



UNITED STATES

ENVIRONMENTAL PROTECTION AGENCY

REGION III

STATEMENT OF BASIS

WABTEC

WILMERDING, PENNSYLVANIA

PAD004341269

I. Introduction

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) to solicit public comment on its proposed decision for the Wabtec facility located at 1001 Air Brake Avenue, Wilmerding PA 15148 (Facility). EPA's proposed decision consists of institutional controls (ICs), which are designed to minimize the potential for human exposure to contamination and to protect the integrity of the cleanup. The proposed ICs restrict land use to non-residential purposes and prohibit groundwater use beneath the Facility for drinking and agricultural purposes since contamination remains at the Facility above levels considered protective for unlimited use. This SB highlights key information relied upon by EPA in making its proposed decision.

The Facility is subject to EPA's Corrective Action Program under 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. §§ 6901 et seq. (Corrective Action Program). The Corrective Action Program is designed to ensure that certain facilities subject to RCRA have investigated and cleaned up any releases of hazardous waste and hazardous constituents that have occurred at their property. The Commonwealth of Pennsylvania (Commonwealth) is not authorized for the Corrective Action Program under Section 3006 of RCRA. Therefore, EPA retains primary authority in the Commonwealth for the Corrective Action Program.

The Administrative Record (AR) for the Facility contains all documents, including data and quality assurance information, on which EPA's proposed decision is based. See Section IX, Public Participation, for information on how you may review the AR.

II. Facility Background

The Facility property consists of approximately 38 acres and is bounded by Turtle Creek to the north and residential properties to the east. Railroad tracks form the southern boundary and commercial and residential properties lie to the west. A location map and property diagram are attached as Figures 1 and 2, respectively.

Construction of the Facility began in 1890 after George Westinghouse purchased the property, which had previously been used as farmland. The Westinghouse Air Brake Company manufactured railroad and mass-transit braking systems as the Westinghouse Air Brake Company (WABCO) until American Standard acquired the Facility in 1970. In 1992, American Standard divested the locomotive air brake business, which merged with MotivePower in 1999 to

form the Westinghouse Air Brake Technology Company (Wabtec).

In 2002, the Facility was divided into two lots. Thomas Real Estate Holdings purchased Lot 1, comprising approximately 18 acres and one large building on the western portion of the property. Lot 1 includes the Western Yard area and the southwestern portion of the Central Yard area. Thomas Real Estate leases the building for general warehousing to various tenants. Lot 2, comprising approximately 20 acres on the eastern portion of the property and including the former Foundry area and most of the Central Yard area, is still owned by Wabtec, which continues to manufacture pneumatic brake components and related devices such as air compressors, air dryers, and aftercoolers for locomotives. Both Lot 1 and Lot 2 have been remediated and include similar environmental covenants that restrict the uses of both lots (see Section V, below, for more information).

III. Summary of Environmental Investigation

The environmental investigations upon which EPA is relying were prepared pursuant to the Pennsylvania Land Recycling and Environmental Remediation Standards Act, commonly referred to as Act 2. This document will refer to “Act 2” or “Pennsylvania Statewide Health Standards” to remain consistent with the investigation reports. EPA has evaluated the standards and finds that the standards referenced are as protective of human health and the environment as EPA guidance requires.

In the mid-1980s, Wabtec initiated an extensive underground storage tank (UST) closure program. The USTs contained fuel oil, linseed oil, waste oils, gasoline, kerosene, and waste coolants and were scattered throughout the Facility. Wabtec excavated or closed these tanks. Any contaminated soils encountered during the UST closures were excavated and disposed of off-site. A hydrocarbon recovery system consisting of three recovery wells and an oil/water separator was constructed near Building 55 to recover groundwater contaminated by leaks from nearby USTs that had been removed.

In June 1989, EPA conducted a Preliminary Assessment that identified 12 solid waste management units and four areas of concern, many of which were areas associated with the UST closure program. The assessment included recommendations for additional monitoring and characterization, which Wabtec completed in subsequent remedial efforts.

In January 1991, Wabtec performed a Phase II Environmental Site Assessment. This assessment identified the need for additional investigation in the northern portion of the Central Yard area and in the former Foundry area. In April 1992, Wabtec undertook a soil gas survey to identify remaining source areas. Soil borings and groundwater monitoring wells were then installed based on the results of the soil gas survey.

