (b)	930 (b)

Parcel 5171- Bldg 1- IA_C	Mar 2012 ppb	Aug 2012 ppb
Benzene [1]	20 (a)	0.44
Methane (%)	-	0.19 U
Methane, field (%)	0.0/0.0	0/0

GP20-09	2009 %	Max ug/m3
cis-1,2-Dichloroethene	-	16000
Methane, field	0/0/0	-
trans-1,2-Dichloroethene	-	310 J
Trichloroethene	-	56000

MW-216	Max ug/L
cis-1,2-Dichloroethene	650
trans-1,2-Dichloroethene	5.9 J
Vinyl chloride	130

Parcel 5171- Bldg 1- Probe C	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	-	0.19 U	0.20 U
Methane, field (%)	0.0/0.0	0.0/0.0	0/0
Trichloroethene	11	17	35 (b)

Parcel 5171- Bldg 1- IA_F	Mar 2012 ppb	Aug 2012 ppb
Benzene [1]	13 (a)	0.99/0.79
Methane (%)	-	0.21 U/0.19 U
Methane, field (%)	0/0.0	0/0/0/0

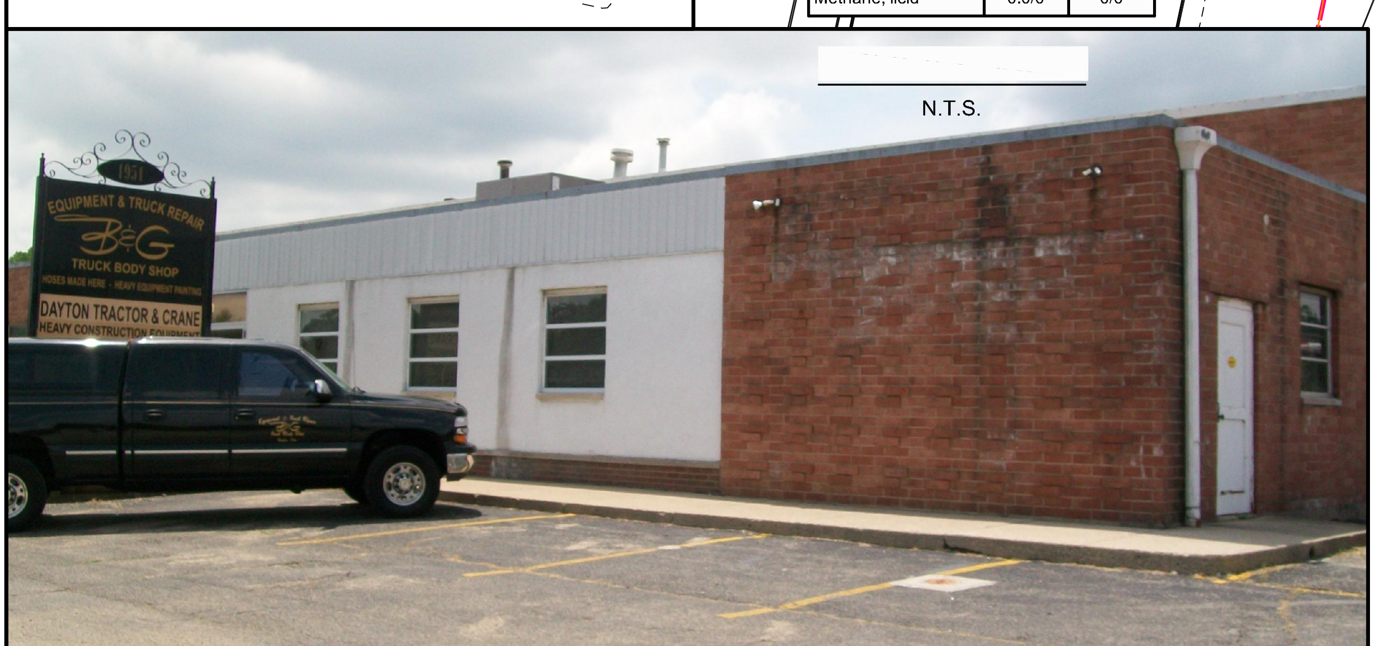
Parcel 5171- Bldg 1- Probe F	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	-	0.19 U
Methane, field	0.0/0.0/0.0/0.0	0.0/0	0/0

Parcel 5171- Bldg 1- IA_Office	Mar 2012 ppb	Aug 2012 ppb
Benzene [1]	26 J (a)	0.41
Methane (%)	-	0.22 U
Methane, field (%)	0/0.0	0/0

Parcel 5171- Bldg 1- Probe A	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	-	-	0.21 U
Methane, field (%)	0.0/0.0	0.0/0.0	0/0
Trichloroethene	1400 (b)	960 (b)	1800 (b)

Parcel 5171- Bldg 1	Mar 2012 %	Aug 2012 %
Methane	-	0.22 U
Methane, field	0.0/0	0/0

MW-208	Max ug/L
Chloroform (Trichloromethane)	0.23 J
cis-1,2-Dichloroethene	0.76 J
Trichloroethene	1.0



Building Characteristics:
Commercial-use building, constructed prior to1968. Building divided into two sections. Total footprint is 13,700 sq. ft. Exterior openings - vents, fans, utility pipe penetrations, windows, 10 large bay doors, personnel doors. Occupied weekdays from 7 AM to 5 PM by 7 adult workers.
Eastern 1/4 of the building is brick, two story, office space, concrete slab-on-grade with wall-to-wall carpet. Average air tightness. Heating provided by forced air natural gas furnace, central A/C. Paint storage room in southeast corner, strong paint odor. Southern 3/4 of the building is one story, concrete block with bare concrete floor. Repair shop for large trucks with shop office on east side (tile floor and 8 ft. drop ceiling). Floor is visibly cracked in areas, floor drain present (leading to sewer) and evidence of spills throughout the shop. Flat metal roof approximately 24 ft. high. Not air tight, no weather seals present, bay doors kept open when occupied. Radiant overhead heat and used oil stove, no A/C. Strong paint odors in west side paint booth area.

figure G.8

PARCEL 5171 - B&G TRUCKING BUILDING 8
1951 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA009 APR 4/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- VAS01 ▲ VAS SAMPLING LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

SAMPLE ID (PARCEL - BUILDING)

Parcel 5171 - Bldg 2 - Probe A	Mar 2012 ug/m3	Aug 2012 ug/m3
Chloroform (Trichloromethane)	42 J	-
Methane, field	0.0/0	0
Trichloroethene	540	-

SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND
EXCEEDANCES

[1] INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE

J ESTIMATED

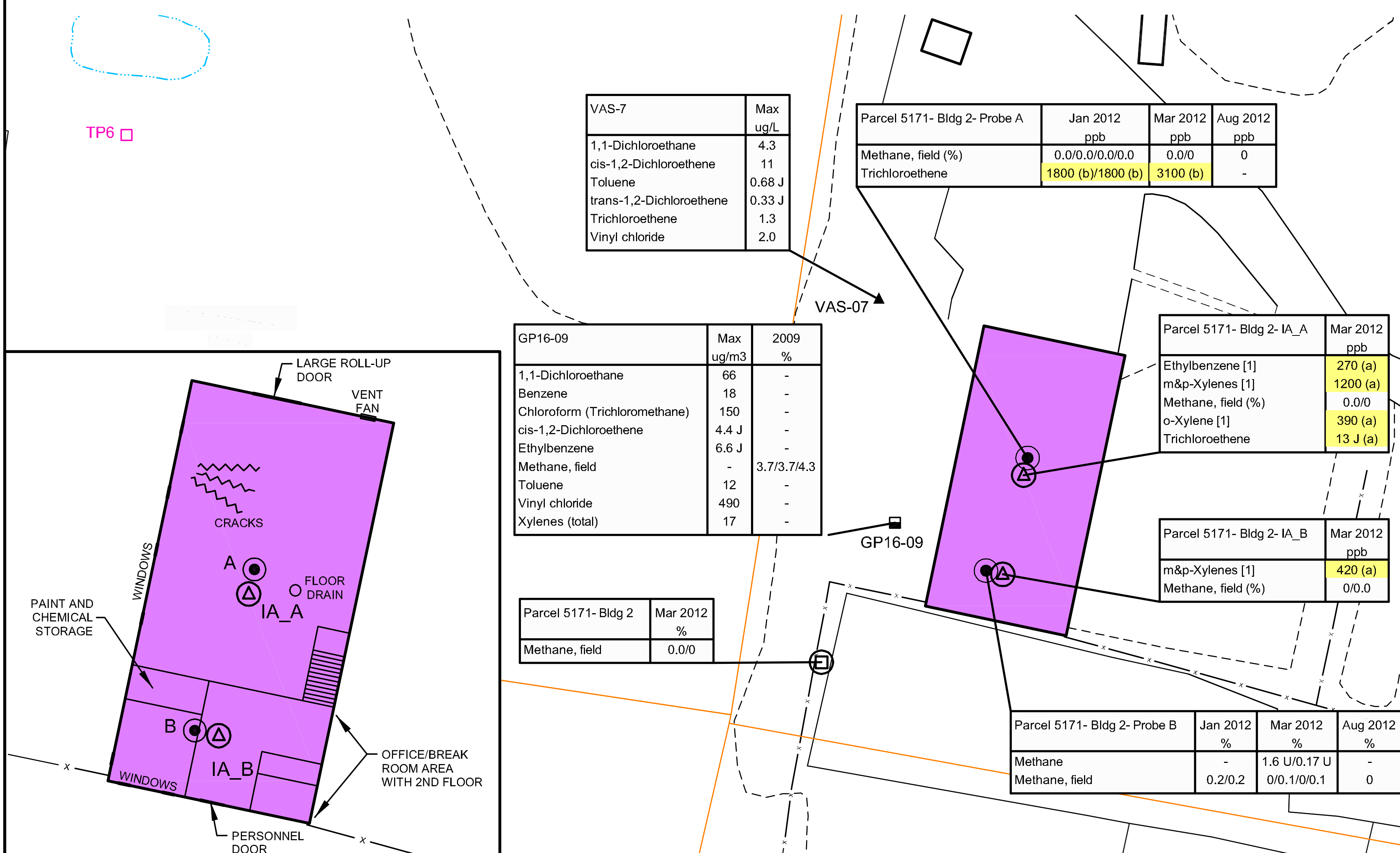
U NOT DETECTED

Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

1.8/1.8 RESULT/DUPLICATE RESULT

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
Ethylbenzene	250	2500
m&p-Xylenes	200	2000
Methane	0.05	0.5
o-Xylene	200	2000
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



VAS-7	Max ug/L
1,1-Dichloroethane	4.3
cis-1,2-Dichloroethene	11
Toluene	0.68 J
trans-1,2-Dichloroethene	0.33 J
Trichloroethene	1.3
Vinyl chloride	2.0

Parcel 5171- Bldg 2- Probe A	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane, field (%)	0.0/0.0/0.0/0.0	0.0/0	0
Trichloroethene	1800 (b)/1800 (b)	3100 (b)	-

GP16-09	Max ug/m3	2009 %
1,1-Dichloroethane	66	-
Benzene	18	-
Chloroform (Trichloromethane)	150	-
cis-1,2-Dichloroethene	4.4 J	-
Ethylbenzene	6.6 J	-
Methane, field	-	3.7/3.7/4.3
Toluene	12	-
Vinyl chloride	490	-
Xylenes (total)	17	-

Parcel 5171- Bldg 2- IA_A	Mar 2012 ppb
Ethylbenzene [1]	270 (a)
m&p-Xylenes [1]	1200 (a)
Methane, field (%)	0.0/0
o-Xylene [1]	390 (a)
Trichloroethene	13 J (a)

Parcel 5171- Bldg 2- IA_B	Mar 2012 ppb
m&p-Xylenes [1]	420 (a)
Methane, field (%)	0/0.0

Parcel 5171- Bldg 2	Mar 2012 %
Methane, field	0.0/0

Parcel 5171- Bldg 2- Probe B	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	1.6 U/0.17 U	-
Methane, field	0.2/0.2	0/0.1/0/0.1	0

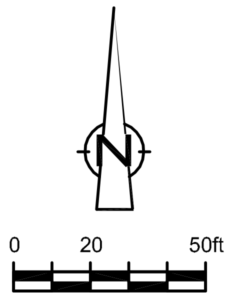
Building Characteristics:
Commercial-use concrete block building, constructed prior to 1968. Used for large truck repair with office/break room on the south side. Total footprint is 5,000 sq. ft. Slab-on-grade, unsealed poured concrete with some cracks and one large floor drain, with visible staining. One story building, approximately 20 ft. high. Southern 1/3 of building has a 2nd story within the building, storage space only. Approximately 8 ft. ceilings in 1st and 2nd floor of southern 1/3 of building. Ceiling in the shop area (northern 2/3 of building) is 20 ft. high. Heating provided by natural gas. Radiant ceiling heating system and floor fans are present. Not insulated, not air tight, bay door kept open during working hours. Exterior openings - vent fans, utility pipe penetrations, windows, 1 large bay door, personnel doors. Occupied weekdays from 7 AM to 5 PM by 2 adult workers.

figure G.9

PARCEL 5171 - B&G TRUCKING BUILDING 9
1951 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA010 MAR 11/2013



LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- BH01-09 SOIL BORING LOCATION
- VAS01 VAS SAMPLING LOCATION
- GP21-09 SHALLOW LANDFILL GAS PROBE
- CRAWL SPACE AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION
- NV NO VALUE

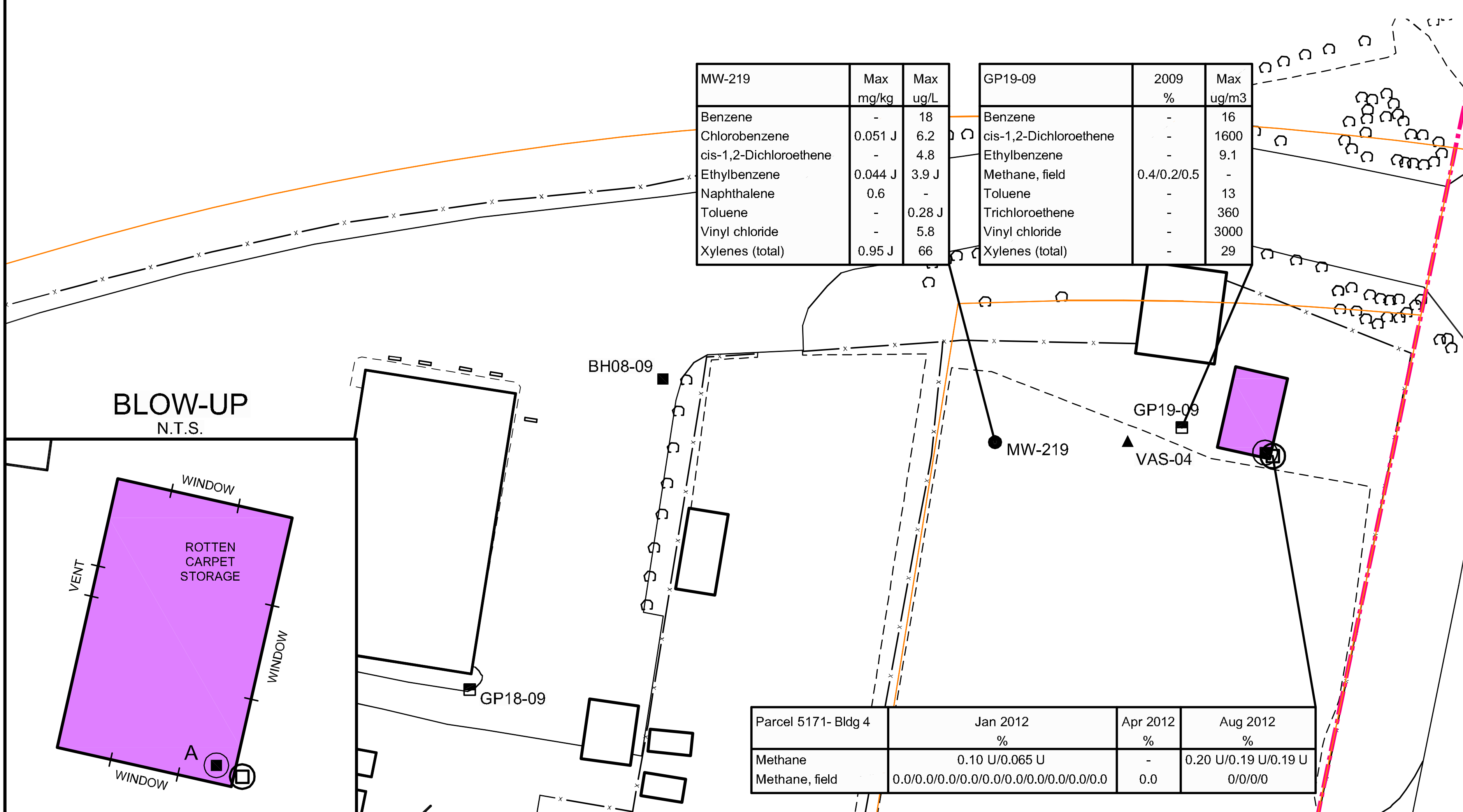
GP09-09	9/15/2009 ug/m3
Tetrachloroethene	2000 (B)

SAMPLE ID
SAMPLE DATE
SAMPLE UNIT
CRITERIA
CONCENTRATION VALUE
COMPOUND

1.8/1.8 RESULT/DUPLICATE RESULT
EXCEEDANCES
J ESTIMATED
Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.
U NOT DETECTED

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	ODH Non-residential Screening Level Sub-Slab (b)
Methane (%)	0.05	0.5

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



MW-219	Max mg/kg	Max ug/L
Benzene	-	18
Chlorobenzene	0.051 J	6.2
cis-1,2-Dichloroethene	-	4.8
Ethylbenzene	0.044 J	3.9 J
Naphthalene	0.6	-
Toluene	-	0.28 J
Vinyl chloride	-	5.8
Xylenes (total)	0.95 J	66

GP19-09	2009 %	Max ug/m3
Benzene	-	16
cis-1,2-Dichloroethene	-	1600
Ethylbenzene	-	9.1
Methane, field	0.4/0.2/0.5	-
Toluene	-	13
Trichloroethene	-	360
Vinyl chloride	-	3000
Xylenes (total)	-	29

Parcel 5171- Bldg 4	Jan 2012 %	Apr 2012 %	Aug 2012 %
Methane	0.10 U/0.065 U	-	0.20 U/0.19 U/0.19 U
Methane, field	0.0/0.0/0.0/0.0/0.0/0.0/0.0/0.0/0.0/0.0	0.0	0/0/0/0

PROFILE VIEW

N.T.S.

Building Characteristics:
Singe-story storage building, potentially formerly used as an office. Footprint is 336q.ft. Concrete block foundation, with crawl space. Wood frame, siding, and floor, unsealed joints, in rotted condition (musty/moldy odor). Asphalt ground cover. Exterior openings - broken windows, vent, and personnel door. No HVAC systems present. No occupancy, building has been vacant for multiple years.

figure G.10

PARCEL 5171 - B&G TRUCKING BUILDING 11
1915 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA036 APR 4/2013

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
cis-1,2-Dichloroethene	37	370
Methane	0.05	0.5
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.

LEGEND

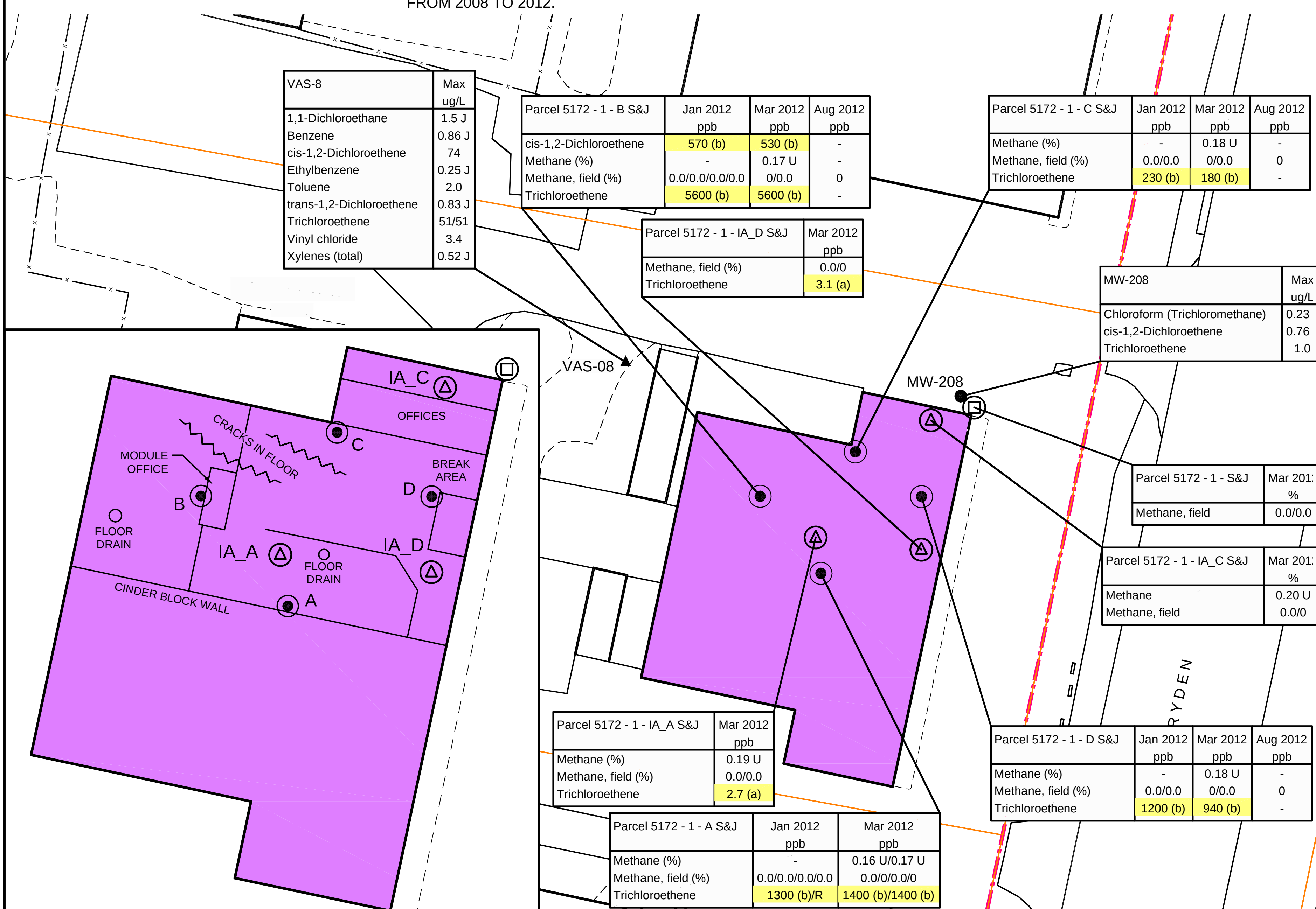
APPROXIMATE SITE BOUNDARY
PARCEL BOUNDARY
SUB SLAB SOIL VAPOR BUILDING LOCATION
MW-202 MONITORING WELL LOCATION
VAS01 VAS SAMPLING LOCATION
SUB SLAB SOIL VAPOR SAMPLE LOCATION
INDOOR AIR SAMPLE LOCATION
OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

SAMPLE ID (PARCEL - BUILDING)
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

MW-208	Max ug/L
Chloroform (Trichloromethane)	0.23 J
cis-1,2-Dichloroethene	0.76 J
Trichloroethene	1.0

1.8/1.8 RESULT/DUPLICATE RESULT
EXCEEDANCES
J ESTIMATED
U NOT DETECTED
R REJECTED
Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.



VAS-8	Max ug/L
1,1-Dichloroethane	1.5 J
Benzene	0.86 J
cis-1,2-Dichloroethene	74
Ethylbenzene	0.25 J
Toluene	2.0
trans-1,2-Dichloroethene	0.83 J
Trichloroethene	51/51
Vinyl chloride	3.4
Xylenes (total)	0.52 J

Parcel 5172 - 1 - B S&J	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
cis-1,2-Dichloroethene	570 (b)	530 (b)	-
Methane (%)	-	0.17 U	-
Methane, field (%)	0.0/0.0/0.0/0.0	0/0.0	0
Trichloroethene	5600 (b)	5600 (b)	-

Parcel 5172 - 1 - C S&J	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	-	0.18 U	-
Methane, field (%)	0.0/0.0	0/0.0	0
Trichloroethene	230 (b)	180 (b)	-

Parcel 5172 - 1 - IA_D S&J	Mar 2012 ppb
Methane, field (%)	0.0/0
Trichloroethene	3.1 (a)

MW-208	Max ug/L
Chloroform (Trichloromethane)	0.23
cis-1,2-Dichloroethene	0.76
Trichloroethene	1.0

Parcel 5172 - 1 - S&J	Mar 201 %
Methane, field	0.0/0.0

Parcel 5172 - 1 - IA_C S&J	Mar 201 %
Methane	0.20 U
Methane, field	0.0/0

Parcel 5172 - 1 - IA_A S&J	Mar 2012 ppb
Methane (%)	0.19 U
Methane, field (%)	0.0/0.0
Trichloroethene	2.7 (a)

Parcel 5172 - 1 - A S&J	Jan 2012 ppb	Mar 2012 ppb
Methane (%)	-	0.16 U/0.17 U
Methane, field (%)	0.0/0.0/0.0/0.0	0.0/0/0.0/0
Trichloroethene	1300 (b)/R	1400 (b)/1400 (b)

Parcel 5172 - 1 - D S&J	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	-	0.18 U	-
Methane, field (%)	0.0/0.0	0/0.0	0
Trichloroethene	1200 (b)	940 (b)	-

Building Characteristics:
Single story, industrial-use building, constructed in the 1950s. Divided into two equal sections, north and south sides. Total footprint is 11,600 sq. ft. Approximately 16 ft. high. Slab-on-grade, concrete block building with brick front. Exterior openings - windows, utility pipe penetrations, bay doors, personnel doors.
North side is the S&J Precision building. Majority of space is a metal working shop and warehouse with some office space. Bare concrete floor in shop and warehouse with cracks and 2 floor drains, staining on warehouse floor and near drain. North office space has elevated floor with floor tile (possibly asbestos) and wall-to-wall carpet on top. Heating provided by forced air natural gas furnace, central A/C. Not insulated, average air tightness, weather seals in fair condition. Occupied weekdays from 6 AM to 5 PM by 5 adult workers.
South side is the Overstreet Painting building.
See figure G.12.

figure G.11

PARCEL 5172 - S&J PRECISION BUILDING 12
2015 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

CRA

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA011 MAY 8/2013

Chemical Name	ODH Non-residential Screening Level	
	Indoor Air (a)	Sub-Slab (b)
Benzene	2	20
cis-1,2-Dichloroethene	37	370
Methane	0.05	0.5
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.

N

0 20 50ft

LEGEND

APPROXIMATE SITE BOUNDARY

PARCEL BOUNDARY

SUB SLAB SOIL VAPOR BUILDING LOCATION

MW-202 ● MONITORING WELL LOCATION

VAS01 ▲ VAS SAMPLING LOCATION

SUB SLAB SOIL VAPOR SAMPLE LOCATION

INDOOR AIR SAMPLE LOCATION

OUTDOOR AIR SAMPLE LOCATION

Parcel 5172 - 1 - A Overstreet	Jan 2012	Jan 2012
	ug/m3	%
Chloroform (Trichloromethane)	250	-
cis-1,2-Dichloroethene	2300	-
Methane, field	-	0.0

SAMPLE ID (PARCEL - BUILDING)

SAMPLE DATE

SAMPLE UNIT

CONCENTRATION VALUE

COMPOUND

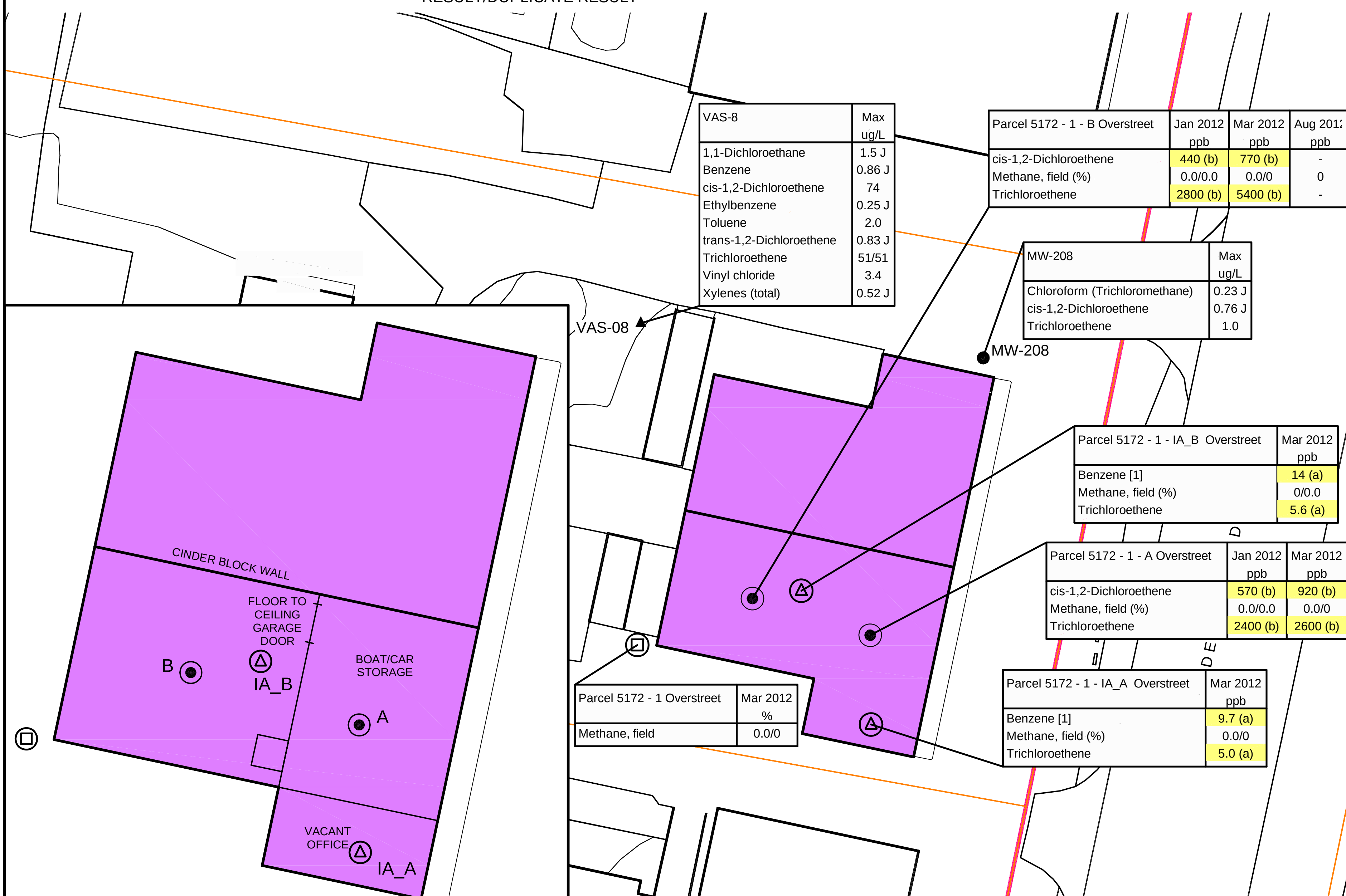
[1] INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE

J ESTIMATED

EXCEEDANCES

Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

1.8/1.8 RESULT/DUPLICATE RESULT



Building Characteristics:
Single story, industrial-use building, constructed in the 1950s. Divided into two equal sections, north and south sides. Total footprint is 11,600 sq. ft. Approximately 16 ft high. Slab-on grade, concrete block building with brick front. Exterior openings - windows, utility pipe penetrations, bay doors, personnel doors. Not insulated, average air tightness, weather seals in fair condition.
North side is the S&J Precision building.
See figure G.11.
South side is the Overstreet Painting building.
Commercial-use storage building. Primarily paint and vehicle storage with vehicle detailing space.
Bare concrete floor with cracks. Heating provided by forced air natural gas furnace ceiling unit. No A/C. No regular occupancy - storage only.

figure G.12

PARCEL 5172 - OVERSTREET PAINTING BUILDING 12
2019 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

CRA

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA012 MAY 7/2013

LEGEND

APPROXIMATE SITE BOUNDARY
PARCEL BOUNDARY
SUB SLAB SOIL VAPOR BUILDING LOCATION
MW-202 MONITORING WELL LOCATION
VAS01 VAS SAMPLING LOCATION
SUB SLAB SOIL VAPOR SAMPLE LOCATION
INDOOR AIR SAMPLE LOCATION
OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

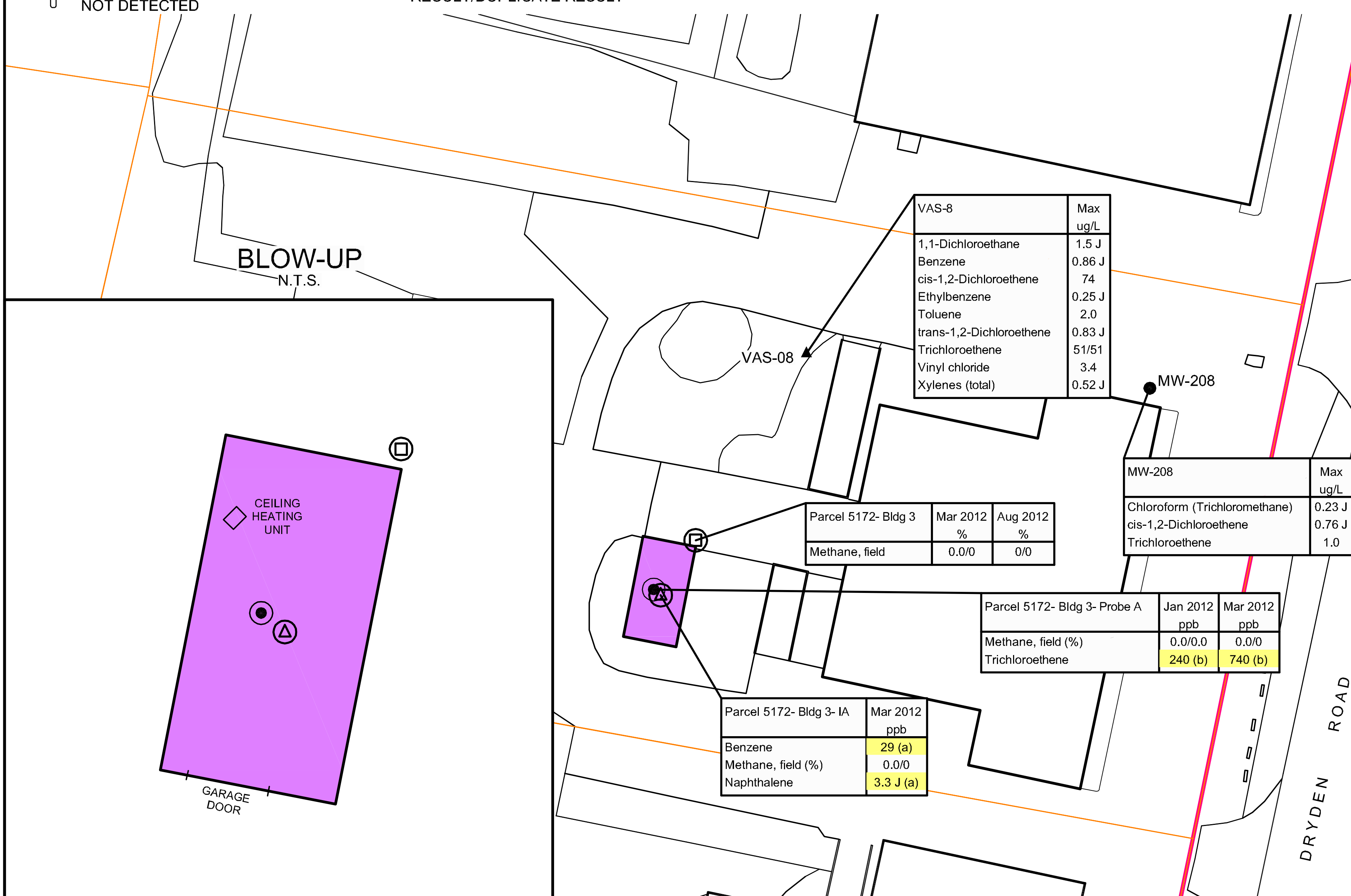
Chemical Name	ODH Non-residential Screening Level	
	Indoor Air (a)	Sub-Slab (b)
Benzene	2	20
Methane (%)	0.05	0.5
Naphthalene	2.9	29
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.

Parcel 5172 - 3 - A Overstreet	Jan 2012	Jan 2012
	ug/m3	%
Methane, field	-	0.0
Trichloroethene	1300	-

SAMPLE ID (PARCEL - BUILDING)
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND
EXCEEDANCES

[1] INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE
J ESTIMATED
U NOT DETECTED
Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.
1.8/1.8 RESULT/DUPLICATE RESULT



VAS-8	Max ug/L
1,1-Dichloroethane	1.5 J
Benzene	0.86 J
cis-1,2-Dichloroethene	74
Ethylbenzene	0.25 J
Toluene	2.0
trans-1,2-Dichloroethene	0.83 J
Trichloroethene	51/51
Vinyl chloride	3.4
Xylenes (total)	0.52 J

MW-208	Max ug/L
Chloroform (Trichloromethane)	0.23 J
cis-1,2-Dichloroethene	0.76 J
Trichloroethene	1.0

Parcel 5172- Bldg 3	Mar 2012	Aug 2012
	%	%
Methane, field	0.0/0	0/0

Parcel 5172- Bldg 3- Probe A	Jan 2012	Mar 2012
	ppb	ppb
Methane, field (%)	0.0/0.0	0.0/0
Trichloroethene	240 (b)	740 (b)

Parcel 5172- Bldg 3- IA	Mar 2012
	ppb
Benzene	29 (a)
Methane, field (%)	0.0/0
Naphthalene	3.3 J (a)

Building Characteristics:
Single-story storage building. Footprint is 900 sq. ft. Primarily storage of painting supplies and scaffolding. Concrete block building with concrete floor. Floor is in good condition with no cracks and no drains. Not insulated with average air tightness, weather seals in fair condition. Heating provided by forced air natural gas furnace ceiling units, no A/C. Exterior openings - garage door, and personnel door. No regular occupancy - storage only. Rubber and dust odors in building.

figure G.13

PARCEL 5172 - OVERSTREET PAINTING BUILDING 13
2019 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA035 APR 4/2013

Chemical Name	ODH Non-residential Screening Level	
	Indoor Air (a)	Sub-Slab (b)
1,1-Dichloroethane	16	160
Benzene	2	20
Methane	0.05	0.5
Trichloroethene	2	20
Vinyl chloride	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.

LEGEND

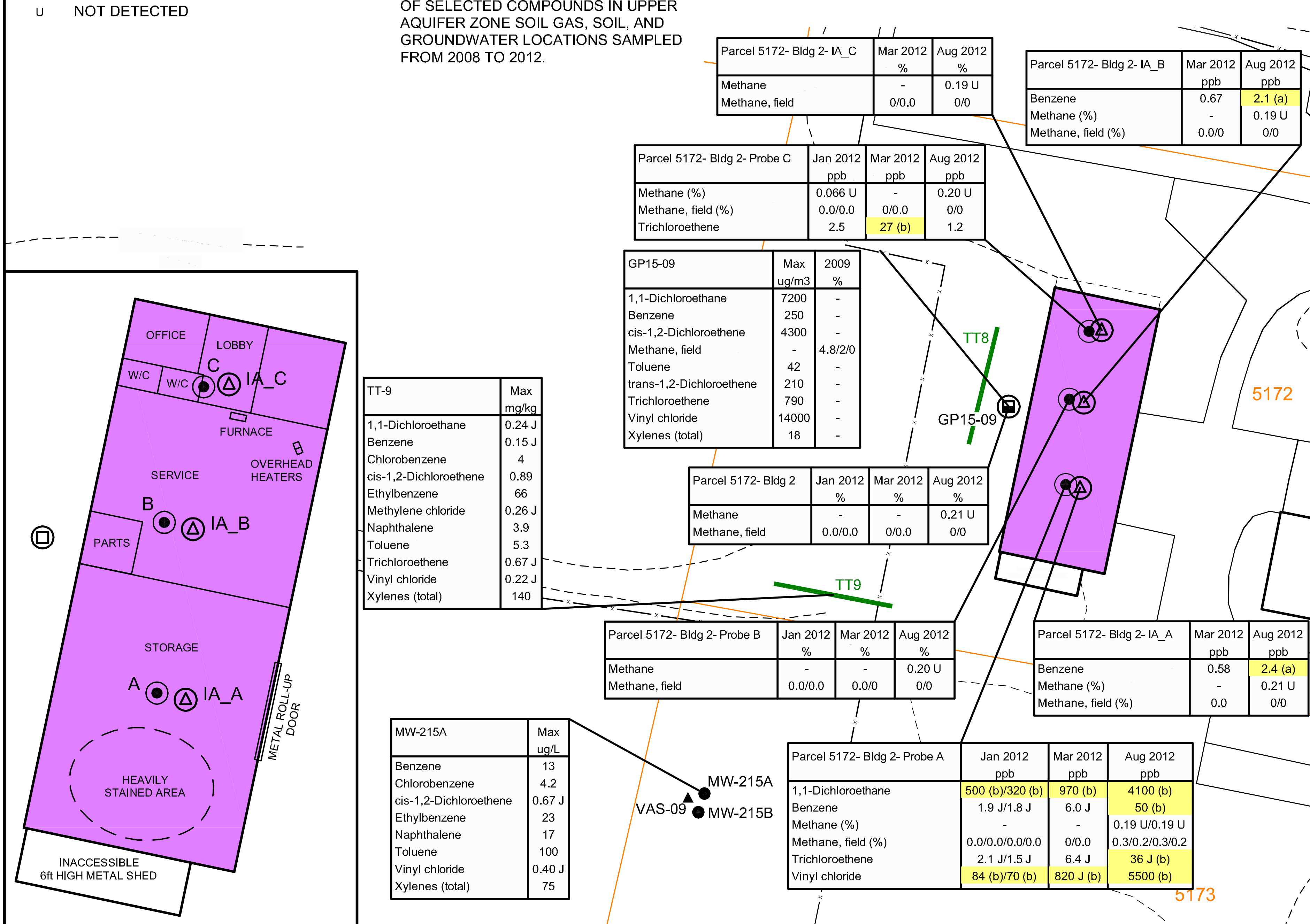
- APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- VAS01 VAS SAMPLING LOCATION
- GP04-09 DEEP LANDFILL GAS PROBE
- TT1 TEST TRENCH LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

Parcel 5172 - Bldg 2 - Probe C	Jan 2012 ug/m3	Jan 2012 %
Methane	-	0.066 U
Methane, field	-	0.0
Trichloroethene	13	-

SAMPLE ID (PARCEL - BUILDING)
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

1.8/1.8 RESULT/DUPLICATE RESULT
J ESTIMATED
U NOT DETECTED
EXCEEDANCES
Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.



Parcel 5172- Bldg 2- IA_C	Mar 2012 %	Aug 2012 %
Methane	-	0.19 U
Methane, field	0/0.0	0/0

Parcel 5172- Bldg 2- IA_B	Mar 2012 ppb	Aug 2012 ppb
Benzene	0.67	2.1 (a)
Methane (%)	-	0.19 U
Methane, field (%)	0.0/0	0/0

Parcel 5172- Bldg 2- Probe C	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	0.066 U	-	0.20 U
Methane, field (%)	0.0/0.0	0/0.0	0/0
Trichloroethene	2.5	27 (b)	1.2

GP15-09	Max ug/m3	2009 %
1,1-Dichloroethane	7200	-
Benzene	250	-
cis-1,2-Dichloroethene	4300	-
Methane, field	-	4.8/2/0
Toluene	42	-
trans-1,2-Dichloroethene	210	-
Trichloroethene	790	-
Vinyl chloride	14000	-
Xylenes (total)	18	-

TT-9	Max mg/kg
1,1-Dichloroethane	0.24 J
Benzene	0.15 J
Chlorobenzene	4
cis-1,2-Dichloroethene	0.89
Ethylbenzene	66
Methylene chloride	0.26 J
Naphthalene	3.9
Toluene	5.3
Trichloroethene	0.67 J
Vinyl chloride	0.22 J
Xylenes (total)	140

Parcel 5172- Bldg 2	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	-	0.21 U
Methane, field	0.0/0.0	0/0.0	0/0

Parcel 5172- Bldg 2- Probe B	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	-	0.20 U
Methane, field	0.0/0.0	0.0/0	0/0

Parcel 5172- Bldg 2- IA_A	Mar 2012 ppb	Aug 2012 ppb
Benzene	0.58	2.4 (a)
Methane (%)	-	0.21 U
Methane, field (%)	0.0	0/0

MW-215A	Max ug/L
Benzene	13
Chlorobenzene	4.2
cis-1,2-Dichloroethene	0.67 J
Ethylbenzene	23
Naphthalene	17
Toluene	100
Vinyl chloride	0.40 J
Xylenes (total)	75

Parcel 5172- Bldg 2- Probe A	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
1,1-Dichloroethane	500 (b)/320 (b)	970 (b)	4100 (b)
Benzene	1.9 J/1.8 J	6.0 J	50 (b)
Methane (%)	-	-	0.19 U/0.19 U
Methane, field (%)	0.0/0.0/0.0/0.0	0/0.0	0.3/0.2/0.3/0.2
Trichloroethene	2.1 J/1.5 J	6.4 J	36 J (b)
Vinyl chloride	84 (b)/70 (b)	820 J (b)	5500 (b)

Building Characteristics:
Single-story, slab-on-grade, commercial use building constructed prior to 1959. Building is divided into three sections. Total footprint is 2,886 sq. ft. Average air tightness. Exterior openings - vents, utility pipe penetrations, office windows, 2 personnel doors, bay door. Attached metal shed on north side, 6 ft. high, not accessible during building survey. Northern 1/5 of the building is brick, approximately 10 ft. high with 8 ft. drop ceilings. Formerly used as office space (two separate offices). Heating provided by forced air natural gas furnace, central A/C present. Heating through floor vents, return air through wall vents. Wall-to-wall carpet in offices. Southern 4/5 of the building is concrete block, approximately 15 ft. high. Formerly used for grease filter washing and filter storage. Bare concrete floor with area of heavy staining on the north side (former wash area). Not insulated, radiant heat ceiling unit, no A/C.

figure G.14

PARCEL 5172 - BULLSEYE AMUSEMENTS BUILDING 14
2003 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA013 APR 15/2013

LEGEND

APPROXIMATE SITE BOUNDARY

PARCEL BOUNDARY

SUB SLAB SOIL VAPOR BUILDING LOCATION

MW-202 MONITORING WELL LOCATION

VAS01 VAS SAMPLING LOCATION

GP04-09 DEEP LANDFILL GAS PROBE

SUB SLAB SOIL VAPOR SAMPLE LOCATION

INDOOR AIR SAMPLE LOCATION

OUTDOOR AIR SAMPLE LOCATION

N

0 20 50ft

SAMPLE ID (PARCEL - BUILDING)

SAMPLE DATE

CONCENTRATION VALUE

Parcel 5173- Bldg 1- Probe A	Jan 2012	Jan 2012
Methane, field	-	0.0
Tetrachloroethene	51	-
Trichloroethene	2100	-

COMPOUND

EXCEEDANCES

[1] INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE

R REJECTED

J ESTIMATED

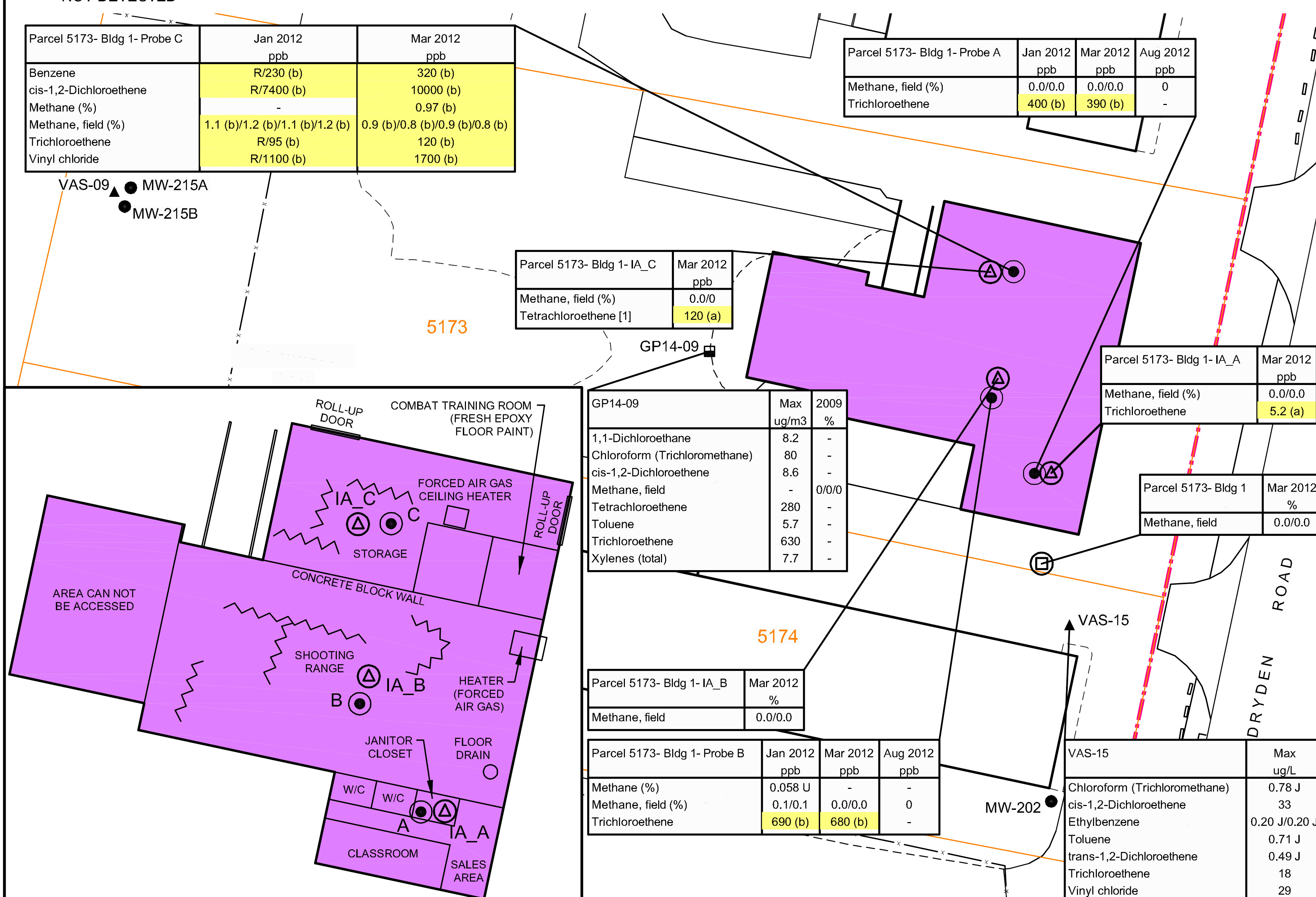
U NOT DETECTED

Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

1.8/1.8 RESULT/DUPLICATE RESULT

Chemical Name	ODH Non-residential Screening Level	
	Indoor Air (a)	Sub-Slab (b)
Benzene	2	20
cis-1,2-Dichloroethene	37	370
Methane	0.05	0.5
Tetrachloroethene	25	250
Trichloroethene	2	20
Vinyl chloride	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



Parcel 5173- Bldg 1- Probe C	Jan 2012 ppb	Mar 2012 ppb
Benzene	R/230 (b)	320 (b)
cis-1,2-Dichloroethene	R/7400 (b)	10000 (b)
Methane (%)	-	0.97 (b)
Methane, field (%)	1.1 (b)/1.2 (b)/1.1 (b)/1.2 (b)	0.9 (b)/0.8 (b)/0.9 (b)/0.8 (b)
Trichloroethene	R/95 (b)	120 (b)
Vinyl chloride	R/1100 (b)	1700 (b)

Parcel 5173- Bldg 1- Probe A	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane, field (%)	0.0/0.0	0.0/0.0	0
Trichloroethene	400 (b)	390 (b)	-

Parcel 5173- Bldg 1- IA_C	Mar 2012 ppb
Methane, field (%)	0.0/0
Tetrachloroethene [1]	120 (a)

Parcel 5173- Bldg 1- IA_A	Mar 2012 ppb
Methane, field (%)	0.0/0.0
Trichloroethene	5.2 (a)

GP14-09	Max ug/m3	2009 %
1,1-Dichloroethane	8.2	-
Chloroform (Trichloromethane)	80	-
cis-1,2-Dichloroethene	8.6	-
Methane, field	-	0/0/0
Tetrachloroethene	280	-
Toluene	5.7	-
Trichloroethene	630	-
Xylenes (total)	7.7	-

Parcel 5173- Bldg 1	Mar 2012 %
Methane, field	0.0/0.0

Parcel 5173- Bldg 1- IA_B	Mar 2012 %
Methane, field	0.0/0.0

Parcel 5173- Bldg 1- Probe B	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	0.058 U	-	-
Methane, field (%)	0.1/0.1	0.0/0.0	0
Trichloroethene	690 (b)	680 (b)	-

VAS-15	Max ug/L
Chloroform (Trichloromethane)	0.78 J
cis-1,2-Dichloroethene	33
Ethylbenzene	0.20 J/0.20 J
Toluene	0.71 J
trans-1,2-Dichloroethene	0.49 J
Trichloroethene	18
Vinyl chloride	29

Building Characteristics:
Single-story commercial-use building constructed in three stages (north and center portions prior to 1956, western addition prior to 1959, southern addition prior to 1968). Total footprint is 8,250 sq. ft. Concrete block building with brick front. Slab-on-grade, bare concrete or painted concrete, fresh epoxy coat in north side combat training room, large cracks in the shooting range. Heavy staining and oil odor in storage area. Range heated by forced air natural gas ceiling units. Air handling unit pulls air from the range out the roof, operated during business hours. Forced air natural gas heat and central A/C in south section. Exterior openings - vents, fans, windows, 2 bay doors and two personnel doors. Occupied during business hours by one adult worker (4-hour shifts) and customers.

figure G.15

PARCEL 5173 - SIM TRAINER BUILDING 15
2031 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

CRA

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA014 APR 9/2013

LEGEND

APPROXIMATE SITE BOUNDARY
PARCEL BOUNDARY
SUB SLAB SOIL VAPOR BUILDING LOCATION
MW-202 MONITORING WELL LOCATION
VAS01 VAS SAMPLING LOCATION
GP04-09 DEEP LANDFILL GAS PROBE
TT1 TEST TRENCH LOCATION
SUB SLAB SOIL VAPOR SAMPLE LOCATION
INDOOR AIR SAMPLE LOCATION
OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

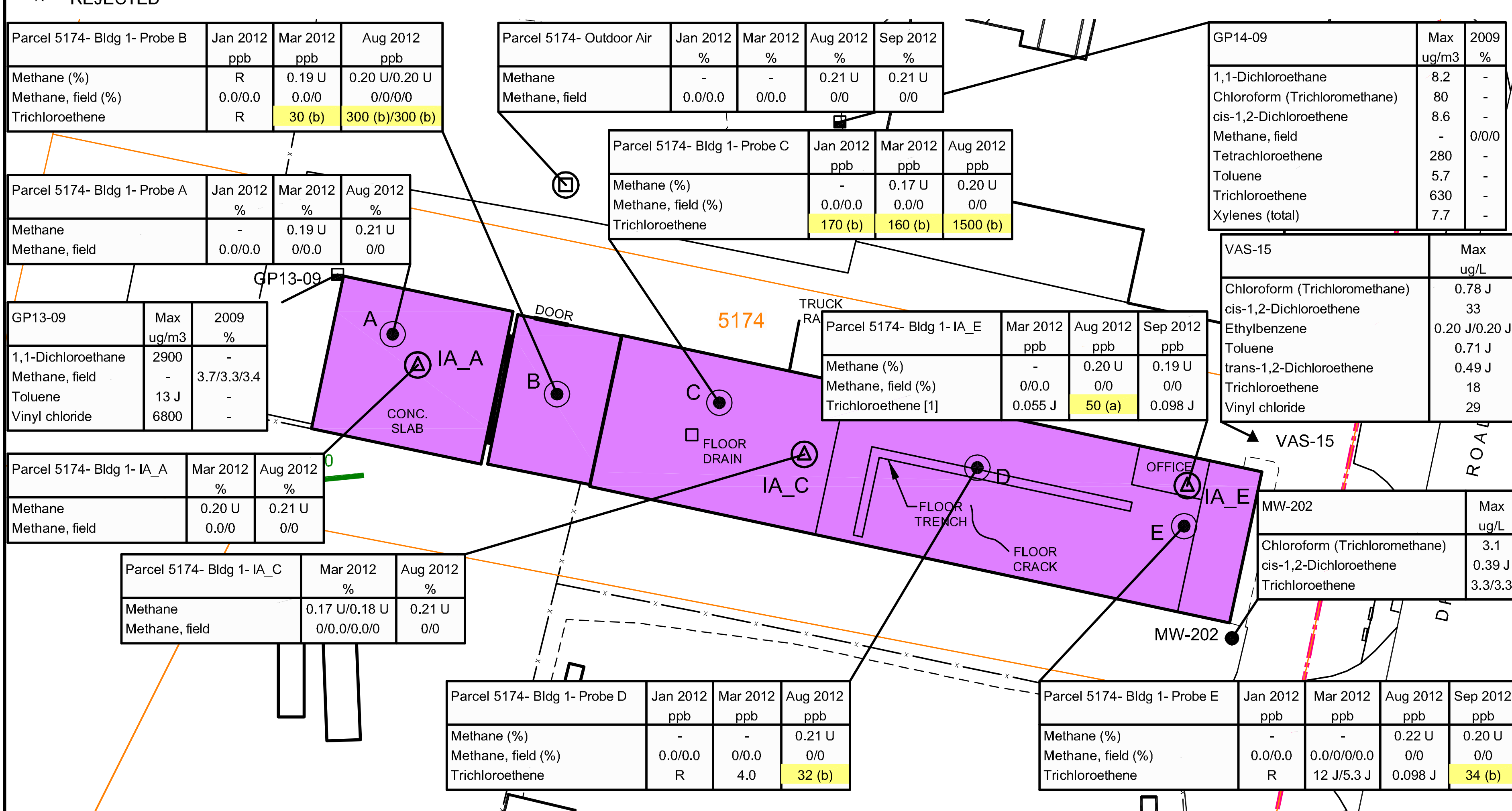
Parcel 5174- Bldg 1- IA_A	Mar 2012	Aug 2012
	%	%
Methane	0.20 U	0.21 U
Methane, field	0/0.0	0/0

SAMPLE ID (PARCEL - BUILDING)
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND
EXCEEDANCES

[1] INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE
J ESTIMATED
U NOT DETECTED
R REJECTED
Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.
1.8/1.8 RESULT/DUPLICATE RESULT

Chemical Name	ODH Non-residential Screening Level	
	Indoor Air (a)	Sub-Slab (b)
Methane	0.05	0.5
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



Parcel 5174- Bldg 1- Probe B	Jan 2012	Mar 2012	Aug 2012
	ppb	ppb	ppb
Methane (%)	R	0.19 U	0.20 U/0.20 U
Methane, field (%)	0.0/0.0	0.0/0	0/0/0/0
Trichloroethene	R	30 (b)	300 (b)/300 (b)

Parcel 5174- Outdoor Air	Jan 2012	Mar 2012	Aug 2012	Sep 2012
	%	%	%	%
Methane	-	-	0.21 U	0.21 U
Methane, field	0.0/0.0	0/0.0	0/0	0/0

GP14-09	Max	2009
	ug/m3	%
1,1-Dichloroethane	8.2	-
Chloroform (Trichloromethane)	80	-
cis-1,2-Dichloroethene	8.6	-
Methane, field	-	0/0/0
Tetrachloroethene	280	-
Toluene	5.7	-
Trichloroethene	630	-
Xylenes (total)	7.7	-

Parcel 5174- Bldg 1- Probe C	Jan 2012	Mar 2012	Aug 2012
	ppb	ppb	ppb
Methane (%)	-	0.17 U	0.20 U
Methane, field (%)	0.0/0.0	0.0/0	0/0
Trichloroethene	170 (b)	160 (b)	1500 (b)

Parcel 5174- Bldg 1- Probe A	Jan 2012	Mar 2012	Aug 2012
	%	%	%
Methane	-	0.19 U	0.21 U
Methane, field	0.0/0.0	0/0.0	0/0

VAS-15	Max
	ug/L
Chloroform (Trichloromethane)	0.78 J
cis-1,2-Dichloroethene	33
Ethylbenzene	0.20 J/0.20 J
Toluene	0.71 J
trans-1,2-Dichloroethene	0.49 J
Trichloroethene	18
Vinyl chloride	29

GP13-09	Max	2009
	ug/m3	%
1,1-Dichloroethane	2900	-
Methane, field	-	3.7/3.3/3.4
Toluene	13 J	-
Vinyl chloride	6800	-

Parcel 5174- Bldg 1- IA_E	Mar 2012	Aug 2012	Sep 2012
	ppb	ppb	ppb
Methane (%)	-	0.20 U	0.19 U
Methane, field (%)	0/0.0	0/0	0/0
Trichloroethene [1]	0.055 J	50 (a)	0.098 J

Parcel 5174- Bldg 1- IA_A	Mar 2012	Aug 2012
	%	%
Methane	0.20 U	0.21 U
Methane, field	0.0/0	0/0

MW-202	Max
	ug/L
Chloroform (Trichloromethane)	3.1
cis-1,2-Dichloroethene	0.39 J
Trichloroethene	3.3/3.3

Parcel 5174- Bldg 1- IA_C	Mar 2012	Aug 2012
	%	%
Methane	0.17 U/0.18 U	0.21 U
Methane, field	0/0.0/0.0/0	0/0

Parcel 5174- Bldg 1- Probe D	Jan 2012	Mar 2012	Aug 2012
	ppb	ppb	ppb
Methane (%)	-	-	0.21 U
Methane, field (%)	0.0/0.0	0/0.0	0/0
Trichloroethene	R	4.0	32 (b)

Parcel 5174- Bldg 1- Probe E	Jan 2012	Mar 2012	Aug 2012	Sep 2012
	ppb	ppb	ppb	ppb
Methane (%)	-	-	0.22 U	0.20 U
Methane, field (%)	0.0/0.0	0.0/0/0/0.0	0/0	0/0
Trichloroethene	R	12 J/5.3 J	0.098 J	34 (b)

PROFILE VIEW
N.T.S.

Building Characteristics:
Single-story, commercial-use storage building, constructed prior to 1968. 12,500 sq. ft concrete slab-on-grade building. Areas A (approximately 12 ft high) and B (approximately 16 ft high) constructed with brick, with weather seals in poor condition. Spray-on insulation (possible asbestos) used in Area B. Areas C (approximately 24 ft high) to E constructed with steel beams and metal siding. No HVAC systems in use as of June 2011. Not air tight. Damp and moldy, with visible evidence of water staining in office area A. Floor slab in poor condition, with cracks and unsealed joints throughout the building, particularly cracked in Areas D and E. Heavy floor staining in areas B through E. Exterior openings - office windows, personnel doors, sliding and roll-up doors.
Infrequent and variable occupancy by 2 adults.

CRA

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

figure G.16
PARCEL 5174 - COMMAND ROOFING BUILDING 16
2045 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

38443-62(018)GN-WA015 MAR 11/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- VAS01 VAS SAMPLING LOCATION
- GP04-09 DEEP LANDFILL GAS PROBE
- TT1 TEST TRENCH LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

SAMPLE ID (PARCEL - BUILDING)

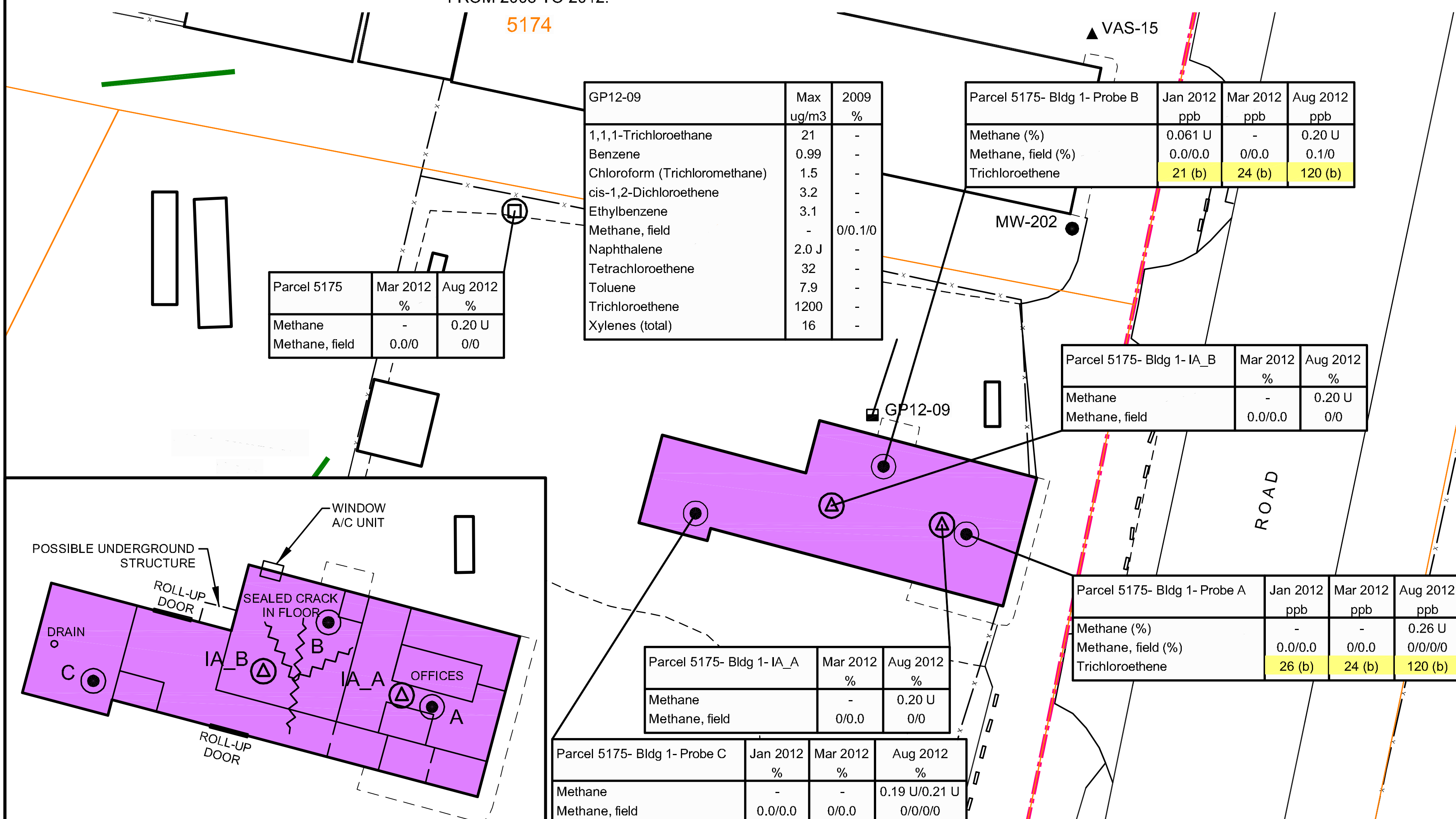
Parcel 5175- Bldg 1- Probe A	Jan 2012 ug/m3	Jan 2012 %
Methane, field	-	0.0
Trichloroethene	140	-

SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

1.8/1.8 RESULT/DUPLICATE RESULT — EXCEEDANCES
J ESTIMATED — Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.
U NOT DETECTED

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	ODH Non-residential Screening Level Sub-Slab (b)
Methane	0.05	0.5
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



GP12-09	Max ug/m3	2009 %
1,1,1-Trichloroethane	21	-
Benzene	0.99	-
Chloroform (Trichloromethane)	1.5	-
cis-1,2-Dichloroethene	3.2	-
Ethylbenzene	3.1	-
Methane, field	-	0/0.1/0
Naphthalene	2.0 J	-
Tetrachloroethene	32	-
Toluene	7.9	-
Trichloroethene	1200	-
Xylenes (total)	16	-

Parcel 5175	Mar 2012 %	Aug 2012 %
Methane	-	0.20 U
Methane, field	0.0/0	0/0

Parcel 5175- Bldg 1- Probe B	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	0.061 U	-	0.20 U
Methane, field (%)	0.0/0.0	0/0.0	0.1/0
Trichloroethene	21 (b)	24 (b)	120 (b)

Parcel 5175- Bldg 1- IA_B	Mar 2012 %	Aug 2012 %
Methane	-	0.20 U
Methane, field	0.0/0.0	0/0

Parcel 5175- Bldg 1- Probe A	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	-	-	0.26 U
Methane, field (%)	0.0/0.0	0/0.0	0/0/0/0
Trichloroethene	26 (b)	24 (b)	120 (b)

Parcel 5175- Bldg 1- IA_A	Mar 2012 %	Aug 2012 %
Methane	-	0.20 U
Methane, field	0/0.0	0/0

Parcel 5175- Bldg 1- Probe C	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	-	0.19 U/0.21 U
Methane, field	0.0/0.0	0/0.0	0/0/0/0

PROFILE VIEW

N.T.S.

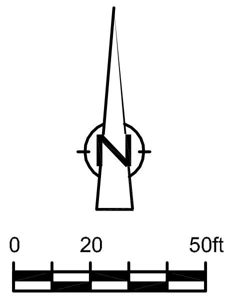
Building Characteristics:
Single-story, commercial-use building, constructed prior to 1949. 4,557 sq. ft. slab-on-grade, unsealed concrete building, with crawl space possibly present on south side. Shallow concrete pit present in southwest corner of warehouse. Large sealed floor cracks observed in middle portion of building. Floor staining observed in warehouse and rear storage shed. Gasoline UST removed from former Conway Fence facility in 1990. Weather seals in poor condition. Overhead doors open at time of building survey. Heated by forced air natural gas furnace. Central A/C present in retail and office areas. Window unit A/C present in northern portion of building. Exterior openings - vents, fans, utility pipe penetrations, windows, overhead and personnel doors.
Occupancy - tenant about to vacate premises at time of building survey

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

figure G.17

PARCEL 5175 - FORMER ALLIANCE EQUIPMENT & SUPPLY BUILDING 17
2075 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

38443-62(018)GN-WA016 MAR 4/2013



LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- GP04-09 DEEP LANDFILL GAS PROBE
- CRAWL SPACE AIR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION
- NV NO VALUE

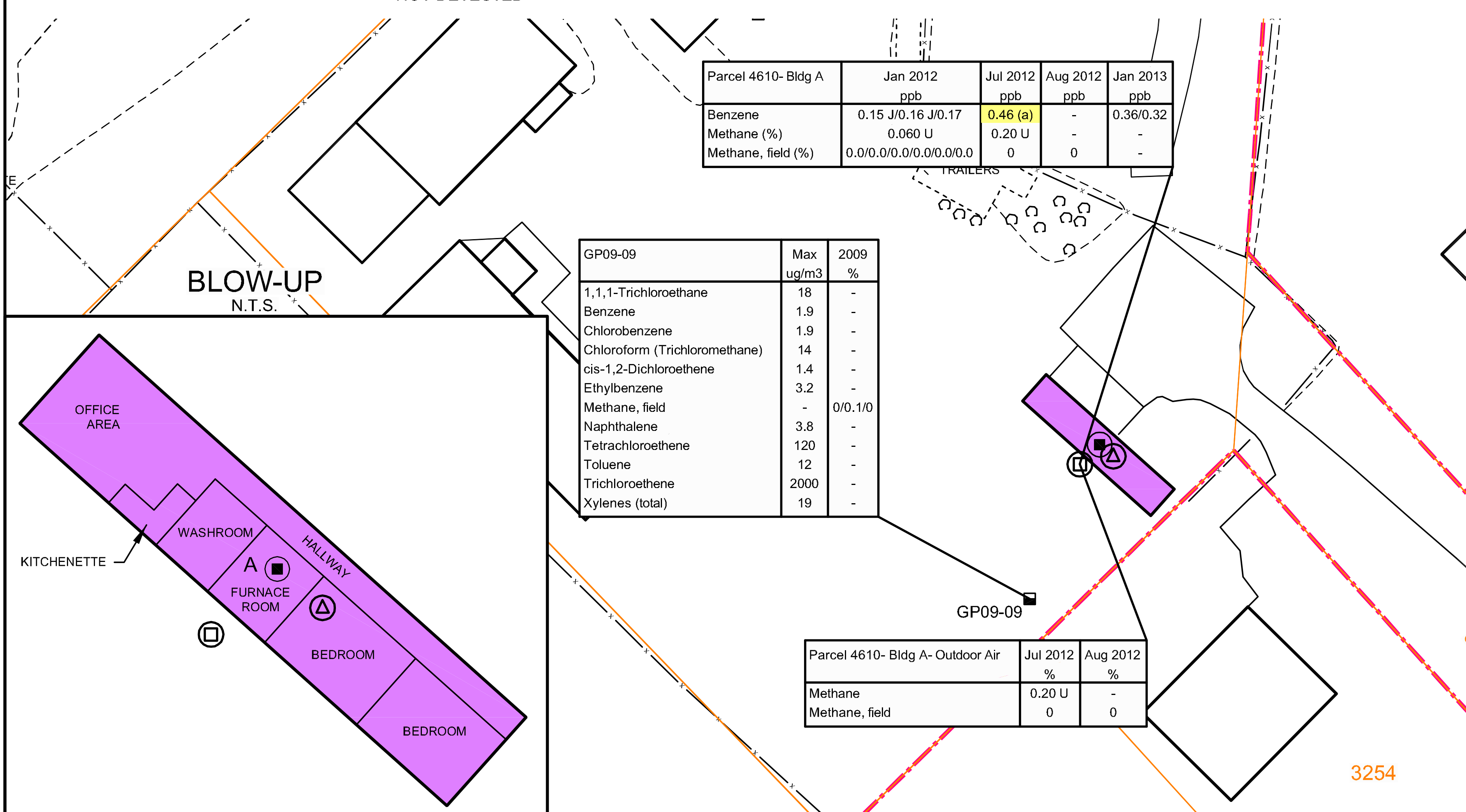
Parcel 4610- Bldg A- Outdoor Air	Jul 2012	Aug 2012
	%	%
Methane	0.20 U	-
Methane, field	0	0

SAMPLE ID
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND
EXCEEDANCES

- Max: MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.
- 1.8/1.8: RESULT/DUPLICATE RESULT
- J: ESTIMATED
- U: NOT DETECTED

Chemical Name	ODH Residential Screening Level	
	Indoor Air (a)	Sub-Slab (b)
Benzene	0.4	4
Methane (%)	0.05	0.5

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



Parcel 4610- Bldg A	Jan 2012	Jul 2012	Aug 2012	Jan 2013
	ppb	ppb	ppb	ppb
Benzene	0.15 J/0.16 J/0.17	0.46 (a)	-	0.36/0.32
Methane (%)	0.060 U	0.20 U	-	-
Methane, field (%)	0.0/0.0/0.0/0.0/0.0/0.0	0	0	-

GP09-09	Max	2009
	ug/m3	%
1,1,1-Trichloroethane	18	-
Benzene	1.9	-
Chlorobenzene	1.9	-
Chloroform (Trichloromethane)	14	-
cis-1,2-Dichloroethene	1.4	-
Ethylbenzene	3.2	-
Methane, field	-	0/0.1/0
Naphthalene	3.8	-
Tetrachloroethene	120	-
Toluene	12	-
Trichloroethene	2000	-
Xylenes (total)	19	-

Parcel 4610- Bldg A- Outdoor Air	Jul 2012	Aug 2012
	%	%
Methane	0.20 U	-
Methane, field	0	0

Building Characteristics:
Single-story, residential trailer, constructed early 1990s. 685 sq. ft. trailer with crawl space enclosed by wood skirting in poor condition, over a concrete pad. Concrete and wood appear damp. Insulated trailer with average air tightness, weather seals in fair condition. Heating provided by forced air propane furnace. Central A/C present. Exterior openings - vents, utility pipe penetrations, windows, doors.

figure G.18

PARCEL 4610 - RESIDENTIAL BUILDING 18
2225A EAST RIVER ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

CRA

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA022 APR 9/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 ● MONITORING WELL LOCATION
- VAS01 ▲ VAS SAMPLING LOCATION
- GP04-09 DEEP LANDFILL GAS PROBE
- TT1 TEST TRENCH LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION
- NV NO VALUE

0 20 50ft

Parcel 4610- Outdoor Air	Jan 2012 %
Methane, field	0.0/0.0

SAMPLE ID
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

1.8/1.8 RESULT/DUPLICATE RESULT

J ESTIMATED

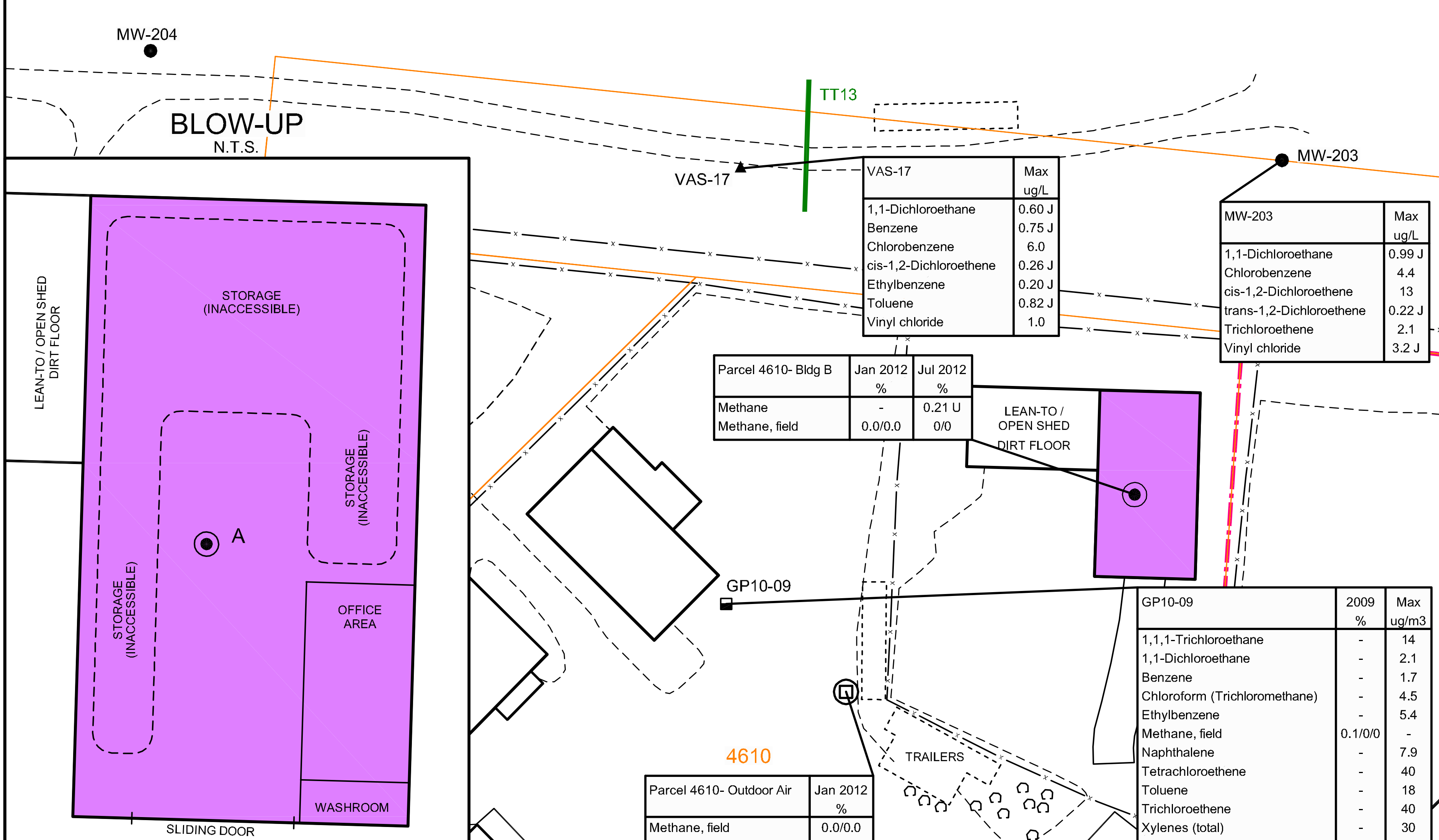
U NOT DETECTED

EXCEEDANCES

Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
Methane (%)	0.05	0.5

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



VAS-17	Max ug/L
1,1-Dichloroethane	0.60 J
Benzene	0.75 J
Chlorobenzene	6.0
cis-1,2-Dichloroethene	0.26 J
Ethylbenzene	0.20 J
Toluene	0.82 J
Vinyl chloride	1.0

MW-203	Max ug/L
1,1-Dichloroethane	0.99 J
Chlorobenzene	4.4
cis-1,2-Dichloroethene	13
trans-1,2-Dichloroethene	0.22 J
Trichloroethene	2.1
Vinyl chloride	3.2 J

Parcel 4610- Bldg B	Jan 2012 %	Jul 2012 %
Methane	-	0.21 U
Methane, field	0.0/0.0	0/0

GP10-09	2009 %	Max ug/m3
1,1,1-Trichloroethane	-	14
1,1-Dichloroethane	-	2.1
Benzene	-	1.7
Chloroform (Trichloromethane)	-	4.5
Ethylbenzene	-	5.4
Methane, field	0.1/0/0	-
Naphthalene	-	7.9
Tetrachloroethene	-	40
Toluene	-	18
Trichloroethene	-	40
Xylenes (total)	-	30

Parcel 4610- Outdoor Air	Jan 2012 %
Methane, field	0.0/0.0

PROFILE VIEW
N.T.S.

Building Characteristics:
Single-story commercial-use storage building, constructed prior to 1993. Primarily warehouse space with modular office space (not currently in use). Attached open garage with dirt floor. Footprint is 1,800 sq. ft. (without garage). Approximately 20 ft. high ceilings. Concrete block foundation walls in poor condition. Constructed with wood frame and steel beams, covered with steel cladding. Slab-on-grade, exposed concrete floor with large cracks. Not air tight, no weather seals. No HVAC system present in building. Window A/C unit present in office draws air from warehouse. Exterior openings - large sliding door, personnel door. Occasional occupancy two to three times per month to pick up or drop off storage items.

figure G.19

PARCEL 4610 - RON BARNETT CONSTRUCTION BUILDING 19
2225B EAST RIVER ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA023 APR 4/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- VAS01 VAS SAMPLING LOCATION
- GP04-09 DEEP LANDFILL GAS PROBE
- TT1 TEST TRENCH LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- NV NO VALUE

0 20 50ft

Parcel 4610- Outdoor Air	Jan 2012
	%
Methane, field	0.0/0.0

SAMPLE ID
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

1.8/1.8 RESULT/DUPLICATE RESULT

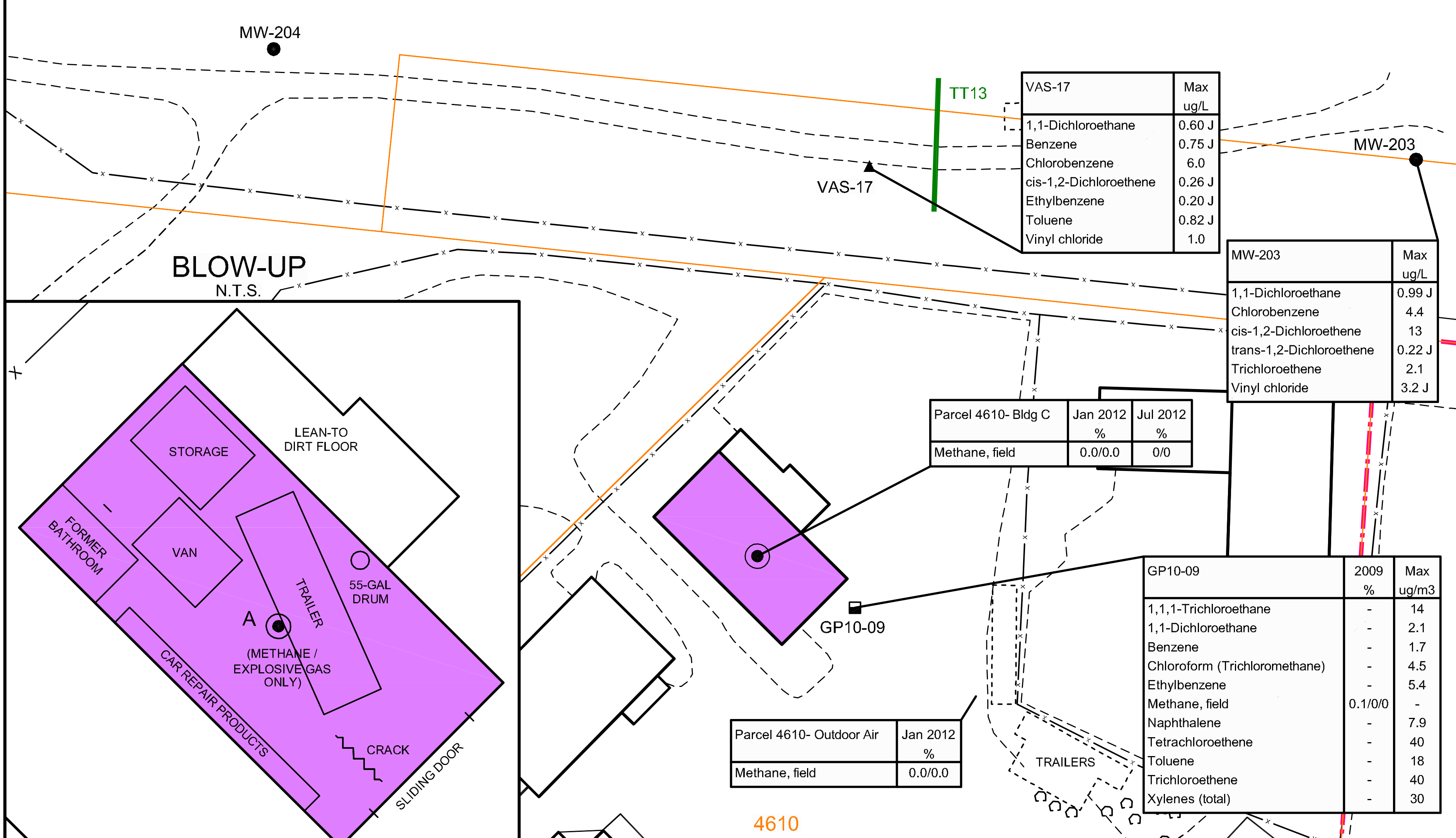
EXCEEDANCES

J ESTIMATED

Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

Chemical Name	ODH Non-residential Screening Level	
	Indoor Air (a)	Sub-Slab (b)
Methane (%)	0.05	0.5

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



VAS-17	Max ug/L
1,1-Dichloroethane	0.60 J
Benzene	0.75 J
Chlorobenzene	6.0
cis-1,2-Dichloroethene	0.26 J
Ethylbenzene	0.20 J
Toluene	0.82 J
Vinyl chloride	1.0

MW-203	Max ug/L
1,1-Dichloroethane	0.99 J
Chlorobenzene	4.4
cis-1,2-Dichloroethene	13
trans-1,2-Dichloroethene	0.22 J
Trichloroethene	2.1
Vinyl chloride	3.2 J

Parcel 4610- Bldg C	Jan 2012	Jul 2012
	%	%
Methane, field	0.0/0.0	0/0

GP10-09	2009 %	Max ug/m3
1,1,1-Trichloroethane	-	14
1,1-Dichloroethane	-	2.1
Benzene	-	1.7
Chloroform (Trichloromethane)	-	4.5
Ethylbenzene	-	5.4
Methane, field	0.1/0/0	-
Naphthalene	-	7.9
Tetrachloroethene	-	40
Toluene	-	18
Trichloroethene	-	40
Xylenes (total)	-	30

Parcel 4610- Outdoor Air	Jan 2012
	%
Methane, field	0.0/0.0

PROFILE VIEW
N.T.S.

Building Characteristics:
Single-story commercial-use storage building, constructed in early 1990s. 1,088 sq. ft slab-on-grade, approximately 16 ft high building with fair condition, unsealed foundation and floor cracks. Constructed with wood frame, covered with steel cladding. Not air tight, no weather seals. No HVAC system present in building. Exterior openings - sliding door and personnel door.
No regular occupancy - storage only

figure G.20

PARCEL 4610 - RON BARNETT CONSTRUCTION BUILDING 20
2225C EAST RIVER ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA024 APR 4/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 — MONITORING WELL LOCATION
- GP04-09 — DEEP LANDFILL GAS PROBE
- TT1 — TEST TRENCH LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- NV — NO VALUE

0 20 50ft

Parcel 4610- Bldg D	Jan 2012	Jul 2012
	%	%
Methane, field	0.0/0.0	0/0

SAMPLE ID
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

1.8/1.8 RESULT/DUPLICATE RESULT

EXCEEDANCES

Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

Chemical Name	ODH Non-residential Screening Level	
	Indoor Air (a)	Sub-Slab (b)
Methane (%)	0.05	0.5

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.

GP10-09	2009	Max
	%	ug/m3
1,1,1-Trichloroethane	-	14
1,1-Dichloroethane	-	2.1
Benzene	-	1.7
Chloroform (Trichloromethane)	-	4.5
Ethylbenzene	-	5.4
Methane, field	0.1/0/0	-
Naphthalene	-	7.9
Tetrachloroethene	-	40
Toluene	-	18
Trichloroethene	-	40
Xylenes (total)	-	30

Parcel 4610- Bldg D	Jan 2012	Jul 2012
	%	%
Methane, field	0.0/0.0	0/0

PROFILE VIEW
N.T.S.

