

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
South Dayton Dump Site - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #1
INITIAL POLREP-PRP Removal
South Dayton Dump Site
B52B
Moraine, OH
Latitude: 39.7240309 Longitude: -84.2187749

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Date: 7/23/2013

Reporting Period: January 2013 through July 22, 2013

1. Introduction

1.1 Background

Site Number:	B52B	Contract Number:	
D.O. Number:		Action Memo Date:	10/9/2012
Response Authority:	CERCLA	Response Type:	PRP Oversight
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	OU3 and OU4
Mobilization Date:	6/20/2013	Start Date:	6/20/2013
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	Ohio EPA notified
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

PRP Oversight

1.1.2 Site Description

The SDDL Site is a former industrial landfill located at 1975 Dryden Road in Moraine, Ohio. It encompasses a total of 80 acres, 65 of which contain landfilled waste. Approximately 40 acres of the landfill has been built over and/or is being used for other commercial/industrial purposes. The Site operated from the early 1940s to 1996 and is a filled sand and gravel pit and 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.

Site Background – 1946 thru 1996 Landfill Operations

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.

A timeline of the Site history is presented below.

- During the 1930s, excavation activities began according to the aerial photographs.
- In 1940, landfill operations initiated at the Site.
- In the mid 1950s, buildings were constructed on the portions of the Site adjoining Dryden Road and businesses reportedly began operation.
- In approximately 1956, Valley Asphalt began operations on the northern part of the site.
- In 1969, the Montgomery County Health Department (MCHD) first licensed the Site as a solid waste disposal facility permitted to accept commercial and industrial wastes.
- In 1974, the Ohio EPA took over the authority for annual licensing; however, the licenses continued to be issued by and overseen by MCHD on behalf of Ohio EPA. The last license granted by Ohio EPA was issued in 1986.
- As of 1987, the Site's Permit limited materials for disposal to construction and demolition debris.

- In 1990, the Site stopped accepting and disposing of fly ash at the Site.
- In early 1996, the Site closed.

Site Background – Remedial Investigation/Feasibility Study

EPA conducted a screening site inspection of the Site in 1991 and a focused site inspection prioritization site evaluation in 1995. Ohio EPA conducted a site team evaluation prioritization of the landfill in 1996.

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

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/Feasibility Study (RI/FS). The RI/FS is being conducted under an Administrative Settlement Agreement and Order on Consent with EPA. In 2008, the PRPs agreed to conduct a streamlined RI/FS at the site. EPA approved these work plans, and the PRPs conducted several investigations at the site from 2008 through 2010.

The 2008-2010 investigations included geophysical surveys, test pit and test trench sampling, vertical aquifer sampling, landfill gas sampling and groundwater monitoring well installation and sampling. The groundwater contamination (above MCLs) along the eastern boundary of the Site (Dryden Road) included TCE, vinyl chloride, cis-1,2-dichloroethene (cis-1,2-DCE), benzene, arsenic and lead.

Preliminary groundwater elevation monitoring and mapping conducted by the PRPs in 2008-2009 indicated groundwater flow direction in the vicinity of the Site was variable. During the July 2008 to December 2008 monitoring events, groundwater flow appeared to be generally to the west, with occasional components of flow to the northwest and southwest.

In 2009 and 2010, the PRPs conducted soil vapor sampling at 9 gas probes on Site. Soil gas/vapor sampling showed TCE levels greater than the ODH sub-slab TCE screening level of 20 parts per billion by volume (ppbv), with a high TCE concentration of 10,420 ppbv in GP20-09.

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.

The PRPs are also conducting a vapor intrusion study, to evaluate whether landfill chemicals are posing immediate threats to the on and near-site businesses. Sampling conducted in January and March 2012 indicated that TCE and/or methane levels greater than the ATSDR and ODH TCE sub-slab and indoor air screening levels were observed in five on-Site non-residential buildings.

