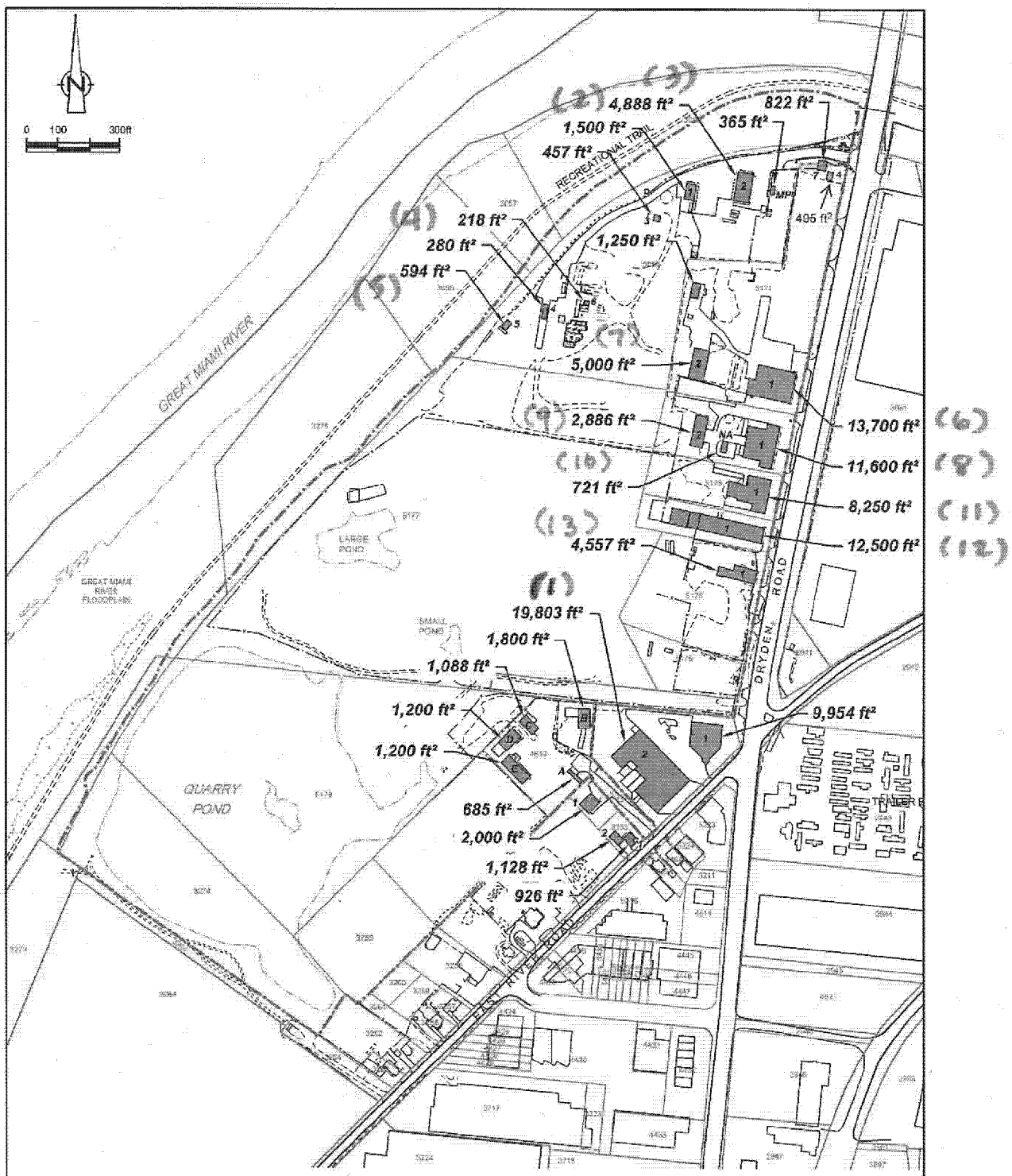


LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- SUB SLAB SAMPLING LOCATION
- NA NOT ACCESSIBLE AT TIME OF BUILDING SURVEY

figure 4

SUB SLAB BUILDING DESIGNATIONS
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/02;
TETRA TECH EM INC., PROJECT L331208-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/05/2004;
CITY OF MORAINE;
ABRAMS AERIAL SURVEY INC. PROJECT 38443, MAP 23010, 04/02/2006

38443-81(015)GN-WA001 AUG 02/2011

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- VAPOR INTRUSION STUDY BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- BH01-09 SOIL BORING LOCATION
- VAS01 VAS SAMPLING LOCATION
- GP21-09, GP04-09 SOIL VAPOR PROBE LOCATION
- TP1 TEST PIT LOCATION
- TT1 TEST TRENCH LOCATION
- PROPOSED SUB SLAB SOIL VAPOR SAMPLE LOCATION
- PROPOSED INDOOR AIR SAMPLE LOCATION
- PROPOSED CRAWL SPACE AIR SAMPLE LOCATION
- CONTINGENCY INDOOR AIR SAMPLE LOCATION

GP09-09	9/15/2009 6.5-7.5 ft BGS ug/m3
Tetrachloroethene	2000

- SAMPLE DATE
- SAMPLE DEPTH
- SAMPLE UNITS
- CONCENTRATION VALUE
- COMPOUND
- SAMPLE ID
- EXCEEDANCES

0 20 50ft

SOIL VAPOR SCREENING LEVELS (ug/m3)	
CHEMICAL NAME	COMMERCIAL/ INDUSTRIAL SVSLs
1,1,1-Trichloroethane	220000
1,1-Dichloroethane	77
1,1-Dichloroethene	8600
Benzene	16
Chlorobenzene	2200
Chloroform (Trichloromethane)	5.3
cis-1,2-Dichloroethene	2600
Ethylbenzene	49
Naphthalene	3.6
Tetrachloroethene	21
trans-1,2-Dichloroethene	2600
Trichloroethene	61
Vinyl Chloride	28
Xylenes (total)	4400
METHANE - UEL = 15% / LEL = 5% / 10% of LEL = 0.5%	

NOTES:

Methane concentrations shown in units of %.

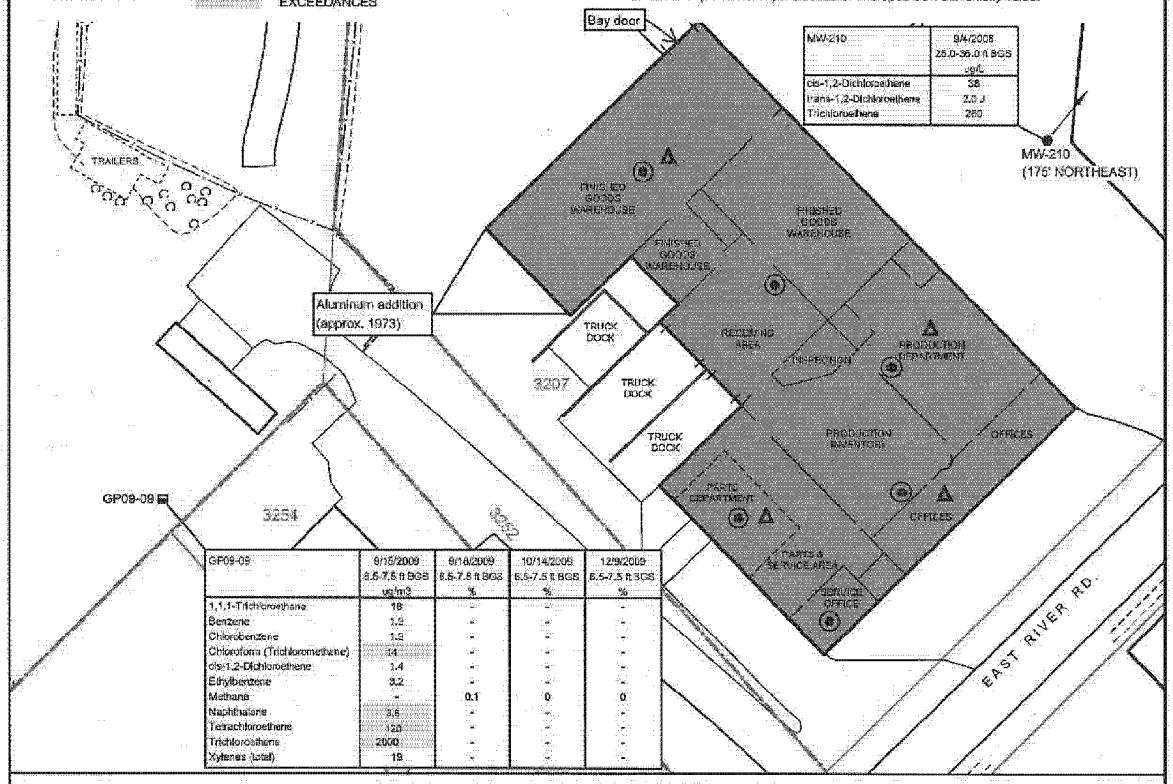
LEL - Lower Explosive Limit; UEL - Upper Explosive Limit

The Industrial SVSLs are based on the USEPA 2011 Regional Screening Levels (June 2011) for Industrial Air.

The SVSLs were derived from the USEPA (Jun 2011) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.

An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.

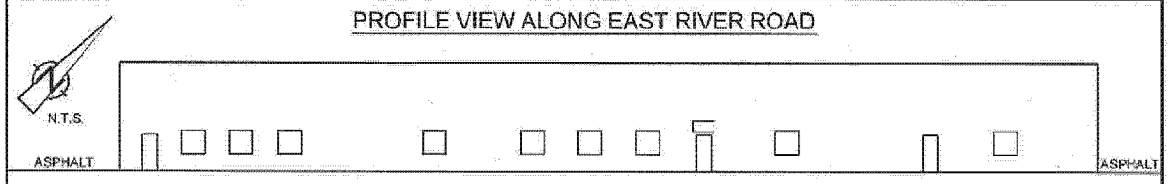
The IRIS toxicity value for TCE was updated in September 2011. The SGSL in this table was not updated; it is based on the June 2011 RSL. However, the screening levels for the Work Plan (Tables 5 - 7) are based on the updated TCE toxicity value.



MW-210	9/4/2008 25.0-35.0 ft BGS ug/L
cis-1,2-Dichloroethene	38
trans-1,2-Dichloroethene	2.0 J
Trichloroethene	260

GP09-09	9/15/2009 6.5-7.5 ft BGS ug/m3	9/16/2009 6.5-7.5 ft BGS %	10/14/2009 6.5-7.5 ft BGS %	12/9/2009 6.5-7.5 ft BGS %
1,1,1-Trichloroethane	18	-	-	-
Benzene	1.2	-	-	-
Chlorobenzene	1.2	-	-	-
Chloroform (Trichloromethane)	14	-	-	-
cis-1,2-Dichloroethene	1.4	-	-	-
Ethylbenzene	3.2	-	-	-
Methane	-	0.1	0	0
Naphthalene	3.6	-	-	-
Tetrachloroethene	120	-	-	-
Trichloroethene	2000	-	-	-
Xylenes (total)	19	-	-	-

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 rooftop units. Exterior openings - vents, fans, utility pipe penetrations, windows, bay doors and man 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 0276.04.05, FIGURE 1, DATED 6/12/05;
TETRA TECH EM INC., PROJECT 0314-2009-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/05/2004;
CITY OF MORAINE;
ASRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 24610, 04/22/2008.

figure 7

PARCEL 3207 - GLOBE EQUIPMENT BUILDING 2
2215 AND 2219 EAST RIVER ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

38443-01(015)GN-WA004 AUG 08/2011

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- VAPOR INTRUSION STUDY BUILDING LOCATION
- MW-202 — MONITORING WELL LOCATION
- BH01-09 — SOIL BORING LOCATION
- VAS01 — VAS SAMPLING LOCATION
- GP21-09, GP04-09 — SOIL VAPOR PROBE LOCATION
- TP1 — TEST PIT LOCATION
- TT1 — TEST TRENCH LOCATION
- PROPOSED SUB SLAB SOIL VAPOR SAMPLE LOCATION
- PROPOSED INDOOR AIR SAMPLE LOCATION
- PROPOSED CRAWL SPACE AIR SAMPLE LOCATION
- CONTINGENCY INDOOR AIR SAMPLE LOCATION

