UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III

FINAL DECISION
SHERWIN WILLIAMS CORP. BALTIMORE, MD

PURPOSE

The United States Environmental Protection Agency (EPA) is issuing this Final Decision and Response to Comments (FDRTC or Final Decision) selecting the Final Remedy for the Sherwin Williams Corp. facility located at Baltimore, MD (hereinafter referred to as the Facility). The Final Decision is issued pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. Sections 6901, et seq.

On February 11, 2015, EPA issued a Statement of Basis (SB) in which it described the information gathered during environmental investigations at the Facility and proposed a Final Remedy for the Facility. The SB is hereby incorporated into this Final Decision by reference and made a part hereof as Attachment A.

This FDRTC selects the remedy that EPA evaluated under the SB. Consistent with the public participation provisions under RCRA, EPA solicited public comment on its proposed Final Remedy. On February 11, 2015, notice of the SB was published on the EPA website: [http://www.epa.gov/reg3wcmd/publicnotice_ SherwinWilliams.html] and in the Daily Record newspaper. The thirty (30) day comment period ended on March 13, 2015.

Since EPA did not receive any comments on the SB and EPA has determined it is not necessary to modify the proposed Final Remedy set forth in the SB based on the comment; thus, the remedy proposed in the SB is the Final Remedy selected by EPA for the Facility.

FINAL DECISION

EPA's Final Remedy for the Facility consists of the following:

- Monitored natural attenuation until drinking water standards are met;
- Compliance with and maintenance of an EPA approved groundwater monitoring plan;
- Installation of a vapor intrusion control system in new structures constructed above the contaminated groundwater plume or within 100-feet of the perimeter of the contaminated groundwater plume, and
- Compliance with and maintenance of land and groundwater use restrictions.

DECLARATION

Based on the Administrative Record compiled for the corrective action at the Sherwin Williams facility, I have determined that the remedy selected in this Final Decision and Response to Comments, which incorporates the February 11, 2015 Statement of Basis, is protective of human health and the environment.

Date: 3.31.15

John A. Armstead, Director
Land and Chemicals Division
U.S. Environmental Protection Agency, Region III

Attachment A: Statement of Basis (February 11, 2015)

Attachment A

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III

STATEMENT OF BASIS

SHERWIN-WILLIAMS CORPORATION
BALTIMORE PLANT
2325 HOLLINS FERRY ROAD

BALTIMORE, MARYLAND

EPA ID NO. MDD000215160

Prepared by
Office of Remediation
Land and Chemicals Division
January 2015

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List of Acronyms

AOC	Areas of Concern
AR	Administrative Record
AST	Above Ground Storage Tank
COI	Contaminants of Interest
COMAR	Code of Maryland Regulations
EPA	Environmental Protection Agency
FDRTC	Final Decision Response to Comments
GPRA	Government Performance and Results Act
MCL	Maximum Contaminant Level
MDE	Maryland Department of the Environment
RAO	Remedial Action Objective
RCRA	Resource Conservation and Recovery Act
RSL	Regional Screening Level
SB	Statement of Basis
UST	Underground Storage Tank
VOC	Volatile Organic Compound

Section 1: Introduction

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) to solicit public comment on its proposed remedy for the Sherwin-Williams Baltimore Plant located in Baltimore, Maryland (hereinafter referred to as the Facility or Site). EPA's proposed remedy for the Facility consists of the following components: 1) natural attenuation with continued monitoring until drinking water standards or background levels are met; 2) compliance with and maintenance of groundwater and land use restrictions to be implemented through institutional controls. This SB highlights key information relied upon by EPA in proposing its remedy for the Facility.

The Facility is subject to EPA's Corrective Action program under the Solid Waste Disposal Act, as amended, commonly referred to as the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901 et seq. The Corrective Action program requires that facilities subject to certain provisions of RCRA investigate and address releases of hazardous waste and hazardous constituents, usually in the form of soil or groundwater contamination, that have occurred at or from their property. Maryland is not authorized for the Corrective Action Program under Section 3006 of RCRA. Therefore, EPA retains primary authority in the State of Maryland for the Corrective Action Program.

EPA is providing a thirty (30) day public comment period on this SB. EPA may modify its proposed remedy based on comments received during this period. EPA will announce its selection of a final remedy for the Facility in a Final Decision and Response to Comments (Final Decision) after the public comment period has ended.

Information on the Corrective Action program as well as a fact sheet for the Facility can be found by navigating http://www.epa.gov/reg3wcmd/correctiveaction.htm.
The Administrative Record (AR) for the Facility contains all documents, including data and quality assurance information, on which EPA's proposed remedy is based. See Section 8, Public Participation, below, for information on how you may review the AR.

Section 2: Facility Background

2.1 Introduction

The Facility is located at 2325 Hollins Ferry Road in Baltimore, Maryland. The Sherwin-Williams Company (Sherwin-Williams) Facility has been used for consumer paint manufacturing since its construction in 1949. Sherwin-Williams acquired the Facility in 1980. The Facility is currently zoned for industrial use.

The Facility has geographic coordinates of 39° 16' 05" North, 076° 38' 32" West. It occupies an approximately 23-acre, irregularly shaped, trapezoidal lot that is bounded by railroad tracks along the north and west property lines (Figure 2). Hollins Ferry Road borders the Facility along the southern property line and low rise multifamily housing borders the Facility to the east.

The Facility is used for manufacturing and related operations. Property improvements include three main production buildings, an administration building, paved access and storage areas and above-ground storage tanks (ASTs) and associated piping. Access to the Facility is restricted by an 8-foot fence surrounding the entire property topped with both razor and barbed wire. The Facility is also electronically monitored through a continuous camera and security system.

2.2 Areas of Investigation

Multiple environmental investigations and remedial actions have been completed at the Facility since its acquisition from the Baltimore Paint and Chemical Company (Baltimore Paint). Multiple environmental investigations and remedial actions have been completed at the Facility since 1980. Many of these environmental actions were taken in response to conditions that were discovered during the removal of historical Underground Storage Tanks (USTs). Most significantly among these was the discovery of contamination during the April 18, 1986 removal of Baltimore Paint's TCA UST. The removal of the TCA UST led to early site investigation and subsequent remediation at the Facility. That work was completed pursuant to a Administrative Consent Order (CO-87-102), dated May 8, 1997, between Sherwin Williams and the Maryland Department of the Environment (MDE). MDE provided regulatory oversight of the site investigation and remediation until March 17, 2005 when Sherwin-Williams entered into a Facility Lead Agreement (FLA) with EPA for the performance of a RCRA Facility Investigation (RFI) and Corrective Measures Study (CMS). EPA identified fourteen (14) potential Solid Waste Management Units (SWMUs) and Areas of Concern (AOC) for investigation. RCRA investigations and Corrective Action activities have since been conducted under the FLA.

On August 4, 2005, the Phase I RFI study which evaluated each of the SWMUs and AOCs was completed by Sherwin Williams. The groundwater results showed that contamination in those areas were not fully delineated. This prompted commencement of an addendum to the Phase I RFI in March 2006. Based on the results of the Phase I RFI, EPA determined that the Facility consists of two primary source areas. The first source area is referred to as 100/500 Area and is located near Building B (See Figure 2). The second source area is referred to as 700 Area and is located near Building C (See Figure 2). Both the 100/500 and 700 Areas were targeted for further investigation.

100/500 Area

The 100 Area refers to the area east of buildings D and B. On April 5, 1986, three 12,000-gallon steel USTs, D-28, D-29, and D-30, were removed from this area. UST D-28 was used to store TCA, and is the source of TCA contamination and a contaminated groundwater plume (as well as degradation compounds) in the area. D-29 was used to store a resin solution, and D-30 was used to store aliphatic hydrocarbon.

The 500 Area includes buildings H, F, B, D, and E. In December 1990, two 5,000-gallon steel USTs, D-23 and D-24, and three 6,000-gallon steel USTs, D-25, D26, and D-27, were closed in place in this area. UST D-23 was used to store Methyl Ethyl Ketone, UST D-24 was

used to store aliphatic hydrocarbon (Varnish Makers & Painters naphtha), UST D-25 was used to store acetone, UST D-26 was used to store ethanol, and UST D-27 was used to store toluene. Some of these contaminants were also found to be in the TCA plume. The 100 and 500 Areas were remediated together whereby contaminated soils located outside the buildings were excavated during September 1988. In addition, a multiphase extraction system was installed and operated from October 1997 through December 2003 to remediate the shallow aquifer. In December 2003 the extraction system was shut down because removal of contaminants was asymptotic. The groundwater monitoring after the shutdown has shown contaminant stability and no indications of significant contaminant rebound.

700 Area

The 700 Area generally encompasses the land beneath the former resin AST farm (C-Tank Farm. See Figure 2.) and areas west to the Facility railroad spur and the western property line. In 2000, a remedial investigation revealed that this area was impacted primarily with petroleum hydrocarbons, including toluene, ethylbenzene, xylenes, 1,3,5-trimethylbenzene and 1,2,4-trimethylbenzene. Subsequent investigations completed under MDE oversight included soil gas, Geoprobe soil and groundwater sampling. At the time of the 2004 RCRA Facility Inspection, the source, nature and extent of these impacts had not yet been delineated. As a result, the Facility agreed to implement the phased 700 Area characterization under the FLA.

Section 3: Summary of Environmental Investigations

3.1 Environmental Investigations

For all environmental investigations conducted at the Facility, groundwater concentrations were screened against federal Maximum Contaminant Levels (MCLs) promulgated pursuant to Section 42 U.S.C. §§ 300f et seq. of the Safe Drinking Water Act and codified at 40 CFR Part 141, or if there was no MCL, EPA Region III Screening Levels (RSL) for tap water for chemicals. Soil concentrations were screened against EPA RSLs for residential soil and industrial soil. EPA also has RSLs to protect groundwater and soil concentrations were also screened against these RSLs.

Soil Gas Survey

Soil gas surveys were performed in both the 100/500 and 700 Areas to assess Site conditions and optimize soil and groundwater sampling locations. In February and April 2003, testing was conducted in the 100/500 Area to verify that there was no continuing source of toluene being released to groundwater. In October 2002 and February 2003, soil gas testing was completed within the 700 Area to optimize assessment soil and groundwater sample locations. Soil gas was sampled in 27 separate locations in the 100/500 Area and 16 locations in the 700 Area. The results of the soil gas sampling can be found in Figures 3 through 6. A comprehensive soil gas sampling/analytical program in February and April 2003 confirmed the source of dissolved toluene in the 100/500 Area alluvium groundwater to be an UST formerly located

beneath the floor of Building E. No new source of toluene impacts was found. Levels of petroleum hydrocarbons and chlorinated volatiles in soil gas have been identified in the vicinity of the 700 Area, near the northern limits of the 100/500 Area. Soil gas sampling within the 100/500 Area detected 1,2,4-trimethylbenzene and 1,3,5 trimethylbenzene, as well.

Soil Sampling

A total of 41 surface (0 to 2 feet below grade) and subsurface (greater than 2 feet below grade) soil samples were analyzed, to complete the soil characterization. In the 100/500 Area, soil samples were generally collected, inspected and field analyzed during the drilling of monitoring wells. Soil sampling in the 700 Area was almost exclusively completed using direct push borings with at least one soil sample per boring analyzed for VOCs. The contaminants above the RSLs for industrial soils were as follows: 1,2,4 Trimethylbenzene with a maximum detection of 83.5 mg/kg (RSL for industrial soils of 26 mg/kg); ethylbenzene with a maximum detection of 235 mg/kg (RSL for industrial soils of 27 mg/kg); and xylenes with a maximum detection of 1300 mg/kg (RSL for industrial soils of 270 mg/kg). The results were all found in Soil Sample A1-G2-2(11). Soil sample results are contained in Table 1.

3.1.2. Groundwater Investigation

A total of 83 monitoring wells have been installed on-site and have been used to evaluate Facility groundwater quality. Of this total, 39 of the wells are located in the 100/500 Area and 12 are located in the 700 Area. Seven of these wells are constructed in bedrock. The remaining wells are screened to measure groundwater quality in the shallow overburden near the water table or deeper overburden/saprolite (weathered bedrock). Many of the wells date back to the mid-1980s providing decades of groundwater monitoring data conducted as frequently as quarterly. Twelve of the original wells have been closed in cooperation with MDE and in accordance with MDE protocols. Groundwater has been tested for nearly 40 different VOC compounds.

Extensive groundwater sampling and years of groundwater monitoring show that Facility-related contaminants of potential concern (COPCs) are limited to the 100/500 and 700 Areas. These COPCs are primarily TCA (and degradation compounds e.g., 1,1-dichloroethene and 1,1,-dichloroethane) and toluene, which are present in two spatially separated plumes: The TCA plume is confined to the 100/500 Area and a separate toluene plume begins in the 100/500 Area but extends into the 700 Area. In the 700 Area, the toluene plume comingles with groundwater containing xylenes and other petroleum hydrocarbons. Both the plumes originated from leaking USTs which have been removed.

TCA and its degradation compounds (1,1-dichloroethene and 1,1,-dichloroethane) were found in both the overburden groundwater and in underlying bedrock in the 100/500 Area. Natural degradation of TCA in the overburden and bedrock groundwater via microbiological (reductive dechlorination) and/or chemical reactions (dehydrohalogenation) has been occurring at the Facility as documented in the CMS for the Facility.

Over the past 20 years, significant reductions in the magnitude of TCA and toluene in the overburden and TCA bedrock groundwater have been documented in the CMS and in the 2013 and 2014 groundwater monitoring reports. The groundwater monitoring data have shown consistent TCA plume contraction (to the former location of failed D-28 UST storing TCA) in the overburden and declining TCA concentrations in bedrock groundwater.

Toluene is only found in overburden groundwater with the core of the dissolved toluene impact located in the 100/500 Area. It has been characterized as a stable, narrow and elongated plume aligned in the north-northeasterly groundwater flow direction with its leading edge terminating in the 700 Area shortly after comingling with residual hydrocarbon impacts (e.g., xylenes) associated with the former C-Tank Farm USTs. The comingled toluene plume also dissipates with depth in the shallow overburden. The toluene plume terminates at a hydraulic divide created by a large city storm sewer extending along the northwestern Facility property line with CSX Railroad. During a June 2008 integrity inspection of the Baltimore storm sewer, it was found to be in excellent condition. There was no contaminated groundwater observed leaking into the storm sewer. Multiple samples from groundwater monitoring wells near the property border and sewer have shown that the toluene and other comingled organic compounds are becoming fully dissipated or attenuated (groundwater contaminants are below MCLs) before the sewer exits the northern corner of the Facility.

