

**Bayer MaterialScience LLC**

## **Corrective Measures Study Report**

125 New South Road  
Hicksville, New York  
USEPA ID No. NYD002920312

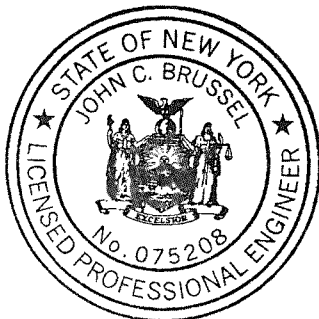
February 2012

# ARCADIS

## Certification

I, John C. Brussel, P.E., certify that I am currently a New York State registered professional engineer as defined in Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (6 NYCRR) Part 375 titled "Environmental Remediation Programs". To the best of my knowledge, and based on my inquiry of the persons involved in preparing this document under my direction, I certify that this Corrective Measures Study Report for the Bayer site at 125 New South Road in Hicksville, New York was completed in general accordance with the following:

- The New York State Department of Environmental Conservation (NYSDEC) approved Corrective Measures Study Work Plan contained in a May 27, 2008 letter from ARCADIS to the NYSDEC.
- The NYSDEC Division of Environmental Remediation guidance document titled "DER-10 / Technical Guidance for Site Investigation and Remediation" dated May 2010.
- 6 NYCRR Part 375-1.8(f) titled "Remedy Selection".
- Supplemental guidance and correspondence referenced throughout this Corrective Measures Study Report.



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2/29/12

## **Corrective Measures Study Report**

125 New South Road  
Hicksville, New York

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February 2012

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## Compact Disc

Phase II Environmental Site Assessment (Impact Environmental, November 2006)

## 1. Introduction

This Corrective Measures Study (CMS) Report (the “Report”) presents the results of a CMS that was conducted to identify and evaluate potential final corrective measure alternatives to address the presence of chemical constituents remaining in onsite soils and soil vapor at the Bayer MaterialScience LLC (Bayer) site located at 125 New South Road in Hicksville, New York (the “Site”). The focus of this Report is site-related soils, as groundwater is being addressed by the United States Environmental Protection Agency (USEPA). This Report has been prepared by ARCADIS on behalf of Bayer pursuant to the Resource Conservation and Recovery Act (RCRA) Corrective Action Program.

Three interim corrective measures (ICMs) have been performed at the Site under the RCRA Corrective Action Program, including one each in 2005, 2006, and 2009. Various remedial activities have also been performed at the Site under the Federal Superfund program since the 1990s.

The overall objective of this Report is to use the information from previous investigations and remedial activities at the Site to develop, evaluate, and recommend final corrective measures alternatives that are protective of human health and the environment, and comply with State and Federal standards, criteria, and guidance that are applicable or relevant and appropriate to the alternatives.

This Report has been prepared in accordance with the following, where appropriate:

- The USEPA Office of Solid Waste and Emergency Response (OSWER) Directive 9902.3-2A – RCRA Corrective Action Plan, dated May 1994;
- New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum (TAGM) titled *Selection of Remedial Actions at Inactive Hazardous Waste Sites*, HWR-90-4030, revised May 15, 1990 (TAGM 4030).
- NYSDEC Division of Environmental Remediation’s *DER-10 Technical Guidance for Site Investigation and Remediation*, dated May 2010 (DER-10).
- Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (6 NYCRR) Part 375 titled “Environmental Remediation Programs”.

- NYSDEC Final Commissioner Policy CP-51/Soil Cleanup Guidance, issued October 2010 (CP-51/Soil Cleanup Guidance).
- *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, dated October 2006 (New York State Department of Health, 2006) [hereinafter, “the NYSDOH VI Guidance”].
- A May 21, 2008 letter from ARCADIS to the NYSDEC presenting the CMS Work Plan, which was approved by the NYSDEC on May 27, 2008.
- September 9, 2010 e-mail correspondence from Bayer responding to USEPA questions on the initial “draft” CMS Report that was submitted to the NYSDEC on August 2, 2010.
- Conference calls with the NYSDEC, NYSDOH and USEPA on November 16, 2010, December 6, 2010, and January 12, 2011, to discuss hybrid alternatives to the “draft” CMS Report. The calls were a follow-up to an October 15, 2010 NYSDEC letter providing comments on the “draft” CMS Report.
- A February 7, 2011 letter from ARCADIS on behalf of Bayer that addressed: (1) the NYSDEC’s October 15, 2010 comments on the “draft” CMS Report; (2) key items of discussion from the three above-identified conference calls; and (3) comments from the Town of Oyster Bay provided in a January 10, 2011 letter from Cashin Spinelli & Ferretti, LLC (CSF) to the NYSDEC.
- A March 30, 2011 letter from the NYSDEC to Bayer issuing conditional approval of the “draft” CMS Report. The letter also included March 28, 2011 comments from CSF on behalf of the Town of Oyster Bay.
- An April 19, 2011 letter from ARCADIS to the NYSDEC that presents Bayer’s response to the conditional approval of the “draft” CMS Report.
- October 11, 2011 e-mail correspondence from the NYSDEC providing approval of a Metals Soil Delineation Summary Report for additional sampling performed to further delineate the extent of metals-containing soils at the site.

Following NYSDEC approval of this revised Report, a Proposed Remedial Action Plan (PRAP) will be developed that will identify the preferred corrective measure alternative,

summarize the alternatives considered, and provide the reasons for proposing the preferred alternative.

## 1.1 Purpose and Objectives

The purpose of this Report is to identify and evaluate corrective measures alternatives that are appropriate for site-specific conditions, protective of human health and the environment, and consistent with applicable laws, regulations, and guidance documents. The overall objective of this Report is to recommend a corrective measure alternative that adequately mitigates potential threats to human health and the environment arising from chemical constituents detected in soil and soil vapor at the Site and is consistent with the corrective measures objectives (CMOs) for the Site.

## 1.2 Report Organization

The CMS Report is organized into the following sections:

Section	Purpose
Section 1 – Introduction	Presents a brief overview of the project, describes the purpose of the document, and presents background relevant to the development of the CMS Report, including past investigation and remedial activities.
Section 2 – Current Conditions and Future Land Use	Presents a summary of the Areas of Concern (AOCs) included in the CMS, discusses the results of soil and soil vapor sampling activities performed in support of the CMS, and identifies potential future land uses.
Section 3 – Standards, Criteria & Guidance (SCGs)	Identifies SCGs referred to in the development and selection of remedial alternatives.
Section 4 – Technology Screening and Development of Corrective Measures Alternatives	Presents the results of the identification and screening of remedial technologies and the development of remedial alternatives that have the potential to meet the CMOs.

Section	Purpose
Section 5 – Evaluation of Final Corrective Measures Alternatives	Presents an evaluation of proposed corrective measures alternatives against evaluation criteria presented in NYSDEC TAGM 4030, DER-10, and 6 NYCRR Part 375.
Section 6 – Comparative Analysis of Final Corrective Measures Alternatives	Presents a comparative analysis of the alternatives and identifies the selected corrective measures alternative and the rationale used for selection.
Section 7 – References	Provides references used to prepare the CMS Report.

### 1.3 Background Information

This section presents relevant background information used to develop the CMS. A description of the Site is presented below, followed by a presentation of topography and drainage in the vicinity of the Site, discussion of the geologic and hydrogeologic setting of the Site, and a summary of historical site information. This section also summarizes results obtained from previous investigation activities and remedial activities, and the results of a qualitative exposure assessment for potential human receptors.

#### 1.3.1 Site Description

The Site consists of a 14-acre triangular-shaped parcel located just southeast of the intersection of New South Road and Commerce Place in the City of Hicksville, New York. The Site is bordered to the north by industrial properties, to the south and west by the Long Island Railroad (LIRR) and commercial/industrial properties, and to the east by a commercial building complex owned by Simone Development (an affiliate of New South Road Realty [NSRR], the party that entered an agreement to purchase the Site from Bayer) and a complex owned by Northrop Grumman Corporation (Northrop Grumman). A site location map is included on Figure 1.

Aside from the Administration Building located in the northern portion of the Site, all other buildings and aboveground structures formerly used in connection with site operations were demolished down to their floor slabs in 2003. The building floor slabs and foundations were demolished and removed between December 2005 and February 2006 in accordance with the NYSDEC-approved *Demolition Work Plan*



(ARCADIS BBL, July 2005) and follow-up correspondence. The location of the Administration Building, the former (demolished) buildings and structures, and the various areas of concern (AOCs) evaluated through the RCRA corrective action process, are shown on Figure 2.

Non-masonry building materials generated by the demolition activities were transported for offsite reclamation/disposal. Impacted concrete and masonry wall materials and impacted concrete flooring/foundations were also transported for offsite disposal. The non-impacted concrete and masonry from the demolition activities were crushed and used onsite as hard fill onsite or stockpiled onsite for future use. The stockpiled material was used as subsurface fill during the 2009 ICM to backfill various excavation areas and portions of the onsite sumps (also referred to as AOCs 28-30). Details of the foundation demolition activities, including related characterization sampling and material handling activities, are presented in the *Demolition Summary Report* (ARCADIS BBL, April 2007).

Further detailed site background information, including the topography and drainage, geologic and hydrogeologic setting, environmental setting, historic site operations, overview of investigation activities, overview of soil vapor investigation (SVI) and vapor intrusion (VI) investigation activities, and overview of remedial activities are presented below.

#### 1.3.2 Site Topography and Drainage

The Site is located on relatively level land at an elevation of approximately 129 to 134 feet above mean sea level. The northwestern portion of the Site (the vicinity of Plant 3 and the parking lot) slopes gently to the west, and the southern portion of the Site (vicinity of Plant 1) slopes gently to the south. Because most of the Site is relatively flat, most of the stormwater infiltrates the ground surface. Some of the stormwater at the Site flows to the recharge basins/rainwater runoff sumps (via overland flow and storm sewer piping).

Sanitary wastewater from the facility was formerly conveyed via underground piping to several septic tanks and cesspools/leachate pits (refer to Figure 3 for septic tank and leachate pit locations). The leachate pits were eventually abandoned in-place when sanitary sewer piping was installed to convey the sanitary wastewater to the municipal sewer system beneath Commerce Place.

### 1.3.3 Geologic/Hydrogeologic Setting

The Site is located in northeastern Nassau County, which is underlain by unconsolidated coastal plain deposits of Cretaceous (60 to 140 million years ago [mya]), Tertiary (2 to 60 mya), and Quaternary age (thousands to 2 mya), overlying metamorphic rocks of Precambrian age (570 mya and greater). The City of Hicksville is located on a generally featureless glacial outwash plain of well-sorted and stratified sand and gravel that slopes gently to the south.

The upper aquifer in the area is identified as the Harbor Drift Quaternary glacial unit, which is composed of sand, gravel, and till deposited by two advances of ice during the Wisconsin Glaciation (Isbister, 1966). Two formations lie below the Harbor Drift Unit, including the Magothy Formation and the underlying Raritan Formation. The Magothy Formation is composed of sand inter-bedded with silt and clay. The Raritan Formation includes the upper clay member and lower Lloyd Sand Member, which lies unconformably on bedrock. The upper clay member is composed primarily of clay and silty clay and lenses of sand and gravel. The Lloyd Sand Member is a stratified deposit, comprising discontinuous layers of sand, gravel, sandy clay, silt, and clay.

The bedrock of the region is Precambrian biotite schist, which is a metamorphic rock of igneous origin. The bedrock surface is relatively smooth and dips to the southeast. The bedrock forms the virtually impermeable base of the groundwater reservoir (Isbister, 1966).

The Site sits on the Harbor Drift Unit, which is composed primarily of glacial outwash sand and gravel. The Magothy aquifer, immediately below the Harbor Drift Unit, is the principal aquifer in the region. It is bounded at the top by the water table and at the bottom by the relatively impermeable Clay Member of the Raritan Formation. The upper part of the Magothy aquifer, consisting of a range glacial outwash sand, gravel, and till, contains water under unconfined conditions. In areas underlain by till of relatively low permeability, the downward movement of water is retarded. Perched and semi-perched water occurs in many places (Isbister, 1966). The lower part of the Magothy aquifer, consisting of heterogeneous sands and gravels, becomes increasingly confined with depth due to numerous discontinuous lenses of silt and clay in the Magothy Formation. Individually, these units do not constitute a distinct confining unit. However, their combined influence through a considerable thickness of the formation acts to impede vertical movement of groundwater. The Magothy aquifer is the primary source of water for municipal and industrial use in the vicinity of the Site.

The aquifer is recharged by infiltration of precipitation, industrial discharges, and stormwater runoff collected via recharge basins.

The deep confined aquifer is the lowermost aquifer in the area. It consists mainly of Lloyd Sand. The clay member of the Raritan Formation confines the Lloyd in most of the area. Bedrock forms the lower boundary of the deep confined aquifer.

Based on available information, groundwater at the Site is located at depths greater than 50 feet below ground surface (bgs). The general groundwater flow direction in the vicinity of the Site is north to south. Locally, the flow direction is influenced by the range in lithology of the Pleistocene deposits and by municipal and industrial pumping centers and recharge basins.

#### 1.3.4 Environmental Setting

The Site is generally covered with crushed stone/gravel, crushed concrete, or vegetation (grass or brush). A large asphalt-paved parking area is located in the western portion of the Site, and a series of rainwater runoff sumps/recharge basins are located along the eastern property boundary. Additionally, a railroad spur enters the northwestern portion of the Site and extends eastward beyond the former Plant 2 building. Access to the Site is limited by a chain-link fence and locking gates.

#### 1.3.5 Historic Site Operations & Demolition

The Site was formerly used as a production facility for polyester resin, polyurethane dispersions, and polyvinyl chloride (PVC). The facility was originally constructed in 1945 and operations were expanded in subsequent years. The facility was previously owned/operated by the Hooker Chemical and Plastic Corporation/Occidental Chemical Corporation (HCPC/OCC) from 1966 to 1982. The facility was designated as a Superfund site and placed on the National Priorities List (NPL) established under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) in 1984. Various soil and groundwater investigation/remedial activities have been implemented since that time.

Ruco Polymer Corporation (Ruco) purchased the facility from HCPC/OCC in 1982. The purchase agreement indemnified Ruco for environmental liabilities associated with facility operations conducted prior to the sale. Ruco operated an onsite RCRA interim status drum storage facility in the early 1980s, which formed the basis for the *RCRA Facility Investigation* (RFI) [Blasland, Bouck, & Lee, Inc. (formerly BBL, and now

ARCADIS), 2004] and subsequent RCRA corrective action activities. Ruco was acquired by Sybron Chemical Corporation (Sybron) in 1988, and Sybron became the facility owner. Sybron was, in turn, acquired by Bayer Corporation in 2000, and Bayer Corporation became the facility owner. Facility ownership was transferred from Bayer Corporation to Bayer Polymers LLC in 2003 as part of a corporate restructuring. As part of further restructuring, Bayer Polymers LLC became Bayer MaterialScience LLC in 2004. As the successor to Ruco, Bayer received the HCPC/OCC indemnification for environmental liabilities associated with former facility operations.

Based on economic evaluation, manufacturing operations were discontinued during 2002 and transferred to existing Bayer facilities in Georgia and West Virginia. In an effort to prepare the Site for future sale and economic redevelopment, all raw materials, products, and hazardous chemicals were removed from the Site. In addition, facility equipment was decommissioned and tanks/piping were closed pursuant to applicable regulations. Asbestos-containing materials were removed and all other buildings and aboveground structures formerly used in connection with site operations were demolished down to their floor slabs in 2003 (except for the Administration Building located in the northern portion of the Site).

Subsequent to the demolition of the above-ground portions of the buildings, pre-demolition characterization sampling was performed as described in the NYSDEC-approved *Demolition Work Plan*. The characterization sampling was performed on the stockpiled construction and demolition (C&D) debris (from the 2003 building demolition) and the concrete building floor slabs in preparation for “foundation” demolition activities. The sampling was performed to determine whether the materials could be re-used (as onsite or offsite fill material) or required offsite disposal. The concrete floor slabs and other concrete surfaces, including ramps, driveways, and former equipment/tank pads were demolished in 2005 and 2006 in accordance with the *Demolition Work Plan*.

After the demolition activities were completed, the impacted concrete C&D debris were transported for offsite disposal. Remaining concrete and/or C&D debris that could be reused onsite as backfill (considered exempt C&D debris) were crushed and placed into stockpiles onsite. Some of the stockpiles containing exempt C&D debris were used as onsite fill during ICM activities later in 2006.

In accordance with a January 20, 2006 letter from ARCADIS BBL (now ARCADIS) to the NYSDEC, the concrete from the eastern two-thirds of the former Pilot Plant and surrounding slabs and from the AOC-39 area, was crushed and then transported for

offsite disposal as a nonhazardous waste. Based on pre-demolition characterization sampling, concrete removed from the western one-third of the former Pilot Plant [which included the concrete characterized by a sample where polychlorinated biphenyls (PCBs) were identified at a concentration above 50 parts per million (ppm)] was transported for offsite disposal as a Toxic Substances and Control Act- (TSCA-) regulated/NYS hazardous waste. Details of the handling of the impacted concrete and other C&D debris are presented in the *Demolition Summary Report* (ARCADIS BBL, April 2007).

The remaining stockpiles of crushed concrete remaining onsite were used as subsurface fill material during the 2009 ICM, with one exception as noted below. The stockpiled material was used to backfill several of the excavation areas and portions of the onsite sumps (AOCs 28-30). One of the stockpiles had concentrations of PCBs exceeding 10 ppm and was therefore removed and transported for offsite disposal as part of the 2009 ICM.

#### 1.3.6 Summary of Investigation Activities

A summary of previous soil and groundwater investigations conducted at the Site is presented below, followed by a summary of previous SVIs and VI investigation conducted at the Site and a VI investigation conducted at the NSRR-owned property adjacent to (east of) the Site.

#### Soil and Groundwater Investigations

Based on available information, site environmental investigations began in the mid 1980s. The primary environmental concerns evaluated by these activities include:

- Former discharge of plant wastewater containing volatile organic compounds (VOCs) and heavy metals into onsite sumps/recharge basins.
- Past release of heat transfer fluids containing PCBs.

Three operable units (including OU1, OU2, and OU3) were established in connection with the investigation activities.

- OU1 – Onsite Soil and Groundwater: This OU consists of groundwater beneath the property and soil in four areas, including two sumps/recharge basin areas referred to as Sump Nos. 1 and 2 (which correspond to AOC Nos. 28 and 29

shown on Figure 3), a former drum storage area north of the sumps, and an area around a nearby groundwater monitoring well. Constituents of interest (COIs) within the soil and groundwater included PVC, styrene/butadiene, vinyl chloride, vinyl acetate copolymer, polyurethane, trichloroethene, barium, cadmium, and organic acids. A Record of Decision (ROD) for this OU was signed by USEPA in 1994 (ROD R01-94/235). The ROD required additional investigation in certain areas, operation/maintenance/monitoring (OM&M) of a groundwater extraction and treatment system, soil flushing within the two sumps (via discharge of treated groundwater and recapture by extraction wells), treatability studies, excavation/offsite disposal of soils within the drum storage area and near the existing monitoring well, and institutional controls. Remedial activities within OU1 were completed by HCPC/OCC.

- **OU2 – PCB Soil Removal:** This OU consists of soil/debris within four areas, including a “direct-spill area” in the vicinity of the Pilot Plant where heat transfer fluid was released through a relief valve, the area surrounding the Pilot Plant where fluid was spread by onsite truck traffic, a sump/recharge basin that received surface water runoff from the vicinity of the Pilot Plant (Sump No. 3, which is also referred to as AOC 30 and shown on Figure 3), and former soil stockpile areas east and south of the Pilot Plant. PCBs and organic constituents were the primary COIs for this OU. A ROD for this OU was signed by the USEPA in 1990 (ROD R02-90/121). The ROD required the excavation and offsite treatment/disposal of soils with PCBs at concentrations greater than 10 ppm. Remedial activities within OU2 were presumed to be completed in December 2001 by HCPC/OCC. However, later sampling as part of the RCRA Corrective Action Program identified further PCB impacts in this area that have been addressed by ICMs. Various actions to address remaining impacts in this area are evaluated in this CMS.
- **OU3 – Offsite Groundwater:** The pump and treat system under OU1 was eliminated and the offsite groundwater impacts element was transferred to OU3 as an offsite component of the OU3 remedy. The remedial design for OU3 includes biosparging for VOCs, groundwater monitoring and participating in the downgradient Northrop Grumman and Naval Weapons Industrial Reserve Plant (NWIRP) groundwater containment system. HCPC/OCC is performing the VOC biosparging program which also includes groundwater and vadose zone monitoring.

In addition to the above OUs, a total of 76 solid waste management units (SWMUs)/Areas of Concern (AOCs) were identified based on review of former facility

operations. SWMUs/AOCs were first identified in the *Comprehensive Site Closure Plan* for the Hicksville Facility prepared by Bayer and submitted to the NYSDEC in October 2002. The SWMUs/AOCs were identified during site visits by the NYSDEC conducted in December 2002 and May 2003. Based on an evaluation of existing information and the potential for environmental releases, 58 of the 76 AOCs were designated for additional evaluation as part of the RFI and 7 AOCs were eliminated from further consideration. The location of each AOC is shown on Figure 3. An approach for evaluating conditions within the SWMUs/AOCs retained for further evaluation was developed and presented in the *RCRA Facility Assessment/RCRA Facility Investigation Work Plan* (ENSR, December 2003).

Environmental conditions related to soil at the Site have been further evaluated by the sampling and analysis performed in connection with the RFI, which was completed in two phases in 2004. The primary concerns identified by the RFI were PCBs and SVOCs in the following: (1) soil within several AOCs; and (2) accumulated debris within subsurface structures (i.e., silt, sand, and gravel from manholes/catch basins, sumps, and floor trenches at the Site). VOCs and metals were also identified at certain sampling locations. The results of the Phase I and II RFI are summarized in the NYSDEC-approved *RCRA Facility Investigation Report* (BBL, June 2004) and letter from BBL to the NYSDEC dated January 5, 2005, respectively.

Soil in two areas of the Site that was found to contain PCBs at concentrations greater than 50 ppm was addressed by two previous ICMs, one in 2005 and one in 2006. The ICM performed in 2005 included: (1) the removal of soil containing PCBs at concentrations greater than 50 ppm from a former electrical transformer area identified as AOC 39; and (2) the delineation of PCB-impacted soil in and around two former Pilot Plant sumps identified as AOC 45. The ICM performed in 2006 included the removal of soil containing PCBs at concentrations greater than 50 ppm from AOC 45.