From November 1996 through February 2005, the Facility submitted several reports to PADEP under Act 2, which led PADEP to direct additional sampling. A table listing a summary of these investigations is shown below:

Report	Summary
Environmental Investigation Report, November 1996	Characterized volatile organic compound (VOC) and total petroleum hydrocarbon (TPH) concentrations in subsurface soil and groundwater, and areas of light non-aqueous phase liquid (LNAPL) plumes
Final Report, December 1997	Sought attainment of Statewide Health Standard (SHS) for surface water and soil, and Site-Specific Standard (SSS) for groundwater; PADEP disapproved
Notice of Intent to Remediate, October 1998	Proposed attainment of SSS for soil and groundwater
Remedial Investigation, May 2001	Proposed SSS based on attainment of ambient water quality criteria for surface water and volatilization of contamination to indoor air, which were main exposure pathways; PADEP disapproved

In February 2005, Wabtec submitted a Remedial Investigation report to PADEP that included additional soil borings and monitoring wells. Samples collected for this report were analyzed for total compound list VOCs, polycyclic aromatic hydrocarbons (PAH), and metals which were RCRA hazardous wastes. Results from this investigation indicated impacts to soil and groundwater from chlorinated VOCs primarily in the northern portion of the Central Yard area, and PAHs and metals primarily in the Western Yard area. This report was approved by PADEP in June 2005.

The Facility submitted a Risk Assessment report to PADEP in October 2005. Exposure to groundwater and migration of soil contamination to groundwater were deemed incomplete exposure pathways, as a deed restriction was anticipated that would prohibit groundwater use. Complete exposure pathways that were assessed for risk included direct contact with contaminated soil and inhalation of contaminated indoor air due to vapor intrusion from groundwater. After receiving responses and addenda that supplemented the human health risk and surface water modeling calculations, PADEP approved the Risk Assessment report in March 2007.

In October 2007, the Facility submitted a Cleanup Plan in accordance with Act 2 that outlined activities to:

1. remove lead-impacted soil from two locations in the Western Yard area;
2. monitor concentrations of 1,1-dichloroethene (1,1-DCE) in monitoring well MW-25D in the Central Yard area near Turtle Creek for two years to ensure modeled concentrations of 1,1-DCE in surface water would not exceed ambient water quality criteria; and,
3. extract LNAPL from monitoring well MW-30S in the Central Yard area until attainment is demonstrated. Attainment is defined as measured LNAPL thickness being equal to or less than 0.1 feet for four consecutive quarters of monitoring following an initial measured thickness of less than 0.01 feet.

The Cleanup Plan also included a post-remediation care plan that required institutional

controls to restrict land use to non-residential purposes and prohibit groundwater use for drinking or agricultural purposes. PADEP approved the Cleanup Plan in February 2008.

Following approval of the Cleanup Plan, Wabtec implemented the remedial measures. Well MW-25D was sampled quarterly from January 2007 to November 2008, during which concentrations of 1,1-DCE remained well below levels of concern. LNAPL was extracted from MW-30S in April 2008, and thickness measurements over eight consecutive quarters were consistently below levels of concern. Over 88 tons of lead-contaminated soil were excavated from the two impacted areas of the Western Yard and disposed of off-site by March 2009. A post-remediation risk assessment for this area demonstrated that excavation of the lead-impacted soil reduced the mean lead soil concentrations to levels resulting in projected blood-lead concentrations for site workers that were below levels of concern.

EPA visited the Facility in May 2010 as part of an Environmental Indicator (EI) inspection to determine whether human exposures to any contamination and the migration of any contaminated groundwater were under control at the Facility. This inspection consisted of a review of solid waste management units and other areas of concern, and included a review of cleanup progress under the Act 2 program. No releases or evidence of spills were observed during the inspection. As a result of this inspection, EPA determined that both EIs were under control at the Facility.