Groundwater monitoring data for both the shallow and deeper overburden wells along the down gradient Facility property line, from the northern most corner of the Facility to the northeastern most corner, has shown that groundwater leaving the Facility property meets EPA drinking water standards with respect to the Facility organic contaminants as shown by the groundwater sampling results explained below.

Groundwater Sampling in 2012

In November 2012, Sherwin-Williams sampled the facility property perimeter's groundwater monitoring wells. More specifically, 16 wells were sampled in November 2012 of which eight were downgradient perimeter monitoring wells (T1D-R, T1D-S, T1, T2, 2D, T3, T3B, MW20S), three wells were piezometers installed in the municipal storm sewer backfill bounding the western edge of the Facility property (SS-P1, SS-P2, SS-P3) and five were source area wells (A1D, A1S, PI-4, RW-3, and VE- 11).

The November 2012 groundwater sampling results are generally consistent with prior groundwater sampling after groundwater remediation system was shut down in December 2003. There was no rebound of the contaminants was observed and contaminants concentrations in groundwater continue to decline. Additionally, there was no measurable change in the overall dimension of the overburden groundwater toluene plume in the years since shutting down the remediation system.

There were no VOCs measured above RSLs in any of the downgradient perimeter

monitoring wells. The 2012 monitoring results indicated that Facility-related groundwater contamination exceeding RSLs or MCLs are not migrating off-site. RSLs were exceeded in the upstream storm sewer backfill piezometer SS-P1, however, the downstream storm sewer backfill piezometers, SS-P2 and SS-P3, located at the northern corner of the Facility property only had one exceedance of the Tap Water RSL. Both samples contained 1,1-DCA at concentrations of 3.3 ug/L and 3.6 ug/L, respectively, as compared to the current 2.4 ug/L RSL (no MCL has been established for 1,1-DCA).

Sampling results from November 2012 continued to show significant dissolved contaminant concentration reductions along the storm sewer backfill as the downstream Facility property boundary is approached. Further 1,1-DCA concentration reduction is expected as the storm sewer backfill water flows further downstream toward and across the downgradient property line. Groundwater along the downgradient property line did not contain 1,1-DCA or any other VOC contaminant at levels above EPA tap water RSLs or MCLs.

The November 2012 sampling event collected in the vicinity of the former TCA tank (PI-4) and in the toluene plume (VE-11 and RW-3) confirm naturally occurring significant decreases over the past several years. Measured TCA, 1,1-DCE and 1,1-DCA levels in the full 20-foot overburden water column in PI-4 were each below 10 ug/L with 1,1-DCE and 1,1-DCA concentrations below 1 ug/L for the first time. These results support earlier conclusions that the source of the dissolved chlorinated solvents is depleted and the associated plumes continue to decline.

The November 2012 sampling event shows that the contaminant mass supplying the toluene plume has been depleted. This is indicated by the substantial decrease in toluene levels in VE-11 and RW-3 over the past several years. More specifically, the toluene levels decreased substantially in each of these wells in just three (3) years.

Groundwater Sampling in 2013

On November 11 and 12, 2013, the following groundwater gauging and sampling activities were completed at the Facility:

Groundwater monitoring wells in the 100/500 and 700 Areas and along the downgradient perimeter were gauged which determined groundwater elevation and groundwater flow;

Monitoring wells in the 100/500 and 700 Areas were sampled to evaluate water quality in historically contaminated areas;

Downgradient perimeter monitoring wells were sampled to evaluate the quality of groundwater leaving the Facility property boundary; and

Three (3) piezometers that were installed along the city storm sewer extending along the northwestern Facility property boundary were sampled in order to assess water quality in the

backfill material.

The following results were obtained:

Groundwater flows to the northeast with a steeper northwest hydraulic gradient/flow component occurring along the downgradient Facility property line where the topography drops more steeply to the CSX Railroad tracks and beyond and in close proximity to the city storm sewer collector along the northwest property line;

The November 2013 groundwater analytical data indicated that contaminant concentrations (see Table 4) show no indication of increased concentrations of groundwater contaminants or extent of the site contaminant plumes area wide.

Trace levels of VOCs were detected below MCLs (see Table 3) for drinking water in two of the perimeter monitoring wells (T-2 and T-3).

Several VOCs (see Table 3) were detected at low levels in SS-P1 above MCLs, the shallow piezometer located in the city storm sewer collector backfill adjacent to the 700 Area. However, as found in all previous sampling data, only trace levels of VOCs below MCLs were detected in down flow storm sewer backfill piezometers SS-P2 and SS-P3, located in the vicinity of the downgradient property line.

Groundwater Sampling in 2014

On July 14, 15, and 16, 2014, the following groundwater gauging and sampling activities were completed at the Facility:

Groundwater monitoring wells in the 100/500 and 700 Areas and along the downgradient perimeter were gauged to determine groundwater elevation and assess groundwater flow direction;

Monitoring wells in the 100/500 and 700 Areas were sampled to evaluate water quality in historically impacted areas;

Downgradient perimeter monitoring wells were sampled to evaluate the quality of groundwater leaving the Facility property boundary;

The three wells installed along the city storm sewer extending along the northwestern Facility property boundary were sampled in order to assess water quality in the backfill material;

The shallow groundwater gradient and inferred flow direction are consistent with historical observations. Groundwater flows to the northeast with a steeper northwest hydraulic gradient/flow component occurring along the downgradient property line where the topography drops more steeply to the CSX Railroad tracks and beyond and in close proximity to the city

storm sewer collector along the northwest property line;

Consistent with prior sampling events, the July 2014 groundwater analytical data indicated that contaminant concentrations and trends show no indications of increased magnitude or extent of the site contaminant plumes. Groundwater quality appears to show continuing improvement overall and relative to what was assumed in the site human health risk assessment;

Trace levels of volatile organic compounds were detected below EPA drinking water maximum contaminant levels (MCLs) in one of the perimeter monitoring wells (T-2), which has been found at this location in the past;

Several VOCs were detected at low levels in SS-P1, the shallow piezometer located in the city storm sewer collector backfill adjacent to the 700 Area. However, as found during all previous sampling data, only trace levels of VOCs were detected in down flow storm sewer backfill piezometers SS-P2 and SS-P3, located in the vicinity of the downgradient property line;

One monitoring well, DB-21 contained one contaminant, 1,2,4-trimethylbenzene (1,2,4-TMB), at a concentration that exceeded the site-specific Remedial Action Objective (RAO). More specifically, 1,2,4-TMB was detected at a concentration of 1,700 ug/L as compared to its RAO of 760 ug/L.

In summary, the residual Facility groundwater volatile organic contaminant plumes originated from historical UST sources removed from the 100/500 and 700 Areas about 25 years ago. These plumes have been subject to active remediation through groundwater treatment and natural degradation that have reduced contaminant plume mass and produced stable plume configurations. Groundwater monitoring data collected through 2014 have shown that the groundwater plumes are stable and are not extending beyond the downgradient Facility property at levels above MCLs or Tap Water RSLs.

3.1.3 Human Health Risk Assessment and Evaluation of Exposure Pathways

Chemical compounds in soil and groundwater samples were evaluated, as appropriate, and in a manner specified by the EPA in the Facility Risk Assessment (RA) which was completed as part of the CMS. Contaminants of Interest (COIs) (see Table 4) were identified for direct contact with soil and groundwater based on a comparison of the analytical data to RSLs. The RA indicated that the total non-cancer hazard indicators (HIs), and target organ-specific hazard quotients (HQs), are less than 1 and the potential cumulative cancer risks are below the target risk of 1 x 10-4 for all receptors exposed to soil and groundwater associated with the Facility property. These data indicates that there is negligible potential for adverse effects to current or future workers or trespassers at the Facility. The RA determined that there was no excessive risk to human health associated with indoor air exposures in existing buildings provided the Facility land use remained industrial or commercial. In the event that future buildings are constructed at the Facility, each such building shall include a standard vapor barrier.

In summary, the RA concluded there is negligible potential for adverse effects to current or future worker receptors or trespassers exposed to soil or groundwater associated with the Facility. On February 7, 2011, EPA approved developing the Remedial Action Objectives (RAOs) for construction workers who might be exposed to the groundwater during excavation.

RAOs were developed for COI (see Table 4) in overburden groundwater as presented in RBR's December 12, 2011 memorandum found in the CMS. The site-specific RAOs were based on the future exposure scenario of a site-specific construction worker inhaling volatiles during deep trench excavation. A groundwater ingestion (drinking water) exposure scenario for employees was not considered in developing the RAOs because State of Maryland Well Construction Regulations, codified at Code of Maryland Regulations ("COMAR") 26.03.01.05, prohibit installation of individual water systems where adequate community systems are available. In addition, Baltimore County Bill No. 17-13 and Baltimore City Revised Code § 2.19.1 require connection to the public water supply system where such a system is available within 500 feet of the owner's property line.

The RAOs were calculated for each of the RA-identified COI assuming an individual constituent. The final RAO for each COI was based on the lower of the calculated potential carcinogenic or non-carcinogenic values. The derived RAOs are listed on Table 4.

3.1.4. Summary of Remedial Activities Completed

100/500 AREA UST Excavations & Closures

On April 18, 1986, TCA UST D-28 was removed along with two other USTs from the same cavity and a small pinhole was observed on the UST D-28. Subsequent investigations of soil and groundwater found TCA had leaked from the former UST into the groundwater within the 100/500 area. On September 9, 1988, source soil in and around the former UST cavity was excavated. This excavation resulted in the removal and off-site disposal of 800 cubic yards (~1,200 tons) of TCA contaminated soil. The work was completed by September 30, 1988.

Interim In-Situ Remediation

Full-scale In-Situ Remediation Investigations by the Facility of the 100/500 Area during 1987 to 1997 delineated the extent of TCA and its degradation compounds, toluene, and other VOCs. As a result, the Facility was directed by MDE to perform interim measures to address these contaminant levels at the Facility. This remedial approach included reducing TCA levels to meet the risk-based target concentrations while simultaneously (1) addressing other VOC contaminants (e.g., toluene) in the overburden groundwater, (2) hydraulically containing the impacted overburden groundwater, and (3) allowing VOCs present the in fractured bedrock groundwater to attenuate naturally. The interim remedial measure, commencing on October 1, 1997 and conducted through December 2003, involved simultaneous extraction of groundwater and soil vapor from the overburden soils beneath the 100/500 Area. Groundwater was extracted from nine (9) building perimeter multi-phase recovery wells (RW1 through RW9) to recover

dissolved VOCs, impose hydraulic control, and dewater a portion of the overburden, including beneath the building footprint, so that adsorbed VOCs could also be removed through vapor extraction. Soil vapor was extracted from the same nine multi-phase wells and up to 13 additional vapor extraction wells (PI1 through PI10 and VE11 through VE13) to enhance soil dewatering, to recover VOCs adsorbed to soil, and to help promote aerobic biodegradation of residual hydrocarbon contamination. The extracted groundwater was treated to remove VOCs prior to discharge to the plant's storm sewer system in accordance with the terms and conditions of the Facility's NPDES permit. VOCs were removed from the extracted groundwater using an air stripping system. Extracted soil vapor and off gases from the air stripping system were discharged to the atmosphere without further treatment, as approved by MDE's Air and Radiation Management Administration. With MDE approval, the groundwater extraction system was shut down in early January 2004 to allow groundwater quality to be further evaluated and, in particular, to determine if the shut-down would lead to a significant rebound in groundwater contaminant concentrations. During the six (6) years the groundwater extraction system operated, it extracted and processed approximately 15.8-million gallons of groundwater and recovered a total of about 1,975 pounds of VOC contaminants in soil vapor and groundwater. Groundwater monitoring conducted since shutting down the groundwater extraction system in January 2004 indicated no appreciable effect on overburden and bedrock groundwater quality through 2013. Concentrations of TCA in bedrock groundwater did not rebound and natural attenuation processes continued to degrade the residual contamination. Additionally, there was no measurable change in the overall dimension of the overburden groundwater toluene plume in the years since shutting down the remediation system. At the Facility's property line dissolved contaminant levels in the storm sewer backfill and all monitoring wells are consistently been below laboratory detection limits or drinking water standards.

3.2 Environmental Indicators

Under the Government Performance and Results Act ("GPRA"), EPA has set national goals to address RCRA corrective action facilities. Under GPRA, EPA evaluates two key environmental clean-up indicators for each facility: (1) Current Human Exposures Under Control, and (2) Migration of Contaminated Groundwater Under Control. The Facility met both of these indicators on September 16, 2009.

Section 4: Corrective Action Objectives

EPA's Corrective Action Objectives for the specific environmental media at the Facility are the following:

1. Soils

EPA has determined that RAO screening levels (see Table 4) determined by the Risk Assessment for industrial soils for direct contact with soils are protective of human health and the environment for individual contaminants.

2. Groundwater

EPA expects final remedies to return groundwater to its maximum beneficial use within a timeframe that is reasonable given the particular circumstances of the project. For projects where aquifers are either currently used for water supply or have the potential to be used for water supply, EPA will use the National Primary Drinking Water Standard Maximum Contaminant Levels (MCLs) promulgated pursuant to Section 42 U.S.C. §§ 300f et seq. of the Safe Drinking Water Act and codified at 40 C.F.R. Part 141.

To the southeast of the Facility, the Patapsco formation and aquifer are known to exist above the Arundel clay. While in these lower lying areas of the Coastal Plain, the Patapsco aquifer would be classified as a Class IIB aquifer as defined by "Guidelines for Ground-Water Classification Under the 1984 EPA Ground-Water Protection Strategy, Final Draft" dated November, 1986, Baltimore County Bill No. 17-13 and Baltimore City Revised Code § 2.19.1 require connection to the public water supply system where such a system is available within 500 feet of the owner's property line because aquifers in Baltimore are contaminated and establishes that groundwater at the Facility cannot be used as drinking water. Therefore, drinking water standards or MCLs are not used as the cleanup action objectives.

Monitoring in Areas 100/500 and 700 and the findings of the risk assessments have shown that there are no unacceptable exposures to groundwater by applicable receptors, including receptors outside the property boundary, with the exception of potential direct contact by onsite construction/excavation workers which will be addressed by a Soil Management Plan. Because a reasonably expected exposure from Facility groundwater is to construction workers via inhalation, EPA's Corrective Action Objective is to meet the EPA-approved RAOs developed to prevent a site-specific construction worker inhaling volatiles during deep trench excavation and set forth in Appendix 4 hereto.

Section 5: Proposed Remedy

1. Introduction

Under this proposed remedy, some contaminants remain in the soil and groundwater at the Facility above levels appropriate for residential uses. Because some contaminants remain in the soil and groundwater at the Facility at levels which exceed residential use, EPA's proposed decision requires the compliance with and maintenance of soil and groundwater use restrictions. EPA proposes to implement the land and groundwater restrictions necessary to prevent human exposure to contaminants at the Facility through an enforceable mechanism such as a permit, order, or environmental covenant.