Additional soil at the Site exhibiting PCBs at concentrations greater than 50 ppm was identified by soil sampling performed in connection with the foundation demolition activities (beginning with the "Phase I" sampling in early 2006). Additional phases of sampling were performed to further delineate the extent of PCB-impacted soil at the Site, culminating with Phase VII in June 2008. As a result of the phased sampling, additional PCB-impacted soils were discovered within the former Plant 1 and Pilot Plant footprints and from various nearby areas (collectively referred to as "the eastern plant area") exhibiting PCB concentrations greater than 50 ppm. Further PCB soil sampling ("ICM pre-excavation verification sampling") was performed in February



2009. These sampling programs have also included additional soil sampling for VOCs and SVOCs. RFI and Post-RFI soil sampling locations are presented on Figure 4.

A third ICM was implemented in 2009 to address the PCB-impacted soil delineated by the phased sampling program. Further discussion of the ICMs is presented in Subsection 1.3.7 of this Report.

In addition, one of the NYSDEC conditions for approval of the “draft” CMS Report was that Bayer further delineate metals in soil where data from previous due diligence sampling performed by Impact Environmental (Impact) on behalf of NSRR suggested the potential presence of arsenic and cadmium at concentrations exceeding the NYSDEC commercial use SCOs as set forth in 6 NYCRR Part 375-6.8(b). The metals delineation was requested by the NYSDEC to address concerns over: (1) the slightly elevated concentrations in Impact’s samples; (2) the wide intervals represented by the samples (e.g., 0 to 5 feet or 0 to 20 feet bgs); and (3) data quality because Impact’s analytical data was unvalidated.

On behalf of Bayer, ARCADIS prepared the Metals Soil Delineation Work Plan and submitted it to the NYSDEC on May 27, 2011. The NYSDEC provided comments on the work plan in a June 17, 2011 letter to Bayer. ARCADIS revised the work plan to address the NYSDEC comments and sent the revised work plan in June 29, 2011 e-mail correspondence to the NYSDEC. The NYSDEC provided conditional approval of the Revised Metals Soil Delineation Work Plan on July 1, 2011.

The metals soil delineation sampling activities were implemented during July 2011 and the findings were validated and summarized in the Metals Soil Delineation Summary Letter Report, which was sent to the NYSDEC on September 2, 2011. Based on the analytical results, arsenic was identified at concentrations exceeding the NYSDEC commercial use SCOs at seven sampling locations near the fence line and one location more interior to the site. The arsenic exceedances were limited to depths of 0 to 0.5 feet bgs at all but two of the locations (the exceedances at the those two locations were at 0.5 to 2.0 feet bgs). Cadmium was detected at a concentration exceeding the commercial use SCO at only one sampling location (a location where arsenic also exceeded the corresponding SCO). The metals delineation soil sampling locations are shown on Figure 4 as “Post-RFI soil sampling locations”.

The NYSDEC provided comments on the summary report and approved the recommendations for removing areas found to be impacted by metals (arsenic and



cadmium) in a September 16, 2011 letter to Bayer. The remedial actions to address the metals-impacted soil at the Site are addressed herein.

An analytical sample summary that identifies each AOC and sampling locations where constituents remain at concentrations exceeding NYSDEC industrial use SCOs is presented in Table 1 and NYSDEC commercial use SCOs is presented in Table 2. Laboratory analytical results for the soil samples previously collected at the Site (as part of the RFI, ICMs, and Phase I through Phase VIII soil sampling performed during/following foundation demolition activities) for detected PCBs, VOCs and semi-volatile organic compounds (SVOCs), and inorganic constituents are presented in Tables 3, 4, and 5, respectively. These tables also identify sampling locations where the soil was removed as part of the previous ICM activities. The sampling locations where COIs remain in soil at concentrations exceeding the industrial and commercial use SCOs are shown by “color-coded dots” on Figure 5 and 6, respectively.

#### Soil Vapor and Vapor Intrusion Investigations

Four SVIs have been performed at the Site from September 2007 to August 2009. The soil vapor sampling locations for the SVIs are shown on Figure 7. The soil vapor analytical results for the SVIs are presented on Table 6.

An initial SVI was performed at the Site in September 2007. Work performed and results obtained for the SVI are summarized in a letter report submitted to the NYSDEC by ARCADIS on December 20, 2007 (the “SVI Report”). In total, 18 soil vapor samples and two ambient air samples were collected and analyzed as part of the SVI. Soil vapor sampling locations were selected to provide coverage across the Site, including in areas where building construction may occur during site redevelopment, within/near footprints of the former plant buildings, near areas where trichloroethene (TCE) was identified in a 1989 soil vapor assessment, and in various paved areas.

The NYSDEC has not established standards, criteria, or guidance values for VOCs in soil vapor. Therefore, the screening criteria used for evaluating the soil vapor data were the air guideline values presented in the NYSDOH VI Guidance.

Several VOCs were identified in soil vapor at concentrations exceeding associated screening criteria. Two or more VOCs were identified at concentrations exceeding air guideline values at each soil vapor sampling location. Constituents that were detected at the highest concentrations included tetrachloroethene (PCE), TCE, cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride. PCE and/or TCE were detected at

concentrations greater than air guideline values at 12 of the 18 sampling locations. The highest concentrations of VOCs detected in soil vapor were at locations within the footprints of the former onsite buildings and along the eastern property boundary.

Based on the results of the 2007 SVI, the NYSDEC and NYSDOH requested additional soil vapor sampling at the Site adjacent to Plant 1 and along the eastern and western property boundaries. Additional soil vapor sampling was conducted under a Phase II SVI in June 2008 that consisted of the following:

- Collecting one additional soil vapor sample (at location SG-19) to further assess the presence and extent of vinyl chloride adjacent to the Plant 1 footprint.
- Collecting two additional soil vapor samples along the eastern and western property boundaries (at locations SG-20 and SG-21) to further assess the presence and extent of PCE, TCE, and cis-1,2-DCE.

The Phase II SVI was performed in accordance with letters dated February 28, 2008 and April 2, 2008 from ARCADIS to the NYSDEC responding to comments on the SVI Report.

VOCs were identified in soil vapor samples collected during the Phase II SVI. As presented in letters from Bayer to the NYSDEC dated November 19, 2008 and January 19, 2009, Bayer agreed to perform a Phase III SVI, which was subsequently implemented in February 2009. The Phase III SVI consisted of collection of six additional soil vapor samples at select locations along the property boundaries (at locations SG-22, SG-23, SG-24, SG-25, SG-26, and SG-27). The results of the Phase III soil vapor sampling were summarized in e-mail correspondence from ARCADIS to the NYSDEC and NYSDOH dated February 25, 2008. ARCADIS, NYSDEC, and NYSDOH concurred that the lower VOC concentrations identified by the Phase III SVI sampling indicated that sampling offsite in the area of New South Road was not necessary.

In the January 19, 2009 letter to the NYSDEC, Bayer also agreed to perform confirmatory (Phase IV) soil vapor sampling at various locations across the site following implementation of the 2009 ICM. Bayer provided the NYSDEC with the Phase IV SVI Work Plan on July 2, 2009, and the NYSDEC approved the work plan on July 15, 2009. The Phase IV soil vapor sampling activities were performed in August 2009 following the 2009 ICM activities. The Phase IV SVI consisted of collection of 12

additional soil vapor samples at select locations (locations SG-1, SG-3, SG-4, SG-5, SG-6, SG-8, SG-11, SG-13, SG-14A, SG-15, and SG-28).

The Phase IV laboratory results were provided in an e-mail correspondence from Bayer to NYSDEC and NYSDOH dated September 28, 2009. Additional copies of the results were sent to the NYSDOH on October 6, 2009. The findings of the Phase IV SVI were discussed during a February 18, 2010 telephone conference call attended by the NYSDEC, NYSDOH, Bayer, and ARCADIS.

VOCs were identified in each Phase IV soil vapor sample at concentrations exceeding associated screening criteria. For the most part, the VOC concentrations identified in the Phase IV soil vapor samples were generally the same or somewhat higher than the concentrations identified in the soil vapor samples from the previous investigations. However, the VOC concentrations identified in the Phase IV soil vapor samples from three locations were lower than the concentrations from the same locations in the previous investigations. This includes locations SG-8 (within the Plant 3 footprint), SG-9 (immediately west of the rainwater runoff sumps identified as AOCs 28 and 29), and SG-14A (along the eastern property boundary).

In response to a February 23, 2010 letter from the NYSDEC to Bayer, background information and data for the commercial/industrial properties south of the LIRR was reviewed to identify the potential generation, use, handling, storage, offsite transportation, disposal, spills, etc. of VOCs (or materials containing VOCs) at these properties. The background information and data was also used to assess the need for or scope of an offsite SVI or VI investigation south of the LIRR. A summary of information obtained from the background information search is presented in an October 1, 2010 letter from ARCADIS to the NYSDEC.

During a September 28, 2010 site meeting, the NYSDEC and NYSDOH requested indoor air and sub-slab soil vapor sampling at the NSRR building complex. In response to the request, the "draft" *Vapor Intrusion Investigation Work Plan* (ARCADIS, January 2011), which detailed proposed VI investigation activities at the NSRR building complex was submitted to the NYSDEC and NYSDOH. The *Vapor Intrusion Investigation Work Plan* was subsequently revised to address comments contained in January 19, 2011 e-mail correspondence from the NYSDEC and comments discussed with the NYSDEC and NYSDOH during follow-up conference calls on January 25, 2011 and March 8, 2011. The final *Vapor Intrusion Investigation Work Plan* (ARCADIS, March 2011) was approved by the NYSDEC in March 22, 2011 e-mail correspondence to Bayer. ARCADIS performed a building reconnaissance and product inventory

between April 11 and 22, 2011, and summarized the findings in April 25, 2011 e-mail correspondence to the NYSDEC.

Sampling locations were selected and approved by the NYSDEC and NYSDOH during an April 26, 2011 telephone conference call with Bayer, ARCADIS, and NSRR. NYSDEC approval of the sampling locations was documented in April 26, 2011 e-mail correspondence from the NYSDEC. ARCADIS performed the VI Investigation sampling between April 27, 2011 and May 5, 2011. The validated laboratory analytical results for the VI investigation were provided to NSRR and the NYSDEC via e-mail correspondence dated June 3, 2011. ARCADIS summarized the findings in the *Vapor Intrusion Investigation Summary Report* (ARCADIS, 2011), which was submitted to the NYSDEC and NYSDOH on August 5, 2011. Select VOCs were detected in certain indoor air samples, but all VOC concentrations identified in indoor air were less than the NYSDOH air guideline values. Based on comparison of the sub-slab vapor and indoor air data to the decision matrices in the NYSDOH VI Guidance, the NYSDEC and NYSDOH expressed concern over VOC concentrations in sub-slab vapor samples and the potential for VI to occur in the future.

As discussed during a September 29, 2011 telephone conference call attended by the NYSDEC, Bayer and ARCADIS, Bayer will be responsible for continuing to evaluate the offsite VI pathway and performing offsite mitigation, where needed, for vapors found to be related to Bayer's operations. Future offsite VI Investigation and offsite mitigation will be implemented separately from the alternatives proposed herein, pending further direction from NYSDEC and access approvals.

#### 1.3.7 Summary of Remedial Activities

Previous remedial activities conducted at the Site pursuant to the RCRA Corrective Action Program consisted of the following:

- Removal of approximately 30 cubic yards (CY) of PCB-impacted soil from the former electrical transformer area (AOC 39), removal of a former gasoline underground storage tank (UST) (AOC 50), and cleaning of subsurface structures as part of an initial ICM in 2005.
- Removal of a UST encountered beneath Plant 2 (AOC 51) and an unrelated, small isolated amount of pooled non-aqueous phase liquid (NAPL) encountered beneath Plant 2 during foundation demolition activities in 2006.

- Removal of approximately 670 CY of PCB-impacted soil (greater than 50 ppm) from AOC 45 as part of an ICM during 2006.
- Removal of approximately 8,774 CY of PCB-impacted soil from “the eastern plant area” as part of an ICM in 2009.

The limits of the previous remedial activities at the Site are shown on Figure 8. Summaries of the previous remedial activities are presented below.

*1.3.7.1 2005 ICM: AOC 39 PCB-Impacted Soil Removal, AOC 50 Gasoline UST Removal, Subsurface Structure Cleaning*

As summarized in the *Interim Corrective Measures Certification Report* (BBL, November 2005), the initial ICM activities resulted in the removal of the following:

- A former 1,000-gallon gasoline UST located northeast of the former Plant 1 building in AOC 50.
- Standing water from a foundation sump at the southeast end of Plant 1 (AOC 44).
- Accumulated debris from the manholes/catch basins, sumps, and floor trenches at the Site associated with AOCs 11, 21B, 38, 40, 42 through 46, and 49.
- Soils within AOC 39 that exhibited PCBs at concentrations above 50 ppm.

Based on observations made during the ICM and based on the results of soil sampling conducted near the former gasoline UST during the RFI and ICM, there was no evidence of a release from the former tank. No further action was required for AOC 50 other than removal of the tank.

Based on visual inspections performed at the conclusion of the subsurface structure cleaning activities, debris contained within the subsurface structures was successfully removed and there were no obvious signs of impacted underlying soils (other than at AOC 45). No further action was required for the subsurface structures, except for the structures associated with AOCs 40 and 45, which were further addressed by the foundation demolition and AOC 45 ICM described below.

Based on the verification soil sampling results for AOC 39, no further action was required for that AOC. In total, approximately 30 CY of PCB-impacted soil was

removed from the AOC 39 excavation and transported for offsite disposal as a TSCA-regulated PCB waste and New York State hazardous waste.

#### *1.3.7.2 Plant 2 UST Removal (AOC 51)*

As detailed in a March 21, 2006 letter from ARCADIS to the NYSDEC and Nassau County Department of Health (DOH), a previously-unidentified 1,000-gallon UST (AOC 51) was encountered and removed by ARCADIS during the implementation of foundation demolition activities at the Site. Following the UST removal, verification soil sampling activities were performed in general accordance with Section B.2. of the NYSDEC Spill Prevention Operations Technology Series (SPOTS) Memo #14, titled "Site Assessments at Bulk Storage Facilities," dated August 1, 1994. Laboratory analytical results for the UST verification soil samples were provided to the NYSDEC and Nassau County DOH in a letter from ARCADIS dated March 21, 2006. Based on the results, no further action was required for AOC 51, and the UST excavation was backfilled with "exempt" (non-impacted) crushed concrete generated by the demolition activities. After being rendered unfit for future use, the UST was transported for offsite recycling of the scrap steel.

#### *1.3.7.3 Plant 2 NAPL Removal*

As presented in a January 20, 2006, letter from ARCADIS to the NYSDEC, a viscous black NAPL was encountered beneath the southwest end of the former Plant 2 building slab. The NAPL (approximately 85 gallons total) was pumped from the area and containerized in two steel 55-gallon steel drums. Surrounding soils within an area approximately 10 feet wide by 10 feet long were excavated to a depth of 4.5 feet below the surrounding grade. The soils and containerized oil were characterized for disposal purposes. Based on the results of the waste characterization, the materials were transported for offsite disposal as a nonhazardous waste.

Following removal of the NAPL and associated impacted soils, verification soil samples were collected from the excavation limits and submitted for laboratory analysis for PCBs, VOCs, and SVOCs. Based on the analytical results, no additional excavation was required.

#### *1.3.7.4 2006 ICM: AOC 45 PCB-Impacted Soil Removal*

As summarized in the *AOC 45 Interim Corrective Measures Certification Report* (ARCADIS, May 2007), soil removal activities were completed beneath and around the

former Pilot Plant sumps (AOC 45) to address soils containing PCBs at concentrations greater than 50 ppm. The final excavations included the following:

- Excavation Area 1 – approximately 5-foot long by 5-foot wide by 6.5 feet deep excavation west of the Pilot Plant sumps.
- Excavation Area 2 (consisting of western, middle and eastern sections) – approximately 28-foot long by 28-foot wide excavation around the Pilot Plant sumps. Relative to the surrounding grade, the western section was approximately 7.6 feet deep, the middle section was approximately 27.5 feet deep, and the eastern section was approximately 18.7 feet deep.

Approximately 670 CY of PCB-impacted soils from these areas and associated concrete from the former Pilot Plant floor slab were transported to the CWM Chemical Services, LLC facility located in Model City, New York for disposal as a TSCA-regulated PCB waste and NYS hazardous waste.

#### *1.3.7.5 2009 ICM: Additional PCB-Impacted Soil Removal*

Additional ICM PCB soil removal activities were completed between May and August 2009. The soil removal activities were performed in accordance with the *ICM Additional PCB Soil Removal Work Plan* and Work Plan Modification contained in a December 11, 2008 letter from ARCADIS to the NYSDEC. Soil removal activities consisted of removing soil from “the eastern plant area” that exhibited PCBs at concentrations greater than 50 ppm. In response to discussions and e-mail correspondence with the NYSDEC (refer to an e-mail from Bayer to the NYSDEC dated August 13, 2009), the remedial goal was subsequently revised to 25 ppm after the ICM activities were underway. The ICM activities also addressed certain areas where soil exhibited VOCs and SVOCs at concentrations exceeding the commercial use SCOs presented in 6 NYCRR Part 375. As a result of the ICM, approximately 14,038 tons (approximately 8,774 CY based on an assumed 1.6 tons per CY of material) of additional impacted material (soil and concrete) was removed and transported offsite for disposal.

During the ICM soil removal activities, soil located within the Plant 1 footprint that was approximately 3 feet above the ground surface was scraped to match the surrounding surface level. Following NYSDEC approval, the scraped soil was used as subsurface fill material in the onsite sumps (identified as AOCs 28-30). Approximately 2,500 CY of soil was scraped and used as subsurface fill. An approximate 10,035 square-foot area adjacent to the scraped area (referred to as the “mound area”) remained in the Plant 1



footprint approximately 3 feet above the surrounding ground surface after completion of the 2009 ICM activities. Bayer proposes to remove the remaining mound area and transport it offsite for disposal as part of the corrective measure recommended in this CMS Report. The mound area is estimated to be 1,115 CY.

#### 1.3.8 Human Health Exposure Evaluation

Based on the results of the RFI and ICMs, a qualitative Human Health Exposure Evaluation (HHEE) was conducted to identify potentially complete exposure pathways for the Site. Details of the HHEE are presented in the *CMS Work Plan* (ARCADIS, May 2008).

Based on current and possible future land use, potentially complete exposure pathways exist for surface and subsurface soils and indoor air (i.e., vapor intrusion to indoor air pathway). Based on the available site information, several potentially complete exposure pathways have been identified.

- *Current/Future Trespasser* – Although the Site is surrounded by a locked chain-link fence, the potential still exists for trespassers to access the Site. Exposure of trespassers to site impacts would likely be infrequent and of relatively short duration. Under current conditions, trespassers may be exposed to COIs in surface soil via dermal contact, incidental ingestion, and/or inhalation of soil particulates.
- *Future Maintenance Worker* – There are no current ongoing maintenance activities at the Site. However, if the Site is redeveloped, maintenance workers (i.e., outdoor workers) may be exposed to COIs in surface soil via incidental ingestion, dermal contact, and/or inhalation of soil particulates during non-intrusive activities such as mowing.
- *Future Site Worker* – The Site is expected to be redeveloped for possible commercial/industrial land use. Future workers (i.e., indoor workers) may be exposed to COIs in surface soil via dermal contact, incidental ingestion, and/or inhalation of soil particulates during non-intrusive activities. Additionally, if any buildings were to be constructed in the future, indoor air could present a potentially complete exposure pathway based on soil vapor concentrations at the Site.
- *Future Construction Worker* – Because the Site is expected to be redeveloped in the future, construction workers represent a receptor population that may be



exposed to COIs in surface and subsurface soil via incidental ingestion, dermal contact, and/or inhalation of soil particulates during intrusive activities. Additionally, construction workers could be exposed to VOCs in ambient air (i.e., soil vapors) during a trenching scenario.

The alternatives evaluated in this CMS will address these potentially complete exposure pathways.

## **2. Current Conditions and Future Land Use**

As summarized in Section 1, a considerable amount of remedial work has already been performed at the Site. Remediation of groundwater impacts was completed by HCPC/OCC under the RODs signed by the USEPA. Therefore, groundwater is not addressed as part of this CMS. PCB-impacted and other impacted soil has been removed from within and around, the limits of AOCs 39 and 45 and transported for offsite disposal. An additional ICM completed between May and August 2009 resulted in the removal of additional soil at the Site found to contain PCBs at concentrations greater than 25 ppm. The limits of the PCB-impacted soil were determined by the results of the Phase I through Phase VIII sampling performed following the RFI and by results of pre- and post-excavation verification soil sampling performed for the 2009 ICM (final results are presented in Tables 2 through 4). The 2009 ICM also removed soil from several sampling locations where VOCs and SVOCs were identified at concentrations exceeding commercial and industrial use SCOs.

Based on the work completed as part of the previous investigations and remedial activities, soil containing PCBs, SVOCs, and metals (considered the COIs for the remedial alternatives presented in this CMS) at concentrations exceeding the industrial use SCOs will remain in 15 of the designated AOCs at the Site (refer to Table 1). Soil containing PCBs, SVOCs, and metals at concentrations exceeding the commercial use SCOs will remain in 25 of the designated AOCs at the Site (refer to Table 2). Soil at certain locations between the AOCs (as identified by the Phase I through VIII and 2009 ICM Verification Soil sampling) also contains COIs at concentrations exceeding the commercial and/or industrial use SCOs. The primary COIs remaining between these AOCs include PCBs, SVOCs, and metals. Soil at each sampling location where VOCs were identified at concentrations exceeding the NYSDEC commercial use SCOs were removed during the 2009 ICM.

The sampling locations where the COIs remain at concentrations exceeding the commercial and/or industrial use SCOs are summarized in Tables 1 and 2. Analytical results for SVOCs, inorganic constituents, and PCBs at concentrations exceeding the industrial use SCOs and commercial use SCOs, including corresponding sampling locations/intervals and sampling dates, are presented in Tables 1a, 1b, and 1c (for industrial use exceedances) and Tables 2a, 2b, and 2c (for commercial use exceedances). The sampling locations where COIs remain in soil at concentrations exceeding the industrial and commercial use SCOs are shown by “color-coded dots” on Figure 5 and 6, respectively. The limits of the previous soil excavations at the Site are shown on Figure 8.