0 20 50ft

GP09-09	9/15/2009
	6.5-7.5 ft BGS
	ug/m3
Tetrachloroethene	2000

SAMPLE DATE
SAMPLE DEPTH
SAMPLE UNITS
CONCENTRATION VALUE
COMPOUND
SAMPLE ID
EXCEEDANCES

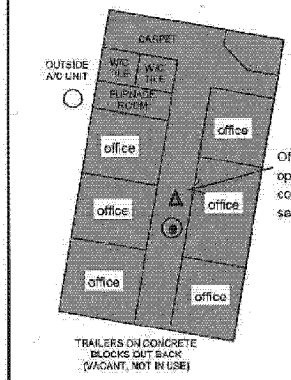
SOIL VAPOR SCREENING LEVELS (ug/m3)	
CHEMICAL NAME	COMMERCIAL/ INDUSTRIAL SVSLs
1,1,1-Trichloroethane	220000
1,1-Dichloroethane	77
1,1-Dichloroethene	8800
Benzene	16
Chlorobenzene	2200
Chloroform (Trichloromethane)	5.3
cis-1,2-Dichloroethene	2600
Ethylbenzene	49
Naphthalene	3.6
Tetrachloroethene	21
trans-1,2-Dichloroethene	2600
Trichloroethene	61
Vinyl Chloride	28
Xylenes (total)	4400
METHANE - UEL = 15% / LEL = 5% / 10% of LEL = 0.5%	

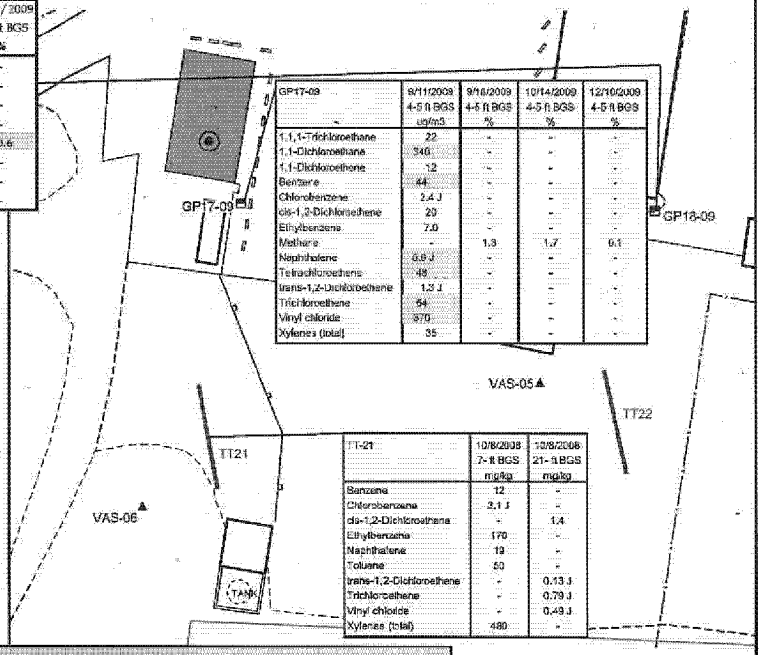
NOTES:
Methane concentrations shown in units of %.
LEL - Lower Explosive Limit; JEL - Upper Explosive Limit
The Industrial SVSLs are based on the USEPA 2011 Regional Screening Levels (June 2011) for Industrial Air.
The SVSLs were derived from the USEPA (Jun 2011) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.
An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
The IRIS toxicity value for TCE was updated in September 2011. The SGSL in this table was not updated; it is based on the June 2011 RSL. However, the screening levels for the Work Plan (Tables 5 - 7) are based on the updated TCE toxicity value.

GP28-09	9/11/2009 3-4 ft BGS ug/m3	9/16/2009 3-4 ft BGS %	10/14/2009 3-4 ft BGS %	12/10/2009 3-4 ft BGS %
1,1-Dichloroethane	400 J	-	-	-
Benzene	14000	-	-	-
cis-1,2-Dichloroethene	340 J	-	-	-
Ethylbenzene	46000	-	-	-
Methane	-	36.6	28.1	20.6
Naphthalene	260 J	-	-	-
Vinyl chloride	4800	-	-	-
Xylenes (total)	47000	-	-	-

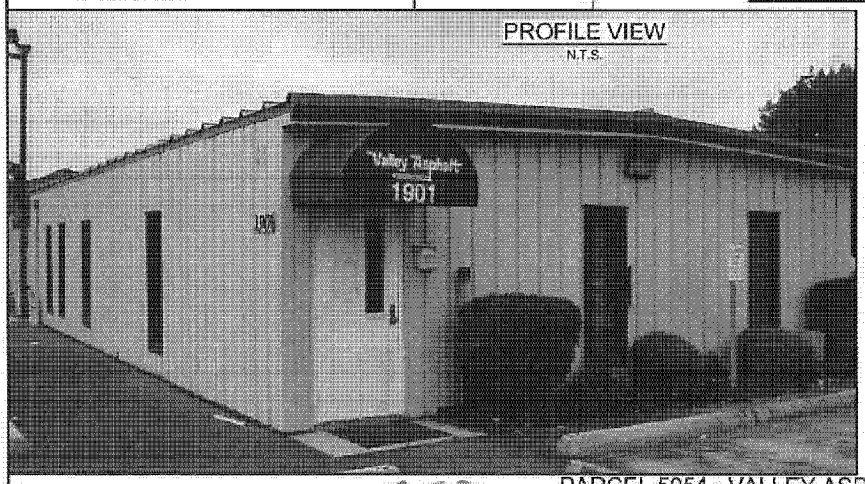
GP17-09	9/11/2009 4-5 ft BGS ug/m3	9/16/2009 4-5 ft BGS %	10/14/2009 4-5 ft BGS %	12/10/2009 4-5 ft BGS %
1,1,1-Trichloroethane	22	-	-	-
1,1-Dichloroethane	340	-	-	-
1,1-Dichloroethene	12	-	-	-
Benzene	44	-	-	-
Chlorobenzene	2.4 J	-	-	-
cis-1,2-Dichloroethene	20	-	-	-
Ethylbenzene	7.0	-	-	-
Methane	-	1.3	1.7	0.1
Naphthalene	0.8 J	-	-	-
Tetrachloroethene	48	-	-	-
trans-1,2-Dichloroethene	1.3 J	-	-	-
Trichloroethene	54	-	-	-
Vinyl chloride	370	-	-	-
Xylenes (total)	35	-	-	-

TT-21	10/8/2008 7- ft BGS mg/kg	10/8/2008 21- ft BGS mg/kg
Benzene	12	-
Chlorobenzene	2.1 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	-





PROFILE VIEW
N.T.S.



Building Characteristics:
Single-story commercial-use storage 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 man doors. Building has been vacant for 4 to 5 years.

figure 16

PARCEL 5054 - VALLEY ASPHALT PLANT BUILDING 1
1901 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0376.4.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT US12636-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2006;
CITY OF MORAINE;
ABRAMS AERIAL SURVEY INC, PROJECT 38443, A/NS 20613, 04/02/2008

38443-01(015)GN-WA014 AUG 08/2011

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- VAPOR INTRUSION STUDY BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- BH01-09 SOIL BORING LOCATION
- VAS01 VAS SAMPLING LOCATION
- GP21-09, GP04-09 SOIL VAPOR PROBE LOCATION
- TP1 TEST PIT LOCATION
- TT1 TEST TRENCH LOCATION
- PROPOSED SUB SLAB SOIL VAPOR SAMPLE LOCATION
- PROPOSED INDOOR AIR SAMPLE LOCATION
- PROPOSED CRAWL SPACE AIR SAMPLE LOCATION
- CONTINGENCY INDOOR AIR SAMPLE LOCATION

0 20 50ft

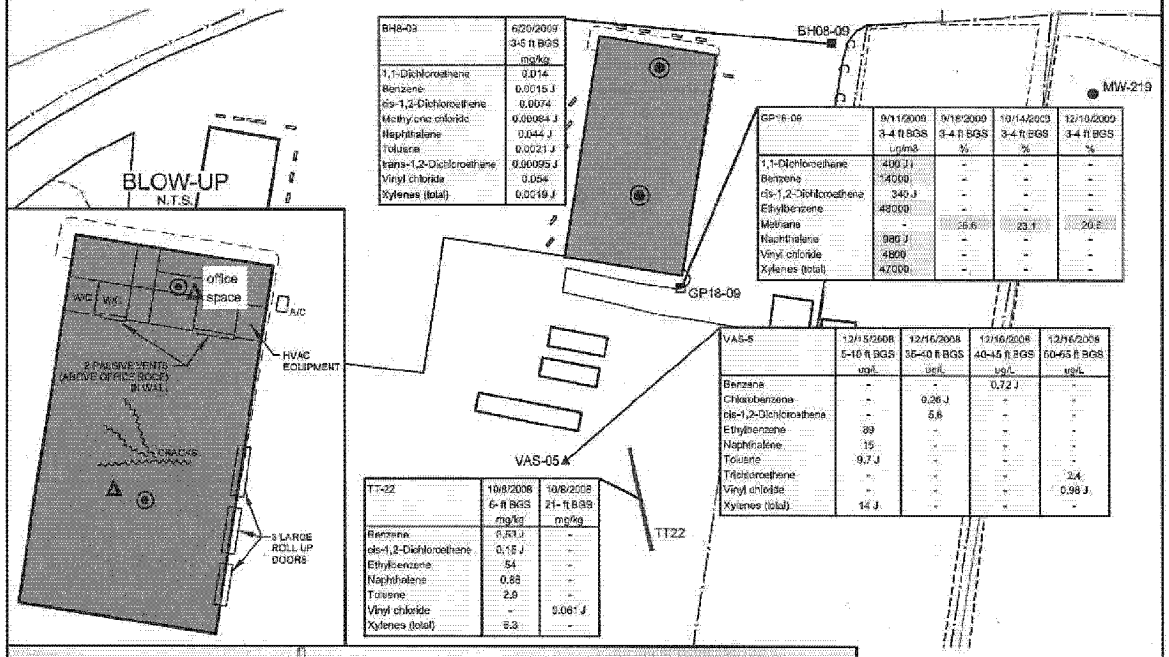
GP09-09	9/15/2009 5.5-7.5 ft BGS ug/m3
Tetrachloroethene	4000

- SAMPLE DATE
- SAMPLE DEPTH
- SAMPLE UNITS
- CONCENTRATION VALUE
- COMPOUND
- SAMPLE ID
- EXCEEDANCES

SOIL VAPOR SCREENING LEVELS (ug/m3)	
CHEMICAL NAME	COMMERCIAL/ INDUSTRIAL SVSLs
1,1,1-Trichloroethane	220000
1,1-Dichloroethane	77
1,1-Dichloroethene	8800
Benzene	16
Chlorobenzene	2200
Chloroform (Trichloromethane)	5.3
cis-1,2-Dichloroethene	2600
Ethylbenzene	49
Naphthalene	3.3
Tetrachloroethene	21
trans-1,2-Dichloroethene	2600
Trichloroethene	61
Vinyl Chloride	28
Xylenes (total)	4400
METHANE - UEL = 15% / LEL = 5% / 10% of LEL = 0.5%	

NOTE: THERE IS ANOTHER SOIL VAPOR SAMPLE LOCATED NEARBY (GP17-09). SEE FIGURE 3.

NOTES:
Methane concentrations shown in units of %.
LEL - Lower Explosive Limit; UEL - Upper Explosive Limit
The industrial SVSLs are based on the USEPA 2011 Regional Screening Levels (June 2011) for Industrial Air.
The SVSLs were derived from the USEPA (Jun 2011) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.
An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
The IRIS toxicity value for TCE was updated in September 2011. The SGSL in this table was not updated; it is based on the June 2011 RSL. However, the screening levels for the Work Plan (Tables 5 - 7) are based on the updated TCE toxicity value.