Building Characteristics:
Single-story commercial-use storage building, with construction completed in early 1990s. constructed prior to 1993. Attached open garage with dirt floor. Footprint is 1,200 sq. ft. (without garage). Approximately 16 ft. high ceilings. Constructed with wood frame, covered with plywood and steel cladding. Plywood partition, open at the top, divides the interior space. Slab-on-grade, exposed concrete floor with some cracks. Not air tight, no weather seals. No HVAC system present in building. Exterior openings - 2 large sliding doors, 2 personnel doors.
No regular occupancy, storage only.

figure G.21

PARCEL 4610 - RON BARNETT CONSTRUCTION BUILDING 21
2225D EAST RIVER ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA025 APR 4/2013

N

0 20 50ft

LEGEND

APPROXIMATE SITE BOUNDARY
EDGE OF WATER
PARCEL BOUNDARY
SUB SLAB SOIL VAPOR BUILDING LOCATION
GP04-09 DEEP LANDFILL GAS PROBE
SUB SLAB SOIL VAPOR SAMPLE LOCATION
PROPOSED CONTINGENCY INDOOR AIR SAMPLE LOCATION
OUTDOOR AIR SAMPLE LOCATION
NV NO VALUE

GP09-09	Max ug/m3	2009 %
1,1,1-Trichloroethane	18	-
Benzene	1.9	-

SAMPLE ID
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

1.8/1.8 RESULT/DUPLICATE RESULT
EXCEEDANCES
U NOT DETECTED
Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

Chemical Name	ODH Non-residential Screening Level	
	Indoor Air (a)	Sub-Slab (b)
Methane (%)	0.05	0.5

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.

GP10-09	2009 %	Max ug/m3
1,1,1-Trichloroethane	-	14
1,1-Dichloroethane	-	2.1
Benzene	-	1.7
Chloroform (Trichloromethane)	-	4.5
Ethylbenzene	-	5.4
Methane, field	0.1/0/0	-
Naphthalene	-	7.9
Tetrachloroethene	-	40
Toluene	-	18
Trichloroethene	-	40
Xylenes (total)	-	30

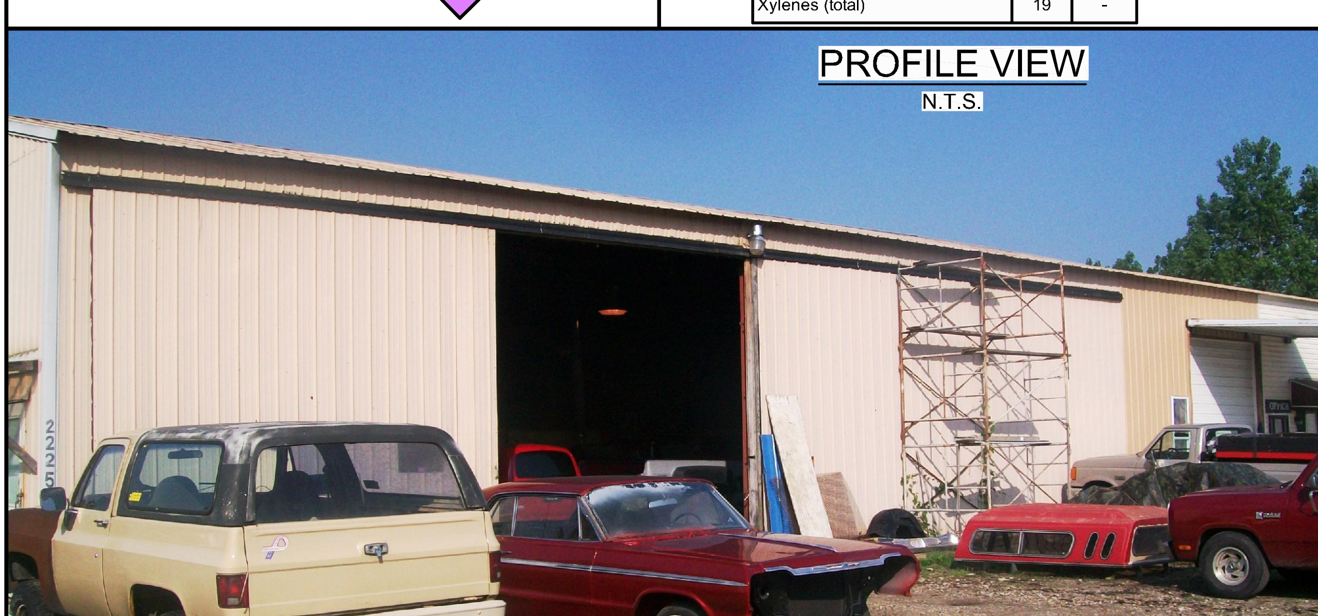
Parcel 4610- Outdoor Air	Jan 2012 %
Methane, field	0.0/0.0

Parcel 4610- Bldg E- Probe B	Jan 2012 %	Jul 2012 %
Methane	0.065 U	0.19 U
Methane, field	0.0/0.0	0/0

Parcel 4610- Bldg E- Probe A	Jan 2012 %	Jul 2012 %
Methane	-	0.21 U
Methane, field	0.0/0.0	0/0

GP09-09	Max ug/m3	2009 %
1,1,1-Trichloroethane	18	-
Benzene	1.9	-
Chlorobenzene	1.9	-
Chloroform (Trichloromethane)	14	-
cis-1,2-Dichloroethene	1.4	-
Ethylbenzene	3.2	-
Methane, field	-	0/0/0.1
Naphthalene	3.8	-
Tetrachloroethene	120	-
Toluene	12	-
Trichloroethene	2000	-
Xylenes (total)	19	-

PROFILE VIEW
N.T.S.



Building Characteristics:
Single-story commercial-use car repair building with office and storage areas, construction completed by early 1990s. 1,200 sq. ft. unsealed, four-inch concrete slab-on-grade, approximately 20 ft. high building, with steel cladding. Significant floor cracks in office and adjacent storage area. Not air tight, weather seals in office are in fair condition, no weather seals in storage area. Electric baseboard heating and window A/C present in office. Wood stove present, vents through roof. Exterior openings - utility pipe penetrations, windows, sliding bay and overhead garage doors.
No regularly scheduled occupancy - occasional evening and weekend occupancy by two adults. Office may be occupied during normal working hours by one adult.

figure G.22

PARCEL 4610 - RON BARNETT CONSTRUCTION BUILDING 22
2225E EAST RIVER ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA026 APR 4/2013

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
Methane (%)	0.05	0.5

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.

LEGEND

- APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- VAS01 VAS SAMPLING LOCATION
- GP11-09 DEEP LANDFILL GAS PROBE
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

Parcel 3207- Bldg 1- IA_A	Mar 2012 %	Aug 2012 %
Methane	-	0.21 U
Methane, field	0/0.0	0/0

- SAMPLE ID (PARCEL - BUILDING)
- SAMPLE DATE
- CONCENTRATION VALUE
- COMPOUND
- EXCEEDANCES

[1] INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE

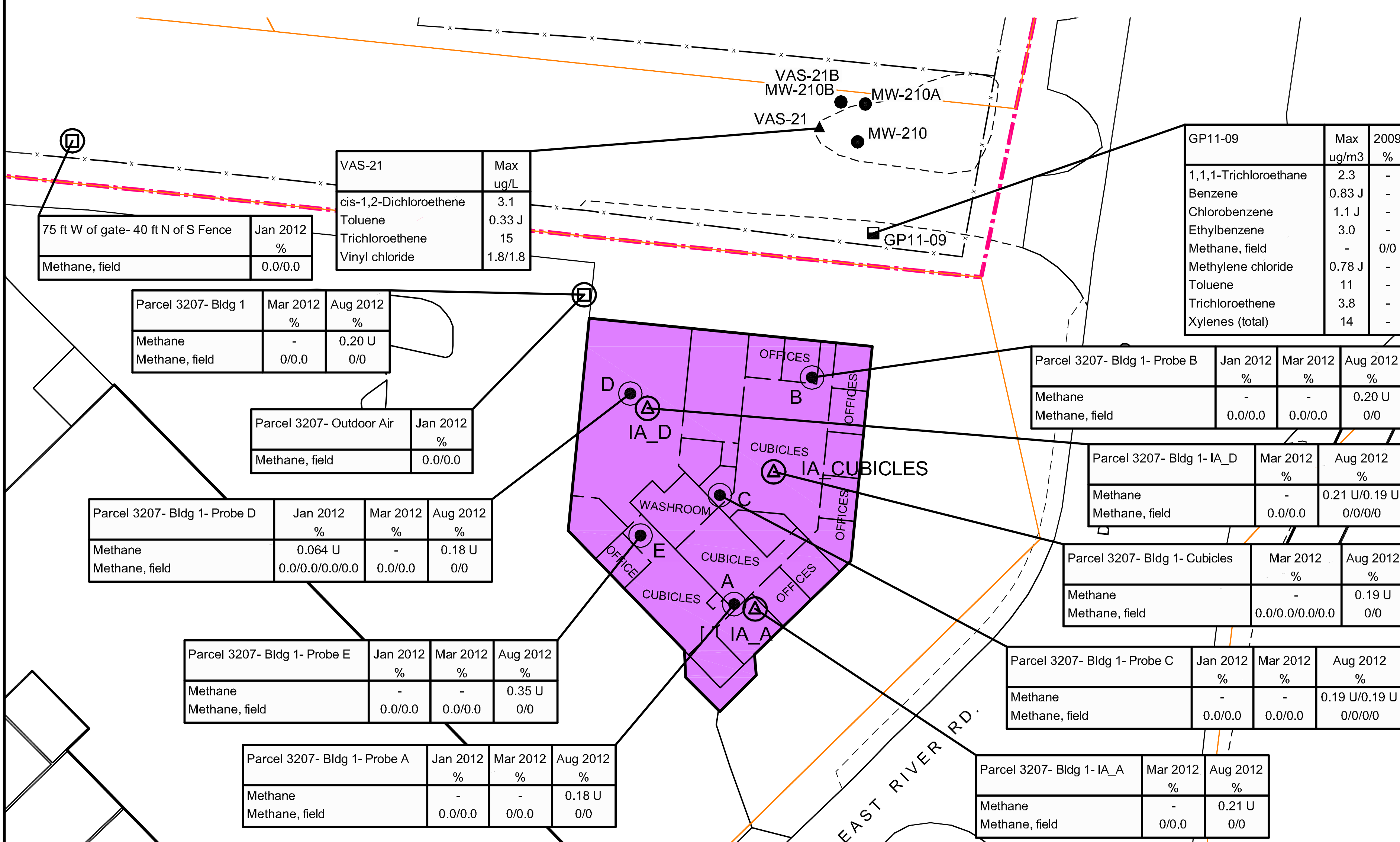
J ESTIMATED

U NOT DETECTED

UJ ESTIMATED REPORTING DETECTION LIMIT

Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

1.8/1.8 RESULT/DUPLICATE RESULT



VAS-21	Max ug/L
cis-1,2-Dichloroethene	3.1
Toluene	0.33 J
Trichloroethene	15
Vinyl chloride	1.8/1.8

GP11-09	Max ug/m3	2009 %
1,1,1-Trichloroethane	2.3	-
Benzene	0.83 J	-
Chlorobenzene	1.1 J	-
Ethylbenzene	3.0	-
Methane, field	-	0/0
Methylene chloride	0.78 J	-
Toluene	11	-
Trichloroethene	3.8	-
Xylenes (total)	14	-

75 ft W of gate- 40 ft N of S Fence	Jan 2012 %
Methane, field	0.0/0.0

Parcel 3207- Bldg 1	Mar 2012 %	Aug 2012 %
Methane	-	0.20 U
Methane, field	0/0.0	0/0

Parcel 3207- Outdoor Air	Jan 2012 %
Methane, field	0.0/0.0

Parcel 3207- Bldg 1- Probe B	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	-	0.20 U
Methane, field	0.0/0.0	0.0/0.0	0/0

Parcel 3207- Bldg 1- IA_D	Mar 2012 %	Aug 2012 %
Methane	-	0.21 U/0.19 U
Methane, field	0.0/0.0	0/0/0/0

Parcel 3207- Bldg 1- Cubicles	Mar 2012 %	Aug 2012 %
Methane	-	0.19 U
Methane, field	0.0/0.0/0.0/0.0	0/0

Parcel 3207- Bldg 1- Probe D	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	0.064 U	-	0.18 U
Methane, field	0.0/0.0/0.0/0.0	0.0/0.0	0/0

Parcel 3207- Bldg 1- Probe E	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	-	0.35 U
Methane, field	0.0/0.0	0.0/0.0	0/0

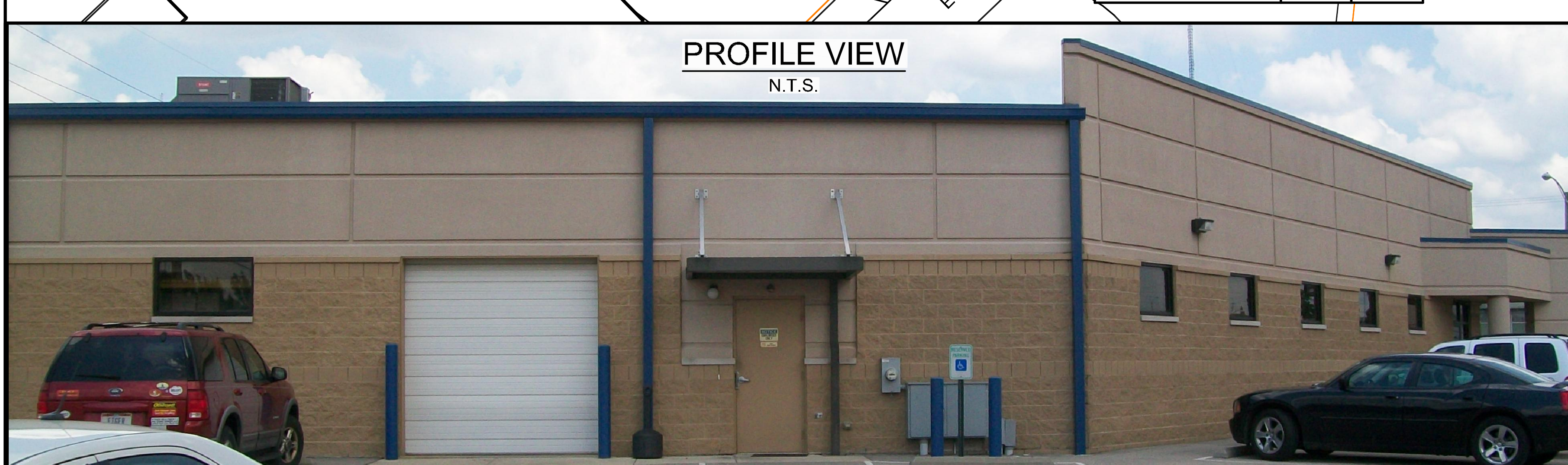
Parcel 3207- Bldg 1- Probe C	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	-	0.19 U/0.19 U
Methane, field	0.0/0.0	0.0/0.0	0/0/0/0

Parcel 3207- Bldg 1- Probe A	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	-	0.18 U
Methane, field	0.0/0.0	0/0.0	0/0

Parcel 3207- Bldg 1- IA_A	Mar 2012 %	Aug 2012 %
Methane	-	0.21 U
Methane, field	0/0.0	0/0

PROFILE VIEW

N.T.S.



Building Characteristics:
Single-story commercial/industrial-use building. Primarily office space with some assembly/ warehouse space. Constructed in 2004 over historic location of gas station and junk yard. Footprint is 9,954 sq. ft. Slab-on-grade concrete building, unsealed joints in assembly/ warehouse room. Wall-to-wall carpeting in the office space. Insulated and air tight building, with weather seals in good condition. Heating provided by forced air natural gas roof-top units. Central A/C provided by roof-top units. Exterior openings - vents, utility pipe penetrations, inoperable windows, personnel doors, roll-up door. Occupied weekdays from 8 AM to 5 PM by approximately 15 adult workers.

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

figure G.23

PARCEL 3207 - GLOBE EQUIPMENT BUILDING 23
2153 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

38443-62(018)GN-WA018 APR 9/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- GP11-09 DEEP LANDFILL GAS PROBE
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

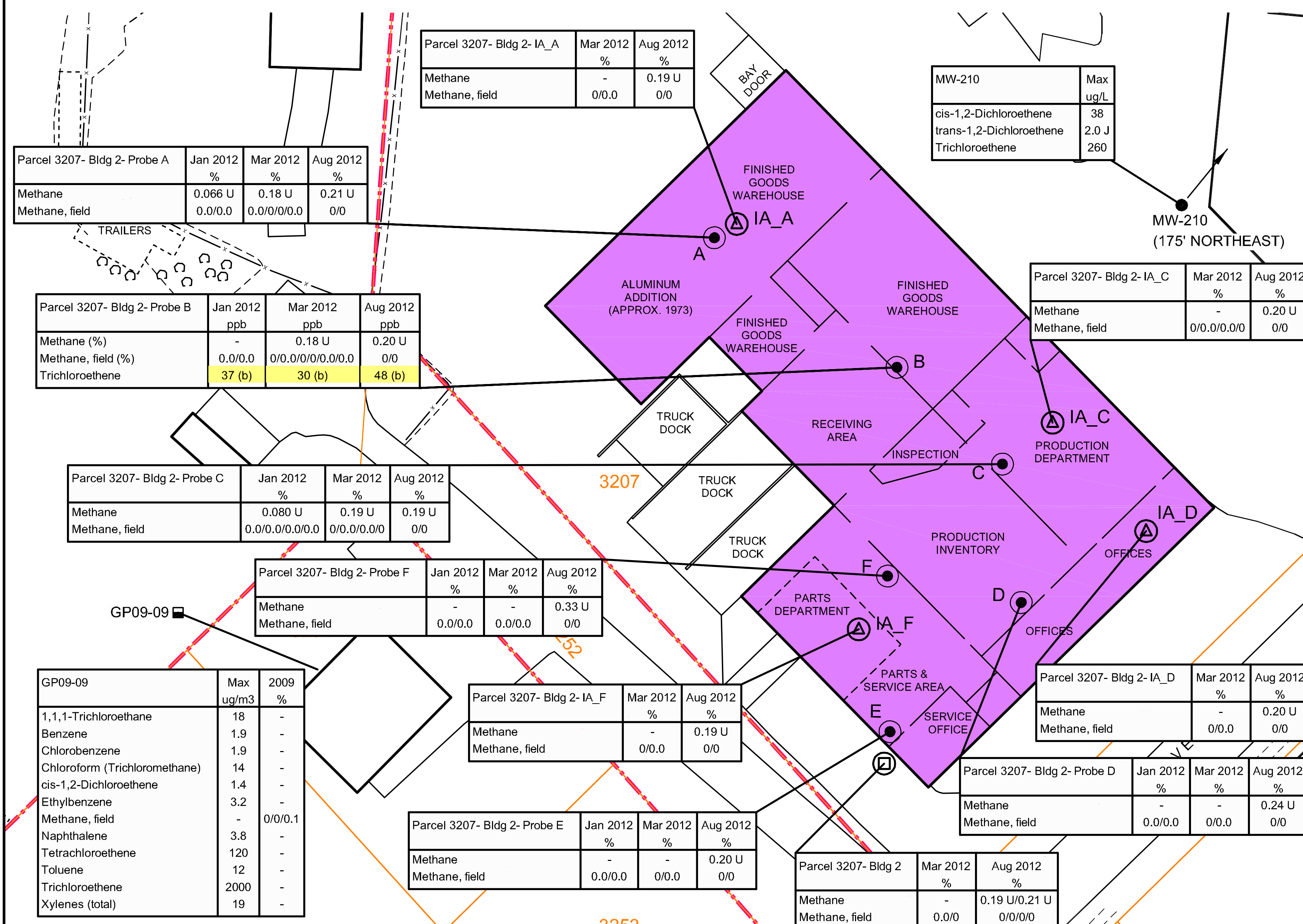
Parcel 3207- Bldg 2- IA_F	Mar 2012 %	Aug 2012 %
Methane	-	0.19 U
Methane, field	0/0.0	0/0

SAMPLE ID (PARCEL - BUILDING)
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

1.8/1.8 RESULT/DUPLICATE RESULT
EXCEEDANCES
J ESTIMATED
U NOT DETECTED
UJ ESTIMATED REPORTING DETECTION LIMIT
Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
Methane	0.05	0.5
Trichloroethene	2	20

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



Parcel 3207- Bldg 2- IA_A	Mar 2012 %	Aug 2012 %
Methane	-	0.19 U
Methane, field	0/0.0	0/0

MW-210	Max ug/L
cis-1,2-Dichloroethene	38
trans-1,2-Dichloroethene	2.0 J
Trichloroethene	260

Parcel 3207- Bldg 2- Probe A	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	0.066 U	0.18 U	0.21 U
Methane, field	0.0/0.0	0.0/0/0/0.0	0/0

Parcel 3207- Bldg 2- IA_C	Mar 2012 %	Aug 2012 %
Methane	-	0.20 U
Methane, field	0/0.0/0.0/0	0/0

Parcel 3207- Bldg 2- Probe B	Jan 2012 ppb	Mar 2012 ppb	Aug 2012 ppb
Methane (%)	-	0.18 U	0.20 U
Methane, field (%)	0.0/0.0	0/0.0/0/0/0.0/0.0	0/0
Trichloroethene	37 (b)	30 (b)	48 (b)

Parcel 3207- Bldg 2- Probe C	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	0.080 U	0.19 U	0.19 U
Methane, field	0.0/0.0/0.0/0.0	0/0.0/0.0/0	0/0

Parcel 3207- Bldg 2- Probe F	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	-	0.33 U
Methane, field	0.0/0.0	0.0/0.0	0/0

GP09-09	Max ug/m3	2009 %
1,1,1-Trichloroethane	18	-
Benzene	1.9	-
Chlorobenzene	1.9	-
Chloroform (Trichloromethane)	14	-
cis-1,2-Dichloroethene	1.4	-
Ethylbenzene	3.2	-
Methane, field	-	0/0/0.1
Naphthalene	3.8	-
Tetrachloroethene	120	-
Toluene	12	-
Trichloroethene	2000	-
Xylenes (total)	19	-

Parcel 3207- Bldg 2- IA_F	Mar 2012 %	Aug 2012 %
Methane	-	0.19 U
Methane, field	0/0.0	0/0

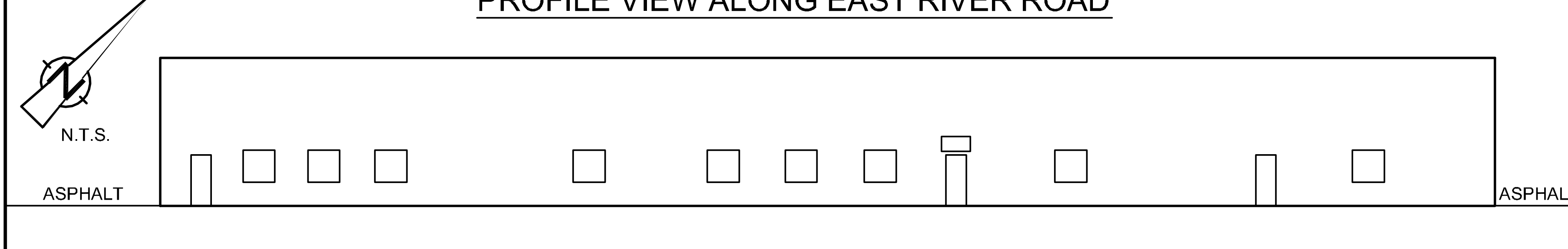
Parcel 3207- Bldg 2- IA_D	Mar 2012 %	Aug 2012 %
Methane	-	0.20 U
Methane, field	0/0.0	0/0

Parcel 3207- Bldg 2- Probe D	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	-	0.24 U
Methane, field	0.0/0.0	0/0.0	0/0

Parcel 3207- Bldg 2- Probe E	Jan 2012 %	Mar 2012 %	Aug 2012 %
Methane	-	-	0.20 U
Methane, field	0.0/0.0	0/0.0	0/0

Parcel 3207- Bldg 2	Mar 2012 %	Aug 2012 %
Methane	-	0.19 U/0.21 U
Methane, field	0.0/0	0/0/0/0

PROFILE VIEW ALONG EAST RIVER ROAD



Building Characteristics:
Single-story industrial-use slab-on-grade building. Primarily assembly/warehouse space with some office space. Main portion of the building constructed prior to 1968 of concrete block. Northern addition was constructed prior to 1973 of steel frame and aluminum siding. Total footprint is 19,803 sq. ft. Building is 16 ft. high, office space has 8 ft.drop ceilings. Majority of the building has bare concrete floors, except office space is carpeted. Some large cracks in the slab are visible, some cracks are sealed. Building is not insulated, average air tightness with no weather seals present. Heating provided by forced air natural gas furnace. Central A/C provided by roof-top units. Exterior openings - vents, fans, utility pipe penetrations, windows, bay doors, and personnel doors. Windows and bay doors are open in good weather.
Occupied weekdays from 7 AM to 5 PM by approximately 25 adult workers.

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

figure G.24
PARCEL 3207 - GLOBE EQUIPMENT BUILDING 24
2215 AND 2219 EAST RIVER ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

38443-62(018)GN-WA017 MAR 4/2013

LEGEND

APPROXIMATE SITE BOUNDARY
PARCEL BOUNDARY
SUB SLAB SOIL VAPOR BUILDING LOCATION
GP04-09 DEEP LANDFILL GAS PROBE
SUB SLAB SOIL VAPOR SAMPLE LOCATION
INDOOR AIR SAMPLE LOCATION
OUTDOOR AIR SAMPLE LOCATION

0 20 50ft

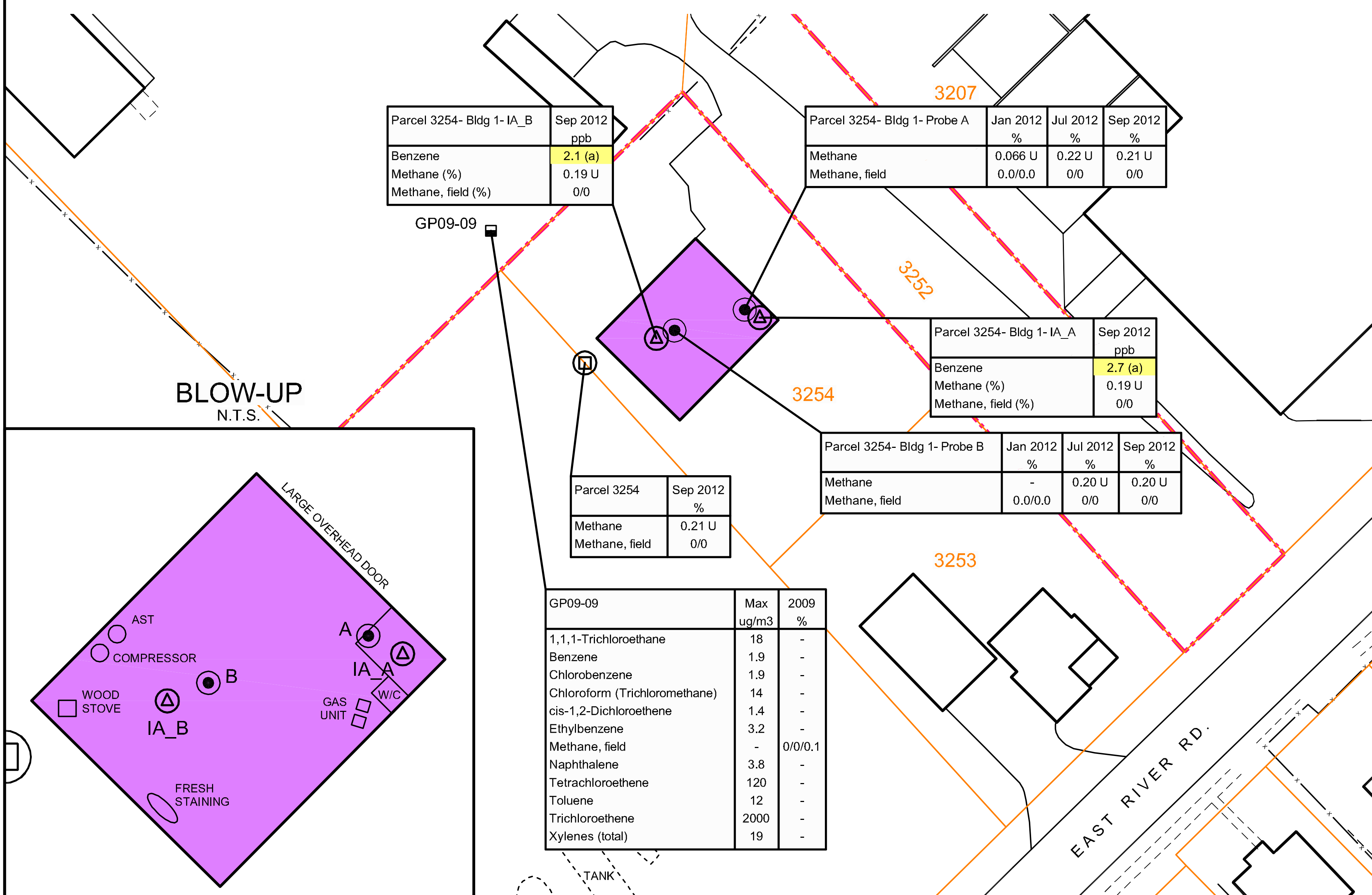
Parcel 3254- Bldg 1- IA_A	Sep 2012
	ug/m3
Benzene [1]	8.8 (e)
Methane (%)	0.19 U
Methane, field (%)	0/0

SAMPLE ID (PARCEL - BUILDING)
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND
EXCEEDANCES
Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.
1.8/1.8 RESULT/DUPLICATE RESULT

[1] INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE
U NOT DETECTED

Chemical Name	ODH Non-residential Screening Level Indoor Air (a)	Sub-Slab (b)
Benzene	2	20
Methane (%)	0.05	0.5

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



Parcel 3254- Bldg 1- IA_B	Sep 2012
	ppb
Benzene	2.1 (a)
Methane (%)	0.19 U
Methane, field (%)	0/0

Parcel 3254- Bldg 1- Probe A	Jan 2012	Jul 2012	Sep 2012
	%	%	%
Methane	0.066 U	0.22 U	0.21 U
Methane, field	0.0/0.0	0/0	0/0

Parcel 3254- Bldg 1- IA_A	Sep 2012
	ppb
Benzene	2.7 (a)
Methane (%)	0.19 U
Methane, field (%)	0/0

Parcel 3254- Bldg 1- Probe B	Jan 2012	Jul 2012	Sep 2012
	%	%	%
Methane	-	0.20 U	0.20 U
Methane, field	0.0/0.0	0/0	0/0

Parcel 3254	Sep 2012
	%
Methane	0.21 U
Methane, field	0/0

GP09-09	Max	2009
	ug/m3	%
1,1,1-Trichloroethane	18	-
Benzene	1.9	-
Chlorobenzene	1.9	-
Chloroform (Trichloromethane)	14	-
cis-1,2-Dichloroethene	1.4	-
Ethylbenzene	3.2	-
Methane, field	-	0/0/0.1
Naphthalene	3.8	-
Tetrachloroethene	120	-
Toluene	12	-
Trichloroethene	2000	-
Xylenes (total)	19	-

PROFILE VIEW

N.T.S.

Building Characteristics:
Single-story concrete block building constructed prior to 1968. Commercial-use, heavy truck repair. Footprint is 2,000 sq. ft. Ceiling is approximately 20 ft. high, sheet metal roof. Not insulated, unsealed and cracked walls. Slab-on-grade, exposed concrete floor with large cracks, majority of the floor is heavily stained, especially at rear of building adjacent to AST and compressor. Not air tight; no weather seals present. Heating provided by overhead natural gas heaters. Wood stove present with vent through west wall. Exterior openings - vents, fans, utility pipe penetrations, 6 windows, large overhead door, personnel door. May have used chlorinated solvents historically in parts washer, now only uses mineral spirits. Occupied weekdays from 8 AM to 5 PM, by three to four adult workers.

figure G.25

PARCEL 3254 - MIDDLETON TRUCKING BUILDING 25
2233 REAR EAST RIVER ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA021 APR 4/2013

0 20 50ft

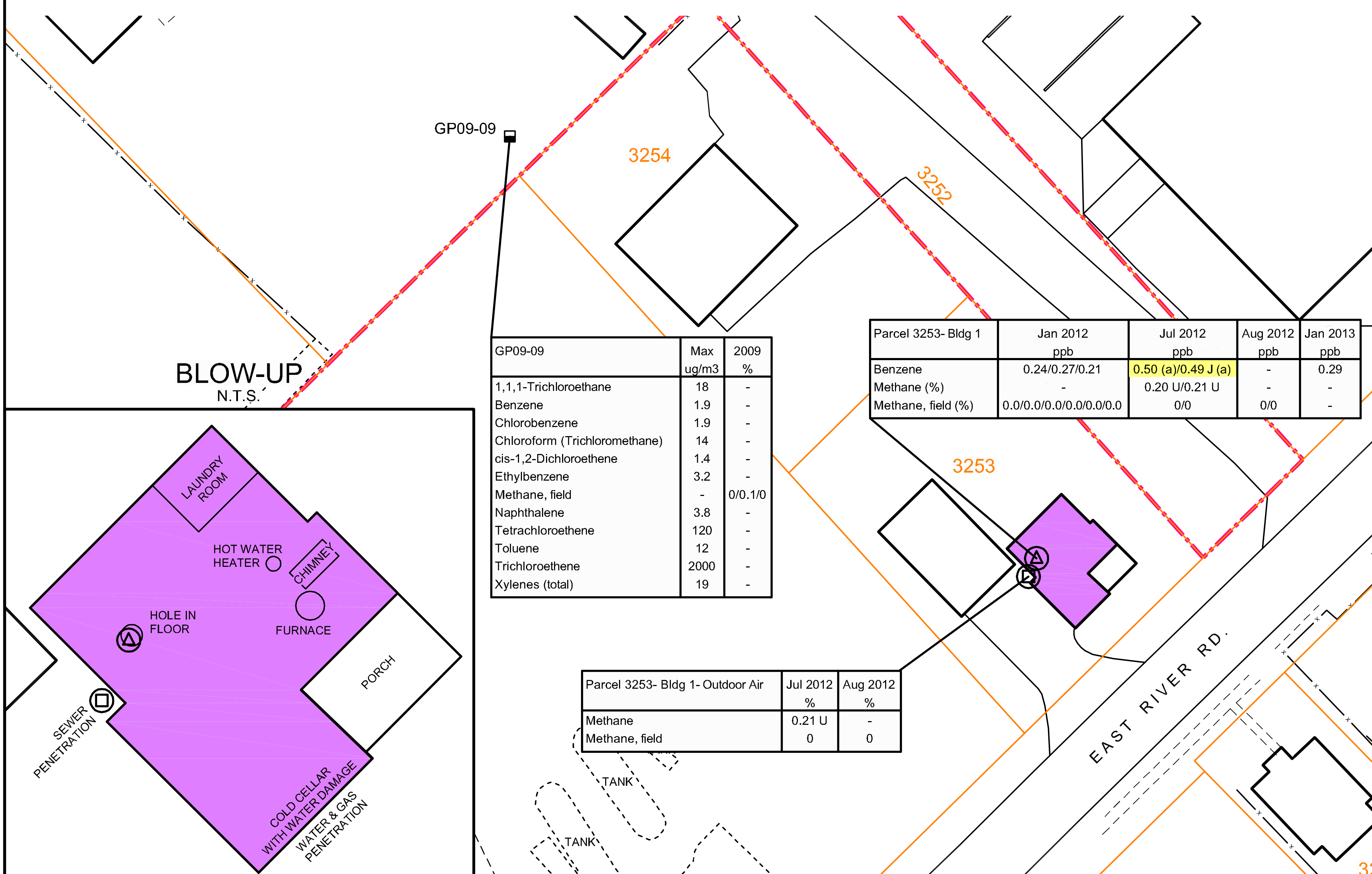
LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- GP04-09 DEEP LANDFILL GAS PROBE
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION
- NV NO VALUE
- SAMPLE ID
- SAMPLE DATE
- SAMPLE UNIT
- CONCENTRATION VALUE
- COMPOUND
- EXCEEDANCES
- Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.
- 1.8/1.8 RESULT/DUPLICATE RESULT

Parcel 3253- Bldg 1- Outdoor Air	Jul 2012	Aug 2012
	%	%
Methane	0.21 U	-
Methane, field	0	0

Chemical Name	ODH Residential Screening Level	
	Indoor Air (a)	Sub-Slab (b)
Benzene	0.4	4
Methane (%)	0.05	0.5

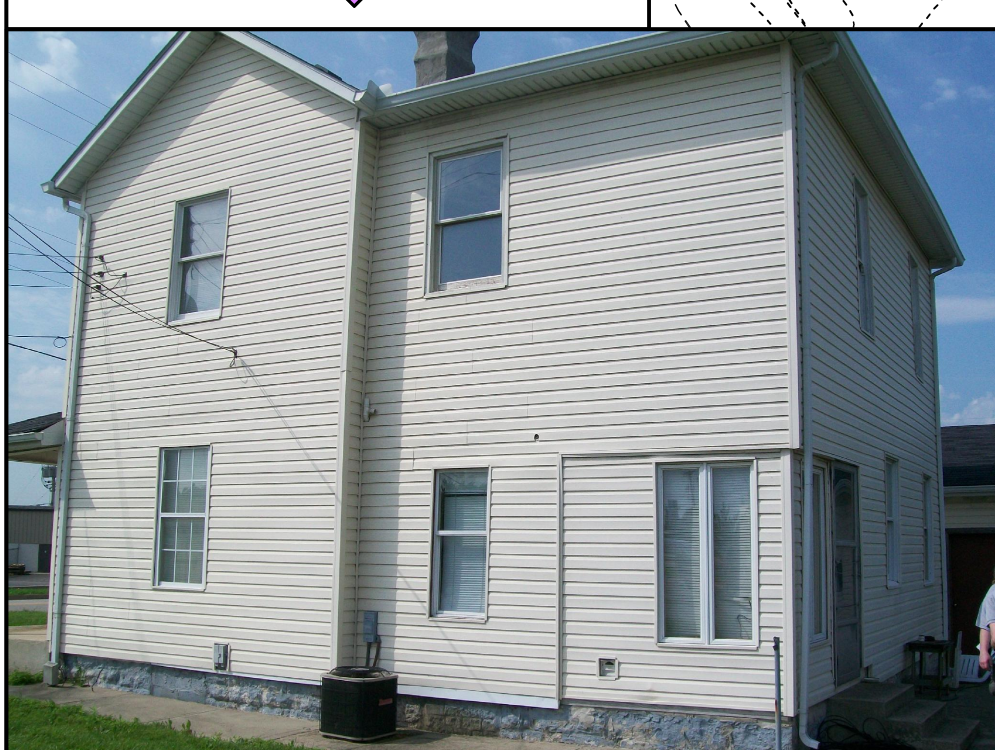
NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



GP09-09	Max	2009
	ug/m3	%
1,1,1-Trichloroethane	18	-
Benzene	1.9	-
Chlorobenzene	1.9	-
Chloroform (Trichloromethane)	14	-
cis-1,2-Dichloroethene	1.4	-
Ethylbenzene	3.2	-
Methane, field	-	0/0.1/0
Naphthalene	3.8	-
Tetrachloroethene	120	-
Toluene	12	-
Trichloroethene	2000	-
Xylenes (total)	19	-

Parcel 3253- Bldg 1	Jan 2012	Jul 2012	Aug 2012	Jan 2013
	ppb	ppb	ppb	ppb
Benzene	0.24/0.27/0.21	0.50 (a)/0.49 J (a)	-	0.29
Methane (%)	-	0.20 U/0.21 U	-	-
Methane, field (%)	0.0/0.0/0.0/0.0/0.0/0.0	0/0	0/0	-

Parcel 3253- Bldg 1- Outdoor Air	Jul 2012	Aug 2012
	%	%
Methane	0.21 U	-
Methane, field	0	0



PROFILE VIEW

N.T.S.

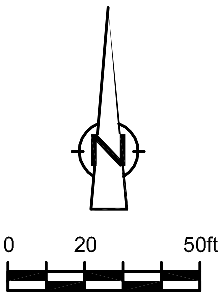
Building Characteristics:
Two-story, residential, single family house constructed in 1800s with stone foundation and vinyl siding. Unfinished basement, 926 sq. ft. with concrete floor containing an approximately 2-ft. diameter hole with pipe for condensate. Unsealed, stone and mortar foundation walls in poor condition. Average air tightness, weather seals in fair condition. Heating provided by forced air natural gas furnace. Central A/C and fireplace present. Exterior openings in the basement - utility pipe penetrations, 2 windows and personnel doors. Constant occupancy by one adult.

figure G.26

PARCEL 3253, BUILDING 26
2233 FRONT EAST RIVER ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA019 APR 8/2013



LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- GP04-09 — DEEP LANDFILL GAS PROBE
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION
- NV — NO VALUE

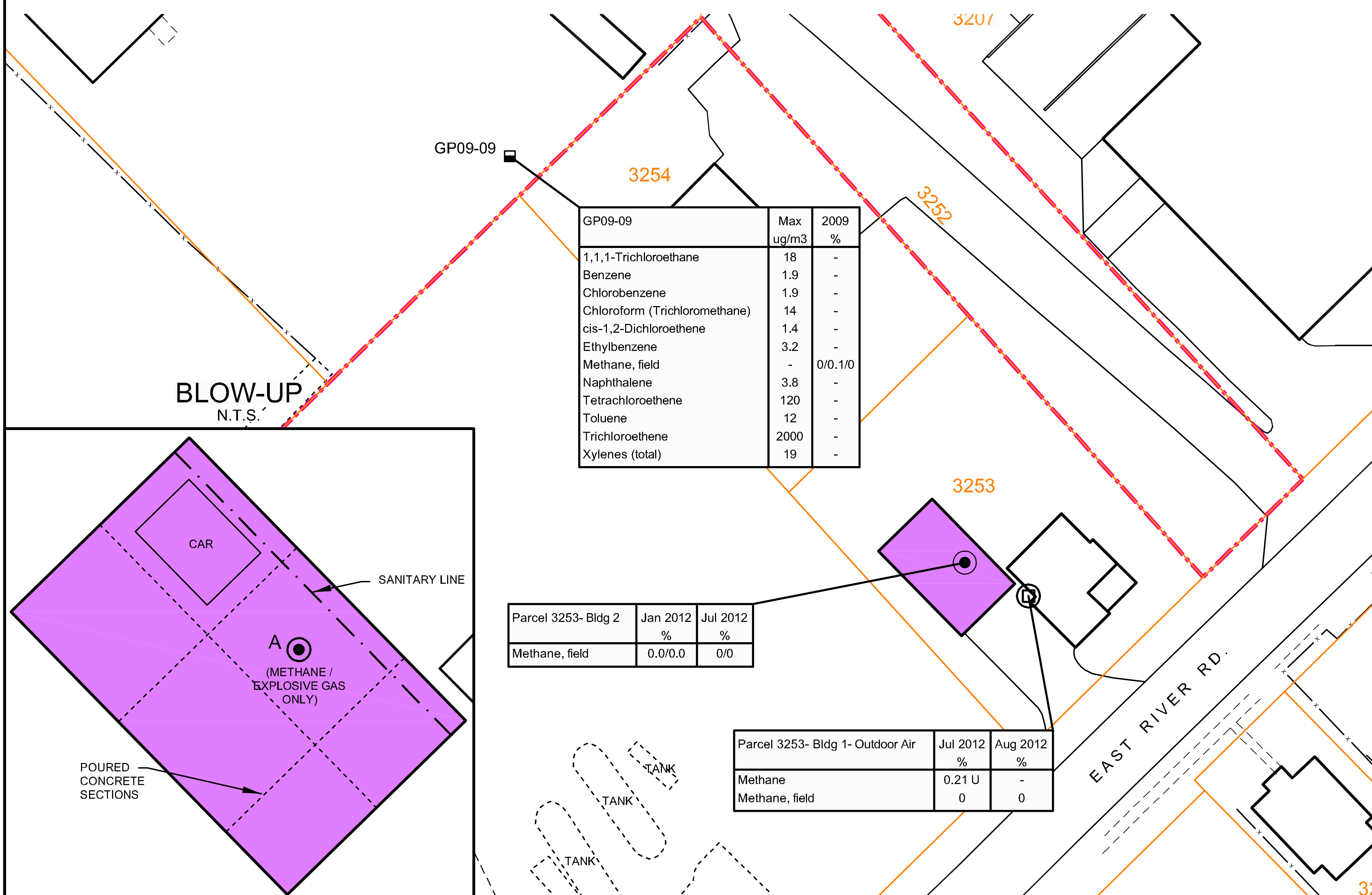
Parcel 3253- Bldg 2	Jan 2012 %	Jul 2012 %
Methane, field	0.0/0.0	0/0

SAMPLE ID
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

- EXCEEDANCES
- Max — MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.
- 1.8/1.8 — RESULT/DUPLICATE RESULT
- U — NOT DETECTED

Chemical Name	ODH Residential Screening Level Indoor Air (a)	Sub-Slab (b)
Methane (%)	0.05	0.5

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.

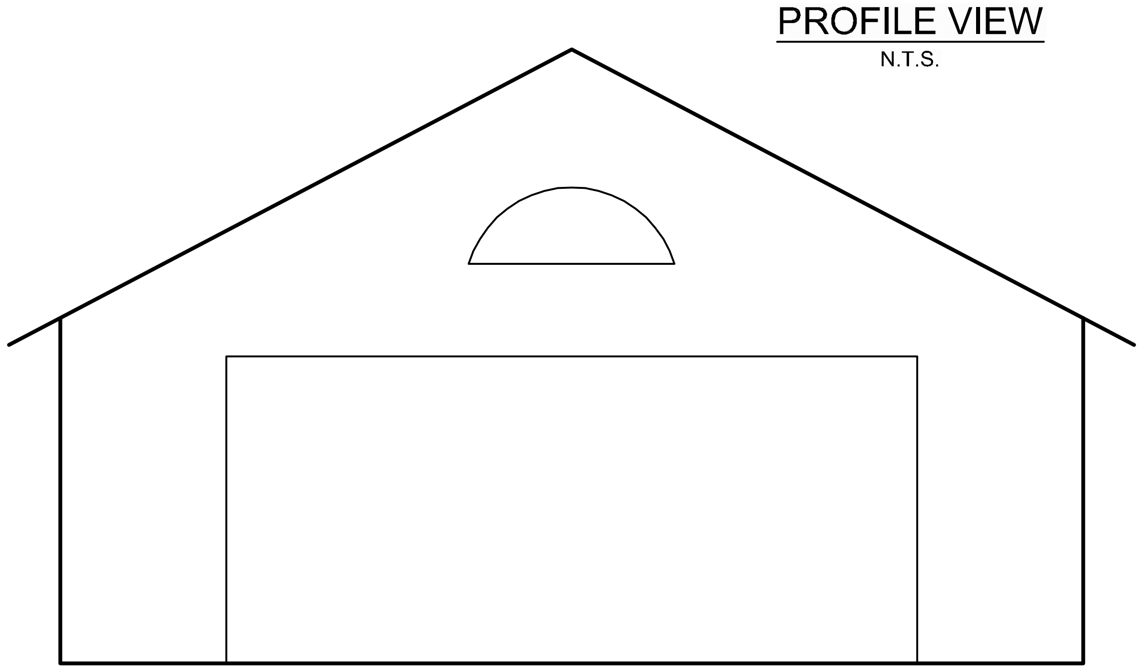


GP09-09	Max ug/m3	2009 %
1,1,1-Trichloroethane	18	-
Benzene	1.9	-
Chlorobenzene	1.9	-
Chloroform (Trichloromethane)	14	-
cis-1,2-Dichloroethene	1.4	-
Ethylbenzene	3.2	-
Methane, field	-	0/0.1/0
Naphthalene	3.8	-
Tetrachloroethene	120	-
Toluene	12	-
Trichloroethene	2000	-
Xylenes (total)	19	-

Parcel 3253- Bldg 2	Jan 2012 %	Jul 2012 %
Methane, field	0.0/0.0	0/0

Parcel 3253- Bldg 1- Outdoor Air	Jul 2012 %	Aug 2012 %
Methane	0.21 U	-
Methane, field	0	0

PROFILE VIEW
N.T.S.



Building Characteristics:
Single-story, 2-car garage constructed early 1990s. 1,128 sq. ft. slab-on-grade, vinyl-sided, building with poured concrete floor composed of six separate poured sections with unsealed joints. Unsealed, poured concrete four inch-high foundation walls in good condition. Average air tightness; weather seals in good condition. No HVAC systems present. Exterior openings - 2 windows, overhead and personnel doors. Grass and concrete exterior ground cover.
No regular occupancy - storage only

figure G.27

PARCEL 3253 - BUILDING 27
2233 FRONT EAST RIVER ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

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LEGEND

- APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- VAS01 ▲ VAS SAMPLING LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

0 20 60ft

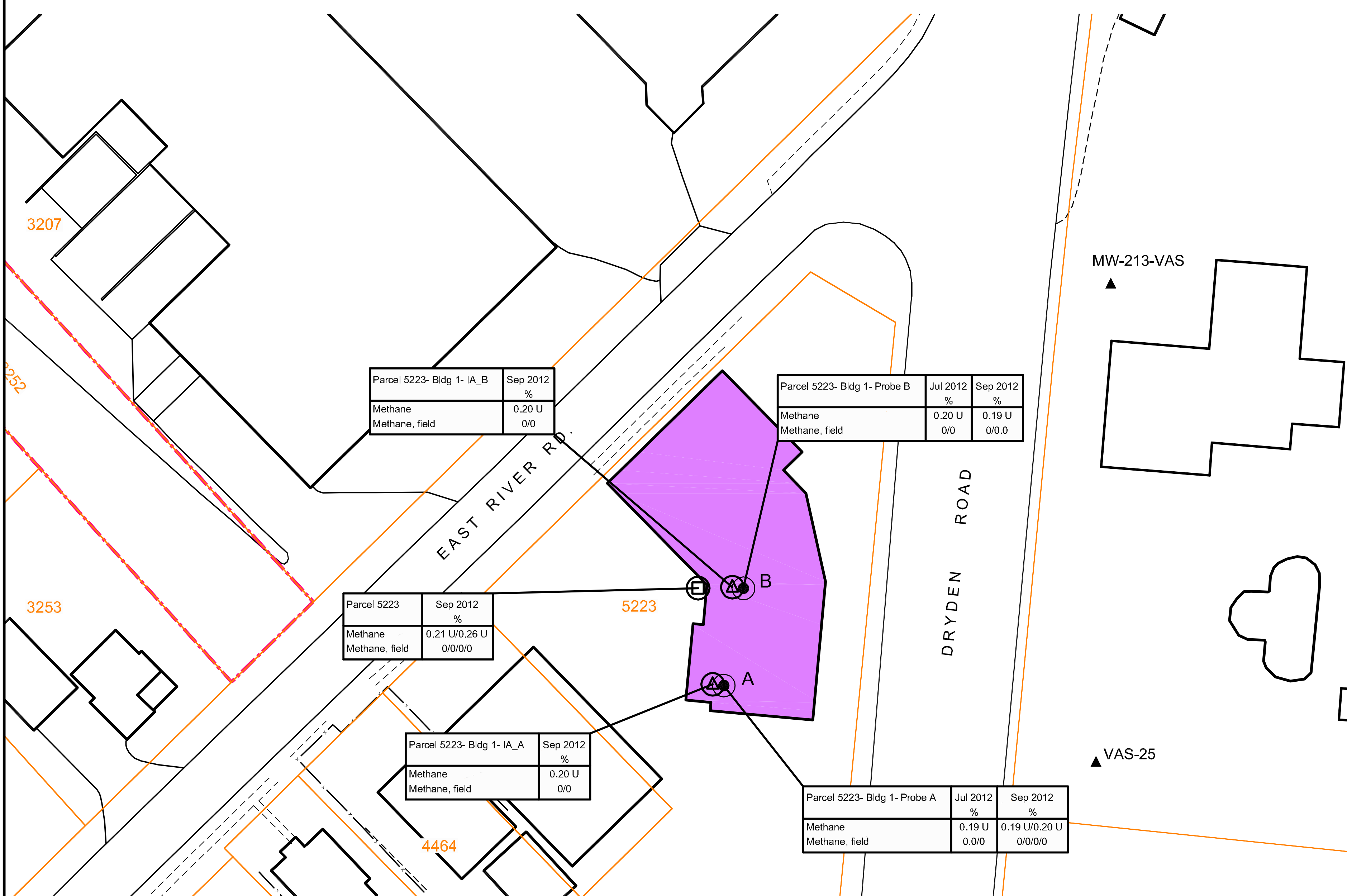
Parcel 5223- Bldg 1- IA_A	Sep 2012 ug/m3
Methane (%)	0.20 U
Methane, field (%)	0/0

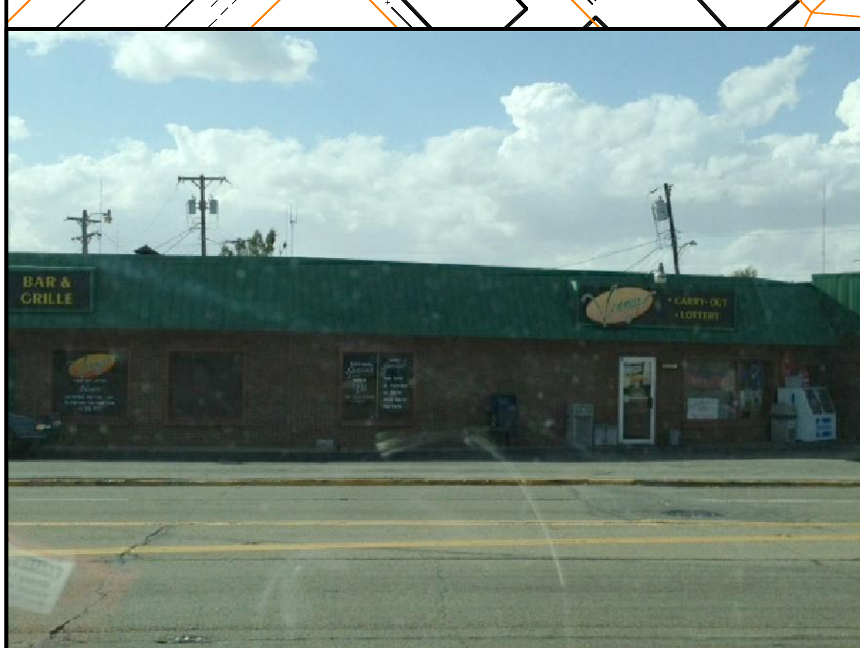
SAMPLE ID (PARCEL - BUILDING)
SAMPLE DATE
SAMPLE UNIT
CONCENTRATION VALUE
COMPOUND

1.8/1.8 RESULT/DUPLICATE RESULT
U NOT DETECTED
EXCEEDANCES
Max MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

Chemical Name	ODH Non-residential Screening Level	
	Indoor Air (a)	Sub-Slab (b)
Methane (%)	0.05	0.5

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.





PROFILE VIEW

N.T.S.

Building Characteristics:
Single-story commercial building. 8,340 sq. ft. building with...Building is insulated, not air tight. Heating provided by natural gas furnace. Central A/C present. Linoleum tile, disinfectants, caulking, degreasers, pesticides and spray insecticides, are stored in the building.

figure G.28

PARCEL 5223 - BUILDING 28
2229 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA040 APR 4/2013

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- NV NO VALUE

0 20 50ft

GP09-09	9/15/2009 ug/m3
Tetrachloroethene	2000 (B)

SAMPLE ID
SAMPLE DATE
SAMPLE UNIT
CRITERIA
CONCENTRATION VALUE
COMPOUND

EXCEEDANCES

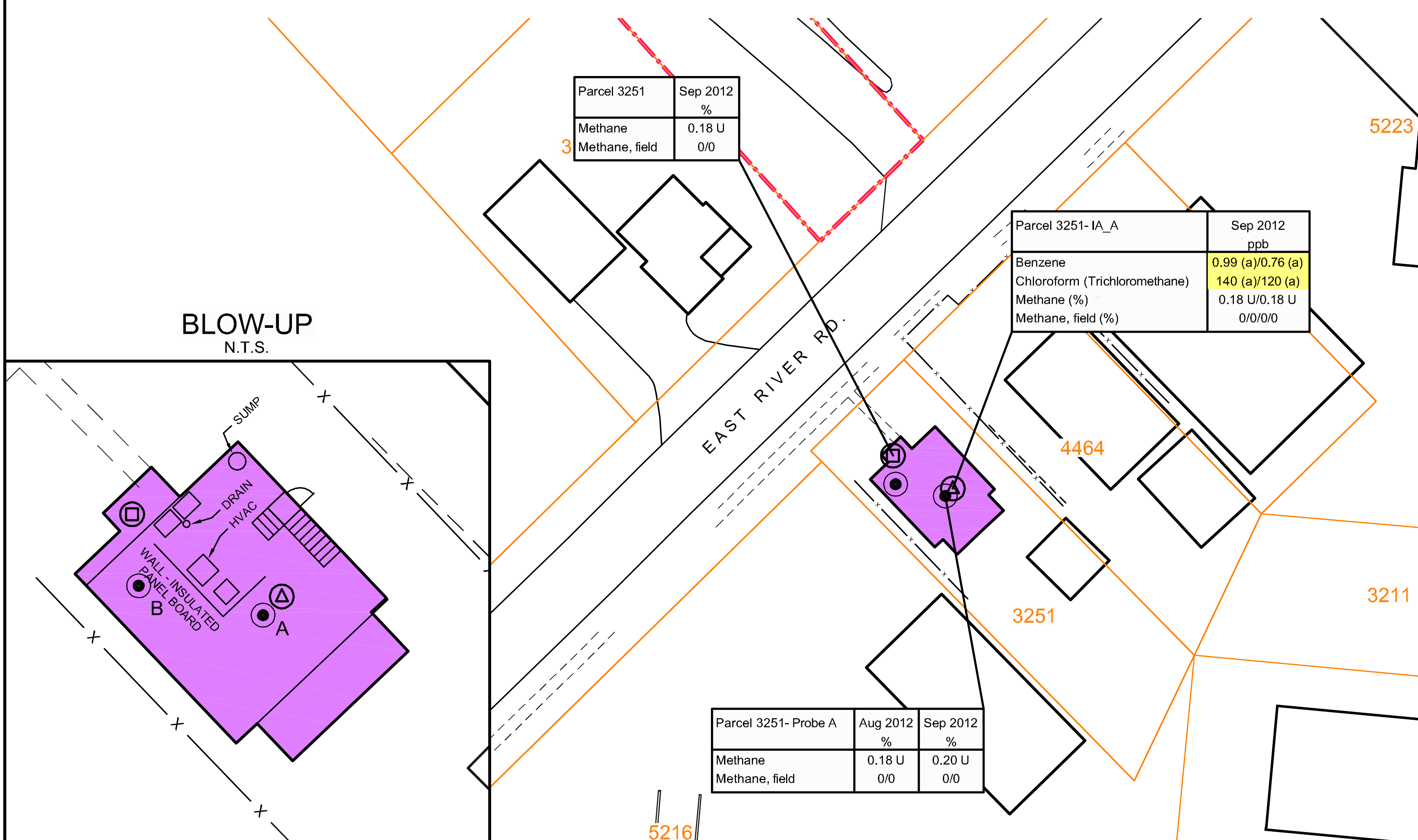
[1] INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE

1.8/1.8 RESULT/DUPLICATE RESULT

U NOT DETECTED

Chemical Name	ODH Residential Screening Level Indoor Air (a)	Sub-Slab (b)
Benzene	0.4	4
Chloroform (Trichloromethane)	20	200
Methane (%)	0.05	0.5

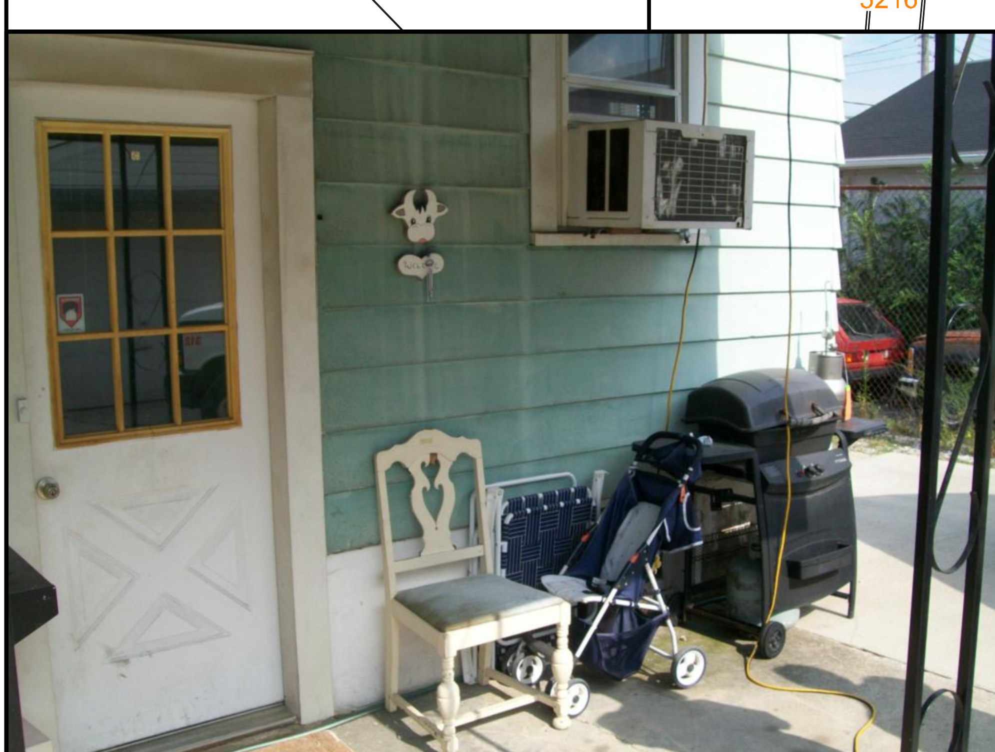
NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



Parcel 3251	Sep 2012 %
Methane	0.18 U
Methane, field	0/0

Parcel 3251- IA_A	Sep 2012 ppb
Benzene	0.99 (a)/0.76 (a)
Chloroform (Trichloromethane)	140 (a)/120 (a)
Methane (%)	0.18 U/0.18 U
Methane, field (%)	0/0/0/0

Parcel 3251- Probe A	Aug 2012 %	Sep 2012 %
Methane	0.18 U	0.20 U
Methane, field	0/0	0/0



PROFILE VIEW

N.T.S.

Building Characteristics:
Two-story, residential building. 760 sq. ft. building with unfinished basement. Building is constructed of poured concrete, with siding. Basement floor contains sump and small drain. Building is insulated, with average air tightness. Heating provided by forced air natural gas furnace, and kerosene space heaters, Central A/C and fireplace present. Exterior openings - windows. Latex caulk, linoleum tile, latex paint, cleaners, degreasers, disinfectants, aerosol spray paints, and furniture polish are stored in the building. Painting of first floor and building exterior occurred within past year. Building occupants smoke. Smoke and food odors observed.

figure G.29

PARCEL 3251 - BUILDING 29
2232 EAST RIVER ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

CRA

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

38443-62(018)GN-WA039 APR 8/2013

Chemical Name	ODH Residential Screening Level Indoor Air (a)	Sub-Slab (b)
Benzene	0.4	4
Methane (%)	0.05	0.5

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.

0 20 50ft

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- GP06-09 DEEP LANDFILL GAS PROBE
- MW-214 MONITORING WELL LOCATION
- VAS-23 VAS SAMPLING LOCATION
- INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION

GP09-09	9/15/2009 ug/m3
Tetrachloroethene	2000 (B)

SAMPLE ID
SAMPLE DATE
SAMPLE UNIT
CRITERIA
CONCENTRATION VALUE
COMPOUND

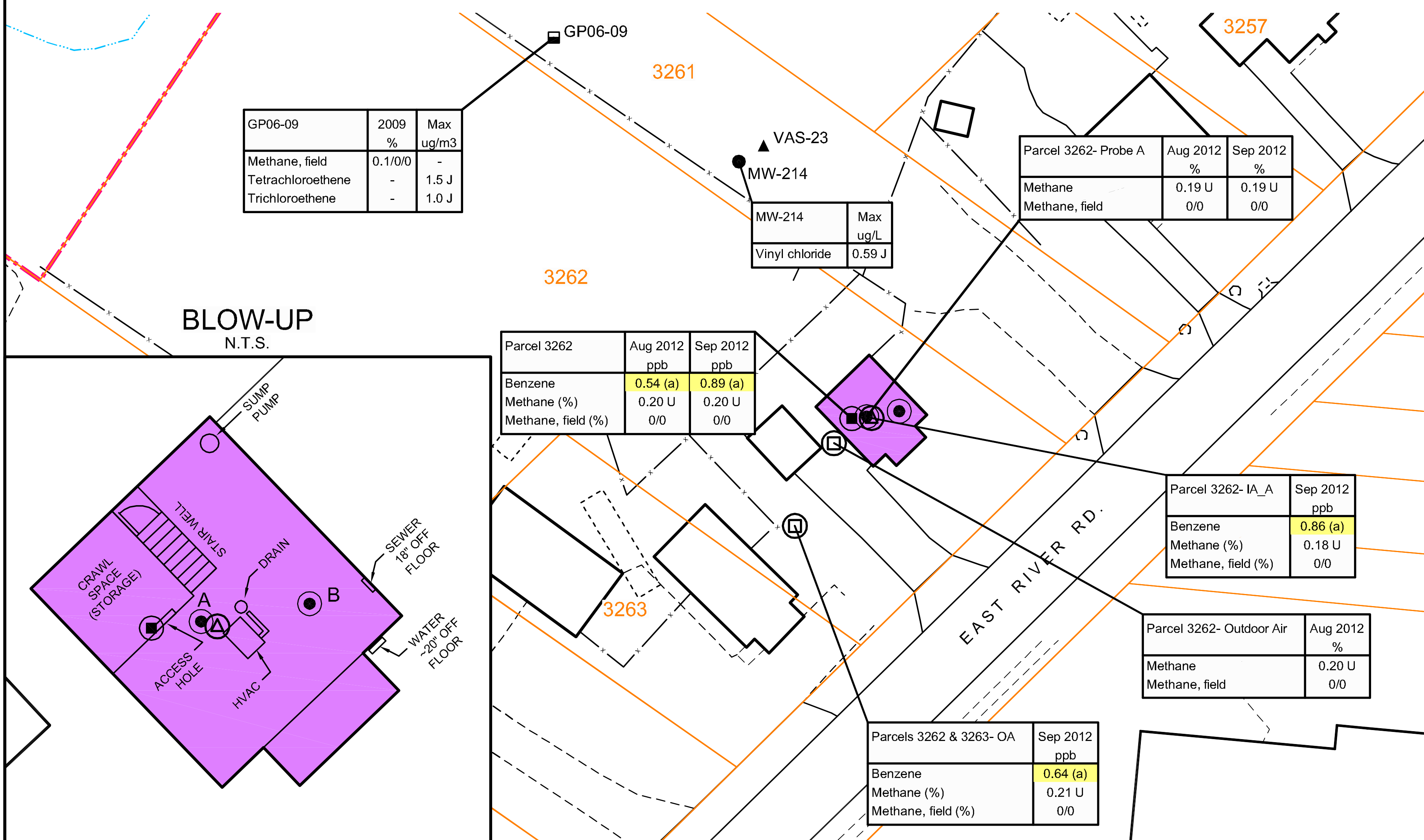
EXCEEDANCES

[1] INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE

1.8/1.8 RESULT/DUPLICATE RESULT

J ESTIMATED

U NOT DETECTED



GP06-09	2009 %	Max ug/m3
Methane, field	0.1/0/0	-
Tetrachloroethene	-	1.5 J
Trichloroethene	-	1.0 J

MW-214	Max ug/L
Vinyl chloride	0.59 J

Parcel 3262- Probe A	Aug 2012 %	Sep 2012 %
Methane	0.19 U	0.19 U
Methane, field	0/0	0/0

Parcel 3262	Aug 2012 ppb	Sep 2012 ppb
Benzene	0.54 (a)	0.89 (a)
Methane (%)	0.20 U	0.20 U
Methane, field (%)	0/0	0/0

Parcel 3262- IA_A	Sep 2012 ppb
Benzene	0.86 (a)
Methane (%)	0.18 U
Methane, field (%)	0/0

Parcel 3262- Outdoor Air	Aug 2012 %
Methane	0.20 U
Methane, field	0/0

Parcels 3262 & 3263- OA	Sep 2012 ppb
Benzene	0.64 (a)
Methane (%)	0.21 U
Methane, field (%)	0/0

PROFILE VIEW

N.T.S.

Building Characteristics:
Single-story, residential building. 625 sq. ft. building with unfinished basement and crawl space, constructed in the early 1950s of poured concrete, with an open sump and some cracks. Visible evidence of leakage through basement walls or floor. Building is insulated, not air tight. Exterior openings - utility pipe penetrations, wall openings. Air conditioning is provided by window units in the main floor front room. Animal and musty odors were observed. Latex paint, aerosol paints, degreasers, caulking, and insecticides are stored in the building.

figure G.30

PARCEL 3262 - BUILDING 33
2373 EAST RIVER ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

CRA

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

LEGEND

APPROXIMATE SITE BOUNDARY

EDGE OF WATER

PARCEL BOUNDARY

SUB SLAB SOIL VAPOR BUILDING LOCATION

INDOOR AIR SAMPLE LOCATION

SUB SLAB SOIL VAPOR SAMPLE LOCATION

OUTDOOR AIR SAMPLE LOCATION

NV NO VALUE

0 20 50ft

Parcels 3262 & 3263- OA	Sep 2012
	ug/m3
Benzene [1]	2.0 (e)
Methane (%)	0.21 U
Methane, field (%)	0/0

SAMPLE ID
SAMPLE DATE
SAMPLE UNIT
CRITERIA
CONCENTRATION VALUE
COMPOUND

EXCEEDANCES

[1] INDOOR AIR EXCEEDANCES MAY NOT BE DUE TO VAPOR INTRUSION, BASED ON MULTIPLE LINES OF EVIDENCE

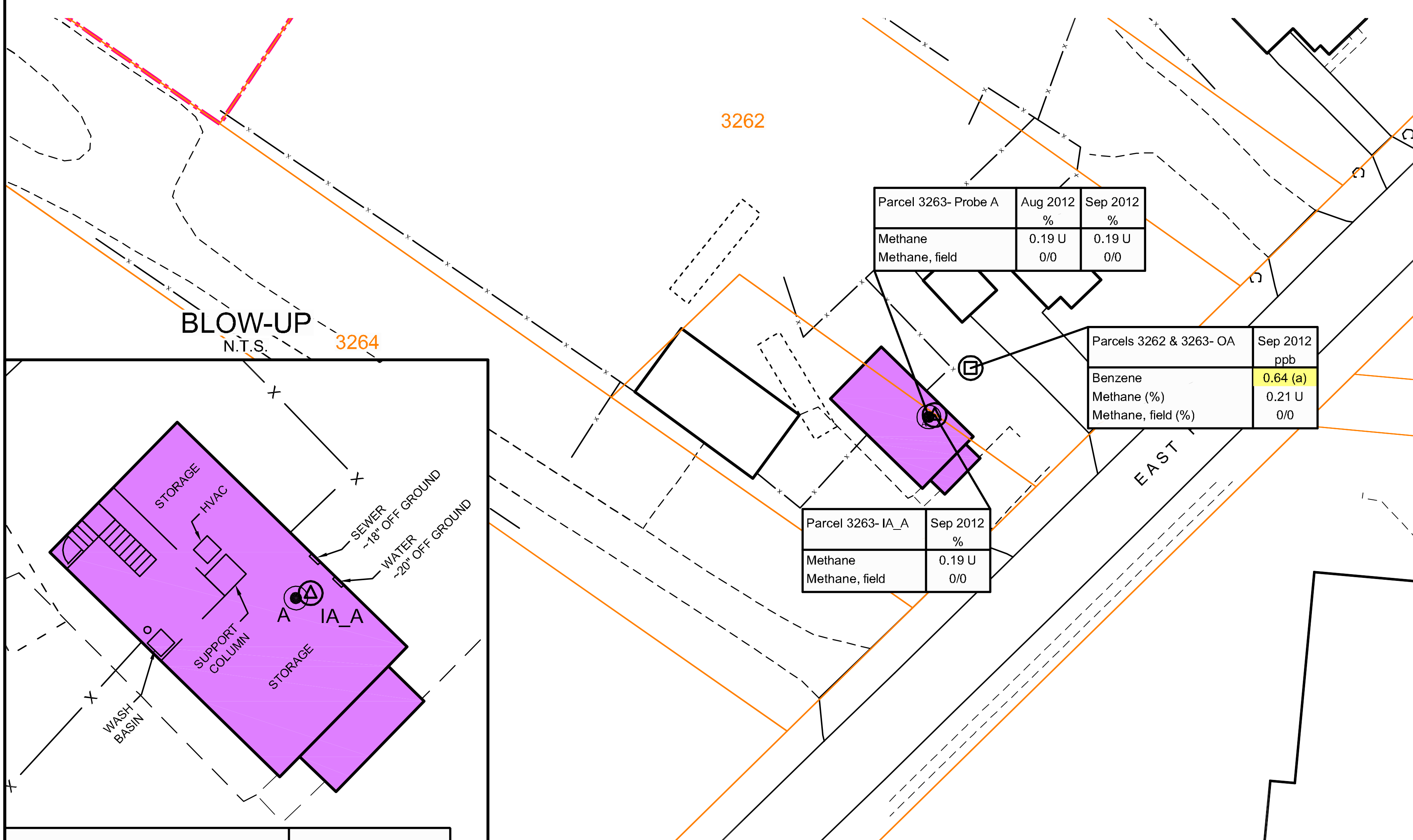
1.8/1.8 RESULT/DUPLICATE RESULT

J ESTIMATED

U NOT DETECTED

Chemical Name	ODH Residential Screening Level	
	Indoor Air (a)	Sub-Slab (b)
Benzene	0.4	4
Methane (%)	0.05	0.5

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



Parcel 3263- Probe A	Aug 2012	Sep 2012
	%	%
Methane	0.19 U	0.19 U
Methane, field	0/0	0/0

Parcels 3262 & 3263- OA	Sep 2012
	ppb
Benzene	0.64 (a)
Methane (%)	0.21 U
Methane, field (%)	0/0

Parcel 3263- IA_A	Sep 2012
	%
Methane	0.19 U
Methane, field	0/0

PROFILE VIEW

N.T.S.

Building Characteristics:
Single-story, residential building. 590 sq. ft. building with unfinished basement. Building is constructed of poured concrete, foundation walls in poor condition. Building is insulated, not air tight. Visible evidence of leakage through basement walls or floor. Heating provided by natural gas furnace. Carpet and linoleum were installed within last six months on first floor, painting in basement and first floor occurred within past year. New carpet, mastic, caulk, etc. odors were observed. Latex caulk, linoleum tile, latex paint, cleaners, degreasers, disinfectants, solvents, and caulking are stored in the building. Exterior openings - utility pipe penetrations, wall openings, and windows.

figure G.31

PARCEL 3263 - BUILDING 34
2391 EAST RIVER ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

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LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOR BUILDING LOCATION
- MW-210 — MONITORING WELL LOCATION
- GP11-09 — DEEP LANDFILL GAS PROBE
- VAS-21 — VAS SAMPLING LOCATION
- CRAWL SPACE AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION
- NV — NO VALUE

GP09-09	9/15/2009 ug/m3
Tetrachloroethene	2000 (B)

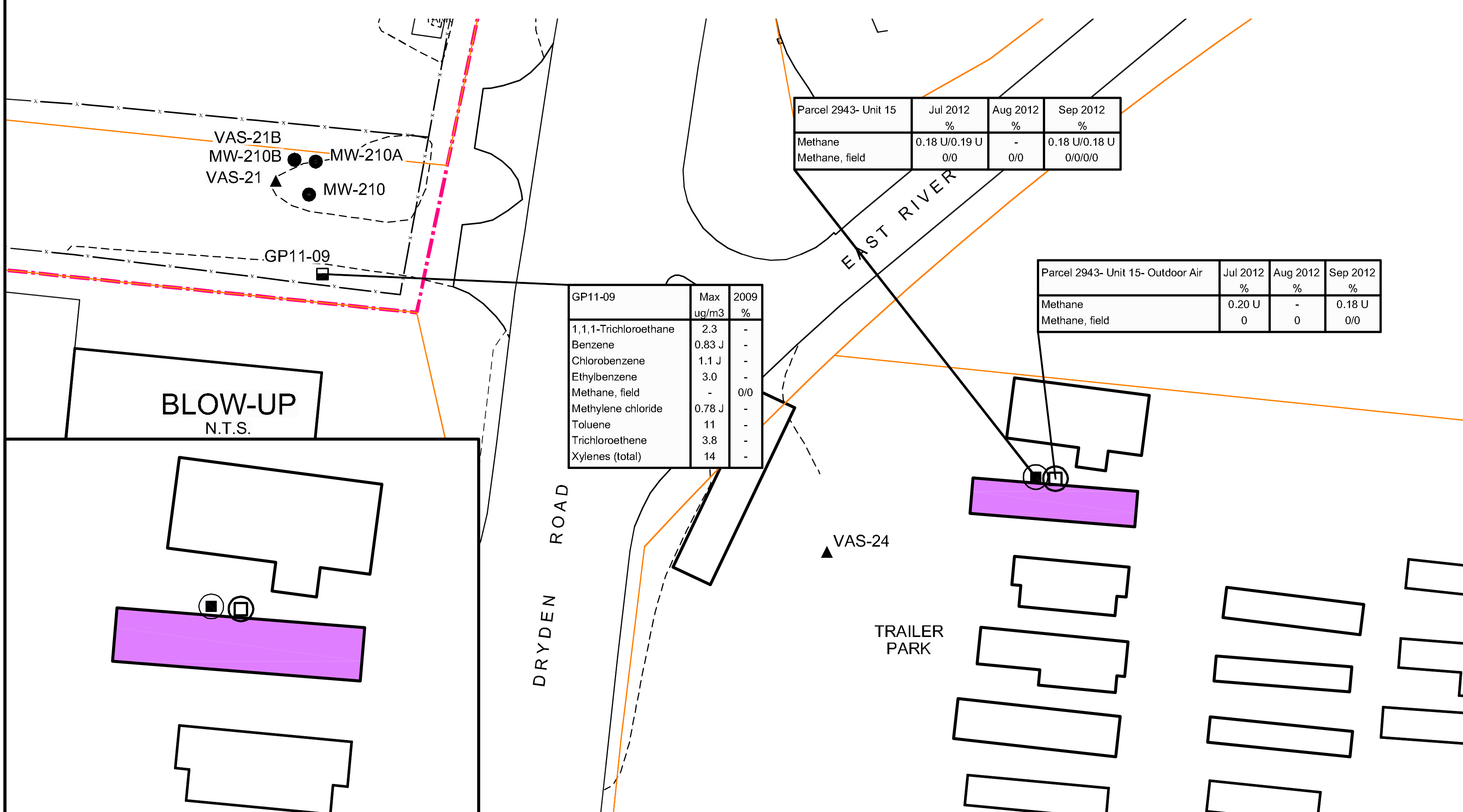
- SAMPLE ID
- SAMPLE DATE
- SAMPLE UNIT
- CRITERIA
- CONCENTRATION VALUE
- COMPOUND
- EXCEEDANCES
- Max — MAXIMUM DETECTED CONCENTRATION OF SELECTED COMPOUNDS IN UPPER AQUIFER ZONE SOIL GAS, SOIL, AND GROUNDWATER LOCATIONS SAMPLED FROM 2008 TO 2012.

0 20 60ft

Chemical Name	ODH Residential Screening Level Indoor Air (a)	Sub-Slab (b)
Methane (%)	0.05	0.5

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.

- 1.8/1.8 — RESULT/DUPLICATE RESULT
- J — ESTIMATED
- U — NOT DETECTED



Parcel 2943- Unit 15	Jul 2012 %	Aug 2012 %	Sep 2012 %
Methane	0.18 U/0.19 U	-	0.18 U/0.18 U
Methane, field	0/0	0/0	0/0/0/0

Parcel 2943- Unit 15- Outdoor Air	Jul 2012 %	Aug 2012 %	Sep 2012 %
Methane	0.20 U	-	0.18 U
Methane, field	0	0	0/0

GP11-09	Max ug/m3	2009 %
1,1,1-Trichloroethane	2.3	-
Benzene	0.83 J	-
Chlorobenzene	1.1 J	-
Ethylbenzene	3.0	-
Methane, field	-	0/0
Methylene chloride	0.78 J	-
Toluene	11	-
Trichloroethene	3.8	-
Xylenes (total)	14	-

PROFILE VIEW

N.T.S.

Building Characteristics:
Single-story residential trailer, with crawl space enclosed by skirting, over a concrete pad. Insulated trailer. Central A/C present. Exterior openings - vents, utility pipe penetrations, windows, doors.

figure G.32

PARCEL 2943 - UNIT 15, BUILDING 35
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

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LEGEND

APPROXIMATE SITE BOUNDARY
EDGE OF WATER
PARCEL BOUNDARY
SUB SLAB SOIL VAPOR BUILDING LOCATION
CRAWL SPACE AIR SAMPLE LOCATION
OUTDOOR AIR SAMPLE LOCATION
NV NO VALUE

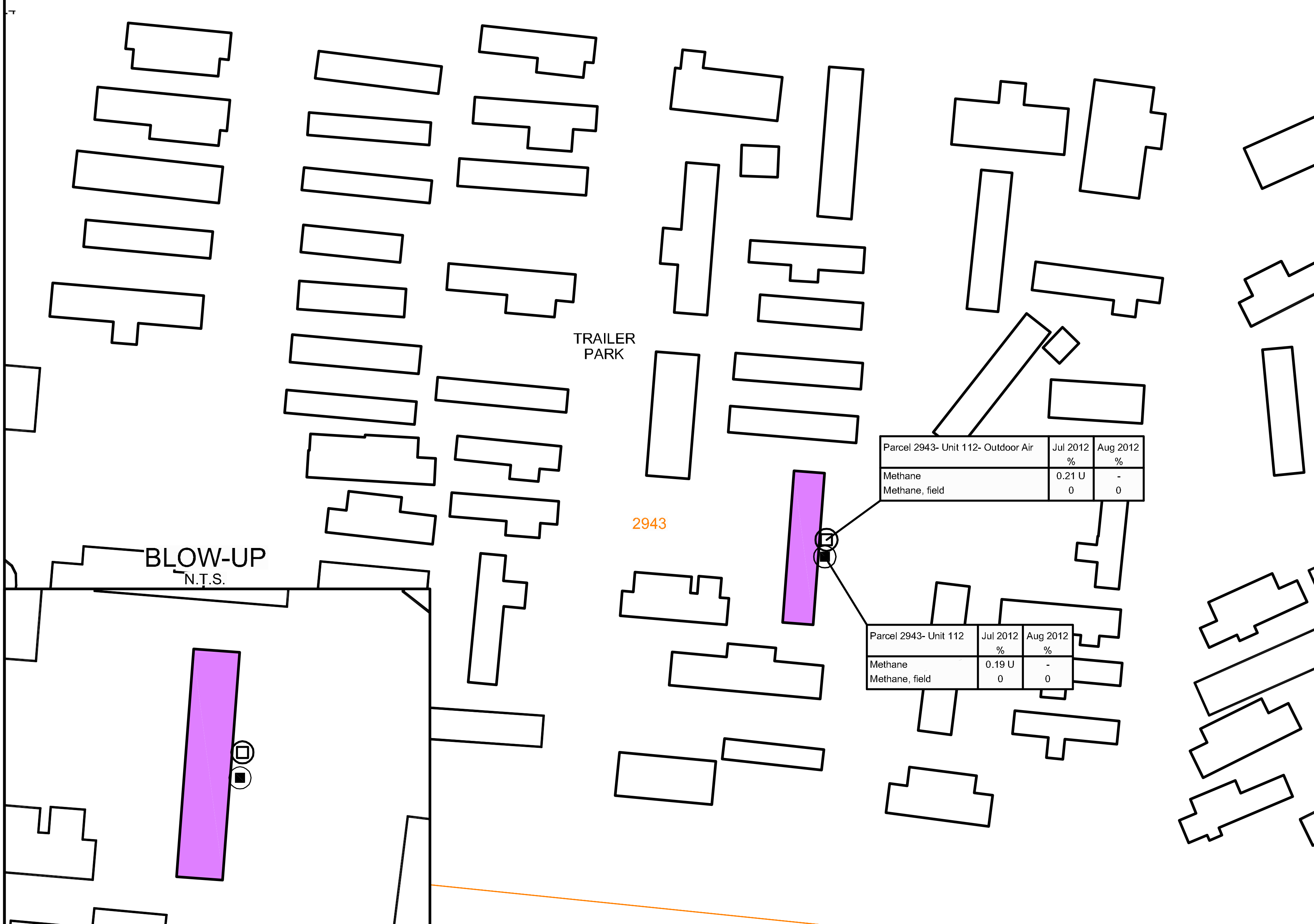
0 20 60ft

GP09-09	9/15/2009 ug/m3
Tetrachloroethene	2000 (B)

SAMPLE ID
SAMPLE DATE
SAMPLE UNIT
CRITERIA
CONCENTRATION VALUE
COMPOUND
U NOT DETECTED

Chemical Name	ODH Residential Screening Level Indoor Air (a)	ODH Residential Screening Level Sub-Slab (b)
Methane (%)	0.05	0.5

NOTES:
METHANE CONCENTRATION SHOWN IN UNITS OF %.



Parcel 2943- Unit 112- Outdoor Air	Jul 2012 %	Aug 2012 %
Methane	0.21 U	-
Methane, field	0	0

Parcel 2943- Unit 112	Jul 2012 %	Aug 2012 %
Methane	0.19 U	-
Methane, field	0	0

PROFILE VIEW
N.T.S.