VOCs in soil vapor at the Site have not been assigned to a particular AOC. As described above, the Phase IV SVI was performed in August 2009 to further evaluate conditions onsite following completion of ICM activities in August 2009. Based on the VOC concentrations identified in the soil vapor samples collected as part of the Phase IV SVI, each action alternative in this CMS Report includes measures to address the potential for VI in connection with future building construction at the Site.

Based on the VOC levels identified in sub-slab soil vapor at the NSRR building complex east of the Site and as requested by the NYSDEC, Bayer will pursue access for further offsite VI investigations to assess the potential presence/extent of VOC vapors related to the Site and will address offsite VI concerns related to the Site. The extent of offsite VI Investigation and scope of mitigation cannot be determined at this time. It is anticipated that mitigation measures, where needed, would include sub-slab depressurization system (SSDS) or a similar engineered system, or other actions appropriate for the building construction. Offsite VI investigation and mitigation will be implemented independently from the alternative proposed in this CMS Report.

The Town of Oyster Bay zoning maps designate that the Site is located within a non-residence, "Light Industry" district. Considering this zoning, the Site's environmental history, the previous use of the Site, and the presence of COIs in surface and subsurface soil at concentrations exceeding the NYSDEC commercial use SCOs, Bayer plans to put land use restrictions in place to allow "industrial" use and "commercial" use, as defined in 6 NYCRR Part 375-1.8(g)(2):

- "Industrial Use" – the land use category which shall only be considered for the primary purpose of manufacturing, production, fabrication or assembly processes and ancillary services. Industrial use does not include any recreational component.
- "Commercial Use" – the land use category which shall only be considered for the primary purpose of buying, selling or trading of merchandise or services. Commercial use includes passive recreational uses, which are public uses with limited potential for soil contact.

After consulting with NSRR and given the site's history, certain commercial land uses permitted within the "Light Industry" district, such as those uses where young children, the disabled, or the elderly would be site occupants on a regular basis, or uses that would involve cultivation, will be prohibited. These prohibited uses are anticipated to include, but not be limited to, public schools, day care, play care, nursery schools,

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hospitals, assisted living/nursing homes, swimming pools, commercial greenhouses, landscape nursery, and garden center.

### 3. Standards, Criteria & Guidance

This section discusses potential standards, criteria, and guidance (SCGs) that may apply to the Site or apply to certain remedial alternatives evaluated for the Site. The identification of SCGs was conducted as set forth in NYSDEC TAGM 4030 which has been incorporated into DER-10. SCGs are also used to aid in the identification of CMOs but do not dictate a particular alternative and do not establish remedial cleanup levels.

#### 3.1 Definition of SCGs

Definitions of the SCGs are presented below.

- *Standards and Criteria* – are New York State regulations or statutes. They are those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations which are generally applicable, consistently applied, and officially promulgated under Federal or State law that are either directly applicable to a contaminant, remedial action, location, or other circumstance, or that are not directly applicable but are relevant and appropriate.
- *Guidance* – includes non-promulgated criteria and guidance that are not legal requirements; however, those responsible for investigation and/or remediation of the Site should consider guidance that, based on professional judgment, are determined to be applicable to the Site.

#### 3.2 Types of SCGs

The NYSDEC guidance on the application of SCGs in the Remedial Investigation/Feasibility Study (RI/FS) process was used in preparation of this CMS. The potential SCGs considered for the remedial alternatives identified in this CMS were categorized into the following NYSDEC-recommended classifications:

- *Chemical-Specific SCGs* – These SCGs are usually health- or risk- based numerical values or methodologies that, when applied to site-specific conditions, result in the establishment of numerical values for each COI. These values establish the acceptable amount or concentration of COIs that may be found in, or discharged to, the ambient environment.

- *Action-Specific SCGs* – These SCGs are usually technology- or activity-based requirements or limitations on actions taken with respect to hazardous waste management and site cleanup.
- *Location-Specific SCGs* – These SCGs are restrictions placed on the concentration of hazardous substances or the conduct of activities solely because they occur in specific locations.

Potential SCGs identified for the Site are summarized below.

### **3.3 Site Specific SCGs**

The identification of Federal and State SCGs for the evaluation of remedial alternatives at the Site was a multi-step process that included a review of conditions identified from sampling activities performed as part of the RFI, ICMs, and various other activities at the Site. The SCGs that have been identified for this Report are summarized below.

#### **3.3.1 Chemical-Specific SCGs**

The chemical-specific SCOs presented in 6 NYCRR Part 375-6.8 are applicable for chemical constituents in soil at the Site, including PCBs, SVOCs, VOCs and inorganic constituents. These SCOs were developed by the NYSDEC pursuant to legislation enacting New York State's Brownfield Cleanup Program. Use of these SCOs is extended to the RCRA Corrective Action Program by the NYSDEC document titled "CP-51/Soil Cleanup Guidance", issued October 21, 2010 (hereafter, "NYSDEC CP-51").

Cleanup to allow unrestricted use is not feasible at this Site, as discussed in Section 5. Since the anticipated future site use is commercial or industrial, the restricted use SCOs from Part 375-6.8(b) are considered to be directly applicable to the Site. These restricted use SCOs were developed to be protective of human health under commercial or industrial land use scenarios. For PCBs, the commercial use SCO is 1 ppm, and the industrial use SCO is 25 ppm. However, when a 25 ppm PCB SCO is used for surface soils at industrial sites, access restrictions may be put in place so that individual occupancy does not exceed an average of 6.7 hours per week. The 25 ppm PCB SCO is consistent with an outcome of the OU2 PCB soil removal action where USEPA approved leaving subsurface soil in certain areas that contained PCBs at concentrations up to 24 ppm.

In accordance with Section V.I. of NYSDEC CP-51, an acceptable presumptive remedy for this Site involves a PCB soil cleanup level of 1 ppm for surface soil and 10 ppm for subsurface soil. These cleanup levels are consistent with the soil guidance values previously presented in the NYSDEC document titled "Determination of Soil Cleanup Objectives and Cleanup Levels," HWR-94-4046, dated January 24, 1994 (TAGM 4046), which was replaced by NYSDEC CP-51. The 10 ppm subsurface PCB SCO is also consistent with the OU2 PCB cleanup goal established for the area around the former Pilot Plant.

NYSDEC CP-51 provides a subsurface soil cleanup level of 500 ppm for total polycyclic aromatic hydrocarbons (PAHs). This soil cleanup level is in lieu of achieving all of the PAH-specific SCOs in 6 NYCRR Part 375-6.8(b) and is acceptable for use at "non-residential sites" (e.g., commercial or industrial sites) where ecological resources are not present or determined not to be impacted or threatened by site COIs. The 500 ppm total PAH soil cleanup level is applicable to subsurface soil defined as "the soil beneath permanent structures, pavement, or similar cover systems; or at least one foot of soil cover (which must meet the applicable SCOs)." As indicated in the NYSDEC's March 30, 2011 conditional approval letter to Bayer, this cleanup level is determined to be feasible and protective based on the NYSDEC's experience in its various remedial programs when applied with institutional controls and a Site Management Plan (SMP).

The air guideline values and decision matrices presented in the NYSDOH VI Guidance are applicable guidance for chemical COIs in soil vapor/indoor air for existing and future buildings at the Site.

### 3.3.2 Action-Specific SCGs

The general health and safety requirements established by OSHA for general industry under 29 CFR Part 1910, and for construction under 29 CFR Part 1926, are action-specific SCGs that may be potentially applicable to each active remedial alternative evaluated in this Report.

6 NYCRR Parts 364, 370, and 372 regulations for the collection and transportation of regulated waste within New York State are applicable action-specific SCGs for alternatives that involve the offsite transportation of regulated wastes.

### 3.3.3 Location-Specific SCGs

Location-specific SCGs for the Site include local requirements such as local building permit conditions for permanent or semi-permanent facilities constructed during the remedial activities (if any), and influent requirements of publicly owned treatment works (POTW) if water is treated at the Site and discharged to a POTW. No floodplains or wetlands were identified at the Site. Therefore location specific SCGs pertaining to floodplains and wetlands are not applicable to the potential remedial alternatives.



#### 4. Corrective Measures Objectives

This section presents the Corrective Measures Objectives (CMOs) that have been developed for the Site. Based on considerations specific to the Site (e.g., detected COIs, Site use, and potential exposure pathways), CMOs are identified to maintain and/or achieve conditions that are protective of public health and the environment. The CMOs that have been developed for the Site are consistent with the remedy selection process described in the DER-10 and in the NYSDOH VI Guidance. The CMOs are based on the results of the completed investigations, the SCGs presented in Section 3 of this Report, and the conclusions drawn from the HHEE. The CMOs were used to identify the remedial alternatives presented in Section 4 of this Report. The following qualitative CMOs have been established for the Site:

- Prevent/mitigate potential future exposure of commercial and/or industrial workers at the Site and other populations to soil containing elevated levels of COIs (via dermal contact, incidental ingestion, and inhalation of soil particulates).
- Prevent/mitigate exposure to VOCs in soil vapor at the Site.

CMOs related to groundwater have not been developed because existing data indicates that current soil conditions at the Site are not impacting groundwater quality. Although groundwater in the southeastern portion of the Site was historically impacted by releases from the former rainwater runoff sumps identified as AOC Nos. 28 and 29, these AOCs and associated groundwater quality impacts have been addressed under the Federal Superfund program. The onsite groundwater flushing/remediation system has been removed, and offsite groundwater impacts continue to be addressed by responsible parties as part of an active remediation pursuant to OU3.

The CMOs developed for the Site are further discussed below.

##### 4.1 Soil CMO Development

The majority of the Site is generally covered with crushed stone/gravel, crushed concrete, or vegetation (grass or brush), and a large asphalt-paved parking area located in the western portion of the Site. Based on the findings of the HHEE, potential direct contact with subsurface soil is likely to occur during construction/excavation activities. Inhalation of or exposure to COIs volatilizing from soil could also occur during such activities. Exposure of trespassers, maintenance workers, site workers, and construction workers to impacted soils via incidental ingestion, dermal contact, and inhalation were identified as potentially

complete exposure pathways. However, exposure via inhalation of soil particulates (i.e., dust) is not considered to be a significant pathway due to the presence of impervious surfaces and vegetation at the Site that would likely limit such exposures.

A CMO was developed for soil to prevent/mitigate commercial and/or industrial workers and all other populations from potential future exposure to soil containing elevated levels of COIs (via dermal contact, incidental ingestion, and inhalation of soil particulates) at the Site.

#### **4.2 Soil Vapor CMO Development**

Based on the findings of the HHEE, if any buildings were to be constructed in the future, indoor air could present a potentially complete exposure pathway based on soil vapor concentrations at the Site. In addition, based on the VI investigation conducted at the NSRR building complex, the potential for offsite VI exists.

Therefore, a CMO was developed for soil vapor to prevent/mitigate potential future exposure to VOCs potentially migrating through soil vapor to indoor air onsite (assuming buildings are constructed at the Site as part of the future redevelopment) and offsite. As discussed during a September 29, 2011 meeting with the NYSDEC, Bayer will continue to evaluate the offsite VI pathway and will perform mitigation, where needed, for vapors found to be related to Bayer's operations provided that property access is granted.

## **5. Technology Screening and Development of Corrective Measures Alternatives**

This section identifies remedial technologies and alternatives to achieve the CMOs described in Section 4. Technologies identified in this section are narrowed down by preliminary and secondary screenings. The remedial technologies retained through the screening processes are then assembled into corrective measure alternatives and described herein.

### **5.1 Identification of Remedial Technologies**

The identification of remedial technologies involved a focused review of available literature, including the following documents:

- NYSDEC TAGM 4030 titled, *Selection of Remedial Actions at Inactive Hazardous Waste Sites* (NYSDEC, 1990).
- NYSDEC, 2010. DER-10 Technical Guidance for Site Investigations and Remediation, May 2010.
- *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA* (USEPA, 1988).
- *Presumptive Remedies: Policy and Procedures* (USEPA, 1993).
- *Presumptive Remedy for Metals-in-Soil Sites* (USEPA, 1999).
- *Treatment Technologies* (USEPA, 1991).
- *Technology Screening Guide for Treatment of CERCLA Soils and Sludges* (USEPA, 1988).
- *Technology Briefs – Data Requirements for Selecting Remedial Action Technologies* (USEPA, 1987).
- *Remediation Technologies Screening Matrix and Reference Guide, Version 3* (Federal Remedial Technologies Roundtable [FRTR], 1997).

These documents, along with remedial technology vendor information and other available information, were reviewed to identify technologies that are potentially applicable for addressing impacted soil and soil vapor at the Site.

## **5.2 Technology Screening**

Potentially applicable technologies and technology processes underwent preliminary and secondary screening to select the technologies that would most-effectively achieve the CMOs identified for the Site. Technology refers to a general category of technologies, such as capping or immobilization, while the technology process is a specific process within each technology type. A “no-action” general response has been included and retained through the screening evaluation. The no-action response will serve as a baseline for comparing the potential overall effectiveness of the other technologies.

### **5.2.1 Preliminary Screening**

The preliminary screening was performed to reduce the number of potentially applicable technologies and technology processes based on technical implementability. The results of the preliminary screening evaluation are presented in Table 7. The technology processes are briefly described and screened in these tables.

### **5.2.2 Secondary Screening**

A number of potentially applicable technologies and technology processes were retained through the preliminary screening for soil and soil vapor. To further reduce the technology processes to be assembled into remedial alternatives, the retained technology processes were subjected to a secondary screening. The objective of the secondary screening was to choose, when possible, one representative remedial technology process for each remedial technology category to simplify the subsequent development and evaluation of the remedial alternatives. A description of the screening criteria is presented below.

- *Effectiveness* – This criterion evaluates the extent that the technology will mitigate potential threats to public health and the environment through the reduction in toxicity, mobility, and/or volume of COIs in the impacted soil and soil vapor.
- *Implementability* – This criterion evaluates the ability to construct, reliably operate, and meet technical specifications or criteria associated with each technology. This

evaluation also considers the operation and maintenance (O&M) required in the future, following completion of remedial construction.

The remedial technologies that were retained through secondary screening using the above-listed criteria are summarized in Table 8 and identified below.

- No Action
- Land use restrictions
- Capping
- Soil Excavation
- Offsite Disposal (RCRA Subtitle D Landfill)
- Sub-Slab Depressurization (for future buildings)

### **5.3 Development of Corrective Measures Alternatives**

A total of seven alternatives have been assembled for further evaluation in the detailed analysis of remedial alternatives presented in Section 6. The seven remedial alternatives developed to address the soil and soil vapor CMOs for the Site are as follows:

- Alternative 1 – No Further Action.
- Alternative 2 – Site Controls and Monitoring.
- Alternative 3 – Excavation of PCB-Impacted Soil Greater than 50 ppm and Offsite Disposal, Capping PCB-Impacted Soil Greater than 25 ppm, Capping SVOC- and Metal-Impacted Soil for Industrial Use, Site Controls, and Monitoring.
- Alternative 4 – Excavation of PCB-Impacted Soil Greater than 25 ppm and Offsite Disposal, No Capping for PCBs, Capping SVOC- and Metal-Impacted Soils for Industrial Use, Site Controls, and Monitoring.

- Alternative 5 – Excavation of PCB-Impacted Soil Greater than 25 ppm and Offsite Disposal, Capping PCB-Impacted Soil Greater than 1 ppm, Capping SVOC- and Metal-Impacted Soil for Commercial Use, Site Controls, and Monitoring.
- Alternative 6 – Excavation of PCB-Impacted Soil Greater than 10 ppm and Offsite Disposal, Capping of PCBs Greater than 1 ppm, Excavation of Metals and Capping of SVOCs for Commercial Use, Site Controls, and Monitoring.
- Alternative 7 – Excavation of PCB-Impacted Soil Greater than 1ppm and SVOCs/Metals at Concentrations Exceeding Commercial Use SCOs, Offsite Disposal, Site Controls, and Monitoring.

The soil remedial alternatives do not include a detailed evaluation of an unrestricted use cleanup (e.g., excavation to achieve unrestricted use SCOs) because: (1) the Site is currently zoned Light Industry; (2) the Site has historically been used for industrial purposes and future development will be limited to similar industrial uses and certain commercial uses; (3) attainment of the industrial use SCOs would meet the program goal presented in NYSDEC CP-51 (eliminate or control risks to public health and the environment); and (4) a cleanup alternative to achieve the NYSDEC commercial use SCOs by excavation (which includes the same 1 ppm PCB SCO used for residential purposes) is included and will provide a baseline for comparing the other alternatives. When discussing “industrial” or “commercial” uses in this Report, those terms are meant to include those uses that are allowed under the Town of Oyster Bay’s “Light Industry” zoning and consistent with the definitions for “industrial” and “commercial” uses as presented in 6 NYCRR Part 375-1.8(g)(2).

A brief description of each corrective measure alternative developed to address the soil and soil vapor CMOs is presented below. Note that for each action alternative, Bayer will take responsibility for continuing to evaluate the offsite VI pathway and performing mitigation, where needed, for vapors found to be related to Bayer’s operations provided that property access is granted.

#### 5.3.1 Alternative 1 – No Further Action

The no-action alternative serves as a baseline for comparison of the overall effectiveness of the other remedial alternatives. The no-action alternative would not involve the implementation of any remedial activities to remove, treat, or contain the COIs in soil and soil vapor related to the Site. The alternative relies on natural attenuation processes to reduce the concentrations of COIs in soil and soil vapor.

### 5.3.2 Alternative 2 – Site Controls and Monitoring

Under this alternative, the following site controls would be implemented:

- The locked chain-link fence around the perimeter of the property would be maintained.
- A land use restriction (e.g., Environmental Easement or Environmental Easement/Deed Restriction hybrid) would be developed to restrict property use to industrial and notify future owners of the presence of PCBs, SVOCs, and metals in soils. It would also restrict site use to prevent young children, the disabled, or the elderly from being site occupants on a regular basis, or uses that would involve cultivation.
- An SMP would be developed to identify, maintain and inspect (if applicable) the institutional and engineering controls in place at the Site, including but not limited to the: site access controls; cover system (if present); vegetation; and SSDS (or similar engineered system). The SMP would establish provisions for the management of future excavations in areas with remaining impacts and for evaluating SVI at onsite buildings for site-related contaminants. The SMP would be referenced in the easement to the property.

A periodic review and certification of the institutional and engineering controls would be prepared and submitted to the NYSDEC in accordance with 6 NYCRR Part 375-1.8 (h)(3).

Additional preventative or mitigative measures (i.e., vapor barrier, venting systems) to address the potential for vapor intrusion into a future building would be incorporated into the land use restriction and SMP. The anticipated future property owner (NSRR, who has entered into an agreement with Bayer to purchase the Site) is prepared to install engineering controls such as vapor barriers and venting systems (where appropriate) as part of new construction at the Site. The future property owner has acknowledged in project planning meetings with Bayer and in the *Phase II Environmental Site Assessment (ESA) Report* (Impact Environmental, November 2006), that such engineering controls will be used in anticipated future redevelopment. Section 7 of the Phase II ESA Report states, “any new development will include engineering controls to mitigate direct contact and vapor intrusion pathways, as mandated by the New York State Department of Health (NYSDOH), Nassau County Health Department (NCHD), and NYSDEC. These controls will probably include a sub-

membrane depressurization system, an approved vapor retarder membrane, and a cap consisting of a concrete floor slab (building footprint) or asphalt cover (parking areas).”

5.3.3 Alternative 3 – Excavation of PCB-Impacted Soil Greater than 50 ppm and Offsite Disposal, Capping PCB-Impacted Soil Greater than 25 ppm, Capping SVOC- and Metal-Impacted Soil for Industrial Use, Site Controls, and Monitoring

A component of this remedy has already been implemented. In order to expedite remedial activities at the Site, the removal of soils containing PCBs at concentrations greater than 50 ppm was performed as part of the 2009 ICM activities. Approximately 14,038 tons of impacted materials were removed during the 2009 ICM activities as described in Section 1.3.7.5 and transported for offsite disposal. The existing data indicates that PCB concentrations in the remaining soils are less than 50 ppm.

The focal point of this alternative would be the installation of a cap (soil cover, asphalt/concrete pavement, concrete foundation, etc.) as an active exposure prevention method over areas of soil exhibiting PCBs, SVOCs and metals at concentrations greater than the NYSDEC industrial use SCOs. A minimum of one foot of soil would be used for the cap and the soil would meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover would be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Institutional controls would be implemented to address cap protection and maintenance. Additional preventative or mitigative measures (i.e., vapor barrier, venting systems) to address the potential for vapor intrusion into a future building would be incorporated into the land use restriction. The anticipated future property owner (NSRR, who has entered into an agreement with Bayer to purchase the Site) is prepared to install engineering controls to address potential soil vapor intrusion, as discussed above in Subsection 5.3.2.

Soils at sampling locations exhibiting chemical COIs at concentrations greater than the NYSDEC industrial use SCOs left in place under this alternative would be addressed by the following site controls, as appropriate:

- The locked chain-link fence around the perimeter of the property would be maintained.
- A land use restriction (e.g., Environmental Easement or Environmental Easement/Deed Restriction hybrid) would be developed to restrict property use to



industrial and notify future owners of the presence of PCBs, SVOCs, and metals in soils. It would also restrict site use to prevent young children, the disabled, or the elderly from being site occupants on a regular basis, or uses that would involve cultivation.

- An SMP would be developed to identify, maintain and inspect (if applicable) the institutional and engineering controls in place at the Site, including but not limited to the: site access controls; cover system; vegetation; and SSDS (or similar engineered system). The SMP would establish provisions for the management of future excavations in areas with remaining impacts and for evaluating SVI at onsite buildings for site-related contaminants. The SMP would be referenced in the easement to the property.

A periodic review and certification of the institutional and engineering controls would be prepared and submitted to the NYSDEC in accordance with 6 NYCRR Part 375-1.8 (h)(3).

5.3.4 Alternative 4 – Excavation of PCB-Impacted Soil Greater than 25 ppm and Offsite Disposal, No Capping for PCBs, Capping SVOC- and Metal-Impacted Soils for Industrial Use, Site Controls, and Monitoring

Under this alternative, soils containing PCBs at concentrations greater than 25 ppm would be excavated and transported for offsite disposal in accordance with applicable rules and regulations. A cap would be installed as an active exposure prevention method over remaining areas of soil exhibiting SVOCs and metals at concentrations greater than the NYSDEC industrial use SCOs. A minimum of one foot of soil would be used for the cap and the soil would meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover would be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Institutional controls would be implemented to address cap protection and maintenance.