In January and March 2012, the PRPs conducted sub-slab and indoor air sampling at a number of properties located on-Site and along Dryden and East River Roads. A summary of the analytical results is as follows:

- One non-residential building (2003 Dryden Road – Building 2) showed a sub-slab 1,1-Dichloroethane (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 963 ppbv.
- Two non-residential buildings (1903 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 313 ppbv in 2031 Dryden Road.
- 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 10,341 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 1,721 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 5,582 ppbv. Three of the thirteen non-residential buildings (1951 Dryden Road, 2015 Dryden Road and 2031 Dryden Road) also showed indoor air TCE levels greater than the ODH indoor air TCE screening level of 2 ppbv, with a high TCE concentration of 13 ppbv, documenting a Completed Exposure Pathway for Vapor Intrusion.
- 2031 Dryden Road, Building 1 showed a sub-slab methane level of 0.97% and 1903 Dryden Road, Building 2 showed a sub-slab methane level of 6.6%, which exceeds the ODH sub-slab methane screening level of 0.5%. Methane is explosive between 5% and 15%.

Table 1 summarizes the four non-residential on-Site buildings where TCE and methane sub-slab and indoor air screening levels were exceeded.

TABLE 1
SUMMARY OF PRP VAPOR INTRUSION SAMPLING GREATER THAN TCE AND METHANE SCREENING LEVELS
JANUARY AND MARCH 2012

Address	Methane Sub-Slab Screening Level	TCE Screening Levels (10 ⁻⁵ levels)		Dates Sampled by CRA - January and March 2012		
		Sub-Slab (in ppbv)	Indoor Air (in ppbv)	Max Methane in Sub-Slab	Max TCE Sub-Slab (in ppbv)	Max TCE Indoor Air (in ppbv)
1903 Dryden Road	0.5%	20	2	6.6%	32	ND
1951 Dryden Road	0.5%	20	2	ND	2,977	13
2015 and 2019 Dryden Road	0.5%	20	2	NA	5,396	5.6
	0.5%	20	2	ND	5,582	3
2031 Dryden Road	0.5%	20	2	0.97%	688	5.2

Notes:

Results bolded and highlighted yellow indicate results exceeding the sub-slab screening level at the 10⁻⁵ Risk Level (Hazard Index of 1.0)

Results bolded and highlighted red indicate results exceeding the sub-slab screening level at both the 10⁻⁴ and 10⁻⁵ Risk Levels.

In order to obtain seasonal Vapor Intrusion data in July and August 2012, the PRPs conducted additional sub-slab and indoor air sampling at a number of commercial and residential properties located on-Site and along Dryden and East River Roads. A summary of the analytical results is as follows:

- 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 1,1-DCA concentration of 4,100 ppbv.
- One non-residential building (2003 Dryden Road, Building 2) showed a sub-slab vinyl chloride level greater than the ODH sub-slab vinyl chloride screening level of 20 ppbv, with a vinyl chloride concentration of 5,500 ppbv.
- Seven on-Site 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 2,700 ppbv. Two of the seven non-residential buildings (1901 Dryden Road and 2045 Dryden Road) also showed 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 for Vapor Intrusion. This indoor air TCE result is 2.5 times greater than the removal action screening level provided by ODH. In addition, one structure on the Valley Asphalt property

(Murphy's Plumbing [MP] structure) showed an indoor air sample having a PCE concentration of 38 ppbv, which exceeds the ODH indoor air PCE screening level of 25 ppbv.

One on-Site non-residential building (2003 Dryden Road, Building 2) showed sub-slab and indoor air benzene levels greater than the ODH sub-slab and indoor air benzene levels. The sub-slab sample (Probe A) showed a benzene concentration of 50 ppbv, which exceeds the ODH sub-slab benzene screening level of 20 ppbv. The indoor air sample showed a benzene concentration of 2.4 ppbv, which exceeds the ODH indoor air benzene screening level of 2 ppbv. The sub-slab and indoor air sampling results document a completed exposure pathway for Vapor Intrusion.

Table 2 summarizes the three non-residential on-Site buildings where TCE sub-slab and indoor air screening levels were exceeded.

TABLE 2
SUMMARY OF PRP VAPOR INTRUSION SAMPLING
GREATER THAN TCE SCREENING LEVELS
JULY AND AUGUST 2012

Address	TCE Screening Levels (10 ⁻⁵ levels)		Dates Sampled by CRA – July and August 2012	
	Sub-Slab (in ppbv)	Indoor Air (in ppbv)	Max TCE in Sub-Slab (in ppbv)	Max TCE Indoor Air (in ppbv)
1901 Dryden Road – Building 1	20	2	2,700	8.2
2045 Dryden Road – Building 1	20	2	1,500	50

Notes:

Results bolded and highlighted yellow indicate results exceeding the sub-slab screening level at the 10⁻⁵ Risk Level (or Hazard Index of 1.0)

Results bolded and highlighted red indicate results exceeding the sub-slab screening level at both the 10⁻⁴ and 10⁻⁵ Risk Levels. 10⁻⁴ Risk Levels (or Hazard Index of 10) are 10-times greater than the 10⁻⁵ Risk Levels.