Building Characteristics:
Single-story residential trailer, with crawl space enclosed by skirting, over a concrete pad. Insulated trailer. Central A/C present. Exterior openings - vents, utility pipe penetrations, windows, doors.

figure G.33

PARCEL 2943 - UNIT 112, BUILDING 36
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

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TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3207, Bldg 23, Probe A*	*Parcel 3207, Bldg 23, Probe A*	*Parcel 3207, Bldg 23, Probe A*	*Parcel 3207, Bldg 23, Probe B*	*Parcel 3207, Bldg 23, Probe B*	*Parcel 3207, Bldg 23, Probe B*	*Parcel 3207, Bldg 23, Probe C*	*Parcel 3207, Bldg 23, Probe C*	*Parcel 3207, Bldg 23, Probe C*	*Parcel 3207, Bldg 23, Probe C*	*Parcel 3207, Bldg 23, Probe D*	*Parcel 3207, Bldg 23, Probe D*
Sample Location:				*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*
Owner / Tenant:				*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*
Sample ID:				*SS-38443-010712-JC-032*	*SS-38443-031012-JC-132*	*SS-38443-081112-GL-072*	*SS-38443-010712-JC-034*	*SS-38443-031012-JC-135*	*SS-38443-081112-GL-073*	*SS-38443-010712-JC-033*	*SS-38443-031012-JC-136*	*SS-38443-081112-GL-074*	*SS-38443-081112-GL-075*	*SS-38443-010712-JC-030*	*SS-38443-010712-JC-029*
Sample Date:				*1/7/2012*	*3/10/2012*	*8/11/2012*	*1/7/2012*	*3/10/2012*	*8/11/2012*	*1/7/2012*	*3/10/2012*	*8/11/2012*	*8/11/2012*	*1/7/2012*	*1/7/2012*
													Duplicate		*Duplicate*
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*												
Volatile Organic Compounds															
1,1,1-Trichloroethane	ppb	NC	NC	0.39	0.37	2.9	0.18 U	0.037 J	0.074 J	0.29 J	0.33	0.39 J	0.41	0.10 U	0.10 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.040 U	0.061 U	0.12 U	0.20 U	0.061 U	0.061 U	0.12 U	0.061 U	0.12 U	0.12 U	0.12 U	0.12 U
1,1,2-Trichloroethane	ppb	NC	NC	0.019 U	0.054 U	0.11 U	0.095 U	0.054 U	0.054 U	0.057 U	0.054 U	0.11 U	0.11 U	0.057 U	0.057 U
1,1-Dichloroethane	ppb	160	1600	0.035 U	0.026 U	0.060 J	0.18 U	0.026 U	0.026 U	0.10 U	0.026 U	0.052 U	0.052 U	0.10 U	0.10 U
1,1-Dichloroethene	ppb	NC	NC	0.030 U	0.032 U	0.081 J	0.15 U	0.032 U	0.032 U	0.090 U	0.032 U	0.064 U	0.064 U	0.090 U	0.090 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.050 U	0.098 UJ	0.20 UJ	0.25 U	0.098 UJ	0.098 UJ	0.15 U	0.098 UJ	0.20 UJ	0.20 UJ	0.15 U	0.15 U
1,2,4-Trimethylbenzene	ppb	NC	NC	4.4	3.3	8.9	0.26 U	0.063 U	0.063 U	0.60	0.063 U	1.2	1.3	0.16 U	0.16 U
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.018 U	0.044 U	0.088 U	0.090 U	0.044 U	0.044 U	0.054 U	0.044 U	0.088 U	0.088 U	0.054 U	0.054 U
1,2-Dichlorobenzene	ppb	NC	NC	0.048 U	0.070 U	0.14 U	0.24 U	0.070 U	0.070 U	0.14 U	0.070 U	0.14 U	0.14 U	0.14 U	0.14 U
1,2-Dichloroethane	ppb	NC	NC	0.031 U	0.047 U	0.19 J	0.16 U	0.047 U	0.047 U	0.093 U	0.054 J	0.094 U	0.094 U	0.093 U	0.093 U
1,2-Dichloroethene (total)	ppb	NC	NC	0.061 J	-	-	0.070 U	-	-	0.042 U	-	-	-	0.042 U	0.042 U
1,2-Dichloropropane	ppb	NC	NC	0.014 U	0.052 U	0.10 U	0.070 U	0.052 U	0.052 U	0.042 U	0.052 U	0.10 U	0.10 U	0.042 U	0.042 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.032 U	0.064 U	0.16 U	0.032 U	0.032 U	0.096 U	0.032 U	0.064 U	0.064 U	0.096 U	0.096 U
1,3,5-Trimethylbenzene	ppb	NC	NC	5.2	7.0	17	0.26 U	0.065 U	0.065 U	1.7	0.17 J	2.9	2.6	0.15 U	0.15 U
1,3-Butadiene	ppb	NC	NC	0.010 U	0.064 U	0.13 U	0.050 U	0.064 U	0.064 U	0.030 U	0.064 U	0.13 U	0.13 U	0.030 U	0.030 U
1,3-Dichlorobenzene	ppb	NC	NC	0.044 U	0.065 U	0.13 U	0.22 U	0.065 U	0.065 U	0.13 U	0.065 U	0.13 U	0.13 U	0.13 U	0.13 U
1,4-Dichlorobenzene	ppb	NC	NC	0.44	0.064 U	0.13 U	0.22 U	0.064 U	0.064 U	0.13 U	0.064 U	0.13 U	0.13 U	0.13 U	0.13 U
1,4-Dioxane	ppb	NC	NC	0.088 U	0.080 U	0.21 J	0.44 U	0.080 UJ	0.080 U	0.47 J	0.27 J	0.16 U	0.16 U	0.26 U	0.26 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.48	0.32 J	1.6	0.18 U	0.039 U	0.039 U	1.6	1.1	1.8	2.0	0.11 U	0.11 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	3.1	1.0	0.67 J	0.085 U	0.33 J	0.25 J	1.2 J	0.53 J	0.76 J	0.70 J	0.55 J	0.64 J
2-Chlorotoluene	ppb	NC	NC	0.047 U	0.063 U	0.13 U	0.24 U	0.063 U	0.063 U	0.14 U	0.063 U	0.13 U	0.13 U	0.14 U	0.14 U
2-Hexanone	ppb	NC	NC	0.039 U	0.13 J	0.12 U	0.20 U	0.058 UJ	0.058 U	0.12 U	0.058 U	0.12 U	0.12 U	0.12 U	0.12 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.29	0.23 J	0.76 J	0.24 U	0.064 U	0.064 U	0.63	0.064 U	0.35 J	0.33 J	0.14 U	0.14 U
4-Ethyl toluene	ppb	NC	NC	1.4	1.4	4.0	0.23 U	0.066 U	0.066 U	0.95	0.11 J	0.95	0.91	0.14 U	0.14 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.026 U	0.045 U	0.090 U	0.13 U	0.045 UJ	0.045 U	0.078 U	0.045 U	0.090 U	0.090 U	0.078 U	0.078 U
Acetone	ppb	NC	NC	23	13	17	8.1 J	5.5	5.0	13 J	7.8	13	12	21	18
Allyl chloride	ppb	NC	NC	0.019 U	0.048 U	0.096 U	0.095 U	0.048 U	0.048 U	0.057 U	0.048 U	0.096 U	0.096 U	0.057 U	0.057 U
Benzene	ppb	20	200	2.3	1.9	8.9	0.090 U	0.056 U	0.056 U	3.9	3.1	4.8	5.1	0.054 U	0.054 U
Benzyl chloride	ppb	NC	NC	0.046 UJ	0.078 U	0.16 U	0.23 U	0.078 U	0.078 U	0.14 U	0.078 U	0.16 U	0.16 U	0.14 UJ	0.14 UJ
Bromodichloromethane	ppb	NC	NC	0.028 U	0.044 U	0.088 U	0.14 U	0.044 U	0.044 U	0.084 U	0.044 U	0.088 U	0.088 U	0.084 U	0.084 U
Bromoform	ppb	NC	NC	0.019 U	0.048 U	0.096 U	0.095 U	0.048 U	0.048 U	0.057 U	0.048 U	0.096 U	0.096 U	0.057 U	0.057 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.012 U	0.032 U	0.064 U	0.060 U	0.032 U	0.032 U	0.036 U	0.032 U	0.064 U	0.064 U	0.036 U	0.036 U
Butane	ppb	NC	NC	26	15	92	0.055 U	0.19 J	0.082 J	29	21	38	44	12	9.3
Carbon disulfide	ppb	NC	NC	8.9	0.068 J	0.25 J	0.33 U	0.031 U	0.031 U	0.71 J	0.12 J	0.22 J	0.45 J	1.0 J	0.66 J
Carbon tetrachloride	ppb	NC	NC	0.058 J	0.058 J	0.078 J	0.17 U	0.041 J	0.060 J	0.099 U	0.038 U	0.076 U	0.076 U	0.099 U	0.099 U
Chlorobenzene	ppb	NC	NC	0.020 U	0.049 U	0.35 J	0.10 U	0.049 U	0.049 U	0.060 U	0.049 U	0.14 J	0.15 J	0.060 U	0.060 U
Chlorodifluoromethane	ppb	NC	NC	0.034 U	0.55	1.6	1.7 J	1.5	9.4	0.76 J	1.1	7.6	7.9	0.10 U	0.10 U
Chloroethane	ppb	NC	NC	0.25 J	0.19 J	0.58	0.080 U	0.035 U	0.035 U	0.048 U	0.064 J	0.086 J	0.088 J	0.074 J	0.048 U
Chloroform (Trichloromethane)	ppb	800	8000	0.031 U	0.039 J	0.16 J	0.16 U	0.038 U	0.038 U	0.093 U	0.048 J	0.10 J	0.11 J	0.093 U	0.093 U
Chloromethane (Methyl chloride)	ppb	NC	NC	0.24 J	0.16 U	0.32 U	0.065 U	0.16 U	0.16 U	0.039 U	0.16 U	0.32 U	0.32 U	0.20 J	0.039 U
cis-1,2-Dichloroethene	ppb	370	3700	0.061 J	0.060 U	0.14 J	0.070 U	0.060 U	0.060 U	0.042 U	0.060 U	0.12 U	0.12 U	0.042 U	0.042 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.016 U	0.074 U	0.15 U	0.080 U	0.074 U	0.074 U	0.048 U	0.074 U	0.15 U	0.15 U	0.048 U	0.048 U
Cyclohexane	ppb	NC	NC	2.2	2.1	11	0.20 U	0.040 U	0.040 U	3.9	3.3	5.8	6.7	0.12 U	0.12 U
Cymene (p-Isopropyltoluene)	ppb	NC	NC	1.3	0.23	0.92	0.24 U	0.057 U	0.057 U	1.1	0.10 J	0.67	0.59	0.14 U	0.14 U
Dibromochloromethane	ppb	NC	NC	0.021 U	0.042 U	0.084 U	0.11 U	0.042 U	0.042 U	0.063 U	0.042 U	0.084 U	0.084 U	0.063 U	0.063 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.72	0.48	0.73	0.54 J	0.38	0.54	1.0 J	0.97	0.58	0.62	0.58 J	0.46 J
Ethylbenzene	ppb	2500	25000	1.3	0.84	3.0	0.11 U	0.068 U	0.068 U	1.4	0.93	1.6	1.6	0.066 U	0.066 U
Hexachlorobutadiene	ppb	NC	NC	0.065 U	0.078 U	0.16 UJ	0.33 U	0.078 UJ	0.078 U	0.19 U	0.078 U	0.16 UJ	0.16 UJ	0.19 U	0.19 U
Hexane	ppb	NC	NC	2.7	1.8	8.1	0.13 U	0.045 J	0.051 J	5.6	3.3	5.3	5.8	0.12 J	0.27 J
Isopropyl alcohol	ppb	NC	NC	2.7 J	9.7	0.088 U	0.19 U	1.8 J	0.23 J	0.11 U	4.7	0.71 J	0.67 J	1.5 J	0.11 U
Isopropyl benzene	ppb	NC	NC	4.1	3.5	13	0.16 U	0.060 U	0.060 U	0.73	0.22 J	0.63 J	0.59 J	0.093 U	0.093 U
m&p-Xylenes	ppb	2000	20000	4.6	3.6	14	0.24 U	0.12 U	0.12 U	3.9	1.2	6.0	5.9	0.14 U	0.14 U
Methyl methacrylate	ppb	NC	NC	0.76	0.079 U	0.16 U	0.065 U	0.079 U	0.079 U	1.3 J	0.079 U	0.16 U	0.16 U	0.039 U	0.039 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.016 U	0.17 U	0.34 U	0.080 U	0.17 U	0.17 U	0.048 U	0.17 U	0.34 U	0.34 U	0.048 U	0.048 U
Methylene chloride	ppb	NC	NC	0.18 U	0.26 J	0.090 U	0.45 U	0.37 J	0.045 U	0.32 U	0.59	0.090 U	0.090 U	0.19 U	0.19 J
Naphthalene	ppb	29	NC	2.6 J	0.26 J	0.18 UJ	0.43 U	0.090 UJ	0.090 UJ	0.29 J	0.090 UJ	0.18 UJ	0.18 UJ	0.26 UJ	0.26 UJ
N-Butylbenzene	ppb	NC	NC	0.055 U	0.92	2.2	0.28 U	0.046 U	0.046 U	0.16 U	0.046 U	0.59 J	0.50 J	0.16 U	0.16 U
N-Decane	ppb	NC	NC	-	-	1.5 J	-	-	0.056 UJ	-	-	0.35 J	0.92 J	-	-
N-Dodecane	ppb	NC	NC	-	-	0.30 J	-	-	0.17 J	-	-	0.17 J	0.16 J	-	-
N-Heptane	ppb	NC	NC	1.7	0.81	1.9	0.050 U	0.047 U	0.047 U	2.6	1.5	1.1	1.3	0.030 U	0.18 J
Nonane	ppb	NC	NC	-	-	2.0	-	-	0.043 U	-	-	0.43 J	0.47 J	-	-
N-Propylbenzene	ppb	NC	NC	0.35	0.23 J	0.83	0.25 U	0.056 U	0.056 U	0.61	0.056 U	0.31 J	0.30 J	0.15 U	0.15 U
N-Undecane	ppb	NC	NC	-	-	0.12 U	-	-	0.062 U	-	-	0.12 U	0.12 U	-	-
Octane	ppb	NC	NC	-	-	0.66 J	-	-	0.036 U	-	-	0.089 J	0.11 J	-	-
o-Xylene	ppb	2000	20000	4.8	4.2	16	0.11 U	0.061 U	0.061 U	4.1	0.73	6.8	6.5	0.066 U	0.066 U
Pentane	ppb	NC	NC	-	-	32	-	-	0.21 J	-	-	22	23	-	-
Styrene	ppb	NC	NC	0.030 U	0.058 U	0.12 U	0.15 U	0.058 U	0.058 U	0.090 U	0.058 U	0.12 U	0.12 U	0.090 U	0.090 U
tert-Butyl alcohol	ppb	NC	NC	5.9	4.1	9.8	0.36 U	0.22 J	0.057 J	6.2 J	7.0	11	11	0.21 U	0.21 U
tert-Butylbenzene	ppb	NC	NC	0.047 U	0.35 J	0.13 U	0.24 U	0.066 U	0.066 U	0.14 U	0.066 U	0.13 U	0.13 U	0.14 U	0.14 U

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3207, Bldg 23, Probe A*	*Parcel 3207, Bldg 23, Probe A*	*Parcel 3207, Bldg 23, Probe A*	*Parcel 3207, Bldg 23, Probe B*	*Parcel 3207, Bldg 23, Probe B*	*Parcel 3207, Bldg 23, Probe B*	*Parcel 3207, Bldg 23, Probe C*	*Parcel 3207, Bldg 23, Probe C*	*Parcel 3207, Bldg 23, Probe C*	*Parcel 3207, Bldg 23, Probe C*	*Parcel 3207, Bldg 23, Probe D*	*Parcel 3207, Bldg 23, Probe D*
Sample Location:				*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*
Owner / Tenant:				*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*
Sample ID:				*SS-38443-010712-JC-032*	*SS-38443-031012-JC-132*	*SS-38443-081112-GL-072*	*SS-38443-010712-JC-034*	*SS-38443-031012-JC-135*	*SS-38443-081112-GL-073*	*SS-38443-010712-JC-033*	*SS-38443-031012-JC-136*	*SS-38443-081112-GL-074*	*SS-38443-081112-GL-075*	*SS-38443-010712-JC-030*	*SS-38443-010712-JC-029*
Sample Date:				*1/7/2012*	*3/10/2012*	*8/11/2012*	*1/7/2012*	*3/10/2012*	*8/11/2012*	*1/7/2012*	*3/10/2012*	*8/11/2012*	*8/11/2012*	*1/7/2012*	*1/7/2012*
													Duplicate		*Duplicate*
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*												
Tetrachloroethene	ppb	250	2500	3.0	3.0	6.6	1.3	1.1	2.8	3.8	3.3	4.5	5.0	1.5	1.9
Tetrahydrofuran	ppb	NC	NC	1.3 J	1.4	0.16 J	0.090 U	0.063 U	0.063 U	0.68 J	2.5	0.48 J	0.53 J	0.054 U	0.054 U
Toluene	ppb	NC	NC	5.3	4.8	18	0.090 U	0.14 J	0.087 J	9.8	8.5	11	12	0.38 J	0.25 J
trans-1,2-Dichloroethene	ppb	NC	NC	0.032 U	0.050 U	0.10 U	0.16 U	0.050 U	0.050 U	0.096 U	0.050 U	0.10 U	0.10 U	0.096 U	0.096 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.020 U	0.048 U	0.096 U	0.10 U	0.048 U	0.048 U	0.060 U	0.048 U	0.096 U	0.096 U	0.060 U	0.060 U
Trichloroethene	ppb	20	200	1.0	0.81	2.8	0.15 U	0.051 J	0.41	0.98	0.90	1.2	1.4	0.49 J	0.48 J
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.48	0.44	1.7	0.33 J	0.31	0.46	1.3	1.3	0.71	0.79	0.28 J	0.25 J
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.082 J	0.074 J	0.12 J	0.050 U	0.063 J	0.085 J	0.11 J	0.15 J	0.082 J	0.095 J	0.068 J	0.065 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.019 U	0.035 U	0.070 U	0.095 U	0.035 U	0.035 U	0.057 U	0.035 U	0.070 U	0.070 U	0.057 U	0.057 U
Vinyl chloride	ppb	20	200	0.029 U	0.071 U	0.14 U	0.15 U	0.071 U	0.071 U	0.087 U	0.071 U	0.14 U	0.14 U	0.087 U	0.087 U
Xylenes (total)	ppb	NC	NC	9.4	-	-	0.11 U	-	-	8.0	-	-	-	0.066 U	0.066 U
Gases															
Methane	%	0.5	0.5	-	-	0.18 U	-	-	0.20 U	-	-	0.19 U	0.19 U	0.064 U	-
Field Parameter															
Methane, field (unfiltered)	%	0.5	0.5	0.0 / 0.0	-	-	0.0 / 0.0	-	-	0.0 / 0.0	-	-	-	0.0 / 0.0	0.0 / 0.0
Methane, field (filtered)	%	0.5	0.5	-	0.0 / 0	0 / 0	-	0.0 / 0.0	0 / 0	-	0.0 / 0.0	0 / 0	0 / 0	-	-

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
\- Concentration was greater than applicable criteria.

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				Parcel 3207, Bldg 23, Probe D	Parcel 3207, Bldg 23, Probe D	Parcel 3207, Bldg 23, Probe E	Parcel 3207, Bldg 23, Probe E	Parcel 3207, Bldg 23, Probe E	Parcel 3207, Bldg 24, Probe A	Parcel 3207, Bldg 24, Probe A	Parcel 3207, Bldg 24, Probe A	Parcel 3207, Bldg 24, Probe A	Parcel 3207, Bldg 24, Probe B	Parcel 3207, Bldg 24, Probe B	Parcel 3207, Bldg 24, Probe B
Sample Location:				2153 Dryden Road	2153 Dryden Road	2153 Dryden Road	2153 Dryden Road	2153 Dryden Road	2215 & 2219 East River Road	2215 & 2219 East River Road	2215 & 2219 East River Road	2215 & 2219 East River Road	2215 & 2219 East River Road	2215 & 2219 East River Road	2215 & 2219 East River Road
Owner/Tenant:				Globe Equipment	Globe Equipment	Globe Equipment	Globe Equipment	Globe Equipment	Globe Equipment	Globe Equipment	Globe Equipment	Globe Equipment	Globe Equipment	Globe Equipment	Globe Equipment
Sample ID:				SS-38443-031012-JC-138	SS-38443-081112-GL-076	SS-38443-010712-JC-031	SS-38443-031012-JC-139	SS-38443-081112-GL-077	SS-38443-010712-JC-035	SS-38443-031012-JC-141	SS-38443-031012-JC-142	SS-38443-081112-GL-083	SS-38443-010712-JC-041	SS-38443-031012-JC-143	SS-38443-031012-JC-153
Sample Date:				3/10/2012	8/11/2012	1/7/2012	3/10/2012	8/11/2012	1/7/2012	3/10/2012	3/10/2012	8/11/2012	1/7/2012	3/10/2012	3/10/2012
Parameter	Units	ODH Sub-Slab Screening Levels (Non-residential) a	ODH Sub-Slab Action Levels (Non-residential) b												
Volatile Organic Compounds															
1,1,1-Trichloroethane	ppb	NC	NC	0.030 U	0.17 J	0.10 U	0.054 J	0.080 J	0.18 U	0.28 J	-	0.26	3.6	3.3	-
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	0.12 U	0.12 U	0.061 U	0.061 U	0.20 U	0.12 U	-	0.061 U	0.14 U	0.061 U	-
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	0.11 U	0.057 U	0.054 U	0.054 U	0.095 U	0.11 U	-	0.054 U	0.067 U	0.054 U	-
1,1-Dichloroethane	ppb	160	1600	0.026 U	0.052 U	0.10 U	0.026 U	0.026 U	0.18 U	0.052 U	-	0.026 U	0.12 U	0.026 U	-
1,1-Dichloroethene	ppb	NC	NC	0.032 U	0.064 U	0.090 U	0.032 U	0.032 U	0.15 U	0.064 U	-	0.032 U	0.11 U	0.032 U	-
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 UJ	0.20 UJ	0.15 U	0.098 UJ	0.098 UJ	0.25 U	0.20 UJ	-	0.098 UJ	0.18 U	0.098 UJ	-
1,2,4-Trimethylbenzene	ppb	NC	NC	0.063 U	0.13 U	0.16 U	0.063 U	0.11 J	0.26 U	0.13 U	-	0.32	0.30 J	0.13 J	-
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	0.088 U	0.054 U	0.044 U	0.044 U	0.090 U	0.088 U	-	0.044 U	0.063 U	0.044 U	-
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	0.14 U	0.14 U	0.070 U	0.070 U	0.24 U	0.14 U	-	0.070 U	0.17 U	0.070 U	-
1,2-Dichloroethane	ppb	NC	NC	0.047 U	0.094 U	0.093 U	0.047 U	0.047 U	0.16 U	0.094 U	-	0.047 U	0.11 U	0.047 U	-
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	0.042 U	-	-	0.91 J	-	-	-	0.049 U	-	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	0.10 U	0.042 U	0.052 U	0.052 U	0.070 U	0.10 U	-	0.052 U	0.049 U	0.052 U	-
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.064 U	0.096 U	0.032 U	0.032 U	0.21 J	0.090 J	-	0.032 U	0.11 U	0.032 U	-
1,3,5-Trimethylbenzene	ppb	NC	NC	0.065 U	0.13 U	0.15 U	0.065 U	0.065 U	0.26 U	0.13 U	-	0.065 U	0.18 U	0.065 U	-
1,3-Butadiene	ppb	NC	NC	0.064 U	0.13 U	0.030 U	0.064 U	0.064 U	0.050 U	0.13 U	-	0.064 U	0.035 U	0.064 U	-
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	0.13 U	0.13 U	0.065 U	0.065 U	0.22 U	0.13 U	-	0.065 U	0.15 U	0.065 U	-
1,4-Dichlorobenzene	ppb	NC	NC	0.064 U	0.13 U	0.13 U	0.064 U	0.064 U	0.22 U	0.13 U	-	0.064 U	0.21 J	0.064 U	-
1,4-Dioxane	ppb	NC	NC	0.080 J	0.17 J	0.26 U	0.080 U	0.080 U	0.44 U	0.16 UJ	-	0.080 U	0.31 U	0.080 UJ	-
2,2,4-Trimethylpentane	ppb	NC	NC	0.039 U	0.078 U	0.11 U	0.039 U	0.039 U	0.18 U	0.078 U	-	0.039 U	0.13 U	0.039 U	-
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.62 J	0.85 J	0.42 J	0.20 U	0.88 J	0.085 U	0.40 U	-	1.0	7.0	0.27 J	-
2-Chlorotoluene	ppb	NC	NC	0.063 U	0.13 U	0.14 U	0.063 U	0.063 U	0.24 U	0.13 U	-	0.063 U	0.16 U	0.063 U	-
2-Hexanone	ppb	NC	NC	0.058 U	0.12 U	0.12 U	0.058 U	0.058 U	0.20 U	0.12 UJ	-	0.058 U	0.14 U	0.058 UJ	-
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	0.13 U	0.14 U	0.064 U	0.064 U	0.24 U	0.13 U	-	0.064 U	0.16 U	0.064 U	-
4-Ethyl toluene	ppb	NC	NC	0.066 U	0.13 U	0.14 U	0.066 U	0.066 U	0.23 U	0.13 U	-	0.066 U	0.16 U	0.066 U	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.071 J	0.090 U	0.078 U	0.045 U	0.045 U	0.13 U	0.090 UJ	-	2.6	0.25 J	0.045 UJ	-
Acetone	ppb	NC	NC	14	17	9.9 J	4.5 J	11	2.6 J	3.9 J	-	13	11 J	2.0 J	-
Allyl chloride	ppb	NC	NC	0.048 U	0.096 U	0.057 U	0.048 U	0.048 U	0.095 U	0.096 U	-	0.048 U	0.067 U	0.048 U	-
Benzene	ppb	20	200	0.066 J	0.18 J	0.054 U	0.056 U	0.066 J	0.090 U	0.11 U	-	0.099 J	0.063 U	0.056 U	-
Benzyl chloride	ppb	NC	NC	0.078 U	0.16 U	0.14 UJ	0.078 U	0.078 U	0.23 UJ	0.16 U	-	0.078 U	0.16 UJ	0.078 U	-
Bromodichloromethane	ppb	NC	NC	0.044 U	0.088 U	0.084 U	0.044 U	0.044 U	0.14 U	0.088 U	-	0.044 U	0.098 U	0.044 U	-
Bromoform	ppb	NC	NC	0.048 U	0.096 U	0.057 U	0.048 U	0.048 U	0.095 U	0.096 U	-	0.048 U	0.067 U	0.048 U	-
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	0.064 U	0.036 U	0.032 U	0.032 U	0.060 U	0.064 U	-	0.032 U	0.042 U	0.032 U	-
Butane	ppb	NC	NC	7.6	13	0.49 J	2.3	0.53	0.055 U	0.99	-	0.70	0.29 J	0.47	-
Carbon disulfide	ppb	NC	NC	0.54	0.84 J	0.28 J	0.031 U	0.22 J	1.6 J	0.23 J	-	0.22 J	11	0.18 J	-
Carbon tetrachloride	ppb	NC	NC	0.068 J	0.076 U	0.099 U	0.060 J	0.065 J	0.17 U	0.076 U	-	0.038 U	0.12 J	0.13 J	-
Chlorobenzene	ppb	NC	NC	0.049 U	0.098 U	0.060 U	0.049 U	0.049 U	0.10 U	0.098 U	-	0.049 U	0.070 U	0.049 U	-
Chlorodifluoromethane	ppb	NC	NC	0.71	6.5	0.10 U	1.1	8.9	0.17 U	0.57	-	0.99	0.12 U	0.44	-
Chloroethane	ppb	NC	NC	0.13 J	0.13 J	0.048 U	0.035 U	0.035 U	0.080 U	0.070 U	-	0.035 U	0.056 U	0.035 U	-
Chloroform (Trichloromethane)	ppb	800	8000	0.058 J	0.076 U	0.093 U	0.038 U	0.051 J	0.16 U	0.076 U	-	0.090 J	0.11 U	0.070 J	-
Chloromethane (Methyl chloride)	ppb	NC	NC	0.16 U	0.32 U	0.44 J	0.16 U	0.45 J	0.065 U	0.32 U	-	0.27 J	0.30 J	0.16 U	-
cis-1,2-Dichloroethene	ppb	370	3700	0.060 U	0.12 U	0.042 U	0.060 U	0.067 J	0.57 J	0.53	-	0.85	0.049 U	0.093 J	-
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	0.15 U	0.048 U	0.074 U	0.074 U	0.080 U	0.15 U	-	0.074 U	0.056 U	0.074 U	-
Cyclohexane	ppb	NC	NC	0.040 U	0.20 J	0.12 U	0.040 U	0.19 J	0.20 U	0.080 U	-	0.24 J	0.14 J	0.040 U	-
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.057 U	0.11 U	0.14 U	0.057 U	0.057 U	0.24 U	0.11 U	-	0.057 U	1.0	0.057 U	-
Dibromochloromethane	ppb	NC	NC	0.042 U	0.084 U	0.063 U	0.042 U	0.042 U	0.11 U	0.084 U	-	0.042 U	0.074 U	0.042 U	-
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.45	0.60	0.64 J	0.51	0.50	2.3 J	0.97	-	0.95	0.61 J	0.35	-
Ethylbenzene	ppb	2500	25000	0.068 U	0.14 U	0.066 U	0.068 U	0.096 J	0.11 U	0.14 U	-	0.68	0.24 J	0.068 U	-
Hexachlorobutadiene	ppb	NC	NC	0.078 U	0.16 UJ	0.19 U	0.078 U	0.078 UJ	0.33 U	0.16 UJ	-	0.078 UJ	0.23 U	0.078 UJ	-
Hexane	ppb	NC	NC	0.12 J	0.78 J	0.12 J	0.11 J	0.30 J	0.13 U	0.079 J	-	0.14 J	0.15 J	0.072 J	-
Isopropyl alcohol	ppb	NC	NC	3.1	1.2 J	1.4 J	1.7 J	0.29 J	0.19 U	0.60 J	-	0.34 J	4.4 J	0.33 J	-
Isopropyl benzene	ppb	NC	NC	0.060 U	0.12 U	0.093 U	0.060 U	0.060 U	0.16 U	0.12 U	-	0.060 U	0.11 U	0.060 U	-
m&p-Xylenes	ppb	2000	20000	0.12 U	0.24 U	0.14 U	0.12 U	0.25	0.24 U	0.24 U	-	2.5	0.41 J	0.12 U	-
Methyl methacrylate	ppb	NC	NC	0.079 U	0.16 U	0.039 U	0.079 U	0.079 U	0.065 U	0.16 U	-	0.079 U	0.046 U	0.079 U	-
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	0.34 U	0.048 U	0.17 U	0.17 U	0.080 U	0.34 U	-	0.17 U	0.056 U	0.17 U	-
Methylene chloride	ppb	NC	NC	0.24 J	11	0.31 U	0.44 J	2.1	0.065 U	0.64 J	-	0.045 U	0.24 U	0.32 J	-
Naphthalene	ppb	29	NC	0.090 UJ	0.18 UJ	0.26 UJ	0.090 UJ	0.090 UJ	0.43 U	0.18 UJ	-	0.090 UJ	0.87 J	0.090 UJ	-
N-Butylbenzene	ppb	NC	NC	0.046 U	0.092 U	0.16 U	0.046 U	0.046 U	0.28 U	0.092 U	-	0.046 U	0.19 U	0.046 U	-
N-Decane	ppb	NC	NC	-	0.11 J	-	-	0.18 J	-	0.11 U	-	0.14 J	-	-	-
N-Dodecane	ppb	NC	NC	-	0.23 J	-	-	0.16 J	-	0.16 UJ	-	0.14 J	-	-	-
N-Heptane	ppb	NC	NC	0.047 U	0.094 U	0.030 U	0.047 U	0.14 J	0.050 U	0.094 U	-	0.18 J	0.24 J	0.047 U	-
Nonane	ppb	NC	NC	-	0.086 U	-	-	0.10 J	-	0.086 U	-	0.055 J	-	-	-
N-Propylbenzene	ppb	NC	NC	0.056 U	0.11 U	0.15 U	0.056 U	0.056 U	0.25 U	0.11 U	-	0.056 U	0.18 U	0.056 U	-
N-Undecane	ppb	NC	NC	-	0.12 J	-	-	0.16 J	-	0.12 UJ	-	0.19 J	-	-	-
Octane	ppb	NC	NC	-	0.072 U	-	-	0.12 J	-	0.072 U	-	0.054 J	-	-	-
o-Xylene	ppb	2000	20000	0.061 U	0.12 U	0.066 U	0.061 U	0.090 J	0.11 U	0.12 U	-	1.4	0.16 J	0.061 U	-
Pentane	ppb	NC	NC	-	3.3	-	-	0.78 J	-	0.12 U	-	0.42 J	-	-	-
Styrene	ppb	NC	NC	0.058 U	0.12 J	0.090 U	0.058 U	0.058 U	0.15 U	0.12 U	-	0.78	0.11 U	0.058 U	-
tert-Butyl alcohol	ppb	NC	NC	2.1	1.0 J	0.21 U	0.12 J	0.038 UJ	0.36 U	0.12 J	-	0.038 UJ	0.25 U	0.12 J	-
tert-Butylbenzene	ppb	NC	NC	0.066 U	0.13 U	0.14 U	0.066 U	0.066 U	0.24 U	0.13 U	-	0.066 U	0.16 U	0.066 U	-

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3207, Bldg 23, Probe D*	*Parcel 3207, Bldg 23, Probe D*	*Parcel 3207, Bldg 23, Probe E*	*Parcel 3207, Bldg 23, Probe E*	*Parcel 3207, Bldg 23, Probe E*	*Parcel 3207, Bldg 24, Probe A*	*Parcel 3207, Bldg 24, Probe A*	*Parcel 3207, Bldg 24, Probe A*	*Parcel 3207, Bldg 24, Probe A*	*Parcel 3207, Bldg 24, Probe B*	*Parcel 3207, Bldg 24, Probe B*	*Parcel 3207, Bldg 24, Probe B*
Sample Location:				*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*
Owner / Tenant:				*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*
Sample ID:				*SS-38443-031012-JC-138*	*SS-38443-081112-GL-076*	*SS-38443-010712-JC-031*	*SS-38443-031012-JC-139*	*SS-38443-081112-GL-077*	*SS-38443-010712-JC-035*	*SS-38443-031012-JC-141*	*SS-38443-031012-JC-142*	*SS-38443-081112-GL-083*	*SS-38443-010712-JC-041*	*SS-38443-031012-JC-143*	*SS-38443-031012-JC-153*
Sample Date:				*3/10/2012*	*8/11/2012*	*1/7/2012*	*3/10/2012*	*8/11/2012*	*1/7/2012*	*3/10/2012*	*3/10/2012*	*8/11/2012*	*1/7/2012*	*3/10/2012*	*3/10/2012*
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*												
Tetrachloroethene	ppb	250	2500	1.3	3.3	0.85	1.4	1.5	25	30	-	39	90	73	-
Tetrahydrofuran	ppb	NC	NC	0.12 J	0.13 U	0.054 U	0.063 U	0.11 J	0.090 U	0.13 U	-	0.063 U	0.28 J	0.063 U	-
Toluene	ppb	NC	NC	0.17 J	0.94	0.18 J	0.17 J	0.67	0.16 J	0.19 J	-	1.9	0.55 J	0.14 J	-
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	0.10 U	0.096 U	0.050 U	0.050 U	0.34 J	0.27 J	-	0.37	0.11 U	0.050 U	-
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	0.096 U	0.060 U	0.048 U	0.048 U	0.10 U	0.096 U	-	0.048 U	0.070 U	0.048 U	-
Trichloroethene	ppb	20	200	0.36	0.98	0.37 J	0.40	1.2	8.2	7.7	-	10	$\boxed{37^{a}}$	$\boxed{30^{a}}$	-
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.28	0.95	0.29 J	0.37	0.51	3.0	2.5	-	4.3	0.39 J	0.35	-
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.064 J	0.091 J	0.072 J	0.074 J	0.075 J	0.050 U	0.11 J	-	0.15 J	0.11 J	0.090 J	-
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	0.070 U	0.057 U	0.035 U	0.035 U	0.095 U	0.070 U	-	0.035 U	0.067 U	0.035 U	-
Vinyl chloride	ppb	20	200	0.071 U	0.14 U	0.087 U	0.071 U	0.071 U	0.15 U	0.14 U	-	0.071 U	0.10 U	0.071 U	-
Xylenes (total)	ppb	NC	NC	-	-	0.066 U	-	-	0.11 U	-	-	-	0.57 J	-	-
Gases															
Methane	%	0.5	0.5	-	0.18 U	-	-	0.35 U	0.066 U	-	0.18 U	0.21 U	-	-	0.18 U
Field Parameter															
Methane, field (unfiltered)	%	0.5	0.5	-	-	0.0 / 0.0	-	-	0.0 / 0.0	-	-	-	0.0 / 0.0	-	-
Methane, field (filtered)	%	0.5	0.5	0.0 / 0.0	0 / 0	-	0.0 / 0.0	0 / 0	-	0 / 0.0	0.0 / 0	0 / 0	-	0 / 0.0	0.0 / 0 / 0 / 0.0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
$\boxed{}$ - Concentration was greater than applicable criteria.

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3207, Bldg 24, Probe B*	*Parcel 3207, Bldg 24, Probe C*	*Parcel 3207, Bldg 24, Probe C*	*Parcel 3207, Bldg 24, Probe C*	*Parcel 3207, Bldg 24, Probe C*	*Parcel 3207, Bldg 24, Probe C*	*Parcel 3207, Bldg 24, Probe D*	*Parcel 3207, Bldg 24, Probe D*	*Parcel 3207, Bldg 24, Probe D*	*Parcel 3207, Bldg 24, Probe E*	*Parcel 3207, Bldg 24, Probe E*	*Parcel 3207, Bldg 24, Probe E*
Sample Location:				*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*
Owner / Tenant:				*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*
Sample ID:				*SS-38443-081112-GL-085*	*SS-38443-010712-JC-039*	*SS-38443-010712-JC-040*	*SS-38443-031012-JC-146*	*SS-38443-031012-JC-147*	*SS-38443-081112-GL-086*	*SS-38443-010712-JC-038*	*SS-38443-031012-JC-149*	*SS-38443-081112-GL-088*	*SS-38443-010712-JC-036*	*SS-38443-031012-JC-150*	*SS-38443-081112-GL-090*
Sample Date:				*8/11/2012*	*1/7/2012*	*1/7/2012*	*3/10/2012*	*3/10/2012*	*8/11/2012*	*1/7/2012*	*3/10/2012*	*8/11/2012*	*1/7/2012*	*3/10/2012*	*8/11/2012*
						Duplicate									
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*												
Volatile Organic Compounds															
1,1,1-Trichloroethane	ppb	NC	NC	4.8	1.4	1.4	1.1	-	0.73	1.4 J	1.5	2.2	0.77	0.74	1.6
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	0.040 U	0.040 U	0.061 U	-	0.061 U	0.40 U	0.061 U	0.061 U	0.080 U	0.061 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	0.019 U	0.019 U	0.054 U	-	0.054 U	0.19 U	0.054 U	0.054 U	0.038 U	0.054 U	0.054 U
1,1-Dichloroethane	ppb	160	1600	0.026 U	0.035 U	0.035 U	0.026 U	-	0.026 U	0.35 U	0.026 U	0.026 U	0.070 U	0.026 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.032 U	0.030 U	0.030 U	0.032 U	-	0.032 U	0.30 U	0.032 U	0.032 U	0.060 U	0.032 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 UJ	0.050 U	0.050 U	0.098 UJ	-	0.098 UJ	0.50 U	0.098 UJ	0.098 UJ	0.10 U	0.098 UJ	0.098 UJ
1,2,4-Trimethylbenzene	ppb	NC	NC	1.9	0.052 U	0.052 U	0.063 U	-	0.85	0.52 U	0.063 U	0.063 U	0.10 U	0.063 U	0.084 J
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	0.018 U	0.018 U	0.044 U	-	0.044 U	0.18 U	0.044 U	0.044 U	0.036 U	0.044 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	0.048 U	0.048 U	0.070 U	-	0.070 U	0.48 U	0.070 U	0.070 U	0.096 U	0.070 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.047 U	0.031 U	0.031 U	0.047 U	-	0.047 U	0.31 U	0.047 U	0.047 U	0.062 U	0.047 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	0.014 U	0.014 U	-	-	-	0.14 U	-	-	0.028 U	-	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	0.014 U	0.014 U	0.052 U	-	0.052 U	0.14 U	0.052 U	0.052 U	0.028 U	0.052 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.032 U	-	0.032 U	0.32 U	0.032 U	0.032 U	0.064 U	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.065 U	0.051 U	0.051 U	0.065 U	-	0.065 U	0.51 U	0.065 U	0.065 U	0.10 U	0.065 U	0.065 U
1,3-Butadiene	ppb	NC	NC	0.064 U	0.010 U	0.010 U	0.064 U	-	0.064 U	0.10 U	0.064 U	0.064 U	0.020 U	0.064 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	0.044 U	0.044 U	0.065 U	-	0.065 U	0.44 U	0.065 U	0.065 U	0.088 U	0.065 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.064 U	0.044 U	0.049 J	0.064 U	-	0.064 U	0.44 U	0.064 U	0.064 U	0.088 U	0.064 U	0.069 J
1,4-Dioxane	ppb	NC	NC	0.080 U	0.088 U	0.088 U	0.080 UJ	-	0.080 U	0.88 U	0.080 UJ	0.080 U	0.18 U	0.080 UJ	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.039 U	0.036 U	0.036 U	0.039 U	-	0.039 U	0.36 U	0.039 U	0.039 U	0.072 U	0.039 U	0.80
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.50 J	0.72	0.63	0.37 J	-	0.59 J	0.17 U	0.20 U	0.40 J	0.86 J	0.26 J	0.78 J
2-Chlorotoluene	ppb	NC	NC	0.063 U	0.047 U	0.047 U	0.063 U	-	0.063 U	0.47 U	0.063 U	0.063 U	0.094 U	0.063 U	0.063 U
2-Hexanone	ppb	NC	NC	0.072 J	0.039 U	0.039 U	0.058 UJ	-	0.058 U	0.39 U	0.058 UJ	0.058 U	0.078 U	0.058 UJ	0.072 J
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	0.047 U	0.047 U	0.064 U	-	0.064 U	0.47 U	0.064 U	0.064 U	0.094 U	0.064 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.18 J	0.046 U	0.046 U	0.066 U	-	0.066 U	0.46 U	0.066 U	0.066 U	0.092 U	0.066 U	0.092 J
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.073 J	0.026 U	0.26 J	0.045 UJ	-	0.095 J	0.26 U	0.045 UJ	0.045 U	0.052 U	0.045 UJ	0.088 J
Acetone	ppb	NC	NC	4.1 J	3.5 J	3.3 J	3.3 J	-	4.7 J	4.7 J	1.9 J	3.3 J	3.4 J	2.4 J	7.3
Allyl chloride	ppb	NC	NC	0.048 U	0.019 U	0.019 U	0.048 U	-	0.048 U	0.19 U	0.048 U	0.048 U	0.038 U	0.048 U	0.048 U
Benzene	ppb	20	200	0.056 U	0.022 J	0.049 J	0.056 U	-	0.056 U	0.18 U	0.056 U	0.056 U	0.036 U	0.056 U	0.16 J
Benzyl chloride	ppb	NC	NC	0.078 U	0.046 UJ	0.046 UJ	0.078 U	-	0.078 U	0.46 UJ	0.078 U	0.078 U	0.092 UJ	0.078 U	0.078 U
Bromodichloromethane	ppb	NC	NC	0.044 U	0.028 U	0.028 U	0.044 U	-	0.044 U	0.28 U	0.044 U	0.044 U	0.056 U	0.044 U	0.044 U
Bromoform	ppb	NC	NC	0.048 U	0.019 U	0.019 U	0.048 U	-	0.048 U	0.19 U	0.048 U	0.048 U	0.038 U	0.048 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	0.012 U	0.012 U	0.032 U	-	0.032 U	0.12 U	0.032 U	0.032 U	0.024 U	0.032 U	0.032 U
Butane	ppb	NC	NC	0.10 J	0.25 J	0.43 J	0.34 J	-	0.23 J	0.11 U	0.93	0.31 J	0.41 J	0.64	0.22 J
Carbon disulfide	ppb	NC	NC	0.29 J	0.93	0.23 J	0.090 J	-	0.058 J	0.66 U	0.031 U	0.031 U	2.9	0.031 U	0.035 J
Carbon tetrachloride	ppb	NC	NC	0.31	0.071 J	0.072 J	0.060 J	-	0.11 J	0.33 U	0.038 U	0.038 U	0.066 U	0.038 U	0.038 U
Chlorobenzene	ppb	NC	NC	0.049 U	0.020 U	0.020 U	0.049 U	-	0.049 U	0.70 J	0.049 U	0.049 U	0.040 U	0.049 U	1.5
Chlorodifluoromethane	ppb	NC	NC	1.1	0.034 U	0.034 U	0.26	-	3.3	0.34 U	0.22	2.9	0.068 U	0.31	0.43
Chloroethane	ppb	NC	NC	0.035 U	0.016 U	0.016 U	0.035 U	-	0.035 U	0.16 U	0.035 U	0.035 U	0.032 U	0.035 U	0.039 J
Chloroform (Trichloromethane)	ppb	800	8000	0.075 J	0.031 U	0.031 U	0.038 U	-	0.038 U	0.31 U	0.038 U	0.038 U	0.062 U	0.038 U	0.038 U
Chloromethane (Methyl chloride)	ppb	NC	NC	0.30 J	0.25 J	0.078 J	0.16 U	-	0.19 J	0.13 U	0.16 U	0.16 U	0.20 J	0.16 U	0.44 J
cis-1,2-Dichloroethene	ppb	370	3700	0.060 U	0.014 U	0.014 U	0.060 U	-	0.060 U	0.14 U	0.060 U	0.060 U	0.028 U	0.060 U	0.086 J
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	0.016 U	0.016 U	0.074 U	-	0.074 U	0.16 U	0.074 U	0.074 U	0.032 U	0.074 U	0.074 U
Cyclohexane	ppb	NC	NC	0.040 U	0.083 J	0.097 J	0.040 U	-	0.056 J	0.39 U	0.040 U	0.051 J	0.078 U	0.040 U	0.073 J
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.086 J	0.048 U	0.048 U	0.057 U	-	0.057 U	0.48 U	0.057 U	0.057 U	0.096 U	0.057 U	0.057 U
Dibromochloromethane	ppb	NC	NC	0.042 U	0.021 U	0.021 U	0.042 U	-	0.042 U	0.21 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.66	0.67	0.76	0.18 J	-	3.2	0.60 J	0.29	1.3	0.71 J	0.17 J	0.51
Ethylbenzene	ppb	2500	25000	0.068 U	0.022 U	0.16 J	0.068 U	-	0.068 U	0.45 J	0.068 U	0.068 U	0.044 U	0.068 U	1.4
Hexachlorobutadiene	ppb	NC	NC	0.078 UJ	0.065 U	0.065 U	0.078 UJ	-	0.078 UJ	0.65 U	0.078 UJ	0.078 U	0.13 U	0.078 UJ	0.078 U
Hexane	ppb	NC	NC	0.037 J	0.080 J	0.18 J	0.045 J	-	0.13 J	0.26 U	0.032 U	0.13 J	0.059 J	0.058 J	0.20 J
Isopropyl alcohol	ppb	NC	NC	0.24 J	1.8 J	2.0 J	0.72 J	-	0.24 J	0.37 U	0.72 J	0.044 U	1.6 J	0.49 J	0.15 J
Isopropyl benzene	ppb	NC	NC	0.060 U	0.031 U	0.031 U	0.060 U	-	0.060 U	0.31 U	0.060 U	0.060 U	0.062 U	0.060 U	0.067 J
m&p-Xylenes	ppb	2000	20000	0.18 J	0.062 J	0.39 J	0.12 U	-	0.22	1.6 J	0.34	0.17 J	0.096 U	0.12 U	4.1
Methyl methacrylate	ppb	NC	NC	0.079 U	0.013 U	0.013 U	0.079 U	-	0.079 U	0.13 U	0.079 U	0.079 U	0.026 U	0.079 U	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	0.016 U	0.016 U	0.17 U	-	0.17 U	0.16 U	0.17 U	0.17 U	0.032 U	0.17 U	0.17 U
Methylene chloride	ppb	NC	NC	0.045 U	0.066 U	0.12 U	0.21 J	-	0.87	0.13 U	0.16 J	0.56	0.026 U	0.27 J	0.59
Naphthalene	ppb	29	NC	0.090 UJ	0.086 UJ	0.086 UJ	0.090 UJ	-	0.090 UJ	0.86 U	0.090 UJ	0.090 UJ	0.17 U	0.090 UJ	0.090 UJ
N-Butylbenzene	ppb	NC	NC	0.092 J	0.055 U	0.055 U	0.046 U	-	0.24 J	0.55 U	0.046 U	0.046 U	0.11 U	0.046 U	0.046 U
N-Decane	ppb	NC	NC	1.2 J	-	-	-	-	1.2 J	-	-	0.066 J	-	-	0.056 UJ
N-Dodecane	ppb	NC	NC	0.22 J	-	-	-	-	0.13 J	-	-	0.15 J	-	-	0.078 U
N-Heptane	ppb	NC	NC	0.047 U	0.058 J	0.11 J	0.047 U	-	0.047 U	0.10 U	0.047 U	0.076 J	0.043 J	0.047 U	1.3
Nonane	ppb	NC	NC	0.14 J	-	-	-	-	0.15 J	-	-	0.043 U	-	-	0.41 J
N-Propylbenzene	ppb	NC	NC	0.11 J	0.050 U	0.050 U	0.056 U	-	0.056 U	0.50 U	0.056 U	0.056 U	0.10 U	0.056 U	0.082 J
N-Undecane	ppb	NC	NC	0.24 J	-	-	-	-	1.7	-	-	0.062 U	-	-	0.062 U
Octane	ppb	NC	NC	0.036 U	-	-	-	-	0.077 J	-	-	0.051 J	-	-	3.0
o-Xylene	ppb	2000	20000	0.12 J	0.022 U	0.11 J	0.061 U	-	0.11 J	0.53 J	0.11 J	0.077 J	0.044 U	0.061 U	1.1
Pentane	ppb	NC	NC	0.060 U	-	-	-	-	0.14 J	-	-	0.21 J	-	-	0.18 J
Styrene	ppb	NC	NC	0.058 U	0.030 U	0.030 U	0.058 U	-	0.058 U	0.30 U	0.058 U	0.058 U	0.060 U	0.058 U	0.058 U
tert-Butyl alcohol	ppb	NC	NC	0.065 J	0.071 U	0.071 U	0.12 J	-	0.038 U	0.71 U	0.078 J	0.038 U	0.14 U	0.19 J	0.32 J
tert-Butylbenzene	ppb	NC	NC	0.066 U	0.047 U	0.047 U	0.066 U	-	0.066 U	0.47 U	0.066 U	0.066 U	0.094 U	0.066 U	0.066 U

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VAPOR INTRUSION INVESTIGATION
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MORAINE, OHIO

Sample Location:				*Parcel 3207, Bldg 24, Probe B*	*Parcel 3207, Bldg 24, Probe C*	*Parcel 3207, Bldg 24, Probe C*	*Parcel 3207, Bldg 24, Probe C*	*Parcel 3207, Bldg 24, Probe C*	*Parcel 3207, Bldg 24, Probe C*	*Parcel 3207, Bldg 24, Probe D*	*Parcel 3207, Bldg 24, Probe D*	*Parcel 3207, Bldg 24, Probe D*	*Parcel 3207, Bldg 24, Probe E*	*Parcel 3207, Bldg 24, Probe E*	*Parcel 3207, Bldg 24, Probe E*
Sample Location:				*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*
Owner / Tenant:				*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*
Sample ID:				*SS-38443-081112-GL-085*	*SS-38443-010712-JC-039*	*SS-38443-010712-JC-040*	*SS-38443-031012-JC-146*	*SS-38443-031012-JC-147*	*SS-38443-081112-GL-086*	*SS-38443-010712-JC-038*	*SS-38443-031012-JC-149*	*SS-38443-081112-GL-088*	*SS-38443-010712-JC-036*	*SS-38443-031012-JC-150*	*SS-38443-081112-GL-090*
Sample Date:				*8/11/2012*	*1/7/2012*	*1/7/2012*	*3/10/2012*	*3/10/2012*	*8/11/2012*	*1/7/2012*	*3/10/2012*	*8/11/2012*	*1/7/2012*	*3/10/2012*	*8/11/2012*
						Duplicate									
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*												
Tetrachloroethene	ppb	250	2500	130	15	15	15	-	12	4.1	4.7	8.5	5.4	7.3	14
Tetrahydrofuran	ppb	NC	NC	0.063 U	0.54 J	0.076 J	0.063 U	-	0.063 U	0.18 U	0.063 U	0.063 U	1.5 J	0.063 U	0.063 U
Toluene	ppb	NC	NC	0.15 J	0.12 J	1.9	0.10 J	-	0.31	0.18 U	0.20	0.26	0.16 J	0.18 J	2.6
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	0.032 U	0.032 U	0.050 U	-	0.050 U	0.32 U	0.050 U	0.050 U	0.064 U	0.050 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	0.020 U	0.020 U	0.048 U	-	0.048 U	0.20 U	0.048 U	0.048 U	0.040 U	0.048 U	0.048 U
Trichloroethene	ppb	20	200	$\boxed{48^{a}}$	0.99	1.1	0.87	-	0.63	0.30 U	0.036 U	0.036 U	0.060 U	0.036 U	1.2
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.62	1.9	2.0	1.0	-	0.86	3.2	1.8	1.5	4.1	2.2	2.9
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.16 J	0.093 J	0.098 J	0.065 J	-	0.082 J	0.10 U	0.053 J	0.088 J	0.020 U	0.049 J	0.11 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	0.019 U	0.019 U	0.035 U	-	0.035 U	0.19 U	0.035 U	0.035 U	0.038 U	0.035 U	0.035 U
Vinyl chloride	ppb	20	200	0.071 U	0.029 U	0.029 U	0.071 U	-	0.071 U	0.29 U	0.071 U	0.071 U	0.058 U	0.071 U	0.071 U
Xylenes (total)	ppb	NC	NC	-	0.062 J	0.50	-	-	-	2.2	-	-	0.044 U	-	-
Gases															
Methane	%	0.5	0.5	0.20 U	-	0.080 U	-	0.19 U	0.19 U	-	-	0.24 U	-	-	0.20 U
Field Parameter															
Methane, field (unfiltered)	%	0.5	0.5	-	0.0 / 0.0	0.0 / 0.0	-	-	-	0.0 / 0.0	-	-	0.0 / 0.0	-	-
Methane, field (filtered)	%	0.5	0.5	0 / 0	-	-	0.0 / 0	0.0 / 0	0 / 0	-	0 / 0.0	0 / 0	-	0 / 0.0	0 / 0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
$\boxed{}$ - Concentration was greater than applicable criteria.

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3207, Bldg 24, Probe F*	*Parcel 3207, Bldg 24, Probe F*	*Parcel 3207, Bldg 24, Probe F*	*Parcel 3254, Bldg 25, Probe A*	*Parcel 3254, Bldg 25, Probe A*	*Parcel 3254, Bldg 25, Probe A*	*Parcel 3254, Bldg 25, Probe B*	*Parcel 3254, Bldg 25, Probe B*	*Parcel 3254, Bldg 25, Probe B*	*Parcel 3254, Bldg 25, Probe C*	*Parcel 3254, Bldg 25, Probe C*	*Parcel 4610, Bldg 19*	*Parcel 4610, Bldg 19*
Sample Location:				*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2225B East River Road*	*2225B East River Road*
Owner/ Tenant:				*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Middleton Trucking*	*Middleton Trucking*	*Middleton Trucking*	*Middleton Trucking*	*Middleton Trucking*	*Middleton Trucking*	*Middleton Trucking*	*Middleton Trucking*	*Ron Barnett Construction*	*Ron Barnett Construction*
Sample ID:				*SS-38443-010712-JC-037*	*SS-38443-031012-JC-152*	*SS-38443-081112-GL-093*	*SS-38443-010512-JC-015*	*SS-38443-073112-GL-003*	*SS-38443-091212-GL-011*	*SS-38443-010512-JC-014*	*SS-38443-073112-GL-004*	*SS-38443-091212-GL-013*	*SS-38443-010913-GL-001*	*SS-38443-010913-GL-002*	*SS-38443-010412-GL-006*	*SS-38443-073112-GL-005*
Sample Date:				*1/7/2012*	*3/10/2012*	*8/11/2012*	*1/5/2012*	*7/31/2012*	*9/12/2012*	*1/5/2012*	*7/31/2012*	*9/12/2012*	*1/9/2013*	*1/9/2013* *Duplicate*	*1/4/2012*	*7/31/2012*
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*													
Volatile Organic Compounds																
1,1,1-Trichloroethane	ppb	NC	NC	1.9	1.6	2.5	1.2	4.4	3.4	1.5	6.4	3.4	0.70	0.66	0.35 U	2.4
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.040 U	0.061 U	0.061 U	0.080 U	0.061 U	0.061 U	0.16 U	0.061 U	0.061 U	0.061 U	0.061 U	0.40 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.019 U	0.054 U	0.054 U	0.038 U	0.054 U	0.054 U	0.076 U	0.054 U	0.054 U	0.054 U	0.054 U	0.19 U	0.054 U
1,1-Dichloroethane	ppb	160	1600	0.035 U	0.026 U	0.026 U	0.070 U	0.026 U	0.026 U	0.14 U	0.026 U	0.026 U	0.026 U	0.026 U	0.35 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.030 U	0.032 U	0.032 U	0.060 U	0.032 U	0.032 U	0.12 U	0.032 U	0.032 U	0.032 U	0.032 U	0.30 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.050 U	0.098 UJ	0.098 UJ	0.10 U	0.098 UJ	0.098 UJ	0.20 U	0.098 UJ	0.098 U	0.098 U	0.098 U	0.50 U	0.098 UJ
1,2,4-Trimethylbenzene	ppb	NC	NC	0.052 U	0.39	0.14 J	0.10 U	0.063 U	0.063 U	0.21 U	0.10 J	0.063 U	0.14 J	0.12 J	0.52 U	0.063 U
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.018 U	0.044 U	0.044 U	0.036 U	0.044 U	0.044 U	0.072 U	0.044 U	0.044 U	0.044 U	0.044 U	0.18 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.048 U	0.070 U	0.070 U	0.096 U	0.070 U	0.070 U	0.19 U	0.070 U	0.070 U	0.070 U	0.070 U	0.48 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.031 U	0.047 U	0.047 U	0.062 U	0.047 U	0.047 U	0.12 U	0.047 U	0.047 U	0.047 U	0.047 U	0.31 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	0.014 U	-	-	0.028 U	-	-	0.056 U	-	-	-	-	0.14 U	-
1,2-Dichloropropane	ppb	NC	NC	0.014 U	0.052 U	0.052 U	0.028 U	0.052 U	0.052 U	0.056 U	0.052 U	0.052 U	0.052 U	0.052 U	0.14 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.064 U	0.032 U	0.032 U	0.13 U	0.032 U	0.032 U	0.032 U	0.032 U	0.32 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.051 U	0.065 U	0.065 U	0.10 U	0.065 U	0.065 U	0.20 U	0.065 U	0.065 U	0.065 U	0.065 U	0.51 U	0.065 U
1,3-Butadiene	ppb	NC	NC	0.010 U	0.064 U	0.064 U	0.020 U	0.064 U	0.064 U	0.040 U	0.064 U	0.064 U	0.064 U	0.064 U	0.10 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.044 U	0.065 U	0.065 U	0.088 U	0.065 U	0.065 U	0.18 U	0.065 U	0.065 U	0.065 U	0.065 U	0.44 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.044 U	0.064 U	0.064 U	0.088 U	0.064 U	0.064 U	0.18 U	0.064 U	0.064 U	0.064 U	0.064 U	0.44 U	0.064 U
1,4-Dioxane	ppb	NC	NC	0.088 U	0.080 UJ	0.080 U	0.18 U	0.11 J	0.080 U	0.35 U	0.080 U	0.080 U	0.080 U	0.080 U	0.88 U	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.036 U	0.039 U	0.039 U	0.072 U	0.039 U	0.039 U	0.14 U	0.039 U	0.039 U	0.039 U	0.039 U	0.36 U	0.039 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.34 J	0.20 U	0.87 J	0.26 J	0.54 J	0.36 J	0.49 J	0.97 J	0.25 J	0.43 J	0.47 J	0.17 U	0.52 J
2-Chlorotoluene	ppb	NC	NC	0.047 U	0.063 U	0.063 U	0.094 U	0.063 U	0.063 U	0.19 U	0.063 U	0.063 U	0.063 U	0.063 U	0.47 U	0.063 U
2-Hexanone	ppb	NC	NC	0.039 U	0.058 UJ	0.082 J	0.078 U	0.079 J	0.058 U	0.16 U	0.078 J	0.058 U	0.058 U	0.058 U	0.39 U	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.047 U	0.094 J	0.064 U	0.094 U	0.064 U	0.064 U	0.19 U	0.064 U	0.064 U	0.064 U	0.064 U	0.47 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.046 U	0.066 U	0.066 U	0.092 U	0.066 U	0.066 U	0.18 U	0.066 U	0.066 U	0.073 J	0.066 U	0.46 U	0.066 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.026 U	0.045 UJ	0.11 J	0.052 U	0.045 U	0.075 J	0.10 U	0.068 J	0.045 U	0.86 J	0.10 J	0.26 U	0.045 U
Acetone	ppb	NC	NC	3.7 J	1.5 J	7.4	4.8 J	4.3 J	5.3	8.4 J	7.9 J	2.0 J	14	12	0.83 J	5.4 J
Allyl chloride	ppb	NC	NC	0.019 U	0.048 U	0.048 U	0.038 U	0.048 U	0.048 U	0.076 U	0.048 U	0.048 U	0.048 U	0.048 U	0.19 U	0.048 U
Benzene	ppb	20	200	0.019 J	0.056 U	0.060 J	0.036 U	0.056 U	0.056 U	0.072 U	0.061 J	0.056 U	0.059 J	0.056 U	0.18 U	0.066 J
Benzyl chloride	ppb	NC	NC	0.046 UJ	0.078 U	0.078 U	0.092 UJ	0.078 U	0.078 U	0.18 UJ	0.078 U	0.078 U	0.078 U	0.078 U	0.46 UJ	0.078 U
Bromodichloromethane	ppb	NC	NC	0.028 U	0.044 U	0.044 U	0.056 U	0.044 U	0.044 U	0.11 U	0.044 U	0.044 U	0.044 U	0.044 U	0.28 U	0.044 U
Bromoform	ppb	NC	NC	0.019 U	0.048 U	0.048 U	0.038 U	0.048 U	0.048 U	0.076 U	0.048 U	0.048 U	0.048 U	0.048 U	0.19 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.012 U	0.032 U	0.032 U	0.024 U	0.032 U	0.032 U	0.048 U	0.032 U	0.032 U	0.032 U	0.032 U	0.12 U	0.20
Butane	ppb	NC	NC	0.11 J	2.4	0.21 J	0.71 J	0.064 UJ	0.12 J	0.30 J	0.49 J	0.064 U	0.32 J	0.19 J	0.11 U	0.064 UJ
Carbon disulfide	ppb	NC	NC	0.58	0.051 J	0.061 J	0.13 U	0.23 J	0.54	0.26 U	0.11 J	0.084 J	0.053 J	0.058 J	0.66 U	0.53
Carbon tetrachloride	ppb	NC	NC	0.033 U	0.038 U	0.038 U	0.066 U	0.060 J	0.038 J	0.13 U	0.038 UJ	0.038 UJ	0.038 U	0.038 U	0.33 U	0.040 J
Chlorobenzene	ppb	NC	NC	0.020 U	0.066 J	0.049 U	0.040 U	0.049 U	0.049 U	0.080 U	0.049 U	0.049 U	0.049 U	0.049 U	0.20 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	0.034 U	1.7	1.3	0.068 U	0.32	0.17 J	0.14 U	0.20	0.14 J	0.068 J	0.061 J	0.34 U	0.20
Chloroethane	ppb	NC	NC	0.016 U	0.035 U	0.051 J	0.032 U	0.035 U	0.035 U	0.064 U	0.035 U	0.035 U	0.035 U	0.035 U	0.16 U	0.035 U
Chloroform (Trichloromethane)	ppb	800	8000	0.031 U	0.038 U	0.038 U	0.062 U	0.038 U	0.038 U	0.12 U	0.53	0.31	0.038 U	0.038 U	0.31 U	0.056 J
Chloromethane (Methyl chloride)	ppb	NC	NC	0.013 U	0.22 J	0.31 J	0.026 U	0.16 U	0.16 U	0.052 U	0.24 J	0.16 U	0.16 U	0.20 J	0.13 U	0.31 J
cis-1,2-Dichloroethene	ppb	370	3700	0.014 U	0.065 J	0.060 U	0.028 U	0.060 U	0.060 U	0.056 U	0.060 U	0.060 U	0.060 U	0.060 U	0.14 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.016 U	0.074 U	0.074 U	0.032 U	0.074 U	0.074 U	0.064 U	0.074 U	0.074 U	0.074 U	0.074 U	0.16 U	0.074 U
Cyclohexane	ppb	NC	NC	0.039 U	0.040 U	0.040 U	0.078 U	0.040 U	0.040 U	0.16 U	0.040 U	0.040 U	0.10 J	0.074 J	0.39 U	0.040 U
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.048 U	0.060 J	0.094 J	0.096 U	0.057 U	0.057 U	0.19 U	0.057 U	0.057 U	0.057 U	0.057 U	0.48 U	0.057 U
Dibromochloromethane	ppb	NC	NC	0.021 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.084 U	0.042 U	0.042 U	0.042 U	0.042 U	0.21 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	1.1	0.14 J	0.54	1.0	0.068 UJ	0.71	1.5 J	0.068 UJ	0.068 U	4.0	3.9	0.38 U	0.068 UJ
Ethylbenzene	ppb	2500	25000	0.034 J	0.073 J	0.068 U	0.050 J	0.068 U	0.068 U	0.088 U	0.068 U	0.068 U	0.089 J	0.077 J	0.22 U	0.068 U
Hexachlorobutadiene	ppb	NC	NC	0.065 U	0.078 UJ	0.078 UJ	0.13 U	0.078 U	0.078 UJ	0.26 U	0.078 U	0.078 U	0.078 U	0.078 U	0.65 U	0.078 U
Hexane	ppb	NC	NC	0.030 J	0.26 J	0.11 J	0.11 J	0.032 U	0.046 J	0.10 U	0.14 J	0.034 J	0.094 J	0.068 J	0.26 U	0.067 J
Isopropyl alcohol	ppb	NC	NC	1.3 J	0.40 J	0.11 J	0.074 U	0.28 J	0.31 J	0.15 U	1.6 J	0.24 J	0.48 J	0.39 J	0.37 U	0.19 J
Isopropyl benzene	ppb	NC	NC	0.031 U	0.060 U	0.060 U	0.062 U	0.060 U	0.060 U	0.12 U	0.060 U	0.060 U	0.060 U	0.060 U	0.31 U	0.060 U
m&p-Xylenes	ppb	2000	20000	0.069 J	0.24	0.12 U	0.12 J	0.12 U	0.12 U	0.19 U	0.15 J	0.12 U	0.32	0.28	0.48 U	0.12 U
Methyl methacrylate	ppb	NC	NC	0.013 U	0.079 U	0.079 U	0.026 U	0.079 U	0.079 U	0.052 U	0.079 U	0.079 U	0.079 U	0.079 U	0.13 U	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.016 U	0.17 U	0.17 U	0.032 U	0.17 U	0.17 U	0.064 U	0.17 U	0.17 U	0.17 U	0.17 U	0.16 U	0.17 U
Methylene chloride	ppb	NC	NC	0.013 U	0.94	0.94	0.15 J	0.045 U	0.30 U	0.052 U	0.045 U	0.27 U	0.27 J	0.23 J	0.49 J	0.045 U
Naphthalene	ppb	29	NC	0.086 U	0.090 UJ	0.090 UJ	0.17 UJ	0.090 UJ	0.090 UJ	0.34 UJ	0.090 UJ	0.090 U	0.090 U	0.090 U	0.86 UJ	0.090 UJ
N-Butylbenzene	ppb	NC	NC	0.055 U	0.10 J	0.046 U	0.11 U	0.046 U	0.046 U	0.22 U	0.046 U	0.046 U	0.046 U	0.046 U	0.55 U	0.046 U
N-Decane	ppb	NC	NC	-	-	0.085 J	-	0.056 U	0.056 UJ	-	0.36 J	0.071 J	-	-	-	0.056 U
N-Dodecane	ppb	NC	NC	-	-	0.078 U	-	0.078 UJ	0.16 J	-	0.078 UJ	0.078 U	-	-	-	0.078 UJ
N-Heptane	ppb	NC	NC	0.010 U	0.047 U	0.047 J	0.32 J	0.047 U	0.047 U	0.040 U	0.58	0.047 U	0.73	0.65	0.10 U	0.047 U
Nonane	ppb	NC	NC	-	-	0.043 U	-	0.043 U	0.043 U	-	0.043 U	0.043 U	-	-	-	0.043 U
N-Propylbenzene	ppb	NC	NC	0.050 U	0.056 U	0.056 U	0.10 U	0.056 U	0.056 U	0.20 U	0.056 U	0.056 U	0.056 U	0.056 U	0.50 U	0.056 U
N-Undecane	ppb	NC	NC	-	-	0.33 J	-	0.062 U	0.062 U	-	0.21 J	0.062 U	-	-	-	0.062 U
Octane	ppb	NC	NC	-	-	0.036 U	-	0.036 U	0.036 U	-	0.036 U	0.036 U	-	-	-	0.036 U
o-Xylene	ppb	2000	20000	0.022 U	0.18 J	0.061 U	0.044 U	0.061 U	0.061 U	0.088 U	0.067 J	0.061 U	0.11 J	0.097 J	0.22 U	0.061 U
Pentane	ppb	NC	NC	-	-	0.18 J	-	0.060 U	0.086 J	-	0.060 U	0.060 U	-	-	-	0.060 U
Styrene	ppb	NC	NC	0.030 U	0.058 U	0.058 U	0.060 U	0.058 U	0.058 U	0.12 U	0.058 U	0.058 U	0.058 U	0.058 U	0.30 U	0.058 U
tert-Butyl alcohol	ppb	NC	NC	2.7 J	0.076 J	0.085 J	0.14 U	0.14 J	2.3 J	0.28 U	1.2 J	0.049 J	0.044 J	0.055 J	0.71 U	0.11 J
tert-Butylbenzene	ppb	NC	NC	0.047 U	0.066 U	0.066 U	0.094 U	0.066 U	0.066 U	0.19 U	0.066 U	0.066 U	0.066 U	0.066 U	0.47 U	0.066 U

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3207, Bldg 24, Probe F*	*Parcel 3207, Bldg 24, Probe F*	*Parcel 3207, Bldg 24, Probe F*	*Parcel 3254, Bldg 25, Probe A*	*Parcel 3254, Bldg 25, Probe A*	*Parcel 3254, Bldg 25, Probe A*	*Parcel 3254, Bldg 25, Probe B*	*Parcel 3254, Bldg 25, Probe B*	*Parcel 3254, Bldg 25, Probe B*	*Parcel 3254, Bldg 25, Probe C*	*Parcel 3254, Bldg 25, Probe C*	*Parcel 4610, Bldg 19*	*Parcel 4610, Bldg 19*
Sample Location:				*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2215 & 2219 East River Road*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2225B East River Road*	*2225B East River Road*
Owner / Tenant:				*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Middleton Trucking*	*Middleton Trucking*	*Middleton Trucking*	*Middleton Trucking*	*Middleton Trucking*	*Middleton Trucking*	*Middleton Trucking*	*Middleton Trucking*	*Ron Barnett Construction*	*Ron Barnett Construction*
Sample ID:				*SS-38443-010712-JC-037*	*SS-38443-031012-JC-152*	*SS-38443-081112-GL-093*	*SS-38443-010512-JC-015*	*SS-38443-073112-GL-003*	*SS-38443-091212-GL-011*	*SS-38443-010512-JC-014*	*SS-38443-073112-GL-004*	*SS-38443-091212-GL-013*	*SS-38443-010913-GL-001*	*SS-38443-010913-GL-002*	*SS-38443-010412-GL-006*	*SS-38443-073112-GL-005*
Sample Date:				*1/7/2012*	*3/10/2012*	*8/11/2012*	*1/5/2012*	*7/31/2012*	*9/12/2012*	*1/5/2012*	*7/31/2012*	*9/12/2012*	*1/9/2013*	*1/9/2013* *Duplicate*	*1/4/2012*	*7/31/2012*
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*													
Tetrachloroethene	ppb	250	2500	0.73	0.63	2.0	2.8	16	12	10	47	39	53	53	1.7 J	21
Tetrahydrofuran	ppb	NC	NC	0.018 U	0.063 U	0.063 U	0.036 U	0.063 U	0.063 U	0.072 U	0.063 U	0.063 U	0.063 U	0.063 U	0.18 U	0.063 U
Toluene	ppb	NC	NC	0.15 J	0.66	0.42	1.2	0.079 J	0.065 J	0.92	0.25	0.082 J	0.47	0.45	0.18 U	0.12 J
trans-1,2-Dichloroethene	ppb	NC	NC	0.032 U	0.050 U	0.050 U	0.064 U	0.050 U	0.050 U	0.13 U	0.050 U	0.050 U	0.050 U	0.050 U	0.32 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.020 U	0.048 U	0.048 U	0.040 U	0.048 U	0.048 U	0.080 U	0.048 U	0.048 U	0.048 U	0.048 U	0.20 U	0.048 U
Trichloroethene	ppb	20	200	0.11 J	0.036 U	0.10 J	0.060 U	0.036 U	0.036 U	0.12 U	0.036 U	0.036 U	0.053 J	0.048 J	0.30 U	0.036 U
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	2.4	1.4	2.2	2.2	3.2	4.1	4.2	10	5.8	7.0	6.8	0.34 U	0.77
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.073 J	0.044 J	0.087 J	0.58	0.46	0.24	0.077 J	0.60	0.41	0.073 J	0.075 J	0.10 U	0.10 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.019 U	0.035 U	0.035 U	0.038 U	0.035 U	0.035 U	0.076 U	0.035 U	0.035 U	0.035 U	0.035 U	0.19 U	0.035 U
Vinyl chloride	ppb	20	200	0.029 U	0.071 U	0.071 U	0.058 U	0.071 U	0.071 U	0.12 U	0.071 U	0.071 U	0.071 UJ	0.071 UJ	0.29 U	0.071 U
Xylenes (total)	ppb	NC	NC	0.069 J	-	-	0.12 J	-	-	0.088 U	-	-	-	-	0.22 U	-
Gases																
Methane	%	0.5	0.5	-	-	0.33 U	0.066 U	0.22 U	0.21 U	-	0.20 U	0.20 U	-	-	-	0.21 U
Field Parameter																
Methane, field (unfiltered)	%	0.5	0.5	0.0 / 0.0	-	-	0.0 / 0.0	-	-	0.0 / 0.0	-	-	-	-	0.0 / 0.0	-
Methane, field (filtered)	%	0.5	0.5	-	0.0 / 0.0	0 / 0	-	0 / 0	-	-	0 / 0	-	-	-	-	0 / 0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 4610, Bldg 22, Probe A*	*Parcel 4610, Bldg 22, Probe A*	*Parcel 4610, Bldg 22, Probe B*	*Parcel 4610, Bldg 22, Probe B*	*Parcel 5054, Bldg 1*	*Parcel 5054, Bldg 1 Probe A*	*Parcel 5054, Bldg 1 Probe A*	*Parcel 5054, Bldg 2, Probe A*	*Parcel 5054, Bldg 2, Probe A*	*Parcel 5054, Bldg 2, Probe A*	*Parcel 5054, Bldg 2, Probe A*	*Parcel 5054, Bldg 2, Probe B*	*Parcel 5054, Bldg 2, Probe B*
Sample Location:				*2225E East River Road*	*2225E East River Road*	*2225E East River Road*	*2225E East River Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1903 Dryden Road*	*1903 Dryden Road*	*1903 Dryden Road*	*1903 Dryden Road*	*1903 Dryden Road*	*1903 Dryden Road*
Owner / Tenant:				*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*
Sample ID:				*SS-38443-010412-GL-004*	*SS-38443-073112-GL-006*	*SS-38443-010412-JC-005*	*SS-38443-073112-GL-007*	*SS-38443-011012-JC-057*	*SS-38443-031312-JC-156*	*SS-38443-080612-GL-055*	*SS-38443-011012-JC-048*	*SS-38443-011012-JC-049*	*SS-38443-031312-JC-159*	*SS-38443-031312-JC-160*	*SS-38443-011012-JC-050*	*SS-38443-031312-JC-163*
Sample Date:				*1/4/2012*	*7/31/2012*	*1/4/2012*	*7/31/2012*	*1/10/2012*	*3/13/2012*	*8/6/2012*	*1/10/2012*	*1/10/2012*	*3/13/2012*	*3/13/2012*	*1/10/2012*	*3/13/2012*
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*													
Volatile Organic Compounds																
1,1,1-Trichloroethane	ppb	NC	NC	0.18 U	1.0	0.28 U	0.13 J	2.0 J	1.6 J	5.2 J	-	R	8.6 U	-	0.10 U	0.084 J
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.20 U	0.061 U	0.32 U	0.061 U	1.3 U	2.3 U	4.8 U	-	R	17 U	-	0.12 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.095 U	0.054 U	0.15 U	0.054 U	0.60 U	2.0 U	4.3 U	-	R	15 U	-	0.057 U	0.054 U
1,1-Dichloroethane	ppb	160	1600	0.18 U	0.026 U	0.28 U	0.026 U	1.1 U	0.98 U	2.1 U	-	R	21 J	-	0.53 J	1.7
1,1-Dichloroethene	ppb	NC	NC	0.15 U	0.032 U	0.24 U	0.032 U	0.95 U	1.2 U	2.5 U	-	R	9.2 U	-	0.090 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.25 U	0.098 UJ	0.40 U	0.098 UJ	1.6 U	3.7 U	7.8 U	-	R	28 U	-	0.15 U	0.098 U
1,2,4-Trimethylbenzene	ppb	NC	NC	0.26 U	0.063 U	0.42 U	6.4	1.6 U	2.4 U	5.0 U	-	R	55 J	-	0.16 U	0.063 U
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.090 U	0.044 U	0.14 U	0.044 U	0.57 U	1.7 U	3.5 U	-	R	13 U	-	0.054 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.24 U	0.070 U	0.38 U	0.070 U	1.5 U	2.6 U	5.5 U	-	R	20 U	-	0.14 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.16 U	0.047 U	0.25 U	0.047 U	0.98 U	1.8 U	3.7 U	-	R	13 U	-	0.093 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	0.070 U	-	0.11 U	-	8.3	-	-	-	R	-	-	6.1	-
1,2-Dichloropropane	ppb	NC	NC	0.070 U	0.052 U	0.11 U	0.052 U	0.44 U	2.0 U	4.1 U	-	R	15 U	-	0.042 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.16 U	0.032 U	0.26 U	0.032 U	1.0 U	1.2 U	2.5 U	-	R	9.2 U	-	0.096 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.26 U	0.065 U	0.41 U	3.3	1.6 U	2.4 U	5.1 U	-	R	19 U	-	0.15 U	0.065 U
1,3-Butadiene	ppb	NC	NC	0.050 U	0.064 U	0.080 U	0.064 U	0.32 U	2.4 U	5.1 U	-	R	18 U	-	0.030 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.22 U	0.065 U	0.35 U	0.065 U	1.4 U	2.4 U	5.1 U	-	R	19 U	-	0.13 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.22 U	0.064 U	0.35 U	0.064 U	1.4 U	2.4 U	5.1 U	-	R	18 UJ	-	0.13 U	0.064 U
1,4-Dioxane	ppb	NC	NC	0.44 U	0.080 U	0.70 U	0.080 U	2.8 U	3.0 U	6.3 U	-	R	23 U	-	0.26 U	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.18 U	0.039 U	0.29 U	0.039 U	1.1 U	1.5 U	3.1 U	-	R	940	-	0.11 U	0.071 J
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.085 U	0.80 J	0.14 U	0.42 J	0.54 U	7.5 U	16 U	-	R	57 U	-	0.051 U	0.20 U
2-Chlorotoluene	ppb	NC	NC	0.24 U	0.063 U	0.38 U	0.063 U	1.5 U	2.4 U	5.0 U	-	R	18 U	-	0.14 U	0.063 U
2-Hexanone	ppb	NC	NC	0.20 U	0.058 U	0.31 U	0.084 J	1.2 U	2.2 U	4.6 U	-	R	17 U	-	0.12 U	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.24 U	0.064 U	0.38 U	0.069 J	1.5 U	2.4 U	5.1 U	-	R	18 U	-	0.14 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.23 U	0.066 U	0.37 U	0.40	1.5 U	2.5 U	5.2 U	-	R	19 U	-	0.14 U	0.066 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.13 U	0.045 U	0.21 U	0.067 J	0.82 U	1.7 U	3.6 U	-	R	13 U	-	0.078 U	0.045 U
Acetone	ppb	NC	NC	0.56 J	5.3 J	0.36 U	3.3 J	3.1 J	53 U	110 UJ	-	R	790 J	-	2.0 J	2.2 J
Allyl chloride	ppb	NC	NC	0.095 U	0.048 U	0.15 U	0.048 U	0.60 U	1.8 U	3.8 U	-	R	14 U	-	0.057 U	0.048 U
Benzene	ppb	20	200	0.090 U	0.056 U	0.14 U	0.074 J	0.57 U	2.1 U	4.4 U	-	R	98[a]	-	0.054 U	0.10 J
Benzyl chloride	ppb	NC	NC	0.23 UJ	0.078 U	0.37 UJ	0.078 U	1.5 UJ	2.9 U	6.2 U	-	R	22 U	-	0.14 UJ	0.078 U
Bromodichloromethane	ppb	NC	NC	0.14 U	0.044 U	0.22 U	0.044 U	0.88 U	1.7 U	3.5 U	-	R	13 U	-	0.084 U	0.044 U
Bromoform	ppb	NC	NC	0.095 U	0.048 U	0.15 U	0.048 U	0.60 U	1.8 U	3.8 U	-	R	14 U	-	0.057 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.060 U	0.032 U	0.096 U	0.032 U	0.38 U	1.2 U	2.5 U	-	R	9.2 U	-	0.036 U	0.032 U
Butane	ppb	NC	NC	2.7	3.2 J	0.088 U	0.35 J	0.35 U	2.4 U	5.1 U	-	R	1800 J	-	0.31 J	4.4
Carbon disulfide	ppb	NC	NC	0.33 U	0.031 U	0.53 U	0.054 J	2.1 U	1.2 U	2.5 U	-	R	8.9 U	-	0.20 U	0.031 U
Carbon tetrachloride	ppb	NC	NC	0.17 U	0.038 UJ	0.26 U	0.086 J	1.0 U	1.4 U	3.0 U	-	R	11 U	-	0.099 U	0.051 J
Chlorobenzene	ppb	NC	NC	0.10 U	0.049 U	0.16 U	0.049 U	0.63 U	1.8 U	3.9 U	-	R	14 U	-	0.060 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	0.17 U	0.22	0.27 U	0.66	1.1 U	2.4 J	2.9 U	-	R	320 J	-	0.10 U	4.5
Chloroethane	ppb	NC	NC	0.080 U	0.035 U	0.13 U	0.035 U	0.51 U	1.3 U	2.8 U	-	R	44 J	-	0.048 U	0.035 U
Chloroform (Trichloromethane)	ppb	800	8000	0.16 U	0.096 J	0.25 U	0.038 U	1.6 J	1.4 U	5.0 J	-	R	11 U	-	0.46 J	0.78
Chloromethane (Methyl chloride)	ppb	NC	NC	0.065 U	0.32 J	0.10 U	0.24 J	0.41 U	6.0 U	13 U	-	R	46 U	-	0.039 U	0.16 U
cis-1,2-Dichloroethene	ppb	370	3700	0.070 U	0.060 U	0.11 U	0.060 U	8.3	5.8 J	29	-	R	17 U	-	6.1	8.8
cis-1,3-Dichloropropene	ppb	NC	NC	0.080 U	0.074 U	0.13 U	0.074 U	0.51 U	2.8 U	5.9 U	-	R	21 U	-	0.048 U	0.074 U
Cyclohexane	ppb	NC	NC	0.20 U	0.040 U	0.31 U	0.040 U	1.2 U	1.5 U	3.2 U	-	R	1700	-	0.12 U	0.040 U
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.24 U	0.057 U	0.38 U	0.20	1.5 U	2.1 U	4.5 U	-	R	16 U	-	0.14 U	0.057 U
Dibromochloromethane	ppb	NC	NC	0.11 U	0.042 U	0.17 U	0.042 U	0.66 U	1.6 U	3.3 U	-	R	12 U	-	0.063 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.90 J	0.53 J	0.48 J	0.60	1.2 U	2.6 U	5.4 U	-	R	19 U	-	0.45 J	0.43
Ethylbenzene	ppb	2500	25000	0.11 U	0.068 U	0.18 U	0.23	0.70 U	2.6 U	5.4 U	-	R	19 U	-	0.11 J	0.12 J
Hexachlorobutadiene	ppb	NC	NC	0.33 U	0.078 U	0.52 U	0.078 UJ	2.1 U	2.9 U	6.2 U	-	R	22 U	-	0.19 U	0.078 U
Hexane	ppb	NC	NC	0.26 J	0.16 J	0.21 U	0.085 J	0.82 U	1.2 U	2.5 U	-	R	730	-	0.078 U	0.33 J
Isopropyl alcohol	ppb	NC	NC	0.19 U	0.88 J	0.30 U	39	1.2 U	1.7 U	3.5 U	-	R	21 J	-	0.11 U	0.27 J
Isopropyl benzene	ppb	NC	NC	0.16 U	0.060 U	0.25 U	0.060 U	0.98 U	2.3 U	4.8 U	-	R	17 U	-	0.093 U	0.060 U
m&p-Xylenes	ppb	2000	20000	0.24 U	0.12 J	0.38 U	1.3	1.5 U	4.5 U	9.5 U	-	R	34 U	-	0.44 J	0.43
Methyl methacrylate	ppb	NC	NC	0.065 U	0.079 U	0.10 U	0.079 U	0.41 U	3.0 U	6.3 U	-	R	1200	-	0.17 J	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.080 U	0.17 U	0.13 U	0.17 U	0.51 U	6.4 U	13 U	-	R	49 U	-	0.048 U	0.17 U
Methylene chloride	ppb	NC	NC	0.065 U	0.045 U	0.10 U	0.045 U	0.41 U	2.8 J	3.6 U	-	R	240	-	0.15 U	2.0
Naphthalene	ppb	29	NC	0.43 UJ	0.090 UJ	0.69 UJ	0.66	2.7 UJ	3.4 U	7.1 U	-	R	26 U	-	0.26 UJ	0.090 U
N-Butylbenzene	ppb	NC	NC	0.28 U	0.046 U	0.44 U	0.74	1.7 U	1.7 U	3.6 U	-	R	13 U	-	0.16 U	0.046 U
N-Decane	ppb	NC	NC	-	0.062 J	-	0.89 J	-	-	4.4 U	-	-	0.056 U	-	-	-
N-Dodecane	ppb	NC	NC	-	0.078 UJ	-	0.52 J	-	-	6.2 U	-	-	0.078 U	-	-	-
N-Heptane	ppb	NC	NC	0.050 U	0.047 U	0.080 U	0.047 U	0.32 U	1.8 U	3.7 U	-	R	47 J	-	2.9	0.063 J
Nonane	ppb	NC	NC	-	0.043 U	-	0.38 J	-	-	3.4 U	-	-	0.043 U	-	-	-
N-Propylbenzene	ppb	NC	NC	0.25 U	0.056 U	0.40 U	0.23 J	1.6 U	2.1 U	4.4 U	-	R	16 U	-	0.15 U	0.056 U
N-Undecane	ppb	NC	NC	-	0.062 U	-	0.29 J	-	-	4.9 U	-	-	0.062 U	-	-	-
Octane	ppb	NC	NC	-	0.036 U	-	0.067 J	-	-	2.9 U	-	-	0.036 U	-	-	-
o-Xylene	ppb	2000	20000	0.11 U	0.061 U	0.18 U	0.70	0.70 U	2.3 U	4.8 U	-	R	17 U	-	0.24 J	0.11 J
Pentane	ppb	NC	NC	-	0.92 J	-	1.5	-	-	4.8 U	-	-	720	-	-	-
Styrene	ppb	NC	NC	0.15 U	0.058 U	0.24 U	0.15 J	0.95 U	2.2 U	4.6 U	-	R	17 U	-	0.090 U	0.058 U
tert-Butyl alcohol	ppb	NC	NC	0.36 U	0.93 J	0.57 U	0.13 J	2.2 U	1.4 U	3.0 U	-	R	11 U	-	0.21 U	0.10 J
tert-Butylbenzene	ppb	NC	NC	0.24 U	0.066 U	0.38 U	0.066 U	1.5 U	2.5 U	5.2 U	-	R	19 U	-	0.14 U	0.066 U

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 4610, Bldg 22, Probe A*	*Parcel 4610, Bldg 22, Probe A*	*Parcel 4610, Bldg 22, Probe B*	*Parcel 4610, Bldg 22, Probe B*	*Parcel 5054, Bldg 1*	*Parcel 5054, Bldg 1 Probe A*	*Parcel 5054, Bldg 1 Probe A*	*Parcel 5054, Bldg 2, Probe A*	*Parcel 5054, Bldg 2, Probe A*	*Parcel 5054, Bldg 2, Probe A*	*Parcel 5054, Bldg 2, Probe A*	*Parcel 5054, Bldg 2, Probe B*	*Parcel 5054, Bldg 2, Probe B*
Sample Location:				*2225E East River Road*	*2225E East River Road*	*2225E East River Road*	*2225E East River Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1903 Dryden Road*	*1903 Dryden Road*	*1903 Dryden Road*	*1903 Dryden Road*	*1903 Dryden Road*	*1903 Dryden Road*
Owner / Tenant:				*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*
Sample ID:				*SS-38443-010412-GL-004*	*SS-38443-073112-GL-006*	*SS-38443-010412-JC-005*	*SS-38443-073112-GL-007*	*SS-38443-011012-JC-057*	*SS-38443-031312-JC-156*	*SS-38443-080612-GL-055*	*SS-38443-011012-JC-048*	*SS-38443-011012-JC-049*	*SS-38443-031312-JC-159*	*SS-38443-031312-JC-160*	*SS-38443-011012-JC-050*	*SS-38443-031312-JC-163*
Sample Date:				*1/4/2012*	*7/31/2012*	*1/4/2012*	*7/31/2012*	*1/10/2012*	*3/13/2012*	*8/6/2012*	*1/10/2012*	*1/10/2012*	*3/13/2012*	*3/13/2012*	*1/10/2012*	*3/13/2012*
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*													
Tetrachloroethene	ppb	250	2500	1.2	7.8	0.088 U	0.17 J	11	9.5	71	-	R	11 U	-	0.42 J	0.50
Tetrahydrofuran	ppb	NC	NC	0.090 U	0.063 U	0.14 U	0.063 U	0.57 U	2.4 U	5.0 U	-	R	18 U	-	0.054 U	0.063 U
Toluene	ppb	NC	NC	0.40 J	0.57	0.14 U	0.67	0.57 U	2.0 U	4.3 U	-	R	62	-	0.68	0.78
trans-1,2-Dichloroethene	ppb	NC	NC	0.16 U	0.050 U	0.26 U	0.050 U	1.0 U	1.9 U	4.0 U	-	R	14 U	-	0.096 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.10 U	0.048 U	0.16 U	0.048 U	0.63 U	1.8 U	3.8 U	-	R	14 U	-	0.060 U	0.048 U
Trichloroethene	ppb	20	200	0.15 U	0.036 U	0.24 U	0.036 U	610[ab]	350[ab]	2700[ab]	-	R	10 U	-	22[a]	32[a]
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.48 J	2.3	0.27 U	0.99	1.1 U	0.90 U	1.9 U	-	R	24 J	-	0.21 J	0.35
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	7.7	38	0.080 U	2.6	0.32 U	1.2 U	2.5 U	-	R	8.9 U	-	0.060 J	0.060 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.095 U	0.035 U	0.15 U	0.035 U	0.60 U	1.3 U	2.8 U	-	R	10 U	-	0.057 U	0.035 U
Vinyl chloride	ppb	20	200	0.15 U	0.071 U	0.23 U	0.071 U	0.92 U	2.7 U	5.6 U	-	R	24 J[a]	-	0.087 U	0.071 U
Xylenes (total)	ppb	NC	NC	0.11 U	-	0.18 U	-	0.70 U	-	-	-	R	-	-	0.68	-
Gases																
Methane	%	0.5	0.5	-	0.21 U	0.065 U	0.19 U	-	-	0.36 U	-	R	6.6[ab]	6.2[ab]	0.064 U	-
Field Parameter																
Methane, field (unfiltered)	%	0.5	0.5	0.0 / 0.0	-	0.0 / 0.0	-	0.0 / 0.0	0.0	-	6.6[ab]	7.6[ab] / 7.6[ab]	8.8[ab]	8.8[ab]	0.0 / 0.0	0.0
Methane, field (filtered)	%	0.5	0.5	-	0 / 0	-	0 / 0	-	0.0 / 0.0	0 / 0	-	-	6.8[ab] / 6.6[ab]	6.6[ab] / 6.8[ab]	-	0 / 0.0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
[ ] - Concentration was greater than applicable criteria.