Additional preventative or mitigative measures (i.e., vapor barrier, venting systems) to address the potential for vapor intrusion into a future building would be incorporated into the land use restriction. The anticipated future property owner (NSRR, who has entered into an agreement with Bayer to purchase the Site) is prepared to install engineering controls such as vapor barriers and venting systems (where appropriate) as part of new construction at the Site. The future property owner has acknowledged

in project planning meetings with Bayer and in the Phase II ESA Report that such engineering controls will be used in anticipated future redevelopment.

Soils at sampling locations exhibiting chemical COIs at concentrations greater than the NYSDEC industrial use SCOs left in place under this alternative would be addressed by the following site controls, as appropriate:

- A land use restriction (e.g., Environmental Easement or Environmental Easement/Deed Restriction hybrid) would be developed to restrict property use to industrial and notify future owners of the presence of PCBs, SVOCs, and metals in soils. It would also restrict site use to prevent young children, the disabled, or the elderly from being site occupants on a regular basis, or uses that would involve cultivation.
- An SMP would be developed to identify, maintain and inspect (if applicable) the institutional and engineering controls in place at the Site, including but not limited to the: site access controls, cover system; vegetation; and SSDS (or similar engineered system). The SMP would establish provisions for the management of future excavations in areas with remaining impacts and for evaluating SVI at onsite buildings for site-related contaminants. The SMP would be referenced in the easement to the property.

#### 5.3.5 Alternative 5 – Excavation of PCB-Impacted Soil Greater than 25 ppm and Offsite Disposal, Capping PCB-Impacted Soil Greater than 1 ppm, Capping SVOC- and Metal-Impacted Soil for Commercial Use, Site Controls, and Monitoring

Under this alternative, soils containing PCBs at concentrations greater than 25 ppm would be excavated and transported for offsite disposal in accordance with applicable rules and regulations. A cap would be installed as an active exposure prevention method over remaining areas of soil exhibiting SVOCs and metals at concentrations greater than the NYSDEC commercial use SCOs. A minimum of one foot of soil would be used for the cap and the soil would meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover would be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Institutional controls would be implemented to address cap protection and maintenance.

Additional preventative or mitigative measures (i.e., vapor barrier, venting systems) to address the potential for vapor intrusion into a future building would be incorporated

into the land use restriction. The anticipated future property owner (NSRR, who has entered into an agreement with Bayer to purchase the Site) is prepared to install engineering controls such as vapor barriers and venting systems (where appropriate) as part of new construction at the Site. The future property owner has acknowledged in project planning meetings with Bayer and in the Phase II ESA Report that such engineering controls will be used in anticipated future redevelopment.

Soils at sampling locations exhibiting chemical COIs at concentrations greater than the NYSDEC commercial use SCOs left in place under this alternative would be addressed by the following site controls, as appropriate:

- A land use restriction (e.g., Environmental Easement or Environmental Easement/Deed Restriction hybrid) would be developed to restrict property use to commercial as defined in 6 NYCRR Part 375-1.8(g)(2) and allow certain commercial uses permitted within the Town of Oyster Bay “Light Industry” district. It would prevent land uses where young children, the disabled, or the elderly would be site occupants on a regular basis, or uses that would involve cultivation. It would also notify future owners of the presence of PCBs, SVOCs, and metals in soils.
- An SMP would be developed to identify, maintain and inspect (if applicable) the institutional and engineering controls in place at the Site, including but not limited to the: cover system; vegetation; and SSDS (or similar engineered system). The SMP would establish provisions for the management of future excavations in areas with remaining impacts and for evaluating SVI at onsite buildings for site-related contaminants. The SMP would be referenced in the easement to the property.

#### 5.3.6 Alternative 6 – Excavation of PCB-Impacted Soil Greater than 10 ppm and Offsite Disposal, Capping of PCBs Greater than 1 ppm, Excavation of Metals and Capping of SVOCs for Commercial Use, Site Controls, and Monitoring

Under this alternative, soils containing PCBs at concentrations greater than 10 ppm would be excavated and transported for offsite disposal in accordance with applicable rules and regulations. A cap would be installed as an active exposure prevention method over remaining areas of soil exhibiting PCBs greater than 1 ppm and SVOCs and metals at concentrations greater than the NYSDEC commercial use SCOs. A minimum of one foot of soil would be used for the cap and the soil would meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover would be placed over a demarcation layer, with the upper six inches of

the soil of sufficient quality to maintain a vegetation layer. Institutional controls would be implemented to address cap protection and maintenance.

Additional preventative or mitigative measures (i.e., vapor barrier, venting systems) to address the potential for vapor intrusion into a future building would be incorporated into the land use restriction. The anticipated future property owner (NSRR, who has entered into an agreement with Bayer to purchase the Site) is prepared to install engineering controls such as vapor barriers and venting systems (where appropriate) as part of new construction at the Site. The future property owner has acknowledged in project planning meetings with Bayer and in the Phase II ESA Report that such engineering controls would be used in anticipated future redevelopment.

Soils at sampling locations exhibiting PCBs greater than 10 ppm or SVOCs and metals at concentrations greater than the NYSDEC commercial use SCOs left in place under this alternative would be addressed by the following site controls, as appropriate:

- A land use restriction (e.g., Environmental Easement or Environmental Easement/Deed Restriction hybrid) would be developed to restrict property use to commercial as defined in 6 NYCRR Part 375-1.8(g)(2) and would allow certain commercial uses permitted within the Town of Oyster Bay “Light Industry” district. It would prevent land uses where young children, the disabled, or the elderly would be site occupants on a regular basis, or uses that would involve cultivation. It would also notify future owners of the presence of PCBs, SVOCs, and metals in soils.
- An SMP would be developed to identify, maintain and inspect (if applicable) the institutional and engineering controls in place at the Site, including but not limited to the: cover system; vegetation; and SSDS (or similar engineered system). The SMP would establish provisions for the management of future excavations in areas with remaining impacts and for evaluating SVI at onsite buildings for site-related contaminants. The SMP would be referenced in the easement to the property.

#### 5.3.7 Alternative 7 – Excavation of PCB-Impacted Soil Greater than 1 ppm and SVOCs/Metals at Concentrations Exceeding Commercial Use SCOs, Offsite Disposal, Site Controls, and Monitoring

Under this alternative, soils containing COIs at concentrations greater than the NYSDEC commercial use SCOs would be excavated and transported for offsite disposal in accordance with applicable rules and regulations.

Additional preventative or mitigative measures (i.e., vapor barrier, venting systems) to address the potential for vapor intrusion into a future building would be incorporated into the land use restriction. The anticipated future property owner (NSRR, who has entered into an agreement with Bayer to purchase the Site) is prepared to install engineering controls such as vapor barriers and venting systems (where appropriate) as part of new construction at the Site. The future property owner has acknowledged in project planning meetings with Bayer and in the Phase II ESA Report that such engineering controls will be used in anticipated future redevelopment.

Soils at any sampling locations exhibiting chemical COIs at concentrations greater than the NYSDEC commercial use SCOs left in place under this alternative would be addressed by the following site controls, as appropriate:

- A land use restriction would be developed to restrict property use to commercial as defined in 6 NYCRR Part 375-1.8(g)(2) and would allow certain commercial uses permitted within the Town of Oyster Bay “Light Industry” district. It would prevent land uses where young children, the disabled, or the elderly would be site occupants on a regular basis, or uses that would involve cultivation. It would also notify future owners of the presence of PCBs, SVOCs, and metals in soils.
- An SMP would be developed to identify, maintain and inspect (if applicable) the institutional and engineering controls in place at the Site, including but not limited to the: cover system; vegetation; and SSDS (or similar engineered system). The SMP would establish provisions for the management of future excavations in areas with remaining impacts and for evaluating SVI at onsite buildings for site-related contaminants. The SMP would be referenced in the easement to the property.

## **6. Evaluation of Corrective Measures Alternatives**

### **6.1 General**

This section presents a detailed description and evaluation of the seven corrective measures alternatives identified in the previous section of this Report. The evaluation criteria are based on NYSDEC TAGM 4030 which has been incorporated into DER-10. The detailed evaluation of each corrective measure alternative presented in this section consists of an assessment of the following seven criteria:

- Compliance with Standards, Criteria, and Guidance Values (SCGs).
- Overall Protection of Human Health and the Environment.
- Short-Term Effectiveness.
- Long-Term Effectiveness and Permanence.
- Reduction of Toxicity, Mobility, or Volume through Treatment.
- Implementability.
- Cost.

Pursuant to TAGM 4030 and DER-10, another criterion to be considered when determining appropriate corrective measures alternatives is community acceptance. The community acceptance assessment will be completed by the NYSDEC after community comments on the PRAP are received.

In addition to assessing each potential corrective measure alternative against the seven criteria presented above, the detailed analysis of the corrective measures alternatives presented in this section also includes a detailed technical description of each alternative. In addition, unique engineering aspects (if any) of the physical components of the corrective measure are discussed.

A description of the seven evaluation criteria used is presented below, followed by a detailed evaluation of each corrective measure alternative.

## 6.2 Description of Evaluation Criteria

A description of each of evaluation criterion used in this CMS is presented below.

### 6.2.1 Compliance with SCGs

This criterion evaluates the compliance of the remedial alternative with appropriate SCGs. The evaluation is based on compliance with:

- Chemical-specific SCGs
- Action-specific SCGs
- Location-specific SCGs

### 6.2.2 Overall Protection of Human Health and the Environment

This criterion evaluates whether the remedial alternative provides adequate protection of human health and the environment. This evaluation relies on the assessment of other evaluation criteria, including long-term and short-term effectiveness and compliance with SCGs.

### 6.2.3 Short-Term Effectiveness

The short-term effectiveness of the remedial alternative is evaluated relative to its effect on human health and the environment during implementation of the alternative. The evaluation of each remedial alternative with respect to its short-term effectiveness considers the following:

- Short-term impacts to which the community may be exposed during implementation of the alternative.
- Potential impacts to workers during implementation of the remedial alternative, and the effectiveness and reliability of protective measures.
- Potential environmental impacts of the remedial alternative and the effectiveness of mitigative measures to be used during implementation.
- Amount of time until environmental concerns are mitigated.

#### 6.2.4 Long-Term Effectiveness and Permanence

The evaluation of each remedial alternative relative to its long-term effectiveness and permanence is made by considering the risks that may remain following completion of the remedial alternative. The following factors will be assessed in the evaluation of the alternative's long-term effectiveness and permanence:

- Potential environmental impacts from untreated waste or treatment residuals remaining at the completion of the remedial alternative.
- The adequacy and reliability of controls (if any) that will be used to manage treatment residuals or untreated waste remaining after the completion of the remedial alternative.
- The ability of the corrective measure alternative to meet CMOs established for the Site.

#### 6.2.5 Reduction of Toxicity, Mobility, or Volume through Treatment

This criterion evaluates the degree to which remedial actions will permanently and significantly reduce the toxicity, mobility, or volume of the COIs present in the site media. The evaluation will be based on the:

- Treatment process and the volume of materials to be treated.
- Anticipated ability of the treatment process to reduce the toxicity, mobility, or volume of chemical COIs.
- Nature and quantity of treatment residuals that will remain after treatment.
- Relative amount of hazardous substances and/or chemical COIs that will be destroyed, treated, or recycled.
- Degree to which the treatment is irreversible.

#### 6.2.6 Implementability

This criterion evaluates the technical and administrative feasibility of implementing the remedial alternative, including the availability of the various services and materials



required for implementation. The evaluation of implementability will be based on two factors, as described below.

- *Technical Feasibility* – This refers to the relative ease of implementing the remedial alternative based on site-specific constraints. In addition, the ease of construction, operational reliability, and ability to monitor the effectiveness of the remedial alternative are considered.
- *Administrative Feasibility* – This refers to the feasibility/time required to obtain necessary permits and approvals to implement the remedial alternative.

#### 6.2.7 Cost

This criterion evaluates the estimated total cost to implement the remedial alternative. The total cost of each alternative represents the sum of the direct capital costs (materials, equipment, and labor), indirect capital costs (engineering, licenses/permits, and contingency allowances), and operation and maintenance (O&M) costs. O&M costs may include operating labor, energy, chemicals, and sampling and analysis. These costs will be estimated with an anticipated accuracy between -30% to +50% in accordance with the USEPA document titled Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (USEPA, 1988). A 25% contingency factor is included to cover unforeseen costs incurred during implementation of the remedial alternative. Present-worth costs are calculated for alternatives expected to last more than 2 years. In accordance with Section 4.3(a)(5)(iv) of DER-10 and discussions during a November 16, 2010 conference call, the NYSDEC agreed to allow a 5% discount rate (before taxes and after inflation) to determine the present-worth factor.

### 6.3 Detailed Evaluation of Corrective Measures Alternatives

This section presents the detailed evaluation of each corrective measure alternative based on the evaluation criteria described in the previous section.

### 6.3.1 Alternative 1 – No Further Action

#### Technical Description

The no-action alternative serves as a baseline for comparison of the overall effectiveness of the other remedial alternatives. The no-action alternative would not involve the implementation of any remedial activities to remove, treat, contain, or monitor COIs in soil or VOCs in soil vapor. The alternative relies on natural attenuation processes to reduce the concentrations of COIs in soil and VOCs in soil vapor. The Site would be allowed to remain in its current condition, and no remedial activities would be undertaken to change the current conditions.

#### Compliance with SCGs

##### *Chemical-Specific SCGs*

Chemical-specific guidance to be considered under this alternative are presented in the NYSDEC commercial and industrial use SCOs and air guideline values and decision matrices presented in the NYSDOH VI Guidelines. Natural degradation processes would not likely reduce COI concentrations in soil at the Site below the NYSDEC commercial and/or industrial use SCOs. No actions would be taken to address VOCs in soil vapor.

The no-action alternative does not include the handling of any materials containing COIs. Therefore, the chemical-specific SCGs that regulate the subsequent handling and disposal of these materials (and related residuals) are not applicable.

##### *Action-Specific SCGs*

Action-specific SCGs are not applicable because this alternative does not include any remedial actions.

##### *Location-Specific SCGs*

Location-specific SCGs are not applicable because this alternative does not include any remedial actions.

### Overall Protection of Human Health and the Environment

Based on the RFI results, the no further-action alternative would not be effective because it would not meet the corrective measure objective of preventing/mitigating potential future exposure of commercial or industrial workers at the Site to soil containing elevated levels of COIs and exposure to offsite residents via windblown dust. The alternative does not remove, treat, or contain COIs in soil. Long-term environmental risks associated with the presence of these COIs in soil would not likely be reduced under this alternative.

### Short-Term Effectiveness

This alternative does not include active remediation in areas where COIs are identified in soil at concentrations greater than the NYSDEC commercial or industrial use SCOs. Therefore, there would be no short-term environmental impacts or risks posed to onsite workers or the community associated with implementation of this alternative.

### Long-Term Effectiveness and Permanence

Based on current conditions, there is a potential for onsite worker exposure to soils containing COIs in surface and subsurface soil during future work activities (i.e., site preparation, utility installation, building construction, landscaping, maintenance activities, etc.). The No Further Action alternative does not include actions or measures to address COIs in soil, VOCs in soil vapor, and potential human exposure. Therefore, the No Further Action alternative is not considered to be effective at addressing the NYSDEC commercial or industrial use SCOs.

### Reduction of Toxicity, Mobility, or Volume through Treatment

Implementation of this alternative would not reduce the toxicity or volume of the COIs in onsite soil. Reduction of toxicity, mobility, and mass of the impacted subsurface soil would potentially occur over an extended period of time as a result of natural processes.

### Implementability

The No Further Action alternative does not involve any active remedial response and poses no technical or administrative implementability concerns.

### Cost

There are no costs associated with the No Further Action alternative.

### 6.3.2 Alternative 2 – Site Controls and Monitoring

#### Technical Description

This alternative includes maintenance of the existing chain-link fence that currently exists around the property boundary, installation of appropriate signage identifying environmental impacts, implementation of a land use restriction, and preparation of an SMP. In addition, existing vegetation would be maintained over impacted onsite soils to reduce migration of surface soil. The location of the current fencing is shown on Figure 2.

The land use restriction would be established to restrict future use of the Site to industrial activities and notify future property owners of the presence of COIs in soil and soil vapor at the Site and the applicability of the SMP. The SMP would be prepared to address possible future disturbances of site soils; identify known locations of COIs in soil at the Site; set forth the inspection and maintenance activities for the fencing, signage and vegetation; and present requirements to prevent intrusion of vapors into future buildings at concentrations exceeding NYSDOH air guideline values. Fence and vegetative cover maintenance requirements would be performed, as needed, in accordance with the SMP.

This alternative would not be consistent with any of the general remedial approaches as presented in NYSDEC CP-51 (i.e., Approaches 1 through 4).

#### Compliance with SCGs

##### *Chemical-Specific SCGs*

Chemical-specific guidance to be considered under this alternative are the NYSDEC industrial use SCOs and air guideline values and decision matrices presented in the NYSDOH VI Guidance. However, access to areas containing COIs in soil at concentrations greater than the NYSDEC industrial use SCOs would be restricted by the chain-link fence and locking gates. However, potential exposures to COIs could result from access to the Site by future site workers. The SMP would require measures to prevent exposures to surface and subsurface soil and intrusion of vapors into future

buildings (e.g., warehouses) at concentrations exceeding NYSDOH air guideline values.

This alternative does not include the excavation or handling of materials containing COIs, therefore, the chemical-specific SCGs that regulate the subsequent handling and disposal of these materials (and related residuals) are not applicable.

#### *Action-Specific SCGs*

Action-specific SCGs are not applicable because this alternative does not include remedial actions in areas where COIs are identified in soil at concentrations greater than the NYSDEC commercial or industrial use SCOs.

#### *Location-Specific SCGs*

Activities at the Site would be conducted in accordance with local construction codes and ordinances, as appropriate.

#### Overall Protection of Human Health and the Environment

Potential exposure of the general public to soil at the Site containing COIs at concentrations greater than the NYSDEC industrial use SCOs would be limited by fencing, signage, and institutional controls, which would physically limit access to the area. Potential exposure to windblown dust would be mitigated by maintaining vegetation, which would physically reduce the likelihood of dust being mobilized by wind. Potential exposure to COIs by site workers would be minimized in the SMP by limiting the use of the Site (i.e., warehousing) and restricting access to exposed soils containing COIs at concentrations exceeding the NYSDEC industrial use SCOs. The SMP would mitigate potential exposure to soil at the Site and potential exposure to windblown dust by setting forth the vegetation and fencing inspection and maintenance activities for the Site.

Potential exposure to VOCs in soil vapor was considered based on the results of the Phase IV SVI completed in 2009. Based on the findings of the soil gas evaluation, additional preventative or mitigative measures (i.e., vapor barrier, venting systems) to address the potential for vapor intrusion into a future building will be incorporated into the land use restriction. The anticipated future property owner (NSRR, who has entered into an agreement with Bayer to purchase the Site) is prepared to install engineering controls such as vapor barriers and venting systems (where appropriate)

as part of new construction at the Site. The future property owner has acknowledged in project planning meetings with Bayer and in the Phase II ESA Report that such engineering controls will be used in anticipated future redevelopment.

#### Short-Term Effectiveness

This alternative does not include active remediation in areas where COIs are identified in soil at concentrations greater than the NYSDEC industrial use SCOs. Therefore, there would be no short-term environmental impacts or risks posed to onsite workers or the community associated with implementation of this alternative.

#### Long-Term Effectiveness and Permanence

Under this alternative, potential direct contact with soils containing COIs would be mitigated by the fencing, and potential transport via windblown dust would be mitigated by maintaining vegetation in the area. Potential exposure to COIs by site workers would be minimized by limiting the use of the Site and restricting access to exposed soils containing COIs at concentrations exceeding the NYSDEC industrial use SCOs. This alternative involves long-term monitoring and maintenance activities.

The land use restriction and SMP would be maintained, unchanged, unless site conditions or SCOs for the intended industrial site use were to change. The SMP would set forth actions to be taken to protect the health and safety of site workers and the community and properly handle impacted materials under a wide variety of typical site development/construction scenarios (site preparation, utility installation, building construction, landscaping, maintenance activities, etc.). If changes were to occur that would require modifications to the land use restriction/SMP, such modifications would be presented to the NYSDEC for review and approval, as appropriate. Both the land use restriction and the SMP would be apparent to potential future site owners during comprehensive due diligence activities performed in connection with property transfer. Taken together, these institutional controls could be expected to adequately and reliably provide for the management of impacted material to be left in place.

#### Reduction of Toxicity, Mobility, and Volume through Treatment

Implementation of this alternative would not reduce the toxicity or volume of the COIs in onsite soil. However, the mobility of onsite soils exhibiting COIs at concentrations greater than the NYSDEC industrial use SCOs would be slightly limited by the

vegetation to be maintained over these soils (which would mitigate potential wind-blown transportation).

#### Implementability

Fence and vegetation maintenance and implementation of institutional controls are all technically feasible. The equipment and materials necessary to implement this alternative are available, as are several capable contractors. The SMP would detail an inspection program to monitor the integrity of the vegetation at and fencing around the Site. The long-term maintenance of the vegetation and fence would be required for an indefinite period of time based on the continued presence of the COIs at the Site.

#### Cost

The capital costs associated with this alternative include costs associated with preparing the appropriate documentation for the land use restriction. Annual O&M costs associated with this alternative include costs associated with completing monitoring, and routine inspection and maintenance of the fencing, signage and vegetation. For purposes of this CMS, a standard 30-year O&M period has been included for maintenance of site fencing and signage. The present worth estimated cost of this alternative is \$360,000. A detailed breakdown of the estimated costs associated with this alternative is presented in Table 9.

6.3.3 Alternative 3 – Excavation of PCB-Impacted Soil Greater than 50 ppm and Offsite Disposal, Capping PCB-Impacted Soil Greater than 25 ppm, Capping SVOC- and Metal-Impacted Soil for Industrial Use, Site Controls, and Monitoring

#### Technical Description

This alternative includes the same site controls, monitoring, land use restriction, and institutional controls as Alternative 2. No excavation would be performed under this alternative because the PCB-impacted soils with concentrations greater than 50 ppm that are referenced in the title of the alternative have already been removed as part of the 2009 ICM. Existing data for the Site indicates that PCB concentrations remaining in soils are less than 50 ppm. The focal point of this alternative is the construction of a cap extending over onsite soils with PCBs, SVOCs, and metals at concentrations exceeding industrial use SCOs. A minimum of one foot of soil would be used for the cap and the soil would meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover would be placed over a demarcation

layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. The cap would be installed over impacted soil that would remain at the Site and would cover an area of approximately 57,153 square feet. Potential horizontal limits of the cap are shown on Figure 9.