The remedial activities discussed above are outlined in the Final Report, which was submitted to PADEP in October 2010. The Final Report also included the list of institutional controls required as part of the final cleanup of the Facility. In addition to the institutional controls of land use and groundwater use restrictions imposed on the Facility, the Final Report recommended two additional institutional controls as added protective measures: 1) a restriction on the construction of future buildings in the Central Yard and former Foundry areas with VOC impacts to soil and groundwater to ensure vapor intrusion would not be an issue; and 2) a requirement for the proper handling of any future excavations performed at the Facility. PADEP approved the Final Report in December 2010.

IV. Corrective Action Objectives

EPA's Corrective Action Objectives for the Facility are the following:

1. Soils

EPA has determined that Pennsylvania's non-residential Statewide Health Standards for direct contact with soils are protective of human health and the environment for individual contaminants at this Facility provided that the Facility is not used for residential purposes. Therefore, EPA's Corrective Action Objective for Facility soils is to control exposure to the hazardous constituents remaining in soils by requiring the compliance with and maintenance of land use restrictions at the Facility.

2. Groundwater

EPA has determined that Pennsylvania's non-residential Statewide Health Standards for groundwater are protective of human health and the environment for individual contaminants at this Facility provided that consumptive uses of groundwater are prohibited. Therefore, EPA's Corrective Action Objective for Facility groundwater is to control exposure to the hazardous constituents remaining in the groundwater by requiring the compliance with and maintenance of groundwater use restrictions at the Facility.

V. Proposed Decision

Institutional Controls

ICs are non-engineered instruments such as administrative and/or legal controls that minimize the potential for human exposure to contamination and/or protect the integrity of the decision by limiting land or resource use. Under this proposed decision, some contaminants remain in the soil and groundwater at the Facility above levels appropriate for residential uses. Because contaminants will remain in the soil and groundwater at the Facility above levels appropriate for residential use, EPA's proposed decision requires the compliance with and maintenance of the following institutional controls to restrict land and groundwater use:

1. The Facility property shall be used solely for non-residential purposes, in accordance with Act 2 and PADEP regulations. No residential use of the Facility property shall take place without first addressing soil and groundwater containing contaminants that exceed residential SHS or other applicable standards then in effect.
2. The groundwater at and under the Facility shall not be used for potable purposes or agricultural activities, including, but not limited to, irrigation of crops, watering of livestock, and food production, processing, or packaging.

The components of EPA's proposed decision are enforceable under two Environmental Covenants (one for Lot 1 and one for Lot 2) pursuant to the Pennsylvania Uniform Environmental Covenants Act, 27 Pa. C.S. Sections 6501-6517 (UECA) that were recorded on February 23, 2011 with the Allegheny County Recorder of Deeds. While the institutional controls described above are sufficient to minimize the potential for human exposure to contamination at the Facility and to protect the integrity of the final decision, if the Facility fails to meet and maintain its obligations under the environmental covenant, or if EPA, in its sole discretion, deems that additional operation and maintenance and monitoring activities and/or institutional controls are necessary to protect human health or the environment, EPA has the authority to require and enforce additional corrective actions.

VI. Evaluation of EPA's Proposed Decision

This section provides a description of the criteria EPA used to evaluate the proposed decision 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.

A. Threshold Criteria

1. Protect Human Health and the Environment

EPA’s proposed decision protects human health and the environment by preventing exposure to contamination remaining at the Facility. Under PADEP oversight, over 88 tons of contaminated soil were removed from the Facility. In addition, the proposed decision adopts PADEP’s land use restriction prohibiting residential use.

With respect to groundwater beneath the Facility, LNAPL has been removed to the extent practicable. PADEP concluded and EPA agrees that potential impacts to Turtle Creek due to remaining groundwater contamination are below levels of concern. The proposed decision restricts groundwater use to prevent human exposure to groundwater contamination.

2. Achieve Media Cleanup Objectives

The Facility has achieved the Site-Specific Standards for both soils and groundwater under PADEP’s Act 2 program. Both of these standards meet EPA risk guidelines for human health and the environment at the Facility (see table below for each SSS).

Constituent/media	Site-Specific Standard
Lead in lead-impacted soil area	953 mg/kg
LNAPL in MW-30S	Less than 0.1 feet for 8 consecutive quarters
1,1-DCE in MW-25D	Less than 148 ug/L for 8 consecutive quarters
Groundwater	Pathway elimination/restricted use

Soils contaminated above SHS have been removed and/or capped with impervious surface, and land use has been restricted to non-residential purposes. Potable and agricultural uses of the groundwater have been prohibited through an institutional control, and remaining groundwater contamination has been shown, through modeling, not to discharge into surface water above levels of concern. The Site-Specific Standards of pathway elimination and restricted use through institutional controls for this Facility prevent exposure to remaining contamination.