Site Background – Remedial Program Request for Removal Assistance

In a letter dated June 5, 2012, EPA RPM Karen Cibulskis requested 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 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 5,582 ppbv and TCE indoor air vapor levels as high as 13 ppbv, a documented completed exposure pathway.

At the occupied building located at 2031 Dryden Road, methane was detected in a laboratory sub-slab sample at 0.97%, which exceeds the ODH sub-slab methane screening level of 0.5%.

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). Building 2 is currently closed to access.

Site Background – Ohio Department of Health

On July 6, 2012, the ODH provided health-based guidance to evaluate the results of Vapor Intrusion sub-slab and indoor air sampling for contaminants of concern at the Site. ATSDR and ODH identified residential and non-residential sub-slab and indoor air screening levels. The screening levels are based on 10⁻⁵ cancer risk or a Hazard Index of 1.0 and generally used at remedial sites. ODH also provided 10⁻⁴ screening levels for time-removal action evaluation. Table 3 summarizes the TCE, PCE and methane screening levels for the Site.

TABLE 3
2012 OHIO DEPARTMENT OF HEALTH - TCE, PCE, BENZENE AND METHANE SCREENING LEVELS

Chemical of Concern	Residential Screening Level (10 ⁻⁵)	Non-Residential Screening Level (10 ⁻⁵)	Residential Screening Level (10 ⁻⁴)	Non-Residential Screening Level (10 ⁻⁴)
Indoor Air				
TCE	0.4	2	4	20
PCE	6	25	60	250
Benzene	0.4	2	4	20
Methane	0.05		0.05	
Sub-Slab				
TCE	4	20	40	200
PCE	60	250	600	2,500

Benzene	4	20	40	200
Methane	0.5		0.5	

Notes:

The screening levels are in parts per billion by volume (ppbv) and based on 10⁻⁵ cancer risk (Hazard Index of 1.0) and based on a 10⁻⁴ cancer risk (Hazard Index of 10).

Site Background – Ohio EPA Request for Removal Assistance

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 SDDL Site.

1.1.2.1 Location

The Site is located at 1901 through 2153 Dryden Road and 2225 East River Road in Moraine, Ohio. The Site’s geographic coordinates (based on the address of 1975 Dryden Road) are 39° 43’ 42.6354” North latitude and 84° 12’ 59.8278” West longitude. 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.

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.

Part of the landfill is within the 100 year floodway and more than half of the landfill is within the 100 year floodplain. The landfill is within a secondary wellhead protection area and there is a well (not used for drinking water) in the northern part of the landfill. The Site also contains a federally designated wetland. Some of the landfilled materials are below the water table and are in direct contact with groundwater.

1.1.2.2 Description of Threat

A release of hazardous substances, pollutants, or contaminants is present due to documented vapor intrusion at the SDDL Site. A completed exposure pathway exists for vapor intrusion, as TCE has been documented in the groundwater (TCE as high as 260 ppb), in the soil gas (TCE as high as 10,420 ppbv), in the sub-slab (TCE as high as 17,000 ppbv) and in the indoor air (TCE as high as 50 ppbv). Vapor intrusion is occurring at the Site.

In addition, a second completed exposure pathway exists for vapor intrusion, as benzene has been documented in the sub-slab (at 50 ppbv) and in the indoor air (at 2.4 ppbv) at one on-Site non-residential property.

Sub-slab sampling has documented a methane level of 6.6% in one non-residential property on Site. Methane is explosive between 5% and 15%.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Between July 12 and August 8, 2012, 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.