The cap would generally consist of a 6-inch thick layer of general fill (run-of-bank gravel) and 6 inches of seeded topsoil to provide a vegetative cover. This cap approach could be modified in areas where buildings or driveways are constructed as part of future site redevelopment activities. Specifically, concrete building floor slabs and asphalt/concrete pavement materials could be designed (in consultation with the NYSDEC) to serve as the cap in these areas.

Airborne monitoring for particulate (dust) and volatile organic vapors would be conducted during the excavation and cap construction activities in accordance with the NYSDOH's *Community Air Monitoring Plan*, dated June 2000. Measures would be provided to mitigate dust generation during the project. Appropriate actions would be taken, if needed, based on air monitoring results.

This alternative would be consistent with an Approach 4 cleanup as outlined in NYSDEC CP-51. With the installation of the soil cap under this alternative, soil in the upper 1 foot of the Site would meet the industrial use SCOs. COIs would remain in subsurface soil below the cap at concentrations exceeding certain industrial use SCOs. Subsurface soil in certain areas below the cap would contain one or more of the following: (1) PCBs at concentrations exceeding the 25 ppm industrial use SCO, but less than the 50 ppm disposal threshold for a TSCA-regulated PCB waste and New York State hazardous waste; (2) total PAHs at concentrations exceeding the 500 ppm subsurface soil cleanup level presented in NYSDEC CP-51; and/or (3) individual SVOCs and metals at concentrations exceeding the industrial use SCOs.

#### Compliance with SCGs

##### *Chemical-Specific SCGs*

Chemical-specific guidance to be considered under this alternative are the NYSDEC industrial use SCOs and decision matrices presented in the NYSDOH VI Guidance.

The PCB, SVOC, and metals concentrations in soil would not be reduced by the cap. However, areas where PCBs, SVOCs, and metals are identified in soil at concentrations greater than the NYSDEC industrial use SCOs would be covered by a



cap. Thus, access to these soils would be limited, and the potential for windblown transport of the impacted soils beneath the cap would also be minimal. The SMP would require measures to prevent intrusion of vapors into future buildings at concentrations exceeding NYSDOH air guideline values.

#### *Action-Specific SCGs*

Action-specific SCGs that apply to this alternative are the OSHA construction standards and health and safety requirements associated with the construction of the cap. Workers and worker activities that occur during implementation of this alternative must comply with OSHA requirements for training, safety equipment and procedures, monitoring, recordkeeping, and reporting as identified in 29 CFR Parts 1904, 1910, and 1926. Compliance with action-specific SCGs would be accomplished by following a NYSDEC-approved design and site-specific HASP.

#### *Location-Specific SCGs*

Remedial activities at the Site would be conducted in accordance with local construction codes and ordinances, as appropriate, including those requirements at offsite disposal locations.

#### Overall Protection of Human Health and the Environment

Potential exposure to soil and windblown dust would be mitigated by maintaining the cap which would physically isolate the impacted soils above NYSDEC industrial use SCOs and prevent them from being mobilized by the wind. Potential exposure to windblown dust would also be mitigated by maintaining vegetation in the remaining areas where soil remains at the Site containing COIs greater than the industrial use COIs, which would physically reduce the likelihood of dust being mobilized by wind. Potential exposure to COIs by site workers would be minimized in the SMP by limiting the use of the Site and restricting access to exposed soils containing COIs at concentrations exceeding the NYSDEC industrial use SCOs. The SMP would mitigate potential exposure to soil at the Site and potential exposure to windblown dust by setting forth the cap, vegetation, and fencing inspection and maintenance activities for the Site.

Potential exposure to VOCs in soil vapor was considered based on the results of the Phase IV SVI completed in 2009. Based on the findings of the soil gas evaluation, additional preventative or mitigative measures (i.e., vapor barrier, venting systems) to

address the potential for vapor intrusion into a future building will be incorporated into the land use restriction. The anticipated future property owner (NSRR, who has entered into an agreement with Bayer to purchase the Site) is prepared to install engineering controls such as vapor barriers and venting systems (where appropriate) as part of new construction at the Site. The future property owner has acknowledged in project planning meetings with Bayer and in the Phase II ESA Report that such engineering controls will be used in anticipated future redevelopment.

#### Short-Term Effectiveness

Onsite workers could be exposed to chemical COIs in soil during the surface disturbance associated with the cap construction. Exposure routes would be of a modest duration and would be addressed via various health and safety precautions as discussed below.

Potential exposure of onsite workers to chemical COIs and operational hazards would be mitigated by the use of PPE as specified in a site-specific HASP and through proper equipment and material handling procedures to be specified in the remedy design documents and site work plans. Air monitoring would be performed during soil construction activities to determine the need for additional engineering controls (e.g., using water sprays to suppress dust, modifying the construction rate, etc.) and to confirm that dust levels remain within acceptable levels, as specified in the site-specific HASP.

The community would not have access to the Site during the cap construction activities because the Site is currently fenced and entry would be controlled through the main gate off Commerce Place. Potential risks to the community during cap construction would also be mitigated by implementing an air monitoring plan and by implementing dust control techniques (e.g. water sprays to suppress dust, modifying the construction rate, etc.) to mitigate the offsite migration of unacceptable levels of fugitive dust from the Site.

#### Long-Term Effectiveness and Permanence

The cap would, over the long-term, effectively isolate surface and subsurface soils containing PCBs, SVOCs, and metals greater than the NYSDEC industrial use SCOs from direct contact and potential transport of impacted site media via windblown dust. The cap could readily be integrated with concrete or asphalt pavement where buildings or parking lots will be constructed during site redevelopment in order to provide an

effective barrier to impacted soils. The remedial goals could potentially be achieved in a modest time frame (one to two months).

The land use restriction and SMP would be kept in place, unchanged, unless site conditions or SCOs for the intended site use were to change. The SMP would set forth actions to be taken to protect the health and safety of site workers and the community and properly handle impacted materials under a wide variety of typical site development/construction scenarios (site preparation, utility installation, building construction, landscaping, maintenance activities, etc.). If changes were to occur that would require modifications to the land use restriction/SMP, such modifications would be presented to the NYSDEC for review and approval, as appropriate. Both the land use restriction and SMP would be apparent to possible future site owners during comprehensive due diligence activities performed in connection with property transfer. Together, these institutional controls could be expected to adequately and reliably provide for the management of impacted material to be left in place (if any).

#### Reduction of Toxicity, Mobility, and Volume through Treatment

Construction of the cap over designated areas of the Site would not reduce the toxicity or volume of the PCBs, SVOCs, or metals in onsite soil and VOCs in soil vapor. However, the mobility of onsite soils exhibiting COIs at concentrations greater than the NYSDEC industrial use SCOs would be reduced as the cap would mitigate the potential for wind-blown transportation.

#### Implementability

Construction of a cap and implementation of institutional controls are all technically feasible. The equipment and materials necessary to implement this alternative are available, as are several capable contractors. The cap system outlined herein could be readily integrated with concrete or asphalt areas, as appropriate, during site redevelopment activities. The SMP would detail an inspection program to monitor the integrity and effectiveness of the cap.

The time associated with installation of the cap would be one to two months.

#### Cost

The capital costs associated with this alternative include costs associated with mobilization, site preparation, cap construction, site restoration, monitoring, and

preparation of documentation necessary for the land use restriction. For purposes of this CMS, the present worth estimated cost of this alternative (based on capping over 57,153 square feet) is \$1,360,000. A detailed breakdown of the estimated costs associated with this alternative is presented in Table 10.

6.3.4 Alternative 4 – Excavation of PCB-Impacted Soil Greater than 25 ppm and Offsite Disposal, No Capping for PCBs, Capping SVOC- and Metal-Impacted Soils for Industrial Use, Site Controls, and Monitoring

Technical Description

This alternative includes the same site controls, monitoring, land use restriction, and institutional controls as Alternatives 2 and 3. This alternative includes the excavation and offsite transportation and disposal of approximately 3,928 CY of impacted soils from the Site. Excavation would be performed in each area where soil exhibits PCBs at concentrations greater than 25 ppm, except for within the footprint of former AOC 45 excavation area [where PCBs remain at a concentration of 26 ppm at sampling location VS-45-2 (34-36') which was below the bottom of the previous 30-foot deep excavation]. Under this alternative, excavation would overlap the footprint of one of the 2009 ICM excavations (i.e., a previous 2-foot deep excavation) to remove soil at sampling location AOC-52-5 (6-6.5') that exhibits PCBs at a concentration of 34 ppm. Approximate horizontal and vertical limits of the proposed excavation areas, based on current site characterization information, are shown on Figure 10.

Excavation of impacted soils would generally be conducted using conventional construction equipment, such as excavators, front-end loaders, dump trucks, etc. The excavated soil would be stockpiled in lined material staging areas for waste characterization purposes and/or direct-loaded for offsite disposal. Specifics of the handling approach would be determined during the remedial design. In-situ or post-excavation waste characterization samples would be collected from each stockpile to evaluate constituent concentrations and determine appropriate methods of handling and offsite disposal. For cost estimation and alternative evaluation purposes in this Report, it is assumed that all excavated soils (estimated 6,285 tons assuming 1.6 tons per CY) would be characterized as nonhazardous PCB-impacted waste and transported to the Veolia Greentree Subtitle D landfill located in Kersey, Pennsylvania for disposal as a nonhazardous waste.

This alternative also includes the construction of a cap extending over remaining onsite soils with SVOCs and metals exceeding industrial use SCOs. A minimum of one foot of

soil would be used for the cap and the soil would meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover would be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. The cap would be installed over impacted soil that would remain at the Site and would cover an area of approximately 43,781 square feet. Potential horizontal limits of the cap are shown on Figure 10. This alternative would include the same cap construction and airborne monitoring as Alternative 3.

Following completion of the excavation activities, the Site would be restored by backfilling the excavated area with imported clean fill material and hydroseeding the area.

This alternative would follow an Approach 4 cleanup as outlined in NYSDEC CP-51. With the installation of the soil cap under this alternative, soil in the upper 1 foot of the Site would meet the industrial use SCOs. COIs would remain in subsurface soil below the cap at concentrations exceeding certain industrial use SCOs. Subsurface soil below certain (limited) areas of the cap would contain total PAHs at concentrations exceeding the 500 ppm subsurface soil cleanup level presented in NYSDEC CP-51 and/or individual SVOCs/metals at concentrations exceeding the industrial use SCOs.

#### Compliance with SCGs

##### *Chemical-Specific SCGs*

Chemical-specific guidance to be considered under this alternative are the NYSDEC industrial use SCOs and decision matrices presented in the NYSDOH VI Guidance. Soils exhibiting PCB concentrations greater than 25 ppm would be removed except for soils at select locations where excavations were previously performed to greater than 10 feet deep and clean backfill has been placed (i.e., AOC 45). It is anticipated that the excavated soils would be characterized as a nonhazardous waste. Chemical-specific SCGs that regulate the subsequent handling and disposal of these materials (and related residuals) would be applicable.

The SVOC concentrations in soil would not be reduced by the cap. However, areas where SVOCs are identified in soil at concentrations greater than the NYSDEC industrial use SCOs would be covered by a cap. Thus, access to these soils would be limited, and the potential for windblown transport of the impacted soils beneath the cap would also be minimal. The SMP would require measures to prevent intrusion of vapors into future buildings at concentrations exceeding NYSDOH air guideline values.

*Action-Specific SCGs*

Action-specific SCGs that apply to this alternative are the OSHA construction standards and health and safety requirements associated with the soil excavation and construction of the cap. Workers and worker activities that occur during implementation of this alternative must comply with OSHA requirements for training, safety equipment and procedures, monitoring, recordkeeping, and reporting as identified in 29 CFR Parts 1904, 1910, and 1926. Compliance with action-specific SCGs would be accomplished by following a NYSDEC-approved design and site-specific HASP.

Wastes generated during the implementation of this alternative (soil removed from the excavation area) would be characterized to determine appropriate offsite disposal requirements. If any of the materials are characterized as a hazardous waste (although this is not anticipated based on existing soil analytical data, then the RCRA, UTS/LDR, and USDOT requirements for the packaging, labeling, transportation, and disposal of hazardous or regulated materials may be applicable. Compliance with these requirements would be achieved by utilizing licensed waste transporters and properly permitted disposal facilities.

*Location-Specific SCGs*

Remedial activities at the Site would be conducted in accordance with local construction codes and ordinances, as appropriate, including those requirements at offsite disposal locations.

Overall Protection of Human Health and the Environment

Potential exposure to soil at the Site and windblown dust containing PCBs at concentrations greater than 25 ppm would be mitigated because such soils would be removed from the Site and transported for offsite disposal, except for soils at select locations where excavations were previously performed to greater than 10 feet bgs and clean backfill has been placed (i.e., AOC 45). Following the excavation activities, remaining soil at the Site containing SVOCs and metals at concentrations greater than the NYSDEC industrial use SCOs would be mitigated by the cap, which would physically isolate impacted soils from direct contact. Potential exposure to windblown dust would also be mitigated by the cap, which would physically isolate impacted soils and prevent them from being mobilized by the wind.

A land use restriction would be established to further mitigate potential exposure by notifying future site owners of the presence of COIs in subsurface soil and soil vapor and the applicability of an SMP. The institutional and engineering controls in the SMP would mitigate potential exposure to soil at the Site by identifying known locations of soil containing COIs at concentrations greater than the NYSDEC industrial use SCOs at the Site and setting forth actions to address possible future disturbances of the cap and subsurface site soils. The SMP would also mitigate potential exposure to windblown dust by setting forth the cap inspection and maintenance activities for the Site.

Potential exposure to VOCs in soil vapor was considered based on the results of the Phase IV SVI completed in 2009. Based on the findings of the soil gas evaluation, additional preventative or mitigative measures (i.e., vapor barrier, venting systems) to address the potential for vapor intrusion into a future building will be incorporated into the land use restriction. The anticipated future property owner (NSRR, who has entered into an agreement with Bayer to purchase the Site) is prepared to install engineering controls such as vapor barriers and venting systems (where appropriate) as part of new construction at the Site. The future property owner has acknowledged in project planning meetings with Bayer and in the Phase II ESA Report that such engineering controls will be used in anticipated future redevelopment.

#### Short-Term Effectiveness

The excavation and subsequent handling of soil containing COIs at concentrations greater than the NYSDEC industrial use SCOs could result in potential exposure to workers or the public to impacted site soils during excavation and transport offsite for disposal. Excavation activities may generate dust, offsite soil transportation would increase the risk of in-traffic accidents, and prolonged periods of emissions (exhaust) from diesel-powered equipment could disturb the local community. Offsite transportation activities could also cause incidental spills from the transport vehicles causing potential environmental impacts.

Under this alternative, onsite workers could be exposed to chemical COIs in soil during the excavation handling activities and surface disturbance associated with the cap construction. Exposure routes would be of a modest duration and would be addressed via various health and safety precautions as discussed below.

Potential exposure of onsite workers to chemical COIs and operational hazards would be mitigated by the use of PPE as specified in a site-specific HASP and through proper



equipment and material handling procedures to be specified in the remedy design documents and site work plans. Air monitoring would be performed during soil excavation/handling activities to determine the need for additional engineering controls (e.g., using water sprays to suppress dust, modifying the excavation rate, etc.) and to confirm that dust levels remain within acceptable levels, as specified in the site-specific HASP.

The community would not have access to the Site during the excavation and cap construction activities because the Site is currently fenced and entry would be controlled through the main gate off Commerce Place. Potential risks to the community during excavation and cap construction would also be mitigated by implementing an air monitoring plan and by implementing dust control techniques (e.g. water sprays to suppress dust, modifying the excavation rate, etc.) to mitigate the offsite migration of unacceptable levels of fugitive dust from the Site.

#### Long-Term Effectiveness and Permanence

Implementation of the excavation portion of this alternative would permanently remove surface and nearly all identified subsurface soil containing PCBs at concentrations greater 25 ppm. The cap would, over the long-term, effectively isolate surface and subsurface soils containing SVOCs and metals greater than the NYSDEC industrial use SCOs from direct contact and potential transport of impacted site media via windblown dust. It is currently anticipated the Site will be redeveloped for industrial purposes. The cap could readily be integrated with concrete or asphalt pavement where buildings or parking lots will be constructed during site redevelopment in order to provide an effective barrier to impacted soils. The remedial goals could potentially be achieved in a modest time frame (several months).

The land use restriction and SMP would be kept in place, unchanged, unless site conditions or SCOs for the intended industrial site use were to change. The SMP would set forth actions to be taken to protect the health and safety of site workers and the community and properly handle impacted materials under a wide variety of typical site development/construction scenarios (site preparation, utility installation, building construction, landscaping, maintenance activities, etc.). If changes were to occur that would require modifications to the land use restriction/SMP, such modifications would be presented to the NYSDEC for review and approval, as appropriate. Both the land use restriction and SMP would be apparent to possible future site owners during comprehensive due diligence activities performed in connection with property transfer.



Together, these institutional controls could be expected to adequately and reliably provide for the management of impacted material to be left in place (if any).

#### Reduction of Toxicity, Mobility, and Volume through Treatment

The soil excavation activities would reduce the mobility and volume of PCBs in the surface and subsurface soil at the Site as most of the soil would be permanently removed and replaced with clean backfill material.

Construction of the cap over designated areas of the Site would not reduce the toxicity or volume of the PCBs, SVOCs, or metals in onsite soil and VOCs in soil vapor. However, the mobility of onsite soils exhibiting COIs at concentrations greater than the NYSDEC industrial use SCOs would be reduced as the cap would mitigate the potential for wind-blown transportation.

#### Implementability

Excavation and offsite transportation of soils are commonly employed in remedial activities and are technically feasible. Based on existing information, it is anticipated that the excavated soils would be characterized as nonhazardous waste. These soils could readily be transported to a RCRA Subtitle D landfill for disposal.

Construction of a cap and implementation of institutional controls are all technically feasible. The equipment and materials necessary to implement this alternative are available, as are several capable contractors. The cap system outlined herein could be readily integrated with concrete or asphalt areas, as appropriate, during site redevelopment activities. The SMP would detail an inspection program to monitor the integrity and effectiveness of the cap.

The time associated with excavation of impacted soils and installation of the cap would be several months.

#### Cost

The capital costs associated with this alternative include costs associated with mobilization, site preparation, excavation, transportation, disposal, cap construction, site restoration, monitoring, and preparation of documentation necessary for the land use restriction. For purposes of this CMS, the present worth estimated cost of this alternative (based on the excavation and offsite disposal of 3,928 CY of soils and

capping over 43,781 square feet) is \$2,700,000. A detailed breakdown of the estimated costs associated with this alternative is presented in Table 11.

6.3.5 Alternative 5 – Excavation of PCB-Impacted Soil Greater than 25 ppm and Offsite Disposal, Capping PCB-Impacted Soil Greater than 1 ppm, Capping SVOC- and Metal-Impacted Soil for Commercial Use, Site Controls, and Monitoring

#### Technical Description

This alternative includes site controls, monitoring, a land use restriction, and institutional controls similar to those under Alternatives 2 through 4. The land use restriction under this alternative would permit industrial and certain commercial uses of the property that are allowed under the applicable Town of Oyster Bay's "Light Industry" zoning. This alternative includes the excavation and offsite transportation and disposal of approximately 3,987 CY of impacted soils from the Site. Approximate horizontal and vertical limits of the proposed excavation areas, based on current site characterization information, are shown on Figure 11. This alternative also includes the same excavation equipment, methods, handling, characterization, and disposal as Alternative 4.

This alternative also includes the construction of a cap extending over remaining onsite soils with PCBs, SVOCs and metals at concentrations exceeding the NYSDEC commercial use SCOs. A minimum of one foot of soil would be used for the cap and the soil would meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover would be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. The cap would be installed over impacted soil that would remain at the Site and would cover an area of approximately 187,317 square feet. Potential horizontal limits of the cap are shown on Figure 11. This alternative would include the same cap construction and airborne monitoring as Alternative 3 and 4.

Following completion of the excavation activities, the Site would be restored by backfilling the excavated area with imported clean fill material and hydroseeding the area.

This alternative would be consistent with an Approach 4 cleanup as outlined in NYSDEC CP-51. With the installation of the soil cap under this alternative, soil in the upper 1 foot of the Site would meet the commercial use SCOs. COIs would remain in subsurface soil below the cap at concentrations exceeding certain commercial use

SCOs. Subsurface soil below certain areas of the cap would contain total PAHs at concentrations exceeding the 500 ppm subsurface soil cleanup level presented in NYSDEC CP-51 and/or individual SVOCs/metals at concentrations exceeding the commercial use SCOs.

#### Compliance with SCGs

##### *Chemical-Specific SCGs*

Chemical-specific guidance to be considered under this alternative are NYSDEC commercial use SCOs and decision matrices presented in the NYSDOH VI Guidance. Soils exhibiting PCB concentrations greater than 25 ppm would be removed except for soils at select locations where excavations were previously performed to greater than 15 feet deep and clean backfill has been placed (i.e., AOC 45). It is anticipated that the excavated soils would be characterized as a nonhazardous waste. Chemical-specific SCGs that regulate the subsequent handling and disposal of these materials (and related residuals) would be applicable.

The SVOCs and metals concentrations in soil would not be reduced by the cap. However, areas where SVOCs and metals are identified in soil at concentrations greater than the NYSDEC commercial use SCOs would be covered by a cap. Thus, access to these soils would be limited, and the potential for windblown transport of the impacted soils beneath the cap would also be minimal. The SMP would require measures to prevent intrusion of vapors into future buildings at concentrations exceeding NYSDOH air guideline values.

##### *Action-Specific SCGs*

Action-specific SCGs that apply to this alternative are the OSHA construction standards and health and safety requirements associated with the soil excavation and construction of the cap. Workers and worker activities that occur during implementation of this alternative must comply with OSHA requirements for training, safety equipment and procedures, monitoring, recordkeeping, and reporting as identified in 29 CFR Parts 1904, 1910, and 1926. Compliance with action-specific SCGs would be accomplished by following a NYSDEC-approved design and site-specific HASP.

Wastes generated during the implementation of this alternative (soil removed from the excavation area) would be characterized to determine appropriate offsite disposal

requirements. If any of the materials are characterized as a hazardous waste (although this is not anticipated based on existing soil analytical data, then the RCRA, UTS/LDR, and USDOT requirements for the packaging, labeling, transportation, and disposal of hazardous or regulated materials may be applicable. Compliance with these requirements would be achieved by utilizing licensed waste transporters and properly permitted disposal facilities.