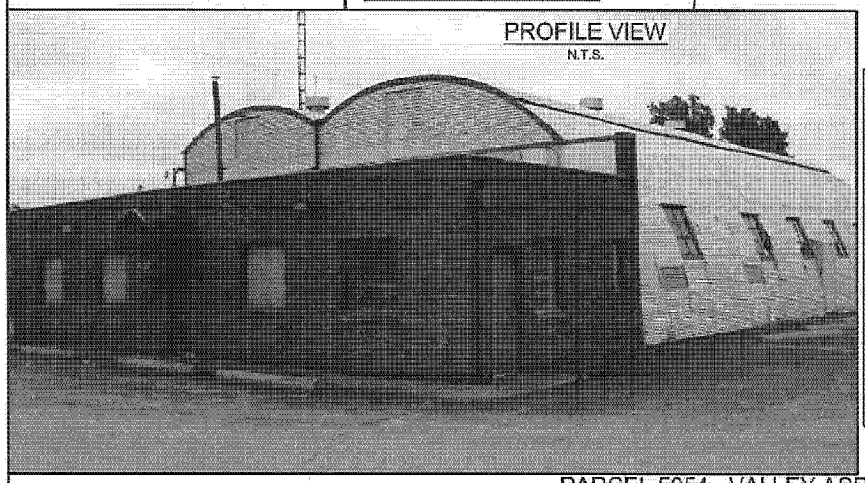
BH8-09	6/20/2009 3-5 ft BGS mg/kg
1,1-Dichloroethane	0.014
Benzene	0.0015 J
cis-1,2-Dichloroethene	0.0074
Methylene chloride	0.00084 J
Naphthalene	0.044 J
Toluene	0.0021 J
trans-1,2-Dichloroethene	0.00095 J
Vinyl chloride	0.054
Xylenes (total)	0.0019 J

GP18-09	9/11/2009 3-4 ft BGS ug/m3	9/18/2009 3-4 ft BGS %	10/14/2009 3-4 ft BGS %	12/10/2009 3-4 ft BGS %
1,1-Dichloroethane	400 J	-	-	-
Benzene	14000	-	-	-
cis-1,2-Dichloroethene	340 J	-	-	-
Ethylbenzene	48000	-	-	-
Methane	-	26.6	23.1	20.2
Naphthalene	980 J	-	-	-
Vinyl chloride	4800	-	-	-
Xylenes (total)	47000	-	-	-

VAS-5	12/15/2008 5-10 ft BGS ug/L	12/16/2008 35-40 ft BGS ug/L	12/16/2008 40-45 ft BGS ug/L	12/16/2008 50-55 ft BGS ug/L
Benzene	-	-	0.72 J	-
Chlorobenzene	-	0.26 J	-	-
cis-1,2-Dichloroethene	-	5.6	-	-
Ethylbenzene	89	-	-	-
Naphthalene	15	-	-	-
Toluene	9.7 J	-	-	-
Trichloroethene	-	-	-	2.4
Vinyl chloride	-	-	-	0.98 J
Xylenes (total)	14 J	-	-	-

TT-22	10/8/2008 6-ft BGS mg/kg	10/8/2008 21- ft BGS mg/kg
Benzene	0.53 J	-
cis-1,2-Dichloroethene	0.15 J	-
Ethylbenzene	54	-
Naphthalene	0.88	-
Toluene	2.9	-
Vinyl chloride	-	0.061 J
Xylenes (total)	5.3	-

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, man 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 17

PARCEL 5054 - VALLEY ASPHALT PLANT BUILDING 2
1903 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

(3)

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.4.05, FIGURE 1, DATED 9/22/05;
TETRA TECH EM INC., PROJECT 03-2006-SOUTH DAYTON DUMP, FIGURE 3, SITE LAYOUT, 05/21/2004;
CITY OF MORAINE,
ARKANS AERIAL SURVEY INC. PROJECT 3844-0, AASI 2861E, 04/27/2008

38443-61(015)GN-WA015 AUG 08/2011

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- VAPOR INTRUSION STUDY BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- BH01-09 SOIL BORING LOCATION
- VAS01 VAS SAMPLING LOCATION
- CP21-09, GP04-09 SOIL VAPOR PROBE LOCATION
- TP1 TEST PIT LOCATION
- TT1 TEST TRENCH LOCATION
- PROPOSED SUB SLAB SOIL VAPOR SAMPLE LOCATION
- PROPOSED INDOOR AIR SAMPLE LOCATION
- PROPOSED CRAWL SPACE AIR SAMPLE LOCATION
- CONTINGENCY INDOOR AIR SAMPLE LOCATION

GP09-09	9/15/2009
	5.5-7.5 ft BGS
	ug/m3
Tetrachloroethene	2000

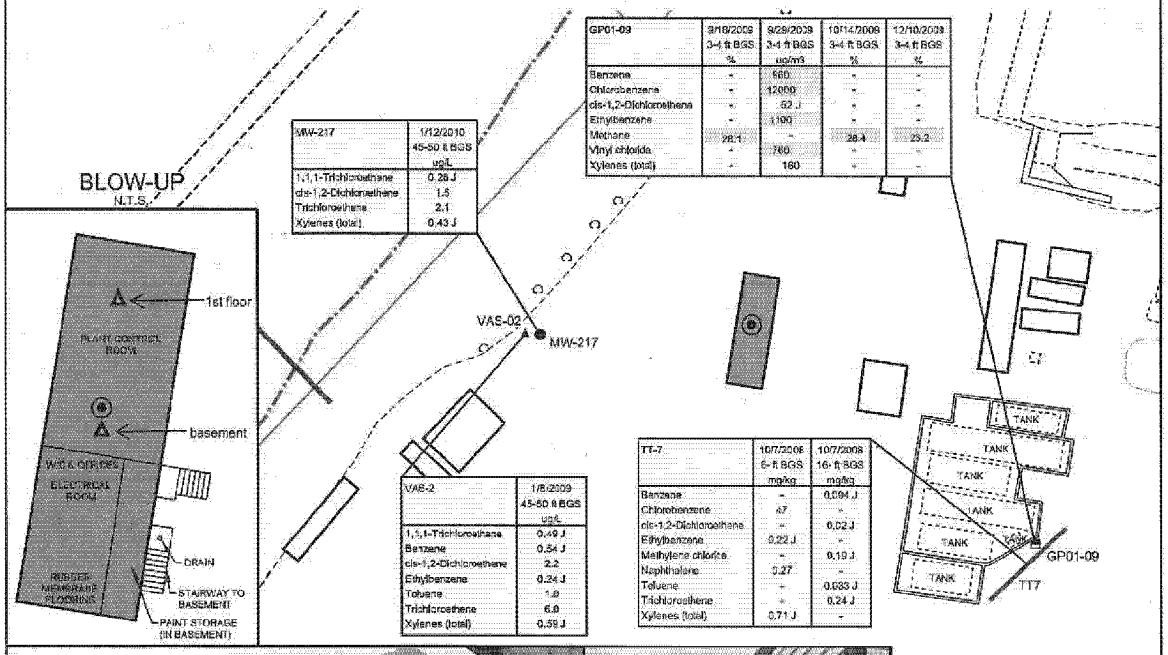
SAMPLE DATE
SAMPLE DEPTH
SAMPLE UNITS
CONCENTRATION VALUE
COMPOUND
SAMPLE ID

EXCEEDANCES

0 20 50ft

SOIL VAPOR SCREENING LEVELS (ug/m3)	
CHEMICAL NAME	COMMERCIAL/ INDUSTRIAL SVSLs
1,1,1-Trichloroethane	220000
1,1-Dichloroethane	77
1,1-Dichloroethene	8800
Benzene	15
Chlorobenzene	2200
Chloroform (Trichloromethane)	5.3
cis-1,2-Dichloroethene	2600
Ethylbenzene	49
Naphthalene	3.6
Tetrachloroethene	21
trans-1,2-Dichloroethene	2600
Trichloroethene	61
Vinyl Chloride	28
Xylenes (total)	4400
METHANE - UEL = 15% / LEL = 5% / 10% of LEL = 0.5%	

NOTES:
Methane concentrations shown in units of %.
LEL - Lower Explosive Limit; UEL - Upper Explosive Limit
The industrial SVSLs are based on the USEPA 2011 Regional Screening Levels (June 2011) for Industrial Air.
The SVSLs were derived from the USEPA (Jun 2011) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.
An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
The IRIS toxicity value for TCE was updated in September 2011. The SGSL in this table was not updated; it is based on the June 2011 RSL. However, the screening levels for the Work Plan (Tables 5 - 7) are based on the updated TCE toxicity value.

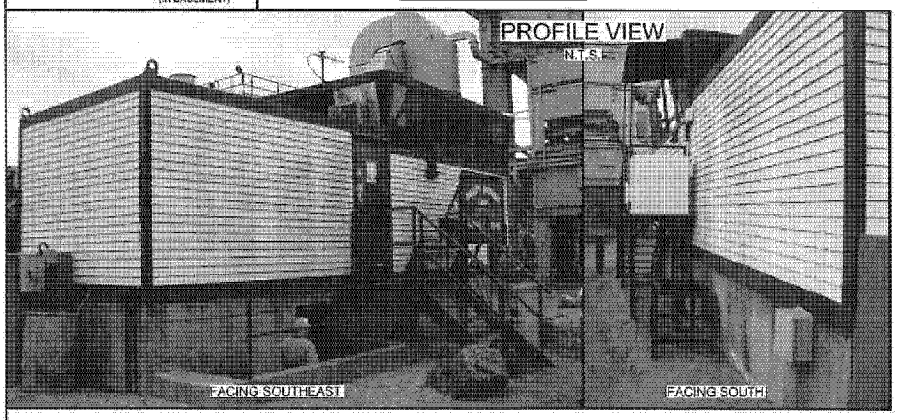


MW-217	1/12/2010
	45-50 ft BGS
	ug/L
1,1,1-Trichloroethane	0.28 J
cis-1,2-Dichloroethene	1.5
Trichloroethene	2.1
Xylenes (total)	0.43 J

GP01-09	9/16/2009	9/29/2009	10/14/2009	12/10/2009
	3-4 ft BGS	3-4 ft BGS	3-4 ft BGS	3-4 ft BGS
	%	ug/m3	%	%
Benzene	-	560	-	-
Chlorobenzene	-	12000	-	-
cis-1,2-Dichloroethene	-	52 J	-	-
Ethylbenzene	-	1100	-	-
Methane	28.1	-	28.4	25.2
Vinyl chloride	-	760	-	-
Xylenes (total)	-	160	-	-

VAS-2	1/8/2009
	45-50 ft BGS
	ug/L
1,1,1-Trichloroethane	0.49 J
Benzene	0.54 J
cis-1,2-Dichloroethene	2.2
Ethylbenzene	0.24 J
Toluene	1.9
Trichloroethene	6.0
Xylenes (total)	0.59 J

TT-7	10/7/2008	10/7/2008
	6- ft BGS	16- ft BGS
	mg/kg	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	-



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 man door to the basement (sometimes left open) and one to the main level. Occupied during weekday work hours by 2 adult workers.

figure 19
PARCEL 5054 - VALLEY ASPHALT PLANT BUILDING 4
1901 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

(4)

SOURCES:
THE RAYNE FIRM, INC., PROJECT 9379.4405, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT 0312606-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE;
ABRAMS AERIAL SURVEY INC. PROJECT 08443, IAS: 25610, 04/02/2008

36443-81(015)GN-WA017 AUG 08/2011

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- VAPOR INTRUSION STUDY BUILDING LOCATION
- MW-202 — MONITORING WELL LOCATION
- BH01-09 — SOIL BORING LOCATION
- VAS01 — VAS SAMPLING LOCATION
- GP21-09, GP04-09 — SOIL VAPOR PROBE LOCATION
- TP1 — TEST PIT LOCATION
- TT1 — TEST TRENCH LOCATION
- PROPOSED SUB SLAB SOIL VAPOR SAMPLE LOCATION
- PROPOSED INDOOR AIR SAMPLE LOCATION
- PROPOSED CRAWL SPACE AIR SAMPLE LOCATION
- CONTINGENCY INDOOR AIR SAMPLE LOCATION