Sub-Slab Samples

EPA collected sub-slab samples at three residential and five non-residential buildings. The results of the sampling are as follows:

- EPA observed PCE in sub-slab samples collected from the three residential properties (2391, 2232 and 2373 East River Road) at concentrations ranging from 7.7 to 20 ppbv, which are less than the ODH residential sub-slab PCE screening level of 60 ppbv.
- Sub-slab samples collected from non-residential properties located at 2230 and 2205 Dryden Road did not detect TCE at concentrations greater than the ODH sub-slab TCE screening level of 20 ppbv. PCE was detected in one sub-slab sample collected from 2205 Dryden Road at a concentration of 110 ppbv, which is less than the non-residential sub-slab PCE screening level of 250 ppbv.
- 1951 Dryden Road (Building 1, Probe D) – EPA observed a TCE sub-slab concentration of 2,900 ppbv, which exceeds the ODH sub-slab TCE screening level of 20 ppbv.
- 2031 Dryden Road (Building 1, Probe C) – EPA observed a cis-1,2-DCE sub-slab concentration of 27,000 ppbv, which exceeds the ODH sub-slab cis-1,2-DCE screening level of 370 ppbv; a benzene sub-slab concentration of 540 ppbv, which exceeds the benzene screening level of 20 ppbv; a TCE sub-slab concentration of 460 ppbv, which exceeds the TCE screening level of 20 ppbv; a m,p-xylene sub-slab concentration of 2,100 ppbv, which exceeds the m,p-xylene screening level of 2,000 ppbv; an o-xylene sub-slab concentration of 2,000 ppbv, which equals the o-xylene screening level of 2,000 ppbv; and a vinyl chloride concentration of 2,600 ppbv, which exceeds the vinyl chloride screening level of 20 ppbv. In addition, methane was detected in the sub-slab sample at a concentration of 2.2%, which exceeds the ODH sub-slab methane screening level of 0.5%.
- 2015 Dryden Road (S&J Building, Probe B) – EPA observed a cis-1,2-DCE sub-slab concentration of 1,400 ppbv, which exceeds the ODH sub-slab cis-1,2-DCE screening level of 370 ppbv. TCE was observed in the sub-slab air sample at a concentration of 17,000 ppbv, which exceeds the TCE sub-slab screening level of 20 ppbv.

Table 4 summarizes the sub-slab data having sub-slab exceedances.

TABLE 4					
SUMMARY OF 2012 EPA SUB-SLAB EXCEEDANCES					
Compound	Sub-Slab Screening Level (10 ⁻⁵ Risk Level for Non-Residential Locations)	Sample ID	1951 Dryden-SS-080712	2031 Dryden-SS-080712	2015 Dryden-SS-080812
		Address	1951 Dryden Road Probe D (Building 1)	2031 Dryden Road Probe C	2015 Dryden Road Probe B (S&J Building)
		Date Sampled	8/7/2012	8/7/2012	8/8/2012
cis-1,2-Dichloroethylene	370		52	27,000	1,400
Benzene	20		ND (11)	540	ND (28)
Trichloroethylene	20		2,900	460	17,000
m,p-Xylene	2,000		ND (11)	2,100	ND (28)

o-Xylene	2,000		ND (11)	2,000	ND (28)
Vinyl Chloride	20		ND (11)	2,600	ND (28)
Percent Methane	0.5%		0.00037%	2.2	0.00045%

Notes:

Results reported in parts per billion by volume, except for percent methane.

Results bolded and highlighted yellow indicate results exceeding the sub-slab screening level at the 10^{-5} Risk Level (Hazard Index of 1.0)

Results bolded and highlighted red indicate results exceeding the sub-slab screening level at both the 10^{-4} and 10^{-5} Risk Levels. 10^{-4} Risk Levels (Hazard Index of 10) are 10-times greater than 10^{-5} Risk Levels.

ND = Not detected at method reporting limit

Soil Gas Samples

EPA used a Geoprobe unit and installed soil gas probes at nested depths between 8-feet and 16-feet below ground surface (bgs) at four locations (GP-3, GP-4, GP-6 and GP-7) on the west side of Dryden Road, two locations (GP-2 and GP-5 on City of Moraine property) on the east side of Dryden Road and one location (GP-1) adjacent to the property located at 2233 East River Road.

From July 24 through 27, 2012, EPA conducted field screening at each soil gas probe for VOCs (using a Multi-RAE photoionization detector [PID]) and percent methane (GEM2000 methane meter). EPA observed detectable methane concentrations in soil gas probe GP-2. The 12-foot bgs nested soil gas probe 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%.