#### *Location-Specific SCGs*

Remedial activities at the Site would be conducted in accordance with local construction codes and ordinances, as appropriate, including those requirements at offsite disposal locations.

#### Overall Protection of Human Health and the Environment

Potential exposure to soil at the Site and windblown dust containing PCBs at concentrations greater than 25 ppm would be mitigated because such soils would be removed from the Site and transported for offsite disposal, except for soils at select locations where excavations were previously performed to greater than 10 feet bgs and clean backfill has been placed (i.e., AOC 45). Following the excavation activities, remaining soil at the Site containing PCBs, SVOCs, and metals at concentrations greater than the NYSDEC commercial use SCOs would be mitigated by the cap, which would physically isolate impacted soils from direct contact. Potential exposure to windblown dust would also be mitigated by the cap, which would physically isolate impacted soils and prevent them from being mobilized by the wind.

A land use restriction would be established to further mitigate potential exposure by notifying future site owners of the presence of COIs in subsurface soil and soil vapor and the applicability of an SMP. The institutional and engineering controls in the SMP would mitigate potential exposure to soil at the Site by identifying known locations of soil containing COIs at concentrations greater than the NYSDEC commercial use SCOs at the Site and setting forth actions to address possible future disturbances of the cap and subsurface site soils. The SMP would also mitigate potential exposure to windblown dust by setting forth the cap inspection and maintenance activities for the Site.

Potential exposure to VOCs in soil vapor was considered based on the results of the Phase IV SVI completed in 2009. Based on the findings of the soil gas evaluation, additional preventative or mitigative measures (i.e., vapor barrier, venting systems) to

address the potential for vapor intrusion into a future building will be incorporated into the land use restriction. The anticipated future property owner (NSRR, who has entered into an agreement with Bayer to purchase the Site) is prepared to install engineering controls such as vapor barriers and venting systems (where appropriate) as part of new construction at the Site. The future property owner has acknowledged in project planning meetings with Bayer and in the Phase II ESA Report that such engineering controls will be used in anticipated future redevelopment.

#### Short-Term Effectiveness

The excavation and subsequent handling of soil containing COIs at concentrations greater than the NYSDEC commercial use SCOs could result in potential exposure to workers or the public to impacted site soils during excavation and transport offsite for disposal. Excavation activities may generate dust, offsite soil transportation would increase the risk of in-traffic accidents, and prolonged periods of emissions (exhaust) from diesel-powered equipment could disturb the local community. Offsite transportation activities could also cause incidental spills from the transport vehicles causing potential environmental impacts.

Under this alternative, onsite workers could be exposed to chemical COIs in soil during the excavation handling activities and surface disturbance associated with the cap construction. Exposure routes would be of a modest duration and would be addressed via various health and safety precautions as discussed below.

Potential exposure of onsite workers to chemical COIs and operational hazards would be mitigated by the use of PPE as specified in a site-specific HASP and through proper equipment and material handling procedures to be specified in the remedy design documents and site work plans. Air monitoring would be performed during soil excavation/handling activities to determine the need for additional engineering controls (e.g., using water sprays to suppress dust, modifying the excavation rate, etc.) and to confirm that dust levels remain within acceptable levels, as specified in the Site-specific HASP.

The community would not have access to the Site during the excavation and cap construction activities because the Site is currently fenced and entry would be controlled through the main gate off Commerce Place. Potential risks to the community during excavation and cap construction would also be mitigated by implementing an air monitoring plan and by implementing dust control techniques (e.g.

water sprays to suppress dust, modifying the excavation rate, etc.) to mitigate the offsite migration of unacceptable levels of fugitive dust from the Site.

#### Long-Term Effectiveness and Permanence

Implementation of the excavation portion of this alternative would permanently remove surface and nearly all subsurface soil containing PCBs at concentrations greater than 25 ppm. The cap would, over the long-term, effectively isolate surface and subsurface soils containing PCBs, SVOCs, and metals greater than the NYSDEC commercial use SCOs from direct contact and potential transport of impacted site media via windblown dust. This alternative would allow for future use of this site for commercial purposes. The cap could readily be integrated with concrete or asphalt pavement where buildings or parking lots will be constructed during site redevelopment in order to provide an effective barrier to impacted soils. The remedial goals could potentially be achieved in a modest time frame (several months).

The land use restriction and SMP would be kept in place, unchanged, unless site conditions or SCOs for the intended commercial site use were to change. The SMP would set forth actions to be taken to protect the health and safety of site workers and the community and properly handle impacted materials under a wide variety of typical site development/construction scenarios (site preparation, utility installation, building construction, landscaping, maintenance activities, etc.). If changes were to occur that would require modifications to the land use restriction/SMP, such modifications would be presented to the NYSDEC for review and approval, as appropriate. Both the land use restriction and SMP would be apparent to possible future site owners during comprehensive due diligence activities performed in connection with property transfer. Together, these institutional controls could be expected to adequately and reliably provide for the management of impacted material to be left in place (if any).

#### Reduction of Toxicity, Mobility, and Volume through Treatment

The soil excavation activities would reduce the mobility and volume of PCBs in the surface and most subsurface soil at the Site as most of the soil would be permanently removed and replaced with clean backfill material.

Construction of the cap over designated areas of the Site would not reduce the toxicity or volume of the PCBs, SVOCs, or metals in onsite soil and VOCs in soil vapor. However, the mobility of onsite soils exhibiting COIs at concentrations greater than the

NYSDEC commercial use SCOs would be reduced as the cap would mitigate the potential for wind-blown transportation.

#### Implementability

Excavation and offsite transportation of soils are commonly employed in remedial activities and are technically feasible. Based on existing information, it is anticipated that the excavated soils would be characterized as nonhazardous waste. These soils could readily be transported to a RCRA Subtitle D landfill for disposal.

Construction of a cap and implementation of institutional controls are all technically feasible. The equipment and materials necessary to implement this alternative are available, as are several capable contractors. The cap system outlined herein could be readily integrated with concrete or asphalt areas, as appropriate, during site redevelopment activities. The SMP would detail an inspection program to monitor the integrity and effectiveness of the cap.

The time associated with excavation of impacted soils and installation of the cap would be several months.

#### Cost

The capital costs associated with this alternative include costs associated with mobilization, site preparation, excavation, transportation, disposal, cap construction, site restoration, monitoring, and preparation of documentation necessary for the land use restriction. For purposes of this CMS, the present worth estimated cost of this alternative (based on the excavation and offsite disposal of 3,987 CY of soils and capping over 187,317 square feet) is \$3,200,000. A detailed breakdown of the estimated costs associated with this alternative is presented in Table 12.

6.3.6 Alternative 6 – Excavation of PCB-Impacted Soil Greater than 10 ppm and Offsite Disposal, Capping of PCBs Greater than 1 ppm, Excavation of Metals and Capping of SVOCs for Commercial Use, Site Controls, and Monitoring

#### Technical Description

This alternative includes site controls, monitoring, a land use restriction, and institutional controls similar to those under Alternatives 2 through 5. The land use restriction would permit industrial and certain commercial uses of the property that are

allowed under the applicable Town of Oyster Bay's "Light Industry" zoning. This alternative includes the excavation and offsite transportation and disposal of approximately 11,409 CY of impacted soils from the Site.

Excavation would be performed in each area where soil exhibits PCBs at concentrations greater than 10 ppm, except for select locations where PCBs remain in soil at concentrations greater than 10 ppm at depths more than 10 feet bgs (i.e., Sump 5 and Pilot Plant area). The 10-foot excavation cut-off depth is consistent with the outcome of the OU2 PCB soil removal action where USEPA allowed soil with PCB concentrations of up to 24 ppm to remain since the impacts were 10 feet bgs.

Excavation areas from the 2009 ICM would be revisited where necessary to remove soil containing PCBs at concentrations greater than 10 ppm below the previous soil removal limits. The 2009 ICM targeted removal of soil impacted with PCBs at concentrations greater than 25 ppm. Therefore, soil impacted with PCBs greater than 10 ppm remains at certain ICM excavations. At these locations, the overlying clean soil (extending to within 2 feet of the 2009 ICM excavation bottom) would first be removed and stockpiled for later use as backfill. The remaining soil between this depth and 10 feet bgs would be transported for offsite disposal in accordance with applicable rules and regulations. It is anticipated that approximately 10,762 CY of soil would be removed specifically to address remaining PCBs at the Site.

Concentrations of SVOCs (primarily PAHs) at two sampling locations, AOC-48-1 (0-1') (immediately southwest of the Plant 1 footprint) and P1-S121 (0-0.2') (halfway between the Plant 1 footprint and the rainwater runoff sump [AOC 28] to the east) shown on Figure 12, exceed the NYSDEC commercial use SCOs by up to an order of magnitude (e.g., 35 ppm and 32 ppm benzo(a)pyrene at sampling locations AOC-48 and P1-S121, respectively, versus the 1 ppm NYSDEC commercial use SCO for this constituent). Soil at these two sampling locations would be excavated for offsite disposal. It is anticipated that this soil would be characterized as nonhazardous waste. Removal of soil from these areas would result in removal of soil at the Site containing the highest PAH concentrations. This would also result in removal of soil at the Site found to contain total PAHs at concentrations greater than the 500 ppm subsurface soil cleanup level presented in NYSDEC CP-51. It is anticipated that approximately 70 CY of soil would be removed to address PAHs at these two locations.

Based on the findings of the metals soil delineation sampling activities performed in July 2011, excavation would also be performed to remove soil at locations in the northern portion of the Site where arsenic was found at concentrations exceeding the



16 ppm commercial use SCO. The excavations would remove soil at sampling locations M-S3, M-S4, M-S15, M-S16, M-S18, M-S20, and M-S22, which are shown on Figure 12. As a result of the excavation at sampling location M-S4, soil would also be removed where cadmium was identified at a concentration exceeding the 9.3 ppm commercial use SCO. It is estimated that 577 CY of soil (in addition to soil from the PCB excavation areas) would be removed to address the metals at these locations and would be transported for offsite disposal. It is anticipated that the soils at these sampling locations would be characterized as nonhazardous.

Imported clean fill used as backfill or as a barrier layer in areas of the site designated for capping (as discussed below) would meet the lower of the protection of groundwater or the protection of public health SCOs for commercial use as set forth in 6 NYCRR Part 375 Table 375-6.8(b).

The approximate horizontal and vertical limits of the proposed excavation areas, based on existing site characterization information, are shown on Figure 12.

This alternative also includes the same excavation equipment, methods, handling, airborne monitoring, characterization, and disposal as Alternative 4, 5, and 6. For cost estimation and alternative evaluation purposes in this Report, it is assumed that most of the excavated soils (estimated 17,219 tons assuming a soil density of 1.6 tons per CY) would be characterized as nonhazardous PCB-impacted waste and transported to the Veolia Greentree Subtitle D landfill located in Kersey, Pennsylvania for offsite disposal. It is assumed that approximately 70 CY of SVOC-impacted soil and 577 CY of metals-impacted soil (estimated 1,035 tons assuming 1.6 tons per CY) would be characterized as nonhazardous waste and also transported to this facility for offsite disposal.

This alternative also includes the construction of a cap extending over remaining onsite soils with PCBs greater than 1 ppm and SVOCs and metals exceeding the NYSDEC commercial use SCOs. A minimum of one foot of soil would be used for the cap. The soil cover would be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. The cap would cover an area of approximately 105,599 square feet. Potential horizontal limits of the cap are shown on Figure 12. This alternative would include the same cap construction and airborne monitoring as Alternatives 3, 4, and 5.

Following completion of the excavation activities, the Site would be restored by backfilling the excavated area with imported clean fill material and hydroseeding the area.

The actions under this alternative are generally consistent with those for an Approach 2 cleanup as outlined in NYSDEC CP-51, except for the following: (1) the excavation cutoff depth under Alternative 6 would be 10 feet (consistent with the OU2 excavation cutoff depth) instead of 15 feet; and (2) subsurface soil extending to a depth of 1 foot below certain areas of the cap would contain individual SVOCs and/or metals at concentrations slightly exceeding the commercial use SCOs. Bayer has determined that further excavation (below 10 feet and in certain areas immediately below the proposed capping limits) would add significantly to the alternative's cost and would do little to increase the overall protection of human health and the environment or overall remedy effectiveness.

#### Compliance with SCGs

##### *Chemical-Specific SCGs*

Chemical-specific guidance to be considered under this alternative are NYSDEC commercial use SCOs and decision matrices presented in the NYSDOH VI Guidance. Soils exhibiting PCB concentrations greater than 10 ppm would be removed except for soils at select locations where excavations were previously performed to greater than 10 feet bgs and clean backfill has been placed. It is anticipated that the excavated soils would be characterized as a nonhazardous waste. Chemical-specific SCGs that regulate the subsequent handling and disposal of these materials (and related residuals) would be applicable.

The SVOCs and metals concentrations in unexcavated soil would not be reduced by the cap. However, areas where SVOCs and metals have been identified in soil at concentrations greater than the NYSDEC commercial use SCOs would be covered by a cap. Thus, access to these soils would be limited, and the potential for windblown transport of the impacted soils beneath the cap would also be minimal. The SMP would require measures to prevent intrusion of vapors into future buildings at concentrations exceeding NYSDOH air guideline values.

*Action-Specific SCGs*

Action-specific SCGs that apply to this alternative are the OSHA construction standards and health and safety requirements associated with the soil excavation and construction of the cap. Workers and worker activities that occur during implementation of this alternative must comply with OSHA requirements for training, safety equipment and procedures, monitoring, recordkeeping, and reporting as identified in 29 CFR Parts 1904, 1910, and 1926. Compliance with action-specific SCGs would be accomplished by following a NYSDEC-approved design and site-specific HASP.

Wastes generated during the implementation of this alternative (soil removed from the excavation area) would be characterized to determine appropriate offsite disposal requirements. If any of the materials are characterized as a hazardous waste (although this is not anticipated based on existing soil analytical data), then the RCRA, UTS/LDR, and USDOT requirements for the packaging, labeling, transportation, and disposal of hazardous or regulated materials may be applicable. Compliance with these requirements would be achieved by utilizing licensed waste transporters and properly permitted disposal facilities.

*Location-Specific SCGs*

Remedial activities at the Site would be conducted in accordance with local construction codes and ordinances, as appropriate, including those requirements at offsite disposal locations.

Overall Protection of Human Health and the Environment

Potential exposure to soil at the Site and windblown dust containing PCBs at concentrations greater than 10 ppm would be mitigated because such soils would be removed from the Site and transported for offsite disposal, except for soils from select locations where excavations were previously performed to greater than 10 feet deep and clean backfill has been placed. Following the excavation activities, remaining soil at the Site containing PCBs greater than 1 ppm and SVOCs and metals at concentrations greater than the NYSDEC commercial use SCOs would be mitigated by the cap physically isolating impacted soils from direct contact. Potential exposure to windblown dust would also be mitigated by the cap, which would physically isolate impacted soils and prevent them from being mobilized by the wind.

A land use restriction would be established to further mitigate potential exposure by notifying future site owners of the presence of COIs in subsurface soil and soil vapor and the applicability of an SMP. The institutional and engineering controls in the SMP would mitigate potential exposure to soil at the Site by identifying known locations of soil containing COIs at concentrations greater than the NYSDEC commercial use SCOs at the Site and setting forth actions to address possible future disturbances of the cap and subsurface site soils. The SMP would also mitigate potential exposure to windblown dust by setting forth the cap inspection and maintenance activities for the Site.

Potential exposure to VOCs in soil vapor was considered based on the results of the Phase IV SVI completed in 2009. Based on the findings of the soil gas evaluation, additional preventative or mitigative measures (i.e., vapor barrier, venting systems) to address the potential for vapor intrusion into a future building would be incorporated into the land use restriction. The anticipated future property owner (NSRR, who has entered into an agreement with Bayer to purchase the Site) is prepared to install engineering controls such as vapor barriers and venting systems (where appropriate) as part of new construction at the Site. The future property owner has acknowledged in project planning meetings with Bayer and in the Phase II ESA Report that such engineering controls would be used in anticipated future redevelopment.

#### Short-Term Effectiveness

The excavation and subsequent handling of soil containing COIs at concentrations greater than the proposed soil cleanup levels could result in potential exposure to workers or the public to impacted site soils during excavation and transport offsite for disposal. Excavation activities may generate dust, offsite soil transportation would increase the risk of in-traffic accidents, and prolonged periods of emissions (exhaust) from diesel-powered equipment could disturb the local community. Offsite transportation activities could also cause incidental spills from the transport vehicles causing potential environmental impacts.

Under this alternative, onsite workers could be exposed to chemical COIs in soil during the excavation handling activities and surface disturbance associated with the cap construction. Exposure routes would be of a modest duration and would be addressed via various health and safety precautions as discussed below.

Potential exposure of onsite workers to chemical COIs and operational hazards would be mitigated by the use of PPE as specified in a site-specific HASP and through proper

equipment and material handling procedures to be specified in the remedy design documents and site work plans. Air monitoring would be performed during soil excavation/handling activities to determine the need for additional engineering controls (e.g., using water sprays to suppress dust, modifying the excavation rate, etc.) and to confirm that dust levels remain within acceptable levels, as specified in the Site-specific HASP.

The community would not have access to the Site during the excavation and cap construction activities because the Site is currently fenced and entry would be controlled through the main gate off Commerce Place. Potential risks to the community during excavation and cap construction would also be mitigated by implementing an air monitoring plan and by implementing dust control techniques (e.g. water sprays to suppress dust, modifying the excavation rate, etc.) to mitigate the offsite migration of unacceptable levels of fugitive dust from the Site.

#### Long-Term Effectiveness and Permanence

Implementation of the excavation portion of this alternative would permanently remove surface and most subsurface soil containing PCBs at concentrations greater than 10 ppm. The cap would, over the long-term, effectively isolate surface and subsurface soils containing PCBs at concentrations greater than 1 ppm and SVOCs/metals at concentrations greater than the NYSDEC commercial use SCOs from direct contact. The cap would also prevent potential transport of impacted site media via windblown dust. This alternative would allow for future use of this site for commercial or industrial purposes. The cap could readily be integrated with concrete or asphalt pavement where buildings or parking lots would be constructed during site redevelopment in order to provide an effective barrier to impacted soils. The remedial goals could potentially be achieved in a modest time frame (approximately six months).

The land use restriction and SMP would be kept in place, unchanged, unless site conditions or SCOs for the intended use of the site were to change. The SMP would set forth actions to be taken to protect the health and safety of site workers and the community and properly handle impacted materials under a wide variety of typical site development/construction scenarios (site preparation, utility installation, building construction, landscaping, maintenance activities, etc.). If changes were to occur that would require modifications to the land use restriction/SMP, such modifications would be presented to the NYSDEC for review and approval, as appropriate. Both the land use restriction and SMP would be apparent to possible future site owners during comprehensive due diligence activities performed in connection with property transfer.

Together, these institutional controls could be expected to adequately and reliably provide for the management of impacted material to be left in place (if any).

#### Reduction of Toxicity, Mobility, and Volume through Treatment

The soil excavation activities would reduce the mobility and volume of PCBs in the surface and most subsurface soil at the Site as most of the soil would be permanently removed and replaced with clean backfill material.

Construction of the cap over designated areas of the Site would not reduce the toxicity or volume of the PCBs or SVOCs in onsite soil and VOCs in soil vapor. However, the mobility of onsite soils exhibiting COIs at concentrations greater than the NYSDEC commercial use SCOs would be reduced as the cap would mitigate the potential for wind-blown transportation.

#### Implementability

Excavation and offsite transportation of soils are commonly employed in remedial activities and are technically feasible. Based on existing information, it is anticipated that the excavated soils would be characterized as nonhazardous waste. These soils could readily be transported to a RCRA Subtitle D landfill for disposal.

Construction of a cap and implementation of institutional controls are all technically feasible. The equipment and materials necessary to implement this alternative are available, as are several capable contractors. The cap system outlined herein could be readily integrated with concrete or asphalt areas, as appropriate, during site redevelopment activities. The SMP would detail an inspection program to monitor the integrity and effectiveness of the cap.

The time associated with excavation of impacted soils and installation of the cap would be approximately six months.

#### Cost

The capital costs associated with this alternative include costs associated with mobilization, site preparation, excavation, transportation, disposal, cap construction, site restoration, monitoring, and preparation of documentation necessary for the land use restriction. For purposes of this CMS, the present worth estimated cost of this alternative (based on the excavation and offsite disposal of 11,409 CY of soils and

capping over 105,599 square feet) is \$5,400,000. A detailed breakdown of the estimated costs associated with this alternative is presented in Table 13.

6.3.7 Alternative 7 – Excavation of PCB-Impacted Soil Greater than 1 ppm and SVOCs/Metals at Concentrations Exceeding Commercial Use SCOs, Offsite Disposal, Site Controls, and Monitoring

Technical Description

This alternative includes the same site controls, monitoring, land use restriction, and institutional controls as Alternatives 2 through 6, with allowance for industrial and/or commercial uses. This alternative also includes the excavation and offsite transportation and disposal of approximately 49,314 CY of impacted soils from the Site. Excavation would be performed in areas where soil exhibits chemical COIs at concentrations greater than the NYSDEC commercial use SCOs (i.e., 1 ppm for PCBs and the individual SCOs established for each SVOC and metal constituent), except for select locations where excavations were previously performed to greater than 15 feet deep and clean backfill has been placed. The 15-foot excavation cut-off depth is consistent with provisions in NYSDEC CP-51 for an appropriate maximum depth under an Approach 2 cleanup when certain conditions are met. As previously mentioned, although one of these conditions is that offsite groundwater does not exceed standards (which is not the case for this Site due to the offsite groundwater VOC plume), the plume is being addressed as part of the OU3 remedy and the existing data support that the remaining soils at the Site do not represent a source of groundwater impacts.

Where the proposed excavation limits overlap a previously backfilled ICM excavation, the clean fill in these areas would be removed and re-used as fill, except for the bottom 2 feet of that backfill which is in contact with the COI-impacted soil. The 2-foot area of clean fill would be removed for offsite transportation and disposal with the COI-impacted soil underneath. Approximate horizontal and vertical limits of the proposed excavation areas, based on current site characterization information, are shown on Figure 13.

This alternative also includes the same excavation equipment, methods, handling, airborne monitoring, characterization, and disposal as Alternative 4 and 5. For cost estimation and alternative evaluation purposes in this Report, it is assumed that all excavated soils (estimated 78,902 tons assuming 1.6 tons per CY) would be characterized as nonhazardous PCB-impacted waste and transported to the Veolia Greentree Subtitle D landfill located in Kersey, Pennsylvania for disposal.