Additionally, EPA has identified the State of Maryland Well Construction Regulations, codified at Code of Maryland Regulations ("COMAR") 26.03.01.05, prohibit installation of individual water systems where adequate community systems are available. In addition, Baltimore County Bill No. 17-13 and Baltimore City Revised Code § 2.19.1 require connection to the public water supply system where such a system is available within 500 feet of the owner's property line. In this case, the Facility and surrounding area are already being provided with potable water from the City's public water supply system.

2. Soils

EPA's proposed remedy for the Facility consists of compliance with and maintenance of land use restrictions. Under EPA's proposed remedy, the following use restrictions will be implemented for soils:

1. Areas shall be restricted to commercial and/or industrial purposes and shall not be used for residential purposes unless it is demonstrated to EPA that such use will not pose a threat to human health or the environment or adversely affect or interfere with the selected remedy and the Facility provides prior written approval from EPA for such use.

2. Prior to any earth moving activities, including excavation, drilling and construction activities, in the areas at the Facility where any contaminants remain in soils above EPA's Screening levels for non-residential use or groundwater above RAOs, shall be conducted in accordance with a Soils Management Plan which shall be developed and submitted to EPA for review and approval.

3. Groundwater

Monitoring at the Facility has shown that contamination in groundwater is not increasing and concentrations of those contaminants are declining or stable over time. Therefore, the proposed remedy for groundwater consists of natural attenuation with continued monitoring until

RAOs are met, and compliance with and maintenance of an EPA approved groundwater monitoring plan and groundwater use restrictions, to be implemented at the Facility to prevent exposure to contaminants while levels remain above RAO standards. The proposed remedy also includes implementation of a vapor intrusion control system, the design of which shall be submitted to EPA for review and approval. A vapor intrusion control system shall be installed in new structures constructed above the contaminated groundwater plume or within 100-feet of the perimeter of the contaminated groundwater plume. The vapor intrusion system shall be operated until it is demonstrated to EPA that vapor intrusion of contaminants at the Facility does not pose a threat to human health.

EPA's proposed remedy includes the following groundwater use restrictions:

1. Groundwater at the Facility shall not be used for any purpose other than the operation, maintenance, and monitoring activities currently being conducted by the Facility and required by EPA, unless it is demonstrated to EPA that such use will not pose a threat to human health or the environment or adversely affect or interfere with the final remedy and the Facility obtains prior written approval from EPA for such use;

2. No new wells shall be installed on Facility property unless it is demonstrated to EPA that such wells are necessary to implement the final remedy and the Facility obtains prior written approval from EPA to install such wells;

3. Compliance with the EPA-approved groundwater monitoring program; and

4. On an annual basis and whenever requested by EPA, the then current owner shall submit to MDE and EPA a written certification stating whether or not the groundwater and land use restrictions are in place and being complied with.

In addition, the Facility shall provide EPA with a coordinate survey as well as a metes and bounds survey, of the Facility boundary. Mapping the extent of the land use restrictions will allow for presentation in a publicly accessible mapping program such as Google Earth or Google Maps.

Section 6: Evaluation of Proposed Remedy

This section provides a description of the criteria EPA used to evaluate the proposed remedy consistent with EPA guidance. The criteria are applied in two phases. In the first phase, EPA evaluates three decision threshold criteria as general goals. In the second phase, for those remedies which meet the threshold criteria, EPA then evaluates seven balancing criteria.

Threshold Criteria	Evaluation
1) Protect human health and the environment	EPA's proposed remedy for the Facility protects human health and the environment by eliminating, reducing, or controlling potential unacceptable risk through the implementation and maintenance of use restrictions. EPA is proposing to restrict land use to commercial or industrial purposes at the Facility. With respect to groundwater, while low levels of contaminants remain in the groundwater beneath the Facility, the contaminants contained in the aquifer are decreasing through natural attenuation as shown by groundwater monitoring data. In addition, groundwater monitoring will continue until RAO groundwater clean-up standards are met. The existing State of Maryland well construction regulations will aid in minimizing exposure to contaminated groundwater by prohibiting the installation of individual water systems where adequate community systems are already available. In addition, Baltimore County Bill No. 17-13 and Baltimore City Revised Code § 2.19.1 require connection to the public water supply system where such a system is available within 500 feet of the owner's property line. Consequently, the Facility and surrounding area are already being provided with potable water from the City's public water supply system. With respect to future uses, the proposed remedy requires groundwater use restrictions to minimize the potential for human exposure to contamination and protect the integrity of the remedy. The RA concluded that there was no excessive risk to human health associated with indoor air exposures in existing buildings provided the Facility land use remained industrial or commercial. In the event that future building construction is contemplated, the Facility shall include a standard vapor barrier.

	The Risk Assessment for the Facility concluded that there would be no risk associated with the soil as long as the Facility property uses remains industrial.
2) Achieve media cleanup objectives	EPA's proposed remedy meet the media cleanup objectives based on assumptions regarding current and reasonably anticipated land and water resource use(s). The remedy proposed in this SB is based on the current and future anticipated land use at the Facility as commercial or industrial. The Risk Assessment for the Facility concluded that there would be no risk associated with the soil as long as the Facility uses remains industrial. The groundwater plume appears to be stable (not migrating); although contaminants are above MCLs, they are declining over time. In addition, groundwater monitoring will continue until RAO groundwater clean-up standards are met. The Facility meets EPA risk guidelines for human health and the environment. EPA's proposed remedy requires the implementation and maintenance of use restrictions to ensure that groundwater beneath Facility property is not used for any purpose except to conduct the operation, maintenance, and monitoring activities required by EPA.
3) Remediating the Source of Releases	In all proposed remedies, EPA seeks to eliminate or reduce further releases of hazardous wastes and hazardous constituents that may pose a threat to human health and the environment and the Facility met this objective. The source of contaminants have been removed from the soil at the Facility, thereby, eliminating, to the extent practicable, further releases of hazardous constituents from on-site soils as well as the source of the groundwater contamination. The Risk Assessment for the Facility concluded that there would be no risk associated with the soil as long as the Facility remains industrial. Contaminants in groundwater are declining through attenuation. There are no remaining large, discrete sources of waste from which constituents would be released to the

	environment. Groundwater is not used for potable purposes at the Facility or at neighboring facilities. In addition, groundwater monitoring will continue until RAO groundwater clean-up standards are met through attenuation. The existing State of Maryland well construction regulations will aid in minimizing exposure to contaminated groundwater by prohibiting the installation of individual water systems where adequate community systems are already available. Also, Baltimore County Bill No. 17-13 and Baltimore City Revised Code § 2.19.1 require connection to the public water supply system where such a system is available within 500 feet of an owner's property line. Consequently, the Facility and surrounding area are already being provided with potable water from the City's public water supply system. Therefore, EPA has determined that this criterion has been met. The RA determined that there was no excessive risk to human health associated with indoor air exposure to VOC's in existing buildings provided the Facility land use remained industrial or commercial. In the event that future building construction is contemplated, the Facility shall include a standard vapor barrier.

Section 6: Evaluation of Proposed Remedy (continued)

Balancing Criteria	Evaluation
4) Long-term effectiveness	Groundwater is not used on the Facility for drinking water, and no down gradient users of off-site groundwater exist. Therefore, the proposed long term effectiveness of the remedy for the Facility will be maintained by the continuation of the groundwater monitoring program and implementation of use restrictions.
5) Reduction of toxicity, mobility, or volume of the Hazardous Constituents	The reduction of toxicity, mobility and volume of hazardous constituents will continue by attenuation at the Facility. Reduction has already been achieved, as demonstrated by the data from the groundwater monitoring. In addition, the groundwater monitoring program already in place will continue.
6) Short-term effectiveness	EPA's proposed remedy does not involve any activities, such as construction or excavation that would pose short-term risks to workers, residents, and the environment. EPA anticipates that the land and groundwater use restrictions will be fully implemented shortly after the issuance of the Final Decision and Response to Comments. The groundwater monitoring program is already in place and will continue.
7) Implementability	EPA's proposed remedy is readily implementable. The groundwater monitoring is already in place and operational. EPA proposes to implement the use restrictions through an enforceable mechanism such as an Environmental Covenant, permit or order.
8) Cost	EPA's proposed remedy is cost effective. The costs associated with this proposed remedy and the continuation of groundwater monitoring have already been incurred and the remaining costs are minimal (estimated cost of $10,200 per year).
9) Community Acceptance	EPA will evaluate community acceptance of the proposed remedy during the public comment period, and it will be described in the Final Decision and Response to Comments.
10) State/Support Agency Acceptance	MDE has reviewed and concurred with the proposed remedy for the Facility.

Section 7: Financial Assurance

EPA has evaluated whether financial assurance for corrective action is necessary to implement EPA's proposed remedy at the Facility. Given that EPA's proposed remedy does not require any further engineering actions to remediate soil, groundwater or indoor air contamination at this time and given that the costs of implementing institutional controls and groundwater monitoring costs (estimated cost of $10,200 per year) at the Facility will be minimal, EPA is proposing that no financial assurance be required.

Section 8: Public Participation

Interested persons are invited to comment on EPA's proposed remedy. The public comment period will last thirty (30) calendar days from the date that notice is published in a local newspaper. Comments may be submitted by mail, fax, or electronic mail to Mr. Leonard Hotham at the contact information listed below.

A public meeting will be held upon request. Requests for a public meeting should be submitted to Mr. Leonard Hotham in writing at the contact information listed below. A meeting will not be scheduled unless one is requested.

The Administrative Record contains all the information considered by EPA for the proposed remedy at this Facility. The Administrative Record is available at the following location:

U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103
Contact: Mr. Leonard Hotham (3LC20)
Phone: (215) 814-5778
Fax: (215) 814 - 3113
Email: hotham.leonard@epa.gov

Attachments:
Figure 1: Map of Facility
Figure 2: Map of Facility
Figure 3: Soil Gas Survey Results
Figure 4: Soil Gas Survey Results
Figure 5: Soil Gas Survey Results
Figure 6: Soil Gas Survey Results
Table 1: Soil Sample Results
Table 2: Groundwater Sample Results 2012
Table 3: Groundwater Sample Results 2013
Table 4: RAOs

Date: 1.29.15

John A. Armstead, Director
Land and Chemicals Division
US EPA, Region III

Section 9: Index to Administrative Record

MDE Administrative Consent Order (CO-87-102), dated May 8, 1997

Sherwin Williams Progress Report July – December 2002, Excalibur Group, dated August 6 2003.

EPA RCRA Site Inspection Report, EPA, dated August 3, 2005

Phase I Report on USEPA Identified Areas of Potential Concern, dated August 4, 2005

EPA electronic mail request for information from William Geiger to Eric Roberts and Jeff Aichroth dated September 9, 2005 – titled "Comments on Phase I Report" in connection with the Addendum to Phase I Report on USEPA Identified Areas of Potential Concern, dated March 27, 2006.

Health Risk Assessment for the Sherwin Williams Company, Excalibur Group, dated March 2011

RCRA Facility Investigation /Corrective Measures Study for the Sherwin-Williams Company, Excalibur Group, dated March 21, 2013

Groundwater Monitoring Report – 2013 Sherwin-Williams Company, Excalibur Group, dated April 7, 2014

Groundwater Monitoring Report – 2014 Sherwin-Williams Company, Excalibur Group, dated September, 2014