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5054, Bldg 2, Probe B*	*Parcel 5054, Bldg 4*	*Parcel 5054, Bldg 4*	*Parcel 5054, Bldg 4, Probe A*	*Parcel 5054, Bldg 4, Probe A*	*Parcel 5054, Bldg 4, Probe A*	*Parcel 5054, Bldg 4, Probe A*	*Parcel 5054, Bldg 5*	*Parcel 5054, Bldg 5, Probe A*	*Parcel 5054, Bldg 5, Probe A*	*Parcel 5054, Bldg 5, Probe A*	*Parcel 5171, Bldg 8, Probe A*	*Parcel 5171, Bldg 8, Probe A*
Sample Location:				*1903 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*
Owner / Tenant:				*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*B&G Trucking*	*B&G Trucking*
Sample ID:				*SS-38443-031312-JC-164*	*SS-38443-011012-JC-055*	*SS-38443-011012-JC-056*	*SS-38443-031312-JC-168*	*SS-38443-031312-JC-169*	*SS-38443-080612-GL-048*	*SS-38443-091312-GL-022*	*SS-38443-011012-JC-054*	*SS-38443-031312-JC-172*	*SS-38443-031312-JC-173*	*SS-38443-080612-GL-052*	*SS-38443-011112-JC-069*	*SS-38443-031412-JC-184*
Sample Date:				*3/13/2012*	*1/10/2012*	*1/10/2012*	*3/13/2012*	*3/13/2012*	*8/6/2012*	*9/13/2012*	*1/10/2012*	*3/13/2012*	*3/13/2012*	*8/6/2012*	*1/11/2012*	*3/14/2012*
						Duplicate		*Duplicate*								
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*													
Volatile Organic Compounds																
1,1,1-Trichloroethane	ppb	NC	NC	-	7.4	7.2	12	10	12	17	4.5	7.1	-	11	2.8 U	3.2 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	-	0.070 U	0.076 U	0.30 U	0.30 U	0.61 U	0.61 U	0.40 U	1.6 U	-	1.8 U	3.2 U	6.5 U
1,1,2-Trichloroethane	ppb	NC	NC	-	0.033 U	0.036 U	0.27 U	0.27 U	0.54 U	0.54 U	0.19 U	1.4 U	-	1.6 U	1.5 U	5.8 U
1,1-Dichloroethane	ppb	160	1600	-	0.20 J	0.18 J	0.13 U	0.13 U	0.46 J	1.0 J	3.5	6.1	-	8.4	2.8 U	2.8 U
1,1-Dichloroethene	ppb	NC	NC	-	0.052 U	0.057 U	0.16 U	0.16 U	0.32 U	0.32 U	0.30 U	0.83 U	-	0.97 U	2.4 U	3.4 U
1,2,4-Trichlorobenzene	ppb	NC	NC	-	0.087 U	0.095 U	0.49 U	0.49 U	0.98 UJ	0.98 UJ	0.50 U	2.5 U	-	3.0 U	4.0 U	10 U
1,2,4-Trimethylbenzene	ppb	NC	NC	-	0.090 U	0.099 U	0.32 U	0.32 U	0.63 U	0.63 U	0.52 U	1.6 U	-	1.9 U	4.2 U	6.7 U
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	-	0.031 U	0.034 U	0.22 U	0.22 U	0.44 U	0.44 U	0.18 U	1.1 U	-	1.3 U	1.5 U	4.7 U
1,2-Dichlorobenzene	ppb	NC	NC	-	0.084 U	0.091 U	0.35 U	0.35 U	0.70 U	0.70 U	0.48 U	1.8 U	-	2.1 U	3.9 U	7.5 U
1,2-Dichloroethane	ppb	NC	NC	-	0.054 U	0.059 U	0.24 U	0.24 U	0.47 U	0.47 U	0.31 U	1.2 U	-	1.4 U	2.5 U	5.0 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	0.089 J	0.096 J	-	-	-	-	2.5	-	-	-	38	-
1,2-Dichloropropane	ppb	NC	NC	-	0.024 U	0.027 U	0.26 U	0.26 U	0.52 U	0.52 U	0.14 U	1.4 U	-	1.6 U	1.1 U	5.6 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	-	0.76	0.69	0.31 J	0.27 J	0.77 J	1.1 J	1.3 J	1.7 J	-	0.97 U	2.6 U	3.4 U
1,3,5-Trimethylbenzene	ppb	NC	NC	-	0.089 U	0.097 U	0.32 U	0.32 U	0.65 U	0.65 U	0.51 U	1.7 U	-	2.0 U	4.1 U	7.0 U
1,3-Butadiene	ppb	NC	NC	-	0.017 U	0.019 U	0.32 U	0.32 U	0.64 U	0.64 U	0.10 U	1.7 U	-	1.9 U	0.81 U	6.9 U
1,3-Dichlorobenzene	ppb	NC	NC	-	0.077 U	0.084 U	0.32 U	0.32 U	0.65 U	0.65 U	0.44 U	1.7 U	-	2.0 U	3.5 U	7.0 U
1,4-Dichlorobenzene	ppb	NC	NC	-	0.077 U	0.084 U	0.32 U	0.32 U	0.64 U	0.64 U	0.44 U	1.7 UJ	-	1.9 U	3.5 U	6.9 UJ
1,4-Dioxane	ppb	NC	NC	-	0.15 U	0.17 U	0.40 U	0.40 U	0.80 U	0.80 U	0.88 U	2.1 U	-	2.4 U	7.1 U	8.6 U
2,2,4-Trimethylpentane	ppb	NC	NC	-	0.063 U	0.068 U	0.20 U	0.20 U	0.39 U	0.39 U	0.36 U	1.0 U	-	1.2 U	2.9 U	4.2 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	-	0.030 U	0.25 J	1.0 U	1.0 U	2.0 U	2.0 U	0.17 U	5.2 U	-	6.1 U	1.4 U	21 U
2-Chlorotoluene	ppb	NC	NC	-	0.082 U	0.089 U	0.32 U	0.32 U	0.63 U	0.63 U	0.47 U	1.6 U	-	1.9 U	3.8 U	6.7 U
2-Hexanone	ppb	NC	NC	-	0.068 U	0.074 U	0.29 U	0.29 U	0.58 U	0.58 U	0.39 U	1.5 U	-	1.8 U	3.1 U	6.2 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	-	0.082 U	0.089 U	0.32 U	0.32 U	0.64 U	0.64 U	0.47 U	1.7 U	-	1.9 U	3.8 U	6.9 U
4-Ethyl toluene	ppb	NC	NC	-	0.080 U	0.087 U	0.33 U	0.33 U	0.66 U	0.66 U	0.46 U	1.7 U	-	2.0 U	3.7 U	7.1 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	-	0.045 U	0.049 U	0.22 U	0.22 U	0.45 U	0.45 U	0.26 U	1.2 U	-	1.4 U	2.1 U	4.8 U
Acetone	ppb	NC	NC	-	0.52 J	1.7 J	7.0 U	7.0 U	14 U	14 U	3.5 J	36 U	-	42 UJ	13 J	150 U
Allyl chloride	ppb	NC	NC	-	0.033 U	0.036 U	0.24 U	0.24 U	0.48 U	0.48 U	0.19 U	1.2 U	-	1.5 U	1.5 U	5.1 U
Benzene	ppb	20	200	-	0.031 U	0.034 U	0.28 U	0.28 U	0.56 U	0.56 U	0.40 J	1.5 U	-	1.7 U	1.5 U	6.0 U
Benzyl chloride	ppb	NC	NC	-	0.080 UJ	0.087 UJ	0.39 U	0.39 U	0.78 U	0.78 U	0.46 UJ	2.0 U	-	2.4 U	3.7 UJ	8.4 U
Bromodichloromethane	ppb	NC	NC	-	0.049 U	0.053 U	0.22 U	0.22 U	0.44 U	0.44 U	0.28 U	1.1 U	-	1.3 U	2.3 U	4.7 U
Bromoform	ppb	NC	NC	-	0.033 U	0.036 U	0.24 U	0.24 U	0.48 U	0.48 U	0.19 U	1.2 U	-	1.5 U	1.5 U	5.1 U
Bromomethane (Methyl bromide)	ppb	NC	NC	-	0.021 U	0.023 U	0.16 U	0.16 U	0.32 U	0.32 U	0.12 U	0.83 U	-	0.97 U	0.97 U	3.4 U
Butane	ppb	NC	NC	-	0.019 U	0.021 U	2.7	3.2	0.64 U	0.64 U	2.0 J	4.7 J	-	4.4 J	0.89 U	16 J
Carbon disulfide	ppb	NC	NC	-	0.11 U	0.13 U	0.16 U	0.16 U	0.31 U	0.31 U	0.66 U	0.81 U	-	1.1 J	5.3 U	3.3 U
Carbon tetrachloride	ppb	NC	NC	-	0.057 U	0.063 U	0.19 U	0.19 U	0.38 U	0.38 U	0.67 J	0.99 U	-	1.2 U	2.7 U	4.1 U
Chlorobenzene	ppb	NC	NC	-	0.035 U	0.038 U	0.24 U	0.24 U	0.49 U	0.49 U	0.20 U	1.3 U	-	1.5 U	1.6 U	5.2 U
Chlorodifluoromethane	ppb	NC	NC	-	0.14 J	0.065 U	0.65 J	1.0	3.3	4.8	0.34 U	0.96 UJ	-	1.1 U	2.7 U	6.0 J
Chloroethane	ppb	NC	NC	-	0.028 U	0.030 U	0.18 U	0.18 U	0.35 U	0.35 U	0.16 U	0.91 U	-	1.1 U	1.3 U	3.7 U
Chloroform (Trichloromethane)	ppb	800	8000	-	0.19 J	0.19 J	0.33 J	0.27 J	0.47 J	0.56 J	1.8 J	3.6 J	-	5.6 J	16	17 J
Chloromethane (Methyl chloride)	ppb	NC	NC	-	0.023 U	0.025 U	0.80 U	0.80 U	1.6 U	1.6 U	0.13 U	4.2 U	-	4.8 U	1.0 U	17 U
cis-1,2-Dichloroethene	ppb	370	3700	-	0.089 J	0.096 J	0.30 U	0.30 U	1.1 J	1.2 J	2.5	3.8 J	-	8.1	27	28
cis-1,3-Dichloropropene	ppb	NC	NC	-	0.028 U	0.030 U	0.37 U	0.37 U	0.74 U	0.74 U	0.16 U	1.9 U	-	2.2 U	1.3 U	7.9 U
Cyclohexane	ppb	NC	NC	-	0.068 U	0.074 U	0.20 U	0.20 U	0.40 U	0.40 U	0.39 U	1.0 U	-	1.2 U	3.1 U	4.3 U
Cymene (p-Isopropyltoluene)	ppb	NC	NC	-	0.084 U	0.091 U	0.28 U	0.28 U	0.57 U	0.57 U	0.48 U	1.5 U	-	1.7 U	3.9 U	6.1 U
Dibromochloromethane	ppb	NC	NC	-	0.037 U	0.040 U	0.21 U	0.21 U	0.42 U	0.42 U	0.21 U	1.1 U	-	1.3 U	1.7 U	4.5 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	-	0.85 J	0.78 J	0.51 J	0.56 J	0.80 J	1.1 J	0.60 J	1.8 U	-	2.1 U	3.1 U	7.3 U
Ethylbenzene	ppb	2500	25000	-	0.038 U	0.042 U	0.34 U	0.34 U	0.68 U	0.68 U	0.25 J	1.8 U	-	2.1 U	1.8 U	7.3 U
Hexachlorobutadiene	ppb	NC	NC	-	0.11 U	0.12 U	0.39 U	0.39 U	0.78 UJ	0.78 UJ	0.65 U	2.0 U	-	2.4 U	5.2 U	8.4 U
Hexane	ppb	NC	NC	-	0.045 U	0.057 J	0.16 U	0.21 J	0.32 U	0.32 U	0.26 U	0.83 U	-	0.97 U	2.1 U	3.4 U
Isopropyl alcohol	ppb	NC	NC	-	0.064 U	0.070 U	0.55 J	0.44 J	0.44 U	0.44 U	0.37 U	1.1 U	-	1.3 U	3.0 U	4.7 U
Isopropyl benzene	ppb	NC	NC	-	0.054 U	0.059 U	0.30 U	0.30 U	0.60 U	0.60 U	0.31 U	1.6 U	-	1.8 U	2.5 U	6.4 U
m&p-Xylenes	ppb	2000	20000	-	0.084 U	0.091 U	0.60 U	0.60 U	1.2 U	1.2 U	0.84 J	3.1 U	-	3.6 U	3.9 U	13 U
Methyl methacrylate	ppb	NC	NC	-	0.023 U	0.025 U	0.40 U	0.40 U	0.79 U	0.79 U	0.13 U	2.1 U	-	2.4 U	1.0 U	8.5 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	-	0.028 U	0.030 U	0.85 U	0.85 U	1.7 U	1.7 U	0.16 U	4.4 U	-	5.1 U	1.3 U	18 U
Methylene chloride	ppb	NC	NC	-	0.023 U	0.16 U	0.86 J	0.72 J	1.7 J	1.3 U	0.13 U	2.6 J	-	1.4 U	1.0 U	15 J
Naphthalene	ppb	29	NC	-	0.15 UJ	0.16 UJ	0.45 U	0.45 U	0.90 UJ	0.90 UJ	1.6 J	2.3 U	-	3.7 J	6.9 UJ	9.6 U
N-Butylbenzene	ppb	NC	NC	-	0.096 U	0.10 U	0.23 U	0.23 U	0.46 U	0.46 U	0.55 U	1.2 U	-	1.4 U	4.4 U	4.9 U
N-Decane	ppb	NC	NC	-	-	-	-	-	0.56 UJ	0.56 UJ	-	0.056 U	-	1.7 U	-	-
N-Dodecane	ppb	NC	NC	-	-	-	-	-	0.78 U	0.78 U	-	0.078 U	-	2.4 U	-	-
N-Heptane	ppb	NC	NC	-	0.017 U	0.019 U	0.24 U	0.24 U	0.47 U	0.47 U	0.10 U	1.2 U	-	1.4 U	0.81 U	5.0 U
Nonane	ppb	NC	NC	-	-	-	-	-	0.43 U	0.43 U	-	0.043 U	-	1.3 U	-	-
N-Propylbenzene	ppb	NC	NC	-	0.087 U	0.095 U	0.28 U	0.28 U	0.56 U	0.56 U	0.50 U	1.5 U	-	1.7 U	4.0 U	6.0 U
N-Undecane	ppb	NC	NC	-	-	-	-	-	0.62 U	0.62 U	-	0.062 U	-	1.9 U	-	-
Octane	ppb	NC	NC	-	-	-	-	-	0.36 U	0.36 U	-	0.036 U	-	1.1 U	-	-
o-Xylene	ppb	2000	20000	-	0.038 U	0.042 U	0.30 U	0.30 U	0.61 U	0.61 U	0.22 U	1.6 U	-	1.8 U	1.8 U	6.5 U
Pentane	ppb	NC	NC	-	-	-	-	-	0.60 U	0.60 U	-	0.060 U	-	1.9 J	-	-
Styrene	ppb	NC	NC	-	0.052 U	0.057 U	0.29 U	0.29 U	0.58 U	0.58 U	0.30 U	1.5 U	-	1.8 U	2.4 U	6.2 U
tert-Butyl alcohol	ppb	NC	NC	-	0.12 U	0.13 U	0.19 U	0.19 U	0.38 U	0.45 J	0.71 U	0.99 U	-	1.2 U	5.7 U	4.1 U
tert-Butylbenzene	ppb	NC	NC	-	0.082 U	0.089 U	0.33 U	0.33 U	0.66 U	0.66 U	0.47 U	1.7 U	-	2.0 U	3.8 U	7.1 U

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5054, Bldg 2, Probe B*	*Parcel 5054, Bldg 4*	*Parcel 5054, Bldg 4*	*Parcel 5054, Bldg 4, Probe A*	*Parcel 5054, Bldg 4, Probe A*	*Parcel 5054, Bldg 4, Probe A*	*Parcel 5054, Bldg 4, Probe A*	*Parcel 5054, Bldg 5*	*Parcel 5054, Bldg 5, Probe A*	*Parcel 5054, Bldg 5, Probe A*	*Parcel 5054, Bldg 5, Probe A*	*Parcel 5171, Bldg 8, Probe A*	*Parcel 5171, Bldg 8, Probe A*
Sample Location:				*1903 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*
Owner/Tenant:				*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*B&G Trucking*	*B&G Trucking*
Sample ID:				*SS-38443-031312-JC-164*	*SS-38443-011012-JC-055*	*SS-38443-011012-JC-056*	*SS-38443-031312-JC-168*	*SS-38443-031312-JC-169*	*SS-38443-080612-GL-048*	*SS-38443-091312-GL-022*	*SS-38443-011012-JC-054*	*SS-38443-031312-JC-172*	*SS-38443-031312-JC-173*	*SS-38443-080612-GL-052*	*SS-38443-011112-JC-069*	*SS-38443-031412-JC-184*
Sample Date:				*3/13/2012*	*1/10/2012*	*1/10/2012*	*3/13/2012*	*3/13/2012*	*8/6/2012*	*9/13/2012*	*1/10/2012*	*3/13/2012*	*3/13/2012*	*8/6/2012*	*1/11/2012*	*3/14/2012*
						Duplicate		*Duplicate*								
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*													
Tetrachloroethene	ppb	250	2500	-	14	14	22	17	55	57	3.0	4.2 J	-	7.5	8.5 J	7.8 J
Tetrahydrofuran	ppb	NC	NC	-	0.031 U	0.034 U	0.32 U	0.32 U	0.63 U	0.63 U	0.18 U	1.6 U	-	1.9 U	1.5 U	6.7 U
Toluene	ppb	NC	NC	-	0.059 J	0.11 J	0.54 J	0.42 J	0.54 U	0.54 U	0.18 U	1.4 U	-	1.6 U	73	5.8 U
trans-1,2-Dichloroethene	ppb	NC	NC	-	0.056 U	0.061 U	0.25 U	0.25 U	0.50 U	0.50 U	0.32 U	1.3 U	-	1.5 U	11 J	11 J
trans-1,3-Dichloropropene	ppb	NC	NC	-	0.035 U	0.038 U	0.24 U	0.24 U	0.48 U	0.48 U	0.20 U	1.2 U	-	1.5 U	1.6 U	5.1 U
Trichloroethene	ppb	20	200	-	**48[a]**	**46[a]**	**63[a]**	**51[a]**	**170[a]**	**200[a]**	**240[ab]**	**360[ab]**	-	**700[ab]**	**1400[ab]**	**960[ab]**
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	-	0.26 J	0.24 J	0.27 J	0.27 J	0.29 J	0.41 J	0.34 U	0.62 U	-	0.84 J	2.7 U	2.6 U
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	-	0.059 J	0.060 J	0.16 U	0.16 U	0.31 U	0.31 U	0.10 U	0.81 U	-	0.94 U	0.81 U	3.3 U
Vinyl bromide (Bromoethene)	ppb	NC	NC	-	0.033 U	0.036 U	0.18 U	0.18 U	0.35 U	0.35 U	0.19 U	0.91 U	-	1.1 U	1.5 U	3.7 U
Vinyl chloride	ppb	20	200	-	0.050 U	0.055 U	0.36 U	0.36 U	0.71 U	0.71 U	0.29 U	1.8 U	-	2.1 U	2.3 U	7.6 U
Xylenes (total)	ppb	NC	NC	-	0.038 U	0.042 U	-	-	-	-	0.84 J	-	-	-	1.8 U	-
Gases																
Methane	%	0.5	0.5	0.20 U	0.066 U	0.057 U	-	-	0.19 U	0.19 U	-	-	0.17 U	0.30 U	-	-
Field Parameter																
Methane, field (unfiltered)	%	0.5	0.5	0.0	0.0 / 0.0	0.0 / 0.0	-	-	-	-	0.0 / 0.0	-	-	-	0.0 / 0.0	-
Methane, field (filtered)	%	0.5	0.5	0 / 0.0	-	-	0.0 / 0	0.0 / 0	0 / 0	-	-	0 / 0.0	0.0 / 0	0 / 0	-	0.0 / 0.0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5171, Bldg 8, Probe A*	*Parcel 5171, Bldg 8, Probe B*	*Parcel 5171, Bldg 8, Probe B*	*Parcel 5171, Bldg 8, Probe B*	*Parcel 5171, Bldg 8, Probe C*	*Parcel 5171, Bldg 8, Probe C*	*Parcel 5171, Bldg 8, Probe C*	*Parcel 5171, Bldg 8, Probe D*	*Parcel 5171, Bldg 8, Probe D*	*Parcel 5171, Bldg 8, Probe D*	*Parcel 5171, Bldg 8, Probe D*	*Parcel 5171, Bldg 8, Probe F*
Sample Location:				*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*
Owner / Tenant:				*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*
Sample ID:				*SS-38443-080712-GL-060*	*SS-38443-011112-JC-065*	*SS-38443-031412-JC-185*	*SS-38443-080712-GL-062*	*SS-38443-011112-JC-066*	*SS-38443-031412-JC-187*	*SS-38443-080712-GL-063*	*SS-38443-011112-JC-064*	*SS-38443-031412-JC-188*	*SS-38443-031412-JC-189*	*SS-38443-080712-GL-065*	*SS-38443-011112-JC-067*
Sample Date:				*8/7/2012*	*1/11/2012*	*3/14/2012*	*8/7/2012*	*1/11/2012*	*3/14/2012*	*8/7/2012*	*1/11/2012*	*3/14/2012*	*3/14/2012*	*8/7/2012*	*1/11/2012*
													Duplicate		
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*												
Volatile Organic Compounds															
1,1,1-Trichloroethane	ppb	NC	NC	1.3 J	0.29 J	0.42 J	0.81 J	0.19 J	0.33 J	0.58 J	0.69 U	1.8 J	1.6 J	2.3 J	0.035 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.49 U	0.12 U	0.30 U	0.61 U	0.060 U	0.65 U	0.30 U	0.79 U	1.8 U	1.8 U	2.4 U	0.040 U
1,1,2-Trichloroethane	ppb	NC	NC	0.43 U	0.057 U	0.27 U	0.54 U	0.029 U	0.57 U	0.27 U	0.37 U	1.5 U	1.5 U	2.1 U	0.019 U
1,1-Dichloroethane	ppb	160	1600	0.25 J	0.10 U	0.13 U	0.26 U	0.076 J	0.28 U	0.22 J	0.69 U	0.75 U	0.75 U	1.0 U	0.035 U
1,1-Dichloroethene	ppb	NC	NC	0.26 U	0.090 U	0.16 U	0.32 U	0.045 U	0.34 U	0.16 U	0.59 U	0.92 U	0.92 U	1.3 U	0.030 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.78 UJ	0.15 U	0.49 U	0.98 U	0.075 U	1.0 U	0.49 U	0.99 U	2.8 U	2.8 U	3.8 U	0.050 U
1,2,4-Trimethylbenzene	ppb	NC	NC	0.79 J	0.19 J	0.32 U	1.7 J	0.078 U	0.67 U	0.32 U	1.0 U	1.8 U	1.8 U	2.5 U	0.20
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.35 U	0.054 U	0.22 U	0.44 U	0.027 U	0.47 U	0.22 U	0.35 U	1.3 U	1.3 U	1.7 U	0.018 U
1,2-Dichlorobenzene	ppb	NC	NC	0.56 U	0.14 U	0.35 U	0.70 U	0.072 U	0.74 U	0.35 U	0.95 U	2.0 U	2.0 U	2.7 U	0.048 U
1,2-Dichloroethane	ppb	NC	NC	0.38 U	0.093 U	0.24 U	0.47 U	0.047 U	0.50 U	0.24 U	0.61 U	1.3 U	1.3 U	1.8 U	0.031 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	0.98	-	-	1.8	-	-	16	-	-	-	0.060 J
1,2-Dichloropropane	ppb	NC	NC	0.42 U	0.042 U	0.26 U	0.52 U	0.021 U	0.55 U	0.26 U	0.28 U	1.5 U	1.5 U	2.0 U	0.014 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.26 U	0.096 U	0.16 U	0.32 U	0.048 U	0.34 U	0.16 U	0.63 U	0.92 U	0.92 U	1.3 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.52 U	0.15 U	0.32 U	0.65 U	0.077 U	0.69 UJ	0.32 U	1.0 U	1.9 U	1.9 U	2.6 U	0.059 J
1,3-Butadiene	ppb	NC	NC	0.51 U	0.030 U	0.32 U	0.64 U	0.015 U	0.68 U	0.32 U	0.20 U	1.8 U	1.8 U	2.5 U	0.010 U
1,3-Dichlorobenzene	ppb	NC	NC	0.52 U	0.13 U	0.32 U	0.65 U	0.066 U	0.69 U	0.32 U	0.87 U	1.9 U	1.9 U	2.6 U	0.044 U
1,4-Dichlorobenzene	ppb	NC	NC	0.51 U	0.13 U	0.32 UJ	0.64 U	0.066 U	0.68 U	0.32 U	0.87 U	1.8 UJ	1.8 UJ	2.5 U	0.044 U
1,4-Dioxane	ppb	NC	NC	0.64 U	0.26 U	0.40 U	0.80 U	0.13 U	0.85 U	0.40 U	1.7 U	2.3 U	2.3 U	3.1 U	0.088 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.59 J	0.11 U	0.54 J	0.39 U	0.054 U	0.41 U	0.20 U	0.71 U	1.1 U	1.1 U	1.5 U	0.036 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	1.6 U	0.14 J	1.0 U	2.0 U	0.30 J	2.1 U	1.0 U	0.33 U	5.7 U	5.7 U	7.9 U	0.47 J
2-Chlorotoluene	ppb	NC	NC	0.50 U	0.14 U	0.32 U	0.63 U	0.071 U	0.67 U	0.32 U	0.93 U	1.8 U	1.8 U	2.5 U	0.047 U
2-Hexanone	ppb	NC	NC	0.46 U	0.12 U	0.29 U	0.58 U	0.059 U	0.61 U	0.29 U	0.77 U	1.7 U	1.7 U	2.3 U	0.039 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.51 U	0.14 U	0.32 U	0.64 U	0.071 U	0.68 U	0.32 U	0.93 U	1.8 U	1.8 U	2.5 U	0.047 U
4-Ethyl toluene	ppb	NC	NC	0.53 U	0.14 U	0.33 U	0.66 U	0.069 U	0.70 U	0.33 U	0.91 U	1.9 U	1.9 U	2.6 U	0.055 J
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.36 U	0.078 U	0.22 U	0.45 U	0.039 U	0.48 U	0.22 U	0.51 U	1.3 U	1.3 U	1.8 U	0.026 U
Acetone	ppb	NC	NC	11 J	6.5 J	54	14 UJ	7.0 J	15 U	7.0 U	9.9 J	40 U	40 U	55 UJ	7.7
Allyl chloride	ppb	NC	NC	0.38 U	0.057 U	0.24 U	0.48 U	0.029 U	0.51 U	0.24 U	0.37 U	1.4 U	1.4 U	1.9 U	0.019 U
Benzene	ppb	20	200	1.1 J	0.13 J	1.1	0.74 J	0.077 J	0.59 U	0.28 U	0.35 U	1.6 U	1.6 U	2.2 U	0.17 J
Benzyl chloride	ppb	NC	NC	0.62 U	0.14 U	0.39 U	0.78 U	0.069 UJ	0.83 U	0.39 U	0.91 UJ	2.2 U	2.2 U	3.1 U	0.046 UJ
Bromodichloromethane	ppb	NC	NC	0.35 U	0.084 U	0.22 U	0.44 U	0.042 U	0.47 U	0.22 U	0.55 U	1.3 U	1.3 U	1.7 U	0.028 U
Bromoform	ppb	NC	NC	0.38 U	0.057 U	0.24 U	0.48 U	0.029 U	0.51 U	0.24 U	0.37 U	1.4 U	1.4 U	1.9 U	0.019 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.26 U	0.036 U	0.16 U	0.32 U	0.018 U	0.34 U	0.16 U	0.24 U	0.92 U	0.92 U	1.3 U	0.012 U
Butane	ppb	NC	NC	15	0.033 U	5.9 J	0.64 U	0.017 U	0.94 J	0.32 J	0.22 U	6.6 J	8.0 J	2.5 U	2.2
Carbon disulfide	ppb	NC	NC	0.25 U	1.6	0.16 U	0.31 U	1.1	0.33 U	0.16 U	1.3 U	0.89 U	0.89 U	1.2 U	0.15 J
Carbon tetrachloride	ppb	NC	NC	0.64 J	0.099 U	0.19 U	0.38 U	0.050 U	0.40 UJ	0.19 U	0.65 U	1.1 U	1.1 U	1.5 U	0.067 J
Chlorobenzene	ppb	NC	NC	0.39 U	0.060 U	0.24 U	0.49 U	0.030 U	0.52 U	0.24 U	0.39 U	1.4 U	1.4 U	1.9 U	0.020 U
Chlorodifluoromethane	ppb	NC	NC	0.30 U	0.10 U	0.84 J	0.37 U	0.051 U	0.39 U	0.18 U	0.67 U	1.6 J	1.6 J	1.5 U	0.034 U
Chloroethane	ppb	NC	NC	0.29 J	0.048 U	0.18 U	0.35 U	0.024 U	0.37 U	0.18 U	0.32 U	1.0 U	1.0 U	1.4 U	0.016 U
Chloroform (Trichloromethane)	ppb	800	8000	25	0.74	1.0	2.3	0.89	1.4 J	3.3	3.8 J	4.9 J	5.0 J	7.4 J	0.19 J
Chloromethane (Methyl chloride)	ppb	NC	NC	1.3 U	0.17 J	0.80 U	1.6 U	0.17 J	1.7 U	0.80 U	0.26 U	4.6 U	4.6 U	6.3 U	0.013 U
cis-1,2-Dichloroethene	ppb	370	3700	48	0.49 J	0.55 J	1.4 J	1.7	2.7	5.0	10	13	14	20	0.014 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.59 U	0.048 U	0.37 U	0.74 U	0.024 U	0.78 U	0.37 U	0.32 U	2.1 U	2.1 U	2.9 U	0.016 U
Cyclohexane	ppb	NC	NC	0.36 J	0.12 U	0.64 J	0.40 U	0.084 J	0.42 U	0.27 J	0.77 U	1.1 U	1.1 U	1.6 U	0.11 J
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.46 U	0.19 J	0.28 U	0.57 U	0.072 U	0.60 U	0.28 U	0.95 U	1.6 U	1.6 U	2.2 U	0.048 U
Dibromochloromethane	ppb	NC	NC	0.34 U	0.063 U	0.21 U	0.42 U	0.032 U	0.45 U	0.21 U	0.41 U	1.2 U	1.2 U	1.6 U	0.021 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.95 J	1.8	2.2	2.0	7.5	9.1	5.9	2.6 J	7.0 J	3.9 J	2.7 U	0.62
Ethylbenzene	ppb	2500	25000	0.54 U	0.80	0.34 U	1.0 J	0.10 J	0.72 U	0.34 U	0.43 U	2.0 U	2.0 U	2.7 U	0.20
Hexachlorobutadiene	ppb	NC	NC	0.62 UJ	0.19 U	0.39 U	0.78 U	0.098 U	0.83 U	0.39 U	1.3 U	2.2 U	2.2 U	3.1 U	0.065 U
Hexane	ppb	NC	NC	1.5 J	0.078 U	10	0.46 J	0.071 J	0.35 J	0.20 J	0.51 U	0.92 U	0.92 U	1.3 U	0.34
Isopropyl alcohol	ppb	NC	NC	16	0.11 U	6.1 J	0.50 J	2.3 J	1.7 J	0.76 J	0.73 U	1.3 U	1.3 U	1.8 J	0.96 J
Isopropyl benzene	ppb	NC	NC	0.48 U	0.12 J	0.30 U	0.60 U	0.047 U	0.64 U	0.30 U	0.61 U	1.7 U	1.7 U	2.4 U	0.065 J
m&p-Xylenes	ppb	2000	20000	1.4 J	1.1 J	0.60 U	4.1	0.42 J	1.3 U	0.60 U	0.95 U	3.4 U	3.4 U	4.7 U	0.44 J
Methyl methacrylate	ppb	NC	NC	0.63 U	0.039 U	0.40 U	0.79 U	0.020 U	0.84 U	0.40 U	0.26 U	2.3 U	2.3 U	3.1 U	0.013 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	1.4 U	0.048 U	0.85 U	1.7 U	0.024 U	1.8 U	0.85 U	0.32 U	4.9 U	4.9 U	6.7 U	0.016 U
Methylene chloride	ppb	NC	NC	1.7 J	0.039 U	1.2 J	0.45 U	0.12 J	0.48 U	0.22 U	0.26 U	5.6 J	4.6 J	1.8 U	0.12 J
Naphthalene	ppb	29	NC	0.72 UJ	0.26 U	0.45 U	0.90 U	0.13 UJ	0.95 U	0.45 U	1.7 UJ	2.6 U	2.6 U	3.5 U	0.086 UJ
N-Butylbenzene	ppb	NC	NC	0.37 U	0.16 U	0.23 U	0.46 U	0.083 U	0.49 U	0.23 U	1.1 U	1.3 U	1.3 U	1.8 U	0.055 U
N-Decane	ppb	NC	NC	1.2 J	-	-	2.6 J	-	1.8 J	0.42 J	-	-	-	2.2 U	-
N-Dodecane	ppb	NC	NC	0.62 U	-	-	0.78 U	-	0.83 U	0.39 U	-	-	-	3.1 U	-
N-Heptane	ppb	NC	NC	0.38 U	1.0	2.7	0.53 J	0.25 J	0.53 J	0.24 U	2.3 J	1.3 U	1.3 U	1.8 U	0.48
Nonane	ppb	NC	NC	0.45 J	-	-	1.3 J	-	1.4 J	0.22 U	-	-	-	1.7 U	-
N-Propylbenzene	ppb	NC	NC	0.45 U	0.15 U	0.28 U	0.56 U	0.075 U	0.59 U	0.28 U	0.99 U	1.6 U	1.6 U	2.2 U	0.050 U
N-Undecane	ppb	NC	NC	0.96 J	-	-	1.3 J	-	0.66 U	0.31 U	-	-	-	2.4 U	-
Octane	ppb	NC	NC	0.29 U	-	-	0.36 U	-	0.38 U	0.18 U	-	-	-	1.4 U	-
o-Xylene	ppb	2000	20000	0.69 J	0.40 J	0.30 U	1.8 J	0.15 J	0.65 U	0.30 U	0.43 U	1.8 U	1.8 U	2.4 U	0.18 J
Pentane	ppb	NC	NC	9.3	-	-	0.60 U	-	0.64 U	0.30 U	-	-	-	2.4 U	-
Styrene	ppb	NC	NC	0.46 U	0.090 U	0.29 U	0.58 U	0.045 U	0.61 U	0.29 U	0.59 U	1.7 U	1.7 U	2.3 U	0.030 U
tert-Butyl alcohol	ppb	NC	NC	0.30 U	0.21 U	3.6 J	0.38 U	0.11 U	1.6 J	1.2 J	1.4 U	1.1 U	1.1 U	1.5 U	0.44 J
tert-Butylbenzene	ppb	NC	NC	0.53 U	0.14 U	0.33 U	0.66 U	0.071 U	0.70 U	0.33 U	0.93 U	1.9 U	1.9 U	2.6 U	0.047 U

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5171, Bldg 8, Probe A*	*Parcel 5171, Bldg 8, Probe B*	*Parcel 5171, Bldg 8, Probe B*	*Parcel 5171, Bldg 8, Probe B*	*Parcel 5171, Bldg 8, Probe C*	*Parcel 5171, Bldg 8, Probe C*	*Parcel 5171, Bldg 8, Probe C*	*Parcel 5171, Bldg 8, Probe D*	*Parcel 5171, Bldg 8, Probe D*	*Parcel 5171, Bldg 8, Probe D*	*Parcel 5171, Bldg 8, Probe D*	*Parcel 5171, Bldg 8, Probe F*
Sample Location:				*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*
Owner / Tenant:				*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*
Sample ID:				*SS-38443-080712-GL-060*	*SS-38443-011112-JC-065*	*SS-38443-031412-JC-185*	*SS-38443-080712-GL-062*	*SS-38443-011112-JC-066*	*SS-38443-031412-JC-187*	*SS-38443-080712-GL-063*	*SS-38443-011112-JC-064*	*SS-38443-031412-JC-188*	*SS-38443-031412-JC-189*	*SS-38443-080712-GL-065*	*SS-38443-011112-JC-067*
Sample Date:				*8/7/2012*	*1/11/2012*	*3/14/2012*	*8/7/2012*	*1/11/2012*	*3/14/2012*	*8/7/2012*	*1/11/2012*	*3/14/2012*	*3/14/2012*	*8/7/2012*	*1/11/2012*
													Duplicate		
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*												
Tetrachloroethene	ppb	250	2500	15	76	79	220	21	32	78	8.4	14	11	28	0.59
Tetrahydrofuran	ppb	NC	NC	0.50 U	0.054 U	0.32 U	0.63 U	0.027 U	0.67 U	0.32 U	0.35 U	1.8 U	1.8 U	2.5 U	0.018 U
Toluene	ppb	NC	NC	1.4 J	77	3.6	4.9	39	0.98 J	0.30 J	8.1	1.5 U	1.5 U	2.1 U	0.51
trans-1,2-Dichloroethene	ppb	NC	NC	19	0.50 J	0.70 J	1.4 J	0.16 J	0.53 U	0.42 J	5.7	6.8	6.9	13	0.060 J
trans-1,3-Dichloropropene	ppb	NC	NC	0.38 U	0.060 U	0.24 U	0.48 U	0.030 U	0.51 U	0.24 U	0.39 U	1.4 U	1.4 U	1.9 U	0.020 U
Trichloroethene	ppb	20	200	**1800**[ab]	**31**[a]	**26**[a]	**95**[a]	11	17	**35**[a]	**420**[ab]	**420**[ab]	**350**[ab]	**930**[ab]	5.3
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.35 J	0.10 U	0.23 J	0.31 J	0.17 J	0.25 U	0.16 J	0.67 U	0.69 U	0.69 U	0.94 U	0.24
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.25 U	0.032 J	0.16 U	0.31 U	0.045 J	0.33 U	0.16 U	0.20 U	0.89 U	0.89 U	1.2 U	0.069 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.28 U	0.057 U	0.18 U	0.35 U	0.029 U	0.37 U	0.18 U	0.37 U	1.0 U	1.0 U	1.4 U	0.019 U
Vinyl chloride	ppb	20	200	0.57 U	0.087 U	0.36 U	0.71 U	0.044 U	0.75 U	0.36 U	0.57 U	2.0 U	2.0 U	2.8 U	0.029 U
Xylenes (total)	ppb	NC	NC	-	1.5	-	-	0.57	-	-	0.43 U	-	-	-	0.62
Gases															
Methane	%	0.5	0.5	0.21 U	0.068 U	-	0.19 U	-	0.19 U	0.20 U	-	-	-	0.19 U	-
Field Parameter															
Methane, field (unfiltered)	%	0.5	0.5	-	0.0 / 0.0	-	-	0.0 / 0.0	-	-	0.0 / 0.0	-	-	-	0.0 / 0.0
Methane, field (filtered)	%	0.5	0.5	0 / 0	-	0.0 / 0.0	0 / 0	-	0.0 / 0.0	0 / 0	-	0.0 / 0.0	0.0 / 0.0	0 / 0	-

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5171, Bldg 8, Probe F*	*Parcel 5171, Bldg 8, Probe F*	*Parcel 5171, Bldg 8, Probe F*	*Parcel 5171, Bldg 9, Probe A*	*Parcel 5171, Bldg 9, Probe A*	*Parcel 5171, Bldg 9, Probe A*	*Parcel 5171, Bldg 9, Probe A*	*Parcel 5171, Bldg 9, Probe A*	*Parcel 5171, Bldg 9, Probe B*	*Parcel 5171, Bldg 9, Probe B*	*Parcel 5171, Bldg 9, Probe B*	*Parcel 5171, Bldg 9, Probe B*
Sample Location:				*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*
Owner / Tenant:				*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*
Sample ID:				*SS-38443-011112-JC-068*	*SS-38443-031412-JC-191*	*SS-38443-080712-GL-066*	*SS-38443-011112-JC-061*	*SS-38443-011112-JC-062*	*SS-38443-032712-JC-194*	*SS-38443-032712-JC-194*	-	*SS-38443-011112-JC-063*	*SS-38443-031412-JC-196*	*SS-38443-031412-JC-197*	-
Sample Date:				*1/11/2012*	*3/14/2012*	*8/7/2012*	*1/11/2012*	*1/11/2012*	*3/26/2012*	*3/27/2012*	*8/7/2012*	*1/11/2012*	*3/14/2012*	*3/14/2012*	*8/7/2012*
				Duplicate				*Duplicate*							
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*												
Volatile Organic Compounds															
1,1,1-Trichloroethane	ppb	NC	NC	0.052 U	0.045 J	0.030 U	12 J	13 J	-	20 J	-	2.6 U	6.2 U	-	-
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.060 U	0.061 U	0.061 U	4.0 U	4.0 U	-	10 U	-	3.0 U	13 U	-	-
1,1,2-Trichloroethane	ppb	NC	NC	0.028 U	0.054 U	0.054 U	1.9 U	1.9 U	-	8.9 U	-	1.4 U	11 U	-	-
1,1-Dichloroethane	ppb	160	1600	0.052 U	0.026 U	0.026 U	3.5 U	3.5 U	-	4.3 U	-	2.6 U	5.4 U	-	-
1,1-Dichloroethene	ppb	NC	NC	0.045 U	0.032 U	0.032 U	3.0 U	3.0 U	-	5.3 U	-	2.3 U	6.7 U	-	-
1,2,4-Trichlorobenzene	ppb	NC	NC	0.075 U	0.098 U	0.098 U	5.0 U	5.0 U	-	16 U	-	3.8 U	20 U	-	-
1,2,4-Trimethylbenzene	ppb	NC	NC	0.11 J	0.22	0.20	5.2 U	5.2 U	-	10 U	-	18	22 J	-	-
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.027 U	0.044 U	0.044 U	1.8 U	1.8 U	-	7.3 U	-	1.4 U	9.2 U	-	-
1,2-Dichlorobenzene	ppb	NC	NC	0.072 U	0.070 U	0.070 U	4.8 U	4.8 U	-	12 U	-	3.6 U	15 U	-	-
1,2-Dichloroethane	ppb	NC	NC	0.046 U	0.047 U	0.047 U	3.1 U	3.1 U	-	7.7 U	-	2.3 U	9.8 U	-	-
1,2-Dichloroethene (total)	ppb	NC	NC	0.021 U	-	-	1.4 U	1.4 U	-	-	-	1.1 U	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.021 U	0.052 U	0.052 U	1.4 U	1.4 U	-	8.6 U	-	1.1 U	11 U	-	-
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.048 U	0.032 U	0.032 U	3.2 U	3.2 U	-	5.3 U	-	2.4 U	6.7 U	-	-
1,3,5-Trimethylbenzene	ppb	NC	NC	0.076 U	0.065 U	0.065 U	5.1 U	5.1 U	-	11 UJ	-	5.5 J	14 U	-	-
1,3-Butadiene	ppb	NC	NC	0.015 U	0.064 U	0.064 U	1.0 U	1.0 U	-	11 U	-	0.75 U	13 U	-	-
1,3-Dichlorobenzene	ppb	NC	NC	0.066 U	0.065 U	0.065 U	4.4 U	4.4 U	-	11 U	-	3.3 U	14 U	-	-
1,4-Dichlorobenzene	ppb	NC	NC	0.066 U	0.064 UJ	0.064 U	4.4 U	4.4 U	-	11 U	-	3.3 U	13 UJ	-	-
1,4-Dioxane	ppb	NC	NC	0.13 U	0.080 U	0.080 U	8.8 U	8.8 U	-	13 U	-	6.6 U	17 U	-	-
2,2,4-Trimethylpentane	ppb	NC	NC	0.054 U	0.044 J	0.062 J	3.6 U	3.6 U	-	6.4 U	-	54	21 J	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.27 J	0.69 J	1.3	1.7 U	1.7 U	-	33 U	-	65	64 J	-	-
2-Chlorotoluene	ppb	NC	NC	0.070 U	0.063 U	0.063 U	4.7 U	4.7 U	-	10 U	-	3.5 U	13 U	-	-
2-Hexanone	ppb	NC	NC	0.058 U	0.058 U	0.064 J	3.9 U	3.9 U	-	9.6 U	-	2.9 U	12 U	-	-
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.070 U	0.064 U	0.064 U	4.7 U	4.7 U	-	11 U	-	3.5 U	13 U	-	-
4-Ethyl toluene	ppb	NC	NC	0.069 U	0.066 U	0.071 J	4.6 U	4.6 U	-	11 U	-	6.6 J	14 U	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.039 U	0.045 U	0.14 J	2.6 U	2.6 U	-	7.4 U	-	7.1 J	43 J	-	-
Acetone	ppb	NC	NC	8.2	18	7.2 J	10 J	10 J	-	230 U	-	1900	1300	-	-
Allyl chloride	ppb	NC	NC	0.028 U	0.048 U	0.048 U	1.9 U	1.9 U	-	7.9 U	-	1.4 U	10 U	-	-
Benzene	ppb	20	200	0.18 J	0.26	0.23	1.8 U	1.8 U	-	9.2 U	-	1.4 U	12 U	-	-
Benzyl chloride	ppb	NC	NC	0.069 UJ	0.078 U	0.078 U	4.6 UJ	4.6 UJ	-	13 U	-	3.5 UJ	16 U	-	-
Bromodichloromethane	ppb	NC	NC	0.042 U	0.044 U	0.044 U	2.8 U	2.8 U	-	7.3 U	-	2.1 U	9.2 U	-	-
Bromoform	ppb	NC	NC	0.028 U	0.048 U	0.048 U	1.9 U	1.9 U	-	7.9 U	-	1.4 U	10 U	-	-
Bromomethane (Methyl bromide)	ppb	NC	NC	0.018 U	0.032 U	0.032 U	1.2 U	1.2 U	-	5.3 U	-	0.90 U	6.7 U	-	-
Butane	ppb	NC	NC	2.6	3.9 J	2.8	1.1 U	1.1 U	-	11 U	-	590	270 J	-	-
Carbon disulfide	ppb	NC	NC	0.098 U	0.031 U	0.18 J	6.6 U	6.6 U	-	5.1 U	-	5.0 U	6.4 U	-	-
Carbon tetrachloride	ppb	NC	NC	0.070 J	0.073 J	0.076 J	3.3 U	3.3 U	-	6.3 UJ	-	2.5 U	7.9 U	-	-
Chlorobenzene	ppb	NC	NC	0.030 U	0.049 U	0.049 U	2.0 U	2.0 U	-	8.1 U	-	1.5 U	10 U	-	-
Chlorodifluoromethane	ppb	NC	NC	0.051 U	0.65 J	0.51	3.4 U	3.4 U	-	6.1 U	-	2.6 U	17 J	-	-
Chloroethane	ppb	NC	NC	0.024 U	0.035 U	0.035 U	1.6 U	1.6 U	-	5.8 U	-	1.2 U	7.3 U	-	-
Chloroform (Trichloromethane)	ppb	800	8000	0.20 J	0.22	0.14 J	4.6 J	4.3 J	-	8.6 J	-	2.3 U	7.9 U	-	-
Chloromethane (Methyl chloride)	ppb	NC	NC	0.019 U	0.16 U	0.16 J	1.3 U	1.3 U	-	26 U	-	0.98 U	33 U	-	-
cis-1,2-Dichloroethene	ppb	370	3700	0.021 U	0.060 U	0.060 U	1.4 U	1.4 U	-	9.9 U	-	1.1 U	12 U	-	-
cis-1,3-Dichloropropene	ppb	NC	NC	0.024 U	0.074 U	0.074 U	1.6 U	1.6 U	-	12 U	-	1.2 U	15 U	-	-
Cyclohexane	ppb	NC	NC	0.12 J	0.23 J	0.16 J	3.9 U	3.9 U	-	6.6 U	-	3.3 J	8.3 U	-	-
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.072 U	0.057 U	0.057 U	4.8 U	4.8 U	-	9.4 U	-	3.6 U	12 U	-	-
Dibromochloromethane	ppb	NC	NC	0.031 U	0.042 U	0.042 U	2.1 U	2.1 U	-	6.9 U	-	1.6 U	8.7 U	-	-
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.65 J	0.60	0.51	3.8 U	3.8 U	-	11 U	-	2.9 U	45	-	-
Ethylbenzene	ppb	2500	25000	0.18 J	0.43	0.79	2.2 U	2.2 U	-	11 U	-	22	19 J	-	-
Hexachlorobutadiene	ppb	NC	NC	0.097 U	0.078 U	0.078 U	6.5 U	6.5 U	-	13 U	-	4.9 U	16 U	-	-
Hexane	ppb	NC	NC	0.42	0.55	0.51	2.6 U	2.6 U	-	5.3 U	-	2.0 U	6.7 U	-	-
Isopropyl alcohol	ppb	NC	NC	2.1 J	2.2	0.70 J	3.7 U	3.7 U	-	7.3 U	-	2.8 U	14 J	-	-
Isopropyl benzene	ppb	NC	NC	0.048 J	0.090 J	0.061 J	3.1 U	3.1 U	-	9.9 U	-	2.3 U	12 U	-	-
m&p-Xylenes	ppb	2000	20000	0.31 J	1.2	2.9	4.8 U	4.8 U	-	20 U	-	92	76	-	-
Methyl methacrylate	ppb	NC	NC	0.019 U	0.079 U	0.079 U	1.3 U	1.3 U	-	13 U	-	0.98 U	16 U	-	-
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.024 U	0.17 U	0.17 U	1.6 U	1.6 U	-	28 U	-	1.2 U	35 U	-	-
Methylene chloride	ppb	NC	NC	0.14 J	0.32 J	0.23 J	7.7 J	6.1 J	-	7.4 U	-	100	170	-	-
Naphthalene	ppb	29	NC	0.13 J	0.090 U	0.090 U	8.6 UJ	8.6 UJ	-	15 U	-	6.5 UJ	19 U	-	-
N-Butylbenzene	ppb	NC	NC	0.082 U	0.046 U	0.046 U	5.5 U	5.5 U	-	7.6 UJ	-	4.1 U	9.6 U	-	-
N-Decane	ppb	NC	NC	-	-	1.3	-	-	-	-	-	-	-	-	-
N-Dodecane	ppb	NC	NC	-	-	0.25 J	-	-	-	-	-	-	-	-	-
N-Heptane	ppb	NC	NC	0.59	1.4	0.090 J	1.0 U	1.0 U	-	7.7 U	-	87	110	-	-
Nonane	ppb	NC	NC	-	-	0.88	-	-	-	-	-	-	-	-	-
N-Propylbenzene	ppb	NC	NC	0.075 U	0.056 U	0.056 U	5.0 U	5.0 U	-	9.2 U	-	3.8 U	12 U	-	-
N-Undecane	ppb	NC	NC	-	-	0.42 J	-	-	-	-	-	-	-	-	-
Octane	ppb	NC	NC	-	-	0.11 J	-	-	-	-	-	-	-	-	-
o-Xylene	ppb	2000	20000	0.13 J	0.37	0.83	2.2 U	2.2 U	-	10 U	-	27	26 J	-	-
Pentane	ppb	NC	NC	-	-	1.9	-	-	-	-	-	-	-	-	-
Styrene	ppb	NC	NC	0.045 U	0.058 U	0.074 J	3.0 U	3.0 U	-	9.6 U	-	12 J	46	-	-
tert-Butyl alcohol	ppb	NC	NC	0.11 U	0.48 J	0.19 J	7.1 U	7.1 U	-	6.3 U	-	5.3 U	7.9 U	-	-
tert-Butylbenzene	ppb	NC	NC	0.070 U	0.066 U	0.066 U	4.7 U	4.7 U	-	11 U	-	3.5 U	14 U	-	-

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5171, Bldg 8, Probe F*	*Parcel 5171, Bldg 8, Probe F*	*Parcel 5171, Bldg 8, Probe F*	*Parcel 5171, Bldg 9, Probe A*	*Parcel 5171, Bldg 9, Probe A*	*Parcel 5171, Bldg 9, Probe A*	*Parcel 5171, Bldg 9, Probe A*	*Parcel 5171, Bldg 9, Probe A*	*Parcel 5171, Bldg 9, Probe B*	*Parcel 5171, Bldg 9, Probe B*	*Parcel 5171, Bldg 9, Probe B*	*Parcel 5171, Bldg 9, Probe B*
Sample Location:				*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*
Owner/Tenant:				*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*
Sample ID:				*SS-38443-011112-JC-068*	*SS-38443-031412-JC-191*	*SS-38443-080712-GL-066*	*SS-38443-011112-JC-061*	*SS-38443-011112-JC-062*	*SS-38443-032712-JC-194*	*SS-38443-032712-JC-194*	*-*	*SS-38443-011112-JC-063*	*SS-38443-031412-JC-196*	*SS-38443-031412-JC-197*	*-*
Sample Date:				*1/11/2012*	*3/14/2012*	*8/7/2012*	*1/11/2012*	*1/11/2012*	*3/26/2012*	*3/27/2012*	*8/7/2012*	*1/11/2012*	*3/14/2012*	*3/14/2012*	*8/7/2012*
				Duplicate				*Duplicate*							
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*												
Tetrachloroethene	ppb	250	2500	0.62	0.81	0.50	48	54	-	80	-	0.83 U	8.3 U	-	-
Tetrahydrofuran	ppb	NC	NC	0.027 U	0.063 U	0.063 U	1.8 U	1.8 U	-	10 U	-	1.4 U	13 U	-	-
Toluene	ppb	NC	NC	0.38	1.2	1.0	9.4 J	9.4 J	-	47	-	1700	2200	-	-
trans-1,2-Dichloroethene	ppb	NC	NC	0.048 U	0.076 J	0.089 J	3.2 U	3.2 U	-	8.2 U	-	2.4 U	10 U	-	-
trans-1,3-Dichloropropene	ppb	NC	NC	0.030 U	0.048 U	0.048 U	2.0 U	2.0 U	-	7.9 U	-	1.5 U	10 U	-	-
Trichloroethene	ppb	20	200	5.6	5.3	3.0	1800[ab]	1800[ab]	-	3100[ab]	-	2.3 U	7.5 U	-	-
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.26 J	0.28	0.27	5.5 J	4.9 J	-	7.5 J	-	2.6 U	5.0 U	-	-
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.073 J	0.069 J	0.074 J	1.0 U	1.0 U	-	5.1 U	-	0.75 U	6.4 U	-	-
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.028 U	0.035 U	0.035 U	1.9 U	1.9 U	-	5.8 U	-	1.4 U	7.3 U	-	-
Vinyl chloride	ppb	20	200	0.043 U	0.071 U	0.071 U	2.9 U	2.9 U	-	12 U	-	2.2 U	15 U	-	-
Xylenes (total)	ppb	NC	NC	0.44	-	-	2.2 U	2.2 U	-	-	-	120	-	-	-
Gases															
Methane	%	0.5	0.5	-	-	0.19 U	-	-	-	-	-	-	1.6 U[ab]	0.17 U	-
Field Parameter															
Methane, field (unfiltered)	%	0.5	0.5	0.0 / 0.0	-	-	0.0 / 0.0	0.0 / 0.0	-	-	-	0.2 / 0.2	-	-	-
Methane, field (filtered)	%	0.5	0.5	-	0.0 / 0	0 / 0	-	-	0	0.0	0	-	0 / 0.1	0 / 0.1	0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5172 / 12/ A Overstreet*	*Parcel 5172 / 12 / A Overstreet*	*Parcel 5172 / 12 / B Overstreet*	*Parcel 5172 / 12 / B Overstreet*	*Parcel 5172 / 12 / B Overstreet*	*Parcel 5172 / 12 / A S&J*	*Parcel 5172 / 12 / A S&J*	*Parcel 5172 / 12 / A S&J*	*Parcel 5172 / 12/ A S&J*	*Parcel 5172 / 12 / B S&J*	*Parcel 5172 / 12 / B S&J*	*Parcel 5172 / 12 / B S&J*	*Parcel 5172 / 12 / B S&J*
Sample Location:				*2019 Dryden Road*	*2019 Dryden Road*	*2019 Dryden Road*	*2019 Dryden Road*	*2019 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*
Owner / Tenant:				*Overstreet Painting*	*Overstreet Painting*	*Overstreet Painting*	*Overstreet Painting*	*Overstreet Painting*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*
Sample ID:				*SS-38443-010612-JC-022*	*SS-38443-031512-JC-216*	*SS-38443-010612-JC-021*	*SS-38443-031512-JC-218*	*-*	*SS-38443-010612-JC-024*	*SS-38443-010612-JC-023*	*SS-38443-030712-JC-112*	*SS-38443-030712-JC-118*	*SS-38443-010612-JC-025*	*SS-38443-010612-JC-025*	*SS-38443-030712-JC-113*	*-*
Sample Date:				*1/6/2012*	*3/15/2012*	*1/6/2012*	*3/15/2012*	*8/7/2012*	*1/6/2012*	*1/6/2012*	*3/7/2012*	*3/7/2012*	*1/6/2012*	*1/9/2012*	*3/7/2012*	*8/7/2012*
										Duplicate		*Duplicate*				
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*													
Volatile Organic Compounds																
1,1,1-Trichloroethane	ppb	NC	NC	8.7 J	13 J	5.2 U	6.8 U	-	3.5 U	R	2.1 U	2.1 U	9.0 U	-	6.7 U	-
1,1,2,2-Tetrachloroethane	ppb	NC	NC	6.0 U	4.2 U	5.9 U	14 U	-	4.0 U	R	4.3 U	4.3 U	10 U	-	14 U	-
1,1,2-Trichloroethane	ppb	NC	NC	2.9 U	3.7 U	2.8 U	12 U	-	1.9 U	R	3.8 U	3.8 U	4.9 U	-	12 U	-
1,1-Dichloroethane	ppb	160	1600	5.3 U	5.8 J	5.2 U	5.9 U	-	3.5 U	R	1.8 U	1.8 U	9.0 U	-	5.8 U	-
1,1-Dichloroethene	ppb	NC	NC	4.5 U	2.2 U	4.4 U	7.2 U	-	3.0 U	R	2.2 U	2.3 U	7.7 U	-	7.1 U	-
1,2,4-Trichlorobenzene	ppb	NC	NC	7.5 U	6.8 U	7.4 U	22 U	-	5.0 U	R	6.9 U	6.9 U	13 U	-	22 UJ	-
1,2,4-Trimethylbenzene	ppb	NC	NC	7.8 U	4.4 U	7.7 U	14 U	-	5.2 U	R	4.4 U	4.4 U	13 U	-	14 U	-
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	2.7 U	3.0 U	2.7 U	10 U	-	1.8 U	R	3.1 U	3.1 U	4.6 U	-	9.8 U	-
1,2-Dichlorobenzene	ppb	NC	NC	7.2 U	4.8 U	7.1 U	16 U	-	4.8 U	R	4.9 U	4.9 U	12 U	-	16 U	-
1,2-Dichloroethane	ppb	NC	NC	4.7 U	3.3 U	4.6 U	11 U	-	3.1 U	R	3.3 U	3.3 U	7.9 U	-	10 U	-
1,2-Dichloroethene (total)	ppb	NC	NC	640	-	480	-	-	35	R	-	-	780	-	-	-
1,2-Dichloropropane	ppb	NC	NC	2.1 U	3.6 U	2.1 U	12 U	-	1.4 U	R	3.6 U	3.7 U	3.6 U	-	12 U	-
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	4.8 U	2.2 U	4.7 U	7.2 U	-	3.2 U	R	2.2 U	2.3 U	8.2 U	-	7.1 U	-
1,3,5-Trimethylbenzene	ppb	NC	NC	7.7 U	4.5 UJ	7.5 U	15 UJ	-	5.1 U	R	4.6 U	4.6 U	13 U	-	14 U	-
1,3-Butadiene	ppb	NC	NC	1.5 U	4.4 U	1.5 U	14 U	-	1.0 U	R	4.5 U	4.5 U	2.6 U	-	14 U	-
1,3-Dichlorobenzene	ppb	NC	NC	6.6 U	4.5 U	6.5 U	15 U	-	4.4 U	R	4.6 U	4.6 U	11 U	-	14 U	-
1,4-Dichlorobenzene	ppb	NC	NC	6.6 U	4.4 U	6.5 U	14 U	-	4.4 U	R	4.5 U	4.5 U	11 U	-	14 U	-
1,4-Dioxane	ppb	NC	NC	13 U	5.5 U	13 U	18 U	-	8.8 U	R	5.6 UJ	5.7 UJ	23 U	-	18 UJ	-
2,2,4-Trimethylpentane	ppb	NC	NC	5.4 U	2.7 U	5.3 U	8.8 U	-	3.6 U	R	2.7 U	2.8 U	9.2 U	-	8.7 U	-
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	2.6 U	14 U	2.5 U	45 U	-	1.7 U	R	14 UJ	14 UJ	4.4 U	-	44 UJ	-
2-Chlorotoluene	ppb	NC	NC	7.1 U	4.4 U	7.0 U	14 U	-	4.7 U	R	4.4 U	4.4 U	12 U	-	14 U	-
2-Hexanone	ppb	NC	NC	5.9 U	4.0 U	5.8 U	13 U	-	3.9 U	R	4.1 UJ	4.1 UJ	10 U	-	13 UJ	-
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	7.1 U	4.4 U	7.0 U	14 U	-	4.7 U	R	4.5 U	4.5 U	12 U	-	14 U	-
4-Ethyl toluene	ppb	NC	NC	6.9 U	4.6 U	6.8 U	15 U	-	4.6 U	R	4.6 U	4.7 U	12 U	-	15 U	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	3.9 U	3.1 U	3.8 U	10 U	-	2.6 U	R	3.2 U	3.2 U	6.7 U	-	10 UJ	-
Acetone	ppb	NC	NC	6.8 U	97 U	6.7 U	320 U	-	11 J	R	98 U	99 U	41 J	-	310 U	-
Allyl chloride	ppb	NC	NC	2.9 U	3.3 U	2.8 U	11 U	-	1.9 U	R	3.4 U	3.4 U	4.9 U	-	11 U	-
Benzene	ppb	20	200	2.7 U	3.9 U	2.7 U	13 U	-	1.8 U	R	3.9 U	4.0 U	4.6 U	-	12 U	-
Benzyl chloride	ppb	NC	NC	6.9 U	5.4 U	6.8 U	18 U	-	4.6 U	R	5.5 U	5.5 U	12 UJ	-	17 U	-
Bromodichloromethane	ppb	NC	NC	4.2 U	3.0 U	4.1 U	10 U	-	2.8 U	R	3.1 U	3.1 U	7.2 U	-	9.8 U	-
Bromoform	ppb	NC	NC	2.9 U	3.3 U	2.8 U	11 U	-	1.9 U	R	3.4 U	3.4 U	4.9 U	-	11 U	-
Bromomethane (Methyl bromide)	ppb	NC	NC	1.8 U	2.2 U	1.8 U	7.2 U	-	1.2 U	R	2.2 U	2.3 U	3.1 U	-	7.1 U	-
Butane	ppb	NC	NC	1.7 U	12 J	1.6 U	14 U	-	1.1 U	R	4.5 U	4.5 U	2.8 U	-	19 J	-
Carbon disulfide	ppb	NC	NC	9.9 U	2.1 U	9.8 U	7.0 U	-	6.6 U	R	2.2 U	2.2 U	17 U	-	6.9 U	-
Carbon tetrachloride	ppb	NC	NC	5.0 U	2.6 UJ	4.9 U	8.6 UJ	-	3.3 U	R	2.7 U	2.7 U	8.4 U	-	8.4 U	-
Chlorobenzene	ppb	NC	NC	3.0 U	3.4 U	3.0 U	11 U	-	2.0 U	R	3.4 U	3.5 U	5.1 U	-	11 U	-
Chlorodifluoromethane	ppb	NC	NC	5.1 U	2.6 U	5.0 U	8.4 U	-	3.4 U	R	2.6 U	2.6 U	8.7 U	-	18 J	-
Chloroethane	ppb	NC	NC	2.4 U	2.4 U	2.4 U	7.9 U	-	1.6 U	R	2.5 U	2.5 U	4.1 U	-	7.8 U	-
Chloroform (Trichloromethane)	ppb	800	8000	51	66	71	110	-	8.8 J	R	9.5 J	9.7 J	25 J	-	32 J	-
Chloromethane (Methyl chloride)	ppb	NC	NC	2.0 U	11 U	1.9 U	36 U	-	1.3 U	R	11 U	11 U	3.3 U	-	36 U	-
cis-1,2-Dichloroethene	ppb	370	3700	570[a]	920[a]	440[a]	770[a]	-	26	R	23	24	570[a]	-	530[a]	-
cis-1,3-Dichloropropene	ppb	NC	NC	2.4 U	5.1 U	2.4 U	17 U	-	1.6 U	R	5.2 U	5.2 U	4.1 U	-	16 U	-
Cyclohexane	ppb	NC	NC	5.9 U	2.8 U	5.8 U	9.1 U	-	3.9 U	R	2.8 U	2.8 U	10 U	-	8.9 U	-
Cymene (p-Isopropyltoluene)	ppb	NC	NC	7.2 U	3.9 U	7.1 U	13 U	-	4.8 U	R	4.0 U	4.0 U	12 U	-	13 U	-
Dibromochloromethane	ppb	NC	NC	3.2 U	2.9 U	3.1 U	9.5 U	-	2.1 U	R	2.9 U	3.0 U	5.4 U	-	9.3 U	-
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	5.7 U	4.7 U	5.6 U	15 U	-	3.8 U	R	4.8 U	4.8 U	9.7 U	-	15 U	-
Ethylbenzene	ppb	2500	25000	3.3 U	4.7 U	3.3 U	15 U	-	2.2 U	R	4.8 U	4.8 U	5.6 U	-	15 U	-
Hexachlorobutadiene	ppb	NC	NC	9.8 U	5.4 U	9.6 U	18 U	-	6.5 U	R	5.5 U	5.5 U	17 U	-	17 UJ	-
Hexane	ppb	NC	NC	3.9 U	2.2 U	3.8 U	7.2 U	-	2.6 U	R	2.2 U	2.3 U	6.7 U	-	7.1 U	-
Isopropyl alcohol	ppb	NC	NC	5.6 U	3.0 U	5.5 U	10 U	-	3.7 U	R	3.1 UJ	3.1 UJ	9.5 U	-	9.8 UJ	-
Isopropyl benzene	ppb	NC	NC	4.7 U	4.2 U	4.6 U	14 U	-	3.1 U	R	4.2 U	4.2 U	7.9 U	-	13 U	-
m&p-Xylenes	ppb	2000	20000	7.2 U	8.3 U	7.1 U	27 U	-	4.8 U	R	8.4 U	8.5 U	12 U	-	27 U	-
Methyl methacrylate	ppb	NC	NC	2.0 U	5.5 U	1.9 U	18 U	-	1.3 U	R	5.5 U	5.6 U	3.3 U	-	18 U	-
Methyl tert butyl ether (MTBE)	ppb	NC	NC	2.4 U	12 U	2.4 U	38 U	-	1.6 U	R	12 U	12 U	4.1 U	-	38 U	-
Methylene chloride	ppb	NC	NC	6.6 J	3.1 U	6.3 J	10 U	-	4.0 J	R	4.9 J	5.3 J	12 U	-	19 J	-
Naphthalene	ppb	29	NC	13 U	6.2 U	13 U	20 U	-	8.6 U	R	6.3 U	6.4 U	22 UJ	-	20 UJ	-
N-Butylbenzene	ppb	NC	NC	8.3 U	3.2 U	8.1 U	10 U	-	5.5 U	R	3.2 U	3.2 U	14 U	-	10 U	-
N-Decane	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-	12 U	-
N-Dodecane	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-	17 UJ	-
N-Heptane	ppb	NC	NC	1.5 U	3.3 U	1.5 U	11 U	-	1.0 U	R	3.3 U	3.3 U	2.6 U	-	10 U	-
Nonane	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-	9.6 U	-
N-Propylbenzene	ppb	NC	NC	7.5 U	3.9 U	7.4 U	13 U	-	5.0 U	R	3.9 U	4.0 U	13 U	-	12 U	-
N-Undecane	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-	14 UJ	-
Octane	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-	8.0 U	-
o-Xylene	ppb	2000	20000	3.3 U	4.2 U	3.3 U	14 U	-	2.2 U	R	4.3 U	4.3 U	5.6 U	-	14 U	-
Pentane	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-	13 U	-
Styrene	ppb	NC	NC	4.5 U	4.0 U	4.4 U	13 U	-	3.0 U	R	4.1 U	4.1 U	7.7 U	-	13 U	-
tert-Butyl alcohol	ppb	NC	NC	11 U	2.6 U	11 U	8.6 U	-	7.1 U	R	2.7 U	2.7 U	18 U	-	8.4 U	-
tert-Butylbenzene	ppb	NC	NC	7.1 U	4.6 U	7.0 U	15 U	-	4.7 U	R	4.6 U	4.7 U	12 U	-	15 U	-

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5172 / 12/ A Overstreet*	*Parcel 5172 / 12 / A Overstreet*	*Parcel 5172 / 12 / B Overstreet*	*Parcel 5172 / 12 / B Overstreet*	*Parcel 5172 / 12 / B Overstreet*	*Parcel 5172 / 12 / A S&J*	*Parcel 5172 / 12 / A S&J*	*Parcel 5172 / 12 / A S&J*	*Parcel 5172 / 12/ A S&J*	*Parcel 5172 / 12 / B S&J*	*Parcel 5172 / 12 / B S&J*	*Parcel 5172 / 12 / B S&J*	*Parcel 5172 / 12 / B S&J*
Sample Location:				*2019 Dryden Road*	*2019 Dryden Road*	*2019 Dryden Road*	*2019 Dryden Road*	*2019 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*
Owner / Tenant:				*Overstreet Painting*	*Overstreet Painting*	*Overstreet Painting*	*Overstreet Painting*	*Overstreet Painting*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*
Sample ID:				*SS-38443-010612-JC-022*	*SS-38443-031512-JC-216*	*SS-38443-010612-JC-021*	*SS-38443-031512-JC-218*	*-*	*SS-38443-010612-JC-024*	*SS-38443-010612-JC-023*	*SS-38443-030712-JC-112*	*SS-38443-030712-JC-118*	*SS-38443-010612-JC-025*	*SS-38443-010612-JC-025*	*SS-38443-030712-JC-113*	*-*
Sample Date:				*1/6/2012*	*3/15/2012*	*1/6/2012*	*3/15/2012*	*8/7/2012*	*1/6/2012*	*1/6/2012*	*3/7/2012*	*3/7/2012*	*1/6/2012*	*1/9/2012*	*3/7/2012*	*8/7/2012*
										Duplicate		*Duplicate*				
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*													
Tetrachloroethene	ppb	250	2500	3.8 J	3.9 J	4.9 J	9.8 J	-	5.8 J	R	6.9 J	7.0 J	9.2 J	-	10 J	-
Tetrahydrofuran	ppb	NC	NC	2.7 U	4.4 U	2.7 U	14 U	-	1.8 U	R	4.4 U	4.4 U	4.6 U	-	14 U	-
Toluene	ppb	NC	NC	2.7 U	3.7 U	2.7 U	12 U	-	1.8 U	R	3.8 U	3.8 U	4.6 U	-	12 U	-
trans-1,2-Dichloroethene	ppb	NC	NC	70	130	41	82	-	8.8 J	R	6.5 J	6.7 J	210	-	200	-
trans-1,3-Dichloropropene	ppb	NC	NC	3.0 U	3.3 U	3.0 U	11 U	-	2.0 U	R	3.4 U	3.4 U	5.1 U	-	11 U	-
Trichloroethene	ppb	20	200	2400[ab]	2600[ab]	2800[ab]	5400[ab]	-	1300[ab]	R	1400[ab]	1400[ab]	5600[ab]	-	5600[ab]	-
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	5.1 U	1.7 U	5.0 U	5.4 U	-	3.4 U	R	1.7 U	1.7 U	8.7 U	-	5.3 U	-
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	1.5 U	2.1 U	1.5 U	7.0 U	-	1.0 U	R	2.2 U	2.2 U	2.6 U	-	6.9 U	-
Vinyl bromide (Bromoethene)	ppb	NC	NC	2.9 U	2.4 U	2.8 U	7.9 U	-	1.9 U	R	2.5 U	2.5 U	4.9 U	-	7.8 U	-
Vinyl chloride	ppb	20	200	4.4 U	4.9 U	4.3 U	16 U	-	2.9 U	R	5.0 U	5.0 U	7.4 U	-	16 U	-
Xylenes (total)	ppb	NC	NC	3.3 U	-	3.3 U	-	-	2.2 U	R	-	-	5.6 U	-	-	-
Gases																
Methane	%	0.5	0.5	-	-	-	-	-	-	-	0.16 U	0.17 U	-	-	0.17 U	-
Field Parameter																
Methane, field (unfiltered)	%	0.5	0.5	0.0 / 0.0	-	0.0 / 0.0	-	-	0.0 / 0.0	0.0 / 0.0	-	-	0.0 / 0.0	0.0 / 0.0	-	-
Methane, field (filtered)	%	0.5	0.5	-	0 / 0.0	-	0.0 / 0	0	-	-	0.0 / 0	0 / 0.0	-	-	0.0 / 0	0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
\- Concentration was greater than applicable criteria.

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5172 / 12 / C S&J*	*Parcel 5172 / 12 / C S&J*	*Parcel 5172 / 12 / C S&J*	*Parcel 5172 / 12 / D S&J*	*Parcel 5172 / 12 / D S&J*	*Parcel 5172 / 12 / D S&J*	*Parcel 5172, Bldg 14, Probe A*	*Parcel 5172, Bldg 14, Probe A*	*Parcel 5172, Bldg 14, Probe A*	*Parcel 5172, Bldg 14, Probe A*	*Parcel 5172, Bldg 14, Probe A*	*Parcel 5172, Bldg 14, Probe A*	*Parcel 5172, Bldg 14, Probe B*
Sample Location:				*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*
Owner/Tenant:				*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*
Sample ID:				*SS-38443-010612-JC-026*	*SS-38443-030712-JC-115*	*-*	*SS-38443-010612-JC-027*	*SS-38443-030712-JC-117*	*-*	*SS-38443-010612-JC-018*	*SS-38443-010612-JC-017*	*SS-38443-032812-JC-225*	*SS-38443-080212-GL-030*	*SS-38443-080212-GL-031*	*SS-38443-080212-GL-031*	*SS-38443-010612-JC-019*
Sample Date:				*1/6/2012*	*3/7/2012*	*8/7/2012*	*1/6/2012*	*3/7/2012*	*8/7/2012*	*1/6/2012*	*1/6/2012*	*3/28/2012*	*8/2/2012*	*8/2/2012*	*8/2/2012*	*1/6/2012*
											Duplicate				*Duplicate*	
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*													
Volatile Organic Compounds																
1,1,1-Trichloroethane	ppb	NC	NC	0.35 U	0.38 J	-	7.4	8.5 J	-	0.70 U	0.83 U	1.0 U	6.1 U	-	-	0.28 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.40 U	0.61 U	-	1.2 U	4.6 U	-	0.80 U	0.95 U	2.1 U	12 U	-	-	0.32 U
1,1,2-Trichloroethane	ppb	NC	NC	0.19 U	0.54 U	-	0.57 U	4.1 U	-	0.38 U	0.45 U	1.9 U	11 U	-	-	0.15 U
1,1-Dichloroethane	ppb	160	1600	0.35 U	0.26 U	-	1.1 U	2.0 U	-	500[a]	320[a]	970[a]	4100[ab]	-	-	54
1,1-Dichloroethene	ppb	NC	NC	0.30 U	0.32 U	-	0.90 U	2.4 U	-	0.60 U	0.71 U	3.0 J	25 J	-	-	0.24 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.50 U	0.98 UJ	-	1.5 U	7.4 U	-	1.0 U	1.2 U	3.4 U	20 UJ	-	-	0.40 U
1,2,4-Trimethylbenzene	ppb	NC	NC	0.52 U	0.63 U	-	1.6 U	4.8 U	-	1.0 U	1.2 U	2.2 U	13 U	-	-	4.8
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.18 U	0.44 U	-	0.54 U	3.3 U	-	0.36 U	0.43 U	1.5 U	8.9 U	-	-	0.14 U
1,2-Dichlorobenzene	ppb	NC	NC	0.48 U	0.70 U	-	1.4 U	5.3 U	-	0.96 U	1.1 U	2.4 U	14 U	-	-	0.38 U
1,2-Dichloroethane	ppb	NC	NC	0.31 U	0.47 U	-	0.93 U	3.6 U	-	0.62 U	0.74 U	1.6 U	9.5 U	-	-	0.25 U
1,2-Dichloroethene (total)	ppb	NC	NC	0.65 J	-	-	390	-	-	4.9	3.1 J	-	-	-	-	0.43 J
1,2-Dichloropropane	ppb	NC	NC	0.14 U	0.52 U	-	0.42 U	3.9 U	-	0.28 U	0.33 U	1.8 U	11 U	-	-	0.11 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.32 U	0.32 U	-	0.96 U	2.4 U	-	0.64 U	0.76 U	2.1 J	6.5 U	-	-	1.9
1,3,5-Trimethylbenzene	ppb	NC	NC	0.51 U	0.65 U	-	1.5 U	4.9 U	-	1.0 U	1.2 U	2.2 UJ	13 U	-	-	1.9
1,3-Butadiene	ppb	NC	NC	0.10 U	0.64 U	-	0.30 U	4.9 U	-	0.20 U	0.24 U	2.2 UJ	13 U	-	-	0.080 U
1,3-Dichlorobenzene	ppb	NC	NC	0.44 U	0.65 U	-	1.3 U	4.9 U	-	0.88 U	1.0 U	2.2 U	13 U	-	-	0.35 U
1,4-Dichlorobenzene	ppb	NC	NC	0.44 U	0.64 U	-	1.3 U	4.9 U	-	0.88 U	1.0 U	2.2 U	13 U	-	-	0.35 U
1,4-Dioxane	ppb	NC	NC	0.88 U	0.80 UJ	-	2.6 U	6.1 UJ	-	1.8 U	2.1 U	2.8 U	16 U	-	-	0.70 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.36 U	0.39 U	-	1.1 U	3.0 U	-	0.72 U	0.86 U	22	98 J	-	-	0.29 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.97 J	2.0 UJ	-	0.51 U	15 UJ	-	8.2 J	7.7 J	6.9 U	40 U	-	-	0.14 U
2-Chlorotoluene	ppb	NC	NC	0.47 U	0.63 U	-	1.4 U	4.8 U	-	0.94 U	1.1 U	2.2 U	13 U	-	-	0.38 U
2-Hexanone	ppb	NC	NC	0.42 J	0.58 UJ	-	1.2 U	4.4 UJ	-	0.78 U	0.93 U	2.0 U	12 U	-	-	0.31 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.47 U	0.64 U	-	1.4 U	4.9 U	-	0.94 U	1.1 U	2.2 U	13 U	-	-	0.38 U
4-Ethyl toluene	ppb	NC	NC	0.46 U	0.66 U	-	1.4 U	5.0 U	-	0.92 U	1.1 U	2.3 U	13 U	-	-	0.81 J
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.26 U	0.45 UJ	-	0.78 U	3.4 U	-	0.52 U	0.62 U	3.9 J	9.1 U	-	-	0.21 U
Acetone	ppb	NC	NC	2.5 J	14 U	-	2.8 J	110 U	-	0.90 U	17 J	48 U	280 U	-	-	2.5 J
Allyl chloride	ppb	NC	NC	0.19 U	0.48 U	-	0.57 U	3.6 U	-	0.38 U	0.45 U	1.7 U	9.7 U	-	-	0.15 U
Benzene	ppb	20	200	0.18 U	0.56 U	-	0.54 U	4.2 U	-	1.9 J	1.8 J	6.0 J	50[a]	-	-	0.14 U
Benzyl chloride	ppb	NC	NC	0.46 U	0.78 U	-	1.4 U	5.9 U	-	0.92 U	1.1 U	2.7 U	16 U	-	-	0.37 UJ
Bromodichloromethane	ppb	NC	NC	0.28 U	0.44 U	-	0.84 U	3.3 U	-	0.56 U	0.67 U	1.5 U	8.9 U	-	-	0.22 U
Bromoform	ppb	NC	NC	0.19 U	0.48 U	-	0.57 U	3.6 U	-	0.38 U	0.45 U	1.7 U	9.7 U	-	-	0.15 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.12 U	0.32 U	-	0.36 U	2.4 U	-	0.24 U	0.29 U	1.1 U	6.5 U	-	-	0.096 U
Butane	ppb	NC	NC	0.11 U	0.64 U	-	0.33 U	4.9 U	-	180	150	920 J	3700	-	-	0.088 U
Carbon disulfide	ppb	NC	NC	0.66 U	0.31 U	-	2.0 U	2.4 U	-	16	14	25	45 J	-	-	0.53 U
Carbon tetrachloride	ppb	NC	NC	0.33 U	0.38 U	-	0.99 U	2.9 U	-	0.66 U	0.79 U	1.3 UJ	7.7 U	-	-	0.26 U
Chlorobenzene	ppb	NC	NC	0.20 U	0.49 U	-	0.60 U	3.7 U	-	0.40 U	0.48 U	1.7 U	9.9 U	-	-	0.16 U
Chlorodifluoromethane	ppb	NC	NC	0.34 U	0.94 J	-	1.0 U	2.8 U	-	2.9 J	2.7 J	9.1	23 J	-	-	0.27 U
Chloroethane	ppb	NC	NC	0.16 U	0.35 U	-	0.48 U	2.7 U	-	0.32 U	0.38 U	1.2 U	7.1 U	-	-	0.13 U
Chloroform (Trichloromethane)	ppb	800	8000	0.79 J	0.70 J	-	24	23	-	0.62 U	0.74 U	1.3 U	7.7 U	-	-	0.93 J
Chloromethane (Methyl chloride)	ppb	NC	NC	0.13 U	1.6 U	-	0.39 U	12 U	-	0.26 U	0.31 U	5.5 UJ	32 U	-	-	0.10 U
cis-1,2-Dichloroethene	ppb	370	3700	0.65 J	0.60 U	-	240	200	-	2.6 J	1.5 J	6.9	110	-	-	0.43 J
cis-1,3-Dichloropropene	ppb	NC	NC	0.16 U	0.74 U	-	0.48 U	5.6 U	-	0.32 U	0.38 U	2.6 U	15 U	-	-	0.13 U
Cyclohexane	ppb	NC	NC	0.39 U	0.40 U	-	1.2 U	3.0 U	-	5.0	3.8 J	19	150	-	-	0.31 U
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.48 U	0.57 U	-	1.4 U	4.3 U	-	0.96 U	1.1 U	2.0 U	12 U	-	-	0.38 U
Dibromochloromethane	ppb	NC	NC	0.21 U	0.42 U	-	0.63 U	3.2 U	-	0.42 U	0.50 U	1.5 U	8.5 U	-	-	0.17 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.63 J	0.68 U	-	1.1 U	5.2 U	-	3.1 J	2.8 J	3.6 J	14 U	-	-	1.2 J
Ethylbenzene	ppb	2500	25000	0.22 U	0.68 U	-	0.66 U	5.2 U	-	0.44 U	0.52 U	2.4 U	14 U	-	-	1.2 J
Hexachlorobutadiene	ppb	NC	NC	0.65 U	0.78 UJ	-	2.0 U	5.9 U	-	1.3 U	1.5 U	2.7 U	16 UJ	-	-	0.52 U
Hexane	ppb	NC	NC	0.26 U	0.32 U	-	0.78 U	2.4 U	-	6.4	4.7 J	29	250	-	-	0.21 U
Isopropyl alcohol	ppb	NC	NC	1.5 J	0.76 J	-	1.1 U	3.3 UJ	-	0.74 U	0.88 U	5.3 J	8.9 U	-	-	0.30 U
Isopropyl benzene	ppb	NC	NC	0.31 U	0.60 U	-	0.93 U	4.6 U	-	0.62 U	0.74 U	2.1 U	12 U	-	-	0.25 U
m&p-Xylenes	ppb	2000	20000	0.48 U	1.2 U	-	1.4 U	9.1 U	-	0.96 U	1.1 U	4.2 U	24 U	-	-	7.1
Methyl methacrylate	ppb	NC	NC	0.13 U	0.79 U	-	0.39 U	6.0 U	-	0.26 U	0.31 U	2.7 U	16 U	-	-	0.10 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.16 U	1.7 U	-	0.48 U	13 U	-	0.32 U	0.38 U	5.9 U	34 U	-	-	0.13 U
Methylene chloride	ppb	NC	NC	0.43 J	0.80 J	-	1.4 J	5.5 J	-	1.0 J	1.1 J	1.6 U	9.1 U	-	-	0.10 U
Naphthalene	ppb	29	NC	0.86 U	0.90 UJ	-	2.6 U	6.8 U	-	1.7 U	2.0 U	3.1 U	18 UJ	-	-	0.69 UJ
N-Butylbenzene	ppb	NC	NC	0.55 U	0.46 U	-	1.7 U	3.5 U	-	1.1 U	1.3 U	1.6 U	9.3 U	-	-	0.44 U
N-Decane	ppb	NC	NC	-	-	-	-	4.2 U	-	-	-	-	11 U	-	-	-
N-Dodecane	ppb	NC	NC	-	-	-	-	5.9 UJ	-	-	-	-	16 UJ	-	-	-
N-Heptane	ppb	NC	NC	0.10 U	0.47 U	-	0.30 U	3.6 U	-	0.20 U	0.24 U	2.4 J	31 J	-	-	0.080 U
Nonane	ppb	NC	NC	-	-	-	-	3.3 U	-	-	-	-	8.7 U	-	-	-
N-Propylbenzene	ppb	NC	NC	0.50 U	0.56 U	-	1.5 U	4.2 U	-	1.0 U	1.2 U	1.9 U	11 U	-	-	0.43 J
N-Undecane	ppb	NC	NC	-	-	-	-	4.7 UJ	-	-	-	-	13 U	-	-	-
Octane	ppb	NC	NC	-	-	-	-	2.7 U	-	-	-	-	7.3 U	-	-	-
o-Xylene	ppb	2000	20000	0.22 U	0.61 U	-	0.66 U	4.6 U	-	0.44 U	0.52 U	2.2 J	12 U	-	-	3.9
Pentane	ppb	NC	NC	-	-	-	-	4.6 U	-	-	-	-	1300	-	-	-
Styrene	ppb	NC	NC	0.30 U	0.58 U	-	0.90 U	4.4 U	-	0.60 U	0.71 U	2.0 U	12 U	-	-	0.24 U
tert-Butyl alcohol	ppb	NC	NC	0.71 U	0.38 U	-	2.1 U	2.9 U	-	1.4 U	1.7 U	1.9 J	7.7 U	-	-	0.57 U
tert-Butylbenzene	ppb	NC	NC	0.47 U	0.66 U	-	1.4 U	5.0 U	-	0.94 U	1.1 U	2.3 U	13 U	-	-	0.38 U

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5172 / 12 / C S&J*	*Parcel 5172 / 12 / C S&J*	*Parcel 5172 / 12 / C S&J*	*Parcel 5172 / 12 / D S&J*	*Parcel 5172 / 12 / D S&J*	*Parcel 5172 / 12 / D S&J*
Sample Location:				*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*
Owner / Tenant:				*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*
Sample ID:				*SS-38443-010612-JC-026*	*SS-38443-030712-JC-115*	*-*	*SS-38443-010612-JC-027*	*SS-38443-030712-JC-117*	*-*
Sample Date:				*1/6/2012*	*3/7/2012*	*8/7/2012*	*1/6/2012*	*3/7/2012*	*8/7/2012*
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*						
Tetrachloroethene	ppb	250	2500	28	23	-	3.5 J	3.2 J	-
Tetrahydrofuran	ppb	NC	NC	0.18 U	0.63 U	-	0.54 U	4.8 U	-
Toluene	ppb	NC	NC	4.6	0.54 U	-	5.5 J	4.1 U	-
trans-1,2-Dichloroethene	ppb	NC	NC	0.32 U	0.50 U	-	150	110	-
trans-1,3-Dichloropropene	ppb	NC	NC	0.20 U	0.48 U	-	0.60 U	3.6 U	-
Trichloroethene	ppb	20	200	**230^{ab}**	**180^{a}**	-	**1200^{ab}**	**940^{ab}**	-
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.34 U	0.29 J	-	1.0 U	1.8 U	-
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.10 U	0.31 U	-	0.30 U	2.4 U	-
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.19 U	0.35 U	-	0.57 U	2.7 U	-
Vinyl chloride	ppb	20	200	0.29 U	0.71 U	-	0.87 U	5.4 U	-
Xylenes (total)	ppb	NC	NC	0.22 U	-	-	0.66 U	-	-
Gases									
Methane	%	0.5	0.5	-	0.18 U	-	-	0.18 U	-
Field Parameter									
Methane, field (unfiltered)	%	0.5	0.5	0.0 / 0.0	-	-	0.0 / 0.0	-	-
Methane, field (filtered)	%	0.5	0.5	-	0.0 / 0	0	-	0.0 / 0	0

Sample Location:				*Parcel 5172, Bldg 14, Probe A*	*Parcel 5172, Bldg 14, Probe A*	*Parcel 5172, Bldg 14, Probe A*	*Parcel 5172, Bldg 14, Probe A*	*Parcel 5172, Bldg 14, Probe A*	*Parcel 5172, Bldg 14, Probe A*	*Parcel 5172, Bldg 14, Probe B*
Sample Location:				*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*
Owner / Tenant:				*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*
Sample ID:				*SS-38443-010612-JC-018*	*SS-38443-010612-JC-017*	*SS-38443-032812-JC-225*	*SS-38443-080212-GL-030*	*SS-38443-080212-GL-031*	*SS-38443-080212-GL-031*	*SS-38443-010612-JC-019*
Sample Date:				*1/6/2012*	*1/6/2012* *Duplicate*	*3/28/2012*	*8/2/2012*	*8/2/2012*	*8/2/2012* *Duplicate*	*1/6/2012*
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*							
Tetrachloroethene	ppb	250	2500	0.22 U	0.26 U	1.4 U	8.1 U	-	-	0.088 U
Tetrahydrofuran	ppb	NC	NC	0.36 U	0.43 U	2.2 U	13 U	-	-	0.14 U
Toluene	ppb	NC	NC	0.69 J	0.78 J	3.2 J	11 J	-	-	0.98 J
trans-1,2-Dichloroethene	ppb	NC	NC	2.2 J	1.6 J	5.3 J	35 J	-	-	0.26 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.40 U	0.48 U	1.7 U	9.7 U	-	-	0.16 U
Trichloroethene	ppb	20	200	2.1 J	1.5 J	6.4 J	**$36\ J^{a}$**	-	-	3.5
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.68 U	0.81 U	0.83 U	4.9 U	-	-	0.27 U
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.20 U	0.24 U	1.1 U	6.3 U	-	-	0.080 U
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.38 U	0.45 U	1.2 U	7.1 U	-	-	0.15 U
Vinyl chloride	ppb	20	200	**84^{a}**	**70^{a}**	**$820\ J^{ab}$**	**5500^{ab}**	-	-	0.23 U
Xylenes (total)	ppb	NC	NC	0.44 U	0.52 U	-	-	-	-	11
Gases										
Methane	%	0.5	0.5	-	-	-	0.19 U	0.19 U	-	-
Field Parameter										
Methane, field (unfiltered)	%	0.5	0.5	0.0 / 0.0	0.0 / 0.0	-	-	-	-	0.0 / 0.0
Methane, field (filtered)	%	0.5	0.5	-	-	0.0 / 0	0.2 / 0.3	-	0.3 / 0.2	-

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
\- Concentration was greater than applicable criteria.