Following completion of the excavation activities, the Site would be restored by backfilling the excavated area with imported clean fill material and hydroseeding the area.

#### Compliance with SCGs

##### *Chemical-Specific SCGs*

Chemical-specific guidance to be considered under this alternative are the NYSDEC commercial use SCOs and decision matrices presented in the NYSDOH VI Guidance. Soils exhibiting COIs at concentrations greater than the NYSDEC commercial use SCOs would be removed. It is anticipated that the excavated soils would be characterized as a nonhazardous waste. Chemical-specific SCGs that regulate the subsequent handling and disposal of these materials (and related residuals) would be applicable.

##### *Action-Specific SCGs*

Action-specific SCGs that apply to this alternative are the OSHA construction standards and health and safety requirements associated with the soil excavation. Workers and worker activities that occur during implementation of this alternative must comply with OSHA requirements for training, safety equipment and procedures, monitoring, recordkeeping, and reporting as identified in 29 CFR Parts 1904, 1910, and 1926. Compliance with action-specific SCGs would be accomplished by following a NYSDEC-approved design and Site-specific HASP.

Wastes generated during the implementation of this alternative (soil removed from the excavation area) would be characterized to determine appropriate offsite disposal requirements. If any of the materials are characterized as a hazardous waste (although this is not anticipated based on existing soil analytical data, then the RCRA, UTS/LDR, and USDOT requirements for the packaging, labeling, transportation, and disposal of hazardous or regulated materials may be applicable. Compliance with these requirements would be achieved by utilizing licensed waste transporters and properly permitted disposal facilities.



### *Location-Specific SCGs*

Remedial activities at the Site would be conducted in accordance with local construction codes and ordinances, as appropriate, including those requirements at offsite disposal locations.

### Overall Protection of Human Health and the Environment

Potential exposure to soil at the Site and windblown dust containing COIs at concentrations greater than the NYSDEC commercial use SCOs would be mitigated because such soils would be removed from the Site and transported for offsite disposal except for soils from select locations where excavations were previously performed to greater than 15 feet deep and clean backfill has been placed. For the few soils containing COIs at concentrations greater than the SCOs that remain in place, the soils would be beneath clean fill and not susceptible to windblown transport or direct contact. A land use restriction would be established to further mitigate potential exposure by notifying future site owners of the presence of COIs in subsurface soil and the applicability of an SMP. The institutional and engineering controls in the SMP would mitigate potential exposure to soil at the Site by identifying known locations of soil containing COIs at concentrations greater than the NYSDEC commercial use SCOs at the Site and setting forth actions to address possible future disturbances of subsurface site soils.

Potential exposure to VOCs in soil vapor was considered based on the results of the Phase IV SVI completed in 2009. Based on the findings of the soil gas evaluation, additional preventative or mitigative measures (i.e., vapor barrier, venting systems) to address the potential for vapor intrusion into a future building would be incorporated into the land use restriction. The anticipated future property owner (NSRR, who has entered into an agreement with Bayer to purchase the Site) is prepared to install engineering controls such as vapor barriers and venting systems (where appropriate) as part of new construction at the Site. The future property owner has acknowledged in project planning meetings with Bayer and in the Phase II ESA that such engineering controls would be used in anticipated future redevelopment.

### Short-Term Effectiveness

The excavation and subsequent handling of soil containing COIs at concentrations greater than the NYSDEC commercial use SCOs could result in potential exposure to workers or the public to impacted site soils during excavation and transport offsite for

disposal. Excavation activities may generate dust, offsite soil transportation would increase the risk of in-traffic accidents, and prolonged periods of emissions (exhaust) from diesel-powered equipment could disturb the local community. Offsite transportation activities could also cause incidental spills from the transport vehicles causing potential environmental impacts.

Under this alternative, onsite workers could be exposed to chemical COIs in soil during the excavation/handling activities. Exposure routes would be for the long duration of the remedial activities implementation and would be addressed via various health and safety precautions as discussed below.

Potential exposure of onsite workers to chemical COIs and operational hazards would be mitigated by the use of PPE as specified in a Site-specific HASP and through proper equipment and material handling procedures to be specified in the remedy design documents and site work plans. Air monitoring would be performed during soil excavation/handling activities to determine the need for additional engineering controls (e.g., using water sprays to suppress dust, modifying the excavation rate, etc.) and to confirm that dust levels remain within acceptable levels, as specified in the Site-specific HASP.

The community would not have access to the Site during the excavation activities because the Site is currently fenced and entry would be controlled through the main gate off Commerce Place. Potential risks to the community during excavation would also be mitigated by implementing an air monitoring plan and by implementing dust control techniques (e.g. water sprays to suppress dust, modifying the excavation rate, etc.) to mitigate the offsite migration of unacceptable levels of fugitive dust from the Site.

#### Long-Term Effectiveness and Permanence

Implementation of this alternative would permanently remove surface and most subsurface soil containing COIs at concentrations greater than the NYSDEC commercial use SCOs. The remedial goals could potentially be achieved in a period of up to one year or more.

The land use restriction and SMP (if necessary after completing excavation activities) would be kept in place, unchanged, unless site conditions or SCOs for the intended commercial site use were to change. The SMP would set forth actions to be taken to protect the health and safety of site workers and the community and properly handle

impacted materials under a wide variety of typical site development/construction scenarios (site preparation, utility installation, building construction, landscaping, maintenance activities, etc.). If changes were to occur that would require modifications to the land use restriction/SMP, such modifications would be presented to the NYSDEC for review and approval, as appropriate. Both the land use restriction and SMP would be apparent to possible future site owners during comprehensive due diligence activities performed in connection with property transfer. Together, these institutional controls could be expected to adequately and reliably provide for the management of impacted material to be left in place (if any).

#### Reduction of Toxicity, Mobility, and Volume through Treatment

The soil excavation activities would reduce the mobility and volume of COIs in the surface and most subsurface soil at the Site as most of the soil would be permanently removed and replaced with clean backfill material.

#### Implementability

Excavation and offsite transportation of soils are commonly employed in remedial activities and are technically feasible. Based on existing information, it is anticipated that the excavated soils would be characterized as nonhazardous waste. These soils could readily be transported to a RCRA Subtitle D landfill for disposal. The time associated with excavation of impacted soils would be one year or more.

#### Cost

The capital costs associated with this alternative include costs associated with mobilization, site preparation, excavation, transportation, disposal, and preparation of documentation necessary for the land use restriction. For purposes of this CMS, the present worth estimated cost of this alternative (based on the excavation and offsite disposal of 49,314 CY of soils) is \$15,900,000. A detailed breakdown of the estimated costs associated with this alternative is presented in Table 14.

## **7. Comparative Analysis of Final Corrective Measures Alternatives**

### **7.1 General**

This section presents a comparative analysis of the alternatives with respect to the seven evaluation criteria identified in Section 4. This comparative analysis identifies the advantages and disadvantages of each alternative relative to each other and in consideration of the seven evaluation criteria. The results of the comparative analysis are used as a basis for recommending a remedial alternative to address site conditions.

#### **7.1.1 Compliance with SCGs**

##### Chemical-Specific SCGs

Chemical-specific guidance to be considered under each alternative are the SCOs presented in 6 NYCRR Part 375. Alternative 1 (No Further Action) would rely on natural attenuation processes that would not likely reduce constituent concentrations in soil at the Site to levels below the commercial or industrial use SCOs. Alternatives 2 (Site Controls and Monitoring) and 3 (Excavation of PCB-Impacted Soil Greater than 50 ppm and Offsite Disposal, Capping PCB-Impacted Soil Greater than 25 ppm, Capping SVOC- and Metal-Impacted Soil for Industrial Use, Site Controls, and Monitoring) would reduce the potential for human contact with impacted soils. Alternative 3 would minimize potential exposure to soils exhibiting COIs at concentrations greater than the NYSDEC industrial use SCOs.

Alternative 4 (Excavation of PCB-Impacted Soil Greater than 25 ppm and Offsite Disposal, No Capping for PCBs, Capping SVOC- and Metal-Impacted Soils for Industrial Use, Site Controls, and Monitoring), Alternative 5 (Excavation of PCB-Impacted Soil Greater than 25 ppm and Offsite Disposal, Capping PCB-Impacted Soil Greater than 1 ppm, Capping SVOC- and Metal-Impacted Soil for Commercial Use, Site Controls, and Monitoring), Alternative 6 (Excavation of PCB-Impacted Soil Greater than 10 ppm and Offsite Disposal, Capping of PCBs Greater than 1 ppm, Excavation of Metals and Capping of SVOCs for Commercial Use, Site Controls, and Monitoring), and Alternative 7 (Excavation of PCB-Impacted Soil Greater than 1 ppm and SVOCs/Metals at Concentrations Exceeding Commercial Use SCOs, Offsite Disposal, Site Controls, and Monitoring) would reduce PCB concentrations in site soil to varying degrees (the most under Alternative 7 and least under Alternative 4). These four

alternatives would also reduce the potential for human contact with impacted soils, as indicated below.

Alternative 4 would reduce potential exposure to soils exhibiting COIs at concentrations greater than the NYSDEC industrial use SCOs, and Alternative 5, 6, and 7 would reduce potential exposure to soils exhibiting COIs at concentrations greater than the NYSDEC commercial use SCOs. Alternative 4 would include a cap over remaining soils with SVOCs and metals that exceed NYSDEC industrial use SCOs, and Alternative 5 would include a cap over remaining soils with SVOCs and metals that exceed NYSDEC commercial use SCOs. Besides addressing PCBs through removal and capping, Alternative 6 would include excavation of soil containing metals at concentrations exceeding the NYSDEC commercial use SCOs and PAHs at concentrations exceeding the 500 ppm subsurface soil cleanup level presented in NYSDEC CP-51. For the comparatively few areas under Alternative 6 where constituents would remain in soil at concentrations exceeding the commercial use SCOs (i.e., as compared to those areas under Alternatives 3, 4, and 5), a cap would be installed to cover these soils and limit exposure. Alternative 7 would include excavation to remove soils containing both metals and SVOCs at concentrations exceeding the NYSDEC commercial use SCOs.

The caps under Alternatives 4, 5, 6 would not reduce constituent concentrations in soil, but would reduce the potential for human contact with impacted soils and would reduce potential exposure to impacted soils. The excavation activities under Alternatives 6 and 7 would go further than the other alternatives in reducing concentrations of COIs in soil and reducing the potential for human contact with impacted soil.

#### Action-Specific SCGs

Action-specific SCGs are not applicable under Alternatives 1 and 2. OSHA regulations (229 CFR Parts 1904, 1910, and 1926) would apply to the construction/installation and/or excavation activities included under Alternatives 3 through 7. SCGs relating to packaging, labeling, transportation, and disposal of hazardous materials (including RCRA, UTS/LDR, and USDOT requirements) would apply to the removal activities under Alternatives 4 through 7.

All of the remedial activities could be designed and implemented to meet action-specific SCGs.

Location-Specific SCGs

Remedial activities under Alternatives 2 through 7 would be conducted in accordance with local construction codes and ordinances, as appropriate.

#### 7.1.2 Overall Protection of Human Health and the Environment

Alternative 1 would be ineffective and would not meet the soil CMOs for the Site. The fencing and vegetation maintenance activities under Alternative 2 would reduce potential human exposure and potential migration of soil containing chemical COIs at concentrations greater than the NYSDEC industrial or commercial use SCOs. The cap under Alternatives 3 through 6 would provide a higher level of protection for site occupants than the measures under Alternative 2. Potential future human exposure to soil at the Site containing COIs at concentrations greater than the NYSDEC industrial or commercial use SCOs would be less likely with construction of the cap, as opposed to the existing vegetative cover/gravel. The cap would also further mitigate potential migration of chemical COIs in onsite soils (i.e., via windblown dust). Alternatives 4 and 5 would also remove most soils exhibiting PCBs at concentrations greater than 25 ppm from the Site, thereby further mitigating potential exposure and migration of PCBs.

Alternative 6 would provide a higher level of protection for site occupants than Alternatives 4 and 5 by removing soils exhibiting PCBs at concentrations greater than 10 ppm, metals at concentrations greater than the NYSDEC commercial use SCOs, and total PAHs at concentrations greater than the 500 ppm subsurface soil cleanup level presented in NYSDEC CP-51. Alternative 7 would provide the highest level of protection by removing most soils exhibiting PCBs, SVOCs, and metals (COIs) at concentrations greater than the NYSDEC commercial use SCOs from the Site, thereby mitigating potential exposure and migration of these COIs. Soils to remain in place under Alternatives 4 through 7 that exhibit COIs at concentrations greater than the NYSDEC industrial and/or commercial use SCOs (if any) would be beneath clean fill and not susceptible to windblown transport or direct contact.

The land use restriction under Alternatives 3 through 7 would require additional preventative or mitigative measures (i.e., vapor barrier, venting systems) to address the potential for vapor intrusion into a future building. The anticipated future property owner (NSRR, who has entered into an agreement with Bayer to purchase the Site) is prepared to install engineering controls such as vapor barriers and venting systems (where appropriate) as part of new construction at the Site. The future property owner has acknowledged in project planning meetings with Bayer and in the Phase II ESA Report that such engineering controls would be used in anticipated future

redevelopment. In addition, as indicated in Subsection 1.3.6, Bayer will be responsible for continuing to evaluate the offsite VI pathway and performing offsite mitigation where needed, for vapors found to be related to Bayer's operations provided that property access is granted. Future offsite VI Investigation and offsite mitigation will be implemented separately from the alternative recommended herein, pending access approvals.

#### 7.1.3 Short-Term Effectiveness

There are no short-term negative impacts associated with Alternatives 1 and 2. Potential short-term impacts under Alternatives 3 through 7 are associated with worker exposure to soil containing PCBs, SVOCs, and metals due to soil disturbance that would occur during excavation and/or cap installation activities. The significant excavation activities for Alternative 7 present a much greater potential for short-term risks to onsite workers and the community during implementation. Under Alternatives 3 through 7, appropriate measures would be implemented to mitigate these risks including, but not limited to, implementing a HASP that includes an air monitoring program, using PPE, and instituting engineering controls to suppress dust.

Alternative 3 could potentially achieve the CMOs pertaining to soils in the least amount of time of the alternatives. Alternatives 4 through 7 would achieve the CMOs pertaining to soils in increasing amounts of time, but would require increasing amounts of soil excavation. Considering that Alternative 4 through 7 would require increasing amounts of time, there would be inherently increasing onsite labor hours and, thereby, an increased probability of site accidents/worker injury for the alternatives with larger excavations.

#### 7.1.4 Long-Term Effectiveness and Permanence

The no-action alternative would provide limited means to achieve and no method to monitor long-term effectiveness. Alternative 2 would reduce potential direct contact with soils containing PCBs, SVOCs, and metals and potential transport via windblown dust. However, Alternatives 3 through 7 would be significantly more effective than Alternative 2, because these alternatives remove COIs and/or provide a cap isolating surface and subsurface soils containing COIs from direct contact and potential transport via windblown dust. Long-term maintenance and monitoring activities would be required under Alternatives 3 through 6. Under Alternatives 4 and 5, most of the soil onsite containing PCBs with concentrations greater than 25 ppm would be permanently removed and transported for offsite disposal. Alternative 6 would remove



additional onsite soil (i.e., that containing PCBs at concentrations greater than 10 ppm, total PAHs at concentrations greater than 500 ppm, and metals at concentrations greater than NYSDEC commercial use SCOs). Alternative 7 would permanently remove the greatest amount of soil and transport it offsite for disposal, including most of the soil onsite containing COIs above the NYSDEC commercial use SCOs. Alternatives 3 through 7 are most conducive to the currently envisioned site redevelopment (for industrial or certain commercial purposes). The lack of a cap under Alternative 2 would not support future redevelopment in certain areas because COIs would be allowed to remain at elevated levels near the ground surface. The cleanups under Alternatives 3, 4, and 5 leave PCBs in subsurface soil within 10 feet of the existing ground surface at concentrations greater than the 10 ppm subsurface soil cleanup level from NYSDEC CP-51, which may require limits on weekly occupancy and would also not support future redevelopment.

Under Alternatives 2 through 7, the land use restriction and SMP would be kept in place, unchanged, unless site conditions or SCOs for the intended commercial and/or industrial site use were to change. The SMP would set forth actions to be taken to protect the health and safety of site workers and the community and properly handle impacted materials under a wide variety of typical site development/construction scenarios (site preparation, utility installation, building construction, landscaping, maintenance activities, etc.). If changes were to occur that would require modifications to the land use restriction/SMP, such modifications would be presented to the NYSDEC for review and approval, as appropriate. Both the land use restriction and SMP would be apparent to possible future site owners during comprehensive due diligence activities performed in connection with property transfer. Taken together, these institutional controls could be expected to adequately and reliably provide for the management of impacted material to be left in place.

#### 7.1.5 Reduction of Toxicity, Mobility, or Volume through Treatment

Alternatives 1 and 2 do not include implementation of active treatment processes to reduce the toxicity, mobility, or volume of COIs in soil and/or soil vapor. Alternative 2 would slightly reduce the mobility of COIs in onsite soil by maintaining vegetation over these soils which would limit potential wind-blown dust transport. Alternative 3 would significantly reduce the mobility of COIs through the construction of a cap. Alternatives 2 and 3 would not further reduce the toxicity or volume of COIs in soil and/or soil vapor beyond that achieved by the three previous ICMs, which involved the removal of approximately 9,500 CY of impacted soil. Alternatives 4 through 7 would reduce the mobility and volume of COIs in soil at the Site, as the soil would be transported for



offsite disposal, and imported clean backfill would be provided to restore the excavated areas and/or construct a cap.

#### 7.1.6 Implementability

Each of the alternatives could be implemented at the Site. Alternative 2 would be the most straightforward to implement. Alternative 3 would require minimal construction and coordination activities. Alternatives 4 through 5 would require the handling and transportation of PCB-impacted material. Alternatives 6 and 7 would require the handling and transportation of larger amounts of soil impacted by PCBs and other site-related COIs (metals and SVOCs). Considering that the Site may likely be redeveloped for certain commercial purposes, Alternatives 1 through 5 would fall short of what would need to be implemented to prepare the Site for redevelopment. Alternatives 6 and 7 are the most adaptable to different redevelopment scenarios.

#### 7.1.7 Cost

The seven corrective measure alternatives under consideration for the Site cover a wide range of costs. No capital or O&M costs are associated with the implementation of Alternative 1. The total costs to implement Alternatives 1 through 7 are summarized in the table below.

Remedial Alternative	Estimated Capital Costs	Estimated O&M Costs	Total Costs (Rounded)
<b>Alternative 1</b> – No Further Action	\$0	\$0	\$0
<b>Alternative 2</b> – Site Controls and Monitoring	\$105,000	\$250,000	\$360,000
<b>Alternative 3</b> – Excavation of PCB-Impacted Soil Greater than 50 ppm and Offsite Disposal, Capping PCB-Impacted Soil Greater than 25 ppm, Capping SVOC- and Metal-Impacted Soil for Industrial Use, Site Controls, and Monitoring	\$874,353	\$481,000	\$1,360,000
<b>Alternative 4</b> – Excavation of PCB-Impacted Soil Greater than 25 ppm and Offsite Disposal, No Capping for PCBs, Capping SVOC- and Metal-Impacted Soils for Industrial Use, Site Controls, and Monitoring	\$2,188,844	\$481,000	\$2,700,000

Remedial Alternative	Estimated Capital Costs	Estimated O&M Costs	Total Costs (Rounded)
<b>Alternative 5</b> – Excavation of PCB-Impacted Soil Greater than 25 ppm and Offsite Disposal, Capping PCB-Impacted Soil Greater than 1ppm, Capping SVOC- and Metal-Impacted Soil for Commercial Use, Site Controls, and Monitoring	\$2,743,864	\$481,000	\$3,200,000
<b>Alternative 6</b> – Excavation of PCB-Impacted Soil Greater than 10 ppm and Offsite Disposal, Capping of PCBs Greater than 1 ppm, Excavation of Metals and Capping of SVOCs for Commercial Use, Site Controls, and Monitoring	\$4,947,647	\$481,000	\$5,400,000
<b>Alternative 7</b> – Excavation of PCB-Impacted Soil Greater than 1ppm and SVOCs/Metals at Concentrations Exceeding Commercial Use SCOs, Offsite Disposal, Site Controls, and Monitoring	\$15,731,068	\$193,000	\$15,900,000

## 7.2 Recommended Corrective Measure Alternative

Based on the results of the comparative analysis presented above, Alternative 6 – Excavation of PCB-Impacted Soil Greater than 10 ppm and Offsite Disposal, Capping of PCBs Greater than 1 ppm, Excavation of Metals and Capping of SVOCs for Commercial Use, Site Controls, and Monitoring – is the most effective corrective measure alternative for this Site considering that the intended future site uses are for industrial and/or certain commercial purposes. This alternative will achieve the CMOs. Specifically, Alternative 6 will mitigate potential human exposure to soils containing PCBs, SVOCs, and metals at concentrations greater than the NYSDEC commercial use SCOs. In addition, this alternative will be protective of the environment, have fewer short-term negative impacts, be effective over the long-term, be conducive to site redevelopment, reduce the mobility of PCBs, SVOCs, and metals in soils at the Site, and be implemented for a cost significantly lower than Alternative 7.

The key advantages of Alternative 6 over the other alternatives evaluated in this CMS Report are summarized below.