Attachments

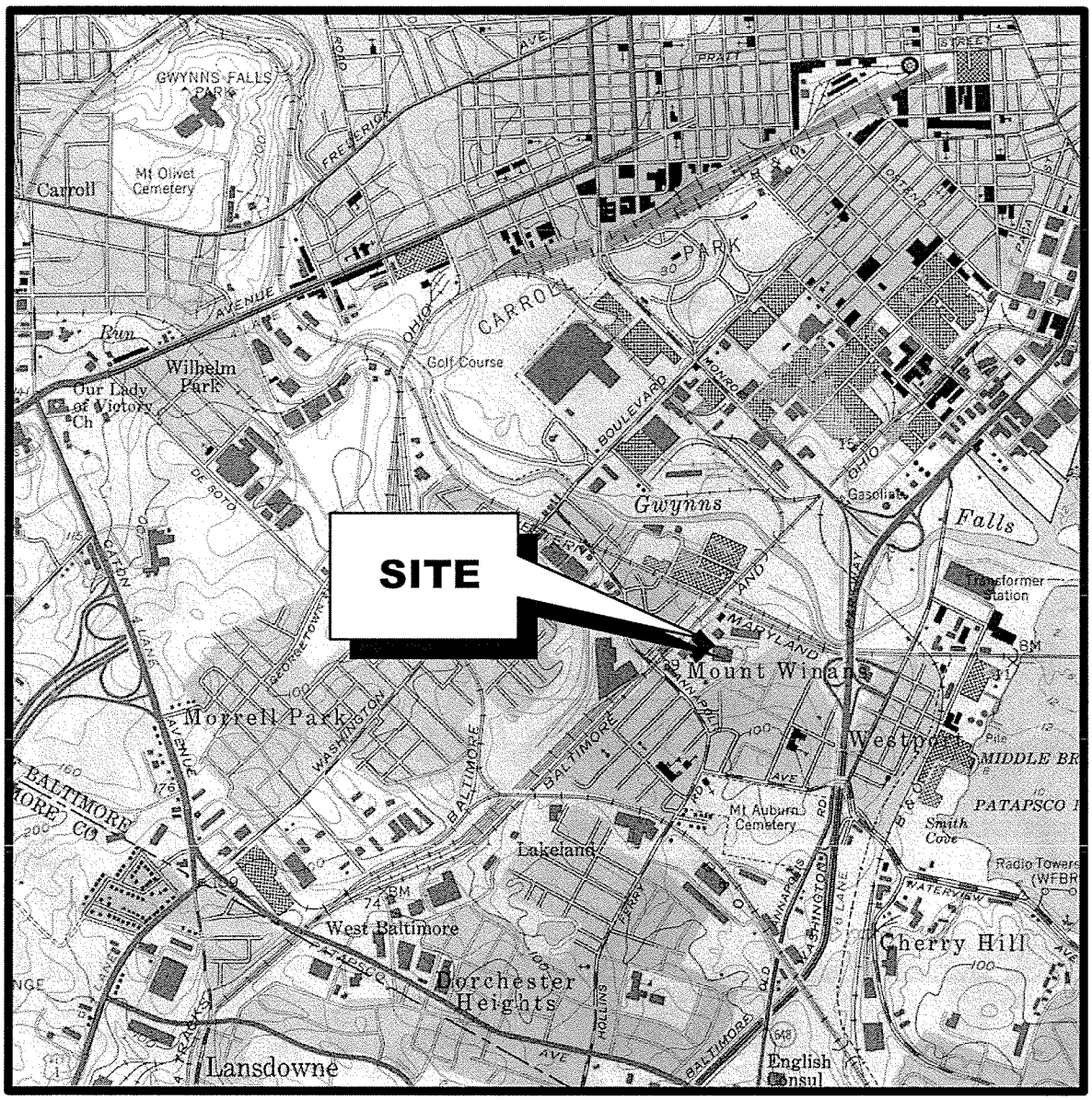


FIGURE 1

SITE LOCATION MAP

THE SHERWIN-WILLIAMS COMPANY

2325 HOLLINS FERRY RD.

BALTIMORE, MARYLAND

N

BALTIMORE WEST, MD

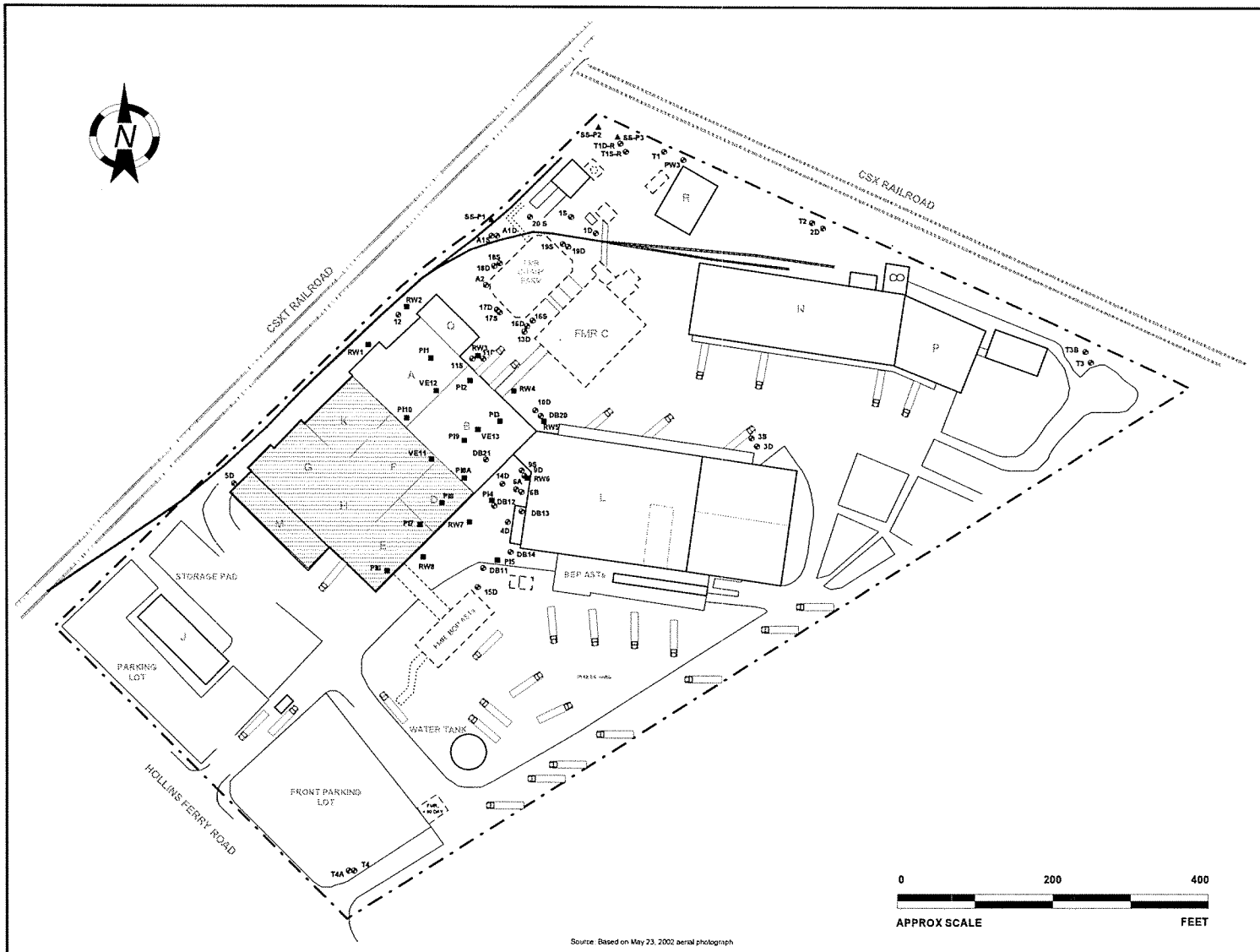
SW/4 BALTIMORE 15' QUADRANGLE

N3915-W7637.5/7.5, 1953

PHOTOREVISED 1966 AND 1974

EXCALIBUR GROUP, LLC

FIGURE 2 - SITE PLAN



LEGEND:

- GROUNDWATER MONITORING WELL (APPROX. LOCATION)
- STORM SEWER BACKFILL PIEZOMETER (APPROX. LOCATION)
- REMEDIATION SYSTEM WELL (APPROX. LOCATION)
- RAILROAD TRACKS
- APPROXIMATE PROPERTY BOUNDARY
- PLANT BUILDING "R"
- MANUFACTURING OPERATIONS HAVE CEASED / NO LONGER OCCUR
- RAZED BUILDING OR OTHER FORMER STRUCTURE

EXCALIBUR GROUP, LLC
Environmental Consulting, Engineering and Remediation
7905 Maureen Ct. #200
Monrovia, MD 21770
Cutting Edge Solutions to Intractable Problems

THE SHERWIN-WILLIAMS COMPANY
BALTIMORE, MARYLAND

GROUNDWATER MONITORING & REMEDIATION WELL LOCATION PLAN

DESIGNED BY: epr	DATE: 1/10/13
CLIENT: THE SHERWIN-WILLIAMS COMPANY	PROJECT: BALTIMORE
FILE: well location map_2013	LOC: MD/PROJ/SW
FIGURE:	REVISION: —