3. Remediating the Source of Releases

In all proposed decisions, EPA seeks to eliminate or reduce further releases of hazardous wastes or hazardous constituents that may pose a threat to human health and the environment. As shown in the October 2010 Final Report, the Facility met this objective by removing or closing in place over 30 USTs and excavating over 88 tons of lead-impacted soil. There are no remaining large, discrete sources of waste from which constituents would be released to the environment. Therefore, EPA has determined that this criterion has been met.

B. Balancing/Evaluation Criteria

1. Long-Term Effectiveness

The proposed ICs will maintain protection of human health and the environment over time by controlling exposure to the hazardous constituents remaining in soil and groundwater. EPA's proposed decision requires the compliance with and maintenance of institutional controls to restrict land use and groundwater use at the Facility. The land use and groundwater use restrictions have already been implemented through environmental covenants recorded in the chain of title for the Facility. The environmental covenants run with the land and as such is enforceable by the State against future land owners.

2. Reduction of Toxicity, Mobility, or Volume of the Hazardous Constituents

The reduction of toxicity, mobility and volume of hazardous constituents at the Facility has already been achieved by removing or closing in place over 30 USTs, operation of a product recovery system and other LNAPL recovery methods, and the excavation of over 88 tons of lead-impacted soil.

3. Short-Term Effectiveness

EPA's proposed decision does not involve any activities, such as construction or excavation, that would pose short-term risks to workers, residents, and the environment. In addition, the land use and groundwater use restrictions have already been implemented through environmental covenants recorded with the deed for the Facility.

4. Implementability

EPA's proposed decision is readily implementable. The ICs are in place. Therefore, EPA does not anticipate any regulatory constraints in implementing its proposed decision.

5. Cost

EPA's proposed decision is cost effective. Given that an environmental covenant has already been recorded in the chain of title for the Facility property, there should be no additional cost associated with the proposed decision, and minimal costs to monitor or enforce the environmental covenants.

6. Community Acceptance

EPA will evaluate Community acceptance of the proposed decision during the public comment period and will be described in the Final Decision and Response to Comments.

7. State/Support Agency Acceptance

EPA will evaluate State acceptance based on comments received from PADEP during the public comment period and will be described in the Final Decision and Response to Comments.

VII. Environmental Indicators

EPA sets national goals to measure progress toward meeting the nation's major environmental goals. For Corrective Action, EPA evaluates two key environmental indicators for each facility: (1) current human exposures under control and (2) migration of contaminated groundwater under control. The EPA has determined that the Facility met these indicators on January 24, 2012.

VIII. Financial Assurance

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

IX. Public Participation

Before EPA makes a final decision on its proposal for the Facility, the public may participate in the decision selection process by reviewing this SB and documents contained in the Administrative Record (AR) for the Facility. The AR contains all information considered by EPA in reaching this proposed decision. It is available for public review during normal business hours at:

U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103
Contact: Griff Miller
Phone: (215) 814-3407
Fax: (215) 814-3113
Email: miller.griff@epa.gov

Interested parties are encouraged to review the AR and comment on EPA's proposed decision. The public comment period will last thirty (30) calendar days from the date that notice is published in a local newspaper. You may submit comments by mail, fax, or e-mail to Mr. Miller. EPA will hold a public meeting to discuss this proposed decision upon request. Requests for a public meeting should be made to Mr. Miller.

EPA will respond to all relevant comments received during the comment period. If EPA determines that new information warrants a modification to the proposed decision, EPA will modify the proposed decision or select other alternatives based on such new information and/or public comments. EPA will announce its final decision and explain the rationale for any changes in a document entitled the Final Decision and Response to Comments (FDRTC). All persons who comment on this proposed decision will receive a copy of the FDRTC. Others may obtain a copy by contacting Mr. Miller at the address listed above.