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5172, Bldg 14, Probe B*	*Parcel 5172, Bldg 14, Probe B*	*Parcel 5172, Bldg 14, Probe B*	*Parcel 5172, Bldg 14, Probe C*	*Parcel 5172, Bldg 14, Probe C*	*Parcel 5172, Bldg 14, Probe C*	*Parcel 5172, Bldg 14, Probe C*	*Parcel 5172, Bldg 13, Probe A*	*Parcel 5172, Bldg 13, Probe A*	*Parcel 5172, Bldg 13, Probe A*	*Parcel 5173, Bldg 15, Probe A*	*Parcel 5173, Bldg 15, Probe A*
Sample Location:				*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2019 Dryden Road*	*2019 Dryden Road*	*2019 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*
Owner / Tenant:				*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Overstreet Painting*	*Overstreet Painting*	*Overstreet Painting*	*SIM Trainer*	*SIM Trainer*
Sample ID:				*SS-38443-032712-JC-227*	*SS-38443-032712-JC-227*	*SS-38443-080212-GL-033*	*SS-38443-010612-JC-020*	*SS-38443-032712-JC-229*	*SS-38443-032712-JC-229*	*SS-38443-080212-GL-035*	*SS-38443-010912-JC-042*	*SS-38443-010912-JC-042*	*SS-38443-031512-JC-221*	*SS-38443-011212-JC-074*	*SS-38443-031312-JC-176*
Sample Date:				*3/26/2012*	*3/27/2012*	*8/2/2012*	*1/6/2012*	*3/2/2012*	*3/27/2012*	*8/2/2012*	*1/9/2012*	*1/10/2012*	*3/15/2012*	*1/12/2012*	*3/13/2012*
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*												
Volatile Organic Compounds															
1,1,1-Trichloroethane	ppb	NC	NC	-	0.056 J	0.12 J	0.18 J	-	0.29	0.34	0.48 U	-	1.1 U	0.60 U	1.1 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	-	0.061 U	0.12 U	0.16 U	-	0.061 U	0.061 U	0.55 U	-	2.2 U	0.68 U	2.2 U
1,1,2-Trichloroethane	ppb	NC	NC	-	0.054 U	0.11 U	0.076 U	-	0.054 U	0.054 U	0.26 U	-	1.9 U	0.32 U	1.9 U
1,1-Dichloroethane	ppb	160	1600	-	77	130	0.14 U	-	0.071 J	0.026 U	2.3 J	-	6.5 J	0.60 U	0.93 U
1,1-Dichloroethene	ppb	NC	NC	-	0.054 J	0.12 J	0.12 U	-	0.032 U	0.032 U	0.41 U	-	1.1 U	0.51 U	1.1 U
1,2,4-Trichlorobenzene	ppb	NC	NC	-	0.098 U	0.20 U	0.20 U	-	0.098 U	0.098 UJ	0.69 U	-	3.5 U	0.86 U	3.5 U
1,2,4-Trimethylbenzene	ppb	NC	NC	-	0.063 U	0.13 U	0.21 U	-	0.063 U	0.063 U	0.72 U	-	2.2 U	0.89 U	2.2 U
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	-	0.044 U	0.088 U	0.072 U	-	0.044 U	0.044 U	0.25 U	-	1.6 U	0.31 U	1.6 U
1,2-Dichlorobenzene	ppb	NC	NC	-	0.070 U	0.14 U	0.19 U	-	0.070 U	0.070 U	0.66 U	-	2.5 U	0.82 U	2.5 U
1,2-Dichloroethane	ppb	NC	NC	-	0.047 U	0.094 U	0.12 U	-	0.047 U	0.047 U	0.43 U	-	1.7 U	0.53 U	1.7 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	0.056 U	-	-	-	15	-	-	2.7 J	-
1,2-Dichloropropane	ppb	NC	NC	-	0.052 U	0.10 U	0.056 U	-	0.052 U	0.052 U	0.19 U	-	1.9 U	0.24 U	1.9 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	-	0.48	0.62	0.13 U	-	0.032 U	0.032 U	0.44 U	-	1.1 U	0.55 U	1.1 U
1,3,5-Trimethylbenzene	ppb	NC	NC	-	0.065 UJ	0.13 U	0.20 U	-	0.065 UJ	0.065 U	0.70 U	-	2.3 UJ	0.87 U	2.3 U
1,3-Butadiene	ppb	NC	NC	-	0.064 U	0.13 U	0.040 U	-	0.064 U	0.064 U	0.14 U	-	2.3 U	0.17 U	2.3 U
1,3-Dichlorobenzene	ppb	NC	NC	-	0.065 U	0.13 U	0.18 U	-	0.065 U	0.065 U	0.61 U	-	2.3 U	0.75 U	2.3 U
1,4-Dichlorobenzene	ppb	NC	NC	-	0.064 U	0.13 U	0.18 U	-	0.064 U	0.064 U	0.61 U	-	2.3 U	0.75 U	2.3 UJ
1,4-Dioxane	ppb	NC	NC	-	0.080 U	0.16 U	0.35 U	-	0.080 U	0.080 U	1.2 U	-	2.9 U	1.5 U	2.8 U
2,2,4-Trimethylpentane	ppb	NC	NC	-	0.18 J	0.078 U	0.14 U	-	0.039 U	0.039 U	0.50 U	-	1.4 U	0.62 U	1.4 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	-	0.76 J	0.68 J	0.068 U	-	0.24 J	0.36 J	0.23 U	-	7.1 U	0.29 U	7.1 U
2-Chlorotoluene	ppb	NC	NC	-	0.063 U	0.13 U	0.19 U	-	0.063 U	0.063 U	0.65 U	-	2.2 U	0.80 U	2.2 U
2-Hexanone	ppb	NC	NC	-	0.058 U	0.12 U	0.16 U	-	0.058 U	0.058 U	0.54 U	-	2.1 U	0.67 U	2.1 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	-	0.064 U	0.13 U	0.19 U	-	0.064 U	0.064 U	0.65 U	-	2.3 U	0.80 U	2.3 U
4-Ethyl toluene	ppb	NC	NC	-	0.066 U	0.13 U	0.18 U	-	0.066 U	0.066 U	0.63 U	-	2.4 U	0.79 U	2.3 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	-	0.045 U	0.090 U	0.10 U	-	0.045 U	0.045 U	0.36 U	-	1.6 U	0.44 U	1.6 U
Acetone	ppb	NC	NC	-	4.0 J	4.4 J	1.3 J	-	2.0 J	2.9 J	11 J	-	50 U	1.5 J	50 U
Allyl chloride	ppb	NC	NC	-	0.048 U	0.096 U	0.076 U	-	0.048 U	0.048 U	0.26 U	-	1.7 U	0.32 U	1.7 U
Benzene	ppb	20	200	-	0.077 J	0.11 U	0.072 U	-	0.056 U	0.056 U	0.25 U	-	2.0 U	0.31 U	2.0 U
Benzyl chloride	ppb	NC	NC	-	0.078 U	0.16 U	0.18 U	-	0.078 U	0.078 U	0.63 UJ	-	2.8 U	0.79 UJ	2.8 U
Bromodichloromethane	ppb	NC	NC	-	0.11 J	0.20 J	0.11 U	-	0.044 U	0.044 U	0.39 U	-	1.6 U	0.48 U	1.6 U
Bromoform	ppb	NC	NC	-	0.048 U	0.096 U	0.076 U	-	0.048 U	0.048 U	0.26 U	-	1.7 U	0.32 U	1.7 U
Bromomethane (Methyl bromide)	ppb	NC	NC	-	0.032 U	0.064 U	0.048 U	-	0.032 U	0.032 U	0.17 U	-	1.1 U	0.21 U	1.1 U
Butane	ppb	NC	NC	-	1.2	0.78 J	0.044 U	-	0.46	0.13 J	0.15 U	-	2.3 U	2.2 J	2.3 UJ
Carbon disulfide	ppb	NC	NC	-	0.11 J	0.11 J	0.26 U	-	0.031 U	0.058 J	0.91 U	-	1.1 U	1.1 U	1.1 U
Carbon tetrachloride	ppb	NC	NC	-	0.038 UJ	0.076 U	0.13 U	-	0.070 J	0.075 J	0.46 U	-	1.4 UJ	0.56 U	1.4 U
Chlorobenzene	ppb	NC	NC	-	0.049 U	0.098 U	0.080 U	-	0.049 U	0.049 U	0.28 U	-	1.7 U	0.34 U	1.7 U
Chlorodifluoromethane	ppb	NC	NC	-	0.84	1.8	0.14 U	-	0.32	0.40	0.47 U	-	2.7 J	0.58 U	3.4 J
Chloroethane	ppb	NC	NC	-	0.11 J	0.50	0.064 U	-	0.035 U	0.080 J	0.22 U	-	1.2 U	0.27 U	1.2 U
Chloroform (Trichloromethane)	ppb	800	8000	-	1.1	3.0	0.12 U	-	0.043 J	0.097 J	0.70 J	-	2.2 J	0.53 U	1.4 U
Chloromethane (Methyl chloride)	ppb	NC	NC	-	0.16 U	0.32 U	0.052 U	-	0.16 U	0.61	0.18 U	-	5.7 U	0.22 U	5.7 U
cis-1,2-Dichloroethene	ppb	370	3700	-	0.97	2.2	0.056 U	-	0.060 U	0.060 U	15	-	49	2.7 J	2.1 U
cis-1,3-Dichloropropene	ppb	NC	NC	-	0.074 U	0.15 U	0.064 U	-	0.074 U	0.074 U	0.22 U	-	2.6 U	0.27 U	2.6 U
Cyclohexane	ppb	NC	NC	-	0.27 J	0.080 U	0.16 U	-	0.39 J	0.040 U	0.54 U	-	1.4 U	0.67 U	1.4 U
Cymene (p-Isopropyltoluene)	ppb	NC	NC	-	0.057 U	0.11 U	0.19 U	-	0.057 U	0.057 U	0.66 U	-	2.0 U	0.82 U	2.0 U
Dibromochloromethane	ppb	NC	NC	-	0.042 U	0.084 U	0.084 U	-	0.042 U	0.042 U	0.29 U	-	1.5 U	0.36 U	1.5 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	-	1.1	0.77	0.50 J	-	0.51	0.48	0.57 J	-	2.4 U	0.65 U	2.4 U
Ethylbenzene	ppb	2500	25000	-	0.068 U	0.14 U	0.088 U	-	0.068 U	0.068 U	0.30 U	-	2.4 U	0.38 U	2.4 U
Hexachlorobutadiene	ppb	NC	NC	-	0.078 U	0.16 U	0.36 J	-	0.078 U	0.078 UJ	0.90 U	-	2.8 U	1.1 U	2.8 U
Hexane	ppb	NC	NC	-	0.32 J	0.15 J	0.10 U	-	0.94	0.049 J	0.36 U	-	1.1 U	0.52 J	1.1 U
Isopropyl alcohol	ppb	NC	NC	-	2.5	0.45 J	1.6 J	-	2.3	0.11 J	0.51 U	-	2.2 J	0.63 U	3.9 J
Isopropyl benzene	ppb	NC	NC	-	0.060 U	0.12 U	0.12 U	-	0.060 U	0.060 U	0.43 U	-	2.1 U	0.53 U	2.1 U
m&p-Xylenes	ppb	2000	20000	-	0.20	0.32 J	0.19 U	-	0.12 U	0.12 U	0.66 U	-	4.3 U	0.82 U	4.3 U
Methyl methacrylate	ppb	NC	NC	-	0.079 U	0.16 U	0.052 U	-	0.079 U	0.079 U	0.18 U	-	2.8 U	0.22 U	2.8 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	-	0.17 U	0.34 U	0.064 U	-	0.17 U	0.17 U	0.22 U	-	6.1 U	0.27 U	6.1 U
Methylene chloride	ppb	NC	NC	-	0.045 U	0.090 U	0.17 J	-	0.045 U	0.045 U	0.81 U	-	1.6 U	0.84 J	4.2 J
Naphthalene	ppb	29	NC	-	0.090 U	0.18 U	0.34 U	-	0.090 U	0.090 UJ	1.2 UJ	-	3.2 U	1.5 U	3.2 U
N-Butylbenzene	ppb	NC	NC	-	0.046 UJ	0.092 U	0.22 U	-	0.046 UJ	0.046 U	0.76 U	-	1.6 U	0.94 U	1.6 U
N-Decane	ppb	NC	NC	-	-	0.11 U	-	-	-	0.056 U	-	-	-	-	-
N-Dodecane	ppb	NC	NC	-	-	0.16 U	-	-	-	0.078 UJ	-	-	-	-	-
N-Heptane	ppb	NC	NC	-	0.10 J	0.094 U	0.040 U	-	0.064 J	0.047 U	0.14 U	-	1.7 U	1.3 J	1.7 U
Nonane	ppb	NC	NC	-	-	0.086 U	-	-	-	0.043 U	-	-	-	-	-
N-Propylbenzene	ppb	NC	NC	-	0.056 U	0.11 U	0.20 U	-	0.056 U	0.056 U	0.69 U	-	2.0 U	0.86 U	2.0 U
N-Undecane	ppb	NC	NC	-	-	0.12 U	-	-	-	0.062 U	-	-	-	-	-
Octane	ppb	NC	NC	-	-	0.072 U	-	-	-	0.036 U	-	-	-	-	-
o-Xylene	ppb	2000	20000	-	0.084 J	0.15 J	0.088 U	-	0.061 U	0.061 U	0.30 U	-	2.2 U	0.38 U	2.2 U
Pentane	ppb	NC	NC	-	-	0.12 U	-	-	-	0.11 J	-	-	-	-	-
Styrene	ppb	NC	NC	-	0.058 U	0.12 U	0.12 U	-	0.058 U	0.058 U	0.41 U	-	2.1 U	0.51 U	2.1 U
tert-Butyl alcohol	ppb	NC	NC	-	3.9	0.19 J	0.28 U	-	0.23 J	0.051 J	0.98 U	-	1.4 U	1.2 U	1.4 U
tert-Butylbenzene	ppb	NC	NC	-	0.066 U	0.13 U	0.19 U	-	0.066 U	0.066 U	0.65 U	-	2.4 U	0.80 U	2.3 U

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5172, Bldg 14, Probe B*	*Parcel 5172, Bldg 14, Probe B*	*Parcel 5172, Bldg 14, Probe B*	*Parcel 5172, Bldg 14, Probe C*	*Parcel 5172, Bldg 14, Probe C*	*Parcel 5172, Bldg 14, Probe C*	*Parcel 5172, Bldg 14, Probe C*	*Parcel 5172, Bldg 13, Probe A*	*Parcel 5172, Bldg 13, Probe A*	*Parcel 5172, Bldg 13, Probe A*	*Parcel 5173, Bldg 15, Probe A*	*Parcel 5173, Bldg 15, Probe A*
Sample Location:				*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2019 Dryden Road*	*2019 Dryden Road*	*2019 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*
Owner / Tenant:				*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Overstreet Painting*	*Overstreet Painting*	*Overstreet Painting*	*SIM Trainer*	*SIM Trainer*
Sample ID:				*SS-38443-032712-JC-227*	*SS-38443-032712-JC-227*	*SS-38443-080212-GL-033*	*SS-38443-010612-JC-020*	*SS-38443-032712-JC-229*	*SS-38443-032712-JC-229*	*SS-38443-080212-GL-035*	*SS-38443-010912-JC-042*	*SS-38443-010912-JC-042*	*SS-38443-031512-JC-221*	*SS-38443-011212-JC-074*	*SS-38443-031312-JC-176*
Sample Date:				*3/26/2012*	*3/27/2012*	*8/2/2012*	*1/6/2012*	*3/2/2012*	*3/27/2012*	*8/2/2012*	*1/9/2012*	*1/10/2012*	*3/15/2012*	*1/12/2012*	*3/13/2012*
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*												
Tetrachloroethene	ppb	250	2500	-	0.41	1.0	0.11 J	-	0.43	0.28	1.5 J	-	5.4 J	7.6	7.1
Tetrahydrofuran	ppb	NC	NC	-	0.73 J	0.13 U	0.072 U	-	0.11 J	0.063 U	0.25 U	-	2.2 U	0.31 U	2.2 U
Toluene	ppb	NC	NC	-	1.4	0.39 J	0.28 J	-	1.8	0.18 J	0.72 J	-	2.2 J	1.4 J	1.9 U
trans-1,2-Dichloroethene	ppb	NC	NC	-	0.050 U	0.10 U	0.13 U	-	0.050 U	0.050 U	0.60 J	-	2.6 J	0.55 U	1.8 U
trans-1,3-Dichloropropene	ppb	NC	NC	-	0.048 U	0.096 U	0.080 U	-	0.048 U	0.048 U	0.28 U	-	1.7 U	0.34 U	1.7 U
Trichloroethene	ppb	20	200	-	4.7	16	2.5	-	**27**[a]	1.2	**240**[ab]	-	**740**[ab]	**400**[ab]	**390**[ab]
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	-	0.089 J	0.30 J	0.29 J	-	0.29	0.34	0.47 U	-	0.86 U	0.58 U	0.85 U
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	-	0.067 J	0.68	0.31 J	-	0.44	0.81	0.14 U	-	1.1 U	0.17 U	1.1 U
Vinyl bromide (Bromoethene)	ppb	NC	NC	-	0.035 U	0.070 U	0.076 U	-	0.035 U	0.035 U	0.26 U	-	1.2 U	0.32 U	1.2 U
Vinyl chloride	ppb	20	200	-	0.071 U	0.14 U	0.12 U	-	0.071 U	0.071 U	0.40 U	-	2.5 U	0.50 U	2.5 U
Xylenes (total)	ppb	NC	NC	-	-	-	0.088 U	-	-	-	0.30 U	-	-	0.38 U	-
Gases															
Methane	%	0.5	0.5	-	-	0.20 U	0.066 U	-	-	0.20 U	-	-	-	-	-
Field Parameter															
Methane, field (unfiltered)	%	0.5	0.5	-	-	-	0.0 / 0.0	-	-	-	0.0	0.0	-	0.0 / 0.0	-
Methane, field (filtered)	%	0.5	0.5	0	0.0	0 / 0	-	0	0.0	0 / 0	-	-	0.0 / 0	-	0.0 / 0.0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5173, Bldg 15, Probe A*	*Parcel 5173, Bldg 15, Probe B*	*Parcel 5173, Bldg 15, Probe B*	*Parcel 5173, Bldg 15, Probe B*	*Parcel 5173, Bldg 15, Probe C*	*Parcel 5173, Bldg 15, Probe C*	*Parcel 5173, Bldg 15, Probe C*	*Parcel 5173, Bldg 15, Probe C*	*Parcel 5174, Bldg 16, Probe A*	*Parcel 5174, Bldg 16, Probe A*	*Parcel 5174, Bldg 16, Probe A*	*Parcel 5174, Bldg 16, Probe A*
Sample Location:				*2031 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*
Owner / Tenant:				*SIM Trainer*	*SIM Trainer*	*SIM Trainer*	*SIM Trainer*	*SIM Trainer*	*SIM Trainer*	*SIM Trainer*	*SIM Trainer*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*
Sample ID:				*-*	*SS-38443-011212-JC-071*	*SS-38443-031312-JC-178*	*-*	*SS-38443-011212-JC-072*	*SS-38443-011212-JC-073*	*SS-38443-031312-JC-180*	*SS-38443-031312-JC-181*	*SS-38443-010512-GL-009*	*SS-38443-030712-JC-103*	*SS-38443-080212-GL-038*	*SS-38443-080312-GL-038*
Sample Date:				*8/7/2012*	*1/12/2012*	*3/13/2012*	*8/7/2012*	*1/12/2012*	*1/12/2012*	*3/13/2012*	*3/13/2012*	*1/5/2012*	*3/7/2012*	*8/2/2012*	*8/3/2012*
									Duplicate						
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*												
Volatile Organic Compounds															
1,1,1-Trichloroethane	ppb	NC	NC	-	1.1 U	1.4 U	-	R	8.8 U	16 U	-	0.18 U	0.29	1.3	-
1,1,2,2-Tetrachloroethane	ppb	NC	NC	-	1.2 U	2.9 U	-	R	10 U	32 U	-	0.20 U	0.061 U	0.061 U	-
1,1,2-Trichloroethane	ppb	NC	NC	-	0.58 U	2.5 U	-	R	4.8 U	28 U	-	0.095 U	0.054 U	0.054 U	-
1,1-Dichloroethane	ppb	160	1600	-	1.1 U	1.2 U	-	R	8.8 U	14 U	-	0.18 U	0.026 U	0.026 U	-
1,1-Dichloroethene	ppb	NC	NC	-	0.91 U	1.5 U	-	R	29 J	34 J	-	0.15 U	0.032 U	0.032 U	-
1,2,4-Trichlorobenzene	ppb	NC	NC	-	1.5 U	4.6 U	-	R	13 U	51 U	-	0.25 U	0.098 UJ	0.098 UJ	-
1,2,4-Trimethylbenzene	ppb	NC	NC	-	1.6 U	3.0 U	-	R	600	900	-	0.26 U	0.063 U	0.20	-
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	-	0.55 U	2.1 U	-	R	4.5 U	23 U	-	0.090 U	0.044 U	0.044 U	-
1,2-Dichlorobenzene	ppb	NC	NC	-	1.5 U	3.3 U	-	R	12 U	37 U	-	0.24 U	0.070 U	0.070 U	-
1,2-Dichloroethane	ppb	NC	NC	-	0.94 U	2.2 U	-	R	7.8 U	25 U	-	0.16 U	0.047 U	0.047 U	-
1,2-Dichloroethene (total)	ppb	NC	NC	-	130	-	-	R	7600	-	-	0.070 U	-	-	-
1,2-Dichloropropane	ppb	NC	NC	-	0.43 U	2.4 U	-	R	3.5 U	27 U	-	0.070 U	0.052 U	0.052 U	-
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	-	0.97 U	1.5 U	-	R	8.0 U	17 U	-	0.61 J	0.31	0.31	-
1,3,5-Trimethylbenzene	ppb	NC	NC	-	1.6 U	3.1 U	-	R	480	590	-	0.26 U	0.065 U	0.065 U	-
1,3-Butadiene	ppb	NC	NC	-	0.30 U	3.0 U	-	R	2.5 U	34 U	-	0.050 U	0.064 U	0.064 U	-
1,3-Dichlorobenzene	ppb	NC	NC	-	1.3 U	3.1 U	-	R	11 U	34 U	-	0.22 U	0.065 U	0.065 U	-
1,4-Dichlorobenzene	ppb	NC	NC	-	1.3 U	3.0 UJ	-	R	11 U	34 UJ	-	0.22 U	0.064 U	0.064 U	-
1,4-Dioxane	ppb	NC	NC	-	2.7 U	3.8 U	-	R	22 U	42 U	-	0.44 U	0.080 UJ	0.080 U	-
2,2,4-Trimethylpentane	ppb	NC	NC	-	1.1 U	7.9 J	-	R	9.0 U	150 J	-	0.18 U	0.039 U	0.050 J	-
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	-	0.52 U	9.4 U	-	R	4.3 U	100 U	-	0.71 J	0.20 UJ	1.7	-
2-Chlorotoluene	ppb	NC	NC	-	1.4 U	3.0 U	-	R	12 U	33 U	-	0.24 U	0.063 U	0.063 U	-
2-Hexanone	ppb	NC	NC	-	1.2 U	2.7 U	-	R	9.8 U	30 U	-	0.20 U	0.058 UJ	0.058 U	-
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	-	1.4 U	3.0 U	-	R	110	180 J	-	0.24 U	0.064 U	0.064 U	-
4-Ethyl toluene	ppb	NC	NC	-	1.4 U	3.1 U	-	R	110	210	-	0.23 U	0.066 U	0.066 U	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	-	0.79 U	2.1 U	-	R	6.5 U	24 U	-	0.13 U	0.045 UJ	0.045 U	-
Acetone	ppb	NC	NC	-	1.4 U	66 U	-	R	72 J	730 U	-	1.1 J	1.4 U	10	-
Allyl chloride	ppb	NC	NC	-	0.58 U	2.3 U	-	R	4.8 U	25 U	-	0.095 U	0.048 U	0.048 U	-
Benzene	ppb	20	200	-	0.55 U	2.6 U	-	R	230[ab]	320[ab]	-	0.090 U	0.056 U	0.075 J	-
Benzyl chloride	ppb	NC	NC	-	1.4 UJ	3.7 U	-	R	12 UJ	41 U	-	0.23 UJ	0.078 U	0.078 U	-
Bromodichloromethane	ppb	NC	NC	-	0.85 U	2.1 U	-	R	7.0 U	23 U	-	0.14 U	0.044 U	0.044 U	-
Bromoform	ppb	NC	NC	-	0.58 UJ	2.3 U	-	R	4.8 U	25 U	-	0.095 U	0.048 U	0.048 U	-
Bromomethane (Methyl bromide)	ppb	NC	NC	-	0.36 U	1.5 U	-	R	3.0 U	17 U	-	0.060 U	0.032 U	0.032 U	-
Butane	ppb	NC	NC	-	0.33 U	3.0 UJ	-	R	6400	10000 J	-	0.055 U	0.48	0.064 U	-
Carbon disulfide	ppb	NC	NC	-	2.0 U	1.5 U	-	R	38 J	70 J	-	0.33 U	0.031 U	0.048 J	-
Carbon tetrachloride	ppb	NC	NC	-	1.0 U	1.8 U	-	R	8.3 U	20 U	-	0.17 U	0.038 U	0.038 U	-
Chlorobenzene	ppb	NC	NC	-	0.61 U	2.3 U	-	R	520	680	-	0.10 U	0.049 U	0.049 U	-
Chlorodifluoromethane	ppb	NC	NC	-	1.0 U	2.7 J	-	R	8.5 U	130 J	-	0.17 U	0.47	0.30	-
Chloroethane	ppb	NC	NC	-	0.49 U	1.6 U	-	R	41 J	87 J	-	0.080 U	0.035 U	0.035 U	-
Chloroform (Trichloromethane)	ppb	800	8000	-	8.5	12	-	R	7.8 U	20 U	-	0.16 U	0.038 U	0.050 J	-
Chloromethane (Methyl chloride)	ppb	NC	NC	-	0.40 U	7.5 U	-	R	3.3 U	84 U	-	0.065 U	0.16 U	0.20 J	-
cis-1,2-Dichloroethene	ppb	370	3700	-	86	130	-	R	7400[ab]	10000[ab]	-	0.070 U	0.060 U	0.060 U	-
cis-1,3-Dichloropropene	ppb	NC	NC	-	0.49 U	3.5 U	-	R	4.0 U	39 U	-	0.080 U	0.074 U	0.074 U	-
Cyclohexane	ppb	NC	NC	-	1.2 U	1.9 U	-	R	1900	2900	-	0.20 U	0.040 U	0.21 J	-
Cymene (p-Isopropyltoluene)	ppb	NC	NC	-	1.5 U	2.7 U	-	R	63	82 J	-	0.24 U	0.057 U	0.057 U	-
Dibromochloromethane	ppb	NC	NC	-	0.64 U	2.0 U	-	R	5.3 U	22 U	-	0.11 U	0.042 U	0.042 U	-
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	-	1.2 U	3.2 U	-	R	9.5 U	36 U	-	3.7	2.3	4.3	-
Ethylbenzene	ppb	2500	25000	-	0.67 U	3.2 U	-	R	320	540	-	0.11 U	0.068 U	0.20	-
Hexachlorobutadiene	ppb	NC	NC	-	2.0 U	3.7 U	-	R	16 U	41 U	-	0.33 U	0.078 UJ	0.078 UJ	-
Hexane	ppb	NC	NC	-	0.79 U	1.9 J	-	R	1300	1900	-	0.13 U	0.098 J	0.53	-
Isopropyl alcohol	ppb	NC	NC	-	1.1 U	4.6 J	-	R	9.3 U	37 J	-	0.19 U	0.28 J	0.044 U	-
Isopropyl benzene	ppb	NC	NC	-	0.94 U	2.8 U	-	R	140	220	-	0.16 U	0.060 U	0.060 U	-
m&p-Xylenes	ppb	2000	20000	-	1.5 U	5.6 U	-	R	820	1300	-	0.24 U	0.12 U	0.73	-
Methyl methacrylate	ppb	NC	NC	-	0.40 U	3.7 U	-	R	3.3 U	41 U	-	0.065 U	0.079 U	0.079 U	-
Methyl tert butyl ether (MTBE)	ppb	NC	NC	-	0.49 U	8.0 U	-	R	4.0 U	89 U	-	0.080 U	0.17 U	0.17 U	-
Methylene chloride	ppb	NC	NC	-	1.4 U	7.2 J	-	R	17 J	220 J	-	0.31 J	0.39 J	0.045 U	-
Naphthalene	ppb	29	NC	-	2.6 U	4.2 U	-	R	22 U	47 U[a]	-	0.43 UJ	0.090 UJ	0.090 UJ	-
N-Butylbenzene	ppb	NC	NC	-	1.7 U	2.2 U	-	R	27 J	110 J	-	0.28 U	0.046 U	0.046 U	-
N-Decane	ppb	NC	NC	-	-	-	-	-	-	1200	-	-	-	0.27 J	-
N-Dodecane	ppb	NC	NC	-	-	-	-	-	-	67 J	-	-	-	0.078 UJ	-
N-Heptane	ppb	NC	NC	-	0.30 U	2.2 U	-	R	3600	4900	-	0.050 U	0.066 J	0.36 J	-
Nonane	ppb	NC	NC	-	-	-	-	-	-	2900	-	-	-	0.18 J	-
N-Propylbenzene	ppb	NC	NC	-	1.5 U	2.6 U	-	R	120	200 J	-	0.25 U	0.056 U	0.056 U	-
N-Undecane	ppb	NC	NC	-	-	-	-	-	-	0.062 U	-	-	-	0.099 J	-
Octane	ppb	NC	NC	-	-	-	-	-	-	2400	-	-	-	0.094 J	-
o-Xylene	ppb	2000	20000	-	0.67 U	2.9 U	-	R	710	1100	-	0.11 U	0.061 U	0.22	-
Pentane	ppb	NC	NC	-	-	-	-	-	-	3100	-	-	-	2.6	-
Styrene	ppb	NC	NC	-	0.91 U	2.7 U	-	R	7.5 U	30 U	-	0.15 U	0.058 U	0.058 U	-
tert-Butyl alcohol	ppb	NC	NC	-	2.2 U	1.8 U	-	R	18 U	95 J	-	0.36 U	0.049 J	0.038 U	-
tert-Butylbenzene	ppb	NC	NC	-	1.4 U	3.1 U	-	R	12 J	35 U	-	0.24 U	0.066 U	0.066 U	-

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5173, Bldg 15, Probe A*	*Parcel 5173, Bldg 15, Probe B*	*Parcel 5173, Bldg 15, Probe B*	*Parcel 5173, Bldg 15, Probe B*	*Parcel 5173, Bldg 15, Probe C*	*Parcel 5173, Bldg 15, Probe C*	*Parcel 5173, Bldg 15, Probe C*	*Parcel 5173, Bldg 15, Probe C*	*Parcel 5174, Bldg 16, Probe A*	*Parcel 5174, Bldg 16, Probe A*	*Parcel 5174, Bldg 16, Probe A*	*Parcel 5174, Bldg 16, Probe A*
Sample Location:				*2031 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*
Owner / Tenant:				*SIM Trainer*	*SIM Trainer*	*SIM Trainer*	*SIM Trainer*	*SIM Trainer*	*SIM Trainer*	*SIM Trainer*	*SIM Trainer*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*
Sample ID:				-	*SS-38443-011212-JC-071*	*SS-38443-031312-JC-178*	-	*SS-38443-011212-JC-072*	*SS-38443-011212-JC-073*	*SS-38443-031312-JC-180*	*SS-38443-031312-JC-181*	*SS-38443-010512-GL-009*	*SS-38443-030712-JC-103*	*SS-38443-080212-GL-038*	*SS-38443-080312-GL-038*
Sample Date:				*8/7/2012*	*1/12/2012*	*3/13/2012*	*8/7/2012*	*1/12/2012*	*1/12/2012*	*3/13/2012*	*3/13/2012*	*1/5/2012*	*3/7/2012*	*8/2/2012*	*8/3/2012*
									Duplicate						
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*												
Tetrachloroethene	ppb	250	2500	-	1.3 J	2.5 J	-	R	2.8 U	21 U	-	0.66 J	0.98	11	-
Tetrahydrofuran	ppb	NC	NC	-	0.55 U	3.0 U	-	R	4.5 U	33 U	-	0.090 U	0.063 U	0.063 U	-
Toluene	ppb	NC	NC	-	0.55 U	2.7 J	-	R	3500	5200	-	0.90 J	0.78	2.8	-
trans-1,2-Dichloroethene	ppb	NC	NC	-	43	59	-	R	150	230	-	0.16 U	0.050 U	0.050 U	-
trans-1,3-Dichloropropene	ppb	NC	NC	-	0.61 U	2.3 U	-	R	5.0 U	25 U	-	0.10 U	0.048 U	0.048 U	-
Trichloroethene	ppb	20	200	-	**690[ab]**	**680[ab]**	-	R	**95[a]**	**120[a]**	-	0.49 J	0.64	4.7	-
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	-	1.0 U	1.1 U	-	R	8.5 U	13 U	-	0.17 U	0.31	2.9	-
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	-	0.30 U	1.5 U	-	R	2.5 U	16 U	-	0.050 U	0.055 J	0.10 J	-
Vinyl bromide (Bromoethene)	ppb	NC	NC	-	0.58 U	1.6 U	-	R	4.8 U	18 U	-	0.095 U	0.035 U	0.035 U	-
Vinyl chloride	ppb	20	200	-	0.88 U	3.3 U	-	R	**1100[ab]**	**1700[ab]**	-	0.15 U	0.071 U	0.071 U	-
Xylenes (total)	ppb	NC	NC	-	0.67 U	-	-	R	1500	-	-	0.11 U	-	-	-
Gases															
Methane	%	0.5	0.5	-	0.058 U	-	-	-	-	-	**0.97[ab]**	-	0.19 U	0.21 U	-
Field Parameter															
Methane, field (unfiltered)	%	0.5	0.5	-	0.1 / 0.1	-	-	**1.1[ab] / 1.2[ab]**	**1.2[ab] / 1.1[ab]**	-	-	0.0 / 0.0	-	-	-
Methane, field (filtered)	%	0.5	0.5	0	-	0.0 / 0.0	0	-	-	**0.9[ab] / 0.8[ab]**	**0.9[ab] / 0.8[ab]**	-	0.0 / 0	-	0 / 0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5174, Bldg 16, Probe B*	*Parcel 5174, Bldg 16, Probe B*	*Parcel 5174, Bldg 16, Probe B*	*Parcel 5174, Bldg 16, Probe B*	*Parcel 5174, Bldg 16, Probe C*	*Parcel 5174, Bldg 16, Probe C*	*Parcel 5174, Bldg 16, Probe C*	*Parcel 5174, Bldg 16, Probe D*	*Parcel 5174, Bldg 16, Probe D*	*Parcel 5174, Bldg 16, Probe D*	*Parcel 5174, Bldg 16, Probe E*	*Parcel 5174, Bldg 16, Probe E*
Sample Location:				*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*
Owner / Tenant:				*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*
Sample ID:				*SS-38443-010512-GL-010*	*SS-38443-030612-JC-087*	*SS-38443-080312-GL-040*	*SS-38443-080312-GL-041*	*SS-38443-010512-GL-011*	*SS-38443-030612-JC-090*	*SS-38443-080312-GL-042*	*SS-38443-010512-GL-012*	*SS-38443-030612-JC-091*	*SS-38443-080312-GL-044*	*SS-38443-010512-GL-013*	*SS-38443-030612-JC-093*
Sample Date:				*1/5/2012*	*3/6/2012*	*8/3/2012*	*8/3/2012*	*1/5/2012*	*3/6/2012*	*8/3/2012*	*1/5/2012*	*3/6/2012*	*8/3/2012*	*1/5/2012*	*3/6/2012*
							Duplicate								
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*												
Volatile Organic Compounds															
1,1,1-Trichloroethane	ppb	NC	NC	R	5.7	33	33	0.44 J	0.57 J	2.1 J	R	3.4	18	R	0.89
1,1,2,2-Tetrachloroethane	ppb	NC	NC	R	0.12 U	0.61 U	0.61 U	0.40 U	0.61 U	3.3 U	R	0.061 U	0.12 U	R	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	R	0.11 U	0.54 U	0.54 U	0.19 U	0.54 U	2.9 U	R	0.054 U	0.11 U	R	0.054 U
1,1-Dichloroethane	ppb	160	1600	R	0.052 U	0.26 U	0.26 U	0.35 U	0.26 U	1.4 U	R	0.026 U	0.052 U	R	0.026 U
1,1-Dichloroethene	ppb	NC	NC	R	0.064 U	0.32 U	0.32 U	0.30 U	0.32 U	1.7 U	R	0.032 U	0.064 U	R	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	R	0.20 U	0.98 UJ	0.98 UJ	0.50 U	0.98 U	5.2 UJ	R	0.098 U	0.20 UJ	R	0.098 U
1,2,4-Trimethylbenzene	ppb	NC	NC	R	0.13 U	0.63 U	0.63 U	0.52 U	0.63 U	3.4 U	R	0.063 U	0.13 U	R	0.063 U
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	R	0.088 U	0.44 U	0.44 U	0.18 U	0.44 U	2.4 U	R	0.044 U	0.088 U	R	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	R	0.14 U	0.70 U	0.70 U	0.48 U	0.70 U	3.7 U	R	0.070 U	0.14 U	R	0.070 U
1,2-Dichloroethane	ppb	NC	NC	R	0.094 U	0.47 U	0.47 U	0.31 U	0.47 U	2.5 U	R	0.047 U	0.094 U	R	0.047 UJ
1,2-Dichloroethene (total)	ppb	NC	NC	R	-	-	-	13	-	-	R	-	-	R	-
1,2-Dichloropropane	ppb	NC	NC	R	0.10 U	0.52 U	0.52 U	0.14 U	0.52 U	2.8 U	R	0.052 U	0.10 U	R	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	R	0.55	0.32 U	0.32 U	0.32 U	0.32 U	1.7 U	R	1.3	0.37 J	R	0.21
1,3,5-Trimethylbenzene	ppb	NC	NC	R	0.13 U	0.65 U	0.65 U	0.51 U	0.65 U	3.5 U	R	0.065 U	0.13 U	R	0.065 U
1,3-Butadiene	ppb	NC	NC	R	0.13 U	0.64 U	0.64 U	0.10 U	0.64 U	3.4 U	R	0.064 U	0.13 U	R	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	R	0.13 U	0.65 U	0.65 U	0.44 U	0.65 U	3.5 U	R	0.065 U	0.13 U	R	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	R	0.13 U	0.64 U	0.64 U	0.44 U	0.64 U	3.4 U	R	0.064 U	0.13 U	R	0.064 U
1,4-Dioxane	ppb	NC	NC	R	0.16 U	0.80 U	0.80 U	0.88 U	0.80 U	4.3 U	R	0.080 U	0.16 U	R	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	R	0.078 U	0.39 U	0.39 U	0.36 U	0.39 U	2.1 U	R	0.039 U	0.078 U	R	0.039 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	R	0.40 U	2.0 U	2.0 U	0.17 U	2.0 U	11 U	R	0.20 U	0.64 J	R	0.30 J
2-Chlorotoluene	ppb	NC	NC	R	0.13 U	0.63 U	0.63 U	0.47 U	0.63 U	3.4 U	R	0.063 U	0.13 U	R	0.063 U
2-Hexanone	ppb	NC	NC	R	0.12 U	0.58 U	0.58 U	0.39 U	0.58 U	3.1 U	R	0.058 U	0.12 U	R	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	R	0.13 U	0.64 U	0.64 U	0.47 U	0.64 U	3.4 U	R	0.064 U	0.13 U	R	0.064 U
4-Ethyl toluene	ppb	NC	NC	R	0.13 U	0.66 U	0.66 U	0.46 U	0.66 U	3.5 U	R	0.066 U	0.13 U	R	0.066 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	R	0.090 U	0.45 U	0.45 U	0.26 U	0.45 U	2.4 U	R	0.045 U	0.090 U	R	0.045 U
Acetone	ppb	NC	NC	R	2.8 U	16 J	14 U	2.5 J	14 U	75 U	R	1.4 U	4.3 J	R	2.9 J
Allyl chloride	ppb	NC	NC	R	0.096 U	0.48 U	0.48 U	0.19 U	0.48 U	2.6 U	R	0.048 U	0.096 U	R	0.048 U
Benzene	ppb	20	200	R	0.11 U	0.56 U	0.56 U	0.18 U	0.56 U	3.0 U	R	0.056 U	0.11 U	R	0.056 U
Benzyl chloride	ppb	NC	NC	R	0.16 U	0.78 U	0.78 U	0.46 UJ	0.78 U	4.2 U	R	0.078 U	0.16 U	R	0.078 U
Bromodichloromethane	ppb	NC	NC	R	0.088 U	0.44 U	0.44 U	0.28 U	0.44 U	2.4 U	R	0.044 U	0.088 U	R	0.044 U
Bromoform	ppb	NC	NC	R	0.096 U	0.48 U	0.48 U	0.19 U	0.48 U	2.6 U	R	0.048 U	0.096 U	R	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	R	0.064 U	0.32 U	0.32 U	0.12 U	0.32 U	1.7 U	R	0.032 U	0.064 U	R	0.032 U
Butane	ppb	NC	NC	R	0.53 J	0.64 U	0.64 U	0.36 J	0.83 J	3.4 U	R	0.12 J	0.18 J	R	0.081 J
Carbon disulfide	ppb	NC	NC	R	0.062 U	0.31 U	0.31 U	0.66 U	0.31 U	1.7 U	R	0.031 U	7.4	R	0.031 U
Carbon tetrachloride	ppb	NC	NC	R	0.076 U	0.38 U	0.38 U	0.33 U	0.38 U	2.0 U	R	0.038 U	0.076 U	R	0.066 J
Chlorobenzene	ppb	NC	NC	R	0.098 U	0.49 U	0.49 U	0.20 U	0.49 U	2.6 U	R	0.049 U	0.098 U	R	0.049 U
Chlorodifluoromethane	ppb	NC	NC	R	0.54	0.37 U	0.37 U	0.34 U	0.88 J	2.0 U	R	0.51	0.25 J	R	0.99
Chloroethane	ppb	NC	NC	R	0.070 U	0.35 U	0.35 U	0.16 U	0.35 U	1.9 U	R	0.035 U	0.070 U	R	0.035 U
Chloroform (Trichloromethane)	ppb	800	8000	R	0.14 J	0.61 J	0.56 J	2.3	2.6	14	R	0.061 J	0.18 J	R	0.038 U
Chloromethane (Methyl chloride)	ppb	NC	NC	R	0.32 U	1.6 U	1.6 U	0.13 U	1.6 U	8.6 U	R	0.16 U	0.65 J	R	0.16 U
cis-1,2-Dichloroethene	ppb	370	3700	R	0.12 U	0.60 U	0.60 U	11	13	63	R	0.060 U	0.12 U	R	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	R	0.15 U	0.74 U	0.74 U	0.16 U	0.74 U	4.0 U	R	0.074 U	0.15 U	R	0.074 U
Cyclohexane	ppb	NC	NC	R	0.080 U	0.40 U	0.40 U	0.39 U	0.40 U	2.1 U	R	0.055 J	0.080 U	R	0.040 U
Cymene (p-Isopropyltoluene)	ppb	NC	NC	R	0.11 U	0.57 U	0.57 U	0.48 U	0.57 U	3.0 U	R	0.057 U	0.11 U	R	0.057 U
Dibromochloromethane	ppb	NC	NC	R	0.084 U	0.42 U	0.42 U	0.21 U	0.42 U	2.2 U	R	0.042 U	0.084 U	R	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	R	16	4.3	4.2	1.4 J	1.7 J	3.6 U	R	1.3	0.82	R	0.74
Ethylbenzene	ppb	2500	25000	R	0.29 J	0.68 U	0.68 U	0.22 U	0.68 U	3.6 U	R	0.068 U	0.14 U	R	0.068 U
Hexachlorobutadiene	ppb	NC	NC	R	0.16 U	0.78 UJ	0.78 UJ	0.65 U	0.78 U	4.2 UJ	R	0.078 U	0.16 UJ	R	0.078 U
Hexane	ppb	NC	NC	R	0.13 J	0.32 U	0.32 U	0.26 U	0.37 J	1.7 U	R	2.0	0.17 J	R	0.15 J
Isopropyl alcohol	ppb	NC	NC	R	0.45 J	0.44 U	0.44 U	0.37 U	0.44 U	2.4 U	R	0.62 J	0.32 J	R	0.36 J
Isopropyl benzene	ppb	NC	NC	R	0.12 U	0.60 U	0.60 U	0.31 U	0.60 U	3.2 U	R	0.060 U	0.12 U	R	0.060 U
m&p-Xylenes	ppb	2000	20000	R	0.90	1.2 U	1.2 U	0.48 U	1.2 U	6.4 U	R	0.12 U	0.24 U	R	0.12 U
Methyl methacrylate	ppb	NC	NC	R	0.16 U	0.79 U	0.79 U	0.13 U	0.79 U	4.2 U	R	0.079 U	0.16 U	R	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	R	0.34 U	1.7 U	1.7 U	0.16 U	1.7 U	9.1 U	R	0.17 U	0.34 U	R	0.17 U
Methylene chloride	ppb	NC	NC	R	0.090 U	0.45 U	0.45 U	0.13 U	0.45 U	2.4 U	R	0.045 U	1.3	R	0.045 U
Naphthalene	ppb	29	NC	R	0.18 U	0.90 UJ	0.90 UJ	0.86 UJ	0.90 U	4.8 UJ	R	0.090 U	0.18 UJ	R	0.090 U
N-Butylbenzene	ppb	NC	NC	R	0.092 U	0.46 U	0.46 U	0.55 U	0.46 U	2.5 U	R	0.046 U	0.092 U	R	0.046 U
N-Decane	ppb	NC	NC	-	0.11 U	0.56 U	0.56 U	-	1.5 J	3.0 U	-	-	0.11 U	-	-
N-Dodecane	ppb	NC	NC	-	0.16 U	0.78 UJ	0.78 UJ	-	0.078 U	4.2 UJ	-	-	0.17 J	-	-
N-Heptane	ppb	NC	NC	R	0.094 U	0.47 U	0.47 U	0.10 U	0.47 U	2.5 U	R	0.047 U	0.094 U	R	0.047 U
Nonane	ppb	NC	NC	-	0.086 U	0.43 U	0.43 U	-	1.4 J	2.3 U	-	-	0.086 U	-	-
N-Propylbenzene	ppb	NC	NC	R	0.11 U	0.56 U	0.56 U	0.50 U	0.56 U	3.0 U	R	0.056 U	0.11 U	R	0.056 U
N-Undecane	ppb	NC	NC	-	0.12 U	0.62 U	0.62 U	-	0.062 U	3.3 U	-	-	0.12 U	-	-
Octane	ppb	NC	NC	-	0.072 U	0.36 U	0.36 U	-	0.53 J	1.9 U	-	-	0.072 U	-	-
o-Xylene	ppb	2000	20000	R	0.42	0.61 U	0.61 U	0.22 U	0.61 U	3.3 U	R	0.061 U	0.12 U	R	0.061 U
Pentane	ppb	NC	NC	-	0.18 J	0.92 J	1.3 J	-	0.060 U	3.2 U	-	-	0.50 J	-	-
Styrene	ppb	NC	NC	R	0.12 U	0.58 U	0.58 U	0.30 U	0.58 U	3.1 U	R	0.058 U	0.12 U	R	0.058 U
tert-Butyl alcohol	ppb	NC	NC	R	0.090 J	1.5 J	1.2 J	0.71 U	0.38 U	2.6 J	R	0.044 J	0.15 J	R	0.080 J
tert-Butylbenzene	ppb	NC	NC	R	0.13 U	0.66 U	0.66 U	0.47 U	0.66 U	3.5 U	R	0.066 U	0.13 U	R	0.066 U

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5174, Bldg 16, Probe B*	*Parcel 5174, Bldg 16, Probe B*	*Parcel 5174, Bldg 16, Probe B*	*Parcel 5174, Bldg 16, Probe B*	*Parcel 5174, Bldg 16, Probe C*	*Parcel 5174, Bldg 16, Probe C*	*Parcel 5174, Bldg 16, Probe C*	*Parcel 5174, Bldg 16, Probe D*	*Parcel 5174, Bldg 16, Probe D*	*Parcel 5174, Bldg 16, Probe D*	*Parcel 5174, Bldg 16, Probe E*	*Parcel 5174, Bldg 16, Probe E*
Sample Location:				*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*
Owner / Tenant:				*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*
Sample ID:				*SS-38443-010512-GL-010*	*SS-38443-030612-JC-087*	*SS-38443-080312-GL-040*	*SS-38443-080312-GL-041*	*SS-38443-010512-GL-011*	*SS-38443-030612-JC-090*	*SS-38443-080312-GL-042*	*SS-38443-010512-GL-012*	*SS-38443-030612-JC-091*	*SS-38443-080312-GL-044*	*SS-38443-010512-GL-013*	*SS-38443-030612-JC-093*
Sample Date:				*1/5/2012*	*3/6/2012*	*8/3/2012*	*8/3/2012*	*1/5/2012*	*3/6/2012*	*8/3/2012*	*1/5/2012*	*3/6/2012*	*8/3/2012*	*1/5/2012*	*3/6/2012*
							Duplicate								
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)*	*ODH Sub-Slab Action Levels (Non-residential)*												
		a	*b*												
Tetrachloroethene	ppb	250	2500	R	4.6	52	51	4.4	4.6	35	R	2.8	39	R	0.32 J
Tetrahydrofuran	ppb	NC	NC	R	0.13 U	0.63 U	0.63 U	0.18 U	0.63 U	3.4 U	R	0.063 U	0.13 U	R	0.063 UJ
Toluene	ppb	NC	NC	R	0.29 J	0.75 J	0.96 J	0.18 U	0.74 J	2.9 U	R	0.72	0.45	R	0.27
trans-1,2-Dichloroethene	ppb	NC	NC	R	0.10 U	0.50 U	0.50 U	1.6 J	2.2	10 J	R	0.050 U	0.10 U	R	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	R	0.096 U	0.48 U	0.48 U	0.20 U	0.48 U	2.6 U	R	0.048 U	0.096 U	R	0.048 U
Trichloroethene	ppb	20	200	R	**30[a]**	**300[ab]**	**300[ab]**	**170[a]**	**160[a]**	**1500[ab]**	R	4.0	**32[a]**	R	12 J
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	R	0.96	2.6	2.5	0.34 U	0.34 J	2.2 J	R	0.23	5.6	R	0.49
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	R	0.062 U	0.31 U	0.31 U	0.10 U	0.31 U	1.7 U	R	0.042 J	0.13 J	R	0.057 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	R	0.070 U	0.35 U	0.35 U	0.19 U	0.35 U	1.9 U	R	0.035 U	0.070 U	R	0.035 U
Vinyl chloride	ppb	20	200	R	0.14 U	0.71 U	0.71 U	0.29 U	0.71 U	3.8 U	R	0.071 U	0.14 U	R	0.071 U
Xylenes (total)	ppb	NC	NC	R	-	-	-	0.22 U	-	-	R	-	-	R	-
Gases															
Methane	%	0.5	0.5	R	0.19 U	0.20 U	0.20 U	-	0.17 U	0.20 U	-	-	0.21 U	-	-
Field Parameter															
Methane, field (unfiltered)	%	0.5	0.5	0.0 / 0.0	-	-	-	0.0 / 0.0	-	-	0.0 / 0.0	-	-	0.0 / 0.0	-
Methane, field (filtered)	%	0.5	0.5	-	0 / 0.0	0 / 0	0 / 0	-	0.0 / 0	0 / 0	-	0 / 0.0	0 / 0	-	0 / 0.0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5174, Bldg 16, Probe E*	*Parcel 5174, Bldg 16, Probe E*	*Parcel 5174, Bldg 16, Probe E*	*Parcel 5175, Bldg 17, Probe A*	*Parcel 5175, Bldg 17, Probe A*	*Parcel 5175, Bldg 17, Probe A*	*Parcel 5175, Bldg 17, Probe A*	*Parcel 5175, Bldg 17, Probe B*	*Parcel 5175, Bldg 17, Probe B*	*Parcel 5175, Bldg 17, Probe B*	*Parcel 5175, Bldg 17, Probe C*	*Parcel 5175, Bldg 17, Probe C*
Sample Location:				*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*
Owner / Tenant:				*Command Roofing*	*Command Roofing*	*Command Roofing*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*
Sample ID:				*SS-38443-030612-JC-094*	*SS-38443-080312-GL-045*	*SS-38443-091412-GL-026*	*SS-38443-010912-JC-044*	*SS-38443-030712-JC-106*	*SS-38443-080112-GL-029*	*SS-38443-080112-GL-029*	*SS-38443-010912-JC-045*	*SS-38443-030712-JC-108*	*SS-38443-080112-GL-020*	*SS-38443-010912-JC-046*	*SS-38443-030712-JC-109*
Sample Date:				*3/6/2012* *Duplicate*	*8/3/2012*	*9/14/2012*	*1/9/2012*	*3/7/2012*	*8/1/2012*	*8/2/2012*	*1/9/2012*	*3/7/2012*	*8/1/2012*	*1/9/2012*	*3/7/2012*
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*												
Volatile Organic Compounds															
1,1,1-Trichloroethane	ppb	NC	NC	0.70	0.060 U	1.9	0.13 J	0.17 J	0.31 J	-	0.28 U	0.19 J	0.56	0.035 U	0.030 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	0.12 U	0.061 U	0.040 U	0.061 U	0.11 U	-	0.32 U	0.061 U	0.061 U	0.040 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	0.11 U	0.054 U	0.019 U	0.054 U	0.095 U	-	0.15 U	0.054 U	0.054 U	0.019 U	0.054 U
1,1-Dichloroethane	ppb	160	1600	0.026 U	0.052 U	0.026 U	0.035 U	0.026 U	0.046 U	-	0.28 U	0.026 U	0.026 U	0.035 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.032 U	0.064 U	0.032 U	0.030 U	0.032 U	0.056 U	-	0.24 U	0.032 U	0.032 U	0.030 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 U	0.20 UJ	0.098 UJ	0.050 U	0.098 UJ	0.17 UJ	-	0.40 U	0.098 UJ	0.098 UJ	0.050 U	0.098 UJ
1,2,4-Trimethylbenzene	ppb	NC	NC	0.063 U	1.8	0.063 U	0.24	0.13 J	0.36	-	0.42 U	0.063 U	0.063 U	0.052 U	0.063 U
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	0.088 U	0.044 U	0.018 U	0.044 U	0.077 U	-	0.14 U	0.044 U	0.044 U	0.018 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	0.14 U	0.070 U	0.048 U	0.070 U	0.12 U	-	0.38 U	0.070 U	0.070 U	0.048 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	6.0 J	0.25 J	0.047 U	0.031 U	0.047 U	0.18 J	-	0.25 U	0.047 U	0.047 U	0.031 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	0.014 U	-	-	-	0.11 U	-	-	0.14 J	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	0.10 U	0.052 U	0.014 U	0.052 U	0.092 U	-	0.11 U	0.052 U	0.052 U	0.014 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.18 J	0.064 U	0.14 J	0.065 J	0.035 J	0.056 U	-	0.26 U	0.038 J	0.079 J	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.065 U	0.50	0.065 U	0.082 J	0.065 U	0.11 U	-	0.41 U	0.065 U	0.64	0.051 U	0.065 U
1,3-Butadiene	ppb	NC	NC	0.064 U	0.13 U	0.064 U	0.010 U	0.064 U	0.11 U	-	0.080 U	0.064 U	0.064 U	0.010 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	0.13 U	0.065 U	0.044 U	0.065 U	0.11 U	-	0.35 U	0.065 U	0.065 U	0.044 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.064 U	0.13 U	0.064 U	0.044 U	0.064 U	0.11 U	-	0.35 U	0.064 U	0.064 U	0.044 U	0.064 U
1,4-Dioxane	ppb	NC	NC	0.080 U	0.19 J	0.080 U	0.088 U	0.080 UJ	0.14 U	-	0.70 U	0.080 UJ	0.080 U	0.088 U	0.080 UJ
2,2,4-Trimethylpentane	ppb	NC	NC	0.039 U	0.17 J	0.039 U	0.036 U	0.039 U	0.23 J	-	0.29 U	0.039 U	0.039 U	0.036 U	0.039 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.20 U	32	0.45 J	0.36 J	0.20 UJ	1.2 J	-	0.14 U	0.20 UJ	0.65 J	0.14 J	0.20 UJ
2-Chlorotoluene	ppb	NC	NC	0.063 U	0.13 U	0.063 U	0.047 U	0.063 U	0.11 U	-	0.38 U	0.063 U	0.063 U	0.047 U	0.063 U
2-Hexanone	ppb	NC	NC	0.058 U	0.12 U	0.058 U	0.039 U	0.058 UJ	0.18 J	-	0.31 U	0.058 UJ	0.058 UJ	0.039 U	0.058 UJ
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	0.13 U	0.064 U	0.047 U	0.064 U	0.11 U	-	0.38 U	0.064 U	0.064 U	0.047 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.066 U	0.38 J	0.066 U	0.073 J	0.066 U	0.12 U	-	0.37 U	0.066 U	0.066 U	0.046 U	0.066 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.045 U	0.15 J	0.060 J	0.026 U	0.045 UJ	0.079 U	-	0.21 U	0.045 UJ	0.045 U	0.026 U	0.045 UJ
Acetone	ppb	NC	NC	2.5 J	46	4.0 J	4.4 J	1.4 U	12	-	2.2 J	1.4 U	6.5 J	5.5	2.2 J
Allyl chloride	ppb	NC	NC	0.067 J	0.096 U	0.048 U	0.019 U	0.048 U	0.084 U	-	0.15 U	0.048 U	0.048 U	0.019 U	0.048 U
Benzene	ppb	20	200	0.056 U	0.32 J	0.056 U	0.20	0.12 J	0.29 J	-	0.14 U	0.056 U	0.63	0.018 U	0.056 U
Benzyl chloride	ppb	NC	NC	0.078 U	0.16 U	0.078 U	0.046 U	0.078 U	0.14 U	-	0.37 U	0.078 U	0.078 U	0.046 U	0.078 U
Bromodichloromethane	ppb	NC	NC	0.044 U	0.088 U	0.044 U	0.028 U	0.044 U	0.077 U	-	0.22 U	0.044 U	0.044 U	0.028 U	0.044 U
Bromoform	ppb	NC	NC	0.048 U	0.096 U	0.048 U	0.019 U	0.048 U	0.084 U	-	0.15 U	0.048 U	0.048 U	0.019 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	0.064 U	0.032 U	0.012 U	0.032 U	0.056 U	-	0.096 U	0.032 U	0.032 U	0.012 U	0.032 U
Butane	ppb	NC	NC	0.16 J	1.2	0.076 J	1.6	0.99	2.9	-	0.088 U	0.27 J	0.13 J	0.28 J	0.13 J
Carbon disulfide	ppb	NC	NC	0.031 U	0.25 J	0.031 U	0.066 U	0.031 U	13	-	0.53 U	0.031 U	0.050 J	0.066 U	0.031 U
Carbon tetrachloride	ppb	NC	NC	0.056 J	0.076 J	0.085 J	0.033 U	0.038 U	0.080 J	-	0.26 U	0.044 J	0.077 J	0.037 J	0.069 J
Chlorobenzene	ppb	NC	NC	0.049 U	0.098 U	0.049 U	0.020 U	0.049 U	0.086 U	-	0.16 U	0.049 U	0.049 U	0.020 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	1.1	2.9	3.7	0.30 J	0.82	0.36	-	0.27 U	0.40	0.56	0.29 J	0.37
Chloroethane	ppb	NC	NC	0.035 U	0.070 U	0.035 U	0.016 U	0.035 U	0.37	-	0.13 U	0.035 U	0.035 U	0.016 U	0.035 U
Chloroform (Trichloromethane)	ppb	800	8000	0.041 J	0.076 U	0.038 U	0.031 U	0.038 U	0.70	-	0.25 U	0.038 U	0.10 J	0.031 U	0.038 U
Chloromethane (Methyl chloride)	ppb	NC	NC	0.26 J	0.85 J	0.16 U	0.013 U	0.16 U	2.2	-	0.10 U	0.16 U	0.16 U	0.013 U	0.16 U
cis-1,2-Dichloroethene	ppb	370	3700	0.060 U	0.12 U	0.060 U	0.014 U	0.060 U	0.11 U	-	0.11 U	0.060 U	0.060 U	0.14 J	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	0.15 U	0.074 U	0.016 U	0.074 U	0.13 U	-	0.13 U	0.074 U	0.074 U	0.016 U	0.074 U
Cyclohexane	ppb	NC	NC	0.22 J	1.4	0.040 U	0.67	0.36 J	1.4	-	0.31 U	0.040 U	0.040 U	0.039 U	0.040 U
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.057 U	0.11 U	0.057 U	0.048 U	0.057 U	0.10 U	-	0.38 U	0.057 U	0.057 U	0.048 U	0.057 U
Dibromochloromethane	ppb	NC	NC	0.042 U	0.084 U	0.042 U	0.021 U	0.042 U	0.074 U	-	0.17 U	0.042 U	0.042 U	0.021 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.72	0.53	0.57	0.64	0.57	0.48	-	0.62 J	0.59	0.38	0.59	0.57
Ethylbenzene	ppb	2500	25000	0.068 U	2.4	0.068 U	0.40	0.18 J	0.35	-	0.18 U	0.068 U	0.068 U	0.022 U	0.068 U
Hexachlorobutadiene	ppb	NC	NC	0.078 U	0.16 UJ	0.078 UJ	0.065 U	0.078 UJ	0.14 UJ	-	0.52 U	0.078 UJ	0.078 UJ	0.065 U	0.078 UJ
Hexane	ppb	NC	NC	0.86 J	19	0.14 J	0.37	0.26 J	0.97	-	0.21 U	0.032 J	0.14 J	0.084 J	0.032 U
Isopropyl alcohol	ppb	NC	NC	9.8 J	1.0 J	0.16 J	0.037 U	0.54 J	1.1 J	-	0.30 U	0.88 J	0.37 J	0.037 U	0.32 J
Isopropyl benzene	ppb	NC	NC	0.060 U	0.12 U	0.060 U	0.22	0.097 J	0.11 U	-	0.25 U	0.060 U	0.060 U	0.031 U	0.060 U
m&p-Xylenes	ppb	2000	20000	0.12 U	8.6	0.12 U	1.0	0.47	1.5	-	0.38 U	0.12 U	0.12 U	0.074 J	0.12 U
Methyl methacrylate	ppb	NC	NC	0.079 U	0.16 U	0.079 U	0.54	0.079 U	0.14 U	-	0.10 U	0.079 U	0.079 U	0.013 U	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	0.34 U	0.17 U	0.016 U	0.17 U	0.30 U	-	0.13 U	0.17 U	0.17 U	0.016 U	0.17 U
Methylene chloride	ppb	NC	NC	0.045 U	1.0	0.26 U	0.11 U	0.51	0.079 U	-	0.61 U	0.18 J	1.1	0.11 U	0.12 J
Naphthalene	ppb	29	NC	0.090 U	0.69 J	0.090 UJ	0.21 J	0.12 J	0.25 J	-	0.69 U	0.090 UJ	0.090 U	0.086 U	0.090 UJ
N-Butylbenzene	ppb	NC	NC	0.046 U	0.12 J	0.046 U	0.055 U	0.046 U	0.081 U	-	0.44 U	0.046 U	0.046 U	0.055 U	0.046 U
N-Decane	ppb	NC	NC	-	2.6	0.056 UJ	-	-	0.099 U	-	-	-	0.074 J	-	-
N-Dodecane	ppb	NC	NC	-	1.3 J	0.078 U	-	-	0.18 J	-	-	-	0.078 U	-	-
N-Heptane	ppb	NC	NC	0.14 J	2.6	0.047 U	1.2	0.51	0.27 J	-	0.080 U	0.047 U	0.047 U	0.074 J	0.047 U
Nonane	ppb	NC	NC	-	2.0	0.043 U	-	-	0.076 U	-	-	-	0.043 U	-	-
N-Propylbenzene	ppb	NC	NC	0.056 U	0.24 J	0.056 U	0.12 J	0.056 U	0.099 U	-	0.40 U	0.056 U	0.056 U	0.050 U	0.056 U
N-Undecane	ppb	NC	NC	-	1.5 J	0.062 U	-	-	0.11 U	-	-	-	0.064 J	-	-
Octane	ppb	NC	NC	-	0.54 J	0.036 U	-	-	0.063 U	-	-	-	0.036 U	-	-
o-Xylene	ppb	2000	20000	0.061 U	2.1	0.061 U	0.57	0.24	0.90	-	0.18 U	0.061 U	0.061 U	0.031 J	0.061 U
Pentane	ppb	NC	NC	-	34	0.33 J	-	-	2.4	-	-	-	0.060 U	-	-
Styrene	ppb	NC	NC	0.058 U	0.12 U	0.058 U	0.030 U	0.058 U	0.10 U	-	0.24 U	0.058 U	0.058 U	0.030 U	0.058 U
tert-Butyl alcohol	ppb	NC	NC	0.038 U	0.25 J	0.063 J	0.071 U	0.19 J	0.29 J	-	0.57 U	0.061 J	0.14 J	0.071 U	0.050 J
tert-Butylbenzene	ppb	NC	NC	0.066 U	0.13 U	0.066 U	0.047 U	0.066 U	0.12 U	-	0.38 U	0.066 U	0.066 U	0.047 U	0.066 U

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5174, Bldg 16, Probe E*	*Parcel 5174, Bldg 16, Probe E*	*Parcel 5174, Bldg 16, Probe E*	*Parcel 5175, Bldg 17, Probe A*	*Parcel 5175, Bldg 17, Probe A*	*Parcel 5175, Bldg 17, Probe A*	*Parcel 5175, Bldg 17, Probe A*	*Parcel 5175, Bldg 17, Probe B*	*Parcel 5175, Bldg 17, Probe B*	*Parcel 5175, Bldg 17, Probe B*	*Parcel 5175, Bldg 17, Probe C*	*Parcel 5175, Bldg 17, Probe C*
Sample Location:				*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*
Owner / Tenant:				*Command Roofing*	*Command Roofing*	*Command Roofing*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*
Sample ID:				*SS-38443-030612-JC-094*	*SS-38443-080312-GL-045*	*SS-38443-091412-GL-026*	*SS-38443-010912-JC-044*	*SS-38443-030712-JC-106*	*SS-38443-080112-GL-029*	*SS-38443-080112-GL-029*	*SS-38443-010912-JC-045*	*SS-38443-030712-JC-108*	*SS-38443-080112-GL-020*	*SS-38443-010912-JC-046*	*SS-38443-030712-JC-109*
Sample Date:				*3/6/2012*	*8/3/2012*	*9/14/2012*	*1/9/2012*	*3/7/2012*	*8/1/2012*	*8/2/2012*	*1/9/2012*	*3/7/2012*	*8/1/2012*	*1/9/2012*	*3/7/2012*
				Duplicate											
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*												
Tetrachloroethene	ppb	250	2500	0.13 J	0.080 U	1.4	1.3	1.0	4.9	-	0.44 J	0.58	3.7	0.25	0.13 J
Tetrahydrofuran	ppb	NC	NC	0.66 J	0.13 U	0.063 U	0.018 U	0.063 U	0.11 U	-	0.14 U	0.063 U	0.063 U	0.018 U	0.063 U
Toluene	ppb	NC	NC	0.28	53	0.21	1.9	0.94	2.3	-	0.14 U	0.069 J	0.15 J	0.13 J	0.085 J
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	0.10 U	0.050 U	0.032 U	0.050 U	0.088 U	-	0.26 U	0.050 U	0.050 U	0.032 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	0.096 U	0.048 U	0.020 U	0.048 U	0.084 U	-	0.16 U	0.048 U	0.048 U	0.020 U	0.048 U
Trichloroethene	ppb	20	200	5.3 J	0.098 J	**34[a]**	**26[a]**	**24[a]**	**120[a]**	-	**21[a]**	**24[a]**	**120[a]**	0.26	0.074 J
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.38	0.43	0.80	1.5	1.8	0.84	-	1.2 J	1.5	2.0	0.42	0.25
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.057 J	0.077 J	0.082 J	0.065 J	0.070 J	0.074 J	-	0.080 U	0.069 J	0.079 J	0.071 J	0.073 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	0.070 U	0.035 U	0.019 U	0.035 U	0.062 U	-	0.15 U	0.035 U	0.035 U	0.019 U	0.035 U
Vinyl chloride	ppb	20	200	0.071 U	0.17 J	0.071 U	0.029 U	0.071 U	0.12 U	-	0.23 U	0.071 U	0.071 U	0.029 U	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-	1.6	-	-	-	0.18 U	-	-	0.10 J	-
Gases															
Methane	%	0.5	0.5	-	0.22 U	0.20 U	-	-	0.26 U	-	0.061 U	-	0.20 U	-	-
Field Parameter															
Methane, field (unfiltered)	%	0.5	0.5	-	-	-	0.0 / 0.0	-	-	-	0.0 / 0.0	-	-	0.0 / 0.0	-
Methane, field (filtered)	%	0.5	0.5	0 / 0.0	0 / 0	-	-	0 / 0.0	0 / 0 / 0	0	-	0.0 / 0	0.1 / 0	-	0 / 0.0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5175, Bldg 17, Probe C*	*Parcel 5175, Bldg 17, Probe C*	*Parcel 5223, Bldg 28, Probe A*	*Parcel 5223, Bldg 28, Probe A*	*Parcel 5223, Bldg 28, Probe A*	*Parcel 5223, Bldg 28, Probe B*	*Parcel 5223, Bldg 28, Probe B*
Sample Location:				*2075 Dryden Road*	*2075 Dryden Road*	*2229 Dryden Road*	*2229 Dryden Road*	*2229 Dryden Road*	*2229 Dryden Road*	*2229 Dryden Road*
Owner / Tenant:				*former Alliance Equipment*	*former Alliance Equipment*	*Vinny's Bar & Grille*	*Vinny's Bar & Grille*	*Vinny's Bar & Grille*	*Vinny's Bar & Grille*	*Vinny's Bar & Grille*
Sample ID:				*SS-38443-080112-GL-018*	*SS-38443-080112-GL-019*	*SS-38443-073012-GL-001*	*SS-38443-091112-GL-003*	*SS-38443-091112-GL-004*	*SS-38443-073012-GL-002*	*SS-38443-091112-GL-001*
Sample Date:				*8/1/2012*	*8/1/2012*	*7/30/2012*	*9/11/2012*	*9/11/2012*	*7/30/2012*	*9/11/2012*
					Duplicate			*Duplicate*		
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)* *a*	*ODH Sub-Slab Action Levels (Non-residential)* *b*							
Volatile Organic Compounds										
1,1,1-Trichloroethane	ppb	NC	NC	0.050 J	0.056 J	13	9.6	11	25 J	12
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	0.061 U	0.30 U	0.44 U	0.44 U	0.075 UJ	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	0.054 U	0.27 U	0.39 U	0.39 U	0.066 UJ	0.054 U
1,1-Dichloroethane	ppb	160	1600	0.026 U	0.026 U	0.13 U	0.19 U	0.19 U	0.032 UJ	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.032 U	0.032 U	0.16 U	0.23 U	0.23 U	0.039 UJ	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 UJ	0.098 UJ	0.49 UJ	0.70 U	0.70 U	0.12 UJ	0.098 U
1,2,4-Trimethylbenzene	ppb	NC	NC	0.11 J	1.5 J	0.32 U	0.45 U	0.45 U	0.077 UJ	0.063 U
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	0.044 U	0.22 U	0.31 U	0.31 U	0.55 J	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	0.070 U	0.35 U	0.50 U	0.50 U	0.086 UJ	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.047 U	0.047 U	0.24 U	0.34 U	0.34 U	0.058 UJ	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	0.052 U	0.26 U	0.37 U	0.37 U	0.064 UJ	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.032 U	0.16 U	0.23 U	0.23 U	0.039 UJ	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.065 U	0.065 U	0.32 U	0.46 U	0.46 U	0.080 UJ	0.065 U
1,3-Butadiene	ppb	NC	NC	0.064 U	0.064 U	0.32 U	0.46 U	0.46 U	0.079 UJ	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	0.065 U	0.32 U	0.46 U	0.46 U	0.080 UJ	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.064 U	0.064 U	0.32 U	0.46 UJ	0.46 UJ	0.079 UJ	0.064 UJ
1,4-Dioxane	ppb	NC	NC	0.080 U	0.080 U	0.40 U	0.57 UJ	0.57 UJ	0.098 UJ	0.080 UJ
2,2,4-Trimethylpentane	ppb	NC	NC	0.039 U	0.039 U	0.20 U	0.28 U	0.28 U	0.048 UJ	0.039 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.59 J	0.41 J	1.0 U	1.4 UJ	1.4 UJ	0.93 J	0.44 J
2-Chlorotoluene	ppb	NC	NC	0.063 U	0.063 U	0.32 U	0.45 U	0.45 U	0.077 UJ	0.063 U
2-Hexanone	ppb	NC	NC	0.058 UJ	0.063 J	0.29 U	0.41 U	0.41 U	0.088 J	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	0.064 U	0.32 U	0.46 U	0.46 U	0.079 UJ	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.066 U	0.46	0.33 U	0.47 U	0.47 U	0.081 UJ	0.066 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.045 U	0.081 J	0.22 U	0.32 U	0.32 U	0.055 UJ	0.16 J
Acetone	ppb	NC	NC	5.2 J	2.7 J	7.0 UJ	10 UJ	10 UJ	8.7 J	5.9 J
Allyl chloride	ppb	NC	NC	0.048 U	0.048 U	0.24 U	0.34 U	0.34 U	0.059 UJ	0.048 U
Benzene	ppb	20	200	0.056 U	0.41	0.28 U	0.40 U	0.40 U	0.069 UJ	0.056 U
Benzyl chloride	ppb	NC	NC	0.078 U	0.078 U	0.39 U	0.56 U	0.56 U	0.096 UJ	0.078 U
Bromodichloromethane	ppb	NC	NC	0.044 U	0.044 U	0.22 U	0.31 U	0.31 U	0.054 UJ	0.044 U
Bromoform	ppb	NC	NC	0.048 U	0.048 U	0.24 U	0.34 UJ	0.34 UJ	0.059 UJ	0.048 UJ
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	0.032 U	0.16 U	0.23 U	0.23 U	0.039 UJ	0.032 U
Butane	ppb	NC	NC	0.52 J	0.25 J	0.32 UJ	0.46 U	0.46 U	1.5 J	0.50
Carbon disulfide	ppb	NC	NC	0.13 J	0.067 J	0.16 U	0.22 U	0.22 U	0.11 J	0.19 J
Carbon tetrachloride	ppb	NC	NC	0.085 J	0.088 J	0.19 UJ	0.27 U	0.27 U	0.14 J	0.078 J
Chlorobenzene	ppb	NC	NC	0.049 U	0.049 U	0.24 U	0.35 U	0.35 U	0.060 UJ	0.049 U
Chlorodifluoromethane	ppb	NC	NC	0.36	0.32	0.80 J	0.26 U	0.36 J	4.4 J	0.72
Chloroethane	ppb	NC	NC	0.035 U	0.035 U	0.18 U	0.25 U	0.25 U	0.043 UJ	0.035 U
Chloroform (Trichloromethane)	ppb	800	8000	0.038 U	0.038 U	0.53 J	0.37 J	0.40 J	0.053 J	0.038 U
Chloromethane (Methyl chloride)	ppb	NC	NC	0.16 U	0.16 U	0.80 U	1.1 U	1.1 U	0.20 UJ	0.16 U
cis-1,2-Dichloroethene	ppb	370	3700	0.060 U	0.060 U	0.30 U	0.43 U	0.43 U	0.074 UJ	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	0.074 U	0.37 U	0.53 U	0.53 U	0.091 UJ	0.074 U
Cyclohexane	ppb	NC	NC	0.040 U	0.040 U	0.20 U	0.29 U	0.29 U	0.049 UJ	0.040 U
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.057 U	0.057 U	0.28 U	0.41 U	0.41 U	0.070 UJ	0.057 U
Dibromochloromethane	ppb	NC	NC	0.042 U	0.042 U	0.21 U	0.30 U	0.30 U	0.052 UJ	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.42	0.40	0.86 J	0.57 J	0.59 J	1.0 J	0.52
Ethylbenzene	ppb	2500	25000	0.068 UJ	0.42 J	0.34 U	0.49 U	0.49 U	0.084 UJ	0.068 U
Hexachlorobutadiene	ppb	NC	NC	0.078 UJ	0.078 UJ	0.39 U	0.56 U	0.56 U	0.096 UJ	0.078 U
Hexane	ppb	NC	NC	0.11 J	0.065 J	0.16 U	0.23 U	0.23 U	1.2 J	0.27 J
Isopropyl alcohol	ppb	NC	NC	0.30 J	0.22 J	0.34 J	0.44 J	0.31 U	0.71 J	0.31 J
Isopropyl benzene	ppb	NC	NC	0.060 U	0.060 U	0.30 U	0.43 U	0.43 U	0.074 UJ	0.060 U
m&p-Xylenes	ppb	2000	20000	0.15 J	2.6 J	0.60 U	0.86 U	0.86 U	0.19 J	0.12 U
Methyl methacrylate	ppb	NC	NC	0.079 U	0.14 J	0.40 U	0.56 U	0.56 U	0.097 UJ	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	0.17 U	0.85 U	1.2 U	1.2 U	0.21 UJ	0.17 U
Methylene chloride	ppb	NC	NC	0.045 U	0.045 U	0.22 U	0.75 J	0.82 J	3.9 J	0.37 J
Naphthalene	ppb	29	NC	0.090 U	0.090 U	0.45 UJ	0.64 U	0.64 U	0.11 UJ	0.090 U
N-Butylbenzene	ppb	NC	NC	0.046 U	0.14 J	0.23 U	0.33 U	0.33 U	0.057 UJ	0.046 U
N-Decane	ppb	NC	NC	0.056 U	0.080 J	0.28 U	0.40 U	0.40 U	0.20 J	0.086 J
N-Dodecane	ppb	NC	NC	0.10 J	0.078 U	0.39 UJ	0.56 U	0.56 U	0.32 J	0.078 U
N-Heptane	ppb	NC	NC	0.047 U	0.047 U	0.24 U	0.34 U	0.34 U	0.065 J	0.16 J
Nonane	ppb	NC	NC	0.043 U	0.058 J	0.22 U	0.31 U	0.31 U	0.053 UJ	0.091 J
N-Propylbenzene	ppb	NC	NC	0.056 U	0.19 J	0.28 U	0.40 U	0.40 U	0.069 UJ	0.056 U
N-Undecane	ppb	NC	NC	0.062 UJ	0.062 UJ	0.31 U	0.44 U	0.44 U	0.085 J	0.072 J
Octane	ppb	NC	NC	0.036 U	0.040 J	0.18 U	0.26 U	0.26 U	0.046 J	0.12 J
o-Xylene	ppb	2000	20000	0.062 J	1.2 J	0.30 U	0.44 U	0.44 U	0.075 UJ	0.061 U
Pentane	ppb	NC	NC	0.20 J	0.060 U	0.30 U	0.43 U	0.43 U	0.85 J	0.35 J
Styrene	ppb	NC	NC	0.058 U	0.058 U	0.29 U	0.41 U	0.41 U	0.071 UJ	0.058 U
tert-Butyl alcohol	ppb	NC	NC	0.23 J	0.12 J	0.19 U	1.1 J	0.55 J	0.21 J	0.15 J
tert-Butylbenzene	ppb	NC	NC	0.066 U	0.14 J	0.33 U	0.47 U	0.47 U	0.081 UJ	0.066 U

TABLE G.1

SUMMARY OF INDUSTRIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5175, Bldg 17, Probe C*	*Parcel 5175, Bldg 17, Probe C*	*Parcel 5223, Bldg 28, Probe A*	*Parcel 5223, Bldg 28, Probe A*	*Parcel 5223, Bldg 28, Probe A*	*Parcel 5223, Bldg 28, Probe B*	*Parcel 5223, Bldg 28, Probe B*
Sample Location:				*2075 Dryden Road*	*2075 Dryden Road*	*2229 Dryden Road*	*2229 Dryden Road*	*2229 Dryden Road*	*2229 Dryden Road*	*2229 Dryden Road*
Owner/ Tenant:				*former Alliance Equipment*	*former Alliance Equipment*	*Vinny's Bar & Grille*	*Vinny's Bar & Grille*	*Vinny's Bar & Grille*	*Vinny's Bar & Grille*	*Vinny's Bar & Grille*
Sample ID:				*SS-38443-080112-GL-018*	*SS-38443-080112-GL-019*	*SS-38443-073012-GL-001*	*SS-38443-091112-GL-003*	*SS-38443-091112-GL-004*	*SS-38443-073012-GL-002*	*SS-38443-091112-GL-001*
Sample Date:				*8/1/2012*	*8/1/2012*	*7/30/2012*	*9/11/2012*	*9/11/2012*	*7/30/2012*	*9/11/2012*
					Duplicate			*Duplicate*		
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Non-residential)*	*ODH Sub-Slab Action Levels (Non-residential)*							
		a	*b*							
Tetrachloroethene	ppb	250	2500	1.2	1.4	130	100	120	0.32 J	0.18 J
Tetrahydrofuran	ppb	NC	NC	0.063 U	0.063 U	0.32 U	0.45 U	0.45 U	0.077 UJ	0.063 U
Toluene	ppb	NC	NC	0.31 J	1.2 J	0.27 U	0.39 U	0.39 U	0.83 J	0.094 J
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	0.050 U	0.25 U	0.36 U	0.36 U	0.062 UJ	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	0.048 U	0.24 U	0.34 U	0.34 U	0.059 UJ	0.048 U
Trichloroethene	ppb	20	200	1.1	1.1	0.18 U	0.26 U	0.26 U	0.044 UJ	0.036 U
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.76	0.78	0.78 J	0.63 J	0.65 J	1.9 J	0.29
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.087 J	0.083 J	0.16 U	0.22 U	0.22 U	0.11 J	0.078 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	0.035 U	0.18 U	0.25 U	0.25 U	0.043 UJ	0.035 U
Vinyl chloride	ppb	20	200	0.071 U	0.071 U	0.36 U	0.51 U	0.51 U	0.087 UJ	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-	-	-	-	-
Gases										
Methane	%	0.5	0.5	0.19 U	0.21 U	0.19 U	0.19 U	0.20 U	0.20 U	0.19 U
Field Parameter										
Methane, field (unfiltered)	%	0.5	0.5	-	-	0.0	-	-	-	-
Methane, field (filtered)	%	0.5	0.5	0 / 0	0 / 0	0	-	-	0 / 0	-

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
\- Concentration was greater than applicable criteria.