FIGURE 3 – TOLUENE IN SOIL GAS, A1S AREA, OCTOBER 2002 & FEBRUARY 2003

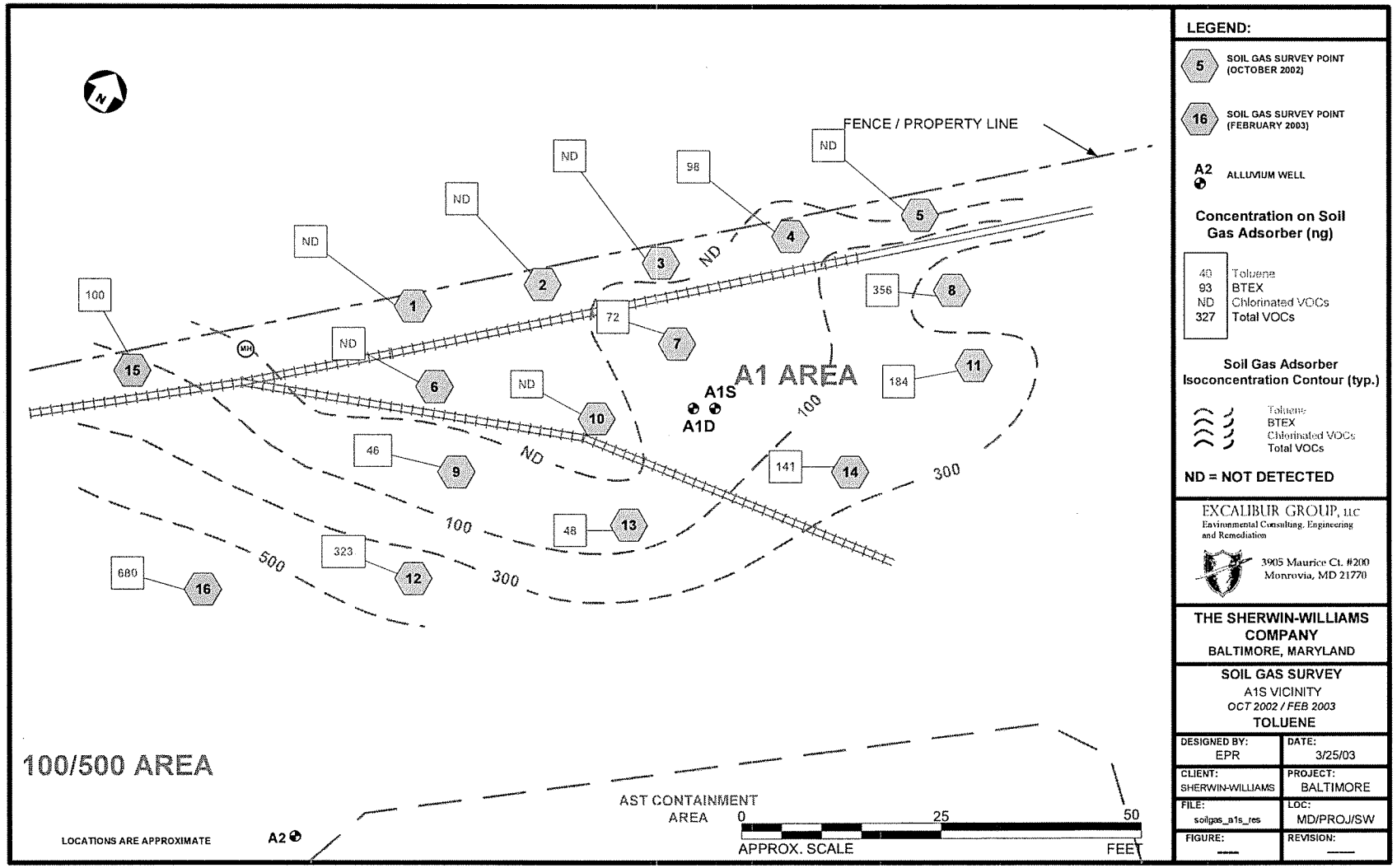


FIGURE 4 – TOTAL VOCS IN SOIL GAS, 100/500 AREA, FEBRUARY & APRIL 2003

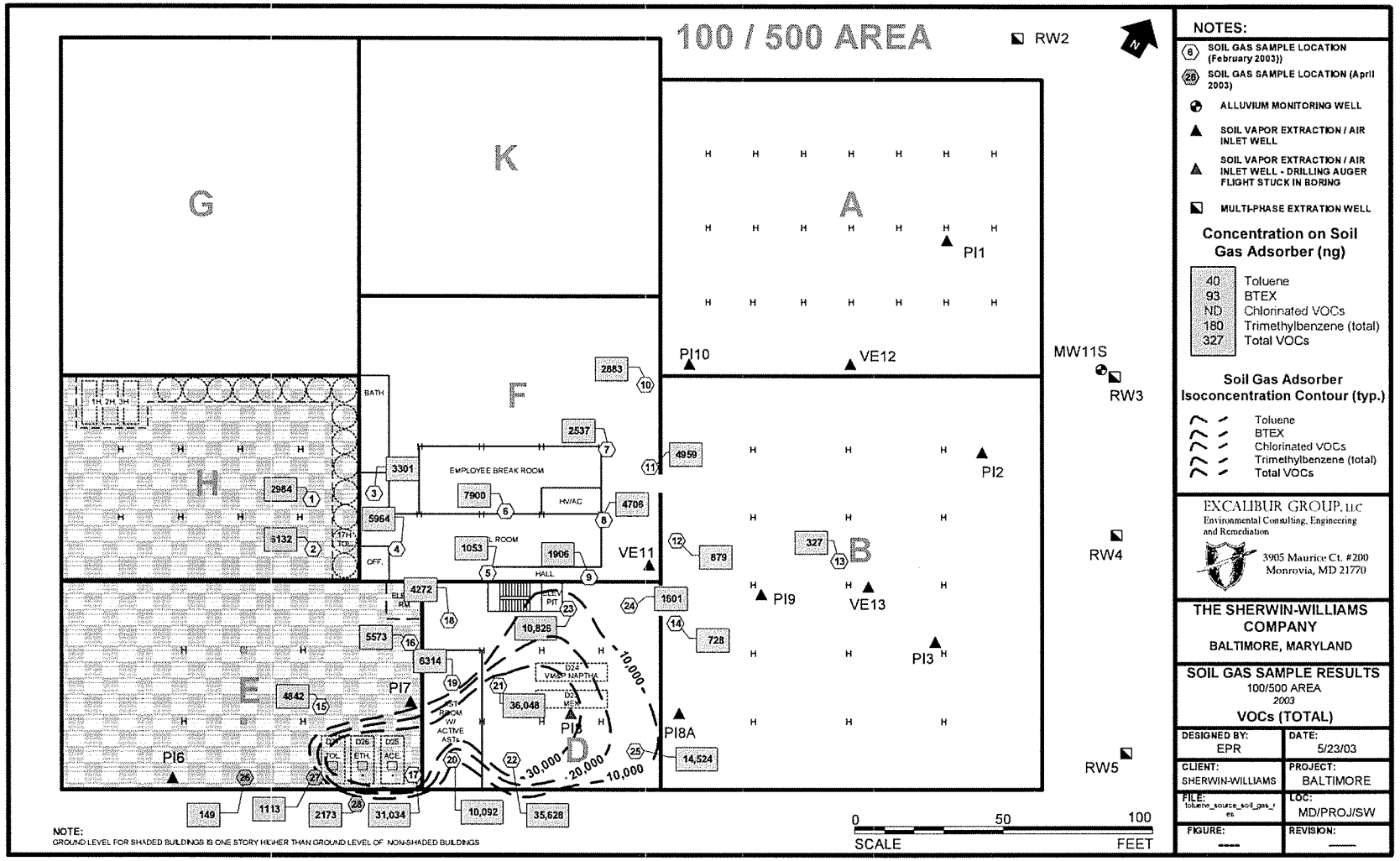


FIGURE 5 – BTEX IN SOIL GAS, A1S AREA, OCTOBER 2002 & FEBRUARY 2003

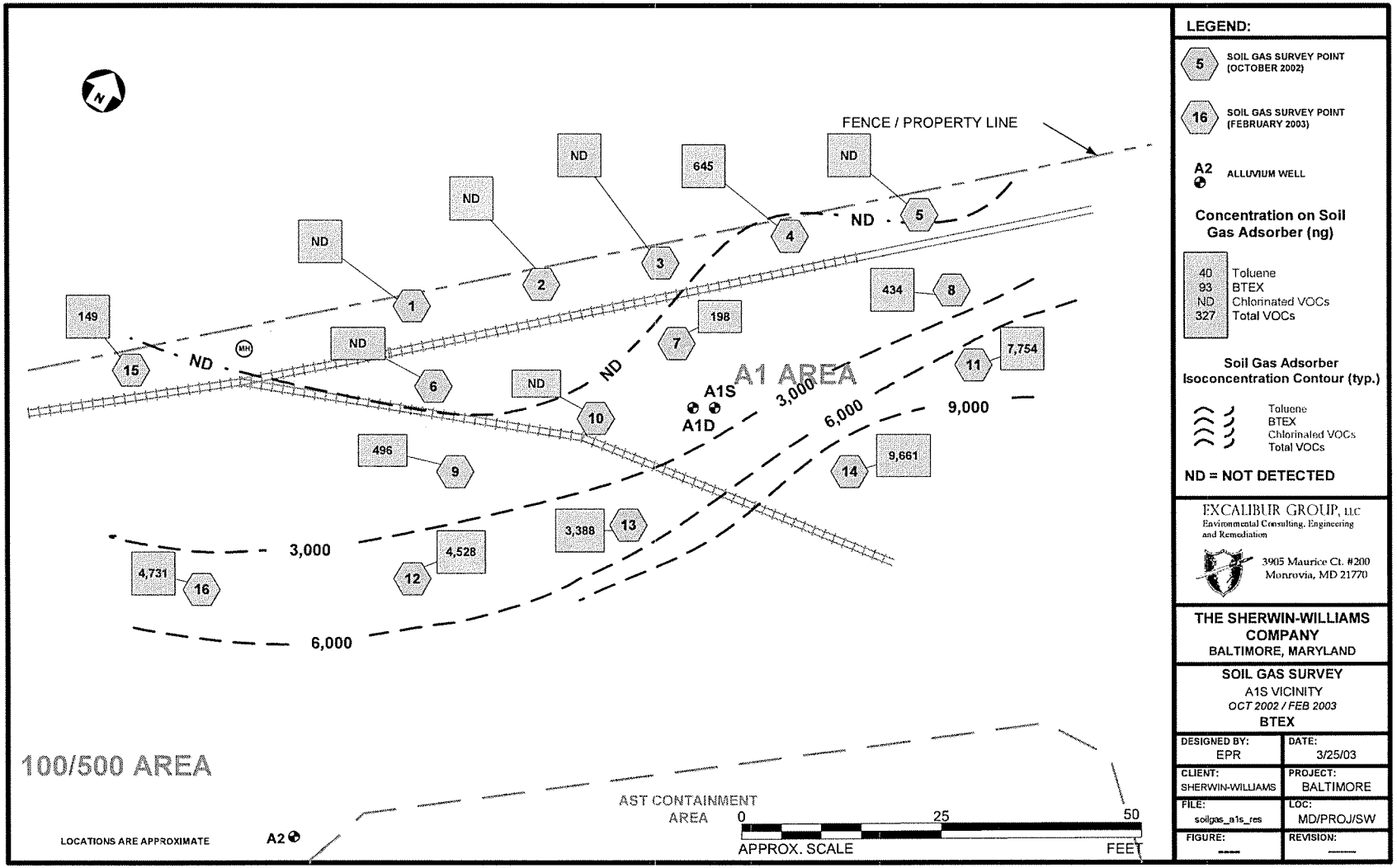


FIGURE 6 – CHLORINATED COMPOUNDS IN SOIL GAS, A1S AREA, OCTOBER 2002 & FEBRUARY 2003

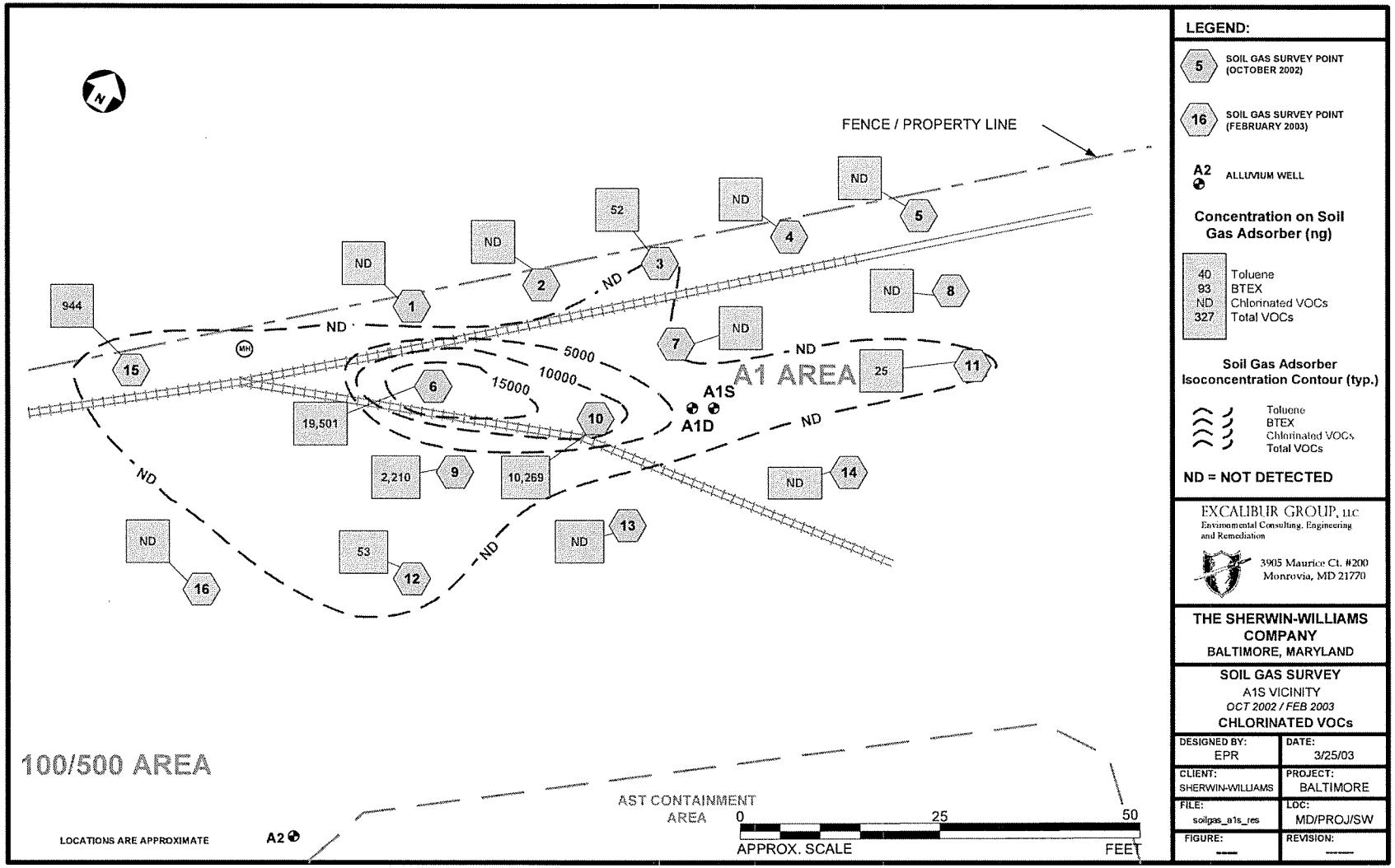


Table A-1

Soil Analytical Data
The Sherwin-Williams Company Paint Manufacturing Plant - Baltimore, Maryland

Sample Identification		A1-G1-1 (5)		A1-G1-1 (5.5-6.5)		A1-G1-2 (8-9)		A1-G2-2 (11)		A1-G2-2D (11)		A1-G3-1 (4)	
Sample Location		A1-G1		A1-G1		A1-G1		A1-G2		A1-G2		A1-G3	
Sample Depth		5.0-6.0		5.5-6.5		8.0-9.0		11.0-12.0		11.0-12.0		4.0-5.0	
Sample Date		04/15/2003		04/15/2003		04/15/2003		04/15/2003		04/15/2003		04/15/2003	
Sample Type		Investigation		Investigation		Investigation		Investigation		Duplicate		Investigation	
Surface/Subsurface		Subsurface		Subsurface		Subsurface		Subsurface		Subsurface		Subsurface	
Constituent	CAS No.												
Volatile Organics (mg/Kg)													
1,1,1-Trichloroethane	71556	< 0.0043	J	< 0.27		< 0.31		< 30		< 29		< 0.0036	J
1,1,2,2-Tetrachloroethane	79345	< 0.0043		< 0.27		< 0.31		< 30		< 29		< 0.0036	
1,1,2-Trichloroethane	79005	< 0.0043		< 0.27		< 0.31		< 30		< 29		< 0.0036	
1,1-Dichloroethane	75343	< 0.0043		< 0.27		< 0.31		< 30		< 29		0.018	
1,1-Dichloroethene	75354	< 0.0043		< 0.27		< 0.31		< 30		< 29		< 0.0036	
1,2,4-Trimethylbenzene	95636	< 0.0043		< 0.28		< 0.31		89		78		0.041	
1,2-Dichloroethane	107062	< 0.0043		< 0.27		< 0.31		< 30		< 29		0.0049	
1,2-Dichloropropane	78875	< 0.0043		< 0.27		< 0.31		< 30		< 29		< 0.0036	
1,2-Xylene	95476	< 0.0043		< 0.27		< 0.31		270		240		0.32	
1,3,5-Trimethylbenzene	108678	< 0.0043		< 0.28		< 0.31		32		30	J	0.015	
2-Butanone	78933	< 0.086		< 5.5		< 6.1		< 590		< 590		< 0.073	
2-Hexanone	591786	< 0.043		< 2.7	J	< 3.1	J	< 300		< 290		< 0.036	
4-Methyl-2-Pentanone (MIBK)	108101	< 0.043		< 2.7	J	< 3.1	J	< 300		< 290		< 0.036	
Acetone	67641	< 0.086	J	< 5.5		< 6.1	J	< 590	J	< 590	J	< 0.073	J
Benzene	71432	< 0.0043		< 0.27		< 0.31		< 30		< 29		0.0088	
Bromodichloromethane	75274	< 0.0043	L	< 0.27		< 0.31		< 30		< 29		< 0.0036	L
Bromoform	75252	< 0.0043		< 0.27		< 0.31		< 30		< 29		< 0.0036	
Bromomethane	74839	< 0.0086	J	< 0.55		< 0.61		< 59	J	< 59	J	< 0.0073	J
Carbon Disulfide	75150	< 0.0043		< 0.27		< 0.31		< 30		< 29		< 0.0036	
Carbon Tetrachloride	56235	< 0.0043		< 0.27		< 0.31		< 30	L	< 29	L	< 0.0036	
Chlorobenzene	108907	< 0.0043		< 0.27		< 0.31		< 30		< 29		< 0.0036	
Chloroethane	75003	< 0.0086	J	< 0.55	J	< 0.61		< 59	J	< 59	J	< 0.0073	J
Chloroform	67663	< 0.0043		< 0.27		< 0.31		< 30		< 29		< 0.0036	
Chloromethane	74873	< 0.0086		< 0.55		< 0.61		< 59		< 59		< 0.0073	
cis-1,2-Dichloroethene	156592	< 0.0043		< 0.27		< 0.31		< 30		< 29		0.11	
cis-1,3-Dichloropropene	10061015	< 0.0043		< 0.27		< 0.31		< 30		< 29		< 0.0036	
Dibromochloromethane	124481	< 0.0043		< 0.27		< 0.31		< 30		< 29		< 0.0036	
Ethylbenzene	100414	< 0.0043		< 0.27		< 0.31		250		220		0.28	J
m,p-Xylenes	--	NA		NA		NA		NA		NA		NA	
Methylene Chloride	75092	< 0.0043	J	< 0.27	J	0.38		< 30	J	< 29	J	< 0.0036	J
Styrene	100425	< 0.0043		< 0.27		< 0.31		< 30		< 29		< 0.0036	
Tetrachloroethene	127184	< 0.0043		< 0.27		< 0.31		< 30		< 29		< 0.0036	
Toluene	108883	< 0.0043		0.3	J	0.3	J	270	K	300	K	0.45	K

Table A-1

Soil Analytical Data
The Sherwin-Williams Company Paint Manufacturing Plant - Baltimore, Maryland

Sample Identification		A1-G1-1 (5)	A1-G1-1 (5.5-6.5)	A1-G1-2 (8-9)	A1-G2-2 (11)	A1-G2-2D (11)	A1-G3-1 (4)
Sample Location		A1-G1	A1-G1	A1-G1	A1-G2	A1-G2	A1-G3
Sample Depth		5.0-6.0	5.5-6.5	8.0-9.0	11.0-12.0	11.0-12.0	4.0-5.0
Sample Date		04/15/2003	04/15/2003	04/15/2003	04/15/2003	04/15/2003	04/15/2003
Sample Type		Investigation	Investigation	Investigation	Investigation	Duplicate	Investigation
Surface/Subsurface		Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface
Constituent	CAS No.						
Volatile Organics (mg/Kg)							
trans-1,2-Dichloroethene	156605	< 0.0043	< 0.27	< 0.31	< 30	< 29	< 0.0036
trans-1,3-Dichloropropene	10061026	< 0.0043	< 0.27	< 0.31	< 30	< 29	< 0.0036
Trichloroethene	79016	< 0.0043	< 0.27	< 0.31	< 30	< 29	< 0.0036
Vinyl Chloride	75014	< 0.0086	< 0.55	< 0.61	< 59	< 59	< 0.0073
Xylenes (total)	1330207	< 0.0086	0.5 J	0.3 J	1400	1200	1.6
General Chemistry							
Percent Moisture	%Mois	13	11	18	16	16	11

Notes:
NA - Not Analyzed.
J - Estimated Value.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
B - Not detected substantially above the level reported in the laboratory or field blanks.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table A-1

Soil Analytical Data
The Sherwin-Williams Company Paint Manufacturing Plant - Baltimore, Maryland