On July 30, 2012, grab samples were collected and analyzed for methane and VOCs (using Method TO-15) from five of the soil gas probe depths. The following is a summary of the soil gas probe sampling results:

- The soil gas sample collected at GP-2 (16-feet bgs) showed the following VOC concentrations: 2,2,4-trimethylpentane at 14,000 ppbv, hexane at 12,000 ppbv and heptane at 860 ppbv. In addition, methane was detected at 2.5%.
- The soil gas sample collected at GP-3 (8-feet bgs) showed a TCE concentration of 120 ppbv, which exceeds the ODH sub-slab TCE screening level of 20 ppbv.
- The soil gas sample collected at GP-4 (16-feet bgs) showed a TCE concentration of 49 ppbv, which exceeds the ODH sub-slab TCE screening level of 20 ppbv.
- The soil gas sample collected at GP-6 (12-feet bgs) showed a TCE concentration of 41 ppbv, which exceeds the ODH sub-slab TCE screening level of 20 ppbv.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Vapor intrusion sampling results from 2012 by 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 sub-slab benzene concentration (50 ppbv) greater than the ODH sub-slab screening level (20 ppbv) and an indoor air benzene concentration (2.4 ppbv) greater than the ODH screening level (2 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. Vapor intrusion has been documented to be occurring at this Site. In addition, one non-residential building has shown a sub-slab methane level of 6.6%. Methane is explosive between 5% and 15%.

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 DP&L building.

For purposes of managing the time-critical removal action, the Site will be segregated into 2 operating units.

Operating Unit 3 (OU3) will encompass removal work south of the Valley Asphalt Corporation property.

Operating Unit 4 (OU4) will encompass removal work on the Valley Asphalt Corporation property.

2.1.2 Response Actions to Date

OU3 work:

On January 3, 10, 17, 24 and 31, 2013, EPA, Ohio EPA, START and the Respondents participated in conference calls regarding EPA requirements for vapor intrusion (VI) mitigation. EPA OSC holding weekly meetings to begin technical discussions on what will need to be included in the Work Plan. Conestoga-Rovers & Associates (CRA) is the primary environmental consultant for the Respondents.

On January 9 and 10, 2013, the Respondents completed confirmatory sampling of buildings with indoor air benzene and chloroform issues. This re-sampling was to confirm the sampling results from the Respondent's August 2012 sample results.

On January 10 and 11, 2013, the Respondents provided EPA with comments on a sub-slab depressurization system (SSDS) acceptance letter and estimated electricity cost for SSDS operation, respectively.

On January 10, 17 and 24, 2013, the Respondents provided EPA with draft sections of the VI Mitigation Work Plan for review.

On January 24, 2013, the Respondents installed Model 2001 Sierra Gas Monitor at 1903 Dryden Road (Valley Asphalt, Building 2, Parcel 5054).

On January 31, 2013, the Respondents installed Model 2001 Sierra Gas Monitor at 2031 Dryden Road (SIM Trainer Building 15, Parcel 5173).

On February 7, 14, 21 and 28, 2013, EPA, Ohio EPA, START and the Respondents participated in conference calls regarding EPA requirements for VI mitigation.

On February 15, 2013, EPA provided the Respondents with comments on the draft VI Mitigation Work Plan.

On March 1, 2013, the Respondents signed and submitted to EPA an Administrative Settlement Agreement and Order on Consent (ASAOC). The ASAOC stated that the Responding Parties have agreed to conduct vapor intrusion work at the SDDL Site, except for work on the Valley Asphalt Corporation property.

On March 7, 14 and 28, 2013, EPA, Ohio EPA, START and the Respondents participated in conference calls regarding updates to the status of the VI mitigation. The Respondents provided meeting minutes for each conference call.

On March 15, 2013, CRA completed visits to the eight buildings proposed for VI mitigation. CRA was accompanied by prospective Ohio licensed radon contractors. The purpose of the building visits was to gather information that would aid in the design of sub-slab depressurization systems and help the Respondents finalize the contractor selection.

On March 28, 2013, the Respondents provided EPA with a revised draft VI Mitigation Work Plan for review.

On April 4, 11, 18 and 25, 2013, EPA, Ohio EPA, START and the Respondents participated in conference calls regarding updates to the status of the VI mitigation. The Respondents provided meeting minutes for each conference call.