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*75' W of gate, 40' N of S Fence*	*Parcel 3207, Outdoor Air*	*Parcel 3207, Bldg 23*	*Parcel 3207, Bldg 23*	*Parcel 3207, Bldg 23, IA_A*	*Parcel 3207, Bldg 23, IA_A*	*Parcel 3207, Bldg 23, Cubicles*	*Parcel 3207, Bldg 23, Cubicles*	*Parcel 3207, Bldg 23, Cubicles*	*Parcel 3207, Bldg 23, IA_D*	*Parcel 3207, Bldg 23, IA_D*
Sample Location:						*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*
Owner/Tenant:					*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*
Sample ID:				*OA-38443-010512-JC-008*	*SS-38443-010712-JC-028*	*OA-38443-031012-JC-129*	*OA-38443-081112-GL-082*	*IA-38443-031012-JC-131*	*IA-38443-081112-GL-078*	*IA-38443-031012-JC-133*	*IA-38443-031012-JC-134*	*IA-38443-081112-GL-081*	*IA-38443-031012-JC-137*	*IA-38443-081112-GL-079*
Sample Date:				*1/5/2012*	*1/7/2012*	*3/10/2012*	*8/11/2012*	*3/10/2012*	*8/11/2012*	*3/10/2012*	*3/10/2012* *Duplicate*	*8/11/2012*	*3/10/2012*	*8/11/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*											
Volatile Organic Compounds														
1,1,1-Trichloroethane	ppb	NC	NC	0.035 U	0.035 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.060 U	0.030 U	0.030 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.040 U	0.040 U	0.56	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.12 U	0.061 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.019 U	0.019 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.11 U	0.054 U	0.054 U
1,1-Dichloroethane	ppb	16	160	0.035 U	0.035 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.052 U	0.026 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.030 U	0.030 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.064 U	0.032 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.050 U	0.050 U	0.098 UJ	0.098 UJ	0.098 UJ	0.098 UJ	0.098 UJ	0.098 UJ	0.20 UJ	0.098 UJ	0.098 UJ
1,2,4-Trimethylbenzene	ppb	NC	NC	0.052 U	0.052 U	0.063 U	0.063 U	0.099 J	0.14 J	0.11 J	0.12 J	0.56	0.063 U	1.6
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.018 U	0.018 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.088 U	0.044 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.048 U	0.048 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.14 U	0.070 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.031 U	0.031 U	0.047 U	0.047 U	0.047 U	0.14 J	0.047 U	0.060 J	0.20 J	0.047 U	0.11 J
1,2-Dichloroethene (total)	ppb	NC	NC	0.014 U	0.014 U	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.014 U	0.014 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.10 U	0.052 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.064 U	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.051 U	0.051 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.13 J	0.065 U	0.40
1,3-Butadiene	ppb	NC	NC	0.093 J	0.010 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.13 U	0.064 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.044 U	0.044 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.13 U	0.065 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.044 U	0.044 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.13 U	0.064 U	0.064 U
1,4-Dioxane	ppb	NC	NC	0.088 U	0.088 U	0.080 UJ	0.080 U	0.080 UJ	0.080 U	0.080 UJ	0.080 UJ	0.16 U	0.080 U	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.036 U	0.036 U	0.039 U	0.039 U	0.039 U	0.83	0.039 U	0.039 U	0.089 J	0.039 U	0.039 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.017 U	0.48 J	0.59 J	0.33 J	0.78 J	1.3	0.43 J	0.62 J	0.88 J	0.56 J	0.96 J
2-Chlorotoluene	ppb	NC	NC	0.047 U	0.047 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.13 U	0.063 U	0.063 U
2-Hexanone	ppb	NC	NC	0.039 U	0.039 U	0.058 UJ	0.058 U	0.058 UJ	0.058 U	0.058 UJ	0.058 UJ	0.12 U	0.058 U	0.060 J
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.047 U	0.047 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.13 U	0.064 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.046 U	0.046 U	0.066 U	0.066 U	0.066 U	0.066 U	0.077 J	0.082 J	0.19 J	0.066 U	0.53
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.026 U	0.026 U	0.045 UJ	0.045 U	0.18 J	0.15 J	0.14 J	0.16 J	0.13 J	0.045 U	0.11 J
Acetone	ppb	NC	NC	1.9 J	3.1 J	2.0 J	3.7 J	7.1	62	4.6 J	5.6	64	3.3 J	39
Allyl chloride	ppb	NC	NC	0.019 U	0.019 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.096 U	0.048 U	0.048 U
Benzene	ppb	2	20	0.018 U	0.16 J	0.15 J	0.057 J	0.15 J	0.086 J	0.15 J	0.15 J	0.12 J	0.15 J	0.074 J
Benzyl chloride	ppb	NC	NC	0.046 UJ	0.046 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.16 U	0.078 U	0.078 U
Bromodichloromethane	ppb	NC	NC	0.028 U	0.028 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.088 U	0.044 U	0.044 U
Bromoform	ppb	NC	NC	0.019 U	0.019 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.096 U	0.048 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.012 U	0.012 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.064 U	0.032 U	0.032 U
Butane	ppb	NC	NC	2.4	1.2	1.2	0.13 J	0.93	0.64	0.97	0.84	0.96	2.3	0.75
Carbon disulfide	ppb	NC	NC	0.066 U	0.066 U	0.031 U	0.031 U	0.031 U	0.036 J	0.031 U	0.032 J	0.062 U	0.031 U	0.043 J
Carbon tetrachloride	ppb	NC	NC	0.033 U	0.069 J	0.076 J	0.070 J	0.062 J	0.070 J	0.074 J	0.082 J	0.078 J	0.068 J	0.072 J
Chlorobenzene	ppb	NC	NC	0.020 U	0.020 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.098 U	0.049 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	0.37 J	0.22 J	0.37	0.24	24	17	25	24	23	5.9	7.3
Chloroethane	ppb	NC	NC	0.016 U	0.016 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.070 U	0.035 U	0.035 U
Chloroform (Trichloromethane)	ppb	80	800	0.031 U	0.031 U	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.076 U	0.038 U	0.040 J
Chloromethane (Methyl chloride)	ppb	NC	NC	0.70	0.45 J	0.55	0.64	0.39 J	0.56	0.49 J	0.39 J	0.75 J	0.57	0.66
cis-1,2-Dichloroethene	ppb	37	370	0.014 U	0.014 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.12 U	0.060 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.016 U	0.016 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.15 U	0.074 U	0.074 U
Cyclohexane	ppb	NC	NC	0.039 U	0.039 U	0.040 U	0.040 U	0.040 U	0.053 J	0.040 U	0.040 U	0.080 U	0.040 U	0.044 J
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.048 U	0.048 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	0.11 U	0.057 U	0.062 J
Dibromochloromethane	ppb	NC	NC	0.021 U	0.021 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.084 U	0.042 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.64	0.45 J	0.41	0.46	0.43	0.46	0.41	0.40	0.54	0.45	0.45
Ethylbenzene	ppb	250	2500	0.022 U	0.027 J	0.068 U	0.068 U	0.15 J	0.38	0.16 J	0.18 J	0.31 J	0.068 U	0.24
Hexachlorobutadiene	ppb	NC	NC	0.065 U	0.065 U	0.078 UJ	0.078 U	0.078 UJ	0.078 UJ	0.078 UJ	0.078 UJ	0.16 UJ	0.078 U	0.078 UJ
Hexane	ppb	NC	NC	0.026 U	0.15 J	0.10 J	0.064 J	0.12 J	0.098 J	0.12 J	0.12 J	0.10 J	0.13 J	0.10 J
Isopropyl alcohol	ppb	NC	NC	0.037 U	0.037 U	0.20 J	0.18 J	5.7	7.3	5.5	5.5	7.2	2.3	2.7 J
Isopropyl benzene	ppb	NC	NC	0.031 U	0.031 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.12 U	0.060 U	0.18 J
m&p-Xylenes	ppb	200	2000	0.048 U	0.059 J	0.12 U	0.12 U	0.47	1.0	0.47	0.53	0.88	0.12 U	0.64
Methyl methacrylate	ppb	NC	NC	0.013 U	0.013 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.16 U	0.079 U	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.016 U	0.016 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.34 U	0.17 U	0.17 U
Methylene chloride	ppb	NC	NC	0.15 J	0.25 U	0.18 J	0.045 U	0.31 J	0.045 U	0.31 J	0.33 J	0.090 U	0.33 J	0.56 J
Naphthalene	ppb	2.9	NC	0.086 UJ	0.086 U	0.090 UJ	0.090 UJ	0.090 UJ	0.090 UJ	0.090 UJ	0.090 UJ	0.18 UJ	0.090 UJ	0.090 UJ
N-Butylbenzene	ppb	NC	NC	0.055 U	0.055 U	0.046 U	0.046 U	0.046 U	0.046 U	0.046 U	0.046 U	0.092 U	0.046 U	0.055 J
N-Decane	ppb	NC	NC	-	-	-	0.056 UJ	-	0.065 J	-	-	0.27 J	-	0.87 J
N-Dodecane	ppb	NC	NC	-	-	-	0.24 J	-	0.078 U	-	-	0.34 J	-	0.25 J
N-Heptane	ppb	NC	NC	0.010 U	0.073 J	0.047 U	0.047 U	0.097 J	0.43 J	0.11 J	0.11 J	0.41 J	0.081 J	0.29 J
Nonane	ppb	NC	NC	-	-	-	0.043 U	-	0.043 U	-	-	0.15 J	-	0.25 J
N-Propylbenzene	ppb	NC	NC	0.050 U	0.050 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.11 J	0.056 U	0.32 J
N-Undecane	ppb	NC	NC	-	-	-	0.074 J	-	0.080 J	-	-	0.40 J	-	0.57 J
Octane	ppb	NC	NC	-	-	-	0.10 J	-	0.14 J	-	-	0.12 J	-	0.14 J

TABLE G.2

**SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO**

Sample Location:				*75' W of gate, 40' N of S Fence*	*Parcel 3207, Outdoor Air*	*Parcel 3207, Bldg 23*	*Parcel 3207, Bldg 23*	*Parcel 3207, Bldg 23, IA_A*	*Parcel 3207, Bldg 23, IA_A*	*Parcel 3207, Bldg 23, Cubicles*	*Parcel 3207, Bldg 23, Cubicles*	*Parcel 3207, Bldg 23, Cubicles*	*Parcel 3207, Bldg 23, IA_D*	*Parcel 3207, Bldg 23, IA_D*
Sample Location:						*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*	*2153 Dryden Road*
Owner/Tenant:					*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*
Sample ID:				*OA-38443-010512-JC-008*	*SS-38443-010712-JC-028*	*OA-38443-031012-JC-129*	*OA-38443-081112-GL-082*	*IA-38443-031012-JC-131*	*IA-38443-081112-GL-078*	*IA-38443-031012-JC-133*	*IA-38443-031012-JC-134*	*IA-38443-081112-GL-081*	*IA-38443-031012-JC-137*	*IA-38443-081112-GL-079*
Sample Date:				*1/5/2012*	*1/7/2012*	*3/10/2012*	*8/11/2012*	*3/10/2012*	*8/11/2012*	*3/10/2012*	*3/10/2012*	*8/11/2012*	*3/10/2012*	*8/11/2012*
											Duplicate			
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*											
o-Xylene	ppb	200	2000	0.022 U	0.022 U	0.061 U	0.061 U	0.14 J	0.31	0.13 J	0.14 J	0.30 J	0.061 U	0.29
Pentane	ppb	NC	NC	-	-	-	0.15 J	-	6.2	-	-	8.3	-	5.7
Styrene	ppb	NC	NC	0.030 U	0.030 U	0.058 U	0.058 U	0.082 J	0.066 J	0.097 J	0.091 J	0.29 J	0.058 U	0.55
tert-Butyl alcohol	ppb	NC	NC	0.071 U	0.071 U	0.040 J	0.038 U	0.17 J	0.26 J	0.13 J	0.16 J	0.27 J	0.12 J	0.11 J
tert-Butylbenzene	ppb	NC	NC	0.047 U	0.047 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.13 U	0.066 U	0.066 U
Tetrachloroethene	ppb	25	250	0.011 U	0.011 U	0.092 J	0.040 U	0.040 U	0.040 U	0.083 J	0.040 U	0.080 U	0.040 U	0.040 U
Tetrahydrofuran	ppb	NC	NC	0.018 U	0.018 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.13 U	0.063 U	0.063 U
Toluene	ppb	NC	NC	0.018 U	0.16 J	0.21	0.22	0.80	0.67	0.68	0.75	0.79	0.46	1.0
trans-1,2-Dichloroethene	ppb	NC	NC	0.032 U	0.032 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.050 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.020 U	0.020 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.096 U	0.048 U	0.048 U
Trichloroethene	ppb	2	20	0.030 U	0.030 U	0.17 J	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.072 U	0.051 J	0.036 U
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.22	0.18 J	0.20	0.23	0.20	0.22	0.20	0.19 J	0.26 J	0.24	0.23
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.049 J	0.068 J	0.063 J	0.071 J	0.068 J	0.073 J	0.062 J	0.064 J	0.081 J	0.070 J	0.072 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.019 U	0.019 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.070 U	0.035 U	0.035 U
Vinyl chloride	ppb	2	20	0.029 U	0.029 U	0.071 U	0.071 U	0.071 U	0.19 J	0.074 J	0.071 U	0.25 J	0.071 U	0.10 J
Xylenes (total)	ppb	NC	NC	0.022 U	0.059 J	-	-	-	-	-	-	-	-	-
Gases														
Methane	%	0.05	0.05	-	-	-	**0.20 U**[ab]	-	**0.21 U**[ab]	-	-	**0.19 U**[ab]	-	**0.21 U**[ab]
Field Parameter														
Methane, field (unfiltered)	%	0.05	0.05	0.0 / 0.0	0.0 / 0.0	-	-	-	-	-	-	-	-	-
Methane, field (filtered)	%	0.05	0.05	-	-	0 / 0.0	0 / 0	0 / 0.0	0 / 0	0.0 / 0.0	0.0 / 0.0	0 / 0	0.0 / 0.0	0 / 0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tenatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
\- Concentration was greater than applicable criteria.

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3207, Bldg 23, IA_D*	*Parcel 3207, Bldg 24*	*Parcel 3207, Bldg 24*	*Parcel 3207, Bldg 24*	*Parcel 3207, Bldg 24, IA_A*	*Parcel 3207, Bldg 24, IA_A*	*Parcel 3207, Bldg 24, IA_C*	*Parcel 3207, Bldg 24, IA_C*	*Parcel 3207, Bldg 24, IA_C*	*Parcel 3207, Bldg 24, IA_D*	*Parcel 3207, Bldg 24, IA_D*
Sample Location:				*2153 Dryden Road*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*
Owner / Tenant:				*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*
Sample ID:				*IA-38443-081112-GL-080*	*OA-38443-031012-JC-130*	*OA-38443-081112-GL-091*	*OA-38443-081112-GL-092*	*IA-38443-031012-JC-140*	*IA-38443-081112-GL-084*	*IA-38443-031012-JC-144*	*IA-38443-031012-JC-145*	*IA-38443-081112-GL-087*	*IA-38443-031012-JC-148*	*IA-38443-081112-GL-089*
Sample Date:				*8/11/2012*	*3/10/2012*	*8/11/2012*	*8/11/2012*	*3/10/2012*	*8/11/2012*	*3/10/2012*	*3/10/2012*	*8/11/2012*	*3/10/2012*	*8/11/2012*
				Duplicate			*Duplicate*				*Duplicate*			
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*											
Volatile Organic Compounds														
1,1,1-Trichloroethane	ppb	NC	NC	0.060 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.036 J	0.030 U	0.030 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.12 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.11 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U
1,1-Dichloroethane	ppb	16	160	0.052 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.064 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.20 UJ	0.098 UJ	0.098 UJ	0.098 U	0.098 UJ	0.098 UJ	0.098 UJ	0.098 UJ	0.098 UJ	0.098 UJ	0.098 UJ
1,2,4-Trimethylbenzene	ppb	NC	NC	1.7	0.063 U	0.063 U	0.13 J	0.38	1.4	0.42	0.35	1.1	0.14 J	0.57
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.088 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.14 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.12 J	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.066 J
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.10 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.064 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.37 J	0.065 U	0.065 U	0.065 U	0.099 J	0.23	0.11 J	0.19 J	0.21	0.065 U	0.12 J
1,3-Butadiene	ppb	NC	NC	0.13 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.13 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.13 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
1,4-Dioxane	ppb	NC	NC	0.16 U	0.080 UJ	0.080 U	0.080 U	0.080 UJ	0.080 U	0.080 UJ	0.080 UJ	0.080 U	0.080 UJ	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.15 J	0.039 U	0.24 J	0.039 U	0.091 J	0.078 J	0.091 J	0.099 J	0.11 J	0.058 J	0.070 J
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.94 J	0.40 J	0.47 J	0.31 J	1.1	1.3	1.6	1.1	2.0	0.64 J	1.5
2-Chlorotoluene	ppb	NC	NC	0.13 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
2-Hexanone	ppb	NC	NC	0.12 U	0.058 UJ	0.058 U	0.058 U	0.058 UJ	0.11 J	0.058 UJ	0.058 UJ	0.17 J	0.058 UJ	0.12 J
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.13 U	0.064 U	0.064 U	0.064 U	0.064 U	0.067 J	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.52 J	0.066 U	0.066 U	0.066 U	0.19 J	0.24 J	0.22 J	0.16 J	0.24 J	0.095 J	0.16 J
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.15 J	0.045 UJ	0.045 U	0.045 U	3.7 J	15	4.4 J	3.5 J	5.9	0.78 J	3.2
Acetone	ppb	NC	NC	43	1.4 U	6.0	3.7 J	23	25	42	30	46	16	58
Allyl chloride	ppb	NC	NC	0.096 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
Benzene	ppb	2	20	0.11 U	0.14 J	0.071 J	0.065 J	0.23	0.22	0.24	0.25	0.37	0.19 J	0.24
Benzyl chloride	ppb	NC	NC	0.16 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
Bromodichloromethane	ppb	NC	NC	0.088 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U
Bromoform	ppb	NC	NC	0.096 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.064 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
Butane	ppb	NC	NC	0.95	1.5	0.22 J	0.22 J	4.0	2.1	4.9	4.7	4.7	4.2	9.6
Carbon disulfide	ppb	NC	NC	0.067 J	0.031 U	0.031 U	0.031 U	0.031 U	0.15 J	0.042 J	0.040 J	0.18 J	0.031 U	0.16 J
Carbon tetrachloride	ppb	NC	NC	0.086 J	0.091 J	0.076 J	0.068 J	0.076 J	0.074 J	0.082 J	0.080 J	0.072 J	0.075 J	0.080 J
Chlorobenzene	ppb	NC	NC	0.098 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	8.6	0.96	0.30	0.26	1.1	2.5	0.96	1.0	7.1	1.3	27
Chloroethane	ppb	NC	NC	0.070 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U
Chloroform (Trichloromethane)	ppb	80	800	0.076 U	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.039 J	0.038 U	0.079 J
Chloromethane (Methyl chloride)	ppb	NC	NC	0.75 J	0.52	0.61	0.54	0.58	0.72	0.47 J	0.59	0.59	0.51	0.82
cis-1,2-Dichloroethene	ppb	37	370	0.12 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.15 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U
Cyclohexane	ppb	NC	NC	0.080 U	0.040 U	0.052 J	0.040 U	0.42 J	0.77	0.48 J	0.46 J	1.2	0.31 J	1.4
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.11 U	0.057 U	0.057 U	0.057 U	0.076 J	0.21	0.098 J	0.068 J	0.15 J	0.057 U	0.098 J
Dibromochloromethane	ppb	NC	NC	0.084 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.55	0.45	0.53	0.42	0.42	0.48	0.47	0.43	0.46	0.38	0.43
Ethylbenzene	ppb	250	2500	0.25 J	0.068 U	0.068 U	0.068 U	2.1	3.2	2.2	1.8	2.9	0.63	1.4
Hexachlorobutadiene	ppb	NC	NC	0.16 U	0.078 UJ	0.078 UJ	0.078 U	0.078 UJ	0.078 UJ	0.078 UJ	0.078 UJ	0.078 UJ	0.078 UJ	0.078 UJ
Hexane	ppb	NC	NC	0.12 J	0.12 J	0.15 J	0.12 J	0.32 J	0.44 J	0.37 J	0.34 J	0.83	0.30 J	0.49 J
Isopropyl alcohol	ppb	NC	NC	6.5 J	0.20 J	0.30 J	0.17 J	11	9.6	14	11	18	25	61
Isopropyl benzene	ppb	NC	NC	0.17 J	0.060 U	0.060 U	0.060 U	0.080 J	0.12 J	0.086 J	0.073 J	0.14 J	0.060 U	0.074 J
m&p-Xylenes	ppb	200	2000	0.61	0.12 U	0.12 U	0.20	8.4	11	9.6	7.4	7.9	2.5	3.7
Methyl methacrylate	ppb	NC	NC	0.16 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 J	0.079 U	0.079 U	0.079 U	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.34 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
Methylene chloride	ppb	NC	NC	1.1 J	0.59	0.045 U	0.77	0.53	0.045 U	0.26 J	0.35 J	0.53	2.0	0.045 U
Naphthalene	ppb	2.9	NC	0.18 UJ	0.090 UJ	0.090 UJ	0.10 J	0.090 UJ	0.096 J	0.090 UJ	0.090 UJ	0.13 J	0.090 UJ	0.090 UJ
N-Butylbenzene	ppb	NC	NC	0.092 U	0.046 U	0.046 U	0.046 U	0.046 U	0.050 J	0.046 U	0.046 U	0.061 J	0.046 U	0.046 U
N-Decane	ppb	NC	NC	0.92 J	-	0.056 UJ	0.16 J	-	0.30 J	-	-	0.74 J	-	0.36 J
N-Dodecane	ppb	NC	NC	1.1 J	-	0.078 U	0.078 U	-	0.47 J	-	-	0.93 J	-	0.078 U
N-Heptane	ppb	NC	NC	0.37 J	0.047 U	0.17 J	0.047 U	1.1	0.72	1.3	1.4	1.6	0.65	1.1
Nonane	ppb	NC	NC	0.23 J	-	0.043 U	0.043 U	-	0.12 J	-	-	0.20 J	-	0.17 J
N-Propylbenzene	ppb	NC	NC	0.31 J	0.056 U	0.056 U	0.056 U	0.092 J	0.15 J	0.10 J	0.079 J	0.17 J	0.056 U	0.10 J
N-Undecane	ppb	NC	NC	1.3 J	-	0.062 U	0.086 J	-	0.72 J	-	-	1.8	-	0.31 J
Octane	ppb	NC	NC	0.12 J	-	0.036 U	0.036 U	-	0.12 J	-	-	0.21 J	-	0.18 J

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3207, Bldg 23, IA_D*	*Parcel 3207, Bldg 24*	*Parcel 3207, Bldg 24*	*Parcel 3207, Bldg 24*	*Parcel 3207, Bldg 24, IA_A*	*Parcel 3207, Bldg 24, IA_A*	*Parcel 3207, Bldg 24, IA_C*	*Parcel 3207, Bldg 24, IA_C*	*Parcel 3207, Bldg 24, IA_C*	*Parcel 3207, Bldg 24, IA_D*	*Parcel 3207, Bldg 24, IA_D*
Sample Location:				*2153 Dryden Road*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*
Owner/Tenant:				*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*	*Globe Equipment*
Sample ID:				*IA-38443-081112-GL-080*	*OA-38443-031012-JC-130*	*OA-38443-081112-GL-091*	*OA-38443-081112-GL-092*	*IA-38443-031012-JC-140*	*IA-38443-081112-GL-084*	*IA-38443-031012-JC-144*	*IA-38443-031012-JC-145*	*IA-38443-081112-GL-087*	*IA-38443-031012-JC-148*	*IA-38443-081112-GL-089*
Sample Date:				*8/11/2012*	*3/10/2012*	*8/11/2012*	*8/11/2012*	*3/10/2012*	*8/11/2012*	*3/10/2012*	*3/10/2012*	*8/11/2012*	*3/10/2012*	*8/11/2012*
				Duplicate			*Duplicate*				*Duplicate*			
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*											
o-Xylene	ppb	200	2000	0.28 J	0.061 U	0.061 U	0.061 U	3.9	6.4	4.5	3.6	3.7	1.1	1.7
Pentane	ppb	NC	NC	7.0	-	0.25 J	0.20 J	-	1.4	-	-	2.8	-	1.8
Styrene	ppb	NC	NC	0.51	0.058 U	0.058 U	0.058 U	2.6	4.4	2.2	1.7	3.1	0.54	1.0
tert-Butyl alcohol	ppb	NC	NC	0.44 J	0.038 U	0.081 J	0.038 U	0.13 J	0.71 J	0.19 J	0.14 J	0.66 J	0.11 J	0.25 J
tert-Butylbenzene	ppb	NC	NC	0.13 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U
Tetrachloroethene	ppb	25	250	0.080 U	0.060 J	0.040 U	0.040 U	0.23	0.22	0.28	0.30	0.44	0.11 J	0.24
Tetrahydrofuran	ppb	NC	NC	0.13 U	0.063 U	0.063 U	0.063 U	0.063 U	0.34 J	0.20 J	0.063 U	0.26 J	0.063 U	0.12 J
Toluene	ppb	NC	NC	1.0	0.16 J	0.97	0.64	6.6	8.0	5.7	5.2	14	2.4	8.1
trans-1,2-Dichloroethene	ppb	NC	NC	0.10 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.096 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
Trichloroethene	ppb	2	20	0.093 J	0.036 U	0.036 U	0.036 U	0.057 J	0.053 J	0.071 J	0.070 J	0.12 J	0.15 J	0.37
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.30 J	0.24	0.26	0.23	0.23	0.24	0.23	0.23	0.27	0.23	0.21
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.082 J	0.068 J	0.081 J	0.069 J	0.063 J	0.078 J	0.069 J	0.062 J	0.073 J	0.060 J	0.069 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.070 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U
Vinyl chloride	ppb	2	20	0.14 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-
Gases														
Methane	%	0.05	0.05	**0.19 U**[ab]	-	**0.19 U**[ab]	**0.21 U**[ab]	-	**0.19 U**[ab]	-	-	**0.20 U**[ab]	-	**0.20 U**[ab]
Field Parameter														
Methane, field (unfiltered)	%	0.05	0.05	-	-	-	-	-	-	-	-	-	-	-
Methane, field (filtered)	%	0.05	0.05	0 / 0	0.0 / 0	0 / 0	0 / 0	0.0 / 0	0 / 0	0.0 / 0	0 / 0.0	0 / 0	0.0 / 0	0 / 0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tenatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3207, Bldg 24, IA_F*	*Parcel 3207, Bldg 24, IA_F*	*Parcel 3254*	*Parcel 3254, Bldg 25, IA_A*	*Parcel 3254, Bldg 25, IA_B*	*Parcel 4610, Bldg 20*	*Parcel 4610, Bldg 20*	*Parcel 4610, Bldg 21*	*Parcel 4610, Bldg 21*	*Parcel 5054*	*Parcel 5054, Bldg 1*
Sample Location:				*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2225C East River Road*	*2225C East River Road*	*2225D East River Road*	*2225D East River Road*	*1901 Dryden Road*	*1901 Dryden Road*
Owner / Tenant:				*Globe Equipment*	*Globe Equipment*	*Middleton Trucking*	*Middleton Trucking*	*Middleton Trucking*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Valley Asphalt*	*Valley Asphalt*
Sample ID:				*IA-38443-031012-JC-151*	*IA-38443-081112-GL-094*	*OA-38443-091212-GL-015*	*IA-38443-091212-GL-012*	*IA-38443-091212-GL-014*	*-*	*-*	*-*	*-*	*OA-38443-011012-JC-047*	*OA-38443-031312-JC-154*
Sample Date:				*3/10/2012*	*8/11/2012*	*9/12/2012*	*9/12/2012*	*9/12/2012*	*1/5/2012*	*7/31/2012*	*1/6/2012*	*7/31/2012*	*1/10/2012*	*3/13/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*											
Volatile Organic Compounds														
1,1,1-Trichloroethane	ppb	NC	NC	0.030 U	0.030 U	0.030 U	0.060 U	0.060 U	-	-	-	-	0.035 U	0.030 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	0.061 U	0.061 U	0.12 U	0.12 U	-	-	-	-	0.040 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	0.054 U	0.054 U	0.11 U	0.11 U	-	-	-	-	0.019 U	0.054 U
1,1-Dichloroethane	ppb	16	160	0.026 U	0.026 U	0.026 U	0.052 U	0.052 U	-	-	-	-	0.035 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.064 U	0.064 U	-	-	-	-	0.030 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 UJ	0.098 U	0.098 UJ	0.20 UJ	0.20 UJ	-	-	-	-	0.050 U	0.098 U
1,2,4-Trimethylbenzene	ppb	NC	NC	0.38	1.2	0.095 J	4.0	2.2	-	-	-	-	0.10 J	0.063 U
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	0.044 U	0.044 U	0.088 U	0.088 U	-	-	-	-	0.018 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.095 J	0.070 U	0.070 U	0.14 U	0.14 U	-	-	-	-	0.048 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.047 U	0.047 U	0.047 U	0.094 U	0.094 U	-	-	-	-	0.031 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	0.014 U	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	0.052 U	0.052 U	0.10 U	0.10 U	-	-	-	-	0.014 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.064 U	0.064 U	-	-	-	-	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.088 J	0.25	0.065 U	0.85	0.57	-	-	-	-	0.051 U	0.065 U
1,3-Butadiene	ppb	NC	NC	0.064 U	0.064 U	0.064 U	0.13 U	0.13 U	-	-	-	-	0.087 J	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	0.065 U	0.065 U	0.13 U	0.13 U	-	-	-	-	0.044 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.064 U	0.064 U	0.064 U	0.13 U	0.13 U	-	-	-	-	0.044 U	0.064 U
1,4-Dioxane	ppb	NC	NC	0.080 UJ	0.080 U	0.080 U	0.16 U	0.16 U	-	-	-	-	0.088 U	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.17 J	0.16 J	0.093 J	5.2	5.2	-	-	-	-	0.11 J	0.039 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	1.7	1.8	0.49 J	0.57 J	0.60 J	-	-	-	-	0.33 J	0.30 J
2-Chlorotoluene	ppb	NC	NC	0.063 U	0.063 U	0.063 U	0.13 U	0.13 U	-	-	-	-	0.047 U	0.063 U
2-Hexanone	ppb	NC	NC	0.058 UJ	0.12 J	0.058 U	0.12 U	0.12 U	-	-	-	-	0.039 U	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	0.064 U	0.064 U	0.13 U	0.13 U	-	-	-	-	0.047 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.18 J	0.44	0.066 U	1.2	0.55 J	-	-	-	-	0.046 U	0.066 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	2.3 J	3.8	0.045 U	0.15 J	0.26 J	-	-	-	-	0.026 U	0.045 U
Acetone	ppb	NC	NC	50	21	5.6	19	48	-	-	-	-	2.6 J	2.1 J
Allyl chloride	ppb	NC	NC	0.048 U	0.048 U	0.048 U	0.096 U	0.096 U	-	-	-	-	0.019 U	0.048 U
Benzene	ppb	2	20	0.31	0.69	0.21	2.7[a]	2.1[a]	-	-	-	-	0.41	0.096 J
Benzyl chloride	ppb	NC	NC	0.078 U	0.078 U	0.078 U	0.16 U	0.16 U	-	-	-	-	0.046 UJ	0.078 U
Bromodichloromethane	ppb	NC	NC	0.044 U	0.044 U	0.044 U	0.088 U	0.088 U	-	-	-	-	0.028 U	0.044 U
Bromoform	ppb	NC	NC	0.048 U	0.048 U	0.048 U	0.096 U	0.096 U	-	-	-	-	0.019 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.064 U	0.064 U	-	-	-	-	0.012 U	0.032 U
Butane	ppb	NC	NC	11	6.6	1.2	4.9	6.3	-	-	-	-	1.8	1.4
Carbon disulfide	ppb	NC	NC	0.031 U	0.16 J	0.031 U	0.062 U	0.062 U	-	-	-	-	0.066 U	0.031 U
Carbon tetrachloride	ppb	NC	NC	0.077 J	0.067 J	0.074 J	0.090 J	0.092 J	-	-	-	-	0.070 J	0.071 J
Chlorobenzene	ppb	NC	NC	0.063 J	0.049 U	0.049 U	0.098 U	0.098 U	-	-	-	-	0.020 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	0.88	5.9	0.42	0.40	0.44	-	-	-	-	0.37 J	0.67
Chloroethane	ppb	NC	NC	0.035 U	0.035 U	0.035 U	0.093 J	0.070 U	-	-	-	-	0.016 U	0.035 U
Chloroform (Trichloromethane)	ppb	80	800	0.038 U	0.041 J	0.038 U	0.076 U	0.076 U	-	-	-	-	0.13 J	0.038 U
Chloromethane (Methyl chloride)	ppb	NC	NC	0.31 J	0.56	0.65	0.74 J	0.73 J	-	-	-	-	0.53	0.56
cis-1,2-Dichloroethene	ppb	37	370	0.060 U	0.060 U	0.060 U	0.12 U	0.12 U	-	-	-	-	0.014 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	0.074 U	0.074 U	0.15 U	0.15 U	-	-	-	-	0.016 U	0.074 U
Cyclohexane	ppb	NC	NC	0.65	1.4	0.087 J	0.080 U	0.080 U	-	-	-	-	0.17 J	0.040 U
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.13 J	0.099 J	0.057 U	0.11 U	0.11 U	-	-	-	-	0.048 U	0.057 U
Dibromochloromethane	ppb	NC	NC	0.042 U	0.042 U	0.042 U	0.084 U	0.084 U	-	-	-	-	0.021 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.42	0.44	0.52	0.55	0.57	-	-	-	-	0.52	0.38
Ethylbenzene	ppb	250	2500	1.4	2.4	0.11 J	3.0	2.0	-	-	-	-	0.098 J	0.068 U
Hexachlorobutadiene	ppb	NC	NC	0.078 UJ	0.078 U	0.078 UJ	0.16 UJ	0.16 UJ	-	-	-	-	0.065 U	0.078 U
Hexane	ppb	NC	NC	0.56	1.6	0.27 J	5.4	4.9	-	-	-	-	0.37	0.16 J
Isopropyl alcohol	ppb	NC	NC	8.8	13	0.55 J	4.7	4.3	-	-	-	-	0.037 U	0.29 J
Isopropyl benzene	ppb	NC	NC	0.060 U	0.11 J	0.060 U	0.25 J	0.19 J	-	-	-	-	0.031 U	0.060 U
m&p-Xylenes	ppb	200	2000	5.9	7.3	0.35	11	7.2	-	-	-	-	0.29 J	0.12 J
Methyl methacrylate	ppb	NC	NC	0.079 U	0.12 J	0.079 U	0.16 U	0.16 U	-	-	-	-	0.039 J	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	0.17 U	0.17 U	0.34 U	0.34 U	-	-	-	-	0.016 U	0.17 U
Methylene chloride	ppb	NC	NC	0.25 J	0.63	0.35 U	0.43 U	0.66 U	-	-	-	-	0.13 U	0.26 J
Naphthalene	ppb	2.9	NC	0.090 UJ	0.15 J	0.090 UJ	0.41 J	0.19 J	-	-	-	-	0.086 UJ	0.090 U
N-Butylbenzene	ppb	NC	NC	0.051 J	0.080 J	0.046 U	0.36 J	0.23 J	-	-	-	-	0.055 U	0.046 U
N-Decane	ppb	NC	NC	-	0.74 J	0.080 J	0.54 J	0.49 J	-	-	-	-	-	-
N-Dodecane	ppb	NC	NC	-	0.86 J	0.078 U	0.41 J	0.26 J	-	-	-	-	-	-
N-Heptane	ppb	NC	NC	2.7	3.1	0.20 J	27	19	-	-	-	-	0.32	0.091 J
Nonane	ppb	NC	NC	-	0.22 J	0.043 U	0.67 J	0.56 J	-	-	-	-	-	-
N-Propylbenzene	ppb	NC	NC	0.086 J	0.24 J	0.056 U	0.63 J	0.41 J	-	-	-	-	0.050 U	0.056 U
N-Undecane	ppb	NC	NC	-	1.5	0.063 J	0.37 J	0.32 J	-	-	-	-	-	-
Octane	ppb	NC	NC	-	0.38 J	0.053 J	1.3	1.0	-	-	-	-	-	-

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3207, Bldg 24, IA_F*	*Parcel 3207, Bldg 24, IA_F*	*Parcel 3254*	*Parcel 3254, Bldg 25, IA_A*	*Parcel 3254, Bldg 25, IA_B*	*Parcel 4610, Bldg 20*	*Parcel 4610, Bldg 20*	*Parcel 4610, Bldg 21*	*Parcel 4610, Bldg 21*	*Parcel 5054*	*Parcel 5054, Bldg 1*
Sample Location:				*2215 & 2219 East River Rd*	*2215 & 2219 East River Rd*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2233 Rear East River Road*	*2225C East River Road*	*2225C East River Road*	*2225D East River Road*	*2225D East River Road*	*1901 Dryden Road*	*1901 Dryden Road*
Owner / Tenant:				*Globe Equipment*	*Globe Equipment*	*Middleton Trucking*	*Middleton Trucking*	*Middleton Trucking*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Valley Asphalt*	*Valley Asphalt*
Sample ID:				*IA-38443-031012-JC-151*	*IA-38443-081112-GL-094*	*OA-38443-091212-GL-015*	*IA-38443-091212-GL-012*	*IA-38443-091212-GL-014*	-	-	-	-	*OA-38443-011012-JC-047*	*OA-38443-031312-JC-154*
Sample Date:				*3/10/2012*	*8/11/2012*	*9/12/2012*	*9/12/2012*	*9/12/2012*	*1/5/2012*	*7/31/2012*	*1/6/2012*	*7/31/2012*	*1/10/2012*	*3/13/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*											
o-Xylene	ppb	200	2000	2.7	3.1	0.13 J	4.1	2.6	-	-	-	-	0.11 J	0.061 U
Pentane	ppb	NC	NC	-	5.1	0.84 J	8.7	9.7	-	-	-	-	-	-
Styrene	ppb	NC	NC	1.2	2.1	0.058 U	0.12 J	0.12 U	-	-	-	-	0.030 U	0.058 U
tert-Butyl alcohol	ppb	NC	NC	0.12 J	0.32 J	0.038 UJ	0.088 J	0.098 J	-	-	-	-	0.071 U	0.038 U
tert-Butylbenzene	ppb	NC	NC	0.066 U	0.066 U	0.066 U	0.13 U	0.13 U	-	-	-	-	0.047 U	0.066 U
Tetrachloroethene	ppb	25	250	0.17 J	0.23	0.072 J	0.080 U	0.085 J	-	-	-	-	0.088 J	0.040 U
Tetrahydrofuran	ppb	NC	NC	0.063 U	0.71 J	0.080 J	0.13 U	0.13 U	-	-	-	-	0.018 U	0.063 U
Toluene	ppb	NC	NC	5.8	29	0.66	12	7.7	-	-	-	-	0.63	0.45
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	-	-	-	-	0.032 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	0.048 U	0.048 U	0.096 U	0.096 U	-	-	-	-	0.020 U	0.048 U
Trichloroethene	ppb	2	20	0.15 J	0.065 J	0.045 J	0.13 J	0.21 J	-	-	-	-	0.030 U	0.036 U
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.20	0.22	0.34	0.32 J	0.36 J	-	-	-	-	0.24	0.22
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.075 J	0.069 J	0.075 J	0.14 J	0.23 J	-	-	-	-	0.070 J	0.058 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	0.035 U	0.035 U	0.070 U	0.070 U	-	-	-	-	0.019 U	0.035 U
Vinyl chloride	ppb	2	20	0.071 U	0.071 U	0.071 U	0.14 U	0.14 U	-	-	-	-	0.029 U	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	0.39	-
Gases														
Methane	%	0.05	0.05	-	**0.19 U**[ab]	**0.21 U**[ab]	**0.19 U**[ab]	**0.19 U**[ab]	-	-	-	-	-	-
Field Parameter														
Methane, field (unfiltered)	%	0.05	0.05	-	-	-	-	-	0.0 / 0.0	-	0.0 / 0.0	-	0.0 / 0.0	-
Methane, field (filtered)	%	0.05	0.05	0 / 0.0	0 / 0	-	-	-	-	0 / 0	-	0 / 0	-	0.0 / 0.0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tenatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
\- Concentration was greater than applicable criteria.

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location: *Sample Location:* *Owner/Tenant:* *Sample ID:* *Sample Date:* *Parameter*	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*	*Parcel 5054, Bldg 1, IA* *1901 Dryden Road* *Valley Asphalt* *IA-38443-031312-JC-155* *3/13/2012*	*Parcel 5054, Bldg 1, IA* *1901 Dryden Road* *Valley Asphalt* *IA-38443-080612-GL-056* *8/6/2012*	*Parcel 5054, Bldg 2* *1903 Dryden Road* *Valley Asphalt* *OA-38443-031312-JC-157* *3/13/2012*	*Parcel 5054, Bldg 2, IA_A* *1903 Dryden Road* *Valley Asphalt* *IA-38443-031312-JC-158* *3/13/2012*	*Parcel 5054, Bldg 2, IA_A* *1903 Dryden Road* *Valley Asphalt* *IA-38443-031312-JC-162* *3/13/2012* *Duplicate*	*Parcel 5054, Bldg 2, IA_B* *1903 Dryden Road* *Valley Asphalt* *IA-38443-031312-JC-161* *3/13/2012*	*Parcel 5054, Bldg 3* *1901 Dryden Road* *Valley Asphalt* *-* *1/10/2012*	*Parcel 5054, Bldg 4* *1901 Dryden Road* *Valley Asphalt* *OA-38443-031312-JC-165* *3/12/2012*	*Parcel 5054, Bldg 4* *1901 Dryden Road* *Valley Asphalt* *OA-38443-031312-JC-165* *3/13/2012*	*Parcel 5054, Bldg 4* *1901 Dryden Road* *Valley Asphalt* *OA-38443-080612-GL-051* *8/6/2012*	*Parcel 5054, Bldg 4* *1901 Dryden Road* *Valley Asphalt* *OA-38443-091312-GL-025* *9/13/2012*
Volatile Organic Compounds														
1,1,1-Trichloroethane	ppb	NC	NC	0.030 U	0.031 J	0.030 U	0.030 U	0.030 U	0.030 U	-	-	0.030 U	0.030 U	0.030 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	-	-	0.061 U	0.061 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	-	-	0.054 U	0.054 U	0.054 U
1,1-Dichloroethane	ppb	16	160	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	-	-	0.026 U	0.026 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	-	-	0.032 U	0.032 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 U	0.098 UJ	0.098 U	0.098 U	0.098 U	0.098 U	-	-	0.098 U	0.098 UJ	0.098 U
1,2,4-Trimethylbenzene	ppb	NC	NC	0.063 U	0.16 J	0.063 U	0.32	0.30	0.22	-	-	0.11 J	0.088 J	0.18 J
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	-	-	0.044 U	0.044 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	-	-	0.070 U	0.070 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	-	-	0.047 U	0.047 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	-	-	0.052 U	0.052 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	-	-	0.032 U	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.065 U	0.097 J	0.065 U	0.093 J	0.088 J	0.067 J	-	-	0.065 U	0.065 U	0.065 U
1,3-Butadiene	ppb	NC	NC	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	-	-	0.064 U	0.064 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	-	-	0.065 U	0.065 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	-	-	0.064 U	0.064 U	0.064 UJ
1,4-Dioxane	ppb	NC	NC	0.080 U	0.080 J	0.080 U	0.080 U	0.080 U	0.080 U	-	-	0.080 U	0.080 U	0.080 UJ
2,2,4-Trimethylpentane	ppb	NC	NC	0.039 U	3.9	0.039 U	0.094 J	0.095 J	0.099 J	-	-	0.039 U	0.048 J	0.090 J
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.33 J	1.5	0.64 J	0.52 J	0.42 J	0.62 J	-	-	0.46 J	0.56 J	0.53 J
2-Chlorotoluene	ppb	NC	NC	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	-	-	0.063 U	0.063 U	0.063 U
2-Hexanone	ppb	NC	NC	0.058 U	0.26 J	0.058 U	0.058 U	0.058 U	0.058 U	-	-	0.058 U	0.058 U	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	-	-	0.077 J	0.064 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.066 U	0.17 J	0.066 U	0.17 J	0.12 J	0.11 J	-	-	0.066 U	0.066 U	0.076 J
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.045 U	0.22 J	0.053 J	0.045 U	0.045 U	0.045 U	-	-	0.045 U	0.045 U	0.062 J
Acetone	ppb	NC	NC	6.7	24	5.6	4.2 J	3.8 J	5.8	-	-	2.8 J	5.6	3.7 J
Allyl chloride	ppb	NC	NC	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	-	-	0.048 U	0.048 U	0.048 U
Benzene	ppb	2	20	0.11 J	0.22	0.10 J	0.31	0.30	0.32	-	-	0.11 J	0.13 J	0.15 J
Benzyl chloride	ppb	NC	NC	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	-	-	0.078 U	0.078 U	0.078 U
Bromodichloromethane	ppb	NC	NC	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	-	-	0.044 U	0.044 U	0.044 U
Bromoform	ppb	NC	NC	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	-	-	0.048 U	0.048 U	0.048 UJ
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	0.093 J	0.032 U	0.043 J	0.032 U	0.032 U	-	-	0.032 U	0.032 U	0.032 U
Butane	ppb	NC	NC	2.2	3.9	0.78	1.3	1.2	2.1	-	-	2.8	0.43	0.94
Carbon disulfide	ppb	NC	NC	0.031 U	0.34 J	0.031 U	0.031 U	0.031 U	0.031 U	-	-	0.062 J	0.031 U	0.031 U
Carbon tetrachloride	ppb	NC	NC	0.068 J	0.088 J	0.074 J	0.071 J	0.065 J	0.068 J	-	-	0.074 J	0.070 J	0.061 J
Chlorobenzene	ppb	NC	NC	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	-	-	0.049 U	0.049 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	7.0	21	0.52	0.42	0.41	0.67	-	-	1.3	0.26	0.36
Chloroethane	ppb	NC	NC	0.035 U	0.15 J	0.035 U	0.035 U	0.035 U	0.035 U	-	-	0.077 J	0.035 U	0.035 U
Chloroform (Trichloromethane)	ppb	80	800	0.038 U	0.059 J	0.038 U	0.038 U	0.038 U	0.038 U	-	-	0.038 U	0.038 U	0.053 J
Chloromethane (Methyl chloride)	ppb	NC	NC	0.51	1.8	0.54	0.49 J	0.66	0.54	-	-	0.76	0.54	0.47 J
cis-1,2-Dichloroethene	ppb	37	370	0.060 U	0.24	0.060 U	0.060 U	0.060 U	0.060 U	-	-	0.060 U	0.060 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	-	-	0.074 U	0.074 U	0.074 U
Cyclohexane	ppb	NC	NC	0.040 U	0.49 J	0.040 U	0.072 J	0.12 J	0.16 J	-	-	0.040 U	0.13 J	0.12 J
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.079 J	0.37	0.057 U	0.057 U	0.057 U	0.057 U	-	-	0.057 U	0.057 U	0.057 U
Dibromochloromethane	ppb	NC	NC	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	-	-	0.042 U	0.042 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.41	0.59	0.42	0.41	0.43	0.39	-	-	0.41	0.45	0.44
Ethylbenzene	ppb	250	2500	0.068 U	2.0	0.068 U	0.17 J	0.16 J	0.15 J	-	-	0.072 J	0.072 J	0.11 J
Hexachlorobutadiene	ppb	NC	NC	0.078 U	0.078 UJ	0.078 U	0.078 U	0.078 U	0.078 U	-	-	0.078 U	0.078 UJ	0.078 U
Hexane	ppb	NC	NC	0.13 J	0.40 J	0.10 J	0.40 J	0.41 J	0.44 J	-	-	0.22 J	0.15 J	0.26 J
Isopropyl alcohol	ppb	NC	NC	0.53 J	3.5	0.43 J	0.31 J	0.32 J	0.46 J	-	-	0.33 J	0.44 J	0.60 J
Isopropyl benzene	ppb	NC	NC	0.060 U	0.17 J	0.060 U	0.060 U	0.060 U	0.060 U	-	-	0.060 U	0.060 U	0.060 U
m&p-Xylenes	ppb	200	2000	0.17 J	5.9	0.16 J	0.64	0.61	0.61	-	-	0.24	0.21	0.35
Methyl methacrylate	ppb	NC	NC	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	-	-	0.079 U	0.079 U	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	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
Methylene chloride	ppb	NC	NC	0.19 J	0.78	0.20 J	0.15 J	0.15 J	0.24 J	-	-	0.62	0.24 J	0.45 J
Naphthalene	ppb	2.9	NC	0.090 U	0.090 UJ	0.090 U	0.090 U	0.090 U	0.090 U	-	-	0.090 U	0.090 UJ	0.090 U
N-Butylbenzene	ppb	NC	NC	0.046 U	0.046 U	0.046 U	0.046 U	0.046 U	0.046 U	-	-	0.046 U	0.046 U	0.046 U
N-Decane	ppb	NC	NC	-	0.29 J	-	-	-	-	-	-	-	0.18 J	0.27 J
N-Dodecane	ppb	NC	NC	-	0.27 J	-	-	-	-	-	-	-	0.11 J	0.16 J
N-Heptane	ppb	NC	NC	0.28 J	1.7	0.064 J	0.12 J	0.12 J	0.20 J	-	-	0.056 J	0.11 J	0.29 J
Nonane	ppb	NC	NC	-	0.21 J	-	-	-	-	-	-	-	0.077 J	0.13 J
N-Propylbenzene	ppb	NC	NC	0.056 U	0.13 J	0.056 U	0.056 U	0.056 U	0.056 U	-	-	0.056 U	0.056 U	0.056 U
N-Undecane	ppb	NC	NC	-	0.36 J	-	-	-	-	-	-	-	0.11 J	0.24 J
Octane	ppb	NC	NC	-	0.87	-	-	-	-	-	-	-	0.068 J	0.089 J

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5054, Bldg 1, IA*	*Parcel 5054, Bldg 1, IA*	*Parcel 5054, Bldg 2*	*Parcel 5054, Bldg 2, IA_A*	*Parcel 5054, Bldg 2, IA_A*	*Parcel 5054, Bldg 2, IA_B*	*Parcel 5054, Bldg 3*	*Parcel 5054, Bldg 4*	*Parcel 5054, Bldg 4*	*Parcel 5054, Bldg 4*	*Parcel 5054, Bldg 4*
Sample Location:				*1901 Dryden Road*	*1901 Dryden Road*	*1903 Dryden Road*	*1903 Dryden Road*	*1903 Dryden Road*	*1903 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*
Owner/Tenant:				*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*
Sample ID:				*IA-38443-031312-JC-155*	*IA-38443-080612-GL-056*	*OA-38443-031312-JC-157*	*IA-38443-031312-JC-158*	*IA-38443-031312-JC-162*	*IA-38443-031312-JC-161*	*-*	*OA-38443-031312-JC-165*	*OA-38443-031312-JC-165*	*OA-38443-080612-GL-051*	*OA-38443-091312-GL-025*
Sample Date:				*3/13/2012*	*8/6/2012*	*3/13/2012*	*3/13/2012*	*3/13/2012*	*3/13/2012*	*1/10/2012*	*3/12/2012*	*3/13/2012*	*8/6/2012*	*9/13/2012*
								Duplicate						
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*											
o-Xylene	ppb	200	2000	0.061 U	1.5	0.061 U	0.22	0.21	0.21	-	-	0.081 J	0.085 J	0.14 J
Pentane	ppb	NC	NC	-	1.6	-	-	-	-	-	-	-	0.34 J	0.54 J
Styrene	ppb	NC	NC	0.058 U	0.11 J	0.058 U	0.058 U	0.058 U	0.058 U	-	-	0.058 U	0.058 U	0.058 U
tert-Butyl alcohol	ppb	NC	NC	0.046 J	0.19 J	0.11 J	0.12 J	0.14 J	0.095 J	-	-	0.26 J	0.038 U	0.038 U
tert-Butylbenzene	ppb	NC	NC	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	-	-	0.066 U	0.066 U	0.066 U
Tetrachloroethene	ppb	25	250	0.040 U	0.25	0.040 U	0.040 U	0.040 U	0.040 U	-	-	0.040 U	0.040 U	0.040 U
Tetrahydrofuran	ppb	NC	NC	0.063 U	0.33 J	0.23 J	0.063 U	0.063 U	0.063 U	-	-	0.063 U	0.063 U	0.063 U
Toluene	ppb	NC	NC	1.2	4.7	0.56	1.1	1.1	1.2	-	-	0.51	0.48	0.53
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	-	-	0.050 U	0.050 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	-	-	0.048 U	0.048 U	0.048 U
Trichloroethene	ppb	2	20	0.41	**8.1**[a]	0.036 U	0.036 U	0.036 U	0.036 U	-	-	0.036 U	0.036 U	0.038 J
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.21	0.34	0.23	0.21	0.20	0.25	-	-	0.23	0.22	0.31
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.061 J	0.080 J	0.067 J	0.062 J	0.064 J	0.061 J	-	-	0.061 J	0.071 J	0.062 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	-	-	0.035 U	0.035 U	0.035 U
Vinyl chloride	ppb	2	20	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	-	-	0.071 U	0.071 U	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-
Gases														
Methane	%	0.05	0.05	-	**0.21 U**[ab]	-	-	-	-	-	-	-	**0.19 U**[ab]	**0.19 U**[ab]
Field Parameter														
Methane, field (unfiltered)	%	0.05	0.05	-	-	-	-	-	-	0.0 / 0.0	-	-	-	-
Methane, field (filtered)	%	0.05	0.05	0.0 / 0.0	0 / 0	0.0 / 0.0	0.0 / 0.0	-	0.0 / 0.0	-	0	0.0	0 / 0	-

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tenatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
\- Concentration was greater than applicable criteria.

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5054, Bldg 4, IA 1st Fl.*	*Parcel 5054, Bldg 4, IA 1st Fl.*	*Parcel 5054, Bldg 4, IA 1st Fl.*	*Parcel 5054, Bldg 4, IA 1st Fl.*	*Parcel 5054, Bldg 4, IA Basement*	*Parcel 5054, Bldg 4, IA Basement*	*Parcel 5054, Bldg 4, IA Basement*	*Parcel 5054, Bldg 4, IA Basement*	*Parcel 5054, Bldg 5*	*Parcel 5054, Bldg 5*
Sample Location:				*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*
Owner/Tenant:				*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*
Sample ID:				*IA-38443-031312-JC-166*	*IA-38443-031312-JC-166*	*IA-38443-080612-GL-050*	*IA-38443-091312-GL-023*	*IA-38443-031312-JC-167*	*IA-38443-031312-JC-167*	*IA-38443-080612-GL-049*	*IA-38443-091312-GL-024*	*OA-38443-031312-JC-170*	*OA-38443-080612-GL-053*
Sample Date:				*3/12/2012*	*3/13/2012*	*8/6/2012*	*9/13/2012*	*3/12/2012*	*3/13/2012*	*8/6/2012*	*9/13/2012*	*3/13/2012*	*8/6/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*										
Volatile Organic Compounds													
1,1,1-Trichloroethane	ppb	NC	NC	-	0.030 U	0.030 U	0.060 U	-	0.030 U	-	0.060 U	0.030 U	0.030 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	-	0.061 U	0.061 U	0.12 U	-	0.061 U	-	0.12 U	0.061 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	-	0.054 U	0.054 U	0.11 U	-	0.054 U	-	0.11 U	0.054 U	0.054 U
1,1-Dichloroethane	ppb	16	160	-	0.026 U	0.026 U	0.052 U	-	0.026 U	-	0.052 U	0.026 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	-	0.032 U	0.032 U	0.064 U	-	0.032 U	-	0.064 U	0.032 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	-	0.098 U	0.098 UJ	0.20 U	-	0.098 U	-	0.20 U	0.098 U	0.098 UJ
1,2,4-Trimethylbenzene	ppb	NC	NC	-	1.0	1.3	0.72	-	2.3	-	0.13 U	0.063 U	0.066 J
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	-	0.044 U	0.044 U	0.088 U	-	0.044 U	-	0.088 U	0.044 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	-	0.070 U	0.070 U	0.14 U	-	0.070 U	-	0.14 U	0.070 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	-	0.047 U	0.047 U	0.094 U	-	0.047 U	-	0.094 U	0.047 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	-	0.052 U	0.052 U	0.10 U	-	0.052 U	-	0.10 U	0.052 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	-	0.032 U	0.032 U	0.064 U	-	0.032 U	-	0.064 U	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	-	0.32	0.48	0.22 J	-	0.67	-	0.13 U	0.065 U	0.065 U
1,3-Butadiene	ppb	NC	NC	-	0.064 U	0.064 U	0.13 U	-	0.064 U	-	0.13 U	0.064 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	-	0.065 U	0.065 U	0.13 U	-	0.065 U	-	0.13 U	0.065 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	-	0.064 U	0.064 U	0.13 UJ	-	0.064 U	-	0.13 UJ	0.064 U	0.064 U
1,4-Dioxane	ppb	NC	NC	-	0.080 U	0.080 U	0.16 UJ	-	0.080 U	-	0.16 UJ	0.080 U	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	-	0.25 J	0.52	0.48 J	-	0.44 J	-	0.14 J	0.039 U	0.041 J
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	-	1.0	1.0	0.72 J	-	1.2	-	0.74 J	0.28 J	0.51 J
2-Chlorotoluene	ppb	NC	NC	-	0.063 U	0.063 U	0.13 U	-	0.063 U	-	0.13 U	0.063 U	0.063 U
2-Hexanone	ppb	NC	NC	-	0.058 U	0.058 U	0.12 U	-	0.058 U	-	0.12 U	0.058 U	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	-	0.064 U	0.064 U	0.13 U	-	0.064 U	-	0.13 U	0.064 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	-	0.52	0.52	0.34 J	-	1.0	-	0.13 U	0.066 U	0.066 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	-	0.11 J	0.16 J	0.20 J	-	0.25 J	-	0.090 U	0.045 U	0.050 J
Acetone	ppb	NC	NC	-	22	25	20 J	-	49	-	31 J	1.9 J	4.6 J
Allyl chloride	ppb	NC	NC	-	0.048 U	0.048 U	0.096 U	-	0.048 U	-	0.096 U	0.048 U	0.048 U
Benzene	ppb	2	20	-	0.54	0.59	0.43	-	0.99	-	0.21 J	0.099 J	0.15 J
Benzyl chloride	ppb	NC	NC	-	0.078 U	0.078 U	0.16 U	-	0.078 U	-	0.16 U	0.078 U	0.078 U
Bromodichloromethane	ppb	NC	NC	-	0.044 U	0.044 U	0.088 U	-	0.044 U	-	0.088 U	0.044 U	0.044 U
Bromoform	ppb	NC	NC	-	0.048 U	0.048 U	0.096 UJ	-	0.048 U	-	0.096 UJ	0.048 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	-	0.032 U	0.032 U	0.064 U	-	0.032 U	-	0.064 U	0.032 U	0.032 U
Butane	ppb	NC	NC	-	5.1	2.4	3.0	-	7.0	-	4.0	1.7	1.7
Carbon disulfide	ppb	NC	NC	-	0.063 J	0.049 J	0.062 U	-	0.081 J	-	0.062 U	0.031 U	0.031 U
Carbon tetrachloride	ppb	NC	NC	-	0.078 J	0.076 J	0.076 U	-	0.071 J	-	0.076 U	0.081 J	0.069 J
Chlorobenzene	ppb	NC	NC	-	0.049 U	0.049 U	0.098 U	-	0.049 U	-	0.098 U	0.049 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	-	1.0	0.30	0.45	-	0.38	-	0.48	0.52	0.29
Chloroethane	ppb	NC	NC	-	0.035 U	0.039 J	0.070 U	-	0.052 J	-	0.070 U	0.035 U	0.035 U
Chloroform (Trichloromethane)	ppb	80	800	-	0.038 U	0.038 U	0.076 U	-	0.038 U	-	0.076 U	0.038 U	0.038 U
Chloromethane (Methyl chloride)	ppb	NC	NC	-	0.77	0.65	0.67 J	-	0.84	-	0.65 J	0.56	0.70
cis-1,2-Dichloroethene	ppb	37	370	-	0.060 U	0.060 U	0.12 U	-	0.060 U	-	0.12 U	0.060 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	-	0.074 U	0.074 U	0.15 U	-	0.074 U	-	0.15 U	0.074 U	0.074 U
Cyclohexane	ppb	NC	NC	-	0.37 J	0.69	0.70 J	-	0.86	-	0.42 J	0.040 U	0.091 J
Cymene (p-Isopropyltoluene)	ppb	NC	NC	-	0.057 U	0.057 U	0.11 U	-	0.057 U	-	0.11 U	0.057 U	0.057 U
Dibromochloromethane	ppb	NC	NC	-	0.042 U	0.042 U	0.084 U	-	0.042 U	-	0.084 U	0.042 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	-	0.40	0.49	0.55	-	0.40	-	0.55	0.49	0.45
Ethylbenzene	ppb	250	2500	-	1.6	2.0	1.2	-	3.3	-	0.14 U	0.068 U	0.068 U
Hexachlorobutadiene	ppb	NC	NC	-	0.078 U	0.078 UJ	0.16 U	-	0.078 U	-	0.16 U	0.078 U	0.078 UJ
Hexane	ppb	NC	NC	-	0.85	0.87	0.80 J	-	1.7	-	0.33 J	0.18 J	0.14 J
Isopropyl alcohol	ppb	NC	NC	-	4.6	4.6	4.5	-	6.8	-	5.0	0.25 J	0.45 J
Isopropyl benzene	ppb	NC	NC	-	0.11 J	0.12 J	0.12 U	-	0.21 J	-	0.12 U	0.060 U	0.060 U
m&p-Xylenes	ppb	200	2000	-	5.2	6.3	4.1	-	11	-	0.24 U	0.14 J	0.18 J
Methyl methacrylate	ppb	NC	NC	-	0.079 U	0.079 U	0.16 U	-	0.079 U	-	0.16 U	0.079 U	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	-	0.17 U	0.17 U	0.34 U	-	0.17 U	-	0.34 U	0.17 U	0.17 U
Methylene chloride	ppb	NC	NC	-	1.5	0.64	0.74 J	-	4.0	-	1.5	0.19 J	0.25 J
Naphthalene	ppb	2.9	NC	-	0.27 J	0.12 J	0.18 U	-	0.27 J	-	0.18 U	0.090 U	0.090 UJ
N-Butylbenzene	ppb	NC	NC	-	0.11 J	0.085 J	0.092 U	-	0.17 J	-	0.092 U	0.046 U	0.046 U
N-Decane	ppb	NC	NC	-	-	0.79 J	0.47 J	-	-	-	0.11 U	-	0.11 J
N-Dodecane	ppb	NC	NC	-	-	0.39 J	0.30 J	-	-	-	0.16 U	-	0.19 J
N-Heptane	ppb	NC	NC	-	1.7	2.6	2.5	-	4.1	-	0.12 J	0.073 J	0.085 J
Nonane	ppb	NC	NC	-	-	0.60	0.42 J	-	-	-	0.086 U	-	0.069 J
N-Propylbenzene	ppb	NC	NC	-	0.24 J	0.29 J	0.20 J	-	0.56	-	0.11 U	0.056 U	0.056 U
N-Undecane	ppb	NC	NC	-	-	0.74 J	0.49 J	-	-	-	0.12 U	-	0.12 J
Octane	ppb	NC	NC	-	-	1.0	0.67 J	-	-	-	0.072 U	-	0.056 J

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5054, Bldg 4, IA 1st Fl.*	*Parcel 5054, Bldg 4, IA 1st Fl.*	*Parcel 5054, Bldg 4, IA 1st Fl.*	*Parcel 5054, Bldg 4, IA 1st Fl.*	*Parcel 5054, Bldg 4, IA Basement*	*Parcel 5054, Bldg 4, IA Basement*	*Parcel 5054, Bldg 4, IA Basement*	*Parcel 5054, Bldg 4, IA Basement*	*Parcel 5054, Bldg 5*	*Parcel 5054, Bldg 5*
Sample Location:				*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*
Owner / Tenant:				*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*
Sample ID:				*IA-38443-031312-JC-166*	*IA-38443-031312-JC-166*	*IA-38443-080612-GL-050*	*IA-38443-091312-GL-023*	*IA-38443-031312-JC-167*	*IA-38443-031312-JC-167*	*IA-38443-080612-GL-049*	*IA-38443-091312-GL-024*	*OA-38443-031312-JC-170*	*OA-38443-080612-GL-053*
Sample Date:				*3/12/2012*	*3/13/2012*	*8/6/2012*	*9/13/2012*	*3/12/2012*	*3/13/2012*	*8/6/2012*	*9/13/2012*	*3/13/2012*	*8/6/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*										
o-Xylene	ppb	200	2000	-	1.4	1.7	1.2	-	2.9	-	0.12 U	0.061 U	0.071 J
Pentane	ppb	NC	NC	-	-	1.0	1.1 J	-	-	-	1.2 J	-	0.34 J
Styrene	ppb	NC	NC	-	0.11 J	0.13 J	0.12 U	-	0.099 J	-	0.12 U	0.058 U	0.058 U
tert-Butyl alcohol	ppb	NC	NC	-	0.19 J	0.12 J	0.16 J	-	0.14 J	-	0.13 J	0.043 J	0.11 J
tert-Butylbenzene	ppb	NC	NC	-	0.11 J	0.066 U	0.13 U	-	0.066 U	-	0.13 U	0.066 U	0.066 U
Tetrachloroethene	ppb	25	250	-	0.61	0.070 J	0.080 U	-	0.069 J	-	0.080 U	0.040 U	0.040 U
Tetrahydrofuran	ppb	NC	NC	-	0.063 U	0.063 U	0.13 U	-	0.063 U	-	0.13 U	0.063 U	0.063 U
Toluene	ppb	NC	NC	-	5.4	6.4	4.2	-	12	-	0.42	0.22	0.48
trans-1,2-Dichloroethene	ppb	NC	NC	-	0.050 U	0.050 U	0.10 U	-	0.050 U	-	0.10 U	0.050 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	-	0.048 U	0.048 U	0.096 U	-	0.048 U	-	0.096 U	0.048 U	0.048 U
Trichloroethene	ppb	2	20	-	0.036 U	0.065 J	0.093 J	-	0.036 U	-	0.072 U	0.036 U	0.036 U
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	-	0.25	0.24	0.36 J	-	0.21	-	0.40	0.24	0.25
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	-	0.059 J	0.073 J	0.074 J	-	0.060 J	-	0.063 J	0.076 J	0.068 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	-	0.035 U	0.035 U	0.070 U	-	0.035 U	-	0.070 U	0.035 U	0.035 U
Vinyl chloride	ppb	2	20	-	0.071 U	0.071 U	0.14 U	-	0.071 U	-	0.14 U	0.071 U	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-
Gases													
Methane	%	0.05	0.05	-	-	**0.20 U**[ab]	**0.19 U**[ab]	-	-	-	**0.20 U**[ab]	-	**0.21 U**[ab]
Field Parameter													
Methane, field (unfiltered)	%	0.05	0.05	-	-	-	-	-	-	-	-	-	-
Methane, field (filtered)	%	0.05	0.05	0	0.0	0 / 0	-	0	0.0	0 / 0	-	-	0 / 0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tenatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
\- Concentration was greater than applicable criteria.

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5054, Bldg 5, IA*	*Parcel 5054, Bldg 5, IA*	*Parcel 5054, Bldg 6*	*Parcel 5054, Bldg 6*	*Parcel 5054, Bldg 7*	*Parcel 5054, Bldg 7*	*Parcel 5054, Bldg 7*	*Parcel 5054, Bldg MP*	*Parcel 5054, Bldg MP*	*Parcel 5054, Bldg MP*	*Parcel 5054, Bldg MP*	*Parcel 5054, Bldg MP*	*Parcel 5054, Bldg MP*
Sample Location:				*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*				*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*
Owner / Tenant:				*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*unknown*	*unknown*	*unknown*	*former Murphy's Plumbing*	*former Murphy's Plumbing*	*former Murphy's Plumbing*	*ormer Murphy's Plumbing*	*former Murphy's Plumbing*	*former Murphy's Plumbing*
Sample ID:				*IA-38443-031312-JC-171*	*IA-38443-080612-GL-054*	-	-	-	-	-	*CS-38443-011012-JC-051*	*OA-38443-011012-JC-053*	*CS-38443-011012-JC-052*	-	*CS-38443-080612-GL-057*	*OA-38443-080612-GL-058*
Sample Date:				*3/13/2012*	*8/6/2012*	*1/10/2012*	*4/4/2012*	*1/10/2012*	*4/4/2012*	*8/2/2012*	*1/10/2012*	*1/10/2012*	*1/10/2012*	*4/4/2012*	*8/6/2012*	*8/6/2012*
													Duplicate			
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*													
Volatile Organic Compounds																
1,1,1-Trichloroethane	ppb	NC	NC	0.030 U	0.030 U	-	-	-	-	-	R	R	0.035 U	-	0.030 U	0.030 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	0.061 U	-	-	-	-	-	R	R	0.040 U	-	0.061 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	0.054 U	-	-	-	-	-	R	R	0.019 U	-	0.054 U	0.054 U
1,1-Dichloroethane	ppb	16	160	0.026 U	0.026 U	-	-	-	-	-	R	R	0.035 U	-	0.026 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.032 U	0.032 U	-	-	-	-	-	R	R	0.030 U	-	0.032 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 U	0.098 UJ	-	-	-	-	-	R	R	0.050 U	-	0.098 UJ	0.098 UJ
1,2,4-Trimethylbenzene	ppb	NC	NC	0.20	0.28	-	-	-	-	-	R	R	0.052 U	-	0.063 U	0.073 J
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	0.044 U	-	-	-	-	-	R	R	0.018 U	-	0.044 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	0.070 U	-	-	-	-	-	R	R	0.048 U	-	0.070 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.047 U	0.047 U	-	-	-	-	-	R	R	0.031 U	-	0.047 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	-	-	-	R	R	0.068 J	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	0.052 U	-	-	-	-	-	R	R	0.014 U	-	0.052 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.032 U	-	-	-	-	-	R	R	0.032 U	-	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.065 U	0.092 J	-	-	-	-	-	R	R	0.051 U	-	0.065 U	0.065 U
1,3-Butadiene	ppb	NC	NC	0.064 U	0.064 U	-	-	-	-	-	R	R	0.010 U	-	0.064 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	0.065 U	-	-	-	-	-	R	R	0.044 U	-	0.065 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.14 J	0.18 J	-	-	-	-	-	R	R	0.044 U	-	0.064 U	0.064 U
1,4-Dioxane	ppb	NC	NC	0.080 U	0.080 U	-	-	-	-	-	R	R	0.088 U	-	0.080 U	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.072 J	0.048 J	-	-	-	-	-	R	R	0.036 U	-	1.1	0.070 J
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.53 J	0.88 J	-	-	-	-	-	R	R	0.044 J	-	0.99 J	0.41 J
2-Chlorotoluene	ppb	NC	NC	0.063 U	0.063 U	-	-	-	-	-	R	R	0.047 U	-	0.063 U	0.063 U
2-Hexanone	ppb	NC	NC	0.058 U	0.11 J	-	-	-	-	-	R	R	0.039 U	-	0.058 U	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	0.064 U	-	-	-	-	-	R	R	0.047 U	-	0.064 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.19 J	0.088 J	-	-	-	-	-	R	R	0.046 U	-	0.066 U	0.066 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.15 J	0.25 J	-	-	-	-	-	R	R	0.026 U	-	0.10 J	0.045 U
Acetone	ppb	NC	NC	8.3	9.2	-	-	-	-	-	R	R	1.1 J	-	9.5	3.5 J
Allyl chloride	ppb	NC	NC	0.048 U	0.048 U	-	-	-	-	-	R	R	0.019 U	-	0.048 U	0.048 U
Benzene	ppb	2	20	0.16 J	0.22	-	-	-	-	-	R	R	0.16 J	-	0.23	0.11 J
Benzyl chloride	ppb	NC	NC	0.078 U	0.078 U	-	-	-	-	-	R	R	0.046 UJ	-	0.078 U	0.078 U
Bromodichloromethane	ppb	NC	NC	0.044 U	0.044 U	-	-	-	-	-	R	R	0.028 U	-	0.044 U	0.044 U
Bromoform	ppb	NC	NC	0.048 U	0.048 U	-	-	-	-	-	R	R	0.019 U	-	0.048 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	0.032 U	-	-	-	-	-	R	R	0.012 U	-	0.032 U	0.032 U
Butane	ppb	NC	NC	11	1.9	-	-	-	-	-	R	R	1.4	-	0.39 J	0.35 J
Carbon disulfide	ppb	NC	NC	0.031 U	0.052 J	-	-	-	-	-	R	R	0.066 U	-	0.12 J	0.031 U
Carbon tetrachloride	ppb	NC	NC	0.088 J	0.068 J	-	-	-	-	-	R	R	0.068 J	-	0.086 J	0.060 J
Chlorobenzene	ppb	NC	NC	0.049 U	0.049 U	-	-	-	-	-	R	R	0.020 U	-	0.049 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	0.58	0.36	-	-	-	-	-	R	R	0.034 U	-	0.31	0.25
Chloroethane	ppb	NC	NC	0.035 U	0.035 U	-	-	-	-	-	R	R	0.016 U	-	0.038 J	0.035 U
Chloroform (Trichloromethane)	ppb	80	800	0.046 J	0.038 U	-	-	-	-	-	R	R	0.089 J	-	0.038 U	0.038 U
Chloromethane (Methyl chloride)	ppb	NC	NC	0.62	0.61	-	-	-	-	-	R	R	0.36 J	-	0.61	0.50
cis-1,2-Dichloroethene	ppb	37	370	0.060 U	0.060 U	-	-	-	-	-	R	R	0.068 J	-	0.060 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	0.074 U	-	-	-	-	-	R	R	0.016 U	-	0.074 U	0.074 U
Cyclohexane	ppb	NC	NC	0.040 U	0.20 J	-	-	-	-	-	R	R	0.039 U	-	0.50	0.092 J
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.057 U	2.0	-	-	-	-	-	R	R	0.048 U	-	0.057 U	0.057 U
Dibromochloromethane	ppb	NC	NC	0.042 U	0.042 U	-	-	-	-	-	R	R	0.021 U	-	0.042 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.48	0.49	-	-	-	-	-	R	R	0.48 J	-	0.49	0.46
Ethylbenzene	ppb	250	2500	28	19	-	-	-	-	-	R	R	0.052 J	-	0.12 J	0.068 U
Hexachlorobutadiene	ppb	NC	NC	0.078 U	0.078 UJ	-	-	-	-	-	R	R	0.065 U	-	0.078 UJ	0.078 UJ
Hexane	ppb	NC	NC	0.19 J	0.55	-	-	-	-	-	R	R	0.14 J	-	2.2	0.089 J
Isopropyl alcohol	ppb	NC	NC	6.0	1.7 J	-	-	-	-	-	R	R	0.037 U	-	0.49 J	0.35 J
Isopropyl benzene	ppb	NC	NC	0.084 J	0.29 J	-	-	-	-	-	R	R	0.031 U	-	0.060 U	0.060 U
m&p-Xylenes	ppb	200	2000	69	76	-	-	-	-	-	R	R	0.053 J	-	0.18 J	0.16 J
Methyl methacrylate	ppb	NC	NC	0.079 U	0.079 U	-	-	-	-	-	R	R	0.013 U	-	0.079 U	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	0.17 U	-	-	-	-	-	R	R	0.016 U	-	0.17 U	0.17 U
Methylene chloride	ppb	NC	NC	0.24 J	1.7	-	-	-	-	-	R	R	0.11 U	-	0.21 J	0.18 J
Naphthalene	ppb	2.9	NC	0.090 U	0.090 UJ	-	-	-	-	-	R	R	0.086 UJ	-	0.090 UJ	0.090 UJ
N-Butylbenzene	ppb	NC	NC	0.073 J	0.68	-	-	-	-	-	R	R	0.055 U	-	0.046 U	0.046 U
N-Decane	ppb	NC	NC	-	15	-	-	-	-	-	-	-	-	-	0.056 UJ	0.056 UJ
N-Dodecane	ppb	NC	NC	-	5.6	-	-	-	-	-	-	-	-	-	0.078 U	0.078 U
N-Heptane	ppb	NC	NC	0.30 J	0.13 J	-	-	-	-	-	R	R	0.076 J	-	5.0	0.047 U
Nonane	ppb	NC	NC	-	34	-	-	-	-	-	-	-	-	-	0.043 U	0.043 U
N-Propylbenzene	ppb	NC	NC	0.056 U	0.095 J	-	-	-	-	-	R	R	0.050 U	-	0.056 U	0.056 U
N-Undecane	ppb	NC	NC	-	17	-	-	-	-	-	-	-	-	-	0.062 U	0.062 U
Octane	ppb	NC	NC	-	1.7	-	-	-	-	-	-	-	-	-	0.22 J	0.036 U

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5054, Bldg 5, IA*	*Parcel 5054, Bldg 5, IA*	*Parcel 5054, Bldg 6*	*Parcel 5054, Bldg 6*	*Parcel 5054, Bldg 7*	*Parcel 5054, Bldg 7*	*Parcel 5054, Bldg 7*	*Parcel 5054, Bldg MP*	*Parcel 5054, Bldg MP*	*Parcel 5054, Bldg MP*	*Parcel 5054, Bldg MP*	*Parcel 5054, Bldg MP*	*Parcel 5054, Bldg MP*
Sample Location:				*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*				*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*	*1901 Dryden Road*
Owner / Tenant:				*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*Valley Asphalt*	*unknown*	*unknown*	*unknown*	*former Murphy's Plumbing*	*former Murphy's Plumbing*	*former Murphy's Plumbing*	*former Murphy's Plumbing*	*former Murphy's Plumbing*	*former Murphy's Plumbing*
Sample ID:				*IA-38443-031312-JC-171*	*IA-38443-080612-GL-054*	-	-	-	-	-	*CS-38443-011012-JC-051*	*OA-38443-011012-JC-053*	*CS-38443-011012-JC-052*	-	*CS-38443-080612-GL-057*	*OA-38443-080612-GL-058*
Sample Date:				*3/13/2012*	*8/6/2012*	*1/10/2012*	*4/4/2012*	*1/10/2012*	*4/4/2012*	*8/2/2012*	*1/10/2012*	*1/10/2012*	*1/10/2012* *Duplicate*	*4/4/2012*	*8/6/2012*	*8/6/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*													
o-Xylene	ppb	200	2000	17	22	-	-	-	-	-	R	R	0.022 U	-	0.061 U	0.061 U
Pentane	ppb	NC	NC	-	0.47 J	-	-	-	-	-	-	-	-	-	0.31 J	0.32 J
Styrene	ppb	NC	NC	0.077 J	0.058 U	-	-	-	-	-	R	R	0.030 U	-	0.058 U	0.058 U
tert-Butyl alcohol	ppb	NC	NC	0.13 J	1.4 J	-	-	-	-	-	R	R	0.071 U	-	0.18 J	0.038 U
tert-Butylbenzene	ppb	NC	NC	0.066 U	0.066 U	-	-	-	-	-	R	R	0.047 U	-	0.066 U	0.066 U
Tetrachloroethene	ppb	25	250	0.040 U	0.040 U	-	-	-	-	-	R	R	0.036 J	-	**38**[a]	0.040 U
Tetrahydrofuran	ppb	NC	NC	0.063 U	0.073 J	-	-	-	-	-	R	R	0.018 U	-	0.063 U	0.063 U
Toluene	ppb	NC	NC	0.43	15	-	-	-	-	-	R	R	0.16 J	-	5.3	0.13 J
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	0.050 U	-	-	-	-	-	R	R	0.032 U	-	0.050 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	0.048 U	-	-	-	-	-	R	R	0.020 U	-	0.048 U	0.048 U
Trichloroethene	ppb	2	20	0.051 J	0.11 J	-	-	-	-	-	R	R	0.10 J	-	0.091 J	0.036 U
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.44	0.49	-	-	-	-	-	R	R	0.23	-	0.26	0.22
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.075 J	0.068 J	-	-	-	-	-	R	R	0.071 J	-	0.079 J	0.069 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	0.035 U	-	-	-	-	-	R	R	0.019 U	-	0.035 U	0.035 U
Vinyl chloride	ppb	2	20	0.071 U	0.071 U	-	-	-	-	-	R	R	0.029 U	-	0.071 U	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-	-	-	-	-	R	R	0.053 J	-	-	-
Gases																
Methane	%	0.05	0.05	-	**0.20 U**[ab]	-	-	-	-	-	**0.061 U**[ab]	R	-	-	**0.22 U**[ab]	**0.21 U**[ab]
Field Parameter																
Methane, field (unfiltered)	%	0.05	0.05	-	-	0.0 / 0.0	-	0.0 / 0.0	-	-	0.0	0.0 / 0.0	0.0	-	-	-
Methane, field (filtered)	%	0.05	0.05	0.0 / 0	0 / 0	-	0.0	-	0.0	0 / 0	-	-	-	0.0	0 / 0	0 / 0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tenatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location: Sample Location: Owner / Tenant: Sample ID: Sample Date:				*Parcel 5171, Bldg 8 1951 Dryden Road B&G Trucking OA-38443-031412-JC-182 3/14/2012*	*Parcel 5171, Bldg 8 1951 Dryden Road B&G Trucking OA-38443-080712-GL-059 8/7/2012*	*Parcel 5171, Bldg 8, IA_C 1951 Dryden Road B&G Trucking IA-38443-031412-JC-186 3/14/2012*	*Parcel 5171, Bldg 8, IA_C 1951 Dryden Road B&G Trucking IA-38443-080712-GL-064 8/7/2012*	*Parcel 5171, Bldg 8, IA_F 1951 Dryden Road B&G Trucking IA-38443-031412-JC-190 3/14/2012*	*Parcel 5171, Bldg 8, IA_F 1951 Dryden Road B&G Trucking IA-38443-080712-GL-067 8/7/2012*	*Parcel 5171, Bldg 8, IA_F 1951 Dryden Road B&G Trucking IA-38443-080712-GL-068 8/7/2012 Duplicate*	*Parcel 5171, Bldg 8, IA_Office 1951 Dryden Road B&G Trucking IA-38443-031412-JC-183 3/14/2012*	*Parcel 5171, Bldg 8, IA_Office 1951 Dryden Road B&G Trucking IA-38443-080712-GL-061 8/7/2012*	*Parcel 5171, Bldg 9 1951 Dryden Road B&G Trucking OA-38443-031412-JC-192 3/14/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential) a*	*ODH Indoor Air Action Levels (Non-residential) b*										
Volatile Organic Compounds													
1,1,1-Trichloroethane	ppb	NC	NC	0.030 U	0.030 U	1.1 U	0.030 U	1.1 U	0.030 U	0.030 U	7.1 U	0.030 U	0.030 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	0.061 U	2.2 U	0.061 U	2.3 U	0.061 U	0.061 U	14 U	0.061 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	0.054 U	2.0 U	0.054 U	2.0 U	0.054 U	0.054 U	13 U	0.054 U	0.054 U
1,1-Dichloroethane	ppb	16	160	0.026 U	0.026 U	0.95 U	0.026 U	0.99 U	0.026 U	0.026 U	6.1 U	0.026 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.032 U	0.032 U	1.2 U	0.032 U	1.2 U	0.032 U	0.032 U	7.6 U	0.032 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 U	0.098 UJ	3.6 U	0.098 U	3.7 U	0.098 UJ	0.098 UJ	23 U	0.098 U	0.098 U
1,2,4-Trimethylbenzene	ppb	NC	NC	0.15 J	0.60	43	0.33	27	0.71 J	1.5 J	34 J	0.81	0.10 J
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	0.044 U	1.6 U	0.044 U	1.7 U	0.044 U	0.044 U	10 U	0.044 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	0.070 U	2.6 U	0.092 J	2.7 U	0.070 U	0.12 J	17 U	0.070 U	0.11 J
1,2-Dichloroethane	ppb	NC	NC	0.047 U	0.047 U	1.7 U	0.047 U	1.8 U	0.047 U	0.047 U	11 U	0.047 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	0.052 U	1.9 U	0.052 U	2.0 U	0.052 U	0.052 U	12 U	0.052 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.032 U	1.2 U	0.032 U	1.2 U	0.032 U	0.032 U	7.6 U	0.12 J	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.065 U	0.15 J	6.9 J	0.16 J	4.3 J	0.23	0.36	15 UJ	0.22	0.065 U
1,3-Butadiene	ppb	NC	NC	0.14 J	0.064 U	2.3 U	0.064 U	2.4 U	0.064 U	0.064 U	15 U	0.064 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	0.065 U	2.4 U	0.065 U	2.5 U	0.065 U	0.065 U	15 U	0.065 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.064 UJ	0.064 U	2.3 U	0.064 U	2.4 U	0.064 U	0.10 J	15 U	0.064 U	0.16 J
1,4-Dioxane	ppb	NC	NC	0.080 U	0.080 U	2.9 U	0.080 U	3.0 U	0.080 U	0.080 U	19 U	0.080 U	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.18 J	0.16 J	8.2 J	0.51	6.7 J	0.76	0.62	13 J	0.28 J	0.12 J
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	1.1	1.3	19 J	1.8	20 J	15	10	47 U	4.8	0.54 J
2-Chlorotoluene	ppb	NC	NC	0.063 U	0.063 U	2.3 U	0.063 U	2.4 U	0.063 U	0.063 U	15 U	0.063 U	0.063 U
2-Hexanone	ppb	NC	NC	0.058 U	0.058 U	2.1 U	0.058 U	2.2 U	0.084 J	0.11 J	14 U	0.058 U	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	0.064 U	2.3 U	0.064 U	2.4 U	0.064 U	0.064 U	15 U	0.064 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.066 U	0.18 J	8.9 J	0.15 J	5.6 J	0.44	0.52	16 U	0.32 J	0.066 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.045 U	18	6.9 J	0.36 J	5.5 J	1.7	1.5	11 U	0.80	0.045 U
Acetone	ppb	NC	NC	7.3	55	2700	12 J	2500	25	32	3500	15 J	3.7 J
Allyl chloride	ppb	NC	NC	0.048 U	0.048 U	1.8 U	0.048 U	1.8 U	0.048 U	0.048 U	11 U	0.048 U	0.048 U
Benzene	ppb	2	20	0.41	0.30	**20[a]**	0.44	**13[a]**	0.99	0.79	**26 J[ab]**	0.41	0.32
Benzyl chloride	ppb	NC	NC	0.078 U	0.078 U	2.9 U	0.078 U	3.0 U	0.078 U	0.078 U	18 U	0.078 U	0.078 U
Bromodichloromethane	ppb	NC	NC	0.044 U	0.044 U	1.6 U	0.044 U	1.7 U	0.044 U	0.044 U	10 U	0.044 U	0.044 U
Bromoform	ppb	NC	NC	0.048 U	0.048 U	1.8 U	0.048 U	1.8 U	0.048 U	0.048 U	11 U	0.048 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	0.032 U	1.2 U	0.032 U	1.2 U	0.032 U	0.032 U	7.6 U	0.032 U	0.032 U
Butane	ppb	NC	NC	5.4 J	1.3	190	3.4	120	12	9.5	190	3.8	4.8 J
Carbon disulfide	ppb	NC	NC	0.031 U	0.031 U	1.1 U	0.031 U	1.2 U	0.16 J	0.046 J	7.3 U	0.031 U	0.031 U
Carbon tetrachloride	ppb	NC	NC	0.092 J	0.073 J	1.4 UJ	0.065 J	1.4 UJ	0.10 J	0.085 J	9.0 UJ	0.064 J	0.073 J
Chlorobenzene	ppb	NC	NC	0.049 U	0.049 U	1.8 U	0.049 U	1.9 U	0.049 U	0.049 U	12 U	0.049 U	0.54
Chlorodifluoromethane	ppb	NC	NC	0.74 J	0.43	3.5 J	0.42	3.3 J	0.037 U	0.60	14 J	0.41	0.83 J
Chloroethane	ppb	NC	NC	0.035 U	0.035 U	1.3 U	0.035 U	1.3 U	0.035 U	0.035 U	8.3 U	0.035 U	0.035 U
Chloroform (Trichloromethane)	ppb	80	800	0.17 J	0.042 J	1.4 U	0.038 U	1.4 U	0.091 J	0.067 J	9.0 U	0.043 J	0.17 J
Chloromethane (Methyl chloride)	ppb	NC	NC	1.1	0.61	5.9 U	0.58	6.1 U	0.75	0.85	38 U	0.52	0.71
cis-1,2-Dichloroethene	ppb	37	370	0.060 U	0.060 U	2.2 U	0.060 U	2.3 U	0.060 U	0.25	14 U	0.060 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	0.074 U	2.7 U	0.074 U	2.8 U	0.074 U	0.074 U	17 U	0.074 U	0.074 U
Cyclohexane	ppb	NC	NC	0.040 U	0.29 J	26	0.62	22	0.91	0.68	57 J	0.37 J	0.040 U
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.057 U	0.057 U	2.1 U	0.057 U	2.2 U	0.057 U	0.058 J	13 U	0.057 U	0.057 U
Dibromochloromethane	ppb	NC	NC	0.042 U	0.042 U	1.5 U	0.042 U	1.6 U	0.042 U	0.042 U	9.9 U	0.042 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.60	0.47	2.5 U	0.43	2.6 U	0.73	0.60	16 U	0.80	0.50
Ethylbenzene	ppb	250	2500	0.16 J	1.9	34	1.1	27	9.5	7.6	22 J	3.8	0.14 J
Hexachlorobutadiene	ppb	NC	NC	0.078 U	0.078 UJ	2.9 U	0.078 U	3.0 U	0.078 UJ	0.078 UJ	18 U	0.078 U	0.078 U
Hexane	ppb	NC	NC	0.52	0.43 J	46	1.1	32	2.8	2.8	69 J	0.98	0.32 J
Isopropyl alcohol	ppb	NC	NC	2.1	1.3 J	270	1.4 J	230	4.9	2.7	370 J	2.1	1.2 J
Isopropyl benzene	ppb	NC	NC	0.060 U	0.060 U	2.6 J	0.075 J	2.3 U	0.17 J	0.14 J	14 U	0.087 J	0.060 U
m&p-Xylenes	ppb	200	2000	0.52	8.2	140	3.7	110	36	32	89	15	0.48
Methyl methacrylate	ppb	NC	NC	0.079 U	0.079 U	2.9 U	0.079 U	3.0 U	0.14 J	0.11 J	19 U	0.083 J	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	0.17 U	6.2 U	0.17 U	6.4 U	0.17 U	0.17 U	40 U	0.17 U	0.17 U
Methylene chloride	ppb	NC	NC	0.43 J	0.55	1.6 U	0.82	1.7 U	0.75 J	2.7 J	11 U	0.91	0.38 J
Naphthalene	ppb	2.9	NC	0.090 U	0.090 UJ	**3.3 U[a]**	0.090 U	**3.4 U[a]**	0.090 UJ	0.096 J	**21 U[a]**	0.090 U	0.090 U
N-Butylbenzene	ppb	NC	NC	0.046 U	0.046 U	2.3 J	0.046 U	1.7 U	0.046 U	0.10 J	11 U	0.070 J	0.046 U
N-Decane	ppb	NC	NC	-	0.99 J	-	16	-	6.9 J	14 J	-	9.8	-
N-Dodecane	ppb	NC	NC	-	0.14 J	-	0.088 J	-	0.078 U	0.46 J	-	0.72 J	-
N-Heptane	ppb	NC	NC	0.46 J	0.25 J	260	0.90	240	1.2	0.94	570	0.45 J	0.25 J
Nonane	ppb	NC	NC	-	0.65	-	24	-	11	11	-	7.3	-
N-Propylbenzene	ppb	NC	NC	0.056 U	0.10 J	5.1 J	0.11 J	3.1 J	0.28 J	0.29 J	13 U	0.17 J	0.056 U
N-Undecane	ppb	NC	NC	-	0.48 J	-	2.3	-	1.0 J	4.2 J	-	3.8	-
Octane	ppb	NC	NC	-	0.090 J	-	1.5	-	1.7	1.4	-	0.74	-

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5171, Bldg 8*	*Parcel 5171, Bldg 8*	*Parcel 5171, Bldg 8, IA_C*	*Parcel 5171, Bldg 8, IA_C*	*Parcel 5171, Bldg 8, IA_F*	*Parcel 5171, Bldg 8, IA_F*	*Parcel 5171, Bldg 8, IA_F*	*Parcel 5171, Bldg 8, IA_Office*	*Parcel 5171, Bldg 8, IA_Office*	*Parcel 5171, Bldg 9*
Sample Location:				*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*
Owner / Tenant:				*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*
Sample ID:				*OA-38443-031412-JC-182*	*OA-38443-080712-GL-059*	*IA-38443-031412-JC-186*	*IA-38443-080712-GL-064*	*IA-38443-031412-JC-190*	*IA-38443-080712-GL-067*	*IA-38443-080712-GL-068*	*IA-38443-031412-JC-183*	*IA-38443-080712-GL-061*	*OA-38443-031412-JC-192*
Sample Date:				*3/14/2012*	*8/7/2012*	*3/14/2012*	*8/7/2012*	*3/14/2012*	*8/7/2012*	*8/7/2012* *Duplicate*	*3/14/2012*	*8/7/2012*	*3/14/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*										
o-Xylene	ppb	200	2000	0.19 J	2.5	44	1.1	33	8.5	8.4	30 J	4.3	0.16 J
Pentane	ppb	NC	NC	-	1.1	-	3.5	-	11	9.3	-	3.6	-
Styrene	ppb	NC	NC	0.058 U	0.33	2.1 U	0.058 U	2.2 U	0.61	0.83	14 U	0.55	0.058 U
tert-Butyl alcohol	ppb	NC	NC	0.11 J	0.063 J	1.4 U	0.045 J	1.4 U	0.24 J	0.53 J	9.0 U	0.15 J	0.10 J
tert-Butylbenzene	ppb	NC	NC	0.066 U	0.066 U	2.4 U	0.066 U	2.5 U	0.066 U	0.066 U	16 U	0.091 J	0.066 U
Tetrachloroethene	ppb	25	250	0.18 J	0.040 U	1.5 U	0.062 J	1.5 U	0.13 J	0.076 J	9.5 U	0.040 U	0.23
Tetrahydrofuran	ppb	NC	NC	0.063 U	0.063 U	2.3 U	0.38 J	2.4 U	0.11 J	0.093 J	15 U	0.29 J	0.063 U
Toluene	ppb	NC	NC	1.3	2.1	130	2.7	91	10	8.7	110	4.1	1.7
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	0.050 U	1.8 U	0.050 U	1.9 U	0.12 J	0.089 J	12 U	0.050 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	0.048 U	1.8 U	0.048 U	1.8 U	0.048 U	0.048 U	11 U	0.048 U	0.048 U
Trichloroethene	ppb	2	20	0.052 J	0.072 J	1.5 J	0.12 J	1.4 U	0.96	0.89	**8.5 U[a]**	0.29	0.50
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.33	0.29	0.88 U	0.23	0.91 U	0.37	0.56	5.7 U	0.35	0.28
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.082 J	0.077 J	1.1 U	0.069 J	1.2 U	0.093 J	0.078 J	7.3 U	0.066 J	0.066 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	0.035 U	1.3 U	0.035 U	1.3 U	0.035 U	0.035 U	8.3 U	0.035 U	0.035 U
Vinyl chloride	ppb	2	20	0.071 U	0.071 U	**2.6 U[a]**	0.071 U	**2.7 U[a]**	0.071 U	0.071 U	**17 U[a]**	0.071 U	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-
Gases													
Methane	%	0.05	0.05	-	**0.22 U[ab]**	-	**0.19 U[ab]**	-	**0.21 U[ab]**	**0.19 U[ab]**	-	**0.22 U[ab]**	-
Field Parameter													
Methane, field (unfiltered)	%	0.05	0.05	-	-	-	-	-	-	-	-	-	-
Methane, field (filtered)	%	0.05	0.05	0.0 / 0	0 / 0	0.0 / 0.0	0 / 0	0.0 / 0	0 / 0	0 / 0	0.0 / 0	0 / 0	0.0 / 0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tenatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
\- Concentration was greater than applicable criteria.