Sample Identification		A1-G3-2 (5-6)		A1-G4-1 (5.5-6.5)		A1-G4-2 (8-9)		A1-G5-1 (3-4)		A1-G5-2 (4.5-5.5)		A1-G6 (2.5-2.8) COMP	
Sample Location		A1-G3		A1-G4		A1-G4		A1-G5		A1-G5		A1-G6	
Sample Depth		5.0-6.0		5.5-6.5		8.0-9.0		3.0-4.0		4.5-5.5		2.5-2.8	
Sample Date		04/15/2003		04/15/2003		04/15/2003		04/15/2003		04/15/2003		06/20/2006	
Sample Type		Investigation		Investigation		Investigation		Investigation		Investigation		Investigation	
Surface/Subsurface		Subsurface		Subsurface		Subsurface		Subsurface		Subsurface		Subsurface	
Constituent	CAS No.												
Volatile Organics (mg/Kg)													
1,1,1-Trichloroethane	71556	< 2.8		< 27		< 0.3		< 28		< 3		< 0.36802	
1,1,2,2-Tetrachloroethane	79345	< 2.8		< 27		< 0.3		< 28		< 3		NA	
1,1,2-Trichloroethane	79005	< 2.8		< 27		< 0.3		< 28		< 3		NA	
1,1-Dichloroethane	75343	< 2.8		< 27		< 0.3		< 28		< 3		< 0.36802	
1,1-Dichloroethene	75354	< 2.8		< 27		< 0.3		< 28		< 3		NA	
1,2,4-Trimethylbenzene	95636	6.1		62		0.3	J	40		11		4.4	
1,2-Dichloroethane	107062	< 2.8	J	< 27		< 0.3		< 28		< 3	J	< 0.36802	
1,2-Dichloropropane	78875	< 2.8		< 27		< 0.3		< 28		< 3		NA	
1,2-Xylene	95476	21		240		0.49		140		27		0.95	
1,3,5-Trimethylbenzene	108678	2.2		20	J	< 0.3		< 28		3.8		0.99	
2-Butanone	78933	< 57		< 550		< 6		< 570		< 60		NA	
2-Hexanone	591786	< 28		< 270		< 3	J	< 280	J	< 30		NA	
4-Methyl-2-Pentanone (MIBK)	108101	< 28		< 270		< 3	J	< 280	J	< 30		NA	
Acetone	67641	< 57	J	< 550	J	< 6		< 570	J	< 60	J	NA	
Benzene	71432	< 2.8		< 27		< 0.3		< 28		< 3		< 0.36802	
Bromodichloromethane	75274	< 2.8		< 27		< 0.3		< 28		< 3		NA	
Bromoform	75252	< 2.8		< 27		< 0.3		< 28		< 3		NA	
Bromomethane	74839	< 5.7	J	< 55	J	< 0.6		< 57		< 6	J	NA	
Carbon Disulfide	75150	< 2.8		< 27		< 0.3		< 28		< 3		NA	
Carbon Tetrachloride	56235	< 2.8		< 27	L	< 0.3		< 28		< 3		NA	
Chlorobenzene	108907	< 2.8		< 27		< 0.3		< 28		< 3		NA	
Chloroethane	75003	< 5.7	J	< 55	J	< 0.6	J	< 57		< 6	J	NA	
Chloroform	67663	< 2.8		< 27		< 0.3		< 28		< 3		NA	
Chloromethane	74873	< 5.7		< 55		< 0.6		< 57		< 6		NA	
cis-1,2-Dichloroethene	156592	< 2.8		< 27		< 0.3		< 28		< 3		NA	
cis-1,3-Dichloropropene	10061015	< 2.8		< 27		< 0.3		< 28		< 3		NA	
Dibromochloromethane	124481	< 2.8		< 27		< 0.3		< 28		< 3		NA	
Ethylbenzene	100414	18		170		0.43		110		17		4.2	
m,p-Xylenes	--	NA		NA		NA		NA		NA		6.7	
Methylene Chloride	75092	< 2.8	J	< 27	J	0.32		< 28	J	< 3	J	< 0.36802	
Styrene	100425	< 2.8		< 27		< 0.3		< 28		< 3		NA	
Tetrachloroethene	127184	< 2.8		< 27		< 0.3		< 28		< 3		NA	
Toluene	108883	19	K	320	K	0.81	K	330	K	19	K	< 0.36802	

Table A-1

Soil Analytical Data
The Sherwin-Williams Company Paint Manufacturing Plant - Baltimore, Maryland

Constituent	Sample Identification / Sample Location / Sample Depth / Sample Date / Sample Type / Surface/Subsurface	CAS No.	A1-G3-2 (5-6) / A1-G3 / 5.0-6.0 / 04/15/2003 / Investigation / Subsurface	A1-G4-1 (5.5-6.5) / A1-G4 / 5.5-6.5 / 04/15/2003 / Investigation / Subsurface	A1-G4-2 (8-9) / A1-G4 / 8.0-9.0 / 04/15/2003 / Investigation / Subsurface	A1-G5-1 (3-4) / A1-G5 / 3.0-4.0 / 04/15/2003 / Investigation / Subsurface	A1-G5-2 (4.5-5.5) / A1-G5 / 4.5-5.5 / 04/15/2003 / Investigation / Subsurface	A1-G6 (2.5-2.8) COMP / A1-G6 / 2.5-2.8 / 06/20/2006 / Investigation / Subsurface
Volatile Organics (mg/Kg)								
trans-1,2-Dichloroethene		156605	< 2.8	< 27	< 0.3	< 28	< 3	NA
trans-1,3-Dichloropropene		10061026	< 2.8	< 27	< 0.3	< 28	< 3	NA
Trichloroethene		79016	< 2.8	< 27	< 0.3	< 28	< 3	< 0.36802
Vinyl Chloride		75014	< 5.7	< 55	< 0.6	< 57	< 6	NA
Xylenes (total)		1330207	94	1000	2.4	620	110	7.6
General Chemistry								
Percent Moisture		%Mois	15	13	19	12	18	8.7

Notes:
NA - Not Analyzed.
J - Estimated Value.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
B - Not detected substantially above the level reported in the laboratory or field blanks.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table A-1

Soil Analytical Data
The Sherwin-Williams Company Paint Manufacturing Plant - Baltimore, Maryland

Sample Identification		A1-G7 (1.0-2.0) COMP	A1-G8 (3.0-3.5) COMP	A1-G9 (10-12)	A1-G9 (12-14)	A1-G9 (16-18)	A1-G10 (2-4) COMP
Sample Location		A1-G7	A1-G8	A1-G9	A1-G9	A1-G9	A1-G10
Sample Depth		1.0-2.0	3.0-3.5	10.0-12.0	12.0-14.0	16.0-18.0	2.0-4.0
Sample Date		06/20/2006	06/20/2006	06/21/2006	06/21/2006	06/21/2006	06/21/2006
Sample Type		Investigation	Investigation	Investigation	Investigation	Investigation	Investigation
Surface/Subsurface		Surface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface
Constituent	CAS No.						
Volatile Organics (mg/Kg)							
1,1,1-Trichloroethane	71556	< 0.31685	< 0.42069	< 0.47	< 0.49	< 0.56	< 0.43
1,1,2,2-Tetrachloroethane	79345	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	79005	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	75343	< 0.31685	< 0.42069	< 0.47	< 0.49	< 0.56	< 0.43
1,1-Dichloroethene	75354	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	95636	< 0.31685	0.34 J	< 0.47	< 0.49	< 0.56	< 0.43
1,2-Dichloroethane	107062	< 0.31685	< 0.42069	< 0.47	< 0.49	< 0.56	< 0.43
1,2-Dichloropropane	78875	NA	NA	NA	NA	NA	NA
1,2-Xylene	95476	< 0.31685	0.68	< 0.47	< 0.49	< 0.56	< 0.43
1,3,5-Trimethylbenzene	108678	< 0.31685	< 0.42069	< 0.47	< 0.49	< 0.56	< 0.43
2-Butanone	78933	NA	NA	NA	NA	NA	NA
2-Hexanone	591786	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone (MIBK)	108101	NA	NA	NA	NA	NA	NA
Acetone	67641	NA	NA	NA	NA	NA	NA
Benzene	71432	< 0.31685	< 0.42069	< 0.47	< 0.49	< 0.56	< 0.43
Bromodichloromethane	75274	NA	NA	NA	NA	NA	NA
Bromoform	75252	NA	NA	NA	NA	NA	NA
Bromomethane	74839	NA	NA	NA	NA	NA	NA
Carbon Disulfide	75150	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	56235	NA	NA	NA	NA	NA	NA
Chlorobenzene	108907	NA	NA	NA	NA	NA	NA
Chloroethane	75003	NA	NA	NA	NA	NA	NA
Chloroform	67663	NA	NA	NA	NA	NA	NA
Chloromethane	74873	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	156592	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	10061015	NA	NA	NA	NA	NA	NA
Dibromochloromethane	124481	NA	NA	NA	NA	NA	NA
Ethylbenzene	100414	< 0.31685	0.61	< 0.47	< 0.49	< 0.56	< 0.43
m,p-Xylenes	--	< 0.6337	2.4	< 0.93	< 0.98	< 1.1	< 0.86
Methylene Chloride	75092	< 0.31685	< 0.42069	< 0.47	< 0.49	< 0.56	< 0.43
Styrene	100425	NA	NA	NA	NA	NA	NA
Tetrachloroethene	127184	NA	NA	NA	NA	NA	NA
Toluene	108883	< 0.31685	0.93	< 0.47	11 J	6.1	< 0.43

Table A-1

Soil Analytical Data
The Sherwin-Williams Company Paint Manufacturing Plant - Baltimore, Maryland

Constituent	CAS No.	Sample Identification	A1-G7 (1.0-2.0) COMP	A1-G8 (3.0-3.5) COMP	A1-G9 (10-12)	A1-G9 (12-14)	A1-G9 (16-18)	A1-G10 (2-4) COMP
		Sample Location	A1-G7	A1-G8	A1-G9	A1-G9	A1-G9	A1-G10
		Sample Depth	1.0-2.0	3.0-3.5	10.0-12.0	12.0-14.0	16.0-18.0	2.0-4.0
		Sample Date	06/20/2006	06/20/2006	06/21/2006	06/21/2006	06/21/2006	06/21/2006
		Sample Type	Investigation	Investigation	Investigation	Investigation	Investigation	Investigation
		Surface/Subsurface	Surface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface
Volatile Organics (mg/Kg)								
trans-1,2-Dichloroethene	156605		NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	10061026		NA	NA	NA	NA	NA	NA
Trichloroethene	79016		< 0.31685	< 0.42069	< 0.47	< 0.49	< 0.56	< 0.43
Vinyl Chloride	75014		NA	NA	NA	NA	NA	NA
Xylenes (total)	1330207		< 0.6337	3.1	< 0.93	< 0.98	< 1.1	< 0.86
General Chemistry								
Percent Moisture	%Mois		19	14	18	21	23	10

Notes:
NA - Not Analyzed.
J - Estimated Value.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
B - Not detected substantially above the level reported in the laboratory or field blanks.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table A-1

Soil Analytical Data
The Sherwin-Williams Company Paint Manufacturing Plant - Baltimore, Maryland

Sample Identification		A1-G10 (8-10)		A1-G10 (12-14)		A1-G11 (4-6) COMP		A1-G11 (8-10) COMP		A1-G11 (10-12) COMP		A1-G12 (0-2) COMP	
Sample Location		A1-G10		A1-G10		A1-G11		A1-G11		A1-G11		A1-G12	
Sample Depth		8.0-10.0		12.0-14.0		4.0-6.0		8.0-10.0		10.0-12.0		0.0-2.0	
Sample Date		06/21/2006		06/21/2006		06/20/2006		06/20/2006		06/20/2006		06/21/2006	
Sample Type		Investigation		Investigation		Investigation		Investigation		Investigation		Investigation	
Surface/Subsurface		Subsurface		Subsurface		Subsurface		Subsurface		Subsurface		Surface	
Constituent	CAS No.												
Volatile Organics (mg/Kg)													
1,1,1-Trichloroethane	71556	< 0.4		< 0.43		< 0.38422		< 0.4756		< 0.47925		< 0.38	
1,1,2,2-Tetrachloroethane	79345	NA		NA		NA		NA		NA		NA	
1,1,2-Trichloroethane	79005	NA		NA		NA		NA		NA		NA	
1,1-Dichloroethane	75343	< 0.4		< 0.43		< 0.38422		< 0.4756		< 0.47925		< 0.38	
1,1-Dichloroethene	75354	NA		NA		NA		NA		NA		NA	
1,2,4-Trimethylbenzene	95636	2.8		< 0.43		10		22		5.8		3.4	
1,2-Dichloroethane	107062	< 0.4		< 0.43		< 0.38422		< 0.4756		< 0.47925		< 0.38	
1,2-Dichloropropane	78875	NA		NA		NA		NA		NA		NA	
1,2-Xylene	95476	3.7		< 0.43		4.3		4		< 0.47925		0.27	J
1,3,5-Trimethylbenzene	108678	1		< 0.43		3.3		7.9		2		0.95	
2-Butanone	78933	NA		NA		NA		NA		NA		NA	
2-Hexanone	591786	NA		NA		NA		NA		NA		NA	
4-Methyl-2-Pentanone (MIBK)	108101	NA		NA		NA		NA		NA		NA	
Acetone	67641	NA		NA		NA		NA		NA		NA	
Benzene	71432	< 0.4		< 0.43		< 0.38422		< 0.4756		< 0.47925		< 0.38	
Bromodichloromethane	75274	NA		NA		NA		NA		NA		NA	
Bromoform	75252	NA		NA		NA		NA		NA		NA	
Bromomethane	74839	NA		NA		NA		NA		NA		NA	
Carbon Disulfide	75150	NA		NA		NA		NA		NA		NA	
Carbon Tetrachloride	56235	NA		NA		NA		NA		NA		NA	
Chlorobenzene	108907	NA		NA		NA		NA		NA		NA	
Chloroethane	75003	NA		NA		NA		NA		NA		NA	
Chloroform	67663	NA		NA		NA		NA		NA		NA	
Chloromethane	74873	NA		NA		NA		NA		NA		NA	
cis-1,2-Dichloroethene	156592	NA		NA		NA		NA		NA		NA	
cis-1,3-Dichloropropene	10061015	NA		NA		NA		NA		NA		NA	
Dibromochloromethane	124481	NA		NA		NA		NA		NA		NA	
Ethylbenzene	100414	2.3		< 0.43		8.5		22		0.5		0.21	J
m,p-Xylenes	--	10		< 0.86		26		55		9.7		0.78	
Methylene Chloride	75092	< 0.4		< 0.43		< 0.38422		< 0.4756		< 0.47925		< 0.38	
Styrene	100425	NA		NA		NA		NA		NA		NA	
Tetrachloroethene	127184	NA		NA		NA		NA		NA		NA	
Toluene	108883	0.25	B	< 0.43		3.2		0.99		< 0.47925		< 0.38	

Table A-1

Soil Analytical Data
The Sherwin-Williams Company Paint Manufacturing Plant - Baltimore, Maryland