GP05-09	9/15/2009
	6.5-7.5 ft BGS
	ug/m3
Tetrachloroethene	2000

SAMPLE DATE
SAMPLE DEPTH
SAMPLE UNITS
CONCENTRATION VALUE
COMPOUND
SAMPLE ID
EXCEEDANCES

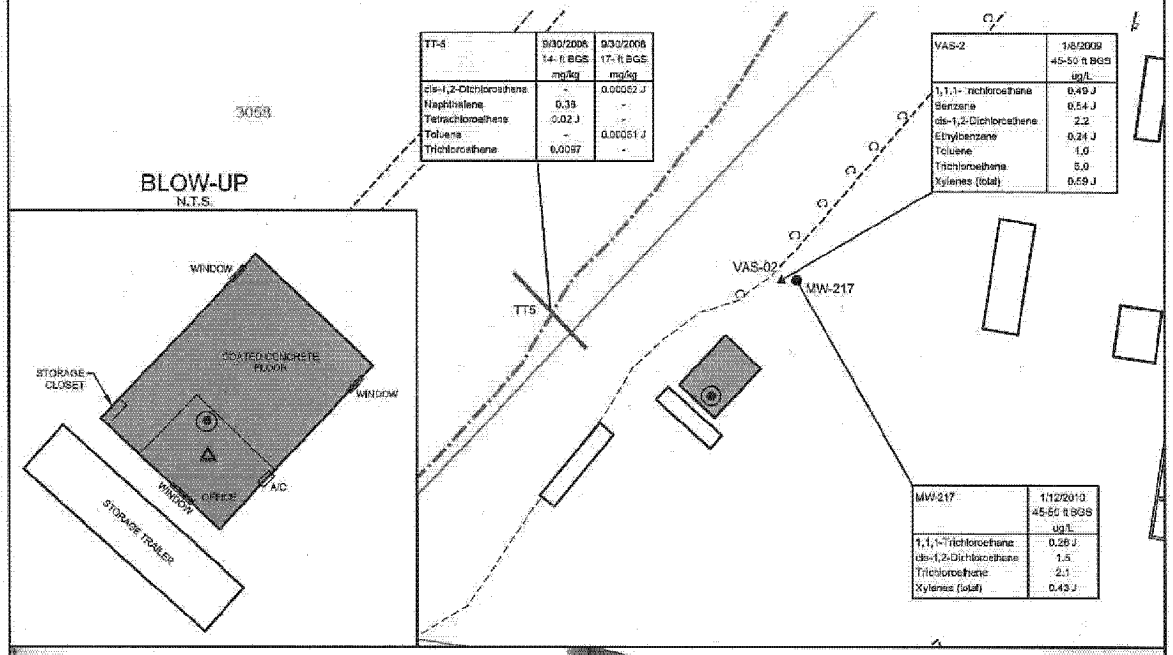
0 20 50ft

SOIL VAPOR SCREENING LEVELS (ug/m3)	
CHEMICAL NAME	COMMERCIAL/ INDUSTRIAL SVSLs
1,1,1-Trichloroethane	220000
1,1-Dichloroethane	77
1,1-Dichloroethene	6000
Benzene	16
Chlorobenzene	2200
Chloroform (Trichloromethane)	9.3
cis-1,2-Dichloroethene	2600
Ethylbenzene	49
Naphthalene	3.8
Tetrachloroethene	21
trans-1,2-Dichloroethene	2600
Trichloroethene	61
Vinyl Chloride	28
Xylenes (total)	4400
METHANE - UEL = 15% / LEL = 5% / 10% of LEL = 0.5%	

NOTE: THERE IS ANOTHER SOIL VAPOR SAMPLE LOCATED NEARBY (GP01-09). SEE FIGURE 3.

NOTES:

Methane concentrations shown in units of %.
LEL - Lower Explosive Limit; UEL - Upper Explosive Limit
The industrial SVSLs are based on the USEPA 2011 Regional Screening Levels (June 2011) for Industrial Air.
The SVSLs were derived from the USEPA (Jun 2011) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.
An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
The IRIS toxicity value for TCE was updated in September 2011. The SGSL in this table was not updated; it is based on the June 2011 RSL. However, the screening levels for the Work Plan (Tables 5 - 7) are based on the updated TCE toxicity value.



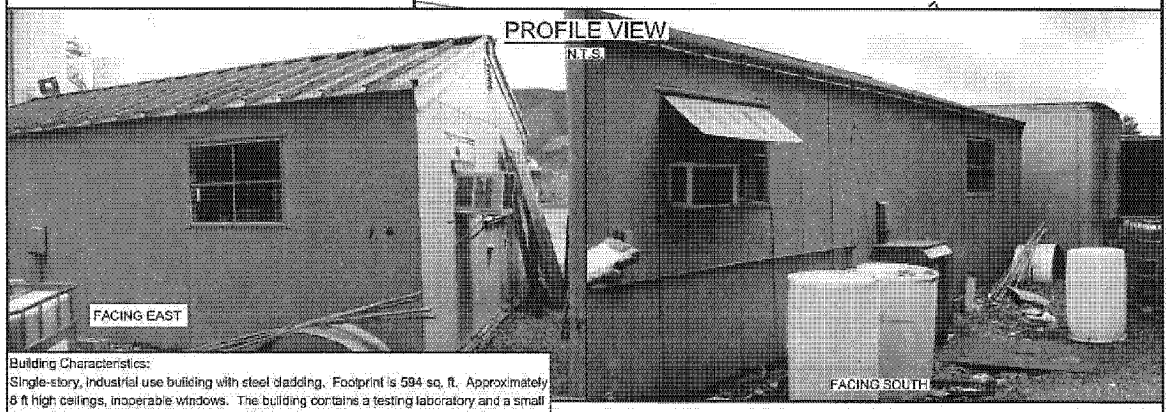
TT-5	9/30/2008 14- ft BGS mg/kg	9/30/2008 17- ft BGS mg/kg
cis-1,2-Dichloroethene	-	0.00062 J
Naphthalene	0.38	-
Tetrachloroethene	0.02 J	-
Toluene	-	0.00051 J
Trichloroethene	0.0097	-

VAS-2	1/8/2009 45-50 ft BGS ug/L
1,1,1-Trichloroethane	0.49 J
Benzene	0.54 J
cis-1,2-Dichloroethene	2.2
Ethylbenzene	0.24 J
Toluene	1.0
Trichloroethene	5.0
Xylenes (total)	0.59 J

MW-217	1/12/2010 45-50 ft BGS ug/L
1,1,1-Trichloroethane	0.26 J
cis-1,2-Dichloroethene	1.5
Trichloroethene	2.1
Xylenes (total)	0.43 J

BLOW-UP
N.T.S.

PROFILE VIEW
N.T.S.



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 man 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 8279.4.03, FIGURE 1, DATED 9/12/03;
TETRA TECH EM INC., PROJECT 103/3036-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE;
ADRAMS AERIAL SURVEY INC, PROJECT 38443, ASSI 29410, 04/22/2009

figure 20
PARCEL 5054 - VALLEY ASPHALT PLANT BUILDING 5
1901 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

38443-61(015)GN-WA018 AUG 08/2011

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- VAPOR INTRUSION STUDY BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- BH01-09 SOIL BORING LOCATION
- VAS01 VAS SAMPLING LOCATION
- GP21-09 / GP04-09 SOIL VAPOR PROBE LOCATION
- TP1 TEST PIT LOCATION
- TT1 TEST TRENCH LOCATION
- PROPOSED SUB SLAB SOIL VAPOR SAMPLE LOCATION
- PROPOSED INDOOR AIR SAMPLE LOCATION
- PROPOSED CRAWL SPACE AIR SAMPLE LOCATION
- CONTINGENCY INDOOR AIR SAMPLE LOCATION

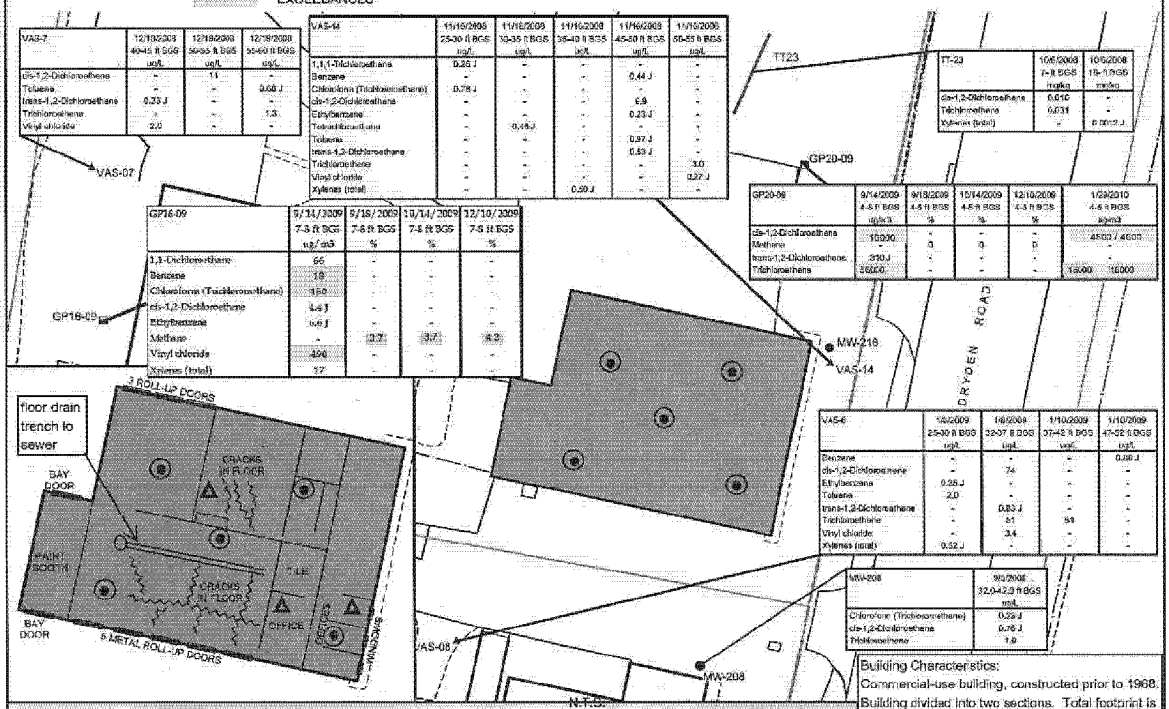
0 20 60ft

GP09-09	9/16/2009
	0.5-7.5 ft BGS
	ug/m3
Tetrachloroethene	2000

SAMPLE DATE
SAMPLE DEPTH
SAMPLE UNITS
CONCENTRATION VALUE
COMPOUND
SAMPLE ID
EXCEEDANCES

SOIL VAPOR SCREENING LEVELS (ug/m3)	
CHEMICAL NAME	COMMERCIAL/ INDUSTRIAL SVSLs
1,1,1-Trichloroethane	220000
1,1-Dichloroethane	77
1,1-Dichloroethene	8600
Benzene	16
Chlorobenzene	2200
Chloroform (Trichloromethane)	5.3
cis-1,2-Dichloroethene	2600
Ethylbenzene	49
Naphthalene	3.6
Tetrachloroethene	21
trans-1,2-Dichloroethene	2600
Trichloroethene	61
Vinyl Chloride	28
Xylenes (total)	4400
METHANE - UEL = 15% / LEL = 5% / 10% of LEL = 0.5%	

NOTES:
Methane concentrations shown in units of %.
LEL - Lower Explosive Limit; UEL - Upper Explosive Limit
The industrial SVSLs are based on the USEPA 2011 Regional Screening Levels (June 2011) for Industrial Air.
The SVSLs were derived from the USEPA (Jun 2011) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.
An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
The IRIS toxicity value for TCE was updated in September 2011. The SGSL in this table was not updated; it is based on the June 2011 RSL. However, the screening levels for the Work Plan (Tables 5 - 7) are based on the updated TCE toxicity value.