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5171, Bldg 9, 40 SW Corner Tree*	*Parcel 5171, Bldg 9, IA_A*	*Parcel 5171, Bldg 9, IA_B*	*Parcel 5171, Bldg 11*	*Parcel 5171, Bldg 11*	*Parcel 5171, Bldg 11*	*Parcel 5171, Bldg 11*	*Parcel 5171, Bldg 11*	*Parcel 5171, Bldg 11*	*Parcel 5171, Bldg 11*	*Parcel 5171, Bldg 11*
Sample Location:				*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1915 Dryden Road*	*1915 Dryden Road*	*1915 Dryden Road*	*1915 Dryden Road*	*1915 Dryden Road*	*1915 Dryden Road*	*1915 Dryden Road*	*1915 Dryden Road*
Owner/Tenant:				*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*
Sample ID:				*OA-38443-032712-JC-222*	*IA-38443-032712-JC-193*	*IA-38443-031412-JC-195*	*CS-38443-011112-JC-060*	*OA-38443-011112-JC-058*	*OA-38443-011112-JC-059*	*CS-38443-011112-JC-060*	*OA-38443-011212-JC-070*	*-*	*CS-38443-080712-GL-069*	*OA-38443-080712-GL-070*
Sample Date:				*3/27/2012*	*3/27/2012*	*3/14/2012*	*1/11/2012*	*1/11/2012*	*1/11/2012*	*1/12/2012*	*1/12/2012*	*4/4/2012*	*8/7/2012*	*8/7/2012*
									Duplicate					
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*											
Volatile Organic Compounds														
1,1,1-Trichloroethane	ppb	NC	NC	0.030 U	9.1 U	26 U	-	0.035 U	0.035 U	0.035 U	0.035 U	-	0.030 U	0.030 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	18 U	52 U	-	0.040 U	0.040 U	0.040 U	0.040 U	-	0.061 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	16 U	46 U	-	0.019 U	0.019 U	0.019 U	0.019 U	-	0.054 U	0.054 U
1,1-Dichloroethane	ppb	16	160	0.026 U	7.9 U	**22 U**[a]	-	0.035 U	0.035 U	0.035 U	0.035 U	-	0.026 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.032 U	9.7 U	27 U	-	0.030 U	0.030 U	0.030 U	0.030 U	-	0.032 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 U	30 U	83 U	-	0.050 U	0.050 U	0.050 U	0.050 U	-	0.098 U	0.098 U
1,2,4-Trimethylbenzene	ppb	NC	NC	0.063 U	21 J	280	-	0.058 J	0.052 U	0.052 U	0.052 U	-	0.063 U	0.78
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	13 U	37 U	-	0.018 U	0.018 U	0.018 U	0.018 U	-	0.044 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	21 U	60 U	-	0.048 U	0.048 U	0.048 U	0.048 U	-	0.070 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.047 U	14 U	40 U	-	0.031 U	0.031 U	0.031 U	0.031 U	-	0.047 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	0.014 U	0.014 U	0.27	0.014 U	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	16 U	44 U	-	0.014 U	0.014 U	0.014 U	0.014 U	-	0.052 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	9.7 U	27 U	-	0.032 U	0.032 U	0.032 U	0.032 U	-	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.065 UJ	20 UJ	55 UJ	-	0.051 U	0.051 U	0.051 U	0.051 U	-	0.065 U	0.12 J
1,3-Butadiene	ppb	NC	NC	0.064 U	19 U	54 U	-	0.010 U	0.010 U	0.010 U	0.010 U	-	0.064 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	20 U	55 U	-	0.044 U	0.044 U	0.044 U	0.044 U	-	0.065 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.064 U	19 U	54 U	-	0.044 U	0.044 U	0.044 U	0.044 U	-	0.064 U	0.064 U
1,4-Dioxane	ppb	NC	NC	0.080 U	24 U	68 U	-	0.088 U	0.088 U	0.088 U	0.088 U	-	0.080 U	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.039 U	12 U	33 U	-	0.051 J	0.036 U	0.036 U	0.036 U	-	0.056 J	0.087 J
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.23 J	1200	460 J	-	7.2 J	0.48 J	0.33 J	0.28 J	-	0.37 J	0.65 J
2-Chlorotoluene	ppb	NC	NC	0.063 U	19 U	54 U	-	0.047 U	0.047 U	0.047 U	0.047 U	-	0.063 U	0.063 U
2-Hexanone	ppb	NC	NC	0.058 U	18 U	49 U	-	0.039 U	0.039 U	0.039 U	0.039 U	-	0.058 U	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	19 U	54 U	-	0.047 U	0.047 U	0.047 U	0.047 U	-	0.064 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.066 U	20 U	56 U	-	0.046 U	0.046 U	0.046 U	0.046 U	-	0.066 U	0.14 J
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.045 U	290	170 J	-	0.026 U	0.026 U	0.026 U	0.026 U	-	0.045 U	0.10 J
Acetone	ppb	NC	NC	1.4 U	2200	5600	-	4.1 J	1.5 J	4.1 J	2.0 J	-	3.0 J	5.8 J
Allyl chloride	ppb	NC	NC	0.048 U	15 U	41 U	-	0.019 U	0.019 U	0.019 U	0.019 U	-	0.048 U	0.048 U
Benzene	ppb	2	20	0.15 J	**17 U**[a]	**48 U**[ab]	-	0.27	0.27	0.31	0.20	-	0.18 J	0.24
Benzyl chloride	ppb	NC	NC	0.078 U	24 U	66 U	-	0.046 UJ	0.046 UJ	0.046 UJ	0.046 UJ	-	0.078 U	0.078 U
Bromodichloromethane	ppb	NC	NC	0.044 U	13 U	37 U	-	0.028 U	0.028 U	0.028 U	0.028 U	-	0.044 U	0.044 U
Bromoform	ppb	NC	NC	0.048 U	15 U	41 U	-	0.019 U	0.019 U	0.019 U	0.019 U	-	0.048 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	9.7 U	27 U	-	0.012 U	0.012 U	0.012 U	0.012 U	-	0.032 U	0.032 U
Butane	ppb	NC	NC	0.73	190	63 J	-	2.2	2.5	2.0	1.1	-	1.0	1.0
Carbon disulfide	ppb	NC	NC	0.031 U	9.4 U	26 U	-	0.36 J	0.066 U	0.23 J	0.11 J	-	0.050 J	0.056 J
Carbon tetrachloride	ppb	NC	NC	0.085 J	12 UJ	32 UJ	-	0.069 J	0.070 J	0.076 J	0.068 J	-	0.087 J	0.068 J
Chlorobenzene	ppb	NC	NC	0.049 U	15 U	42 U	-	0.020 U	0.020 U	0.032 J	0.020 U	-	0.049 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	0.24	24 J	31 U	-	0.34 J	0.39 J	0.034 U	0.25 J	-	0.46	0.47
Chloroethane	ppb	NC	NC	0.035 U	11 U	30 U	-	0.016 U	0.016 U	0.016 U	0.016 U	-	0.036 J	0.040 J
Chloroform (Trichloromethane)	ppb	80	800	0.038 U	12 U	32 U	-	0.031 U	0.031 U	0.031 U	0.031 U	-	0.063 J	0.038 U
Chloromethane (Methyl chloride)	ppb	NC	NC	0.57	49 U	140 U	-	0.74	0.71	0.18 J	0.48 J	-	0.26 J	0.65
cis-1,2-Dichloroethene	ppb	37	370	0.060 U	18 U	**51 U**[a]	-	0.014 U	0.014 U	0.27	0.014 U	-	0.060 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	22 U	63 U	-	0.016 U	0.016 U	0.016 U	0.016 U	-	0.074 U	0.074 U
Cyclohexane	ppb	NC	NC	0.040 U	14 J	34 U	-	0.039 U	0.041 J	0.093 J	0.040 J	-	0.18 J	0.27 J
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.057 U	17 U	48 U	-	0.048 U	0.048 U	0.048 U	0.048 U	-	0.057 U	0.057 U
Dibromochloromethane	ppb	NC	NC	0.042 U	13 U	36 U	-	0.021 U	0.021 U	0.021 U	0.021 U	-	0.042 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.43	21 U	71 J	-	0.61	0.65	0.50	0.47 J	-	0.51	0.43
Ethylbenzene	ppb	250	2500	0.068 U	**270**[a]	94 J	-	0.061 J	0.062 J	0.26	0.036 J	-	0.077 J	0.78
Hexachlorobutadiene	ppb	NC	NC	0.078 U	24 U	66 U	-	0.065 U	0.065 U	0.065 U	0.065 U	-	0.078 U	0.078 U
Hexane	ppb	NC	NC	0.16 J	20 J	27 U	-	0.18 J	0.21	0.19 J	0.14 J	-	0.19 J	0.52
Isopropyl alcohol	ppb	NC	NC	0.17 J	32 J	63 J	-	0.037 U	0.037 U	0.71 J	0.85 J	-	0.22 J	2.3
Isopropyl benzene	ppb	NC	NC	0.060 U	18 U	51 U	-	0.031 U	0.031 U	0.066 J	0.031 U	-	0.060 U	0.12 J
m&p-Xylenes	ppb	200	2000	0.12 U	**1200**[a]	**420**[a]	-	0.17 J	0.18 J	0.22 J	0.10 J	-	0.29	1.1
Methyl methacrylate	ppb	NC	NC	0.079 U	24 U	67 U	-	0.013 U	0.013 U	0.013 U	0.013 U	-	0.079 U	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	52 U	140 U	-	0.016 U	0.016 U	0.016 U	0.016 U	-	0.17 U	0.17 U
Methylene chloride	ppb	NC	NC	0.045 U	260	38 U	-	0.13 J	0.13 J	0.16 J	0.12 J	-	0.26 J	2.4
Naphthalene	ppb	2.9	NC	0.090 U	**27 U**[a]	**76 U**[a]	-	0.086 UJ	0.086 UJ	0.086 U	0.086 U	-	0.090 U	0.20 J
N-Butylbenzene	ppb	NC	NC	0.046 UJ	14 UJ	39 U	-	0.055 U	0.055 U	0.055 U	0.055 U	-	0.046 U	0.17 J
N-Decane	ppb	NC	NC	-	-	-	-	-	-	-	-	-	0.056 U	0.097 J
N-Dodecane	ppb	NC	NC	-	-	-	-	-	-	-	-	-	0.18 J	0.078 U
N-Heptane	ppb	NC	NC	0.059 J	180	310 J	-	0.099 J	0.11 J	0.13 J	0.057 J	-	0.058 J	0.18 J
Nonane	ppb	NC	NC	-	-	-	-	-	-	-	-	-	0.043 U	0.084 J
N-Propylbenzene	ppb	NC	NC	0.056 U	17 U	48 U	-	0.050 U	0.050 U	0.050 U	0.050 U	-	0.056 U	0.37 J
N-Undecane	ppb	NC	NC	-	-	-	-	-	-	-	-	-	0.13 J	0.062 U
Octane	ppb	NC	NC	-	-	-	-	-	-	-	-	-	0.036 U	0.091 J

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5171, Bldg 9, 40 SW Corner Tree*	*Parcel 5171, Bldg 9, IA_A*	*Parcel 5171, Bldg 9, IA_B*	*Parcel 5171, Bldg 11*	*Parcel 5171, Bldg 11*	*Parcel 5171, Bldg 11*	*Parcel 5171, Bldg 11*	*Parcel 5171, Bldg 11*	*Parcel 5171, Bldg 11*	*Parcel 5171, Bldg 11*	*Parcel 5171, Bldg 11*
Sample Location:				*1951 Dryden Road*	*1951 Dryden Road*	*1951 Dryden Road*	*1915 Dryden Road*	*1915 Dryden Road*	*1915 Dryden Road*	*1915 Dryden Road*	*1915 Dryden Road*	*1915 Dryden Road*	*1915 Dryden Road*	*1915 Dryden Road*
Owner / Tenant:				*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*	*B&G Trucking*
Sample ID:				*OA-38443-032712-JC-222*	*IA-38443-032712-JC-193*	*IA-38443-031412-JC-195*	*CS-38443-011112-JC-060*	*OA-38443-011112-JC-058*	*OA-38443-011112-JC-059*	*CS-38443-011112-JC-060*	*OA-38443-011212-JC-070*	*-*	*CS-38443-080712-GL-069*	*OA-38443-080712-GL-070*
Sample Date:				*3/27/2012*	*3/27/2012*	*3/14/2012*	*1/11/2012*	*1/11/2012*	*1/11/2012* *Duplicate*	*1/12/2012*	*1/12/2012*	*4/4/2012*	*8/7/2012*	*8/7/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*											
o-Xylene	ppb	200	2000	0.061 U	**390**[a]	150 J	-	0.067 J	0.060 J	0.11 J	0.038 J	-	0.11 J	0.15 J
Pentane	ppb	NC	NC	-	-	-	-	-	-	-	-	-	0.90 J	0.79 J
Styrene	ppb	NC	NC	0.058 U	57 J	160 J	-	0.030 U	0.030 U	0.030 U	0.030 U	-	0.058 U	0.15 J
tert-Butyl alcohol	ppb	NC	NC	0.038 U	12 U	32 U	-	0.071 U	0.071 U	0.071 U	0.071 U	-	0.038 U	0.085 J
tert-Butylbenzene	ppb	NC	NC	0.066 U	20 U	56 U	-	0.047 U	0.047 U	0.047 U	0.047 U	-	0.066 U	0.066 U
Tetrachloroethene	ppb	25	250	0.040 U	12 U	**34 U**[a]	-	0.011 U	0.011 U	0.011 U	0.011 U	-	0.19 J	0.041 J
Tetrahydrofuran	ppb	NC	NC	0.063 U	19 U	54 U	-	6.3 J	0.72 J	0.018 U	0.018 U	-	0.077 J	0.098 J
Toluene	ppb	NC	NC	0.32	5800	7900	-	0.35	0.36	0.84	0.32	-	0.68	1.1
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	15 U	42 U	-	0.032 U	0.032 U	0.032 U	0.032 U	-	0.050 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	15 U	41 U	-	0.020 U	0.020 U	0.020 U	0.020 U	-	0.048 U	0.048 U
Trichloroethene	ppb	2	20	0.042 J	**13 J**[a]	**31 U**[ab]	-	0.030 U	0.030 U	0.29	0.030 U	-	0.94	0.036 U
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.18 J	7.3 U	20 U	-	0.22	0.24	0.22	0.21	-	0.26	0.37
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.071 J	9.4 U	26 U	-	0.072 J	0.071 J	0.078 J	0.070 J	-	0.081 J	0.070 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	11 U	30 U	-	0.019 U	0.019 U	0.019 U	0.019 U	-	0.035 U	0.035 U
Vinyl chloride	ppb	2	20	0.071 U	**22 U**[ab]	**60 U**[ab]	-	0.029 U	0.029 U	0.029 U	0.029 U	-	0.071 U	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-	-	0.24	0.24	0.33	0.14 J	-	-	-
Gases														
Methane	%	0.05	0.05	-	-	-	-	-	-	**0.10 U**[ab]	**0.065 U**[ab]	-	**0.20 U**[ab]	**0.19 U**[ab]
Field Parameter														
Methane, field (unfiltered)	%	0.05	0.05	-	-	-	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0	-	-	-
Methane, field (filtered)	%	0.05	0.05	0.0 / 0	0.0 / 0	0 / 0.0	-	-	-	-	-	0.0	0 / 0	0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tenatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5171, Bldg 11*	*Parcel 5171, Bldg 11*	*Parcel 5172 / 12 Overstreet*	*Parcel 5172 / 12 / IA_A Overstreet*	*Parcel 5172 / 12 / IA_B Overstreet*	*Parcel 5172 / 12 / S&J*	*Parcel 5172 / 12 / IA_A S&J*	*Parcel 5172 / 12 / IA_C S&J*	*Parcel 5172 / 12 / IA_D S&J*	*Parcel 5172, Bldg 14*	*Parcel 5172, Bldg 14*
Sample Location:				*1915 Dryden Road*	*1915 Dryden Road*	*2019 Dryden Road*	*2019 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*
Owner / Tenant:				*B&G Trucking*	*B&G Trucking*	*Overstreet Painting*	*Overstreet Painting*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*Bullseye Amusements*	*Bullseye Amusements*
Sample ID:				*OA-38443-080712-GL-071*	*OA-38443-080712-GL-071*	*OA-38443-031512-JC-214*	*IA-38443-031512-JC-215*	*IA-38443-031512-JC-217*	*OA-38443-030712-JC-110*	*IA-38443-030712-JC-111*	*IA-38443-030712-JC-114*	*IA-38443-030712-JC-116*	*OA-38443-010612-JC-016*	*OA-38443-080212-GL-037*
Sample Date:				*8/7/2012*	*8/7/2012*	*3/15/2012*	*3/15/2012*	*3/15/2012*	*3/7/2012*	*3/7/2012*	*3/7/2012*	*3/7/2012*	*1/6/2012*	*8/2/2012*
					Duplicate									
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*											
Volatile Organic Compounds														
1,1,1-Trichloroethane	ppb	NC	NC	0.030 U	-	0.030 U	0.030 U	0.12 U	0.030 U	0.030 U	0.030 U	0.030 U	0.035 U	0.030 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	-	0.061 U	0.061 U	0.24 U	0.061 U	0.061 U	0.061 U	0.061 U	0.040 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	-	0.054 U	0.054 U	0.22 U	0.054 U	0.054 U	0.054 U	0.054 U	0.019 U	0.054 U
1,1-Dichloroethane	ppb	16	160	0.026 U	-	0.026 U	0.026 U	0.10 U	0.026 U	0.026 U	0.026 U	0.026 U	0.035 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.032 U	-	0.032 U	0.032 U	0.13 U	0.032 U	0.032 U	0.032 U	0.032 U	0.030 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 UJ	-	0.098 U	0.098 U	0.39 U	0.098 UJ	0.098 UJ	0.098 UJ	0.098 UJ	0.050 U	0.098 UJ
1,2,4-Trimethylbenzene	ppb	NC	NC	0.076 J	-	0.063 U	2.6	9.6	0.063 U	0.39	0.18 J	0.34	0.052 U	0.063 U
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	-	0.044 U	0.044 U	0.18 U	0.044 U	0.044 U	0.044 U	0.044 U	0.018 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	-	0.070 U	0.070 U	0.28 U	0.070 U	0.070 U	0.070 U	0.070 U	0.048 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.047 U	-	0.047 U	0.047 U	0.19 U	0.047 U	0.047 U	0.047 U	0.047 U	0.031 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	0.014 U	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	-	0.052 U	0.052 U	0.21 U	0.052 U	0.052 U	0.052 U	0.052 U	0.014 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	-	0.032 U	0.032 U	0.13 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.065 U	-	0.065 UJ	2.8 J	2.2 J	0.065 U	0.10 J	0.065 U	0.095 J	0.051 U	0.065 U
1,3-Butadiene	ppb	NC	NC	0.064 U	-	0.064 U	0.064 U	0.26 U	0.064 U	0.064 U	0.064 U	0.064 U	0.010 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	-	0.065 U	0.065 U	0.26 U	0.065 U	0.065 U	0.065 U	0.065 U	0.044 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.064 U	-	0.064 U	0.064 U	0.26 U	0.064 U	0.28	0.25	0.25	0.044 U	0.064 U
1,4-Dioxane	ppb	NC	NC	0.080 U	-	0.080 U	0.080 U	0.32 U	0.080 UJ	0.080 UJ	0.080 UJ	0.080 UJ	0.088 U	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.095 J	-	0.064 J	21	12	0.039 U	0.089 J	0.061 J	0.095 J	0.052 J	0.084 J
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.72 J	-	0.35 J	2.5	2.0 J	0.20 UJ	0.56 J	0.38 J	0.65 J	0.29 J	0.56 J
2-Chlorotoluene	ppb	NC	NC	0.063 U	-	0.063 U	0.063 U	0.25 U	0.063 U	0.063 U	0.063 U	0.063 U	0.047 U	0.063 U
2-Hexanone	ppb	NC	NC	0.058 U	-	0.058 U	0.16 J	0.23 U	0.058 UJ	0.058 UJ	0.058 UJ	0.058 UJ	0.039 U	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	-	0.064 U	0.16 J	0.26 U	0.064 U	0.064 U	0.064 U	0.064 U	0.047 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.066 U	-	0.066 U	3.3	3.1	0.066 U	0.12 J	0.077 J	0.15 J	0.046 U	0.066 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.086 J	-	0.045 U	1.2	1.9 J	0.045 UJ	6.1 J	1.9 J	3.2 J	0.026 U	0.056 J
Acetone	ppb	NC	NC	6.5	-	2.5 J	16	23	1.4 U	5.5	3.3 J	5.2	1.2 J	5.3
Allyl chloride	ppb	NC	NC	0.048 U	-	0.048 U	0.048 U	0.19 U	0.048 U	0.048 U	0.048 U	0.048 U	0.019 U	0.048 U
Benzene	ppb	2	20	0.24	-	0.22	**9.7**[a]	**14**[a]	0.056 U	0.22	0.18 J	0.21	0.24	0.22
Benzyl chloride	ppb	NC	NC	0.078 U	-	0.078 U	0.084 J	0.31 U	0.078 U	0.078 U	0.078 U	0.078 U	0.046 U	0.078 U
Bromodichloromethane	ppb	NC	NC	0.044 U	-	0.044 U	0.044 U	0.18 U	0.044 U	0.044 U	0.044 U	0.044 U	0.028 U	0.044 U
Bromoform	ppb	NC	NC	0.048 U	-	0.048 U	0.048 U	0.19 U	0.048 U	0.048 U	0.048 U	0.048 U	0.019 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	-	0.032 U	0.032 U	0.13 U	0.032 U	0.032 U	0.032 U	0.032 U	0.012 U	0.032 U
Butane	ppb	NC	NC	0.91	-	1.1	110	130	0.78	2.5	1.9	2.8	1.4	1.0
Carbon disulfide	ppb	NC	NC	0.52	-	0.031 U	0.092 J	0.12 U	0.031 U	0.031 U	0.031 U	0.031 U	0.066 U	0.13 J
Carbon tetrachloride	ppb	NC	NC	0.073 J	-	0.10 J	0.084 J	0.15 UJ	0.038 U	0.081 J	0.078 J	0.075 J	0.080 J	0.075 J
Chlorobenzene	ppb	NC	NC	0.049 U	-	0.049 U	0.049 U	0.20 U	0.049 U	0.049 U	0.049 U	0.049 U	0.020 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	0.36	-	0.40	0.56	0.94	0.34	0.84	0.70	0.87	0.25 J	0.40
Chloroethane	ppb	NC	NC	0.035 U	-	0.035 U	0.035 U	0.14 U	0.035 U	0.035 U	0.035 U	0.035 U	0.016 U	0.035 U
Chloroform (Trichloromethane)	ppb	80	800	0.038 U	-	0.074 J	0.23	0.37 J	0.038 U	0.066 J	0.049 J	0.074 J	0.049 J	0.038 U
Chloromethane (Methyl chloride)	ppb	NC	NC	0.69	-	0.71	0.84	0.64 U	0.53	0.54	0.59	0.68	0.51	0.69
cis-1,2-Dichloroethene	ppb	37	370	0.060 U	-	0.060 U	0.35	0.37 J	0.060 U	0.077 J	0.060 U	0.093 J	0.014 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	-	0.074 U	0.074 U	0.30 U	0.074 U	0.074 U	0.074 U	0.074 U	0.016 U	0.074 U
Cyclohexane	ppb	NC	NC	0.24 J	-	0.064 J	3.4	7.6	0.040 U	0.21 J	0.077 J	0.16 J	0.055 J	0.078 J
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.079 J	-	0.057 U	0.27	0.23 U	0.057 U	0.057 U	0.057 U	0.060 J	0.048 U	0.057 U
Dibromochloromethane	ppb	NC	NC	0.042 U	-	0.042 U	0.042 U	0.17 U	0.042 U	0.042 U	0.042 U	0.042 U	0.021 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.46	-	0.47	0.42	0.44 J	0.52	0.49	0.50	0.56	0.49 J	0.52
Ethylbenzene	ppb	250	2500	0.12 J	-	0.068 U	8.4	10	0.068 U	0.17 J	0.094 J	0.17 J	0.058 J	0.075 J
Hexachlorobutadiene	ppb	NC	NC	0.078 UJ	-	0.078 U	0.078 U	0.31 U	0.078 UJ	0.078 UJ	0.078 UJ	0.078 UJ	0.065 U	0.078 UJ
Hexane	ppb	NC	NC	0.34 J	-	0.27 J	17	29	0.032 U	0.23 J	0.17 J	0.24 J	0.17 J	0.39 J
Isopropyl alcohol	ppb	NC	NC	1.1 J	-	0.76 J	6.2	6.7 J	0.10 J	25 J	14 J	30 J	0.037 U	0.53 J
Isopropyl benzene	ppb	NC	NC	0.060 U	-	0.060 U	1.2	0.72 J	0.060 U	0.060 U	0.060 U	0.060 U	0.031 U	0.060 U
m&p-Xylenes	ppb	200	2000	0.37	-	0.12 U	34	37	0.12 U	0.58	0.29	0.51	0.15 J	0.19 J
Methyl methacrylate	ppb	NC	NC	0.079 U	-	0.079 U	0.079 U	1.1 J	0.079 U	0.26 J	0.13 J	0.079 U	0.013 U	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	-	0.17 U	0.17 U	0.68 U	0.17 U	0.17 U	0.17 U	0.17 U	0.016 U	0.17 U
Methylene chloride	ppb	NC	NC	0.30 J	-	0.045 U	2.3	10	0.14 J	0.45 J	0.40 J	0.39 J	0.12 J	0.045 U
Naphthalene	ppb	2.9	NC	0.090 UJ	-	0.090 U	0.37 J	0.89 J	0.090 UJ	0.12 J	0.090 UJ	0.090 UJ	0.086 U	0.090 UJ
N-Butylbenzene	ppb	NC	NC	0.046 U	-	0.046 U	1.1	0.82 J	0.046 U	0.046 U	0.046 U	0.046 U	0.055 U	0.046 U
N-Decane	ppb	NC	NC	0.31 J	-	-	-	-	-	3.8	1.6	-	-	0.056 U
N-Dodecane	ppb	NC	NC	0.078 U	-	-	-	-	-	0.56 J	0.14 J	-	-	0.078 UJ
N-Heptane	ppb	NC	NC	0.20 J	-	0.092 J	5.7	10	0.047 U	1.9	0.59	1.0	0.085 J	0.19 J
Nonane	ppb	NC	NC	0.17 J	-	-	-	-	-	1.7	0.70	-	-	0.043 U
N-Propylbenzene	ppb	NC	NC	0.056 U	-	0.056 U	1.9	1.9	0.056 U	0.057 J	0.056 U	0.056 J	0.050 U	0.056 U
N-Undecane	ppb	NC	NC	0.12 J	-	-	-	-	-	1.6 J	0.53 J	-	-	0.062 U
Octane	ppb	NC	NC	0.085 J	-	-	-	-	-	0.11 J	0.066 J	-	-	0.077 J

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5171, Bldg 11*	*Parcel 5171, Bldg 11*	*Parcel 5172/12 Overstreet*	*Parcel 5172/12/IA_A Overstreet*	*Parcel 5172/12/IA_B Overstreet*	*Parcel 5172/12/S&J*	*Parcel 5172/12/IA_A S&J*	*Parcel 5172/12/IA_C S&J*	*Parcel 5172/12/IA_D S&J*	*Parcel 5172, Bldg 14*	*Parcel 5172, Bldg 14*
Sample Location:				*1915 Dryden Road*	*1915 Dryden Road*	*2019 Dryden Road*	*2019 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2015 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*
Owner/Tenant:				*B&G Trucking*	*B&G Trucking*	*Overstreet Painting*	*Overstreet Painting*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*S&J Precision*	*Bullseye Amusements*	*Bullseye Amusements*
Sample ID:				*OA-38443-080712-GL-071*	*OA-38443-080712-GL-071*	*OA-38443-031512-JC-214*	*IA-38443-031512-JC-215*	*IA-38443-031512-JC-217*	*OA-38443-030712-JC-110*	*IA-38443-030712-JC-111*	*IA-38443-030712-JC-114*	*IA-38443-030712-JC-116*	*OA-38443-010612-JC-016*	*OA-38443-080212-GL-037*
Sample Date:				*8/7/2012*	*8/7/2012*	*3/15/2012*	*3/15/2012*	*3/15/2012*	*3/7/2012*	*3/7/2012*	*3/7/2012*	*3/7/2012*	*1/6/2012*	*8/2/2012*
					Duplicate									
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*											
o-Xylene	ppb	200	2000	0.15 J	-	0.061 U	12	12	0.061 U	0.25	0.12 J	0.23	0.051 J	0.062 J
Pentane	ppb	NC	NC	0.76 J	-	-	-	-	-	4.3	4.1	-	-	0.82 J
Styrene	ppb	NC	NC	0.092 J	-	0.058 U	0.55	0.58 J	0.058 U	0.075 J	0.058 U	0.067 J	0.030 U	0.058 U
tert-Butyl alcohol	ppb	NC	NC	0.038 U	-	0.038 U	0.27 J	0.84 J	0.038 U	0.15 J	0.11 J	0.18 J	0.071 U	0.038 U
tert-Butylbenzene	ppb	NC	NC	0.066 U	-	0.066 U	0.066 U	0.26 U	0.066 U	0.066 U	0.066 U	0.066 U	0.047 U	0.066 U
Tetrachloroethene	ppb	25	250	0.048 J	-	0.057 J	0.24	0.51 J	0.040 U	0.62	0.41	0.67	0.023 J	0.040 U
Tetrahydrofuran	ppb	NC	NC	0.078 J	-	0.063 U	0.22 J	0.25 U	0.063 U	0.063 U	0.075 J	0.063 U	0.018 U	0.063 U
Toluene	ppb	NC	NC	0.86	-	0.48	38	74	0.054 U	1.5	0.83	1.6	0.39	0.85
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	-	0.050 U	0.066 J	0.20 U	0.050 U	0.083 J	0.050 U	0.089 J	0.032 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	-	0.048 U	0.048 U	0.19 U	0.048 U	0.048 U	0.048 U	0.048 U	0.020 U	0.048 U
Trichloroethene	ppb	2	20	0.051 J	-	0.10 J	**5.0**[a]	**5.6**[a]	0.036 U	**2.7**[a]	1.6	**3.1**[a]	0.030 U	0.036 U
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.26	-	0.24	0.87	0.55 J	0.17 J	0.27	0.24	0.28	0.21	0.29
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.072 J	-	0.081 J	0.072 J	0.12 U	0.031 U	0.066 J	0.062 J	0.074 J	0.076 J	0.071 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	-	0.035 U	0.035 U	0.14 U	0.035 U	0.035 U	0.035 U	0.035 U	0.019 U	0.035 U
Vinyl chloride	ppb	2	20	0.071 U	-	0.071 U	0.071 U	0.28 U	0.071 U	0.071 U	0.071 U	0.071 U	0.029 U	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	0.20	-
Gases														
Methane	%	0.05	0.05	**0.19 U**[ab]	-	-	-	-	-	**0.19 U**[ab]	**0.20 U**[ab]	-	-	**0.21 U**[ab]
Field Parameter														
Methane, field (unfiltered)	%	0.05	0.05	-	-	-	-	-	-	-	-	-	0.0 / 0.0	-
Methane, field (filtered)	%	0.05	0.05	-	0	0 / 0.0	0 / 0.0	0 / 0.0	0.0 / 0.0	0.0 / 0.0	0.0 / 0	0.0 / 0	-	0 / 0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tenatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5172, Bldg 14, IA_A*	*Parcel 5172, Bldg 14, IA_A*	*Parcel 5172, Bldg 14, IA_B*	*Parcel 5172, Bldg 14, IA_B*	*Parcel 5172, Bldg 14, IA_C*	*Parcel 5172, Bldg 14, IA_C*	*Parcel 5172, Bldg 14, IA_C*	*Parcel 5172, Bldg 14, on top of GP-15-09*	*Parcel 5172, Bldg 13*	*Parcel 5172, Bldg 13*	*Parcel 5172, Bldg 13, IA*
Sample Location:				*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2019 Dryden Road*	*2019 Dryden Road*	*2019 Dryden Road*
Owner/Tenant:				*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Overstreet Painting*	*Overstreet Painting*	*Overstreet Painting*
Sample ID:				*IA-38443-032712-JC-224*	*IA-38443-080212-GL-032*	*IA-38443-032712-JC-226*	*IA-38443-080212-GL-034*	*IA-38443-032712-JC-228*	*IA-38443-032712-JC-228*	*IA-38443-080212-GL-036*	*OA-38443-032712-JC-223*	*OA-38443-031512-JC-219*	*-*	*IA-38443-031512-JC-220*
Sample Date:				*3/27/2012*	*8/2/2012*	*3/27/2012*	*8/2/2012*	*3/26/2012*	*3/27/2012*	*8/2/2012*	*3/27/2012*	*3/15/2012*	*8/7/2012*	*3/15/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*											
Volatile Organic Compounds														
1,1,1-Trichloroethane	ppb	NC	NC	0.082 J	0.57	0.14 J	0.57	-	0.088 J	0.53	0.030 U	0.030 U	-	0.60 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	0.061 U	0.061 U	0.12 U	-	0.061 U	0.12 U	0.061 U	0.061 U	-	1.2 U
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	0.054 U	0.054 U	0.11 U	-	0.054 U	0.11 U	0.054 U	0.054 U	-	1.1 U
1,1-Dichloroethane	ppb	16	160	0.026 U	0.046 J	0.035 J	0.055 J	-	0.026 U	0.052 U	0.026 U	0.026 U	-	0.52 U
1,1-Dichloroethene	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.064 U	-	0.032 U	0.064 U	0.032 U	0.032 U	-	0.64 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 U	0.098 U	0.098 U	0.20 U	-	0.098 U	0.20 U	0.098 U	0.098 U	-	2.0 U
1,2,4-Trimethylbenzene	ppb	NC	NC	0.11 J	2.1	0.64	1.6	-	0.72	1.4	0.063 U	0.12 J	-	53
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	0.044 U	0.044 U	0.088 U	-	0.044 U	0.088 U	0.044 U	0.044 U	-	0.88 U
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	0.070 U	0.070 U	0.14 U	-	0.070 U	0.14 U	0.070 U	0.070 U	-	1.4 U
1,2-Dichloroethane	ppb	NC	NC	0.047 U	0.047 U	0.047 U	0.094 U	-	0.047 U	0.094 U	0.047 U	0.047 U	-	1.5 J
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	0.052 U	0.052 U	0.10 U	-	0.052 U	0.10 U	0.052 U	0.052 U	-	1.0 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.064 U	-	0.032 U	0.064 U	0.032 U	0.032 U	-	0.64 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.065 UJ	0.58	0.13 J	0.49	-	0.16 J	0.13 U	0.065 UJ	0.065 UJ	-	8.2 J
1,3-Butadiene	ppb	NC	NC	0.55	1.4	0.72	1.7	-	0.59	1.6	0.064 U	0.064 U	-	1.3 U
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	0.065 U	0.065 U	0.13 U	-	0.065 U	0.13 U	0.065 U	0.065 U	-	1.3 U
1,4-Dichlorobenzene	ppb	NC	NC	0.064 U	0.083 J	0.064 U	0.13 U	-	0.064 U	0.13 U	0.064 U	0.064 U	-	1.3 U
1,4-Dioxane	ppb	NC	NC	0.080 U	0.080 U	0.080 U	0.16 U	-	0.080 U	0.16 U	0.080 U	0.080 U	-	1.6 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.55	0.32 J	0.12 J	0.30 J	-	0.096 J	0.30 J	0.039 U	0.25 J	-	99
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	1.7	8.1	3.4	12	-	2.8	7.3	0.38 J	0.44 J	-	4.0 U
2-Chlorotoluene	ppb	NC	NC	0.063 U	0.063 U	0.063 U	0.13 U	-	0.063 U	0.13 U	0.063 U	0.063 U	-	1.3 U
2-Hexanone	ppb	NC	NC	0.058 U	0.10 J	0.058 U	0.12 U	-	0.058 U	0.12 U	0.058 U	0.058 U	-	1.2 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	0.064 U	0.064 U	0.13 U	-	0.064 U	0.13 U	0.064 U	0.064 U	-	1.3 U
4-Ethyl toluene	ppb	NC	NC	0.066 U	0.56	0.088 J	0.49 J	-	0.095 J	0.13 U	0.066 U	0.066 U	-	11
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.13 J	2.0	0.21 J	1.6	-	0.23 J	1.7	0.045 U	0.045 U	-	1.2 J
Acetone	ppb	NC	NC	7.7	35 J	12	32 J	-	15	31 J	1.4 U	3.9 J	-	28 U
Allyl chloride	ppb	NC	NC	0.048 U	0.048 U	0.048 U	0.096 U	-	0.048 U	0.096 U	0.048 U	0.048 U	-	0.96 U
Benzene	ppb	2	20	0.58	**2.4[a]**	0.67	**2.1[a]**	-	0.60	2.0	0.15 J	0.34	-	**29[ab]**
Benzyl chloride	ppb	NC	NC	0.078 U	0.078 U	0.078 U	0.16 U	-	0.078 U	0.16 U	0.078 U	0.078 U	-	1.6 U
Bromodichloromethane	ppb	NC	NC	0.044 U	0.044 U	0.044 U	0.088 U	-	0.044 U	0.088 U	0.044 U	0.044 U	-	0.88 U
Bromoform	ppb	NC	NC	0.048 U	0.048 U	0.048 U	0.096 U	-	0.048 U	0.096 U	0.048 U	0.048 U	-	0.96 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.064 U	-	0.032 U	0.064 U	0.032 U	0.032 U	-	0.64 U
Butane	ppb	NC	NC	3.1	7.0	4.2	7.7	-	3.5	6.5	0.72	15	-	270
Carbon disulfide	ppb	NC	NC	0.35 J	0.30 J	0.28 J	0.28 J	-	0.22 J	0.27 J	0.031 U	0.031 U	-	0.62 U
Carbon tetrachloride	ppb	NC	NC	0.090 J	0.12 J	0.090 J	0.11 J	-	0.090 J	0.12 J	0.086 J	0.086 J	-	0.76 UJ
Chlorobenzene	ppb	NC	NC	0.049 U	0.049 U	0.049 U	0.098 U	-	0.049 U	0.098 U	0.049 U	0.049 U	-	0.98 U
Chlorodifluoromethane	ppb	NC	NC	0.27	0.60	0.27	0.62	-	0.26	0.66	0.32	4.5	-	3.3 J
Chloroethane	ppb	NC	NC	0.035 U	0.035 U	0.035 U	0.070 U	-	0.035 U	0.070 U	0.035 U	0.035 U	-	0.70 U
Chloroform (Trichloromethane)	ppb	80	800	0.038 U	0.15 J	0.038 U	0.18 J	-	0.038 U	0.15 J	0.038 U	0.060 J	-	0.76 U
Chloromethane (Methyl chloride)	ppb	NC	NC	0.87	1.9	1.1	2.3	-	0.97	1.7	0.57	0.63	-	3.2 U
cis-1,2-Dichloroethene	ppb	37	370	0.060 U	0.060 U	0.060 U	0.12 U	-	0.060 U	0.12 U	0.060 U	0.060 U	-	1.2 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	0.074 U	0.074 U	0.15 U	-	0.074 U	0.15 U	0.074 U	0.074 U	-	1.5 U
Cyclohexane	ppb	NC	NC	0.29 J	0.37 J	0.33 J	0.50 J	-	0.31 J	0.40 J	0.040 U	0.14 J	-	9.0 J
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.057 U	0.21	0.061 J	0.15 J	-	0.084 J	0.16 J	0.057 U	0.057 U	-	1.1 U
Dibromochloromethane	ppb	NC	NC	0.042 U	0.042 U	0.042 U	0.084 U	-	0.042 U	0.084 U	0.042 U	0.042 U	-	0.84 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.44	0.64	0.42	0.68	-	0.43	0.72	0.42	0.46	-	1.4 U
Ethylbenzene	ppb	250	2500	0.21	1.2	0.32	0.95	-	0.33	0.81	0.068 U	0.14 J	-	23
Hexachlorobutadiene	ppb	NC	NC	0.078 U	0.078 U	0.078 U	0.16 U	-	0.078 U	0.16 U	0.078 U	0.078 U	-	1.6 U
Hexane	ppb	NC	NC	0.58	1.2	0.68	1.2	-	0.44 J	1.0	0.24 J	1.3	-	46
Isopropyl alcohol	ppb	NC	NC	2.8	9.3	6.2	10	-	6.1	10	0.21 J	0.89 J	-	14 J
Isopropyl benzene	ppb	NC	NC	0.060 U	0.13 J	0.060 U	0.12 U	-	0.060 U	0.12 U	0.060 U	0.060 U	-	2.7 J
m&p-Xylenes	ppb	200	2000	0.58	4.4	1.3	3.6	-	1.3	3.1	0.12 U	0.46	-	100
Methyl methacrylate	ppb	NC	NC	0.079 U	0.39 J	0.079 U	0.34 J	-	0.079 U	0.36 J	0.079 U	0.079 U	-	1.6 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	0.17 U	0.17 U	0.34 U	-	0.17 U	0.34 U	0.17 U	0.17 U	-	3.4 U
Methylene chloride	ppb	NC	NC	0.045 U	0.045 U	0.045 U	0.090 U	-	0.045 U	0.090 U	0.045 U	8.8	-	0.90 U
Naphthalene	ppb	2.9	NC	0.090 U	0.37 J	0.20 J	0.34 J	-	0.17 J	0.18 U	0.090 U	0.090 U	-	**3.3 J[a]**
N-Butylbenzene	ppb	NC	NC	0.046 UJ	0.10 J	0.046 UJ	0.092 U	-	0.046 UJ	0.092 U	0.046 UJ	0.046 U	-	2.5 J
N-Decane	ppb	NC	NC	-	0.54 J	-	0.47 J	-	-	0.39 J	-	-	-	-
N-Dodecane	ppb	NC	NC	-	0.75 J	-	0.77 J	-	-	0.35 J	-	-	-	-
N-Heptane	ppb	NC	NC	0.49 J	2.6	0.89	4.2	-	0.67	2.7	0.093 J	0.16 J	-	16
Nonane	ppb	NC	NC	-	0.26 J	-	0.24 J	-	-	0.22 J	-	-	-	-
N-Propylbenzene	ppb	NC	NC	0.056 U	0.21 J	0.056 U	0.16 J	-	0.057 J	0.15 J	0.056 U	0.056 U	-	6.0 J
N-Undecane	ppb	NC	NC	-	2.0	-	1.7 J	-	-	1.5 J	-	-	-	-
Octane	ppb	NC	NC	-	0.52	-	0.64 J	-	-	0.46 J	-	-	-	-

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5172, Bldg 14, IA_A*	*Parcel 5172, Bldg 14, IA_A*	*Parcel 5172, Bldg 14, IA_B*	*Parcel 5172, Bldg 14, IA_B*	*Parcel 5172, Bldg 14, IA_C*	*Parcel 5172, Bldg 14, IA_C*	*Parcel 5172, Bldg 14, IA_C*	*Parcel 5172, Bldg 14, on top of GP-15-09*	*Parcel 5172, Bldg 13*	*Parcel 5172, Bldg 13*	*Parcel 5172, Bldg 13, IA*
Sample Location:				*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2003 Dryden Road*	*2019 Dryden Road*	*2019 Dryden Road*	*2019 Dryden Road*
Owner/Tenant:				*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Bullseye Amusements*	*Overstreet Painting*	*Overstreet Painting*	*Overstreet Painting*
Sample ID:				*IA-38443-032712-JC-224*	*IA-38443-080212-GL-032*	*IA-38443-032712-JC-226*	*IA-38443-080212-GL-034*	*IA-38443-032712-JC-228*	*IA-38443-032712-JC-228*	*IA-38443-080212-GL-036*	*OA-38443-032712-JC-223*	*OA-38443-031512-JC-219*	*-*	*IA-38443-031512-JC-220*
Sample Date:				*3/27/2012*	*8/2/2012*	*3/27/2012*	*8/2/2012*	*3/26/2012*	*3/27/2012*	*8/2/2012*	*3/27/2012*	*3/15/2012*	*8/7/2012*	*3/15/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*											
o-Xylene	ppb	200	2000	0.19 J	1.7	0.48	1.4	-	0.47	1.2	0.061 U	0.14 J	-	34
Pentane	ppb	NC	NC	-	15	-	19	-	-	26	-	-	-	-
Styrene	ppb	NC	NC	0.058 U	0.62	0.083 J	0.55	-	0.094 J	0.47	0.058 U	0.058 U	-	1.2 U
tert-Butyl alcohol	ppb	NC	NC	0.50 J	0.94 J	0.56 J	0.84 J	-	0.38 J	0.97 J	0.038 U	0.041 J	-	0.76 U
tert-Butylbenzene	ppb	NC	NC	0.066 U	0.066 U	0.066 U	0.13 U	-	0.066 U	0.13 U	0.066 U	0.066 U	-	1.3 U
Tetrachloroethene	ppb	25	250	0.040 U	0.054 J	0.040 U	0.080 U	-	0.040 U	0.080 U	0.040 U	0.054 J	-	0.80 U
Tetrahydrofuran	ppb	NC	NC	0.18 J	0.063 U	0.10 J	0.13 U	-	0.063 U	0.13 U	0.063 U	0.063 U	-	1.3 U
Toluene	ppb	NC	NC	13	35	22	57	-	34	34	0.39	3.1	-	580
trans-1,2-Dichloroethene	ppb	NC	NC	0.091 J	0.36	0.17 J	0.44	-	0.10 J	0.42	0.050 U	0.050 U	-	1.0 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	0.048 U	0.048 U	0.096 U	-	0.048 U	0.096 U	0.048 U	0.048 U	-	0.96 U
Trichloroethene	ppb	2	20	0.047 J	0.043 J	0.080 J	0.072 U	-	0.036 J	0.079 J	0.036 U	0.097 J	-	0.98 J
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.22	0.47	0.25	0.48	-	0.23	0.47	0.20	0.53	-	0.58 J
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.14 J	0.99	0.20	1.1	-	0.14 J	0.96	0.068 J	0.070 J	-	0.62 U
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	0.035 U	0.035 U	0.070 U	-	0.035 U	0.070 U	0.035 U	0.035 U	-	0.70 U
Vinyl chloride	ppb	2	20	0.071 U	0.071 U	0.071 U	0.14 U	-	0.071 U	0.14 U	0.071 U	0.071 U	-	1.4 U
Xylenes (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-
Gases														
Methane	%	0.05	0.05	-	**0.21 U[ab]**	-	**0.19 U[ab]**	-	-	**0.19 U[ab]**	-	-	-	-
Field Parameter														
Methane, field (unfiltered)	%	0.05	0.05	-	-	-	-	-	-	-	-	-	-	-
Methane, field (filtered)	%	0.05	0.05	0.0	0 / 0	0 / 0.0	0 / 0	0	0.0	0 / 0	0.0 / 0	0.0 / 0	0 / 0	0 / 0.0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tenatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5173, Bldg 15*	*Parcel 5173, Bldg 15, IA_A*	*Parcel 5173, Bldg 15, IA_B*	*Parcel 5173, Bldg 15, IA_C*	*Parcel 5174, Outdoor Air*	*Parcel 5174, Outdoor Air*	*Parcel 5174, Outdoor Air*	*Parcel 5174, Outdoor Air*	*Parcel 5174, Bldg 16, IA_A*	*Parcel 5174, Bldg 16, IA_A*	*Parcel 5174, Bldg 16, IA_C*
Sample Location:				*2031 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*
Owner / Tenant:				*SIM Trainer*	*SIM Trainer*	*SIM Trainer*	*SIM Trainer*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*
Sample ID:				*OA-38443-031312-JC-174*	*IA-38443-031312-JC-175*	*IA-38443-031312-JC-177*	*IA-38443-031312-JC-179*	*SS-38443-010912-JC-043*	*OA-38443-030612-JC-085*	*OA-38443-080312-GL-047*	*OA-38443-091412-GL-028*	*IA-38443-030612-JC-086*	*IA-38443-080312-GL-039*	*IA-38443-030612-JC-088*
Sample Date:				*3/13/2012*	*3/13/2012*	*3/13/2012*	*3/13/2012*	*1/9/2012*	*3/6/2012*	*8/3/2012*	*9/14/2012*	*3/6/2012*	*8/3/2012*	*3/6/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*											
Volatile Organic Compounds														
1,1,1-Trichloroethane	ppb	NC	NC	0.030 U	0.030 U	0.030 U	0.12 U	0.035 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	0.061 U	0.061 U	0.24 U	0.040 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	0.054 U	0.054 U	0.22 U	0.019 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U
1,1-Dichloroethane	ppb	16	160	0.026 U	0.026 U	0.026 U	0.10 U	0.035 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.13 U	0.030 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 U	0.098 U	0.098 U	0.39 U	0.050 U	0.098 U	0.098 UJ	0.098 U	0.098 U	0.098 UJ	0.098 U
1,2,4-Trimethylbenzene	ppb	NC	NC	0.063 U	0.45	0.34	0.74 J	0.052 U	0.063 U	0.063 U	0.097 J	1.9	3.7	1.1
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	0.044 U	0.044 U	0.18 U	0.018 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	0.070 U	0.070 U	0.28 U	0.048 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.047 U	0.047 U	0.047 U	0.19 U	0.031 U	0.047 U	0.047 U	0.047 U	0.047 U	0.36	0.062 J
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	0.014 U	-	-	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	0.052 U	0.052 U	0.21 U	0.014 U	0.052 U	0.052 U	0.052 U	0.052 U	0.071 J	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.13 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.065 U	0.12 J	0.088 J	0.26 U	0.051 U	0.065 U	0.065 U	0.065 U	0.61	1.1	0.32
1,3-Butadiene	ppb	NC	NC	0.064 U	0.064 U	0.31 J	0.26 U	0.010 U	0.064 U	0.064 U	0.081 J	0.064 U	0.064 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	0.065 U	0.065 U	0.26 U	0.044 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.064 U	0.064 UJ	0.064 UJ	0.26 UJ	0.044 U	0.064 U	0.064 U	0.064 UJ	0.064 U	0.064 U	0.064 U
1,4-Dioxane	ppb	NC	NC	0.080 U	0.080 U	0.080 U	0.32 U	0.088 U	0.080 U	0.080 U	0.080 UJ	0.080 U	0.31 J	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.039 U	0.055 J	0.039 U	0.85 J	0.066 J	0.039 J	0.052 J	0.10 J	0.34 J	0.39 J	0.23 J
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.38 J	0.85 J	0.57 J	2.3 J	0.43 J	0.20 U	0.79 J	0.46 J	0.33 J	30	0.36 J
2-Chlorotoluene	ppb	NC	NC	0.063 U	0.063 U	0.063 U	0.25 U	0.047 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
2-Hexanone	ppb	NC	NC	0.058 U	0.058 U	0.058 U	0.23 U	0.039 U	0.058 U	0.058 U	0.058 U	0.058 U	0.12 J	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	0.064 U	0.064 U	0.26 U	0.047 U	0.064 U	0.064 U	0.064 U	0.064 U	0.092 J	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.066 U	0.33 J	0.13 J	0.47 J	0.046 U	0.066 U	0.066 U	0.066 U	0.85	0.88	0.43
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.045 U	3.7	11	6.1	0.026 U	0.045 U	0.13 J	0.045 U	0.045 U	0.25 J	0.045 U
Acetone	ppb	NC	NC	2.2 J	23	6.1	10 J	1.8 J	1.4 U	7.6	2.8 J	18	37	11
Allyl chloride	ppb	NC	NC	0.048 U	0.048 U	0.048 U	0.19 U	0.019 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
Benzene	ppb	2	20	0.068 J	0.46	0.51	0.51 J	0.27	0.14 J	0.13 J	0.23	0.40	0.50	0.35
Benzyl chloride	ppb	NC	NC	0.078 U	0.078 U	0.078 U	0.31 U	0.046 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
Bromodichloromethane	ppb	NC	NC	0.044 U	0.044 U	0.044 U	0.18 U	0.028 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U
Bromoform	ppb	NC	NC	0.048 U	0.048 U	0.048 U	0.19 U	0.019 U	0.048 U	0.048 U	0.048 UJ	0.048 U	0.048 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.13 U	0.012 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
Butane	ppb	NC	NC	0.75	2.7 J	1.2 J	8.9 J	2.2	0.89	0.70	1.1	2.3	1.7	6.7
Carbon disulfide	ppb	NC	NC	0.031 U	0.088 J	0.095 J	0.12 U	0.066 U	0.031 U	0.16 J	0.031 U	0.071 J	0.54	0.043 J
Carbon tetrachloride	ppb	NC	NC	0.071 J	0.096 J	0.082 J	0.15 U	0.064 J	0.049 J	0.074 J	0.075 J	0.079 J	0.075 J	0.089 J
Chlorobenzene	ppb	NC	NC	0.049 U	0.049 U	0.049 U	0.20 U	0.020 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	0.49	0.94 J	0.97 J	1.5 J	0.31 J	1.1	0.34	0.48	0.38	0.53	0.34
Chloroethane	ppb	NC	NC	0.035 U	0.035 U	0.035 U	0.14 U	0.016 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U
Chloroform (Trichloromethane)	ppb	80	800	0.038 U	0.077 J	0.038 U	0.15 U	0.031 U	0.038 U	0.038 U	0.055 J	0.038 U	0.038 U	0.038 U
Chloromethane (Methyl chloride)	ppb	NC	NC	0.60	1.1	0.81	0.64 U	0.48 J	0.75	0.59	0.60	0.47 J	0.78	0.64
cis-1,2-Dichloroethene	ppb	37	370	0.060 U	0.060 U	0.060 U	0.24 U	0.014 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	0.074 U	0.074 U	0.30 U	0.016 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U
Cyclohexane	ppb	NC	NC	0.040 U	0.33 J	0.13 J	4.1	0.067 J	0.040 U	0.052 J	0.14 J	2.8	2.7	0.98
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.057 U	0.057 U	0.057 U	0.23 U	0.048 U	0.057 U	0.057 U	0.057 U	0.057 U	0.14 J	0.057 U
Dibromochloromethane	ppb	NC	NC	0.042 U	0.042 U	0.042 U	0.17 U	0.021 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.41	0.56	0.54	0.72 J	0.50	0.72	0.50	0.48	0.55	0.48	0.56
Ethylbenzene	ppb	250	2500	0.068 U	0.15 J	0.12 J	0.43 J	0.086 J	0.068 U	0.068 U	0.12 J	0.68	3.0	0.57
Hexachlorobutadiene	ppb	NC	NC	0.078 U	0.078 U	0.078 U	0.31 U	0.065 U	0.078 U	0.078 UJ	0.078 U	0.078 U	0.078 UJ	0.078 U
Hexane	ppb	NC	NC	0.098 J	2.5	0.61	25	0.27	0.26 J	0.40 J	0.31 J	11	14	13
Isopropyl alcohol	ppb	NC	NC	0.15 J	24	1.3 J	6.1 J	0.55 J	0.42 J	0.33 J	0.51 J	0.35 J	1.0 J	0.32 J
Isopropyl benzene	ppb	NC	NC	0.060 U	0.060 U	0.060 U	0.24 U	0.031 U	0.060 U	0.060 U	0.060 U	0.15 J	0.17 J	0.072 J
m&p-Xylenes	ppb	200	2000	0.12 U	0.52	0.43	1.6	0.27 J	0.12 U	0.16 J	0.35	2.4	11	2.0
Methyl methacrylate	ppb	NC	NC	0.079 U	0.079 U	0.079 U	0.32 U	0.013 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	0.17 U	0.17 U	0.68 U	0.016 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylene chloride	ppb	NC	NC	0.17 J	0.31 J	0.29 J	1.4 J	0.21 U	0.84	0.045 U	0.48 J	1.3	2.0	0.045 U
Naphthalene	ppb	2.9	NC	0.090 U	0.25 J	0.090 U	0.36 U	0.086 U	0.090 U	0.090 UJ	0.090 U	0.090 U	0.40 J	0.093 J
N-Butylbenzene	ppb	NC	NC	0.046 U	0.068 J	0.046 U	0.18 U	0.055 U	0.046 U	0.046 U	0.046 U	0.046 U	0.20 J	0.062 J
N-Decane	ppb	NC	NC	-	-	-	-	-	-	0.12 J	0.066 J	0.51 J	5.3 J	0.26 J
N-Dodecane	ppb	NC	NC	-	-	-	-	-	-	0.11 J	0.078 U	0.078 U	0.34 J	0.078 U
N-Heptane	ppb	NC	NC	0.047 U	0.23 J	0.097 J	1.4 J	0.15 J	0.063 J	0.088 J	0.23 J	7.2	5.5	1.7
Nonane	ppb	NC	NC	-	-	-	-	-	-	0.085 J	0.043 U	3.0	4.2	1.0
N-Propylbenzene	ppb	NC	NC	0.056 U	0.056 U	0.056 U	0.22 U	0.050 U	0.056 U	0.056 U	0.056 U	0.57	0.50	0.27 J
N-Undecane	ppb	NC	NC	-	-	-	-	-	-	0.063 J	0.062 U	0.24 J	2.4	0.13 J
Octane	ppb	NC	NC	-	-	-	-	-	-	0.051 J	0.045 J	0.79	0.99	0.47

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5173, Bldg 15*	*Parcel 5173, Bldg 15, IA_A*	*Parcel 5173, Bldg 15, IA_B*	*Parcel 5173, Bldg 15, IA_C*	*Parcel 5174, Outdoor Air*	*Parcel 5174, Outdoor Air*	*Parcel 5174, Outdoor Air*	*Parcel 5174, Outdoor Air*	*Parcel 5174, Bldg 16, IA_A*	*Parcel 5174, Bldg 16, IA_A*	*Parcel 5174, Bldg 16, IA_C*
Sample Location:				*2031 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*	*2031 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*
Owner/Tenant:				*SIM Trainer*	*SIM Trainer*	*SIM Trainer*	*SIM Trainer*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*
Sample ID:				*OA-38443-031312-JC-174*	*IA-38443-031312-JC-175*	*IA-38443-031312-JC-177*	*IA-38443-031312-JC-179*	*SS-38443-010912-JC-043*	*OA-38443-030612-JC-085*	*OA-38443-080312-GL-047*	*OA-38443-091412-GL-028*	*IA-38443-030612-JC-086*	*IA-38443-080312-GL-039*	*IA-38443-030612-JC-088*
Sample Date:				*3/13/2012*	*3/13/2012*	*3/13/2012*	*3/13/2012*	*1/9/2012*	*3/6/2012*	*8/3/2012*	*9/14/2012*	*3/6/2012*	*8/3/2012*	*3/6/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*											
o-Xylene	ppb	200	2000	0.061 U	0.21	0.17 J	0.62 J	0.10 J	0.061 U	0.063 J	0.12 J	1.1	3.0	0.78
Pentane	ppb	NC	NC	-	-	-	-	-	-	0.55 J	0.87 J	8.3	46	7.0
Styrene	ppb	NC	NC	0.058 U	0.12 J	0.083 J	0.23 U	0.030 U	0.058 U	0.058 U	0.058 U	0.058 U	0.085 J	0.058 U
tert-Butyl alcohol	ppb	NC	NC	0.046 J	0.28 J	0.12 J	0.15 U	0.071 U	0.038 U	0.038 U	0.038 U	0.045 J	0.27 J	0.059 J
tert-Butylbenzene	ppb	NC	NC	0.066 U	0.066 U	0.066 U	0.26 U	0.047 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U
Tetrachloroethene	ppb	25	250	0.040 U	0.84	1.4	**120[a]**	0.011 U	0.040 U	0.040 U	0.054 J	0.040 U	0.040 U	0.040 U
Tetrahydrofuran	ppb	NC	NC	0.063 U	0.063 U	0.063 U	0.25 U	0.018 U	0.063 U	0.063 U	0.11 J	0.26 J	0.29 J	0.063 U
Toluene	ppb	NC	NC	0.16 J	3.6	1.3	15	0.65	0.18 J	1.1	0.61	41	44	19
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	0.050 U	0.050 U	0.20 U	0.032 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	0.048 U	0.048 U	0.19 U	0.020 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
Trichloroethene	ppb	2	20	0.036 U	**5.2[a]**	0.13 J	1.6	0.42	0.66	0.036 U	0.059 J	0.036 U	0.050 J	0.036 U
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.20	0.35	0.24	0.30 J	0.24	0.23	0.50	0.30	0.18 J	0.60	0.16 J
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.060 J	0.090 J	0.078 J	0.12 U	0.071 J	0.077 J	0.076 J	0.072 J	0.062 J	0.078 J	0.063 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	0.035 U	0.035 U	0.14 U	0.019 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U
Vinyl chloride	ppb	2	20	0.071 U	0.071 U	0.071 U	0.28 U	0.029 U	0.071 U	0.071 U	0.071 U	0.071 U	0.26	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-	-	0.37	-	-	-	-	-	-
Gases														
Methane	%	0.05	0.05	-	-	-	-	-	-	**0.21 U[ab]**	**0.21 U[ab]**	**0.20 U[ab]**	**0.21 U[ab]**	**0.17 U[ab]**
Field Parameter														
Methane, field (unfiltered)	%	0.05	0.05	-	-	-	-	0.0 / 0.0	-	-	-	-	-	-
Methane, field (filtered)	%	0.05	0.05	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0	0.0 / 0	-	0.0 / 0	0 / 0	-	0.0 / 0	0 / 0	0 / 0.0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tenatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5174, Bldg 16, IA_C*	*Parcel 5174, Bldg 16, IA_C*	*Parcel 5174, Bldg 16, IA_E*	*Parcel 5174, Bldg 16, IA_E*	*Parcel 5174, Bldg 16, IA_E*	*Parcel 5175*	*Parcel 5175*	*Parcel 5175, Bldg 17, IA_A*	*Parcel 5175, Bldg 17, IA_A*	*Parcel 5175, Bldg 17, IA_B*	*Parcel 5175, Bldg 17, IA_B*
Sample Location:				*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2045 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*	*2075 Dryden Road*
Owner/Tenant:				*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*Command Roofing*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*	*former Alliance Equipment*
Sample ID:				*IA-38443-030612-JC-089*	*IA-38443-080312-GL-043*	*IA-38443-030612-JC-092*	*IA-38443-080312-GL-046*	*IA-38443-091412-GL-027*	*OA-38443-030712-JC-104*	*OA-38443-080112-GL-023*	*IA-38443-030712-JC-105*	*IA-38443-080112-GL-022*	*IA-38443-030712-JC-107*	*IA-38443-080112-GL-021*
Sample Date:				*3/6/2012*	*8/3/2012*	*3/6/2012*	*8/3/2012*	*9/14/2012*	*3/7/2012*	*8/1/2012*	*3/7/2012*	*8/1/2012*	*3/7/2012*	*8/1/2012*
				Duplicate										
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*											
Volatile Organic Compounds														
1,1,1-Trichloroethane	ppb	NC	NC	0.030 U	0.060 U	0.030 U	2.1	0.060 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	0.12 U	0.061 U	0.061 U	0.12 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	0.11 U	0.054 U	0.054 U	0.11 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U
1,1-Dichloroethane	ppb	16	160	0.026 U	0.087 J	0.026 U	0.026 U	0.052 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.032 U	0.064 U	0.032 U	0.032 U	0.064 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 U	0.20 UJ	0.098 U	0.098 U	0.20 U	0.098 UJ	0.098 UJ	0.098 UJ	0.098 UJ	0.098 UJ	0.098 UJ
1,2,4-Trimethylbenzene	ppb	NC	NC	0.99	0.13 U	0.65	0.063 U	0.44	0.063 U	0.28	0.063 U	0.063 U	0.17 J	0.62
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	0.088 U	0.044 U	0.044 U	0.088 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	0.14 U	0.070 U	0.070 U	0.14 U	0.070 U	0.31	0.070 U	0.070 U	0.070 U	0.29
1,2-Dichloroethane	ppb	NC	NC	0.087 J	2.0	0.047 U	0.047 U	0.14 J	0.047 U	0.047 U	0.047 U	0.12 J	0.047 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	0.10 U	0.052 U	0.052 U	0.10 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.064 U	0.032 U	0.11 J	0.064 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.31	0.13 U	0.20	0.065 U	0.14 J	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.10 J
1,3-Butadiene	ppb	NC	NC	0.064 U	0.13 U	0.064 U	0.064 U	0.13 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	0.13 U	0.065 U	0.065 U	0.13 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.064 U	0.13 U	0.064 U	0.064 U	0.13 UJ	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
1,4-Dioxane	ppb	NC	NC	0.080 U	0.40 J	0.080 U	0.080 U	0.16 UJ	0.080 UJ	0.080 U	0.080 UJ	0.080 U	0.080 UJ	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.21 J	0.38 J	0.079 J	0.039 U	0.19 J	0.042 J	0.058 J	0.043 J	0.039 U	0.070 J	0.049 J
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.32 J	44	0.31 J	0.65 J	12 J	0.29 J	1.2	0.22 J	0.40 J	0.22 J	1.0
2-Chlorotoluene	ppb	NC	NC	0.063 U	0.13 U	0.063 U	0.063 U	0.13 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
2-Hexanone	ppb	NC	NC	0.058 U	0.12 U	0.058 U	0.058 U	0.12 U	0.058 UJ	0.11 J	0.058 UJ	0.058 UJ	0.058 UJ	0.087 J
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	0.13 U	0.064 U	0.064 U	0.13 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.40	0.13 U	0.26 J	0.066 U	0.14 J	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.10 J	0.10 J	0.045 U	0.045 U	0.090 U	0.045 UJ	0.12 J	0.045 UJ	0.045 U	0.045 UJ	0.045 U
Acetone	ppb	NC	NC	11	69	11	2.6 J	16 J	2.2 J	9.9 J	1.9 J	3.9 J	1.7 J	8.7 J
Allyl chloride	ppb	NC	NC	0.048 U	0.096 U	0.048 U	0.048 U	0.096 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
Benzene	ppb	2	20	0.31	0.40	0.26	0.056 U	0.26 J	0.14 J	0.22	0.16 J	0.092 J	0.19 J	0.17 J
Benzyl chloride	ppb	NC	NC	0.078 U	0.16 U	0.078 U	0.078 U	0.16 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
Bromodichloromethane	ppb	NC	NC	0.044 U	0.088 U	0.044 U	0.044 U	0.088 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U
Bromoform	ppb	NC	NC	0.048 U	0.096 U	0.048 U	0.048 U	0.096 UJ	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	0.064 U	0.032 U	0.032 U	0.064 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
Butane	ppb	NC	NC	6.6	1.6	1.4	0.15 J	1.1	0.97	0.83	0.88	0.62	1.3	0.65
Carbon disulfide	ppb	NC	NC	0.031 J	0.26 J	0.037 J	0.41 J	0.27 J	0.040 J	0.040 J	0.031 U	0.031 U	0.031 U	0.034 J
Carbon tetrachloride	ppb	NC	NC	0.082 J	0.077 J	0.077 J	0.14 J	0.076 U	0.081 J	0.10 J	0.083 J	0.093 J	0.077 J	0.097 J
Chlorobenzene	ppb	NC	NC	0.049 U	0.098 U	0.049 U	0.049 U	0.098 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	0.36	0.52	1.1	7.7	1.8	0.34	0.40	0.57	0.37	3.8	0.38
Chloroethane	ppb	NC	NC	0.035 U	0.13 J	0.035 U	0.035 U	0.070 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U
Chloroform (Trichloromethane)	ppb	80	800	0.038 U	0.076 U	0.038 U	0.038 U	0.087 J	0.038 U	0.042 J	0.038 U	0.038 U	0.038 U	0.043 J
Chloromethane (Methyl chloride)	ppb	NC	NC	0.63	0.82 J	0.66	0.16 J	0.60 J	0.54	0.67	0.50	0.97	0.52	0.72
cis-1,2-Dichloroethene	ppb	37	370	0.060 U	0.12 U	0.060 U	0.060 U	0.12 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	0.15 U	0.074 U	0.074 U	0.15 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U
Cyclohexane	ppb	NC	NC	0.89	3.2	0.44 J	0.040 U	0.65 J	0.040 U	0.040 U	0.049 J	0.071 J	0.054 J	0.040 U
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.057 U	0.11 U	0.057 U	0.057 U	0.11 U	0.057 U	0.078 J	0.057 U	0.057 U	0.057 U	0.096 J
Dibromochloromethane	ppb	NC	NC	0.042 U	0.084 U	0.042 U	0.042 U	0.084 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.59	0.49	0.60	0.52	0.46	0.53	0.67	0.52	0.61	0.52	0.60
Ethylbenzene	ppb	250	2500	0.56	1.0	0.42	0.068 U	1.1	0.068 U	0.16 J	0.068 U	0.068 U	0.11 J	0.13 J
Hexachlorobutadiene	ppb	NC	NC	0.078 U	0.16 UJ	0.078 U	0.078 U	0.16 U	0.078 UJ	0.078 UJ	0.078 UJ	0.078 UJ	0.078 UJ	0.078 UJ
Hexane	ppb	NC	NC	13	69	9.2	0.53	8.4	0.17 J	0.22 J	0.19 J	0.18 J	0.27 J	0.19 J
Isopropyl alcohol	ppb	NC	NC	1.7 J	1.1 J	0.35 J	0.26 J	0.71 J	0.29 J	0.94 J	0.36 J	0.42 J	0.25 J	0.84 J
Isopropyl benzene	ppb	NC	NC	0.067 J	0.12 U	0.060 U	0.060 U	0.12 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U
m&p-Xylenes	ppb	200	2000	2.0	2.4	1.4	0.12 U	4.1	0.12 U	0.58	0.13 J	0.12 U	0.39	0.53
Methyl methacrylate	ppb	NC	NC	0.14 J	0.16 U	0.079 U	0.079 U	0.16 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	0.34 U	0.17 U	0.17 U	0.34 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylene chloride	ppb	NC	NC	0.045 U	1.2	0.045 U	0.045 U	0.91 J	0.22 J	0.045 U	0.31 J	0.90	0.28 J	0.045 U
Naphthalene	ppb	2.9	NC	0.090 U	0.18 UJ	0.090 U	0.090 U	0.18 U	0.090 UJ	0.090 U	0.090 UJ	0.090 U	0.090 UJ	0.19 J
N-Butylbenzene	ppb	NC	NC	0.052 J	0.092 U	0.046 U	0.046 U	0.092 U	0.046 U	0.046 U	0.046 U	0.046 U	0.046 U	0.13 J
N-Decane	ppb	NC	NC	0.24 J	0.11 U	-	0.056 U	0.47 J	-	0.16 J	-	0.056 U	-	0.19 J
N-Dodecane	ppb	NC	NC	0.078 U	0.16 UJ	-	0.078 U	0.16 U	-	0.078 U	-	0.078 U	-	0.32 J
N-Heptane	ppb	NC	NC	1.6	2.6	0.81	0.047 U	1.6	0.11 J	0.13 J	0.098 J	0.047 U	0.13 J	0.12 J
Nonane	ppb	NC	NC	1.0	0.62 J	-	0.043 U	0.62 J	-	0.077 J	-	0.043 U	-	0.075 J
N-Propylbenzene	ppb	NC	NC	0.25 J	0.11 U	0.16 J	0.056 U	0.11 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.084 J
N-Undecane	ppb	NC	NC	0.18 J	0.12 U	-	0.062 U	0.12 U	-	0.13 J	-	0.062 UJ	-	0.31 J
Octane	ppb	NC	NC	0.43	2.2	-	0.036 U	0.30 J	-	0.076 J	-	0.036 U	-	0.050 J

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location: *Sample Location:* *Owner/Tenant:* *Sample ID:* *Sample Date:*				*Parcel 5174, Bldg 16, IA_C* *2045 Dryden Road* *Command Roofing* *IA-38443-030612-JC-089* *3/6/2012* *Duplicate*	*Parcel 5174, Bldg 16, IA_C* *2045 Dryden Road* *Command Roofing* *IA-38443-080312-GL-043* *8/3/2012*	*Parcel 5174, Bldg 16, IA_E* *2045 Dryden Road* *Command Roofing* *IA-38443-030612-JC-092* *3/6/2012*	*Parcel 5174, Bldg 16, IA_E* *2045 Dryden Road* *Command Roofing* *IA-38443-080312-GL-046* *8/3/2012*	*Parcel 5174, Bldg 16, IA_E* *2045 Dryden Road* *Command Roofing* *IA-38443-091412-GL-027* *9/14/2012*	*Parcel 5175* *2075 Dryden Road* *former Alliance Equipment* *OA-38443-030712-JC-104* *3/7/2012*	*Parcel 5175* *2075 Dryden Road* *former Alliance Equipment* *OA-38443-080112-GL-023* *8/1/2012*	*Parcel 5175, Bldg 17, IA_A* *2075 Dryden Road* *former Alliance Equipment* *IA-38443-030712-JC-105* *3/7/2012*	*Parcel 5175, Bldg 17, IA_A* *2075 Dryden Road* *former Alliance Equipment* *IA-38443-080112-GL-022* *8/1/2012*	*Parcel 5175, Bldg 17, IA_B* *2075 Dryden Road* *former Alliance Equipment* *IA-38443-030712-JC-107* *3/7/2012*	*Parcel 5175, Bldg 17, IA_B* *2075 Dryden Road* *former Alliance Equipment* *IA-38443-080112-GL-021* *8/1/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*											
o-Xylene	ppb	200	2000	0.74	0.58	0.44	0.061 U	0.97	0.061 U	0.24	0.061 U	0.061 U	0.14 J	0.22
Pentane	ppb	NC	NC	7.3	73	-	0.32 J	19	-	0.49 J	-	0.39 J	-	0.38 J
Styrene	ppb	NC	NC	0.058 U	0.12 U	0.058 U	0.058 U	0.12 U	0.058 U	0.061 J	0.058 U	0.058 U	0.058 U	0.062 J
tert-Butyl alcohol	ppb	NC	NC	0.20 J	0.21 J	0.097 J	0.055 J	0.15 J	0.068 J	0.17 J	0.045 J	0.045 J	0.038 U	0.15 J
tert-Butylbenzene	ppb	NC	NC	0.066 U	0.13 U	0.066 U	0.066 U	0.13 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	0.067 J
Tetrachloroethene	ppb	25	250	0.040 U	0.24 J	0.31	1.8	0.097 J	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U
Tetrahydrofuran	ppb	NC	NC	0.087 J	0.19 J	0.063 U	0.063 U	0.13 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Toluene	ppb	NC	NC	18	100	14	0.51	19	0.28	0.96	0.56	0.088 J	0.71	0.71
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	0.10 U	0.050 U	0.050 U	0.10 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	0.096 U	0.048 U	0.048 U	0.096 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
Trichloroethene	ppb	2	20	0.036 U	0.072 U	0.055 J	**50**[ab]	0.098 J	0.036 U	0.16 J	0.036 U	0.062 J	0.036 U	0.18 J
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.17 J	0.42	0.20	1.5	0.32 J	0.23	0.34	0.24	0.38	0.21	0.32
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.067 J	0.081 J	0.077 J	0.079 J	0.067 J	0.066 J	0.089 J	0.067 J	0.080 J	0.068 J	0.076 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	0.070 U	0.035 U	0.035 U	0.070 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U
Vinyl chloride	ppb	2	20	0.071 U	1.2	0.071 U	0.071 U	0.14 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-
Gases														
Methane	%	0.05	0.05	**0.18 U**[ab]	**0.21 U**[ab]	-	**0.20 U**[ab]	**0.19 U**[ab]	-	**0.20 U**[ab]	-	**0.20 U**[ab]	-	**0.20 U**[ab]
Field Parameter														
Methane, field (unfiltered)	%	0.05	0.05	-	-	-	-	-	-	-	-	-	-	-
Methane, field (filtered)	%	0.05	0.05	0.0 / 0	0 / 0	0.0 / 0	0 / 0	-	0 / 0.0	0 / 0	0.0 / 0	0 / 0	0.0 / 0.0	0 / 0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tenatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
\- Concentration was greater than applicable criteria.

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5223*	*Parcel 5223*	*Parcel 5223, Bldg 28, IA_A*	*Parcel 5223, Bldg 28, IA_B*
Sample Location:				*2229 Dryden Road*	*2229 Dryden Road*	*2229 Dryden Road*	*2229 Dryden Road*
Owner / Tenant:				*Vinny's Bar & Grille*	*Vinny's Bar & Grille*	*Vinny's Bar & Grille*	*Vinny's Bar & Grille*
Sample ID:				*OA-38443-091112-GL-006*	*OA-38443-091112-GL-007*	*IA-38443-091112-GL-005*	*IA-38443-091112-GL-002*
Sample Date:				*9/11/2012*	*9/11/2012*	*9/11/2012*	*9/11/2012*
					Duplicate		
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*				
Volatile Organic Compounds							
1,1,1-Trichloroethane	ppb	NC	NC	0.030 U	0.030 U	0.50	0.093 J
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	0.061 U	0.061 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	0.054 U	0.054 U	0.054 U
1,1-Dichloroethane	ppb	16	160	0.026 U	0.026 U	0.026 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 UJ	0.098 U	0.098 U	0.098 U
1,2,4-Trimethylbenzene	ppb	NC	NC	0.063 U	0.095 J	0.30	0.51
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	0.044 U	0.044 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	0.070 U	0.070 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.047 U	0.047 U	0.047 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	0.052 U	0.052 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.065 U	0.065 U	0.093 J	0.18 J
1,3-Butadiene	ppb	NC	NC	0.064 U	0.064 U	0.064 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	0.065 U	0.065 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.064 U	0.064 U	0.064 UJ	0.064 U
1,4-Dioxane	ppb	NC	NC	0.080 U	0.080 U	0.080 UJ	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.056 J	0.048 J	0.060 J	0.15 J
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.77 J	0.90 J	0.67 J	1.0
2-Chlorotoluene	ppb	NC	NC	0.063 U	0.063 U	0.063 U	0.063 U
2-Hexanone	ppb	NC	NC	0.058 U	0.069 J	0.058 U	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	0.064 U	0.064 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.066 U	0.066 U	0.090 J	0.15 J
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.084 J	0.18 J	0.078 J	0.075 J
Acetone	ppb	NC	NC	5.0	4.3 J	7.1 J	4.6 J
Allyl chloride	ppb	NC	NC	0.048 U	0.048 U	0.048 U	0.048 U
Benzene	ppb	2	20	0.17 J	0.15 J	0.18 J	0.52
Benzyl chloride	ppb	NC	NC	0.078 U	0.078 U	0.078 U	0.078 U
Bromodichloromethane	ppb	NC	NC	0.044 U	0.044 U	0.044 U	0.044 U
Bromoform	ppb	NC	NC	0.048 U	0.048 U	0.048 UJ	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.032 U
Butane	ppb	NC	NC	0.72	0.74	0.90	2.8
Carbon disulfide	ppb	NC	NC	0.031 U	0.052 J	0.031 U	0.033 J
Carbon tetrachloride	ppb	NC	NC	0.083 J	0.075 J	0.071 J	0.079 J
Chlorobenzene	ppb	NC	NC	0.049 U	0.049 U	0.049 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	0.38	0.36	1.3	1.9
Chloroethane	ppb	NC	NC	0.035 U	0.035 U	0.035 U	0.035 U
Chloroform (Trichloromethane)	ppb	80	800	0.038 U	0.038 U	1.0	0.061 J
Chloromethane (Methyl chloride)	ppb	NC	NC	0.56	0.50	0.65	0.46 J
cis-1,2-Dichloroethene	ppb	37	370	0.060 U	0.060 U	0.060 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	0.074 U	0.074 U	0.074 U
Cyclohexane	ppb	NC	NC	0.054 J	0.040 U	0.076 J	0.13 J
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.057 U	0.057 U	0.059 J	0.057 U
Dibromochloromethane	ppb	NC	NC	0.042 U	0.042 U	0.042 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.56	0.55	0.64	0.78
Ethylbenzene	ppb	250	2500	0.068 U	0.079 J	0.093 J	0.31
Hexachlorobutadiene	ppb	NC	NC	0.078 UJ	0.078 U	0.078 U	0.078 U
Hexane	ppb	NC	NC	0.18 J	0.21 J	0.21 J	0.65
Isopropyl alcohol	ppb	NC	NC	0.47 J	0.31 J	6.0	0.71 J
Isopropyl benzene	ppb	NC	NC	0.060 U	0.060 U	0.060 U	0.060 U
m&p-Xylenes	ppb	200	2000	0.22	0.27	0.30	1.1
Methyl methacrylate	ppb	NC	NC	0.079 U	0.079 U	0.079 U	0.11 J
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	0.17 U	0.17 U	0.17 U
Methylene chloride	ppb	NC	NC	0.46 UJ	0.89 J	0.21 J	0.44 U
Naphthalene	ppb	2.9	NC	0.090 UJ	0.090 U	0.090 U	0.090 U
N-Butylbenzene	ppb	NC	NC	0.046 U	0.046 U	0.053 J	0.063 J
N-Decane	ppb	NC	NC	0.056 UJ	0.090 J	0.93 J	0.75 J
N-Dodecane	ppb	NC	NC	0.078 UJ	0.26 J	0.078 U	0.078 U
N-Heptane	ppb	NC	NC	0.097 J	0.10 J	0.13 J	0.33 J
Nonane	ppb	NC	NC	0.043 U	0.052 J	0.69	0.67
N-Propylbenzene	ppb	NC	NC	0.056 U	0.056 U	0.056 U	0.087 J
N-Undecane	ppb	NC	NC	0.062 U	0.10 J	0.43 J	0.24 J
Octane	ppb	NC	NC	0.036 U	0.049 J	0.068 J	0.15 J

TABLE G.2

SUMMARY OF INDUSTRIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 5223*	*Parcel 5223*	*Parcel 5223, Bldg 28, IA_A*	*Parcel 5223, Bldg 28, IA_B*
Sample Location:				*2229 Dryden Road*	*2229 Dryden Road*	*2229 Dryden Road*	*2229 Dryden Road*
Owner/Tenant:				*Vinny's Bar & Grille*	*Vinny's Bar & Grille*	*Vinny's Bar & Grille*	*Vinny's Bar & Grille*
Sample ID:				*OA-38443-091112-GL-006*	*OA-38443-091112-GL-007*	*IA-38443-091112-GL-005*	*IA-38443-091112-GL-002*
Sample Date:				*9/11/2012*	*9/11/2012* *Duplicate*	*9/11/2012*	*9/11/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Non-residential)* *a*	*ODH Indoor Air Action Levels (Non-residential)* *b*				
o-Xylene	ppb	200	2000	0.079 J	0.099 J	0.12 J	0.41
Pentane	ppb	NC	NC	0.50 J	0.43 J	0.96 J	4.5
Styrene	ppb	NC	NC	0.058 U	0.058 U	0.058 U	0.058 U
tert-Butyl alcohol	ppb	NC	NC	0.051 J	0.082 J	0.10 J	0.060 J
tert-Butylbenzene	ppb	NC	NC	0.066 U	0.066 U	0.066 U	0.066 U
Tetrachloroethene	ppb	25	250	0.040 U	0.040 U	0.16 J	0.040 U
Tetrahydrofuran	ppb	NC	NC	0.063 U	0.063 U	0.088 J	0.063 U
Toluene	ppb	NC	NC	0.38	0.49	0.53	1.7
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	0.050 U	0.050 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	0.048 U	0.048 U	0.048 U
Trichloroethene	ppb	2	20	0.036 U	0.036 U	0.089 J	0.036 U
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.31	0.32	0.65	0.64
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.075 J	0.075 J	0.068 J	0.073 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	0.035 U	0.035 U	0.035 U
Vinyl chloride	ppb	2	20	0.071 U	0.071 U	0.071 U	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-	-
Gases							
Methane	%	0.05	0.05	**0.21 U[ab]**	**0.26 U[ab]**	**0.20 U[ab]**	**0.20 U[ab]**
Field Parameter							
Methane, field (unfiltered)	%	0.05	0.05	-	-	-	-
Methane, field (filtered)	%	0.05	0.05	-	-	-	-

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tenatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
\- Concentration was greater than applicable criteria.