Constituent	CAS No.	Sample Identification	A1-G10 (8-10)	A1-G10 (12-14)	A1-G11 (4-6) COMP	A1-G11 (8-10) COMP	A1-G11 (10-12) COMP	A1-G12 (0-2) COMP
		Sample Location	A1-G10	A1-G10	A1-G11	A1-G11	A1-G11	A1-G12
		Sample Depth	8.0-10.0	12.0-14.0	4.0-6.0	8.0-10.0	10.0-12.0	0.0-2.0
		Sample Date	06/21/2006	06/21/2006	06/20/2006	06/20/2006	06/20/2006	06/21/2006
		Sample Type	Investigation	Investigation	Investigation	Investigation	Investigation	Investigation
		Surface/Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Surface
Volatile Organics (mg/Kg)								
trans-1,2-Dichloroethene	156605		NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	10061026		NA	NA	NA	NA	NA	NA
Trichloroethene	79016		6	< 0.43	< 0.38422	< 0.4756	< 0.47925	< 0.38
Vinyl Chloride	75014		NA	NA	NA	NA	NA	NA
Xylenes (total)	1330207		14	< 0.86	31	59	9.7	1
General Chemistry								
Percent Moisture	%Mois		11	15	17	18	19	1.9

Notes:
NA - Not Analyzed.
J - Estimated Value.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
B - Not detected substantially above the level reported in the laboratory or field blanks.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table A-1

Soil Analytical Data
The Sherwin-Williams Company Paint Manufacturing Plant - Baltimore, Maryland

Constituent	CAS No.	Sample Identification	A1-G12 (6-8) COMP	A1-G12 (10-12) COMP	A1-G13 (2-4) COMP	A1-G13 (6-8) COMP	A1-G14 (4-6) COMP	A1-G14 (8-10) COMP
		Sample Location	A1-G12	A1-G12	A1-G13	A1-G13	A1-G14	A1-G14
		Sample Depth	6.0-8.0	10.0-12.0	2.0-4.0	6.0-8.0	4.0-6.0	8.0-10.0
		Sample Date	06/21/2006	06/21/2006	06/21/2006	06/21/2006	06/21/2006	06/21/2006
		Sample Type	Investigation	Investigation	Investigation	Investigation	Investigation	Investigation
		Surface/Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface
Volatile Organics (mg/Kg)								
1,1,1-Trichloroethane	71556		< 0.45	< 0.49	< 0.4	< 0.46	< 0.44	< 0.46
1,1,2,2-Tetrachloroethane	79345		NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	79005		NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	75343		< 0.45	< 0.49	< 0.4	< 0.46	< 0.44	< 0.46
1,1-Dichloroethene	75354		NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	95636		< 0.45	0.61	0.67	< 0.46	< 0.44	< 0.46
1,2-Dichloroethane	107062		< 0.45	< 0.49	< 0.4	< 0.46	< 0.44	< 0.46
1,2-Dichloropropane	78875		NA	NA	NA	NA	NA	NA
1,2-Xylene	95476		< 0.45	< 0.49	< 0.4	< 0.46	< 0.44	< 0.46
1,3,5-Trimethylbenzene	108678		< 0.45	< 0.49	0.45	< 0.46	< 0.44	< 0.46
2-Butanone	78933		NA	NA	NA	NA	NA	NA
2-Hexanone	591786		NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone (MIBK)	108101		NA	NA	NA	NA	NA	NA
Acetone	67641		NA	NA	NA	NA	NA	NA
Benzene	71432		< 0.45	< 0.49	< 0.4	< 0.46	< 0.44	< 0.46
Bromodichloromethane	75274		NA	NA	NA	NA	NA	NA
Bromoform	75252		NA	NA	NA	NA	NA	NA
Bromomethane	74839		NA	NA	NA	NA	NA	NA
Carbon Disulfide	75150		NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	56235		NA	NA	NA	NA	NA	NA
Chlorobenzene	108907		NA	NA	NA	NA	NA	NA
Chloroethane	75003		NA	NA	NA	NA	NA	NA
Chloroform	67663		NA	NA	NA	NA	NA	NA
Chloromethane	74873		NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	156592		NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	10061015		NA	NA	NA	NA	NA	NA
Dibromochloromethane	124481		NA	NA	NA	NA	NA	NA
Ethylbenzene	100414		< 0.45	< 0.49	2.1	< 0.46	< 0.44	< 0.46
m,p-Xylenes	--		< 0.91	< 0.99	4.6	< 0.93	< 0.87	< 0.93
Methylene Chloride	75092		< 0.45	< 0.49	< 0.4	< 0.46	< 0.44	< 0.46
Styrene	100425		NA	NA	NA	NA	NA	NA
Tetrachloroethene	127184		NA	NA	NA	NA	NA	NA
Toluene	108883		< 0.45	< 0.49	< 0.4	< 0.46	< 0.44	< 0.46

Table A-1

Soil Analytical Data
The Sherwin-Williams Company Paint Manufacturing Plant - Baltimore, Maryland

Constituent	CAS No.	Sample Identification	A1-G12 (6-8) COMP	A1-G12 (10-12) COMP	A1-G13 (2-4) COMP	A1-G13 (6-8) COMP	A1-G14 (4-6) COMP	A1-G14 (8-10) COMP
		Sample Location	A1-G12	A1-G12	A1-G13	A1-G13	A1-G14	A1-G14
		Sample Depth	6.0-8.0	10.0-12.0	2.0-4.0	6.0-8.0	4.0-6.0	8.0-10.0
		Sample Date	06/21/2006	06/21/2006	06/21/2006	06/21/2006	06/21/2006	06/21/2006
		Sample Type	Investigation	Investigation	Investigation	Investigation	Investigation	Investigation
		Surface/Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface
Volatile Organics (mg/Kg)								
trans-1,2-Dichloroethene	156605		NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	10061026		NA	NA	NA	NA	NA	NA
Trichloroethene	79016		< 0.45	< 0.49	< 0.4	< 0.46	< 0.44	< 0.46
Vinyl Chloride	75014		NA	NA	NA	NA	NA	NA
Xylenes (total)	1330207		< 0.91	< 0.99	4.7	< 0.93	< 0.87	< 0.93
General Chemistry								
Percent Moisture	%Mois		15	24	13	18	18	20

Notes:
NA - Not Analyzed.
J - Estimated Value.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
B - Not detected substantially above the level reported in the laboratory or field blanks.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table A-1

Soil Analytical Data
The Sherwin-Williams Company Paint Manufacturing Plant - Baltimore, Maryland

Sample Identification		MW-16S (8-10) COMP	MW-16D (8-10) COMP	MW-17S (2-4) COMP	MW-17D (16-18) COMP	MW-18S (4-6) COMP	MW-18D (6-8) COMP
Sample Location		MW-16S	MW-16D	MW-17S	MW-17D	MW-18S	MW-18D
Sample Depth		8-10	8-10	2-4	16-18	4-6	6-8
Sample Date		05/07/2007	05/07/2007	05/08/2007	05/14/2007	05/08/2007	05/08/2007
Sample Type		Investigation	Investigation	Investigation	Investigation	Investigation	Investigation
Surface/Subsurface		Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface
Constituent	CAS No.						
Volatile Organics (mg/Kg)							
1,1,1-Trichloroethane	71556	< 0.4509	< 0.43616	< 0.44426	< 0.42878	< 0.45977	< 0.43408
1,1,2,2-Tetrachloroethane	79345	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	79005	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	75343	< 0.4509	< 0.43616	< 0.44426	< 0.42878	< 0.45977	< 0.43408
1,1-Dichloroethene	75354	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	95636	14	6.5	< 0.44426	< 0.61	12	1.4
1,2-Dichloroethane	107062	< 0.4509	< 0.43616	< 0.44426	< 0.42878	< 0.45977	< 0.43408
1,2-Dichloropropane	78875	NA	NA	NA	NA	NA	NA
1,2-Xylene	95476	< 0.4509 J	1.5	< 0.44426	< 0.42878	< 0.45977	< 0.43408
1,3,5-Trimethylbenzene	108678	5.6	2.4	< 0.44426	< 0.61	4.4	0.23 J
2-Butanone	78933	NA	NA	NA	NA	NA	NA
2-Hexanone	591786	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone (MIBK)	108101	NA	NA	NA	NA	NA	NA
Acetone	67641	NA	NA	NA	NA	NA	NA
Benzene	71432	< 0.4509	< 0.43616	< 0.44426	< 0.42878	< 0.45977	< 0.43408
Bromodichloromethane	75274	NA	NA	NA	NA	NA	NA
Bromoform	75252	NA	NA	NA	NA	NA	NA
Bromomethane	74839	NA	NA	NA	NA	NA	NA
Carbon Disulfide	75150	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	56235	NA	NA	NA	NA	NA	NA
Chlorobenzene	108907	NA	NA	NA	NA	NA	NA
Chloroethane	75003	NA	NA	NA	NA	NA	NA
Chloroform	67663	NA	NA	NA	NA	NA	NA
Chloromethane	74873	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	156592	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	10061015	NA	NA	NA	NA	NA	NA
Dibromochloromethane	124481	NA	NA	NA	NA	NA	NA
Ethylbenzene	100414	19	7.4	< 0.44426	< 0.42878	12	0.46
m,p-Xylenes	--	53	19	< 0.44426	< 0.42878	40	1.4
Methylene Chloride	75092	< 0.4509	< 0.43616	< 0.44426	< 0.42878	< 0.45977	< 0.43408
Styrene	100425	NA	NA	NA	NA	NA	NA
Tetrachloroethene	127184	NA	NA	NA	NA	NA	NA
Toluene	108883	< 0.4509	< 0.43616	< 0.44426	< 0.42878	< 0.45977	< 0.43408

Table A-1

Soil Analytical Data
The Sherwin-Williams Company Paint Manufacturing Plant - Baltimore, Maryland

Constituent	CAS No.	Sample Identification	MW-16S (8-10) COMP	MW-16D (8-10) COMP	MW-17S (2-4) COMP	MW-17D (16-18) COMP	MW-18S (4-6) COMP	MW-18D (6-8) COMP
		Sample Location	MW-16S	MW-16D	MW-17S	MW-17D	MW-18S	MW-18D
		Sample Depth	8-10	8-10	2-4	16-18	4-6	6-8
		Sample Date	05/07/2007	05/07/2007	05/08/2007	05/14/2007	05/08/2007	05/08/2007
		Sample Type	Investigation	Investigation	Investigation	Investigation	Investigation	Investigation
		Surface/Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface	Subsurface
Volatile Organics (mg/Kg)								
trans-1,2-Dichloroethene	156605		NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	10061026		NA	NA	NA	NA	NA	NA
Trichloroethene	79016		< 0.4509	< 0.43616	< 0.44426	< 0.42878	< 0.45977	< 0.43408
Vinyl Chloride	75014		NA	NA	NA	NA	NA	NA
Xylenes (total)	1330207		53	20.5	< 0.88852	< 0.85756	40	1.4
General Chemistry								
Percent Moisture	%Mois		17	18	8.5	18	13	13

Notes:
NA - Not Analyzed.
J - Estimated Value.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
B - Not detected substantially above the level reported in the laboratory or field blanks.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table A-1

Soil Analytical Data
The Sherwin-Williams Company Paint Manufacturing Plant - Baltimore, Maryland

Sample Identification		MW-19S (6-8) COMP	MW-19D (8-10) COMP	MW-20S (4-6) COMP	SS-P2 (8-10) COMP	SS-P3 (4-6) COMP
Sample Location		MW-19S	MW-19D	MW-20S	SS-P2	SS-P3
Sample Depth		6-8	8-10	4-6	8-10	4-6
Sample Date		05/08/2007	05/08/2007	05/08/2007	05/09/2007	05/09/2007
Sample Type		Investigation	Investigation	Investigation	Investigation	Investigation
Surface/Subsurface		Subsurface	Subsurface	Subsurface	Subsurface	Subsurface
Constituent	CAS No.					
Volatile Organics (mg/Kg)						
1,1,1-Trichloroethane	71556	< 0.45988	< 0.53772	< 0.51455	< 0.40652	< 0.52384
1,1,2,2-Tetrachloroethane	79345	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	79005	NA	NA	NA	NA	NA
1,1-Dichloroethane	75343	< 0.45988	< 0.53772	< 0.51455	< 0.40652	< 0.52384
1,1-Dichloroethene	75354	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	95636	< 0.45988	< 0.53772	17	0.4 J	0.68
1,2-Dichloroethane	107062	< 0.45988	< 0.53772	< 0.51455	< 0.40652	< 0.52384
1,2-Dichloropropane	78875	NA	NA	NA	NA	NA
1,2-Xylene	95476	2.1	1.4	< 0.51455	< 0.40652	< 0.52384
1,3,5-Trimethylbenzene	108678	< 0.45988	< 0.53772	3.3	< 0.40652	< 0.52384
2-Butanone	78933	NA	NA	NA	NA	NA
2-Hexanone	591786	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone (MIBK)	108101	NA	NA	NA	NA	NA
Acetone	67641	NA	NA	NA	NA	NA
Benzene	71432	< 0.45988	< 0.53772	< 0.51455	< 0.40652	< 0.52384
Bromodichloromethane	75274	NA	NA	NA	NA	NA
Bromoform	75252	NA	NA	NA	NA	NA
Bromomethane	74839	NA	NA	NA	NA	NA
Carbon Disulfide	75150	NA	NA	NA	NA	NA
Carbon Tetrachloride	56235	NA	NA	NA	NA	NA
Chlorobenzene	108907	NA	NA	NA	NA	NA
Chloroethane	75003	NA	NA	NA	NA	NA
Chloroform	67663	NA	NA	NA	NA	NA
Chloromethane	74873	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	156592	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	10061015	NA	NA	NA	NA	NA
Dibromochloromethane	124481	NA	NA	NA	NA	NA
Ethylbenzene	100414	1.9	1.3	40	< 0.40652	< 0.52384
m,p-Xylenes	--	6.8	4.8	8	0.38 J	0.7
Methylene Chloride	75092	< 0.45988	< 0.53772	< 0.51455	< 0.40652	< 0.52384
Styrene	100425	NA	NA	NA	NA	NA
Tetrachloroethene	127184	NA	NA	NA	NA	NA
Toluene	108883	2	8.5	3.4	< 0.40652	< 0.52384