VAS-7	12/18/2009 40-45 ft BGS ug/L	12/18/2009 55-60 ft BGS ug/L	12/18/2009 65-60 ft BGS ug/L
cis-1,2-Dichloroethene	-	11	-
Toluene	-	-	0.68 J
trans-1,2-Dichloroethene	0.29 J	-	-
Trichloroethene	-	-	1.3
Vinyl chloride	2.0	-	-

VAS-14	11/16/2009 25-30 ft BGS ug/L	11/16/2009 30-35 ft BGS ug/L	11/16/2009 35-40 ft BGS ug/L	11/16/2009 45-50 ft BGS ug/L	11/16/2009 55-60 ft BGS ug/L
1,1,1-Trichloroethane	0.25 J	-	-	-	-
Benzene	-	-	-	0.44 J	-
Chloroform (Trichloromethane)	0.78 J	-	-	-	-
cis-1,2-Dichloroethene	-	-	-	6.9	-
Ethylbenzene	-	-	-	0.23 J	-
Tetrachloroethene	-	0.45 J	-	-	-
Toluene	-	-	-	0.97 J	-
trans-1,2-Dichloroethene	-	-	-	0.53 J	-
Trichloroethene	-	-	-	-	3.0
Vinyl chloride	-	-	-	-	0.27 J
Xylenes (total)	-	-	0.59 J	-	-

TT-23	10/6/2009 7-8 ft BGS mg/kg	10/6/2009 18-19 ft BGS mg/kg
cis-1,2-Dichloroethene	0.010	-
Trichloroethene	0.031	-
Xylenes (total)	-	0.0012 J

GP16-09	9/14/2009 7-8 ft BGS ug/m3	9/16/2009 7-8 ft BGS %	10/14/2009 7-8 ft BGS %	12/10/2009 7-8 ft BGS %
1,1-Dichloroethane	66	-	-	-
Benzene	18	-	-	-
Chloroform (Trichloromethane)	180	-	-	-
cis-1,2-Dichloroethene	4.6 J	-	-	-
Ethylbenzene	0.6 J	-	-	-
Methane	-	3.7	3.7	4.3
Vinyl chloride	490	-	-	-
Xylenes (total)	37	-	-	-

GP20-09	9/14/2009 4-5 ft BGS ug/m3	9/16/2009 4-5 ft BGS %	10/14/2009 4-5 ft BGS %	12/10/2009 4-5 ft BGS %	1/29/2010 4-5 ft BGS ug/m3
cis-1,2-Dichloroethene	10000	-	-	-	4500 / 4600
Methane	-	0	0	0	-
trans-1,2-Dichloroethene	310 J	-	-	-	-
Trichloroethene	55000	-	-	-	13,000 / 15000

VAS-6	10/2/2009 25-30 ft BGS ug/L	10/6/2009 32-37 ft BGS ug/L	1/10/2009 37-42 ft BGS ug/L	1/10/2009 47-52 ft BGS ug/L
Benzene	-	-	-	0.66 J
cis-1,2-Dichloroethene	-	74	-	-
Ethylbenzene	0.35 J	-	-	-
Toluene	2.0	-	-	-
trans-1,2-Dichloroethene	-	0.83 J	-	-
Trichloroethene	-	51	53	-
Vinyl chloride	-	3.4	-	-
Xylenes (total)	0.32 J	-	-	-

MW-208	9/2/2009 32.0-42.0 ft BGS ug/L
Chloroform (Trichloromethane)	0.29 J
cis-1,2-Dichloroethene	0.76 J
Trichloroethene	1.9

Building Characteristics:
Commercial-use building, constructed prior to 1968. Building divided into two sections. Total footprint is 13,700 sq. ft. Exterior openings - vents, fans, utility pipe penetrations, windows, 10 large bay doors, man 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 northeast 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 kep open when occupied. Radiant overhead heat and used oil stove, no A/C. Strong paint odors in west side paint booth area.

PROF VIEW

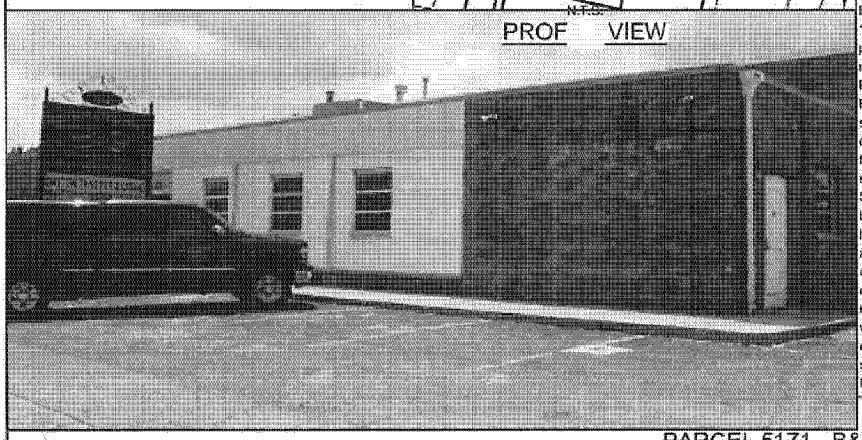


figure 24

PARCEL 5171 - B&G TRUCKING BUILDING 1
1951 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

(6)

SOURCES:
THE FAYNESFIRM, INC., PROJECT 0279.4.05, FIGURE 1, DATED 6/12/09;
TETRA TECH GM INC., PROJECT 027-2005-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE;
ABRAMS AERIAL SURVEY INC., PROJECT 36443, AASI 2M10, 8-02/2009

38443-61(015)GN-WA022 AUG 09/2011

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- VAPOR INTRUSION STUDY BUILDING LOCATION
- MW-202 — MONITORING WELL LOCATION
- BH01-09 — SOIL BORING LOCATION
- VAS01 — VAS SAMPLING LOCATION
- GP21-09, GP04-09 — SOIL VAPOR PROBE LOCATION
- TP1 — TEST PIT LOCATION
- TT1 — TEST TRENCH LOCATION
- PROPOSED SUB SLAB SOIL VAPOR SAMPLE LOCATION
- PROPOSED INDOOR AIR SAMPLE LOCATION
- PROPOSED CRAWL SPACE AIR SAMPLE LOCATION
- CONTINGENCY INDOOR AIR SAMPLE LOCATION

GP09-09	9/15/2009
	5.5-7.5 ft. BGS
	ug/m3
Tetrachloroethene	2000

- SAMPLE DATE
- SAMPLE DEPTH
- SAMPLE UNITS
- CONCENTRATION VALUE
- COMPOUND
- SAMPLE ID
- EXCEEDANCES

0 20 50ft

SOIL VAPOR SCREENING LEVELS (ug/m3)	
CHEMICAL NAME	COMMERCIAL/ INDUSTRIAL SVSLs
1,1,1-Trichloroethane	220000
1,1-Dichloroethane	77
1,1-Dichloroethene	8800
Benzene	16
Chlorobenzene	2200
Chloroform (Trichloromethane)	5.3
cis-1,2-Dichloroethene	2600
Ethylbenzene	49
Naphthalene	3.6
Tetrachloroethene	21
trans-1,2-Dichloroethene	2600
Trichloroethene	61
Vinyl Chloride	28
Xylenes (total)	4400
METHANE - UEL = 15% / LEL = 5% / 10% of LEL = 0.5%	

NOTES:

Methane concentrations shown in units of %.
LEL - Lower Explosive Limit; UEL - Upper Explosive Limit
The Industrial SVSLs are based on the USEPA 2011 Regional Screening Levels (June 2011) for Industrial Air.
The SVSLs were derived from the USEPA (Jun 2011) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.
An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
The IRIS toxicity value for TCE was updated in September 2011. The SGSL in this table was not updated; it is based on the June 2011 RSL. However, the screening levels for the Work Plan (Tables 5 - 7) are based on the updated TCE toxicity value.

TP6

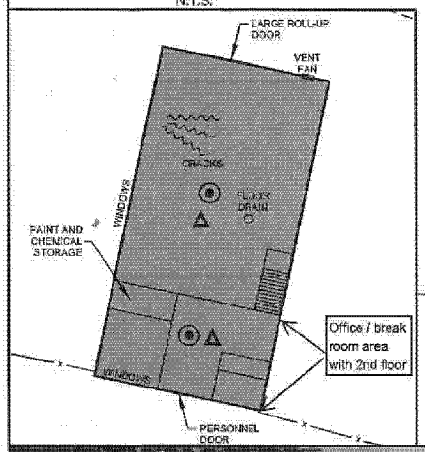
TP-6	10/5/2009 20-ft BGS mg/kg
Benzene	0.00036 J
cis-1,2-Dichloroethene	0.0017 J
Toluene	0.00028 J
trans-1,2-Dichloroethene	0.00053 J
Trichloroethene	0.00068 J
Vinyl chloride	0.00058 J
Xylenes (total)	0.0011 J

BLOW-UP
N.T.S.

VAS-7	12/18/2008 40-45 ft BGS ug/L	12/19/2008 50-55 ft BGS ug/L	12/19/2008 55-60 ft BGS ug/L
cis-1,2-Dichloroethene	-	11	-
Toluene	-	-	0.68 J
trans-1,2-Dichloroethene	0.33 J	-	-
Trichloroethene	-	-	1.3
Vinyl chloride	2.0	-	-

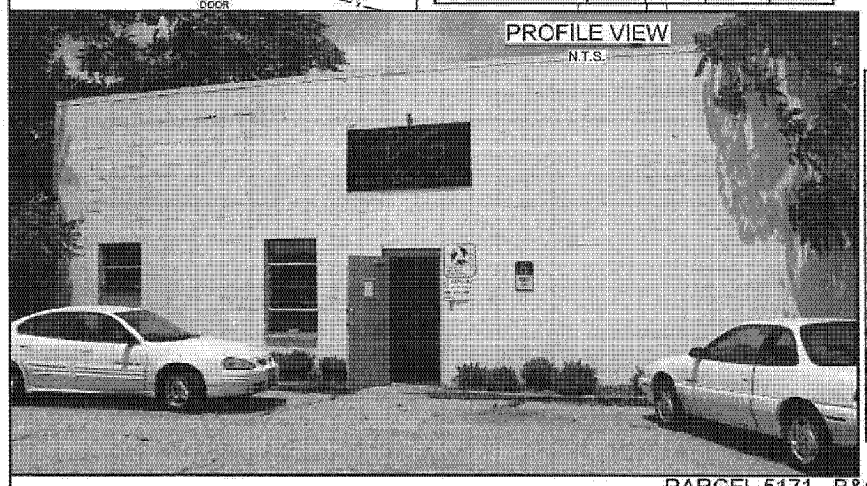
VAS-07

GP16-09



GP16-09	9/14/2009 7-8 ft BGS ug/m3	9/10/2009 7-8 ft BGS %	10/14/2009 7-8 ft BGS %	12/10/2009 7-8 ft BGS %
1,1-Dichloroethane	66	-	-	-
Benzene	16	-	-	-
Chloroform (Trichloromethane)	150	-	-	-
cis-1,2-Dichloroethene	4.4 J	-	-	-
Ethylbenzene	6.6 J	-	-	-
Methane	-	3.7	3.7	4.0
Vinyl chloride	480	-	-	-
Xylenes (total)	17	-	-	-

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 work hours. Exterior openings - vent fans, utility pipe penetrations, windows, 1 large bay door, man doors. Occupied weekdays from 7 AM to 5 PM by 2 adult workers.

figure 25

PARCEL 5171 - B&G TRUCKING BUILDING 2
1951 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

(7)

SOURCES:
THE PAYNE FIRM, INC., PROJECT 2278.14.05, FIGURE 1, DATED 9/1/05;
TETRA TECH EM INC., PROJECT 0012005-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/15/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 33443, AASI 2910, 04/02/2008

38443-61(015)GN-WA023 AUG 09/2011

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- VAPOR INTRUSION STUDY BUILDING LOCATION
- MW-202 — MONITORING WELL LOCATION
- BH01-09 — SOIL BORING LOCATION
- VAS01 — VAS SAMPLING LOCATION
- CP21-09, GP04-09 — SOIL VAPOR PROBE LOCATION
- TP1 — TEST PIT LOCATION
- TT1 — TEST TRENCH LOCATION
- PROPOSED SUB SLAB SOIL VAPOR SAMPLE LOCATION
- PROPOSED INDOOR AIR SAMPLE LOCATION
- PROPOSED CRAWL SPACE AIR SAMPLE LOCATION
- CONTINGENCY INDOOR AIR SAMPLE LOCATION