TABLE G.3

SUMMARY OF RESIDENTIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3251, Bldg 29, Probe A*	*Parcel 3251, Bldg 29, Probe A*	*Parcel 3251, Bldg 29, Probe B*	*Parcel 3262, Bldg 33, Probe A*	*Parcel 3262, Bldg 33, Probe A*
Sample Location:				*2232 East River Road*	*2232 East River Road*	*2232 East River Road*	*2373 East River Road*	*2373 East River Road*
Owner/Tenant:				*Quinn Ogletree*	*Quinn Ogletree*	*Quinn Ogletree*	*Jim Worley*	*Jim Worley*
Sample ID:				*SS-38443-080112-GL-025*	*SS-38443-091312-GL-029*	*SS-38443-010913-GL-010*	*SS-38443-080112-GL-026*	*SS-38443-091212-GL-018*
Sample Date:				*8/1/2012*	*9/13/2012*	*1/9/2013*	*8/1/2012*	*9/12/2012*
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Residential)* *a*	*ODH Sub-Slab Action Levels (Residential)* *b*					
Volatile Organic Compounds								
1,1,1-Trichloroethane	ppb	NC	NC	11	11	2.6	0.23	0.24
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U
1,1-Dichloroethane	ppb	37	370	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 UJ	0.098 UJ	0.098 U	0.098 UJ	0.098 UJ
1,2,4-Trimethylbenzene	ppb	NC	NC	0.35	0.063 U	0.063 U	0.063 U	0.063 U
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.047 U	0.047 U	0.047 U	0.11 J	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1,3-Butadiene	ppb	NC	NC	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
1,4-Dioxane	ppb	NC	NC	0.080 U	0.080 U	0.080 U	0.080 U	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.30 J	0.20 U	0.34 J	0.35 J	0.31 J
2-Chlorotoluene	ppb	NC	NC	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
2-Hexanone	ppb	NC	NC	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.066 J	0.066 U	0.066 U	0.066 U	0.066 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.045 U	0.045 U	0.045 U	0.098 J	0.079 J
Acetone	ppb	NC	NC	3.8 J	1.4 U	4.2 J	3.0 J	4.3 J
Allyl chloride	ppb	NC	NC	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
Benzene	ppb	4	40	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U
Benzyl chloride	ppb	NC	NC	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
Bromodichloromethane	ppb	NC	NC	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U
Bromoform	ppb	NC	NC	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
Butane	ppb	NC	NC	0.16 J	0.064 U	0.49	0.43 J	1.1
Carbon disulfide	ppb	NC	NC	0.040 J	0.031 U	0.045 J	0.081 J	0.031 U
Carbon tetrachloride	ppb	NC	NC	0.039 J	0.038 U	0.038 U	0.038 UJ	0.038 U
Chlorobenzene	ppb	NC	NC	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	0.31	0.21	0.15 J	0.29	0.20
Chloroethane	ppb	NC	NC	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U
Chloroform (Trichloromethane)	ppb	200	2000	0.43	0.96	0.038 U	0.12 J	0.038 U
Chloromethane (Methyl chloride)	ppb	NC	NC	0.18 J	0.16 U	0.16 U	0.16 U	0.17 J
cis-1,2-Dichloroethene	ppb	88	880	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U

TABLE G.3

SUMMARY OF RESIDENTIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3251, Bldg 29, Probe A*	*Parcel 3251, Bldg 29, Probe A*	*Parcel 3251, Bldg 29, Probe B*	*Parcel 3262, Bldg 33, Probe A*	*Parcel 3262, Bldg 33, Probe A*
Sample Location:				*2232 East River Road*	*2232 East River Road*	*2232 East River Road*	*2373 East River Road*	*2373 East River Road*
Owner/Tenant:				*Quinn Ogletree*	*Quinn Ogletree*	*Quinn Ogletree*	*Jim Worley*	*Jim Worley*
Sample ID:				*SS-38443-080112-GL-025*	*SS-38443-091312-GL-029*	*SS-38443-010913-GL-010*	*SS-38443-080112-GL-026*	*SS-38443-091212-GL-018*
Sample Date:				*8/1/2012*	*9/13/2012*	*1/9/2013*	*8/1/2012*	*9/12/2012*
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Residential)* *a*	*ODH Sub-Slab Action Levels (Residential)* *b*					
Cyclohexane	ppb	NC	NC	0.040 U	0.040 U	0.040 U	0.14 J	0.040 U
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U
Dibromochloromethane	ppb	NC	NC	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.28 J	0.48	0.41	0.075 J	0.46
Ethylbenzene	ppb	600	6000	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U
Hexachlorobutadiene	ppb	NC	NC	0.078 U	0.078 UJ	0.078 U	0.078 U	0.078 UJ
Hexane	ppb	NC	NC	0.041 J	0.032 U	0.14 J	0.11 J	0.12 J
Isopropyl alcohol	ppb	NC	NC	0.40 J	0.044 U	0.28 J	0.64 J	0.29 J
Isopropyl benzene	ppb	NC	NC	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U
m&p-Xylenes	ppb	500	5000	0.12 U	0.12 U	0.12 U	0.15 J	0.12 U
Methyl methacrylate	ppb	NC	NC	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylene chloride	ppb	NC	NC	0.045 U	0.85	0.97	0.045 U	0.30 U
Naphthalene	ppb	7	NC	0.13 J	0.090 UJ	0.090 U	0.090 UJ	0.090 UJ
N-Butylbenzene	ppb	NC	NC	0.046 U	0.046 U	0.046 U	0.046 U	0.046 U
N-Decane	ppb	NC	NC	0.33 J	0.056 UJ	-	0.46 J	0.056 UJ
N-Dodecane	ppb	NC	NC	0.12 J	0.078 U	-	0.24 J	0.078 U
N-Heptane	ppb	NC	NC	0.047 U	0.047 U	0.047 U	0.057 J	0.047 U
Nonane	ppb	NC	NC	0.14 J	0.043 U	-	0.19 J	0.043 U
N-Propylbenzene	ppb	NC	NC	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U
N-Undecane	ppb	NC	NC	0.16 J	0.062 U	-	0.33 J	0.062 U
Octane	ppb	NC	NC	0.036 U	0.036 U	-	0.038 J	0.036 U
o-Xylene	ppb	500	5000	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U
Pentane	ppb	NC	NC	0.060 U	0.060 U	-	0.39 J	0.38 J
Styrene	ppb	NC	NC	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U
tert-Butyl alcohol	ppb	NC	NC	0.11 J	0.038 UJ	0.069 J	0.10 J	0.046 J
tert-Butylbenzene	ppb	NC	NC	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U
Tetrachloroethene	ppb	60	600	12	14	0.23	8.0	9.1
Tetrahydrofuran	ppb	NC	NC	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
Toluene	ppb	NC	NC	0.10 J	0.054 U	0.054 U	0.36	0.073 J
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
Trichloroethene	ppb	4	40	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.44	0.41	0.23	0.63	0.56
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.11 J	0.031 U	0.052 J	0.13 J	0.11 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U
Vinyl chloride	ppb	4	40	0.071 U	0.071 U	0.071 UJ	0.071 U	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-	-	-
Gases								
Methane	%	0.5	0.5	0.18 U	0.20 U	-	0.19 U	0.19 U
Field Parameter								

TABLE G.3

SUMMARY OF RESIDENTIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				***Parcel 3251, Bldg 29, Probe A***	***Parcel 3251, Bldg 29, Probe A***	***Parcel 3251, Bldg 29, Probe B***	***Parcel 3262, Bldg 33, Probe A***	***Parcel 3262, Bldg 33, Probe A***
Sample Location:				***2232 East River Road***	***2232 East River Road***	***2232 East River Road***	***2373 East River Road***	***2373 East River Road***
Owner/Tenant:				***Quinn Ogletree***	***Quinn Ogletree***	***Quinn Ogletree***	***Jim Worley***	***Jim Worley***
Sample ID:				***SS-38443-080112-GL-025***	***SS-38443-091312-GL-029***	***SS-38443-010913-GL-010***	***SS-38443-080112-GL-026***	***SS-38443-091212-GL-018***
Sample Date:				***8/1/2012***	***9/13/2012***	***1/9/2013***	***8/1/2012***	***9/12/2012***
Parameter	***Units***	***ODH Sub-Slab Screening Levels (Residential)*** ***a***	***ODH Sub-Slab Action Levels (Residential)*** ***b***					
Methane, field (unfiltered)	%	0.5	0.5	-	-	0	-	-
Methane, field (filtered)	%	0.5	0.5	0 / 0	0 /0	0	0 /0	0 /0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tenatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.3

SUMMARY OF RESIDENTIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3262, Bldg 33, Probe B*	*Parcel 3263, Bldg 34, Probe A*	*Parcel 3263, Bldg 34, Probe A*
Sample Location:				*2373 East River Road*	*2391 East River Road*	*2391 East River Road*
Owner/Tenant:				*Jim Worley*	*Jim Worley*	*Jim Worley*
Sample ID:				*SS-38443-010913-GL-003*	*SS-38443-080112-GL-024*	*SS-38443-091212-GL-016*
Sample Date:				*1/9/2013*	*8/1/2012*	*9/12/2012*
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Residential)* *a*	*ODH Sub-Slab Action Levels (Residential)* *b*			
Volatile Organic Compounds						
1,1,1-Trichloroethane	ppb	NC	NC	0.13 J	1.5	1.5
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	0.061 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	0.054 U	0.054 U
1,1-Dichloroethane	ppb	37	370	0.026 U	0.026 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.032 U	0.032 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 U	0.098 UJ	0.098 UJ
1,2,4-Trimethylbenzene	ppb	NC	NC	0.063 U	0.063 U	0.063 U
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	0.044 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	0.070 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.047 U	0.047 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	0.052 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.065 U	0.065 U	0.065 U
1,3-Butadiene	ppb	NC	NC	0.064 U	0.064 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	0.065 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.064 U	0.064 U	0.064 U
1,4-Dioxane	ppb	NC	NC	0.080 U	0.080 U	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	19	0.039 U	0.039 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.57 J	0.33 J	0.31 J
2-Chlorotoluene	ppb	NC	NC	0.063 U	0.063 U	0.063 U
2-Hexanone	ppb	NC	NC	0.059 J	0.058 UJ	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	0.064 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.066 U	0.066 U	0.066 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.28 J	0.045 U	0.045 U
Acetone	ppb	NC	NC	5.5	2.1 J	3.6 J
Allyl chloride	ppb	NC	NC	0.048 U	0.048 U	0.048 U
Benzene	ppb	4	40	0.056 U	0.056 U	0.056 U
Benzyl chloride	ppb	NC	NC	0.078 U	0.078 U	0.078 U
Bromodichloromethane	ppb	NC	NC	0.044 U	0.044 U	0.044 U
Bromoform	ppb	NC	NC	0.048 U	0.048 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	0.032 U	0.032 U
Butane	ppb	NC	NC	0.69	0.064 J	0.21 J
Carbon disulfide	ppb	NC	NC	0.031 U	0.13 J	0.056 J
Carbon tetrachloride	ppb	NC	NC	0.038 U	0.041 J	0.038 J
Chlorobenzene	ppb	NC	NC	0.049 U	0.049 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	0.087 J	1.3	0.79
Chloroethane	ppb	NC	NC	0.035 U	0.035 U	0.035 U
Chloroform (Trichloromethane)	ppb	200	2000	0.038 U	0.051 J	0.041 J
Chloromethane (Methyl chloride)	ppb	NC	NC	0.20 J	0.24 J	0.16 U
cis-1,2-Dichloroethene	ppb	88	880	0.060 U	0.060 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	0.074 U	0.074 U

TABLE G.3

SUMMARY OF RESIDENTIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3262, Bldg 33, Probe B*	*Parcel 3263, Bldg 34, Probe A*	*Parcel 3263, Bldg 34, Probe A*
Sample Location:				*2373 East River Road*	*2391 East River Road*	*2391 East River Road*
Owner/Tenant:				*Jim Worley*	*Jim Worley*	*Jim Worley*
Sample ID:				*SS-38443-010913-GL-003*	*SS-38443-080112-GL-024*	*SS-38443-091212-GL-016*
Sample Date:				*1/9/2013*	*8/1/2012*	*9/12/2012*
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Residential)* *a*	*ODH Sub-Slab Action Levels (Residential)* *b*			
Cyclohexane	ppb	NC	NC	0.29 J	0.040 U	0.040 U
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.057 U	0.057 U	0.057 U
Dibromochloromethane	ppb	NC	NC	0.042 U	0.042 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.37	0.068 U	0.55
Ethylbenzene	ppb	600	6000	0.068 U	0.068 U	0.068 U
Hexachlorobutadiene	ppb	NC	NC	0.078 U	0.078 UJ	0.078 UJ
Hexane	ppb	NC	NC	0.14 J	0.10 J	0.076 J
Isopropyl alcohol	ppb	NC	NC	0.24 J	0.32 J	0.21 J
Isopropyl benzene	ppb	NC	NC	0.060 U	0.060 U	0.060 U
m&p-Xylenes	ppb	500	5000	0.12 U	0.12 U	0.12 U
Methyl methacrylate	ppb	NC	NC	0.079 U	0.094 J	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	0.17 U	0.17 U
Methylene chloride	ppb	NC	NC	0.29 J	0.045 U	0.59 U
Naphthalene	ppb	7	NC	0.090 U	0.090 U	0.090 UJ
N-Butylbenzene	ppb	NC	NC	0.046 U	0.046 U	0.046 U
N-Decane	ppb	NC	NC	-	0.14 J	0.056 UJ
N-Dodecane	ppb	NC	NC	-	0.14 J	0.10 J
N-Heptane	ppb	NC	NC	0.15 J	0.047 U	0.047 U
Nonane	ppb	NC	NC	-	0.043 U	0.043 U
N-Propylbenzene	ppb	NC	NC	0.056 U	0.056 U	0.056 U
N-Undecane	ppb	NC	NC	-	0.064 J	0.062 U
Octane	ppb	NC	NC	-	0.036 U	0.036 U
o-Xylene	ppb	500	5000	0.061 U	0.061 U	0.061 U
Pentane	ppb	NC	NC	-	0.14 J	0.16 J
Styrene	ppb	NC	NC	0.058 U	0.058 U	0.058 U
tert-Butyl alcohol	ppb	NC	NC	0.095 J	0.17 J	0.045 J
tert-Butylbenzene	ppb	NC	NC	0.066 U	0.066 U	0.066 U
Tetrachloroethene	ppb	60	600	2.4	19	21
Tetrahydrofuran	ppb	NC	NC	0.063 U	0.16 J	0.14 J
Toluene	ppb	NC	NC	0.23	0.12 J	0.086 J
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	0.050 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	0.048 U	0.048 U
Trichloroethene	ppb	4	40	0.036 U	0.036 U	0.036 U
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.36	0.71	0.73
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.071 J	0.15 J	0.15 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	0.035 U	0.035 U
Vinyl chloride	ppb	4	40	0.071 UJ	0.071 U	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-
Gases						
Methane	%	0.5	0.5	-	0.19 U	0.19 U
Field Parameter						

TABLE G.3

SUMMARY OF RESIDENTIAL SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3262, Bldg 33, Probe B*	*Parcel 3263, Bldg 34, Probe A*	*Parcel 3263, Bldg 34, Probe A*
Sample Location:				*2373 East River Road*	*2391 East River Road*	*2391 East River Road*
Owner/Tenant:				*Jim Worley*	*Jim Worley*	*Jim Worley*
Sample ID:				*SS-38443-010913-GL-003*	*SS-38443-080112-GL-024*	*SS-38443-091212-GL-016*
Sample Date:				*1/9/2013*	*8/1/2012*	*9/12/2012*
Parameter	*Units*	*ODH Sub-Slab Screening Levels (Residential)* *a*	*ODH Sub-Slab Action Levels (Residential)* *b*			
Methane, field (unfiltered)	%	0.5	0.5	0 / 0	-	-
Methane, field (filtered)	%	0.5	0.5	0 / 0	0 / 0	0 /0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tenatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.4

SUMMARY OF RESIDENTIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 2943, Bldg 36*	*Parcel 2943, Bldg 36*	*Parcel 2943, Bldg 36, Outdoor Air*	*Parcel 2943, Bldg 36, Outdoor Air*	*Parcel 2943, Bldg 35*	*Parcel 2943, Bldg 35*	*Parcel 2943, Bldg 35*	*Parcel 2943, Bldg 35*	*Parcel 2943, Bldg 35*	*Parcel 2943, Bldg 35*	*Parcel 2943, Bldg 35, Outdoor Air*
Sample Location:														
Owner/Tenant:				*Village Park*	*Village Park*	*Village Park*	*Village Park*	*Village Park*	*Village Park*	*Village Park*	*Village Park*	*Village Park*	*Village Park*	*Village Park*
Sample ID:				*CS-38443-073112-GL-008*	*CS-38443-073112-GL-008*	*OA-38443-073112-GL-009*	*OA-38443-073112-GL-009*	*CS-38443-073112-GL-011*	*CS-38443-073112-GL-012*	*CS-38443-073112-GL-011*	*CS-38443-073112-GL-012*	*CS-38443-091112-GL-008*	*CS-38443-091112-GL-009*	*OA-38443-073112-GL-010*
Sample Date:				*7/31/2012*	*8/1/2012*	*7/31/2012*	*8/1/2012*	*7/31/2012*	*7/31/2012*	*8/1/2012*	*8/1/2012*	*9/11/2012*	*9/11/2012*	*7/31/2012*
									Duplicate		*Duplicate*		*Duplicate*	
Parameter	*Units*	*ODH Indoor Air Screening Levels (Residential)* *a*	*ODH Indoor Air Action Levels (Residential)* *b*											
Volatile Organic Compounds														
1,1,1-Trichloroethane	ppb	NC	NC	0.030 U	-	0.030 U	-	0.030 U	0.030 U	-	-	0.030 U	0.030 U	0.030 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	-	0.061 U	-	0.061 U	0.061 U	-	-	0.061 U	0.061 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	-	0.054 U	-	0.054 U	0.054 U	-	-	0.054 U	0.054 U	0.054 U
1,1-Dichloroethane	ppb	3.7	37	0.026 U	-	0.026 U	-	0.026 U	0.026 U	-	-	0.026 U	0.026 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.032 U	-	0.032 U	-	0.032 U	0.032 U	-	-	0.032 U	0.032 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 UJ	-	0.098 UJ	-	0.098 UJ	0.098 UJ	-	-	0.12 J	0.098 UJ	0.098 UJ
1,2,4-Trimethylbenzene	ppb	NC	NC	0.19 J	-	0.12 J	-	0.085 J	0.084 J	-	-	0.086 J	0.75 J	0.091 J
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	-	0.044 U	-	0.044 U	0.044 U	-	-	0.044 U	0.044 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	-	0.070 U	-	0.070 U	0.070 U	-	-	0.080 J	0.070 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.11 J	-	0.047 U	-	0.047 U	0.047 U	-	-	0.047 U	0.047 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	-	0.052 U	-	0.052 U	0.052 U	-	-	0.052 U	0.052 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	-	0.032 U	-	0.032 U	0.032 U	-	-	0.032 U	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.065 U	-	0.065 U	-	0.065 U	0.065 U	-	-	0.065 UJ	0.16 J	0.065 U
1,3-Butadiene	ppb	NC	NC	0.064 U	-	0.064 U	-	0.064 U	0.064 U	-	-	0.064 U	0.064 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	-	0.065 U	-	0.065 U	0.065 U	-	-	0.065 U	0.065 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.064 U	-	0.064 U	-	0.064 U	0.064 U	-	-	0.064 U	0.064 U	0.064 U
1,4-Dioxane	ppb	NC	NC	0.080 U	-	0.080 U	-	0.080 U	0.080 U	-	-	0.080 U	0.080 U	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.074 J	-	0.077 J	-	0.062 J	0.069 J	-	-	0.073 J	0.12 J	0.058 J
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	1.3	-	0.61 J	-	1.1	0.67 J	-	-	1.5	1.5	0.60 J
2-Chlorotoluene	ppb	NC	NC	0.063 U	-	0.063 U	-	0.063 U	0.063 U	-	-	0.063 U	0.063 U	0.063 U
2-Hexanone	ppb	NC	NC	0.058 U	-	0.058 U	-	0.070 J	0.058 U	-	-	0.066 J	0.062 J	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	-	0.064 U	-	0.064 U	0.064 U	-	-	0.064 U	0.064 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.066 U	-	0.066 U	-	0.072 J	0.066 U	-	-	0.066 UJ	0.16 J	0.066 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.045 U	-	0.045 U	-	0.092 J	0.045 U	-	-	0.093 J	0.045 UJ	0.045 U
Acetone	ppb	NC	NC	5.4 J	-	4.0 J	-	7.9 J	5.6 J	-	-	7.4	8.9	4.0 J
Allyl chloride	ppb	NC	NC	0.048 U	-	0.048 U	-	0.048 U	0.048 U	-	-	0.048 U	0.048 U	0.048 U
Benzene	ppb	0.4	4	0.17 J	-	0.17 J	-	0.17 J	0.18 J	-	-	0.17 J	0.19 J	0.16 J
Benzyl chloride	ppb	NC	NC	0.078 U	-	0.078 U	-	0.078 U	0.078 U	-	-	0.078 U	0.078 U	0.078 U
Bromodichloromethane	ppb	NC	NC	0.044 U	-	0.044 U	-	0.044 U	0.044 U	-	-	0.044 U	0.044 U	0.044 U
Bromoform	ppb	NC	NC	0.048 U	-	0.048 U	-	0.048 U	0.048 U	-	-	0.048 U	0.048 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	-	0.032 U	-	0.032 U	0.032 U	-	-	0.032 U	0.032 U	0.032 U
Butane	ppb	NC	NC	1.6 J	-	1.1 J	-	1.8 J	1.9 J	-	-	0.91	0.94	1.1 J
Carbon disulfide	ppb	NC	NC	0.048 J	-	0.043 J	-	0.71 J	0.045 J	-	-	0.046 J	0.26 J	0.033 J
Carbon tetrachloride	ppb	NC	NC	0.10 J	-	0.097 J	-	0.12 J	0.12 J	-	-	0.084 J	0.082 J	0.11 J
Chlorobenzene	ppb	NC	NC	0.049 U	-	0.049 U	-	0.049 U	0.049 U	-	-	0.049 U	0.049 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	0.46	-	0.41	-	18	20	-	-	6.3	6.3	1.3
Chloroethane	ppb	NC	NC	0.035 U	-	0.035 U	-	0.28	0.035 U	-	-	0.035 U	0.035 U	0.035 U
Chloroform (Trichloromethane)	ppb	20	200	0.047 J	-	0.051 J	-	0.17 J	0.069 J	-	-	0.15 J	0.15 J	0.057 J
Chloromethane (Methyl chloride)	ppb	NC	NC	1.0	-	0.72	-	2.3 J	0.72 J	-	-	0.51	0.45 J	1.0
cis-1,2-Dichloroethene	ppb	8.8	88	0.060 U	-	0.060 U	-	0.060 U	0.060 U	-	-	0.060 U	0.060 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	-	0.074 U	-	0.074 U	0.074 U	-	-	0.074 U	0.074 U	0.074 U
Cyclohexane	ppb	NC	NC	0.040 U	-	0.040 U	-	0.040 U	0.040 U	-	-	0.11 J	0.096 J	0.040 U
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.057 U	-	0.057 U	-	0.057 U	0.057 U	-	-	0.057 U	0.057 U	0.057 U
Dibromochloromethane	ppb	NC	NC	0.042 U	-	0.042 U	-	0.042 U	0.042 U	-	-	0.042 U	0.042 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.66 J	-	0.63 J	-	0.64 J	0.65 J	-	-	0.51	0.52	0.68 J
Ethylbenzene	ppb	60	600	0.12 J	-	0.094 J	-	0.082 J	0.089 J	-	-	0.090 J	0.17 J	0.10 J
Hexachlorobutadiene	ppb	NC	NC	0.078 U	-	0.078 U	-	0.078 U	0.078 U	-	-	0.078 UJ	0.078 UJ	0.078 U
Hexane	ppb	NC	NC	0.25 J	-	0.23 J	-	0.21 J	0.21 J	-	-	0.20 J	0.19 J	0.22 J
Isopropyl alcohol	ppb	NC	NC	3.3	-	2.7	-	0.94 J	1.1 J	-	-	0.49 J	0.37 J	0.98 J
Isopropyl benzene	ppb	NC	NC	0.060 U	-	0.060 U	-	0.060 U	0.060 U	-	-	0.060 U	0.060 U	0.060 U
m&p-Xylenes	ppb	50	500	0.41	-	0.35	-	0.26	0.29	-	-	0.29 J	0.81 J	0.30
Methyl methacrylate	ppb	NC	NC	0.079 U	-	0.079 U	-	0.079 U	0.079 U	-	-	0.079 U	0.079 U	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	-	0.17 U	-	0.17 U	0.17 U	-	-	0.17 U	0.17 U	0.17 U
Methylene chloride	ppb	NC	NC	0.045 U	-	0.045 U	-	0.045 U	0.045 U	-	-	0.21 U	0.24 U	0.045 U
Naphthalene	ppb	0.7	NC	0.090 UJ	-	0.090 UJ	-	0.090 UJ	0.15 J	-	-	0.10 J	0.52 J	0.090 UJ
N-Butylbenzene	ppb	NC	NC	0.046 U	-	0.046 U	-	0.046 U	0.046 U	-	-	0.046 UJ	0.085 J	0.046 U
N-Decane	ppb	NC	NC	0.21 J	-	0.21 J	-	0.17 J	0.33 J	-	-	0.25 J	0.12 J	0.15 J
N-Dodecane	ppb	NC	NC	0.078 UJ	-	0.078 UJ	-	0.078 UJ	0.33 J	-	-	0.078 U	0.078 U	0.078 UJ
N-Heptane	ppb	NC	NC	0.20 J	-	0.13 J	-	0.12 J	0.13 J	-	-	0.20 J	0.19 J	0.17 J
Nonane	ppb	NC	NC	0.10 J	-	0.10 J	-	0.068 J	0.14 J	-	-	0.043 U	0.056 J	0.085 J
N-Propylbenzene	ppb	NC	NC	0.056 U	-	0.056 U	-	0.056 U	0.056 U	-	-	0.056 U	0.075 J	0.056 U
N-Undecane	ppb	NC	NC	0.067 J	-	0.091 J	-	0.078 J	0.64 J	-	-	0.12 J	0.13 J	0.11 J
Octane	ppb	NC	NC	0.071 J	-	0.043 J	-	0.036 U	0.036 U	-	-	0.039 J	0.045 J	0.061 J

TABLE G.4

SUMMARY OF RESIDENTIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 2943, Bldg 36*	*Parcel 2943, Bldg 36*	*Parcel 2943, Bldg 36, Outdoor Air*	*Parcel 2943, Bldg 36, Outdoor Air*	*Parcel 2943, Bldg 35*	*Parcel 2943, Bldg 35*	*Parcel 2943, Bldg 35*	*Parcel 2943, Bldg 35*	*Parcel 2943, Bldg 35*	*Parcel 2943, Bldg 35*	*Parcel 2943, Bldg 35, Outdoor Air*
Sample Location:														
Owner/Tenant:				*Village Park*	*Village Park*	*Village Park*	*Village Park*	*Village Park*	*Village Park*	*Village Park*	*Village Park*	*Village Park*	*Village Park*	*Village Park*
Sample ID:				*CS-38443-073112-GL-008*	*CS-38443-073112-GL-008*	*OA-38443-073112-GL-009*	*OA-38443-073112-GL-009*	*CS-38443-073112-GL-011*	*CS-38443-073112-GL-012*	*CS-38443-073112-GL-011*	*CS-38443-073112-GL-012*	*CS-38443-091112-GL-008*	*CS-38443-091112-GL-009*	*OA-38443-073112-GL-010*
Sample Date:				*7/31/2012*	*8/1/2012*	*7/31/2012*	*8/1/2012*	*7/31/2012*	*7/31/2012*	*8/1/2012*	*8/1/2012*	*9/11/2012*	*9/11/2012*	*7/31/2012*
									Duplicate		*Duplicate*		*Duplicate*	
Parameter	*Units*	*ODH Indoor Air Screening Levels (Residential)*	*ODH Indoor Air Action Levels (Residential)*											
		a	*b*											
o-Xylene	ppb	50	500	0.15 J	-	0.13 J	-	0.099 J	0.11 J	-	-	0.11 J	0.38 J	0.12 J
Pentane	ppb	NC	NC	0.69 J	-	0.48 J	-	0.49 J	0.48 J	-	-	0.69 J	0.59 J	0.62 J
Styrene	ppb	NC	NC	0.058 U	-	0.058 U	-	0.068 J	0.12 J	-	-	0.058 U	0.058 U	0.058 U
tert-Butyl alcohol	ppb	NC	NC	0.089 J	-	0.067 J	-	0.24 J	0.18 J	-	-	0.10 J	0.067 J	0.058 J
tert-Butylbenzene	ppb	NC	NC	0.066 U	-	0.066 U	-	0.066 U	0.066 U	-	-	0.066 U	0.066 U	0.066 U
Tetrachloroethene	ppb	6	60	0.042 J	-	0.040 U	-	0.040 U	0.040 U	-	-	0.063 J	0.040 U	0.040 U
Tetrahydrofuran	ppb	NC	NC	0.84 J	-	0.063 U	-	0.063 U	0.063 U	-	-	0.085 J	0.082 J	0.063 U
Toluene	ppb	NC	NC	0.58	-	0.58	-	0.45	0.52	-	-	0.47	0.67	0.55
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	-	0.050 U	-	0.050 U	0.050 U	-	-	0.050 U	0.050 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	-	0.048 U	-	0.048 U	0.048 U	-	-	0.048 U	0.048 U	0.048 U
Trichloroethene	ppb	0.4	4	0.036 U	-	0.036 U	-	0.036 U	0.036 U	-	-	0.036 U	0.036 U	0.036 U
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.34	-	0.32	-	0.36	0.35	-	-	0.33	0.34	0.33
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.087 J	-	0.081 J	-	0.087 J	0.086 J	-	-	0.069 J	0.076 J	0.086 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	-	0.035 U	-	0.035 U	0.035 U	-	-	0.035 U	0.035 U	0.035 U
Vinyl chloride	ppb	0.4	4	0.071 U	-	0.071 U	-	0.081 J	0.071 U	-	-	0.071 U	0.071 U	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-
Gases														
Methane	%	0.05	0.05	**0.19 U[ab]**	-	**0.21 U[ab]**	-	**0.18 U[ab]**	**0.19 U[ab]**	-	-	**0.18 U[ab]**	**0.18 U[ab]**	**0.20 U[ab]**
Field Parameter														
Methane, field (unfiltered)	%	0.05	0.05	-	-	-	-	-	-	-	-	-	-	-
Methane, field (filtered)	%	0.05	0.05	0	0	0	0	0	0	0	0	-	-	0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.4

SUMMARY OF RESIDENTIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 2943, Bldg 35, Outdoor Air*	*Parcel 2943, Bldg 35, Outdoor Air*	*Parcel 3251, Bldg 29*	*Parcel 3251, Bldg 29, IA_A*	*Parcel 3251, Bldg 29, IA_A*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*
Sample Location:						*2232 East River Road*	*2232 East River Road*	*2232 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*
Owner/Tenant:				*Village Park*	*Village Park*	*Quinn Ogletree*	*Quinn Ogletree*	*Quinn Ogletree*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*
Sample ID:				*OA-38443-073112-GL-010*	*OA-38443-091112-GL-010*	*OA-38443-091312-GL-032*	*IA-38443-091312-GL-030*	*IA-38443-091312-GL-031*	*IA-38443-010312-GL-001*	*IA-38443-010312-GL-002*	*OA-38443-010312-GL-003*	*IA-38443-010312-GL-001*	*IA-38443-010312-GL-002*	*OA-38443-010312-GL-003*
Sample Date:				*8/1/2012*	*9/11/2012*	*9/13/2012*	*9/13/2012*	*9/13/2012*	*1/3/2012*	*1/3/2012*	*1/3/2012*	*1/4/2012*	*1/4/2012*	*1/4/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Residential)* *a*	*ODH Indoor Air Action Levels (Residential)* *b*											
Volatile Organic Compounds														
1,1,1-Trichloroethane	ppb	NC	NC	-	0.030 U	0.030 U	0.060 U	0.060 U	0.035 U	0.010 J	0.035 U	-	-	-
1,1,2,2-Tetrachloroethane	ppb	NC	NC	-	0.061 U	0.061 U	0.12 U	0.12 U	0.040 U	-	0.040 U	-	-	-
1,1,2-Trichloroethane	ppb	NC	NC	-	0.054 U	0.054 U	0.11 U	0.11 U	0.019 U	0.0050 U	0.019 U	-	-	-
1,1-Dichloroethane	ppb	3.7	37	-	0.026 U	0.026 U	0.052 U	0.052 U	0.035 U	0.0025 U	0.035 U	-	-	-
1,1-Dichloroethene	ppb	NC	NC	-	0.032 U	0.032 U	0.064 U	0.064 U	0.030 U	0.0050 U	0.030 U	-	-	-
1,2,4-Trichlorobenzene	ppb	NC	NC	-	0.098 U	0.098 UJ	0.20 UJ	0.20 UJ	0.050 U	-	0.050 U	-	-	-
1,2,4-Trimethylbenzene	ppb	NC	NC	-	0.063 U	0.22	0.29 J	0.35 J	0.052 U	-	0.052 U	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	-	0.044 U	0.044 U	0.088 U	0.088 U	0.018 U	0.0040 U	0.018 U	-	-	-
1,2-Dichlorobenzene	ppb	NC	NC	-	0.070 U	0.070 U	0.14 U	0.14 U	0.048 U	-	0.048 U	-	-	-
1,2-Dichloroethane	ppb	NC	NC	-	0.047 U	0.047 U	0.094 U	0.094 U	0.031 U	0.019	0.031 U	-	-	-
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	-	0.014 U	-	0.014 U	-	-	-
1,2-Dichloropropane	ppb	NC	NC	-	0.052 U	0.052 U	0.10 U	0.10 U	0.014 U	-	0.014 U	-	-	-
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	-	0.032 U	0.032 U	0.064 U	0.064 U	0.032 U	-	0.032 U	-	-	-
1,3,5-Trimethylbenzene	ppb	NC	NC	-	0.065 U	0.065 U	0.13 U	0.13 U	0.051 U	-	0.051 U	-	-	-
1,3-Butadiene	ppb	NC	NC	-	0.064 U	0.064 U	0.13 U	0.13 U	0.045 J	-	0.052 J	-	-	-
1,3-Dichlorobenzene	ppb	NC	NC	-	0.065 U	0.065 U	0.13 U	0.13 U	0.044 U	-	0.044 U	-	-	-
1,4-Dichlorobenzene	ppb	NC	NC	-	0.064 UJ	0.064 U	0.13 U	0.13 U	0.044 U	-	0.044 U	-	-	-
1,4-Dioxane	ppb	NC	NC	-	0.080 UJ	0.080 U	0.16 U	0.16 U	0.088 U	-	0.088 U	-	-	-
2,2,4-Trimethylpentane	ppb	NC	NC	-	0.061 J	0.29 J	0.34 J	0.29 J	0.036 U	-	0.036 U	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	-	0.58 J	0.68 J	4.5	5.2	0.57	-	0.37 J	-	-	-
2-Chlorotoluene	ppb	NC	NC	-	0.063 U	0.063 U	0.13 U	0.13 U	0.047 U	-	0.047 U	-	-	-
2-Hexanone	ppb	NC	NC	-	0.058 U	0.058 U	0.12 U	0.12 U	0.039 U	-	0.039 U	-	-	-
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	-	0.064 U	0.064 U	0.13 U	0.13 U	0.047 U	-	0.047 U	-	-	-
4-Ethyl toluene	ppb	NC	NC	-	0.066 U	0.074 J	0.13 U	0.13 U	0.046 U	-	0.046 U	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	-	0.055 J	3.9	0.090 U	0.090 U	0.026 U	-	0.026 U	-	-	-
Acetone	ppb	NC	NC	-	2.3 J	7.7	660	640	3.7 J	-	1.9 J	-	-	-
Allyl chloride	ppb	NC	NC	-	0.048 U	0.048 U	0.096 U	0.096 U	0.019 U	-	0.019 U	-	-	-
Benzene	ppb	0.4	4	-	0.14 J	0.38	**0.99**[a]	**0.76**[a]	0.21	0.27	0.24	-	-	-
Benzyl chloride	ppb	NC	NC	-	0.078 U	0.078 U	0.16 U	0.16 U	0.046 U	-	0.046 U	-	-	-
Bromodichloromethane	ppb	NC	NC	-	0.044 U	0.044 U	0.13 J	0.10 J	0.028 U	-	0.028 U	-	-	-
Bromoform	ppb	NC	NC	-	0.048 UJ	0.048 U	0.096 U	0.096 U	0.019 U	-	0.019 U	-	-	-
Bromomethane (Methyl bromide)	ppb	NC	NC	-	0.032 U	0.032 U	0.064 U	0.064 U	0.012 U	-	0.012 U	-	-	-
Butane	ppb	NC	NC	-	0.77	1.5	7.7	7.0	0.98	-	0.67	-	-	-
Carbon disulfide	ppb	NC	NC	-	0.048 J	0.031 U	0.099 J	0.092 J	0.066 U	-	0.066 U	-	-	-
Carbon tetrachloride	ppb	NC	NC	-	0.061 J	0.091 J	0.12 J	0.095 J	0.064 J	-	0.073 J	-	-	-
Chlorobenzene	ppb	NC	NC	-	0.049 U	0.049 U	0.098 U	0.098 U	0.020 U	-	0.020 U	-	-	-
Chlorodifluoromethane	ppb	NC	NC	-	1.4	0.56	0.64	0.54	0.26 J	-	0.26 J	-	-	-
Chloroethane	ppb	NC	NC	-	0.035 U	0.035 U	0.070 U	0.070 U	0.016 U	-	0.016 U	-	-	-
Chloroform (Trichloromethane)	ppb	20	200	-	0.13 J	4.2	**140**[a]	**120**[a]	0.031 U	0.028	0.031 U	-	-	-
Chloromethane (Methyl chloride)	ppb	NC	NC	-	0.56	0.68	2.6	2.3	0.48 J	-	0.52	-	-	-
cis-1,2-Dichloroethene	ppb	8.8	88	-	0.060 U	0.060 U	0.12 U	0.12 U	0.014 U	0.0025 U	0.014 U	-	-	-
cis-1,3-Dichloropropene	ppb	NC	NC	-	0.074 U	0.074 U	0.15 U	0.15 U	0.016 U	-	0.016 U	-	-	-
Cyclohexane	ppb	NC	NC	-	0.098 J	0.23 J	0.37 J	0.31 J	0.039 U	-	0.040 J	-	-	-
Cymene (p-Isopropyltoluene)	ppb	NC	NC	-	0.057 U	0.057 U	0.16 J	0.20 J	0.048 U	-	0.048 U	-	-	-
Dibromochloromethane	ppb	NC	NC	-	0.042 U	0.042 U	0.084 U	0.084 U	0.021 U	-	0.021 U	-	-	-
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	-	0.45	0.53	0.62	0.53	0.46 J	-	0.51	-	-	-
Ethylbenzene	ppb	60	600	-	0.077 J	0.25	0.70	0.73	0.036 J	-	0.034 J	-	-	-
Hexachlorobutadiene	ppb	NC	NC	-	0.078 U	0.078 UJ	0.16 UJ	0.16 UJ	0.065 U	-	0.065 U	-	-	-
Hexane	ppb	NC	NC	-	0.20 J	0.54	0.66 J	0.63 J	0.096 J	-	0.081 J	-	-	-
Isopropyl alcohol	ppb	NC	NC	-	0.57 J	0.99 J	15	16	0.037 U	-	0.34 J	-	-	-
Isopropyl benzene	ppb	NC	NC	-	0.060 U	0.060 U	0.12 U	0.12 U	0.031 U	-	0.031 U	-	-	-
m&p-Xylenes	ppb	50	500	-	0.24	0.87	2.1	2.3	0.10 J	-	0.098 J	-	-	-
Methyl methacrylate	ppb	NC	NC	-	0.079 U	0.079 U	0.16 U	0.16 U	0.013 U	-	0.013 U	-	-	-
Methyl tert butyl ether (MTBE)	ppb	NC	NC	-	0.17 U	0.17 U	0.34 U	0.34 U	0.016 U	-	0.016 U	-	-	-
Methylene chloride	ppb	NC	NC	-	0.22 J	0.38 U	36	32	0.098 J	0.093 U	0.10 J	-	-	-
Naphthalene	ppb	0.7	NC	-	0.090 U	0.090 UJ	0.18 UJ	0.18 UJ	0.086 U	0.0070 U	0.086 U	-	-	-
N-Butylbenzene	ppb	NC	NC	-	0.046 U	0.046 U	0.092 U	0.092 U	0.055 U	-	0.055 U	-	-	-
N-Decane	ppb	NC	NC	-	0.056 U	0.21 J	0.46 J	0.49 J	-	-	-	-	-	-
N-Dodecane	ppb	NC	NC	-	0.078 U	0.11 J	0.34 J	0.24 J	-	-	-	-	-	-
N-Heptane	ppb	NC	NC	-	0.25 J	0.59	2.8	2.4	0.077 J	-	0.090 J	-	-	-
Nonane	ppb	NC	NC	-	0.043 U	0.067 J	0.42 J	0.45 J	-	-	-	-	-	-
N-Propylbenzene	ppb	NC	NC	-	0.056 U	0.056 U	0.11 U	0.11 U	0.050 U	-	0.050 U	-	-	-
N-Undecane	ppb	NC	NC	-	0.062 U	0.17 J	0.31 J	0.25 J	-	-	-	-	-	-
Octane	ppb	NC	NC	-	0.036 U	0.090 J	1.0	0.84	-	-	-	-	-	-

TABLE G.4

SUMMARY OF RESIDENTIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 2943, Bldg 35, Outdoor Air*	*Parcel 2943, Bldg 35, Outdoor Air*	*Parcel 3251, Bldg 29*	*Parcel 3251, Bldg 29, IA_A*	*Parcel 3251, Bldg 29, IA_A*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*
Sample Location:						*2232 East River Road*	*2232 East River Road*	*2232 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*
Owner/Tenant:				*Village Park*	*Village Park*	*Quinn Ogletree*	*Quinn Ogletree*	*Quinn Ogletree*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*
Sample ID:				*OA-38443-073112-GL-010*	*OA-38443-091112-GL-010*	*OA-38443-091312-GL-032*	*IA-38443-091312-GL-030*	*IA-38443-091312-GL-031*	*IA-38443-010312-GL-001*	*IA-38443-010312-GL-002*	*OA-38443-010312-GL-003*	*IA-38443-010312-GL-001*	*IA-38443-010312-GL-002*	*OA-38443-010312-GL-003*
Sample Date:				*8/1/2012*	*9/11/2012*	*9/13/2012*	*9/13/2012*	*9/13/2012*	*1/3/2012*	*1/3/2012*	*1/3/2012*	*1/4/2012*	*1/4/2012*	*1/4/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Residential)* *a*	*ODH Indoor Air Action Levels (Residential)* *b*											
o-Xylene	ppb	50	500	-	0.091 J	0.31	0.55	0.64	0.041 J	-	0.038 J	-	-	-
Pentane	ppb	NC	NC	-	0.44 J	1.5	8.0	7.2	-	-	-	-	-	-
Styrene	ppb	NC	NC	-	0.058 U	0.058 U	3.1	3.8	0.030 U	-	0.030 U	-	-	-
tert-Butyl alcohol	ppb	NC	NC	-	0.038 U	0.041 J	0.56 J	0.59 J	0.071 U	-	0.071 U	-	-	-
tert-Butylbenzene	ppb	NC	NC	-	0.066 U	0.066 U	0.13 U	0.13 U	0.047 U	-	0.047 U	-	-	-
Tetrachloroethene	ppb	6	60	-	0.040 U	0.13 J	0.69	0.58	0.056 J	0.062	0.045 J	-	-	-
Tetrahydrofuran	ppb	NC	NC	-	0.063 U	0.066 J	0.64 J	0.72 J	0.018 U	-	0.018 U	-	-	-
Toluene	ppb	NC	NC	-	0.41	1.6	5.3	4.9	0.24	-	0.24	-	-	-
trans-1,2-Dichloroethene	ppb	NC	NC	-	0.050 U	0.050 U	0.10 U	0.10 U	0.032 U	0.0050 U	0.032 U	-	-	-
trans-1,3-Dichloropropene	ppb	NC	NC	-	0.048 U	0.048 U	0.096 U	0.096 U	0.020 U	-	0.020 U	-	-	-
Trichloroethene	ppb	0.4	4	-	0.036 U	0.036 U	0.072 U	0.072 U	0.030 U	0.013	0.030 U	-	-	-
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	-	0.27	0.35	0.48	0.44	0.21	-	0.21	-	-	-
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	-	0.064 J	0.082 J	0.084 J	0.077 J	0.071 J	-	0.074 J	-	-	-
Vinyl bromide (Bromoethene)	ppb	NC	NC	-	0.035 U	0.035 U	0.070 U	0.070 U	0.019 U	-	0.019 U	-	-	-
Vinyl chloride	ppb	0.4	4	-	0.071 U	0.071 U	0.14 U	0.14 U	0.029 U	0.0034 J	0.029 U	-	-	-
Xylenes (total)	ppb	NC	NC	-	-	-	-	-	0.14 J	-	0.14 J	-	-	-
Gases														
Methane	%	0.05	0.05	-	**0.18 U[ab]**	**0.18 U[ab]**	**0.18 U[ab]**	**0.18 U[ab]**	-	-	-	-	-	-
Field Parameter														
Methane, field (unfiltered)	%	0.05	0.05	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0
Methane, field (filtered)	%	0.05	0.05	0	-	-	-	-	-	-	-	-	-	-

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
- Concentration was greater than applicable criteria.

TABLE G.4

SUMMARY OF RESIDENTIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26, Outdoor Air*	*Parcel 3253, Bldg 26, Outdoor Air*	*Parcel 3253, Bldg 27*	*Parcel 3253, Bldg 27*	*Parcel 3262, Bldg 33*	*Parcel 3262, Bldg 33*
Sample Location:				*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2373 East River Road*	*2373 East River Road*
Owner/Tenant:				*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Jim Worley*	*Jim Worley*
Sample ID:				*IA-38443-073112-GL-013*	*IA-38443-073112-GL-014*	*IA-38443-073112-GL-013*	*IA-38443-073112-GL-014*	*IA-38443-010913-GL-005*	*OA-38443-073112-GL-017*	*OA-38443-073112-GL-017*	*-*	*-*	*CS-38443-080112-GL-027*	*CS-38443-080112-GL-027*
Sample Date:				*7/31/2012*	*7/31/2012*	*8/1/2012*	*8/1/2012*	*1/9/2013*	*7/31/2012*	*8/1/2012*	*1/5/2012*	*7/30/2012*	*8/1/2012*	*8/2/2012*
					Duplicate		*Duplicate*							
Parameter	*Units*	*ODH Indoor Air Screening Levels (Residential)* *a*	*ODH Indoor Air Action Levels (Residential)* *b*											
Volatile Organic Compounds														
1,1,1-Trichloroethane	ppb	NC	NC	0.030 U	0.037 UJ	-	-	0.030 U	0.030 U	-	-	-	0.030 U	-
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	0.076 UJ	-	-	0.061 U	0.061 U	-	-	-	0.061 U	-
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	0.067 UJ	-	-	0.054 U	0.054 U	-	-	-	0.054 U	-
1,1-Dichloroethane	ppb	3.7	37	0.026 U	0.032 UJ	-	-	0.026 U	0.026 U	-	-	-	0.026 U	-
1,1-Dichloroethene	ppb	NC	NC	0.032 U	0.040 UJ	-	-	0.032 U	0.032 U	-	-	-	0.032 U	-
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 UJ	0.12 UJ	-	-	0.098 U	0.098 UJ	-	-	-	0.098 UJ	-
1,2,4-Trimethylbenzene	ppb	NC	NC	0.12 J	0.17 J	-	-	0.063 U	0.12 J	-	-	-	0.26	-
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	0.055 UJ	-	-	0.044 U	0.044 U	-	-	-	0.044 U	-
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	0.087 UJ	-	-	0.070 U	0.070 U	-	-	-	0.070 U	-
1,2-Dichloroethane	ppb	NC	NC	0.047 U	0.058 UJ	-	-	0.047 U	0.047 U	-	-	-	0.047 U	-
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	0.064 UJ	-	-	0.052 U	0.052 U	-	-	-	0.052 U	-
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.040 UJ	-	-	0.032 U	0.032 U	-	-	-	0.032 U	-
1,3,5-Trimethylbenzene	ppb	NC	NC	0.065 U	0.081 UJ	-	-	0.065 U	0.065 U	-	-	-	0.065 U	-
1,3-Butadiene	ppb	NC	NC	0.13 J	0.079 UJ	-	-	0.064 U	0.064 U	-	-	-	0.064 U	-
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	0.081 UJ	-	-	0.065 U	0.065 U	-	-	-	0.065 U	-
1,4-Dichlorobenzene	ppb	NC	NC	0.064 U	0.079 UJ	-	-	0.064 U	0.064 U	-	-	-	0.064 U	-
1,4-Dioxane	ppb	NC	NC	0.080 U	0.099 UJ	-	-	0.080 U	0.080 U	-	-	-	0.080 U	-
2,2,4-Trimethylpentane	ppb	NC	NC	0.065 J	0.091 J	-	-	0.11 J	0.077 J	-	-	-	0.28 J	-
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	1.1	1.0 J	-	-	0.24 J	0.68 J	-	-	-	3.3	-
2-Chlorotoluene	ppb	NC	NC	0.063 U	0.078 UJ	-	-	0.063 U	0.063 U	-	-	-	0.063 U	-
2-Hexanone	ppb	NC	NC	0.072 J	0.072 UJ	-	-	0.058 U	0.058 UJ	-	-	-	0.060 J	-
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	0.079 UJ	-	-	0.064 U	0.064 U	-	-	-	0.064 U	-
4-Ethyl toluene	ppb	NC	NC	0.066 U	0.082 UJ	-	-	0.066 U	0.066 U	-	-	-	0.26 J	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.093 J	0.056 UJ	-	-	0.045 U	0.045 U	-	-	-	0.11 J	-
Acetone	ppb	NC	NC	9.7 J	15 J	-	-	2.8 J	5.4 J	-	-	-	17 J	-
Allyl chloride	ppb	NC	NC	0.048 U	0.060 UJ	-	-	0.048 U	0.048 U	-	-	-	0.048 U	-
Benzene	ppb	0.4	4	0.50[a]	0.49 J[a]	-	-	0.29	0.19 J	-	-	-	0.54[a]	-
Benzyl chloride	ppb	NC	NC	0.078 U	0.097 UJ	-	-	0.078 U	0.078 U	-	-	-	0.078 U	-
Bromodichloromethane	ppb	NC	NC	0.044 U	0.055 UJ	-	-	0.044 U	0.044 U	-	-	-	0.046 J	-
Bromoform	ppb	NC	NC	0.048 U	0.060 UJ	-	-	0.048 U	0.048 U	-	-	-	0.048 U	-
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	0.040 UJ	-	-	0.032 U	0.032 U	-	-	-	0.032 U	-
Butane	ppb	NC	NC	7.0	7.6 J	-	-	5.5	1.1	-	-	-	30 J	-
Carbon disulfide	ppb	NC	NC	0.057 J	0.11 J	-	-	0.031 U	0.049 J	-	-	-	0.074 J	-
Carbon tetrachloride	ppb	NC	NC	0.10 J	0.14 J	-	-	0.060 J	0.094 J	-	-	-	0.11 J	-
Chlorobenzene	ppb	NC	NC	0.049 U	0.061 UJ	-	-	0.049 U	0.049 U	-	-	-	0.049 U	-
Chlorodifluoromethane	ppb	NC	NC	0.45 J	1.3 J	-	-	0.36	0.44	-	-	-	1.7	-
Chloroethane	ppb	NC	NC	0.035 U	0.043 UJ	-	-	0.035 U	0.035 U	-	-	-	0.035 U	-
Chloroform (Trichloromethane)	ppb	20	200	0.085 J	0.16 J	-	-	0.038 U	0.062 J	-	-	-	0.18 J	-
Chloromethane (Methyl chloride)	ppb	NC	NC	0.93	1.3 J	-	-	0.62	0.77	-	-	-	1.1	-
cis-1,2-Dichloroethene	ppb	8.8	88	0.060 U	0.074 UJ	-	-	0.060 U	0.060 U	-	-	-	0.060 U	-
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	0.092 UJ	-	-	0.074 U	0.074 U	-	-	-	0.074 U	-
Cyclohexane	ppb	NC	NC	0.074 J	0.12 J	-	-	0.12 J	0.040 U	-	-	-	0.67	-
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.057 U	0.071 UJ	-	-	0.057 U	0.057 U	-	-	-	0.090 J	-
Dibromochloromethane	ppb	NC	NC	0.042 U	0.052 UJ	-	-	0.042 U	0.042 U	-	-	-	0.042 U	-
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.63	0.87 J	-	-	0.47	0.64	-	-	-	0.76 J	-
Ethylbenzene	ppb	60	600	0.11 J	0.18 J	-	-	0.068 U	0.11 J	-	-	-	0.35	-
Hexachlorobutadiene	ppb	NC	NC	0.078 UJ	0.097 UJ	-	-	0.078 U	0.078 UJ	-	-	-	0.078 U	-
Hexane	ppb	NC	NC	0.34 J	7.2 J	-	-	0.37 J	0.26 J	-	-	-	1.4	-
Isopropyl alcohol	ppb	NC	NC	0.97 J	1.2 J	-	-	7.4	0.57 J	-	-	-	5.2	-
Isopropyl benzene	ppb	NC	NC	0.060 U	0.074 UJ	-	-	0.060 U	0.060 U	-	-	-	0.060 U	-
m&p-Xylenes	ppb	50	500	0.36	0.55 J	-	-	0.14 J	0.36	-	-	-	1.2	-
Methyl methacrylate	ppb	NC	NC	0.079 U	0.098 UJ	-	-	0.079 U	0.079 U	-	-	-	0.079 U	-
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	0.21 UJ	-	-	0.17 U	0.17 U	-	-	-	0.17 U	-
Methylene chloride	ppb	NC	NC	0.045 UJ	13 J	-	-	0.28 J	0.045 U	-	-	-	0.045 U	-
Naphthalene	ppb	0.7	NC	0.090 U	0.11 UJ	-	-	0.090 U	0.090 U	-	-	-	0.095 J	-
N-Butylbenzene	ppb	NC	NC	0.046 U	0.057 UJ	-	-	0.046 U	0.046 U	-	-	-	0.046 U	-
N-Decane	ppb	NC	NC	0.79 J	0.55 J	-	-	-	0.29 J	-	-	-	0.20 J	-
N-Dodecane	ppb	NC	NC	0.078 U	0.097 UJ	-	-	-	0.099 J	-	-	-	0.078 J	-
N-Heptane	ppb	NC	NC	0.16 J	0.16 J	-	-	0.16 J	0.14 J	-	-	-	0.60	-
Nonane	ppb	NC	NC	0.42 J	0.40 J	-	-	-	0.14 J	-	-	-	0.089 J	-
N-Propylbenzene	ppb	NC	NC	0.056 U	0.069 UJ	-	-	0.056 U	0.056 U	-	-	-	0.056 U	-
N-Undecane	ppb	NC	NC	0.062 UJ	0.11 J	-	-	-	0.079 J	-	-	-	0.093 J	-
Octane	ppb	NC	NC	0.069 J	0.069 J	-	-	-	0.036 U	-	-	-	0.21 J	-

TABLE G.4

SUMMARY OF RESIDENTIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26*	*Parcel 3253, Bldg 26, Outdoor Air*	*Parcel 3253, Bldg 26, Outdoor Air*	*Parcel 3253, Bldg 27*	*Parcel 3253, Bldg 27*	*Parcel 3262, Bldg 33*	*Parcel 3262, Bldg 33*
Sample Location:				*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2233 East River Road*	*2373 East River Road*	*2373 East River Road*
Owner / Tenant:				*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Ron Barnett*	*Jim Worley*	*Jim Worley*
Sample ID:				*IA-38443-073112-GL-013*	*IA-38443-073112-GL-014*	*IA-38443-073112-GL-013*	*IA-38443-073112-GL-014*	*IA-38443-010913-GL-005*	*OA-38443-073112-GL-017*	*OA-38443-073112-GL-017*	*-*	*-*	*CS-38443-080112-GL-027*	*CS-38443-080112-GL-027*
Sample Date:				*7/31/2012*	*7/31/2012*	*8/1/2012*	*8/1/2012*	*1/9/2013*	*7/31/2012*	*8/1/2012*	*1/5/2012*	*7/30/2012*	*8/1/2012*	*8/2/2012*
					Duplicate		*Duplicate*							
Parameter	*Units*	*ODH Indoor Air Screening Levels (Residential)* *a*	*ODH Indoor Air Action Levels (Residential)* *b*											
o-Xylene	ppb	50	500	0.16 J	0.20 J	-	-	0.061 U	0.13 J	-	-	-	0.43	-
Pentane	ppb	NC	NC	1.0	1.6 J	-	-	-	0.82 J	-	-	-	4.7	-
Styrene	ppb	NC	NC	0.079 J	0.089 J	-	-	0.058 U	0.058 U	-	-	-	0.78	-
tert-Butyl alcohol	ppb	NC	NC	0.23 J	0.21 J	-	-	0.044 J	0.077 J	-	-	-	0.18 J	-
tert-Butylbenzene	ppb	NC	NC	0.066 U	0.082 UJ	-	-	0.066 U	0.066 U	-	-	-	0.066 U	-
Tetrachloroethene	ppb	6	60	0.040 U	0.050 UJ	-	-	0.048 J	0.040 U	-	-	-	0.48	-
Tetrahydrofuran	ppb	NC	NC	0.063 U	0.19 J	-	-	0.063 U	0.063 U	-	-	-	0.063 U	-
Toluene	ppb	NC	NC	0.89 J	2.7 J	-	-	0.51	0.65	-	-	-	3.7	-
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	0.062 UJ	-	-	0.050 U	0.050 U	-	-	-	0.050 U	-
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	0.060 UJ	-	-	0.048 U	0.048 U	-	-	-	0.048 U	-
Trichloroethene	ppb	0.4	4	0.036 U	0.045 UJ	-	-	0.036 U	0.036 U	-	-	-	0.036 U	-
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.39 J	2.2 J	-	-	0.23	0.30	-	-	-	0.37	-
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.083 J	0.11 J	-	-	0.056 J	0.077 J	-	-	-	0.099 J	-
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	0.043 UJ	-	-	0.035 U	0.035 U	-	-	-	0.035 U	-
Vinyl chloride	ppb	0.4	4	0.071 U	0.088 UJ	-	-	0.071 UJ	0.071 U	-	-	-	0.071 U	-
Xylenes (total)	ppb	NC	NC	-	-	-	-	-	-	-	-	-	-	-
Gases														
Methane	%	0.05	0.05	**0.21 U**[ab]	**0.20 U**[ab]	-	-	-	**0.21 U**[ab]	-	-	-	**0.20 U**[ab]	-
Field Parameter														
Methane, field (unfiltered)	%	0.05	0.05	-	-	-	-	-	-	-	0.0 / 0.0	-	-	-
Methane, field (filtered)	%	0.05	0.05	0	0	0	0	-	0	0	-	0 / 0	0	0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
\- Concentration was greater than applicable criteria.

TABLE G.4

SUMMARY OF RESIDENTIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3262, Bldg 33*	*Parcel 3262, Bldg 33, IA_A*	*Parcel 3262, Outdoor Air*	*Parcel 3262, Outdoor Air*	*Parcels 3262 & 3263, OA*	*Parcel 3263, Bldg 34, IA_A*	*Parcel 4610, Bldg 18*	*Parcel 4610, Bldg 18*	*Parcel 4610, Bldg 18*	*Parcel 4610, Bldg 18*	*Parcel 4610, Bldg 18*
Sample Location:				*2373 East River Road*	*2373 East River Road*	*2373 East River Road*	*2373 East River Road*		*2391 East River Road*	*2225A East River Road*	*2225A East River Road*	*2225A East River Road*	*2225A East River Road*	*2225A East River Road*
Owner/Tenant:				*Jim Worley*	*Jim Worley*	*Jim Worley*	*Jim Worley*	*Jim Worley*	*Jim Worley*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*
Sample ID:				*CS-38443-091212-GL-020*	*IA-38443-091212-GL-019*	*OA-38443-080112-GL-028*	*OA-38443-080112-GL-028*	*OA-38443-091212-GL-021*	*IA-38443-091212-GL-017*	*CS-38443-011212-JC-076*	*CS-38443-011212-JC-075*	*CS-38443-011212-JC-076*	*OA-38443-011212-JC-077*	*CS-38443-073112-GL-015*
Sample Date:				*9/12/2012*	*9/12/2012*	*8/1/2012*	*8/2/2012*	*9/12/2012*	*9/12/2012*	*1/12/2012*	*1/13/2012*	*1/13/2012*	*1/13/2012*	*7/31/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Residential)* *a*	*ODH Indoor Air Action Levels (Residential)* *b*											
Volatile Organic Compounds														
1,1,1-Trichloroethane	ppb	NC	NC	0.030 U	0.060 U	0.030 U	-	0.030 U	0.030 U	0.0072 J	0.035 U	-	0.035 U	0.030 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.061 U	0.12 U	0.061 U	-	0.061 U	0.061 U	-	0.040 U	-	0.040 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.054 U	0.11 U	0.054 U	-	0.054 U	0.054 U	0.0050 U	0.019 U	-	0.019 U	0.054 U
1,1-Dichloroethane	ppb	3.7	37	0.026 U	0.052 U	0.026 U	-	0.026 U	0.026 U	0.0025 U	0.035 U	-	0.035 U	0.026 U
1,1-Dichloroethene	ppb	NC	NC	0.032 U	0.064 U	0.032 U	-	0.032 U	0.032 U	0.0050 U	0.030 U	-	0.030 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.098 UJ	0.20 U	0.098 UJ	-	0.098 U	0.098 U	-	0.050 U	-	0.050 U	0.098 UJ
1,2,4-Trimethylbenzene	ppb	NC	NC	0.20	0.15 J	0.38	-	0.20	1.4	-	0.052 U	-	0.052 U	0.12 J
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.044 U	0.088 U	0.044 U	-	0.044 U	0.044 U	0.0040 U	0.018 U	-	0.018 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.070 U	0.14 U	0.070 U	-	0.070 U	0.070 U	-	0.048 U	-	0.048 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.047 U	0.094 U	0.047 U	-	0.047 U	0.13 J	0.019	0.031 U	-	0.031 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	-	-	-	0.014 U	-	0.014 U	-
1,2-Dichloropropane	ppb	NC	NC	0.052 U	0.10 U	0.052 U	-	0.052 U	0.052 U	-	0.014 U	-	0.014 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.064 U	0.032 U	-	0.032 U	0.032 U	-	0.032 U	-	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.065 U	0.13 U	0.065 U	-	0.065 U	0.58	-	0.051 U	-	0.051 U	0.065 U
1,3-Butadiene	ppb	NC	NC	0.064 U	0.13 U	0.064 U	-	0.064 U	0.064 U	-	0.010 U	-	0.010 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	0.065 U	0.13 U	0.065 U	-	0.065 U	0.065 U	-	0.044 U	-	0.044 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.064 U	0.13 UJ	0.064 U	-	0.064 UJ	0.34	-	0.044 U	-	0.044 U	0.064 U
1,4-Dioxane	ppb	NC	NC	0.080 U	0.16 UJ	0.080 U	-	0.080 UJ	0.080 U	-	0.088 U	-	0.088 U	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.72	0.67 J	0.36 J	-	0.69	0.32 J	-	0.036 U	-	0.036 U	0.096 J
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.78 J	0.54 J	0.80 J	-	0.52 J	5.8	-	0.34 J	-	0.12 J	1.2
2-Chlorotoluene	ppb	NC	NC	0.063 U	0.13 U	0.063 U	-	0.063 U	0.063 U	-	0.047 U	-	0.047 U	0.063 U
2-Hexanone	ppb	NC	NC	0.058 U	0.12 U	0.064 J	-	0.058 U	0.060 J	-	0.039 U	-	0.039 U	0.062 J
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.064 U	0.13 U	0.064 U	-	0.064 U	0.064 U	-	0.047 U	-	0.047 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.074 J	0.13 U	0.14 J	-	0.091 J	0.69	-	0.046 U	-	0.046 U	0.066 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.072 J	0.12 J	0.057 J	-	0.10 J	0.12 J	-	0.026 U	-	0.026 U	0.13 J
Acetone	ppb	NC	NC	15	9.8 J	6.4 J	-	5.2 J	8.6 J	-	1.3 J	-	0.89 J	10 J
Allyl chloride	ppb	NC	NC	0.048 U	0.096 U	0.048 U	-	0.048 U	0.048 U	-	0.019 U	-	0.019 U	0.048 U
Benzene	ppb	0.4	4	**0.89[a]**	**0.86[a]**	0.36	-	**0.64[a]**	0.39	0.17	0.16 J	-	0.15 J	**0.46[a]**
Benzyl chloride	ppb	NC	NC	0.078 U	0.16 U	0.078 U	-	0.078 U	0.078 U	-	0.046 UJ	-	0.046 UJ	0.078 U
Bromodichloromethane	ppb	NC	NC	0.044 U	0.088 U	0.044 U	-	0.044 U	0.044 U	-	0.028 U	-	0.028 U	0.044 U
Bromoform	ppb	NC	NC	0.048 U	0.096 UJ	0.048 U	-	0.048 UJ	0.048 U	-	0.019 U	-	0.019 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.032 U	0.064 U	0.032 U	-	0.032 U	0.032 U	-	0.012 U	-	0.012 U	0.032 U
Butane	ppb	NC	NC	31	39	1.4 J	-	2.7	3.0	-	0.96	-	0.93	11
Carbon disulfide	ppb	NC	NC	0.077 J	0.092 J	0.12 J	-	0.84	0.14 J	-	0.066 U	-	0.066 U	0.061 J
Carbon tetrachloride	ppb	NC	NC	0.088 J	0.081 J	0.10 J	-	0.083 J	0.090 J	-	0.068 J	-	0.068 J	0.096 J
Chlorobenzene	ppb	NC	NC	0.049 U	0.098 U	0.049 U	-	0.049 U	0.049 U	-	0.020 U	-	0.020 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	1.1	1.4	0.50	-	0.43	4.0	-	0.35 J	-	0.034 U	0.73
Chloroethane	ppb	NC	NC	0.035 U	0.070 U	0.035 U	-	0.14 J	0.035 U	-	0.016 U	-	0.016 U	0.035 U
Chloroform (Trichloromethane)	ppb	20	200	0.22	0.23 J	0.060 J	-	0.14 J	0.24	0.017	0.031 U	-	0.031 U	0.072 J
Chloromethane (Methyl chloride)	ppb	NC	NC	0.91	0.88 J	1.1	-	1.0	0.50	-	0.50	-	0.56	0.16 U
cis-1,2-Dichloroethene	ppb	8.8	88	0.060 U	0.12 U	0.060 U	-	0.060 U	0.060 U	0.0025 U	0.014 U	-	0.014 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.074 U	0.15 U	0.074 U	-	0.074 U	0.074 U	-	0.016 U	-	0.016 U	0.074 U
Cyclohexane	ppb	NC	NC	1.1	1.4	0.12 J	-	0.38 J	0.23 J	-	0.039 U	-	0.039 U	0.12 J
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.057 U	0.11 U	0.057 U	-	0.057 U	0.091 J	-	0.048 U	-	0.048 U	0.057 U
Dibromochloromethane	ppb	NC	NC	0.042 U	0.084 U	0.042 U	-	0.042 U	0.042 U	-	0.021 U	-	0.021 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.56	0.54	0.64 J	-	0.52	0.51	-	0.49 J	-	0.52	0.59
Ethylbenzene	ppb	60	600	0.38	0.27 J	0.45	-	0.26	0.17 J	-	0.035 J	-	0.022 U	0.11 J
Hexachlorobutadiene	ppb	NC	NC	0.078 UJ	0.16 U	0.078 U	-	0.078 U	0.078 U	-	0.065 U	-	0.065 U	0.078 UJ
Hexane	ppb	NC	NC	2.9	3.7	0.66	-	1.5	0.78	-	2.1	-	0.11 J	0.35 J
Isopropyl alcohol	ppb	NC	NC	2.6	4.4	0.79 J	-	0.30 J	0.85 J	-	0.34 J	-	0.037 U	11
Isopropyl benzene	ppb	NC	NC	0.060 U	0.12 U	0.060 U	-	0.060 U	0.15 J	-	0.031 U	-	0.031 U	0.060 U
m&p-Xylenes	ppb	50	500	1.3	0.90	1.6	-	0.86	0.62	-	0.070 J	-	0.048 U	0.38
Methyl methacrylate	ppb	NC	NC	0.079 U	0.16 U	0.079 U	-	0.079 U	0.079 U	-	0.013 U	-	0.013 U	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.17 U	0.34 U	0.17 U	-	0.17 U	0.17 U	-	0.016 U	-	0.016 U	0.17 U
Methylene chloride	ppb	NC	NC	0.52 U	0.86 J	0.045 U	-	0.41 J	3.5	0.10 U	0.13 J	-	0.12 J	0.045 U
Naphthalene	ppb	0.7	NC	0.090 UJ	0.18 U	0.090 UJ	-	0.090 U	0.090 U	0.0070 U	0.086 U	-	0.086 U	0.090 U
N-Butylbenzene	ppb	NC	NC	0.046 U	0.092 U	0.046 U	-	0.046 U	0.046 U	-	0.055 U	-	0.055 U	0.046 U
N-Decane	ppb	NC	NC	0.056 UJ	0.11 U	0.16 J	-	0.075 J	0.43 J	-	-	-	-	0.33 J
N-Dodecane	ppb	NC	NC	0.078 U	0.16 U	0.097 J	-	0.078 U	0.078 U	-	-	-	-	0.078 U
N-Heptane	ppb	NC	NC	1.2	1.3	0.28 J	-	0.67	0.30 J	-	0.10 J	-	0.052 J	0.17 J
Nonane	ppb	NC	NC	0.073 J	0.086 U	0.086 J	-	0.053 J	0.19 J	-	-	-	-	0.24 J
N-Propylbenzene	ppb	NC	NC	0.056 U	0.11 U	0.082 J	-	0.056 U	0.31 J	-	0.050 U	-	0.050 U	0.056 U
N-Undecane	ppb	NC	NC	0.071 J	0.12 U	0.096 J	-	0.091 J	0.16 J	-	-	-	-	0.090 J
Octane	ppb	NC	NC	0.21 J	0.19 J	0.17 J	-	0.098 J	0.053 J	-	-	-	-	0.060 J

TABLE G.4

SUMMARY OF RESIDENTIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 3262, Bldg 33*	*Parcel 3262, Bldg 33, IA_A*	*Parcel 3262, Outdoor Air*	*Parcel 3262, Outdoor Air*	*Parcels 3262 & 3263, OA*	*Parcel 3263, Bldg 34, IA_A*	*Parcel 4610, Bldg 18*	*Parcel 4610, Bldg 18*	*Parcel 4610, Bldg 18*	*Parcel 4610, Bldg 18*	*Parcel 4610, Bldg 18*
Sample Location:				*2373 East River Road*	*2373 East River Road*	*2373 East River Road*	*2373 East River Road*		*2391 East River Road*	*2225A East River Road*	*2225A East River Road*	*2225A East River Road*	*2225A East River Road*	*2225A East River Road*
Owner/Tenant:				*Jim Worley*	*Jim Worley*	*Jim Worley*	*Jim Worley*	*Jim Worley*	*Jim Worley*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*
Sample ID:				*CS-38443-091212-GL-020*	*IA-38443-091212-GL-019*	*OA-38443-080112-GL-028*	*OA-38443-080112-GL-028*	*OA-38443-091212-GL-021*	*IA-38443-091212-GL-017*	*CS-38443-011212-JC-076*	*CS-38443-011212-JC-075*	*CS-38443-011212-JC-076*	*OA-38443-011212-JC-077*	*CS-38443-073112-GL-015*
Sample Date:				*9/12/2012*	*9/12/2012*	*8/1/2012*	*8/2/2012*	*9/12/2012*	*9/12/2012*	*1/12/2012*	*1/13/2012*	*1/13/2012*	*1/13/2012*	*7/31/2012*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Residential)* *a*	*ODH Indoor Air Action Levels (Residential)* *b*											
o-Xylene	ppb	50	500	0.42	0.32 J	0.60	-	0.29	0.41	-	0.023 J	-	0.022 U	0.15 J
Pentane	ppb	NC	NC	11	10	1.2	-	2.6	1.6	-	-	-	-	1.6
Styrene	ppb	NC	NC	0.43	0.50	0.075 J	-	0.058 U	0.41	-	0.030 U	-	0.030 U	0.077 J
tert-Butyl alcohol	ppb	NC	NC	0.038 UJ	0.081 J	0.19 J	-	0.038 U	0.15 J	-	0.071 U	-	0.071 U	0.16 J
tert-Butylbenzene	ppb	NC	NC	0.066 U	0.13 U	0.066 U	-	0.066 U	0.066 U	-	0.047 U	-	0.047 U	0.066 U
Tetrachloroethene	ppb	6	60	0.48	0.78	0.040 U	-	0.080 J	0.15 J	0.024	0.011 U	-	0.011 U	0.053 J
Tetrahydrofuran	ppb	NC	NC	0.065 J	0.13 U	0.063 U	-	0.063 U	8.2	-	0.018 U	-	0.018 U	0.063 U
Toluene	ppb	NC	NC	3.6	2.7	2.4	-	2.1	3.5	-	0.18 J	-	0.12 J	1.4
trans-1,2-Dichloroethene	ppb	NC	NC	0.050 U	0.10 U	0.050 U	-	0.050 U	0.050 U	0.0050 U	0.032 U	-	0.032 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.048 U	0.096 U	0.048 U	-	0.048 U	0.048 U	-	0.020 U	-	0.020 U	0.048 U
Trichloroethene	ppb	0.4	4	0.036 U	0.072 U	0.036 U	-	0.036 U	0.036 U	0.022	0.030 U	-	0.030 U	0.036 U
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.36	0.36 J	0.32	-	0.33	0.31	-	0.20	-	0.22	0.35
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.077 J	0.078 J	0.087 J	-	0.077 J	0.070 J	-	0.070 J	-	0.072 J	0.085 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.035 U	0.070 U	0.035 U	-	0.035 U	0.035 U	-	0.019 U	-	0.019 U	0.035 U
Vinyl chloride	ppb	0.4	4	0.071 U	0.14 U	0.071 U	-	0.071 U	0.071 U	0.0027 UJ	0.029 U	-	0.029 U	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-	-	-	-	-	0.093 J	-	0.022 U	-
Gases														
Methane	%	0.05	0.05	**0.20 U[ab]**	**0.18 U[ab]**	**0.20 U[ab]**	-	**0.21 U[ab]**	**0.19 U[ab]**	-	**0.060 U[ab]**	-	-	**0.20 U[ab]**
Field Parameter														
Methane, field (unfiltered)	%	0.05	0.05	-	-	-	-	-	-	0.0	0.0 / 0.0	0.0	0.0 / 0.0	-
Methane, field (filtered)	%	0.05	0.05	-	-	0	0	-	-	-	-	-	-	0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
\- Concentration was greater than applicable criteria.

TABLE G.4

SUMMARY OF RESIDENTIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 4610, Bldg 18*	*Parcel 4610, Bldg 18*	*Parcel 4610, Bldg 18*	*Parcel 4610, Bldg 18, IA*	*Parcel 4610, Bldg 18, Outdoor Air*	*Parcel 4610, Bldg 18, Outdoor Air*	*Parcel 4610, Bldg 18, Outdoor Air*
Sample Location:				*2225A East River Road*	*2225A East River Road*	*2225A East River Road*	*2225A East River Road*	*2225A East River Road*	*2225A East River Road*	*2225A East River Road*
Owner / Tenant:				*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*
Sample ID:				*CS-38443-073112-GL-015*	*CS-38443-010913-GL-008*	*CS-38443-010913-GL-009*	*IA-38443-010913-GL-006*	*OA-38443-073112-GL-016*	*OA-38443-073112-GL-016*	*OA-38443-010913-GL-007*
Sample Date:				*8/1/2012*	*1/9/2013*	*1/9/2013* *Duplicate*	*1/9/2013*	*7/31/2012*	*8/1/2012*	*1/9/2013*
Parameter	*Units*	*ODH Indoor Air Screening Levels (Residential)* *a*	*ODH Indoor Air Action Levels (Residential)* *b*							
Volatile Organic Compounds										
1,1,1-Trichloroethane	ppb	NC	NC	-	0.030 U	0.030 U	0.030 U	0.030 U	-	0.030 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	-	0.061 U	0.061 U	0.061 U	0.061 U	-	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	-	0.054 U	0.054 U	0.054 U	0.054 U	-	0.054 U
1,1-Dichloroethane	ppb	3.7	37	-	0.026 U	0.026 U	0.026 U	0.026 U	-	0.026 U
1,1-Dichloroethene	ppb	NC	NC	-	0.032 U	0.032 U	0.032 U	0.032 U	-	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	-	0.098 U	0.098 U	0.098 U	0.098 UJ	-	0.098 U
1,2,4-Trimethylbenzene	ppb	NC	NC	-	0.13 J	0.063 U	0.063 U	0.063 U	-	0.063 U
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	-	0.044 U	0.044 U	0.044 U	0.044 U	-	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	-	0.070 U	0.070 U	0.070 U	0.070 U	-	0.070 U
1,2-Dichloroethane	ppb	NC	NC	-	0.047 U	0.047 U	0.047 U	0.047 U	-	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	-	0.052 U	0.052 U	0.052 U	0.052 U	-	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	-	0.032 U	0.032 U	0.032 U	0.032 U	-	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	-	0.065 U	0.065 U	0.065 U	0.065 U	-	0.065 U
1,3-Butadiene	ppb	NC	NC	-	0.064 U	0.064 U	0.064 U	0.064 U	-	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	-	0.065 U	0.065 U	0.065 U	0.065 U	-	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	-	0.064 U	0.064 U	0.064 U	0.064 U	-	0.064 U
1,4-Dioxane	ppb	NC	NC	-	0.080 U	0.080 U	0.080 U	0.080 U	-	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	-	0.18 J	0.14 J	0.14 J	5.1	-	0.12 J
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	-	0.36 J	0.36 J	7.9	0.93 J	-	0.26 J
2-Chlorotoluene	ppb	NC	NC	-	0.063 U	0.063 U	0.063 U	0.063 U	-	0.063 U
2-Hexanone	ppb	NC	NC	-	0.058 U	0.058 U	0.058 U	0.058 UJ	-	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	-	0.064 U	0.064 U	0.064 U	0.064 U	-	0.064 U
4-Ethyl toluene	ppb	NC	NC	-	0.066 U	0.066 U	0.066 U	0.066 U	-	0.066 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	-	0.26 J	0.30 J	0.46 J	0.47 J	-	0.71
Acetone	ppb	NC	NC	-	3.5 J	3.5 J	14	8.4 J	-	3.0 J
Allyl chloride	ppb	NC	NC	-	0.048 U	0.048 U	0.048 U	0.048 U	-	0.048 U
Benzene	ppb	0.4	4	-	0.36	0.32	0.37	0.24	-	0.30
Benzyl chloride	ppb	NC	NC	-	0.078 U	0.078 U	0.078 U	0.078 U	-	0.078 U
Bromodichloromethane	ppb	NC	NC	-	0.044 U	0.044 U	0.044 U	0.044 U	-	0.044 U
Bromoform	ppb	NC	NC	-	0.048 U	0.048 U	0.048 U	0.048 U	-	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	-	0.032 U	0.032 U	0.032 U	0.032 U	-	0.032 U
Butane	ppb	NC	NC	-	4.1	4.3	4.6	1.5	-	3.7
Carbon disulfide	ppb	NC	NC	-	0.034 J	0.042 J	0.031 U	0.064 J	-	0.039 J
Carbon tetrachloride	ppb	NC	NC	-	0.065 J	0.053 J	0.065 J	0.11 J	-	0.059 J
Chlorobenzene	ppb	NC	NC	-	0.049 U	0.049 U	0.049 U	0.049 U	-	0.049 U
Chlorodifluoromethane	ppb	NC	NC	-	0.39	0.39	0.35	0.47	-	0.38
Chloroethane	ppb	NC	NC	-	0.035 U	0.035 U	0.035 U	0.035 U	-	0.035 U
Chloroform (Trichloromethane)	ppb	20	200	-	0.038 U	0.038 U	0.038 U	0.076 J	-	0.038 U
Chloromethane (Methyl chloride)	ppb	NC	NC	-	0.64	0.66	0.69	0.91	-	0.58
cis-1,2-Dichloroethene	ppb	8.8	88	-	0.060 U	0.060 U	0.060 U	0.060 U	-	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	-	0.074 U	0.074 U	0.074 U	0.074 U	-	0.074 U
Cyclohexane	ppb	NC	NC	-	0.14 J	0.14 J	0.24 J	0.39 J	-	0.11 J
Cymene (p-Isopropyltoluene)	ppb	NC	NC	-	0.057 U	0.057 U	0.057 U	0.057 U	-	0.057 U
Dibromochloromethane	ppb	NC	NC	-	0.042 U	0.042 U	0.042 U	0.042 U	-	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	-	0.52	0.56	0.55	0.71	-	0.48
Ethylbenzene	ppb	60	600	-	0.14 J	0.068 U	0.24	0.54	-	0.068 U
Hexachlorobutadiene	ppb	NC	NC	-	0.078 U	0.078 U	0.078 U	0.078 UJ	-	0.078 U
Hexane	ppb	NC	NC	-	0.43 J	0.35 J	0.48 J	1.2	-	0.34 J
Isopropyl alcohol	ppb	NC	NC	-	1.2 J	1.2 J	1.5 J	0.87 J	-	0.57 J
Isopropyl benzene	ppb	NC	NC	-	0.060 U	0.060 U	0.060 U	0.060 U	-	0.060 U
m&p-Xylenes	ppb	50	500	-	0.50 J	0.12 UJ	0.73	0.90	-	0.21
Methyl methacrylate	ppb	NC	NC	-	0.079 U	0.079 U	0.079 U	0.25 J	-	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	-	0.17 U	0.17 U	0.17 U	0.17 U	-	0.17 U
Methylene chloride	ppb	NC	NC	-	0.49 J	0.24 J	0.40 J	0.045 U	-	0.44 J
Naphthalene	ppb	0.7	NC	-	0.090 U	0.090 U	0.090 U	0.090 U	-	0.090 U
N-Butylbenzene	ppb	NC	NC	-	0.046 U	0.046 U	0.046 U	0.046 U	-	0.046 U
N-Decane	ppb	NC	NC	-	-	-	-	0.056 U	-	-
N-Dodecane	ppb	NC	NC	-	-	-	-	0.078 U	-	-
N-Heptane	ppb	NC	NC	-	0.25 J	0.12 J	1.9	2.6	-	0.11 J
Nonane	ppb	NC	NC	-	-	-	-	0.043 U	-	-
N-Propylbenzene	ppb	NC	NC	-	0.056 U	0.056 U	0.056 U	0.056 U	-	0.056 U
N-Undecane	ppb	NC	NC	-	-	-	-	0.062 UJ	-	-
Octane	ppb	NC	NC	-	-	-	-	0.35 J	-	-

TABLE G.4

SUMMARY OF RESIDENTIAL INDOOR AIR ANALYTICAL RESULTS
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				*Parcel 4610, Bldg 18*	*Parcel 4610, Bldg 18*	*Parcel 4610, Bldg 18*	*Parcel 4610, Bldg 18, IA*	*Parcel 4610, Bldg 18, Outdoor Air*	*Parcel 4610, Bldg 18, Outdoor Air*	*Parcel 4610, Bldg 18, Outdoor Air*
Sample Location:				*2225A East River Road*	*2225A East River Road*	*2225A East River Road*	*2225A East River Road*	*2225A East River Road*	*2225A East River Road*	*2225A East River Road*
Owner/Tenant:				*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*	*Ron Barnett Construction*
Sample ID:				*CS-38443-073112-GL-015*	*CS-38443-010913-GL-008*	*CS-38443-010913-GL-009*	*IA-38443-010913-GL-006*	*OA-38443-073112-GL-016*	*OA-38443-073112-GL-016*	*OA-38443-010913-GL-007*
Sample Date:				*8/1/2012*	*1/9/2013*	*1/9/2013*	*1/9/2013*	*7/31/2012*	*8/1/2012*	*1/9/2013*
						Duplicate				
Parameter	*Units*	*ODH Indoor Air Screening Levels (Residential)* *a*	*ODH Indoor Air Action Levels (Residential)* *b*							
o-Xylene	ppb	50	500	-	0.19 J	0.061 UJ	0.20	0.20	-	0.076 J
Pentane	ppb	NC	NC	-	-	-	-	1.0	-	-
Styrene	ppb	NC	NC	-	0.058 U	0.058 U	0.089 J	0.058 U	-	0.058 U
tert-Butyl alcohol	ppb	NC	NC	-	0.061 J	0.052 J	0.13 J	0.11 J	-	0.053 J
tert-Butylbenzene	ppb	NC	NC	-	0.066 U	0.066 U	0.066 U	0.066 U	-	0.066 U
Tetrachloroethene	ppb	6	60	-	0.67 J	0.043 J	0.055 J	0.074 J	-	0.040 U
Tetrahydrofuran	ppb	NC	NC	-	0.087 J	0.063 U	0.063 U	0.063 U	-	0.063 U
Toluene	ppb	NC	NC	-	1.1 J	0.57 J	5.7	6.5	-	0.56
trans-1,2-Dichloroethene	ppb	NC	NC	-	0.050 U	0.050 U	0.050 U	0.050 U	-	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	-	0.048 U	0.048 U	0.048 U	0.048 U	-	0.048 U
Trichloroethene	ppb	0.4	4	-	0.036 U	0.036 U	0.036 U	0.036 U	-	0.036 U
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	-	0.26	0.26	0.26	0.34	-	0.24
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	-	0.063 J	0.060 J	0.061 J	0.079 J	-	0.063 J
Vinyl bromide (Bromoethene)	ppb	NC	NC	-	0.035 U	0.035 U	0.035 U	0.035 U	-	0.035 U
Vinyl chloride	ppb	0.4	4	-	0.071 UJ	0.071 UJ	0.071 UJ	0.071 U	-	0.071 UJ
Xylenes (total)	ppb	NC	NC	-	-	-	-	-	-	-
Gases										
Methane	%	0.05	0.05	-	-	-	-	**0.20 U[ab]**	-	-
Field Parameter										
Methane, field (unfiltered)	%	0.05	0.05	-	-	-	-	-	-	-
Methane, field (filtered)	%	0.05	0.05	0	-	-	-	0	0	-

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
R - The presence or absence of the chemical cannot be verified
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
\- Concentration was greater than applicable criteria.

APPENDIX H

OHIO DEPARTMENT OF HEALTH CORRESPONDENCE

OHIO DEPARTMENT OF HEALTH

246 North High Street
Columbus, Ohio 43215

614/466-3543
www.odh.ohio.gov

John R. Kasich / Governor

Theodore E. Wymyslo, M.D. / Director of Health

July 6, 2012

Steven Renninger, On-Scene Coordinator
U.S. Environmental Protection Agency
Emergency Response Branch
26 West Martin Luther King Drive (G41)
Cincinnati, OH 45268

Dear Steve:

Per your request, ODH HAS is providing screening levels for the contaminants of concern in indoor air and sub-slab soil gas for properties at South Dayton Dump in Dayton, Ohio.

The values listed in the tables are expressed in micrograms per cubic meter ($\mu g/m^3$) and parts per billion (ppb). We prefer the use of ppb, as we believe it is more easily understood by the general public. Based on the Region 5 guidance, we are giving you both screening levels and action levels for assessing vapor intrusion sites:

Screening Levels are based on 10^{-5} cancer risk or hazard index of 1.0. Screening levels represent concentrations of a substance that are unlikely to cause harmful (adverse) health effects in exposed people. Detections in indoor air below these levels are not of a health concern. When available, our screening levels were taken from ATSDR's minimal risk levels (MRLs) and cancer risk evaluation guides (CREGs). Other sources include the U.S. EPA's reference concentrations (RfCs), regional screening levels (RSLs); and, in the case of cis-1,2-DCE, the 2002 OSWER Vapor Intrusion Guidance.

Action Levels are based on 10^{-4} cancer risk and hazard index of 10. Detections in indoor air that exceed this level would lead to a recommendation for actions to reduce exposure in a relatively short period of time. Detections below the action level, but above the screening level would be referred to the EPA Remedial program or to the state for evaluation.

Also included are corresponding values for non-residential buildings – spaces that are not used for residences or where children are not continuously present. Non-residential buildings include commercial businesses and public buildings, churches, non-manufacturing businesses, and industries where these chemicals are not used as part of the manufacturing process. The non-residential screening levels were derived by adjusting the residential values by a factor of 4.2 to adjust from a 168-hour week for the residential exposure to a 40-hour work week for the non-residential exposure. For industrial settings were the chemicals in question are used, OSHA permissible exposure limits or other occupational exposure values would apply.

Methane gas is explosive between its lower explosive limit (LEL) of 5 percent methane by volume in air and its upper explosive limit (UEL) of 15 percent by volume. At these levels, there is a ratio of methane to oxygen in air that allows for combustion to occur and an explosion hazard to exist if an ignition source is present in a confined indoor space. Based on Region 5 Vapor Intrusion Guidance, methane levels exceeding 10 percent of the LEL or 0.5 percent methane by volume in the sub-slab soil gas are considered potential explosive situations that may need immediate action. For indoor air, methane results greater than 1 percent of the LEL or 0.05 percent methane by volume are levels where emergency actions may be undertaken. Because this is a physical hazard, these actionable levels would apply in both residential and commercial settings.

If you have any questions regarding these values, please contact John Kollman in my program at (614) 752-8335.

Thank you.

Sincerely,

Robert Frey, PhD
Chief, Health Assessment Section, Ohio Department of Health

RF/jk

Table 1. Screening Levels – South Dayton Dump

Chemical of Concern	Residential		Source/Criteria	Non-residential		Source/Criteria
	$\mu g/m^3$	ppb		$\mu g/m^3$	ppb	
Indoor Air Screening Levels						
1,1-Dichloroethane	15	3.7	EPA RSL/C/10^{-5}	63	16	EPA RSL/C/10^{-5} x 4.2
Benzene	1	0.4	CREG/C/10^{-5}	4	2	CREG/C/10^{-5} x 4.2
Chloroform	100	20	ATSDR/NC	400	80	ATSDR/NC
cis-1,2-Dichloroethylene	35	8.8	OSWER/NC	150	37	OSWER/NC x 4.2
Ethylbenzene	300	60	ATSDR/NC	1,300	250	ATSDR/NC x 4.2
Tetrachloroethylene (PCE)	40	6	EPA RfC	170	25	EPA RfC x 4.2
Trichloroethylene (TCE)	2	0.4	EPA RfC	10	2	EPA RfC x 4.2
m,p-Xylene*	200	50	ATSDR/NC	800	200	ATSDR/NC x 4.2
o-Xylene*	200	50	ATSDR/NC	800	200	ATSDR/NC x 4.2
Vinyl chloride	1	0.4	CREG/C/10^{-5}	4	2	CREG/C/10^{-5} x 4.2
Methane (in percent = %)	0.05		Region 5 VI Guide	0.05		Region 5 VI Guide
Sub-slab Soil Gas Screening Levels						
1,1-Dichloroethane	150	37	EPA RSL/C/10^{-5} x 10	630	160	EPA RSL/C/10^{-5} x 10 x 4.2
Benzene	10	4	CREG/C/10^{-5} x 10	40	20	CREG/C/10^{-5} x 10 x 4.2
Chloroform	1,000	200	ATSDR/NC x10	4,000	800	ATSDR/NC x10 x 4.2
cis-1,2-Dichloroethylene	350	88	OSWER/NC x 10	1,500	370	OSWER/NC x 10 x 4.2
Ethylbenzene	3,000	600	ATSDR/NC x10	13,000	2,500	ATSDR/NC x10 x 4.2
Tetrachloroethylene (PCE)	400	60	EPA RfC x 10	1,700	250	EPA RfC x 10 x 4.2
Trichloroethylene (TCE)	20	4	EPA RfC x 10	100	20	EPA RfC x 10 x 4.2
m,p-Xylene*	2,000	500	ATSDR/NC x 10	8,000	2,000	ATSDR/NC x 10 x 4.2
o-Xylene*	2,000	500	ATSDR/NC x 10	8,000	2,000	ATSDR/NC x 10 x 4.2
Vinyl chloride	10	4	CREG/C/10^{-5} x 10	40	20	CREG/C/10^{-5} x 10 x 4.2
Methane (in percent = %)	0.5		Region 5 VI Guide	0.5		Region 5 VI Guide

*ATSDR comparison value for total xylenes
$\mu g/m^3$ = micrograms per cubic meter
ppb = parts per billion
C = cancer
NC = noncancer

10^{-5} = cancer risk of 1 in 100,000
CREG = cancer risk evaluation guide (ATSDR)\
RfC = EPA Reference Concentration
RSL = Regional Screening Level (EPA April 2012)

Table 2. Action Levels – South Dayton Dump

Chemical of Concern	*Residential*		*Source/Criteria*	*Non-residential*		*Source/Criteria*
	μg/m³	*ppb*		*μg/m³*	*ppb*	
Indoor Air Action Levels						
1,1-Dichloroethane	150	37	EPA RSL/C/10^{-4}	630	160	EPA RSL/C/10^{-4} x 4.2
Benzene	10	4	CREG/C/10^{-4}	40	20	CREG/C/10^{-4} x 4.2
Chloroform	1,000	200	ATSDR/NC x 10	4,000	800	ATSDR/NC x 10 x 4.2
cis-1,2-Dichloroethylene	350	88	OSWER/NC x 10	1,500	370	OSWER/NC x 10 x 4.2
Ethylbenzene	3,000	600	ATSDR/NC x 10	13,000	2,500	ATSDR/NC x 10 x 4.2
Tetrachloroethylene (PCE)	400	60	EPA RfC/NC x 10	1,700	250	EPA RfC/NC x 10 x 4.2
Trichloroethylene (TCE)	20	4	EPA RfC/NC x 10	100	20	EPA RfC/NC x 10 4.2
m,p-Xylene*	2,000	500	ATSDR/NC x 10	8,000	2,000	ATSDR/NC x 10 x 4.2
o-Xylene*	2,000	500	ATSDR/NC x 10	8,000	2,000	ATSDR/NC x 10 x 4.2
Vinyl chloride	10	4	CREG/C/10^{-4}	40	20	CREG/C/10^{-4} x 4.2
Methane (in percent = %)	0.05		Region 5 VI Guide	0.05		Region 5 VI Guide
Sub-slab Soil Gas Action Levels						
1,1-Dichloroethane	1,500	370	EPA RSL/C/10^{-4} x 10	6,300	1,600	EPA RSL/C/10^{-4} x 10 x 4.2
Benzene	100	40	CREG/C/10^{-4} x 10	400	200	CREG/C/10^{-4} x 10 x 4.2
Chloroform	10,000	2,000	ATSDR/NC x 100	40,000	8,000	ATSDR/NC x 100 x 4.2
cis-1,2-Dichloroethylene	3,500	880	OSWER/NC x 100	15,000	3,700	OSWER/NC x 100 x 4.2
Ethylbenzene	30,000	6,000	ATSDR/NC x100	130,000	25,000	ATSDR/NC x100 x 4.2
Tetrachloroethylene (PCE)	4,000	600	EPA RfC/NC x 100	17,000	2,500	EPA RfC/NC x 100 x 4.2
Trichloroethylene (TCE)	200	40	EPA RfC/NC x 100	1,000	200	EPA RfC/NC x 100 x 4.2
m,p-Xylene*	20,000	5,000	ATSDR/NC x 100	80,000	20,000	ATSDR/NC x 100 x 4.2
o-Xylene*	20,000	5,000	ATSDR/NC x 100	80,000	20,000	ATSDR/NC x 100 x 4.2
Vinyl chloride	100	40	CREG/C/10^{-4} x 10	400	200	CREG/C/10^{-4} x 10 x 4.2
Methane (in percent = %)	0.5		Region 5 VI Guide	0.5		Region 5 VI Guide

*ATSDR comparison value for total xylenes
μg/m³ = micrograms per cubic meter
ppb = parts per billion
C = cancer
NC = noncancer

10^{-4} = cancer risk of 1 in 10,000
CREG = cancer risk evaluation guide (ATSDR)\
RfC = EPA Reference Concentration
RSL = Regional Screening Level (EPA April 2012)

From: Kollman, John [mailto:John.Kollman@odh.ohio.gov]
Sent: Thursday, September 13, 2012 8:46 AM
To: Frey, Bob; John Sherrard
Subject: RE: South Dayton Dump Site

Bob and John,

The residential indoor air comparison value for naphthalene is 0.7 ppb; the residential sub-slab soil gas value is 7 ppb. For non-residential structures, the values for IA and SS are 2.9 and 29 ppb, respectively. (The residential values are slightly different than the OSWER 2002 numbers provided earlier—we are using ATSDR's comparison values as much as possible.)

John Kollman, MS, CIH, RS
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