Table 2

TABLE 3 - November 2012 Groundwater Analytical Results Summary

	T1D-R	T1S-R	T1	T2	2D	T3	T3B	MW-20S
Date Collected	11/12/2012	11/12/2012	11/12/2012	11/13/2012	11/13/2012	11/13/2012	11/13/2012	11/12/2012
Analyte								
VOCS								
1,1,1-TRICHLOROETHANE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE (ug/l)	**1.2**	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRIMETHYLBENZENE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-TRIMETHYLBENZENE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-BUTANONE (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-CHLOROETHYLVINYLETHER (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-METHYL-2-PENTANONE (MIBK) (ug/l)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
ACROLEIN (ug/l)	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
ACRYLONITRILE (ug/l)	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
BENZENE (ug/l)	1 U	1 U	1 U	**2.9**	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE (ug/l)	1 U	1 U	1 U	**2**	1 U	1 U	1 U	1 U
CHLOROETHANE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.8**
CHLOROFORM (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ETHYLBENZENE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE (ug/l)	1 U	1 U	1 U	1 U	1 U	**1.1**	1 U	1 U
TOLUENE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHENE (ug/l)	1 U	1 U	1 U	1 U	1 U	**1.5**	1 U	1 U
VINYL CHLORIDE (ug/l)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
XYLENES (TOTAL) (ug/l)	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U

TABLE 3 (CONT.) - November 2012 Groundwater Analytical Results Summary

Location ID	PI-4	RW-3	VE-11	A1-D	A1-S	SS-P1	SS-P2	SS-P3
Date Collected	11/14/2012	11/13/2012	11/14/2012	11/14/2012	11/14/2012	11/13/2012	11/12/2012	11/12/2012
Analyte								
VOCS								
1,1,1-TRICHLOROETHANE (ug/l)	5.5 L	33 UL	40 U	1 UL	1 UL	150	1 U	1 U
1,1,2,2-TETRACHLOROETHANE (ug/l)	1.0 UL	33 UL	40 U	1 UL	1 UL	3.3 UL	1 U	1 U
1,1-DICHLOROETHANE (ug/l)	1 UL	33 UL	40 U	1.8 L	1 UL	300	3.3	3.6
1,1-DICHLOROETHENE (ug/l)	1 UL	33 UL	40 U	1.8 L	1 UL	27 L	1 U	1 U
1,2,4-TRIMETHYLBENZENE (ug/l)	2.7 L	62 L	47	3.5 L	68 L	130 L	1 U	1 U
1,2-DICHLOROBENZENE (ug/l)	1.0 UL	33 UL	40 U	1 UL	1 UL	3.3 UL	1 U	1 U
1,2-DICHLOROETHANE (ug/l)	1 UL	33 UL	40 U	1 UL	1 UL	8.2 L	1 U	1 U
1,2-DICHLOROPROPANE (ug/l)	1.0 UL	33 UL	40 U	1 UL	1 UL	3.3 UL	1 U	1 U
1,3,5-TRIMETHYLBENZENE (ug/l)	1.0 UL	33 UL	40 U	1.2 L	11 L	7.6 L	1 U	1 U
1,3-DICHLOROBENZENE (ug/l)	1.0 UL	33 UL	40 U	1 UL	1 UL	3.3 UL	1 U	1 U
1,4-DICHLOROBENZENE (ug/l)	1.0 UL	33 UL	40 U	1 UL	1 UL	3.3 UL	1 U	1 U
2-BUTANONE (ug/l)	10 UL	330 UL	400 U	10 UL	10 UL	33 UL	10 U	10 U
2-CHLOROETHYLVINYLETHER (ug/l)	10 UL	330 UL	400 U	10 UL	10 UL	33 UL	10 U	10 U
4-METHYL-2-PENTANONE (MIBK) (ug/l)	10 UL	330 UL	400 U	10 UL	10 UL	33 UL	10 U	10 U
ACROLEIN (ug/l)	20 UL	670 UL	800 U	20 UL	20 UL	67 UL	20 U	20 U
ACRYLONITRILE (ug/l)	20 UL	670 UL	800 U	20 UL	20 UL	67 UL	20 U	20 U
BENZENE (ug/l)	2.7	69 L	40 U	1.1 L	120	11 L	1 U	1 U
BROMODICHLOROMETHANE (ug/l)	1 UL	33 UL	40 U	1 UL	1 UL	3.3 UL	1 U	1 U
BROMOFORM (ug/l)	1 UL	33 UL	40 U	1 UL	1 UL	3.3 UL	1 U	1 U
BROMOMETHANE (ug/l)	1 UL	33 UL	40 U	1 UL	1 UL	3.3 UL	1 U	1 U
CARBON TETRACHLORIDE (ug/l)	1 UL	33 UL	40 U	1 UL	1 UL	3.3 UL	1 U	1 U
CHLOROBENZENE (ug/l)	1 UL	33 UL	40 U	1 UL	1 UL	5.2 L	1 U	1 U
CHLOROETHANE (ug/l)	1 UL	33 UL	40 U	1 UL	54 L	48	1 U	1 U
CHLOROFORM (ug/l)	1 UL	33 UL	40 U	1 UL	1 UL	3.7 L	1 U	1 U
CHLOROMETHANE (ug/l)	1 UL	33 UL	40 U	1 UL	1 UL	3.3 UL	1 U	1 U
CIS-1,3-DICHLOROPROPENE (ug/l)	1 UL	33 UL	40 U	1 UL	1 UL	3.3 UL	1 U	1 U
DIBROMOCHLOROMETHANE (ug/l)	1 UL	33 UL	40 U	1 UL	1 UL	3.3 UL	1 U	1 U
ETHYLBENZENE (ug/l)	14 L	140 L	850	8.5 L	140	360	1 U	1 U
METHYLENE CHLORIDE (ug/l)	1 UL	33 UL	40 U	1 UL	1 UL	3.3 UL	1 U	1 U
TETRACHLOROETHENE (ug/l)	1 UL	33 UL	40 U	1 UL	1 UL	4.8 L	1 U	1 U
TOLUENE (ug/l)	57 L	12000 L	53	120 L	110	820	1 U	1 U
TRANS-1,2-DICHLOROETHENE (ug/l)	1 UL	33 UL	40 U	1 UL	1 UL	4 L	1 U	1 U
TRANS-1,3-DICHLOROPROPENE (ug/l)	1 UL	33 UL	40 U	1 UL	1 UL	3.3 UL	1 U	1 U
TRICHLOROETHENE (ug/l)	1 UL	33 UL	40 U	1 UL	1 UL	10 L	1 U	1 U
VINYL CHLORIDE (ug/l)	1 UL	33 UL	40 U	1.1 L	1 UL	97 L	1 U	1
XYLENES (TOTAL) (ug/l)	54 L	2100 L	3800	41 L	530 L	820 L	2 U	2 U

TABLE 3 (CONT.) - November 2012 Groundwater Analytical Results Summary

Location ID	SS-P3 - DUP	RINSE BLANK	RINSE BLANK	RINSE BLANK	TRIP BLANK
Date Collected	11/12/2012	11/12/2012	11/13/2012	11/14/2012	11/14/2012
Analyte					
VOCS					
1,1,1-TRICHLOROETHANE (ug/l)	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE (ug/l)	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE (ug/l)	**3.3**	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE (ug/l)	1 U	1 U	1 U	1 U	1 U
1,2,4-TRIMETHYLBENZENE (ug/l)	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE (ug/l)	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE (ug/l)	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE (ug/l)	1 U	1 U	1 U	1 U	1 U
1,3,5-TRIMETHYLBENZENE (ug/l)	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE (ug/l)	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE (ug/l)	1 U	1 U	1 U	1 U	1 U
2-BUTANONE (ug/l)	10 U	10 U	10 U	10 U	10 U
2-CHLOROETHYLVINYLETHER (ug/l)	10 U	10 U	10 U	10 U	10 U
4-METHYL-2-PENTANONE (MIBK) (ug/l)	10 U	10 U	10 U	10 U	10 U
ACROLEIN (ug/l)	20 U	20 U	20 U	20 U	20 U
ACRYLONITRILE (ug/l)	20 U	20 U	20 U	20 U	20 U
BENZENE (ug/l)	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE (ug/l)	1 U	1 U	1 U	1 U	1 U
BROMOFORM (ug/l)	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE (ug/l)	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE (ug/l)	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE (ug/l)	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE (ug/l)	1 U	1 U	1 U	1 U	1 U
CHLOROFORM (ug/l)	1 U	**1.5**	**1.5**	**1.4**	1 U
CHLOROMETHANE (ug/l)	1 U	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE (ug/l)	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE (ug/l)	1 U	1 U	1 U	1 U	1 U
ETHYLBENZENE (ug/l)	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE (ug/l)	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE (ug/l)	1 U	1 U	1 U	1 U	1 U
TOLUENE (ug/l)	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE (ug/l)	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE (ug/l)	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHENE (ug/l)	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE (ug/l)	1 U	1 U	1 U	1 U	1 U
XYLENES (TOTAL) (ug/l)	2 U	2 U	2 U	2 U	2 U

Table 3

TABLE 3 – KEY WELL – GROUNDWATER ANALYTICAL RESULTS, NOVEMBER 2013[3]

Field Sample ID / Date Collected	RAO	DB12 11/12/2013	RW3 11/12/2013	VE11 11/12/2013	A1D 11/11/2013	A1S 11/12/2013	MW-20S 11/11/2013
VOCS							
1,1,1-TRICHLOROETHANE (ug/l)	150,000	11000	75	1.4 U	1 U	2.4	1 U
1,1,2,2-TETRACHLOROETHANE (ug/l)	na	17 U	13 U	1.4 U	1 U	1 U	1 U
1,1-DICHLOROETHANE (ug/l)	99,000	150	13 U	1.4 U	1	1.9	1 U
1,1-DICHLOROETHENE (ug/l)	4,800	2200	16	1.4 U	2.3	1 U	1 U
1,2,4-TRIMETHYLBENZENE (ug/l)	760	17 U	93	88	1 U	32	1 U
1,2-DICHLOROBENZENE (ug/l)	na	17 U	13 U	1.4 U	1 U	1 U	1 U
1,2-DICHLOROETHANE (ug/l)	200	17 U	13 U	1.4 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE (ug/l)	na	17 U	13 U	1.4 U	1 U	1 U	1 U
1,3,5-TRIMETHYLBENZENE (ug/l)	5,000	17 U	26	29	1 U	2.1	1 U
1,3-DICHLOROBENZENE (ug/l)	na	17 U	13 U	1.4 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE (ug/l)	na	17 U	13 U	1.4 U	1 U	1 U	1 U
2-BUTANONE (ug/l)	na	170 U	130 U	14 U	10 U	10 U	10 U
2-CHLOROETHYLVINYLETHER (ug/l)	na	170 R	130 R	14 R	10 R	10 R	10 R
4-METHYL-2-PENTANONE (MIBK) (ug/l)	99,000	170 U	130 U	14 U	10 U	10 U	15
ACROLEIN (ug/l)	na	330 U	250 U	29 U	20 U	20 U	20 U
ACRYLONITRILE (ug/l)	na	330 U	250 U	29 U	20 U	20 U	20 U
BENZENE (ug/l)	1,900	17 U	62	7.9	1 U	97	1 U
BROMODICHLOROMETHANE (ug/l)	na	17 U	13 U	1.4 U	1 U	1 U	1 U
BROMOFORM (ug/l)	na	17 U	13 U	1.4 U	1 U	1 U	1 U
BROMOMETHANE (ug/l)	na	17 U	13 U	1.4 U	1 U	1 U	1 U
CARBON TETRACHLORIDE (ug/l)	na	17 U	13 U	1.4 U	1 U	1 U	1 U
CHLOROBENZENE (ug/l)	na	17 U	13 U	1.4 U	1 U	1 U	1 U
CHLOROETHANE (ug/l)	na	17 U	13 U	1.4 U	1 U	51	1.9
CHLOROFORM (ug/l)	na	17 U	13 U	1.4 U	1 U	1 U	1 U
CHLOROMETHANE (ug/l)	na	17 U	13 U	1.4 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE (ug/l)	na	17 U	13 U	1.4 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE (ug/l)	na	17 U	13 U	1.4 U	1 U	1 U	1 U
ETHYLBENZENE (ug/l)	19,000	17 U	200	24	1 U	63	1 U
METHYLENE CHLORIDE (ug/l)	na	17 UJ	13 UJ	1.4 UJ	1 U	1 UJ	1 U
TETRACHLOROETHENE (ug/l)	3,400	17 U	13 U	1.4 U	1 U	1 U	1 U
TOLUENE (ug/l)	77,000	17 U	7600	6.9	1 U	3.8	1 U
TRANS-1,2-DICHLOROETHENE (ug/l)	na	17 U	13 U	1.4 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE (ug/l)	na	17 U	13 U	1.4 U	1 U	1 U	1 U
TRICHLOROETHENE (ug/l)	54	17 U	13 U	1.4 U	1 U	1 U	1 U
VINYL CHLORIDE (ug/l)	910	17 U	13 U	1.4 U	1 U	1	1 U
XYLENES (TOTAL) (ug/l)	9,900	74	1800	1600	2 U	160	2 U

[3] Laboratory analyses by Test America using USEPA Method 8260B. Absence of a flag/data qualifier adjacent to a result signifies detection of the compound at the bolded concentration. Flags / Data Qualifiers: U = Not detected (detection level shown); J – Analyte present but reported value may not be accurate or precise; L = Analyte present, reported value may be biased low; R = Unusable result (due to QA issue), analyte may or may not be present; na = not applicable.

Table 4

TABLE 4 – Remedial Action Objectives

Constituent of Interest	Constituent-Specific Target HQ [1]	Noncancer RAO (ug/L)	Carcinogenic RAO (ug/L) Target Risk = 8.33E-06	Remedial Action Objective [2] (ug/L)
Volatile Organics				
1,1,1-Trichloroethane	0.061	150000	NA	150000
1,1,2-Trichloroethane	0.061	2000	17000	2000
1,1-Dichloroethane	0.061	99000	150000	99000
1,1-Dichloroethene	0.061	4800	NA	4800
1,2,4-Trimethylbenzene	0.20	700	NA	700
1,2-Dichloroethane	0.061	200	9400	200
1,2-Dichloropropane	0.061	190	25000	190
1,3,5-Trimethylbenzene	0.061	5000	NA	5000
1,4-Dichlorobenzene	0.061	16000	31000	16000
1,4-Dioxane	0.061	15000	43000	15000
2-Butanone	0.20	460000	NA	460000
4-Methyl-2-Pentanone (MIBK)	0.20	99000	NA	99000
Benzene	0.20	1900	24000	1900
Ethylbenzene	0.061	19000	93000	19000
Methylene Chloride	0.061	14000	300000	14000
Tetrachloroethene	0.061	3400	7700	3400
Toluene	0.15	77000	NA	77000
Trichloroethene	0.061	54	45000	54
Vinyl chloride	0.061	910	5900	910
Xylenes (total)	0.20	9900	NA	9900

Notes:

NA - Toxicity values are not available for this endpoint.

[1] Refer to text for discussion of constituent-specific adjusted target hazard quotients.

[2] Final Remedial Action Objective (RAO) is the lower of the noncancer or cancer RAOs.