GP09-09	9/16/2009 6.5-7.5 ft BGS ug/m3
Tetrachloroethene	2000

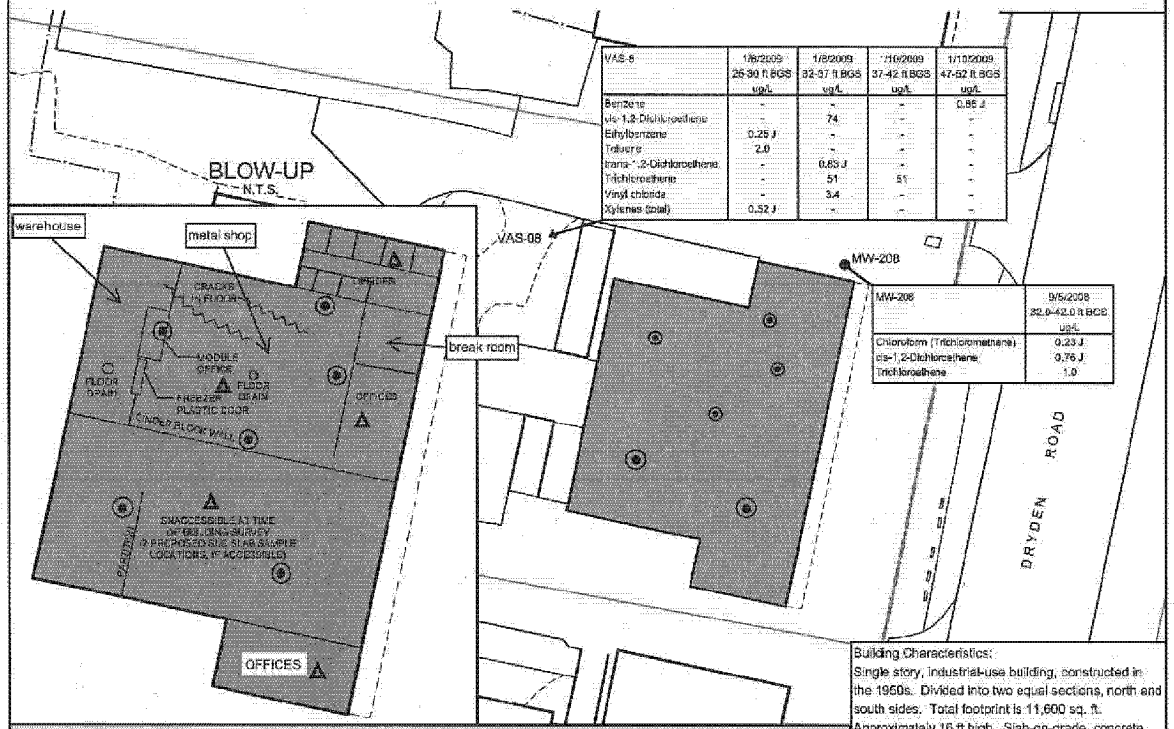
SAMPLE DATE
SAMPLE DEPTH
SAMPLE UNITS
CONCENTRATION VALUE
COMPOUND
SAMPLE ID
EXCEEDANCES

0 20 50ft

SOIL VAPOR SCREENING LEVELS (ug/m3)	
CHEMICAL NAME	COMMERCIAL/ INDUSTRIAL SVSLs
1,1,1-Trichloroethane	220000
1,1-dichloroethane	77
1,1-dichloroethene	8800
Benzene	16
Chlorobenzene	2200
Chloroform (Trichloromethane)	5.3
cis-1,2-Dichloroethene	2600
Ethylbenzene	49
Naphthalene	3.6
Tetrachloroethene	21
trans-1,2-Dichloroethene	2600
Trichloroethene	61
Vinyl Chloride	28
Xylenes (total)	4400
METHANE – UEL = 15% / LEL = 5% / 10% of LEL = 0.5%	

NOTE: THERE IS ANOTHER SOIL VAPOR SAMPLE LOCATED NEARBY (GP15-09 and GP15-09). SEE FIGURE 3.

NOTES:
Methane concentrations shown in units of %.
LEL - Lower Explosive Limit; UEL - Upper Explosive Limit
The industrial SVSLs are based on the USEPA 2011 Regional Screening Levels (June 2011) for Industrial Air.
The SVSLs were derived from the USEPA (Jun 2011) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.
An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
The IRIS toxicity value for TCE was updated in September 2011. The SGSL in this table was not updated; it is based on the June 2011 RSL. However, the screening levels for the Work Plan (Tables 5 - 7) are based on the updated TCE toxicity value.



VAS-8	1/8/2009 26-30 ft BGS ug/L	1/8/2009 32-37 ft BGS ug/L	1/10/2009 37-42 ft BGS ug/L	1/10/2009 47-52 ft BGS ug/L
Benzene	-	-	-	0.85 J
cis-1,2-Dichloroethene	-	74	-	-
Ethylbenzene	0.25 J	-	-	-
Toluene	2.0	-	-	-
trans-1,2-Dichloroethene	-	0.65 J	-	-
Trichloroethene	-	51	51	-
Vinyl chloride	-	3.4	-	-
Xylenes (total)	0.52 J	-	-	-

MW-20B	9/5/2008 32.0-42.0 ft BGS ug/L
Chloroform (Trichloromethane)	0.23 J
cis-1,2-Dichloroethene	0.76 J
Trichloroethene	1.0

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, man 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. Not accessible during building survey, looked through window. Appeared vacant. Bare concrete floor. South office area appears similar to north office area.

PROFILE VIEW
N.T.S.

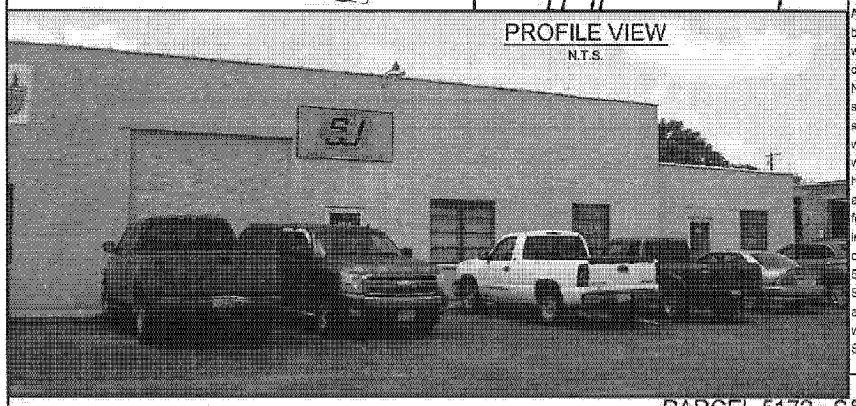


figure 27

PARCEL 5172 - S&J PRECISION BUILDING 1
2015 AND 2019 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

(8)

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.04.05, FIGURE 1, DATED 8/12/05;
TETRA TECH EM INC., PROJECT 112-2106-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE,
ARRAMS AERIAL SURVEY INC. PROJECT 3844, AASI 25610, 04/02/2008.

38443-61(015)GN-WA025 AUG 09/2011

LEGEND

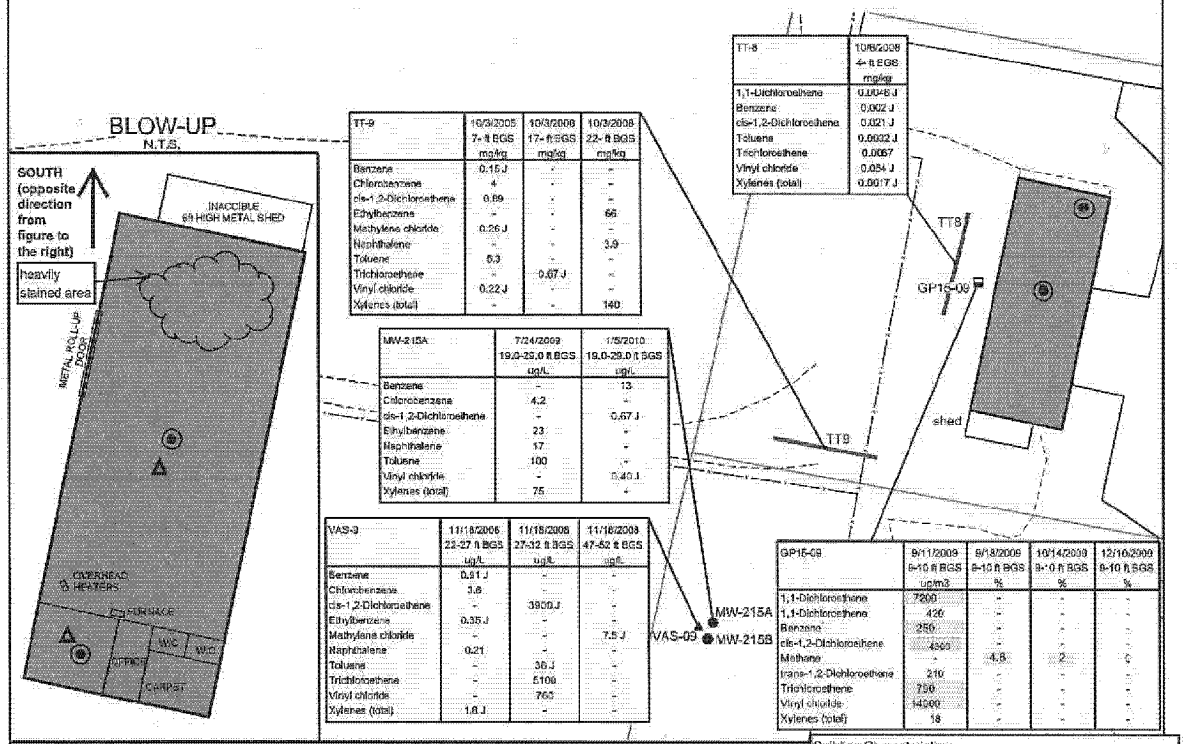
- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- VAPOR INTRUSION STUDY BUILDING LOCATION
- MW-202 — MONITORING WELL LOCATION
- BH01-09 — SOIL BORING LOCATION
- VAS01 — VAS SAMPLING LOCATION
- GP21-09, GP04-09 — SOIL VAPOR PROBE LOCATION
- TP1 — TEST PIT LOCATION
- TT1 — TEST TRENCH LOCATION
- PROPOSED SUB SLAB SOIL VAPOR SAMPLE LOCATION
- PROPOSED INDOOR AIR SAMPLE LOCATION
- PROPOSED CRAWL SPACE AIR SAMPLE LOCATION
- CONTINGENCY INDOOR AIR SAMPLE LOCATION

GP09-09	9/16/2009
	6.5-7.5 ft BGS
	ug/m3
Tetrachloroethene	2000

SAMPLE DATE
SAMPLE DEPTH
SAMPLE UNITS
CONCENTRATION VALUE
COMPOUND
SAMPLE ID
EXCEEDANCES

SOIL VAPOR SCREENING LEVELS (ug/m3)	
CHEMICAL NAME	COMMERCIAL/ INDUSTRIAL SVSLs
1,1,1-Trichloroethane	220000
1,1-Dichloroethane	77
1,1-Dichloroethene	8800
Benzene	16
Chlorobenzene	2200
Chloroform (Trichloromethane)	5.3
cis-1,2-Dichloroethene	2600
Ethylbenzene	49
Naphthalene	3.6
Tetrachloroethene	21
trans-1,2-Dichloroethene	2600
Trichloroethene	61
Vinyl Chloride	28
Xylenes (total)	4400
METHANE - LEL = 15% / LEL = 5% / 10% of LEL = 0.5%	

NOTES:
Methane concentrations shown in units of %.
LEL - Lower Explosive Limit; UEL - Upper Explosive Limit
The industrial SVSLs are based on the USEPA 2011 Regional Screening Levels (June 2011) for Industrial Air.
The SVSLs were derived from the USEPA (Jun 2011) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.
An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
The IRIS toxicity value for TCE was updated in September 2011. The SGSL in this table was not updated; it is based on the June 2011 RSL. However, the screening levels for the Work Plan (Tables 5 - 7) are based on the updated TCE toxicity value.