List of Figures

Figure 1: Site Location
Figure 2: Site Layout

Date:

Abraham Ferdas, Director
Land and Chemicals Division
US EPA, Region III

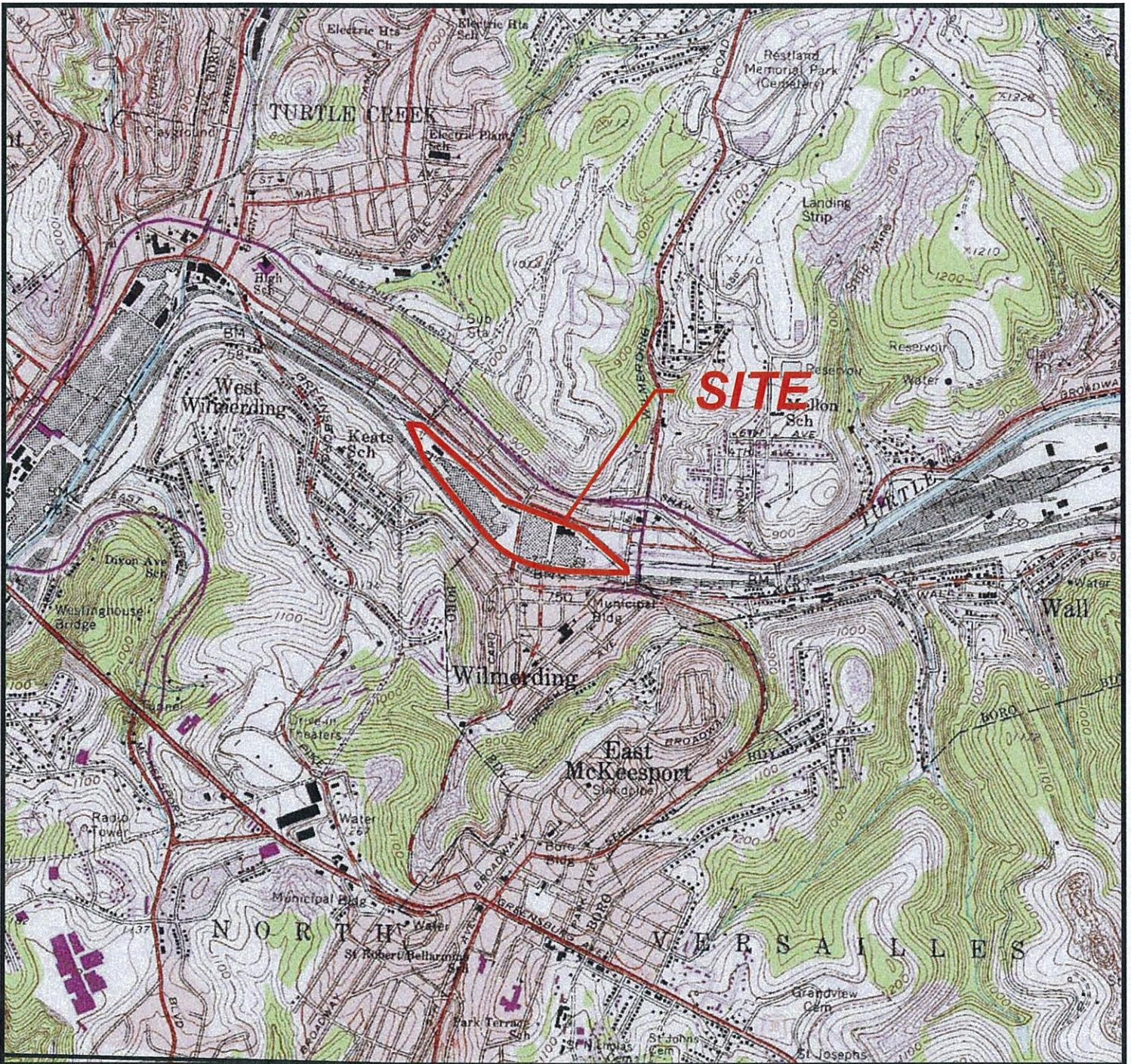
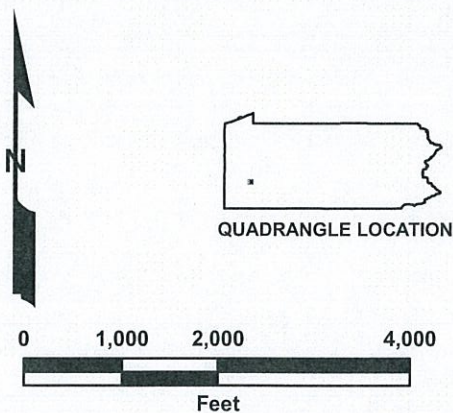