On April 5, 2013, EPA executed the Removal Action ASAOC. Based on the dates of the Return Receipts, the effective date of the Removal Action ASAOC was April 8, 2013.

On April 12, 2013, the Respondents formally notified EPA in a letter indicating that CRA would be the primary environmental consultant for the removal action and Adam Loney (CRA) would be the project coordinator at the Site.

On April 29, 2013, CRA submitted a draft VI Mitigation Work Plan for EPA to review.

On May 1, 2013, EPA OSC issued a conditional approval letter to the Respondents for the VI Mitigation Work Plan based on EPA modifications.

On May 2, 9, 16, 23 and 30, 2013, EPA, Ohio EPA, START and the Respondents participated in conference calls regarding the status of VI mitigation activities.

On May 9, 2013, the Respondents issued an electronic copy and sent out hard copies of the Final VI Mitigation Work Plan to EPA.

On May 13, 2013, the Respondents issued a letter to EPA identifying the properties where access has or has not been obtained.

On May 13, 2013, START, CRA, CRA's SSDS installation subcontractor (Environmental Doctor) held a meeting with Globe Equipment regarding the proposed SSDS installation.

On June 6, 13, 20 and 27, 2013, EPA, Ohio EPA, START and the Respondents participated in conference calls regarding the status of VI mitigation activities.

On June 13, 2013, the Respondents provided EPA, Ohio EPA, Public Health - Dayton and Montgomery County (PHDMC) with revised figures showing proposed SSDS compliance and extraction point locations; the Respondents also included a list of proposed changes to the proposed locations due to existing sub-slab soil vapor probe locations.

On June 18, 2013, the Respondents provided copies of the signed Vapor Abatement System Acceptance Forms for the 8 buildings addressed by the VI Mitigation Work Plan.

On June 20, 2013, CRA began SSDS installation activities at 2215 East River Road (Building 24 - Globe Equipment). Estimated completion date was set at July 24, 2013.

On June 28, 2013, CRA began SSDS installation activities at 1951 Dryden Road (Building 8 - B&G Equipment). Estimated completion date was set at July 24, 2013.

OU4 work:

On March 22, 2013, EPA issued a Unilateral Administrative Order (UAO) to the Valley Asphalt Corporation for Removal Actions at the Valley Asphalt Site. The UAO effective date was April 16, 2013.

On April 19, 2013, the Respondent (Valley Asphalt Corporation) formally notified EPA that it would comply with the UAO.

On April 22, 2013, the Respondent formally notified EPA that Bowser-Morner would be the primary environmental contractor at the Site, and that Katherine Beach (Bowser-Morner) would be the project coordinator.

On April 26, 2013, the Respondent submitted a draft VI Mitigation Work Plan to mitigate the 6 buildings on the Valley Asphalt property.

On June 6, 2013, a conference call was conducted between EPA, Ohio EPA, START, and the Respondent to discuss the VI mitigation work plan. The Respondent initial plans to mitigate 3 properties and to demolish 4 properties. One of the properties (Building 2) will be partially demolished and the portion not demolished will have a SSDS installed. The Respondent stated that the Environmental Doctor will be installing the SSDSs on site.

On June 11, 2013, Respondent installed sub-slab probes in the 3 buildings where SSDSs will be installed in order to measure vacuum once the systems are installed.

On June 13, 2013, a conference call was conducted between EPA, Ohio EPA, START, and the Respondent to discuss the VI mitigation work plan. The SSDS for Building 2 was scheduled to begin on July 8, 2013. The Respondents sent out preliminary SSDS designs for the three buildings to get mitigated. EPA provided comments to sub-slab and compliance probe locations.

On June 20, 2013, a conference call was conducted between EPA, Ohio EPA, START, and the Respondent to discuss the VI mitigation work plan. The Respondent stated that due to the cost of the SSDS installation and long-term sampling and monitoring for each building, that it might be more cost effective for them to demolish the buildings that are not important to the operation of the facility. The Respondent stated that it will demolish Buildings 1, 2 (partial), 7 and the MP Building. The Respondent plans to install a SSDS in Buildings 2 (partial), 4 and 5.

On June 27, 2013, a conference call was conducted between EPA, Ohio EPA, START, and the Respondent to discuss the VI mitigation work plan. After further review of the cost to install an SSDS and the monitoring involved following install, the Respondent stated that it would be more cost effective for them to demolish Buildings 2 and 5. The only building that will have a SSDS will be Building 4. Lead and asbestos surveys to be completed in all buildings where demolition will take place.