Building Characteristics:
Single-story, slab-on-grade, commercial use building constructed prior to 1959. Recently became vacant, formerly used by A-Evans Filter Service company. Building is divided into two sections. Total footprint is 2,888 sq. ft. Average air tightness: Exterior openings - vents, utility pipe penetrations, office windows, 2 man doors, bay door. Attached metal shed on north side, 6 ft high, not accessible during building survey. Southern 1/5 of the building is brick, approximately 10 ft high with 8 ft high 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. Northern 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 28

PARCEL 5172 - FORMER A-EVANS AIR FILTER SERVICE BUILDING 2
2003 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 9279.44.05, FIGURE 1, DATED 9/1/05;
TETRA TECH EM INC., PROJECT 0317208-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE;
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AAS1 256/10, 04/02/08

(9)

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LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- VAPOR INTRUSION STUDY BUILDING LOCATION
- MW-202 MONITORING WELL LOCATION
- BH01-09 SOIL BORING LOCATION
- VAS01 VAS SAMPLING LOCATION
- GP21-09, GP04-09 SOIL VAPOR PROBE LOCATION
- TP1 TEST PIT LOCATION
- TT1 TEST TRENCH LOCATION
- PROPOSED SUB SLAB SOIL VAPOR SAMPLE LOCATION
- PROPOSED INDOOR AIR SAMPLE LOCATION
- PROPOSED CRAWL SPACE AIR SAMPLE LOCATION
- CONTINGENCY INDOOR AIR SAMPLE LOCATION

0 20 50ft

GP09-09	9/15/2009
	6.5-7.5 ft BGS
	ug/m3
Tetrachloroethene	2000

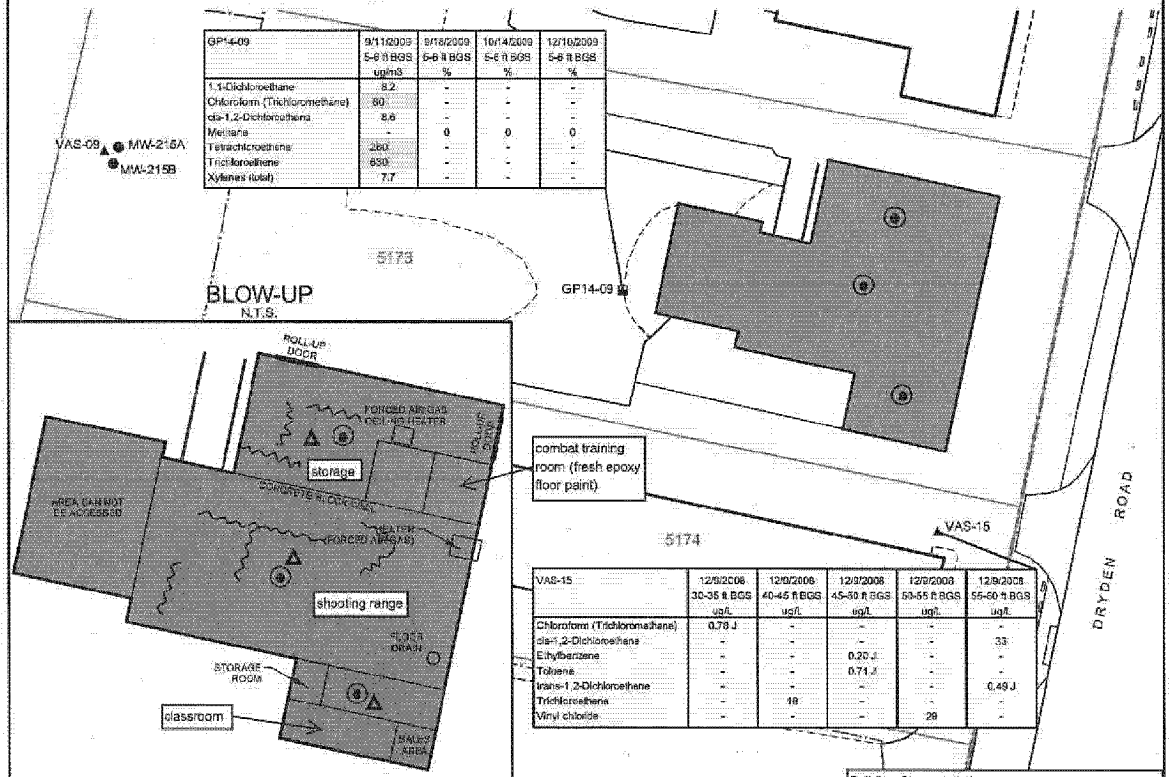
SAMPLE DATE
SAMPLE DEPTH
SAMPLE UNITS
CONCENTRATION VALUE
COMPOUND
SAMPLE ID
EXCEEDANCES

SOIL VAPOR SCREENING LEVELS (ug/m3)	
CHEMICAL NAME	COMMERCIAL/ INDUSTRIAL SVSLs
1,1,1-Trichloroethane	220000
1,1-Dichloroethane	77
1,1-Dichloroethene	8800
Benzene	16
Chlorobenzene	2200
Chloroform (Trichloromethane)	3.3
cis-1,2-Dichloroethene	2800
Ethylbenzene	49
Naphthalene	3.6
Tetrachloroethene	21
trans-1,2-Dichloroethene	2800
Trichloroethene	61
Vinyl Chloride	28
Xylenes (total)	4400
METHANE - UEL = 15% / LEL = 5% / 10% of LEL = 0.5%	

NOTE: THERE IS ANOTHER SOIL VAPOR SAMPLE LOCATED NEARBY (GP13-09). SEE FIGURE 3.

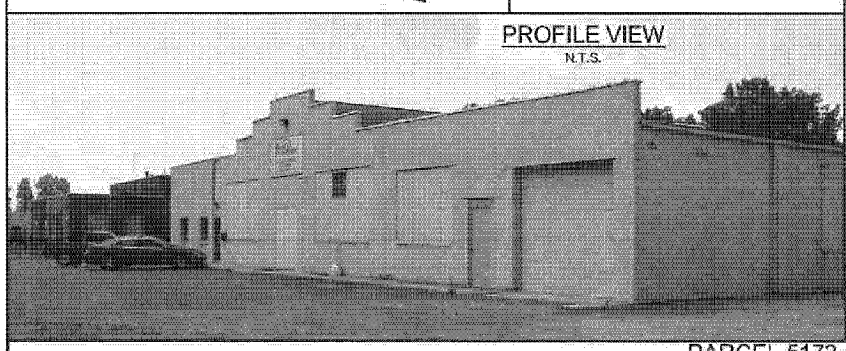
NOTES:
Methane concentrations shown in units of %.
LEL - Lower Explosive Limit; UEL - Upper Explosive Limit
The industrial SVSLs are based on the USEPA 2011 Regional Screening Levels (June 2011) for Industrial Air.
The SVSLs were derived from the USEPA (Jun 2011) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.
An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
The IRIS toxicity value for TCE was updated in September 2011. The SGSL in this table was not updated; it is based on the June 2011 RSL. However, the screening levels for the Work Plan (Tables 5 - 7) are based on the updated TCE toxicity value.

GP14-09	9/11/2009 5-6 ft BGS ug/m3	9/18/2009 5-6 ft BGS %	10/14/2009 5-6 ft BGS %	12/10/2009 5-6 ft BGS %
1,1-Dichloroethane	8.2	-	-	-
Chloroform (Trichloromethane)	80	-	-	-
cis-1,2-Dichloroethene	8.6	-	-	-
Methane	-	0	0	0
Tetrachloroethene	260	-	-	-
Trichloroethene	630	-	-	-
Xylenes (total)	7.7	-	-	-



VAS-15	12/8/2006 30-35 ft BGS ug/L	12/8/2006 40-45 ft BGS ug/L	12/8/2006 45-50 ft BGS ug/L	12/8/2006 50-55 ft BGS ug/L	12/8/2006 55-60 ft BGS ug/L
Chloroform (Trichloromethane)	0.78 J	-	-	-	-
cis-1,2-Dichloroethene	-	-	-	-	33
Ethylbenzene	-	-	0.20 J	-	-
Toluene	-	-	0.71 J	-	-
trans-1,2-Dichloroethene	-	-	-	-	0.49 J
Trichloroethene	-	18	-	-	-
Vinyl chloride	-	-	-	28	-

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 man doors. Occupied during business hours by one adult worker (4-hour shifts) and customers.

figure 29

PARCEL 5173 - SIM TRAINER BUILDING 1
2031 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

SOURCES:
THE PAYNE FIRM, INC., PROJECT 6278.14.05, FIGURE 1, DATED 07/2005;
TETRA TECH EM INC., PROJECT 1.031206-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2007;
CITY OF MORAINE;
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 26810, 06/02/2008

38443-61(015)GN-WA027 AUG 09/2011

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- VAPOR INTRUSION STUDY BUILDING LOCATION
- MW-202 — MONITORING WELL LOCATION
- BH01-09 — SOIL BORING LOCATION
- VAS01 — VAS SAMPLING LOCATION
- GP21-09 — SOIL VAPOR PROBE LOCATION
- GP04-09 — SOIL VAPOR PROBE LOCATION
- TP1 — TEST PIT LOCATION
- TT1 — TEST TRENCH LOCATION
- PROPOSED SUB SLAB SOIL VAPOR SAMPLE LOCATION
- PROPOSED INDOOR AIR SAMPLE LOCATION
- PROPOSED CRAWL SPACE AIR SAMPLE LOCATION
- CONTINGENCY INDOOR AIR SAMPLE LOCATION

0 20 50ft

GP09-09	9/15/2009
	6.5-7.5 ft BGS
	ug/m3
Tetrachloroethene	2000

SAMPLE DATE
SAMPLE DEPTH
SAMPLE UNITS
CONCENTRATION VALUE
COMPOUND
SAMPLE ID
EXCEEDANCES

SOIL VAPOR SCREENING LEVELS (ug/m3)	
CHEMICAL NAME	COMMERCIAL/ INDUSTRIAL SVSLs
1,1,1-Trichloroethane	220000
1,1-Dichloroethane	77
1,1-Dichloroethene	8800
Benzene	16
Chlorobenzene	2200
Chloroform (Trichloromethane)	5.3
cis-1,2-Dichloroethene	2600
Ethylbenzene	49
Naphthalene	3.6
Tetrachloroethene	21
trans-1,2-Dichloroethene	2600
Trichloroethene	61
Vinyl Chloride	28
Xylenes (total)	4400
METHANE - UEL = 15% / LEL = 5% / 10% of LEL = 0.5%	

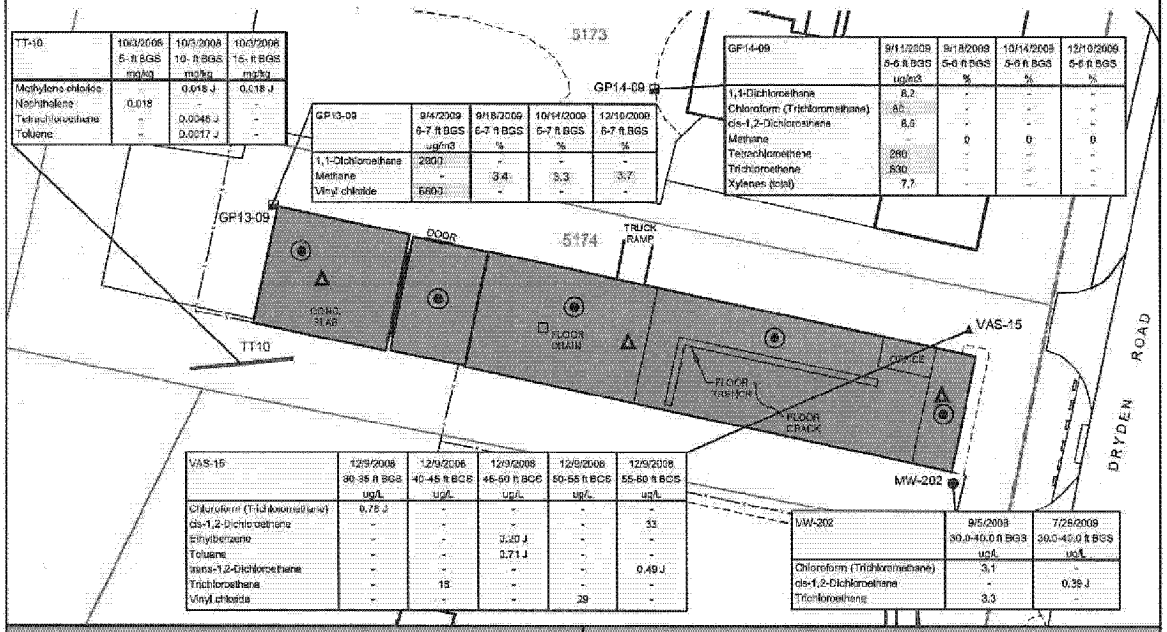
NOTE: THERE IS ANOTHER SOIL VAPOR SAMPLE LOCATED NEARBY (GP12-09). SEE FIGURE 3.