FIGURE 1
 SITE LOCATION
 WABTEC FACILITY
 WILMERDING, PENNSYLVANIA

PREPARED FOR
 WABTEC CORPORATION
 WILMERDING, PENNSYLVANIA



SOURCE
 "DIGITAL RASTER GRAPHIC MOSAIC OF ALLEGHENY COUNTY,
 PENNSYLVANIA", U.S. DEPARTMENT OF AGRICULTURE, NATURAL
 RESOURCES CONSERVATION SERVICE, 2002. QUADRANGLE
 LOCATION REFERENCES THE BRADDOCK, PENNSYLVANIA USGS
 7.5-MINUTE QUADRANGLE.



APP. BY	WTN	04/15/09
CHK. BY	MPR	04/08/09
DRN. BY	BAS	04/08/09
SIZE	B	94001-021-01

1" = 150'
 SCALE: 1" = 150'
 N

LEGEND:
 APPROXIMATE PROPERTY BOUNDARY
 BUILDING FOOTPRINT
 FORMER BUILDING FOOTPRINT
 FORMER RAILROAD TRACKS
 RAILROAD TRACKS
 CHANNELIZED STREAM
 FENCE
 L M
 1 2
 SAMPLING GRID

MONITORING WELL LOCATION
 DEPTHES/UNDETECTABLE MONITORING WELL LOCATION (APPROXIMATE)
 ABANDONED MONITORING WELL LOCATION
 PEZOMETER LOCATION
 RECOVERY WELL LOCATION
 SOIL BORING LOCATION
 SURFACE SOIL SAMPLE LOCATION
 HISTORICAL SOIL BORING LOCATION
 SURFACE WATER MEASURING REFERENCE POINT
 FORMER UST TEST PIT EXCAVATION
 FORMER UST LOCATION



PLATE 1
 SITE LAYOUT
 WABTEC FACILITY
 WILMERDING, PENNSYLVANIA
 WABTEC CORPORATION
 WILMERDING, PENNSYLVANIA

APP. BY	MM	DATE	02/17/05
CHK. BY	MM	DATE	02/17/05
DES. BY	MM	DATE	02/09/05
SCALE	AS SHOWN	DATE	02/09/05
NO. SHEETS	1	TOTAL SHEETS	1
PROJECT NO.	94001-C-P1		

American Consulting, Inc.
 1001 Air Brake Avenue, Wilmerding, Pennsylvania 15151

NOTES:
 1. SHALLOW, DEEP, OR BEDROCK MONITORING WELLS ARE SURFICED BY S, O, OR BR, RESPECTIVELY.
 2. PORTIONS OF THIS PLAN ARE PRESENTED IN COLOR, SUPERIMPOSED BLACK AND WHITE COPIES.
 MW NOT DEPICIT ALL INFORMATION AS PRESENTED IN THE ORIGINAL DOCUMENT.

REFERENCE:
 PLAN OF SURVEY, STUDY IN WILMERDING BOROUGH, ALLEGHENY COUNTY, PENNSYLVANIA,
 WILMERDING, PENNSYLVANIA, PREPARED BY THOMAS F. EASTON, PROFESSIONAL LAND SURVEYOR OF
 PITTSBURGH, PENNSYLVANIA, FEBRUARY 2001, AND UPDATED JULY 7, 2003.

Source: AGL, 2005.

SCALE: AS SHOWN
 S.O. NO.: 118047
 DSN/DWN: MM/WJH

DATE: AUGUST 2010
 FILE: 118047-WAB-02
 CHK: MM

Baker
 MICHAEL BAKER JR., INC.
 MOON TOWNSHIP, PENNSYLVANIA

FIGURE 2
 SITE LAYOUT
 WABCO
 1001 AIRBRAKE AVENUE, WILMERDING, PENNSYLVANIA