On July 10, 2013, an SSDS was installed in Building 4. One extraction point was installed in the building. Radius of influence testing was completed and proved that there is a vacuum reaching across the floor of the building.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

There are two groups of PRPs at the SDDL Site conducting removal activities.

Operable Unit 3 (OU3)
Hobart Corporation
NCR Corporation
Kelsey Hayes Company
(CRA is the environmental consultant)

Operable Unit 4 (OU4)
Valley Asphalt Corporation
(Bowser-Morner is the environmental consultant)

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
N/A					

2.2 Planning Section

2.2.1 Anticipated Activities

See below in Section 2.2.1.1.

2.2.1.1 Planned Response Activities

OU3 Planned Response Activities:
Finish SSDS installation activities in Buildings 8 and 24. Confirm a radius of influence is being achieved in both properties. Once radius of influence testing shows a vacuum on the entire footprint of the building, the clock will start ticking as to when the 30-day post installation air samples will be collected.

Tentative SSDS installation dates:
July 29, 2013 - Begin install at Building 9 - 1951 Dryden Road.
August 7, 2013 - Begin install at Building 14 - 2003 Dryden Road.
August 15, 2013 - Begin install at Building 12 - 2015 and 2019 Dryden Road.
August 26, 2013 - Begin install at Building 15 - 2031 Dryden Road.
September 6, 2013 - Begin install at Building 16 - 2045 Dryden Road.
September 18, 2013 - Begin install at Building 17 - 2075 Dryden Road.

Conduct post SSDS installation proficiency air sampling activities after 30-days, 180-days and 1-year.

OU4 Planned Activities:

Lead and asbestos abatement activities to begin on July 23 or 24, 2013. Abatement activities will be conducted in the buildings that are scheduled to be demolished (Buildings 1, 2, 5, 7 and MP). Demolition to be completed once abatement activities are completed. Demolition tentatively scheduled from July 29 through August 2, 2013.

Building 7 - The Respondent is still in the process of determining who owns Building 7 since the building is straddled on its property and partially on another property.

Bowser-Morner to collect an effluent air sample from the SSDS installed in Building 4.

Bowser-Morner to collect post SSDS installation proficiency air sampling activities after 30-days, 180-days and 1-year.

2.2.1.2 Next Steps

See above in Section 2.2.1.1.

2.2.2 Issues

A completed exposure pathway exists for vapor intrusion, as TCE has been documented in the groundwater (TCE as high as 260 ppb), in the soil gas (TCE as high as 10,420 ppbv), in the sub-slab (TCE as high as 17,000 ppbv) and in the indoor air (TCE as high as 50 ppbv).

In addition, EPA has documented one non-residential property with a sub-slab methane level of 6.6%, which by definition is in the explosive range of 5%-15%.

2.3 Logistics Section

None.

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
START (Site Assessment) - Task 1868	\$58,000.00	\$57,907.00	\$93.00	0.16%
START (Initial OU3 oversight) - Task 1997	\$33,500.00	\$18,043.00	\$15,457.00	46.14%
START (OU3) - Task 2159	\$15,000.00	\$0.00	\$15,000.00	100.00%
START (OU4 - Valley) - Task 2219	\$15,000.00	\$2,732.00	\$12,268.00	81.79%
Intramural Costs				
USEPA - Direct	\$20,000.00	\$9,000.00	\$11,000.00	55.00%
Total Site Costs	\$141,500.00	\$87,682.00	\$53,818.00	38.03%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety Plans have been completed under each PRP Work Plan.

2.5.2 Liaison Officer

City of Moraine Council was briefed by OSC Renninger on June 13, 2013 of the removal action progress.

2.5.3 Information Officer

None.

3. Participating Entities

3.1 Unified Command

None.

3.2 Cooperating Agencies

Ohio EPA
RAPCA
PHDMC
Ohio Dept of Health

4. Personnel On Site

EPA OSC - 1
START (Weston Solutions/Dynamac) - 1

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6.1 Internet location of additional information/report

None.

6.2 Reporting Schedule

POLREP 2 will be issued in September 2013.

7. Situational Reference Materials

No information available at this time.