NOTES:
Methane concentrations shown in units of %.
LEL - Lower Explosive Limit; UEL - Upper Explosive Limit
The Industrial SVSLs are based on the USEPA 2011 Regional Screening Levels (June 2011) for Industrial Air.
The SVSLs were derived from the USEPA (Jun 2011) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.
An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
The IRIS toxicity value for TCE was updated in September 2011. The SGSL in this table was not updated; it is based on the June 2011 RSL. However, the screening levels for the Work Plan (Tables 5 - 7) are based on the updated TCE toxicity value.

TT-10	10/3/2008 5 - ft BGS mg/kg	10/3/2008 10 - ft BGS mg/kg	10/3/2008 15 - ft BGS mg/kg
Methylene chloride	-	0.018 J	0.018 J
Naphthalene	0.018	-	-
Tetrachloroethene	-	0.0045 J	-
Toluene	-	0.0017 J	-

GP13-09	9/4/2009 6-7 ft BGS ug/m3	9/18/2009 6-7 ft BGS %	10/14/2009 6-7 ft BGS %	12/10/2009 6-7 ft BGS %
1,1-Dichloroethane	2800	-	-	-
Methane	-	3.4	3.3	3.7
Vinyl chloride	5600	-	-	-

GP14-09	9/11/2009 5-6 ft BGS ug/m3	9/18/2009 5-6 ft BGS %	10/14/2009 5-6 ft BGS %	12/10/2009 5-6 ft BGS %
1,1-Dichloroethane	8.2	-	-	-
Chloroform (Trichloromethane)	5.5	-	-	-
cis-1,2-Dichloroethene	8.6	-	-	-
Methane	-	0	0	0
Tetrachloroethene	280	-	-	-
Trichloroethene	530	-	-	-
Xylenes (total)	7.7	-	-	-



VAS-15	12/9/2008 30-35 ft BGS ug/L	12/9/2008 40-45 ft BGS ug/L	12/9/2008 45-50 ft BGS ug/L	12/9/2008 50-55 ft BGS ug/L	12/9/2008 55-60 ft BGS ug/L
Chloroform (Trichloromethane)	0.75 J	-	-	-	-
cis-1,2-Dichloroethene	-	-	-	-	33
Ethylbenzene	-	-	0.20 J	-	-
Toluene	-	-	0.71 J	-	-
trans-1,2-Dichloroethene	-	-	-	-	0.49 J
Trichloroethene	-	18	-	-	-
Vinyl chloride	-	-	-	29	-

MW-202	9/5/2008 30.0-40.0 ft BGS ug/L	7/29/2009 30.0-40.0 ft BGS ug/L
Chloroform (Trichloromethane)	3.1	-
cis-1,2-Dichloroethene	-	0.39 J
Trichloroethene	3.3	-

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.

SOURCES:
THE PAYNE FIRM, INC., PROJECT 0379-A1-05, FIGURE 1, DATED 9-12-05;
TETRA TECH EM INC., PROJECT 112/2006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/23/2006;
CITY OF MORAINE;
ABRAMS AERIAL SURVEY INC, PROJECT 08443, MAS 2916, 6/02/2008

(12)

figure 30

PARCEL 5174 - COMMAND ROOFING BUILDING 1
2045 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

38443-61(015)GN-WA028 AUG 09/2011

LEGEND

- APPROXIMATE SITE BOUNDARY
- EDGE OF WATER
- PARCEL BOUNDARY
- VAPOR INTRUSION STUDY BUILDING LOCATION
- MW-202 — MONITORING WELL LOCATION
- BH01-09 — SOIL BORING LOCATION
- VAS01 — VAS SAMPLING LOCATION
- GP21-09, GP04-09 — SOIL VAPOR PROBE LOCATION
- TP1 — TEST PIT LOCATION
- TT1 — TEST TRENCH LOCATION
- PROPOSED SUB SLAB SOIL VAPOR SAMPLE LOCATION
- PROPOSED INDOOR AIR SAMPLE LOCATION
- PROPOSED CRAWL SPACE AIR SAMPLE LOCATION
- CONTINGENCY INDOOR AIR SAMPLE LOCATION

GP09-09	6/15/2009 6.5-7.5 ft BGS ug/m3
Tetrachloroethene	2000

SAMPLE DATE
SAMPLE DEPTH
SAMPLE UNITS
CONCENTRATION VALUE
COMPOUND
SAMPLE ID
EXCEEDANCES

0 20 50ft

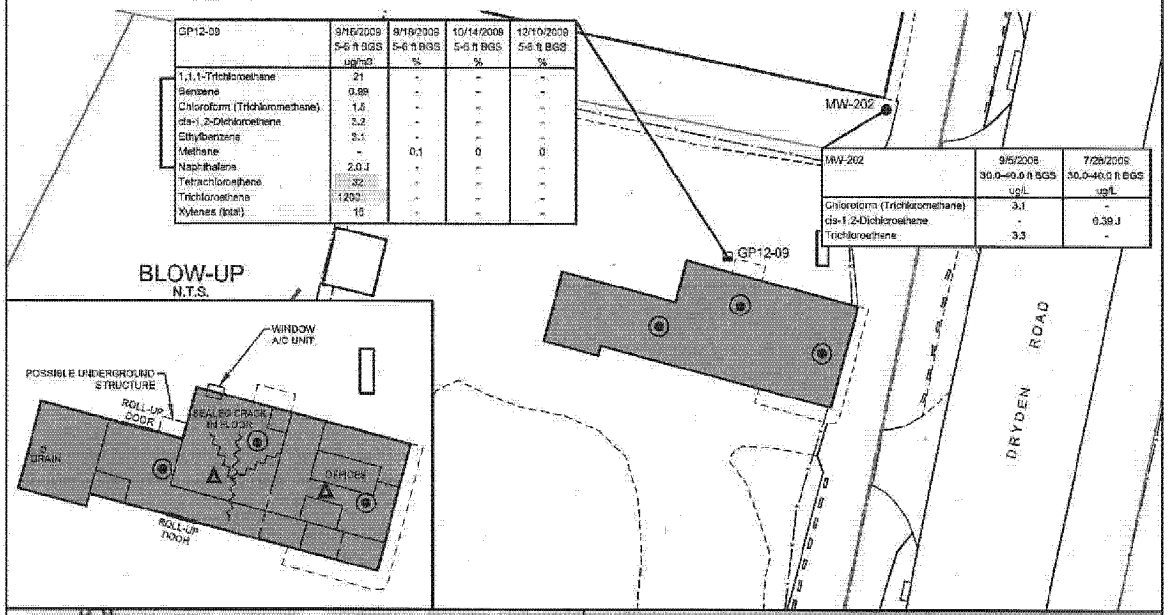
SOIL VAPOR SCREENING LEVELS (ug/m3)	
CHEMICAL NAME	COMMERCIAL/ INDUSTRIAL SVSLs
1,1,1-Trichloroethane	220000
1,1-Dichloroethane	77
1,1-Dichloroethene	8800
Benzene	16
Chlorobenzene	2300
Chloroform (Trichloromethane)	5.3
cis-1,2-Dichloroethene	2600
Ethylbenzene	49
Naphthalene	3.6
Tetrachloroethene	21
trans-1,2-Dichloroethene	2600
Trichloroethene	61
Vinyl Chloride	28
Xylenes (total)	4400
METHANE - UEL = 15% / LEL = 5% / 10% of LEL = 0.5%	

NOTE: THERE IS ANOTHER SOIL VAPOR SAMPLE LOCATED NEARBY (GP13-09). SEE FIGURE 3.

NOTES:
Methane concentrations shown in units of %.
LEL - Lower Explosive Limit; UEL - Upper Explosive Limit
The Industrial SVSLs are based on the USEPA 2011 Regional Screening Levels (June 2011) for Industrial Air.
The SVSLs were derived from the USEPA (Jun 2011) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.
An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
The IRIS toxicity value for TCE was updated in September 2011. The SGSL in this table was not updated; it is based on the June 2011 RSL. However, the screening levels for the Work Plan (Tables 5 - 7) are based on the updated TCE toxicity value.

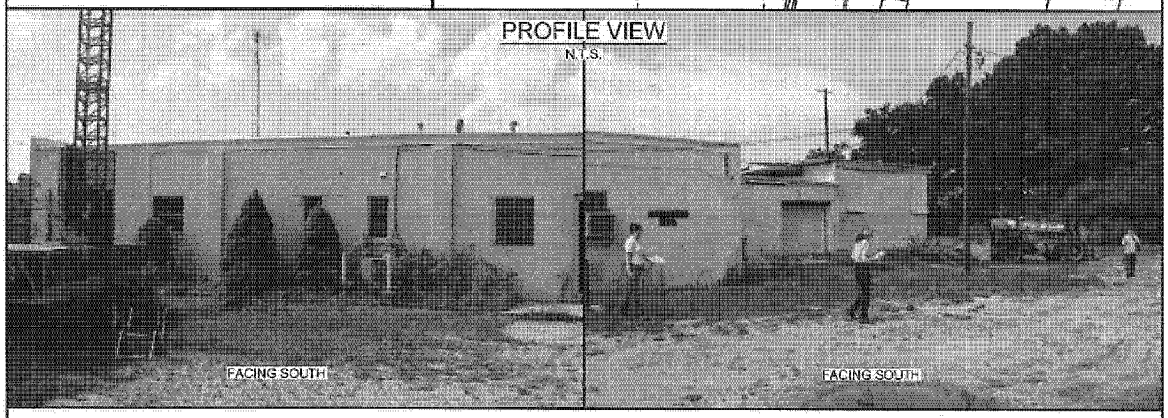
GP12-09	9/16/2009 5-6 ft BGS ug/m3	9/16/2009 5-6 ft BGS %	10/14/2009 5-6 ft BGS %	12/10/2009 5-6 ft BGS %
1,1,1-Trichloroethane	21	-	-	-
Benzene	0.89	-	-	-
Chloroform (Trichloromethane)	1.6	-	-	-
cis-1,2-Dichloroethene	3.2	-	-	-
Ethylbenzene	3.1	-	-	-
Methane	-	0.1	0	0
Naphthalene	2.0 J	-	-	-
Tetrachloroethene	32	-	-	-
Trichloroethene	1200	-	-	-
Xylenes (total)	16	-	-	-

MW-202	9/5/2008 30.0-40.0 ft BGS ug/L	7/28/2009 30.0-40.0 ft BGS ug/L
Chloroform (Trichloromethane)	3.1	-
cis-1,2-Dichloroethene	-	0.39 J
Trichloroethene	3.3	-



BLOW-UP
N.T.S.

PROFILE VIEW
N.T.S.



Building Characteristics:
Single-story, commercial-use building, constructed prior to 1948. 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 0379.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT 112/2006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/26/2006;
CITY OF MORAINE;
ABRAMS AERIAL SURVEY INC, PROJECT 38443, AASI 07610, 04/20/2006.

(13)

figure 31
PARCEL 5175 - FORMER ALLIANCE EQUIPMENT & SUPPLY BUILDING 1
2075 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio

38443-61(015)GN-WA029 AUG 09/2011