- Under Alternatives 1 through 4, site redevelopment options would be significantly limited. Future commercial use, which is a redevelopment option desired by NSRR and the Town of Oyster Bay, would not be allowed. Alternative 2 would require a substantial part of the property to be cordoned off (enclosed by fence), and use of that part of the property would not be permitted. In addition, because of the lack of capping or soil excavation under Alternative 2, potential exposures via wind-blown dust would not be mitigated. Under Alternatives 3 and 4, site use would be limited to industrial purposes and subject to certain additional restrictions, as indicated below.
- Although different amounts of excavation and/or capping are proposed under Alternatives 3, 4, and 5, each of these alternatives would allow soil containing PCBs at concentrations exceeding the 10 ppm subsurface soil cleanup level presented in NYSDEC CP-51 to remain in-place closer than 10 feet from the existing ground surface. Depending on certain factors (site uses), such PCB levels might require limitations on the amount of time that any one person could spend onsite per week. In addition, soil containing total PAHs at concentrations greater than 500 ppm and arsenic/cadmium at concentrations exceeding commercial use SCOs would not be excavated. Such impacted shallow soils would likely be disturbed during future redevelopment and would need to be managed appropriately. Nonetheless, the caps under Alternatives 3, 4, and 5 would reduce potential direct human exposure to site soil containing PCBs, SVOCs, and metals and mitigate the potential for migration of these COIs via wind-blown dust, to varying degrees. The cap under Alternative 5 would provide similar protection to that under Alternative 6, but the caps under Alternatives 3 and 4 would cover smaller areas and would exclude certain soils containing COIs at concentrations exceeding commercial use SCOs.
- Alternative 7 would require a considerable amount of additional soil excavation beyond that already completed and beyond that proposed in Alternative 6, and it would be significantly more expensive to implement than Alternative 6 (i.e., approximately 3 times more expensive). The additional soil excavation under this alternative does not significantly increase the protection of human health and the environment or the ultimate effectiveness of the remedy as that provided under Alternative 6. The soil excavations and disposal under Alternative 7 would result in significantly increased short-term risks (e.g., worker exposure, injury, odors, noise, spills, traffic, etc.) and the “potential” added benefits of these additional actions do not outweigh those risks. Alternative 7 would go well-beyond what is needed for future commercial and industrial site uses.

The additional costs for Alternative 7 (\$10,500,000 greater than Alternative 6) is not justified considering that Alternative 6 can meet the CMOs, is appropriate for future commercial and industrial site use, and can be readily implemented.

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**TABLE 1**  
**SUMMARY OF SAMPLING LOCATIONS WHERE REMAINING SOIL EXCEEDS INDUSTRIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

AOC/ Location	Locations with SVOC Exceedances	Location(s) with Metal Exceedance	Locations with PCB Exceedance
<b>Designated AOCs</b>			
AOC-1	--	1 (AOC 1-2 [0-1])	--
AOC-2	1 (AOC 2-4 [0-1])	--	--
AOC-10	--	--	1 (P1-S34 [4-4.5])
AOC-11	1 (P1-S35 [0-0.2])	--	1 (AOC 11-2 [0-1])
AOC-17	1 (AOC 17-1 [0-1])	--	--
AOC-18	1 (AOC 18-3 [0-1])	--	--
AOC-24	2 (AOC 24-2 [0-1] and AOC 24-7 [0-1])	1 ( <i>R003 [0-5]</i> )	--
AOC-27 C	1 (P1-S95 [0-0.2])	--	--
AOC-31	1 (AOC31-1 [0-2])	--	--
AOC-35 M	--	--	1 (P1-S134 [6-6.5])
AOC-37	1 (AOC 37-3 [0-1])	--	--
AOC-45	--	--	1 (VS-45-2 [34-36])
AOC-47	1 (P2-S1 [0-2])	--	--
AOC-48	1 (AOC 48-1 [0-1])	--	--
AOC-52	--	--	1 (AOC 52-5 [6-6.5])
<b>Locations Between AOCs</b>			
East of AOC-1 and West of western exterior wall of plant 2, and between AOC-42 and the Former Railroad Tracks to the North and South	1 (P1-S27 [0-0.2])	--	1 (P1-S66 [0-0.2])
Dirt Patch South of AOC 30, north of AOC-7, west of AOC 28, and east of former plant 1 eastern wall	--	--	1 (P1-S90 [2-2.5])
Between AOC 7 and AOC 28	1 (P1-S121 [0-0.2 & 2-2.5])	--	1 (VS-P1-S9 [1.5-2])
South of AOC-7 to Southern Site Boundary, and east of AOC-5 and west of AOC-9	--	--	1 (P1-S65 [0-0.2])
South of AOC-49 and north of AOC-11.	--	--	1 (P1-S50 [0-0.2])
Western half of Former Plant 1. West of western boundary for AOC 42 to former western exterior wall of plant 1. North of AOC-2 and south of AOC 50	3 (P1-S33 [0-0.2], P1-S69 [0-0.2], and P1-S70 [0-0.2])	--	--
Plant 2	3 (VS-P2-1S [0-0.2], <i>F069 [0-5]</i> , and <i>T008 [0-5]</i> )	--	--
Northwest of AOC 24	1 ( <i>F051 [0-5]</i> )	--	--
Northwest of AOC 32	1 ( <i>DW064 [0-20]</i> )	1 ( <i>DW066 [0-20]</i> )	1 (P1-S138 [0-0.2])
West of AOC 35M	--	--	1 (P1-S142A [2-2.5])
Northern Corner of Site	--	M-S3 [0-0.5], M-S4 [0.5-2], M-S5 [0-0.5], M-S15 [0-0.5], M-S16 [0-0.5], M-S18 [0.5-2], M-S20 [0-0.5], M-S22 [0-0.5]	--

**Notes:**

- AOC = Area of concern.
- PCBs = Polychlorinated Biphenyls.
- VOCs = Volatile Organic Compounds.
- SVOCs = Semi-Volatile Organic Compounds.
- = No sampling Location for AOC/Relative Site Location.
- Exceedance = Constituent(s) Identified at concentrations above industrial use soil cleanup objectives presented in 6 NYCRR Part 375-6.8(b).
- Italics indicates that the sampling was a composite soil sample collected by Impact Environmental as part of a Phase II Investigation Environmental Site Assessment dated November 3, 2006.

**TABLE 1A**  
**RESULTS FOR REMAINING SOILS WITH SVOCs AT CONCENTRATIONS EXCEEDING INDUSTRIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

AOC/ Location	Location s ID	Depth (feet)	Date Collected	Benzo(a) anthracene (ppm)	Benzo(a) pyrene (ppm)	Benzo(b) flouroanthene (ppm)	Dibenzo(a,h) anthracene (ppm)	Indeno(1,2,3-cd) pyrene (ppm)
<b>6 NYCRR 375 Industrial Use SCOs (Exceedances in Bold)</b>				11	1.1	11	1.1	11
<b>Designated AOCs</b>								
AOC-2	AOC 2-4	0 - 1	2/12/2004	0.82	<b>1.2</b>	1.8	0.24 J	0.67 J
AOC-11	P1-S35	0 - 0.2	5/2/2006	2.6	<b>3.3</b>	3.0	0.95	2.9
AOC-17	AOC 17-1	0 - 1	2/16/2004	1.0 J [0.99 J]	1.1 J [0.92 J]	1.1 J [0.86 J]	0.25 J [0.27 J]	0.60 J [0.63 J]
AOC-18	AOC 18-3	0 - 1	2/16/2004	<b>12</b>	<b>10</b>	9.9	<b>3.0 J</b>	6.7
AOC-24	AOC 24-2	0 - 1	2/17/2004	2.9	<b>2.8</b>	2.6	0.49 J	1.1 J
	AOC 24-7	0 - 1	2/17/2004	5.7	<b>4.8</b>	5.4	1.1 J	2.2
AOC-27 C	P1-S95	0 - 0.2	10/23/2006	4.0 [3.5]	<b>3.2 [3.3]</b>	3.9 [3.4]	<2.7 [0.69 J]	3.3 [3.0]
AOC-31	AOC31-1	0 - 2	2/9/2004	1.9 J	<b>2.4 J</b>	2.7 J	<10	3.2 J
AOC-37	AOC 37-3	0 - 1	2/18/2004	6.3	<b>5.0</b>	4.6	0.97 J	2.1 J
AOC-47	P2-S1	0 - 2	1/4/2006	6.4	<b>7.6</b>	6.7	<b>2.5</b>	7.2
AOC-48	AOC 48-1	0 - 1	2/19/2004	<b>45</b>	<b>35</b>	<b>42</b>	<b>13 J</b>	<b>23</b>
<b>Locations Between AOCs</b>								
East of AOC-1 and West of western exterior wall of plant 2, and between AOC-42 and the Former Railroad Tracks to the North and South	P1-S27	0 - 0.2	5/3/2006	2.1	<b>1.8</b>	2.3	0.36	1.3
Between AOC 7 and AOC 28	P1-S121	0 - 0.2	4/24/2007	<b>32</b>	<b>32</b>	<b>43</b>	<b>5.9 J</b>	<b>27</b>
		2 - 2.5	4/24/2007	1.1	1.1	1.6	0.17 J	0.86
Western half of Former Plant 1. West of western boundary for AOC 42 to former western exterior wall of plant 1. North of AOC-2 and south of AOC 50	P1-S33	0 - 0.2	5/2/2006	5.7 [3.4]	<b>5.2 [3.5]</b>	5.7 [4.3]	<b>1.6 [0.88 J]</b>	5.1 [3.0]
	P1-S69	0 - 0.2	8/22/2006	2.5	<b>2.5</b>	2.3 H	0.38 H	1.7 H
	P1-S70	0 - 0.2	8/22/2006	2.1	<b>2.2</b>	2.3 H	0.35	1.6
Plant 2	VS-P2-1S	0 - 0.2	5/9/2006	3.6	<b>3.8</b>	4.5	1.1 J	4.3
	F069	0 - 5	July - September 2006	1.3	<b>2.3</b>	1.6	<0.33	0.7
	T008	0 - 5	July - September 2006	3.4	<b>3.5</b>	2.6	0.43	2.2
Northwest of AOC 24	F051	0 - 5	July - September 2006	2.6	<b>2.3</b>	4	0.37	1.5
Northwest of AOC 32	DW064	0 - 20	July - September 2006	1.4	<b>1.2</b>	1.2	<0.33	0.62

**TABLE 1A**  
**RESULTS FOR REMAINING SOILS WITH SVOCs AT CONCENTRATIONS EXCEEDING INDUSTRIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

**Notes:**

1. AOC = Area of concern.
2. SVOCs = Semi-Volatile Organic Compounds.
3. Exceedance = Constituent(s) Identified at concentrations above industrial use soil cleanup objectives presented in Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (6 NYCRR) Part 375-6.8(b).
4. Italics indicates that the sampling was a composite soil sample collected by Impact Environmental as part of a Phase II Investigation Environmental Site Assessment dated November 3, 2006. Samples not in italics were collected by ARCADIS.
5. Samples collected by ARCADIS were analyzed by TestAmerica Laboratories, Inc. (formerly Severn Trent Laboratories, Inc) located in Shelton, Connecticut for SVOCs using Environmental Protection Agency (USEPA) SW-846 Method 8270C.
6. Samples collected by Impact Environmental were analyzed by JMS Environmental Services, Inc.
7. All concentrations reported in dry weight parts per million (ppm), which is equivalent to milligrams per kilogram (mg/kg).
8. Field duplicate sample results are presented in brackets.
9. Data qualifiers are defined as follows:
  - < - Constituent not detected at a concentration above the reported detection limit.
  - H - Sample was prepped or analyzed beyond the specified holding time.
  - J - Indicates that the associated numerical value is an estimated concentration.
10. 6 NYCRR Part 375 Industrial Use Soil Cleanup Objectives (SCOs) are from 6 NYCRR Part 375-6.8 (b).
11. Bolding indicates that the result exceeds the 6 NYCRR Part 375 Industrial Use SCO.

**TABLE 1B**  
**RESULTS FOR REMAINING SOILS WITH METALS AT CONCENTRATIONS EXCEEDING INDUSTRIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

AOC/ Location	Location ID	Depth (feet)	Date Collected	Arsenic (ppm)
<b>6 NYCRR 375 Industrial Use SCOs (Exceedances in Bold)</b>				<b>16</b>
<b>Designated AOCs</b>				
AOC-1	AOC 1-2	0 - 1	2/12/2004	<b>17.7</b>
AOC-24	<i>R003</i>	<i>0 - 5</i>	<i>July - September 2006</i>	<b>17.2</b>
<b>Locations Between AOCs</b>				
Northwest of AOC 32	<i>DW066</i>	<i>0 - 5</i>	<i>July - September 2006</i>	<b>19.0</b>
Norther Corner of Site	<i>M-S3</i>	<i>0-0.5</i>	<i>July 2011</i>	<b>29.3</b>
	<i>M-S4</i>	<i>0.5-2</i>	<i>July 2011</i>	<b>24.0</b>
	<i>M-S5</i>	<i>0-0.5</i>	<i>July 2011</i>	<b>25.9</b>
	<i>M-S15</i>	<i>0-0.5</i>	<i>July 2011</i>	<b>21.4</b>
	<i>M-S16</i>	<i>0-0.5</i>	<i>July 2011</i>	<b>22.5</b>
	<i>M-S18</i>	<i>0.5-2</i>	<i>July 2011</i>	<b>16.2</b>
	<i>M-S20</i>	<i>0-0.5</i>	<i>July 2011</i>	<b>25.7</b>
	<i>M-S22</i>	<i>0-0.5</i>	<i>July 2011</i>	<b>32.9</b>

**Notes:**

1. AOC = Area of concern.
2. Exceedance = Constituent(s) Identified at concentrations above industrial use soil cleanup objectives presented in Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (6 NYCRR) Part 375-6.8(b).
3. Italics indicates that the sampling was a composite soil sample collected by Impact Environmental as part of a Phase II Investigation Environmental Site Assessment dated November 3, 2006. Samples not in italics were collected by ARCADIS as part of the RCRA Corrective Action Program between February 2004 and February 2009.
4. Samples collected by ARCADIS were analyzed by TestAmerica Laboratories, Inc. (formerly Severn Trent Laboratories, Inc) located in Shelton, Connecticut for metals using United States Environmental Protection Agency (USEPA) SW-846 Methods 6010A.
5. Samples collected by Impact Environmental were analyzed by JMS Environmental Services, Inc.
6. All concentrations reported in dry weight parts per million (ppm), which is equivalent to milligrams per kilogram (mg/kg).
7. Data qualifiers, <, indicates that the constituent was not detected at a concentration above the reported detection limit.
8. 6 NYCRR Part 375 Industrial Use Soil Cleanup Objectives (SCOs) are from 6 NYCRR Part 375-6.8(b).
9. Bolding indicates that the result exceeds the 6 NYCRR Part 375 Industrial Use SCO.

**TABLE 1C**  
**RESULTS FOR REMAINING SOILS WITH PCBs AT CONCENTRATIONS EXCEEDING INDUSTRIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

AOC/ Location	Location ID	Depth (feet)	Date Collected	Total PCBs (ppm)
<b>6 NYCRR 375 Industrial Use SCO (Exceedances in Bold)</b>				<b>25</b>
<b>Designated AOCs</b>				
AOC-10	P1-S34	4 - 4.5	5/2/2006	<b>33</b>
AOC-11	AOC11-2	0 - 1	2/12/2004	<b>47</b>
AOC-35 M	P1-S134	6 - 6.5	4/24/2007	<b>34</b>
AOC-45	VS-45-2	34 - 36	8/4/2005	<b>26 [48]</b>
AOC-52	AOC-52-5	6 - 6.5	6/4/2008	<b>34</b>
<b>Locations Between AOCs</b>				
East of AOC-1 and West of eastern exterior wall of plant 1, and between AOC-42 and the Former Railroad Tracks to the North and South	P1-S66	0 - 0.2	8/21/2006	<b>32</b>
Dirt Patch South of AOC 30, north of AOC-7, west of AOC 28, and east of former plant 1 eastern wall	P1-S90	2 - 2.5	10/24/2006	<b>42 J [25]</b>
Between AOC 7 and AOC 28	VS-P1-S9	1.5 - 2	2/12/2009	<b>34</b>
South of AOC-7 to Southern Site Boundary, and east of AOC-5 and west of AOC-9	P1-S65	0 - 0.2	8/21/2006	<b>28</b>
South of AOC-49 and north of AOC-11	P1-S50	0 - 0.2	8/21/2006	<b>31 J</b>
Northwest of AOC 32	P1-S138	0 - 0.2	4/24/2007	<b>29 J [39]</b>
West of AOC 35M	P1-S142A	2 - 2.5	7/24/2009	<b>42.6</b>

**Notes:**

1. AOC = Area of concern.
2. PCBs = Polychlorinated Biphenyls.
3. Exceedance = Constituent(s) Identified at concentrations above industrial use soil cleanup objectives presented in Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (6 NYCRR) Part 375-6.8(b).
4. Italics indicates that the sampling was a composite soil sample collected by Impact Environmental as part of a Phase II Investigation Environmental Site Assessment dated November 3, 2006. Samples not in italics were collected by ARCADIS as part of the RCRA Corrective Action Program between February 2004 and February 2009.
5. Samples collected by ARCADIS were analyzed by TestAmerica Laboratories, Inc. (formerly Severn Trent Laboratories, Inc) located in Shelton, Connecticut for PCBs using USEPA SW-846 Method 8082.
6. Samples collected by Impact Environmental were analyzed by JMS Environmental Services, Inc.
7. All concentrations reported in dry weight parts per million (ppm), which is equivalent to milligrams per kilogram (mg/kg).
8. Field duplicate sample results are presented in brackets.
9. Data qualifier J, Indicates that the associated numerical value is an estimated concentration.
10. 6 NYCRR Part 375 Industrial Use Soil Cleanup Objectives (SCOs) are from 6 NYCRR Part 375-6.8 (b).
11. Bolding indicates that the result exceeds the 6 NYCRR Part 375 Industrial Use SCO.

**TABLE 2**  
**SUMMARY OF SAMPLING LOCATIONS WHERE REMAINING SOIL EXCEEDS COMMERCIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

AOC/ Location	Locations with VOC Exceedances	Locations with SVOC Exceedances	Location(s) with Metal Exceedance	Locations with PCB Exceedance
<b>Designated AOCs</b>				
AOC-1	--	--	1 (AOC 1-2 [0-1])	--
AOC-2	--	1 (AOC 2-4 [0-1])	--	--
AOC-5	--	--	--	1 (F032 [0-5])
AOC-7	--	--	--	9 (P1-S41 [0-0.2 & 2-2.5], P1-S42 [0-0.2 & 2-2.5], P1-S48 [0-0.2 & 2-2.5], P1-S61 [0-0.2 & 2-2.5], and P1-S62 [2-2.5])
AOC-10	--	--	--	2 (P1-S34 [0-0.2 & 4-4.5])
AOC-11	--	1 (P1-S35 [0-0.2])	--	6 (AOC 11-2 [0-1], AOC 11-4S [0-0.17], P1-S36 [0-0.2 & 2-2.5], P1-S37 [2-2.5], and VS-P1-S37A [0-0.2])
AOC-17	--	1 (AOC 17-1 [0-1])	--	--
AOC-18	--	1 (AOC 18-3 [0-1])	--	--
AOC-24	--	2 (AOC 24-2 [0-1] and AOC 24-7 [0-1])	1 (R003 [0-5])	1 (T006 [0-5])
AOC-27 C	--	1 (P1-S95 [0-0.2])	--	2 (P1-S95 [0-0.2 & 2-2.5])
AOC-27 G	--	--	1 (F063 [0-5])	--
AOC-28	--	--	1 (F042 [0-5])	1 (V-A7-S2M [0-0.2])
AOC-31	--	1 (AOC-31 [0-2])	--	4 (AOC 31-1 [0-0.8], AOC 31-2 [0-0.2], AOC 31-3S [0-0.17], and AOC 31-4S [0-0.17])
AOC-33	--	--	--	1 (AOC 33-1 [0-1])
AOC-34	--	--	1 (F067 [0-5])	1 (F067 [0-5])
AOC-35 F	--	--	--	1 (P1-S139 [0-0.5])
AOC-35 M	--	--	--	5 (P1-S134 [0-0.2, 2-2.5, 4-4.5, & 6-6.5] and T011 [0-5])
AOC-37	--	1 (AOC 37-3 [0-1])	--	--
AOC-39	--	--	--	5 (AOC 39-2S [2-3 & 3-4], AOC 39-12S [0-0.17], VS-39-1 [0-2], and VS-39-5 [0-2])
AOC-44	--	--	--	1 (P1-S4 [4-4.5])
AOC-45	--	--	--	7 (VS-45-2 [34-36, 40-42, & 44-46], VS-45-4 [6.5-7.5], VS-45-11 [22-24], VS-45-15 [28-30], and VS-45-23 [4.5-5])
AOC-47	--	1 (P2-S1 [0-2])	--	--
AOC-48	--	1 (AOC 48-1 [0-1])	--	--
AOC-50	--	--	--	1 (UST-AOC-50 [0-2.5])
AOC-52	--	--	--	7 (AOC 52-1 [2-3], AOC 52-3 [1-2.5 & 2.5-3.5], and AOC 52-5 [6-6.5, 8-8.5, 10-10.5, & 16-18])

**TABLE 2**  
**SUMMARY OF SAMPLING LOCATIONS WHERE REMAINING SOIL EXCEEDS COMMERCIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

AOC/ Location	Locations with VOC Exceedances	Locations with SVOC Exceedances	Location(s) with Metal Exceedance	Locations with PCB Exceedance
<b>Locations Between AOCs</b>				
East of AOC-1 and West of western exterior wall of plant 2, and between AOC-42 and the Former Railroad Tracks to the North and South	--	1 (P1-S27 [0-0.2])	--	13 (P1-S13 [6-6.5], P1-S26 [0-0.2 & 2-2.5], P1-S27 [0-0.2], P1-S-43 [0-0.2], P1-S44 [4-4.5], <b>P1-S66 [0-0.2, 2-2.5, &amp; 4-4.5]</b> , P1-S67 [0-0.2, 2-2.5, & 4-4.5], and P1-S68 [0-0.2])
Dirt Patch South of AOC 30, north of AOC-7, west of AOC 28, and east of former plant 1 eastern wall	--	--	--	17 (P1-S38 [0-0.2], P1-S39 [2-2.5], P1-S40 [2-2.5], P1-S52 [0-0.2 & 2-2.5], P1-S52A [0-0.2 & 2-2.5], P1-S56 [4-4.5], P1-S57 [0-0.2], P1-S58 [0-0.2 & 2-2.5], P1-S59 [0-0.2 & 2-2.5], and <b>P1-S90 [0-0.2, 2-2.5, 4-4.5, &amp; 6-6.5]</b> )
Between AOC 7 and AOC 28	--	2 (P1-S121 [0-0.2 & 2-2.5])	--	20 (P1-S84 [4-4.5, 6-6.5, 8-8.5, & 10-10.5], P1-S121 [0-0.2], P1-S122 [0-0.2, 2-2.5, 4-4.5, & 6-6.5], P1-S123 [0-0.2], P1-S124 [0-0.2, 2-2.5, 4-4.5, 6-6.5, & 8-8.5], P1-S125 [0-0.2 & 2-2.5], <b>VS-P1-S9 [1.5-2 &amp; 3.5-4]</b> , and F083 [0-5])
Around former overhead pipes, north of AOC-35 F and south of southern wall of former plant 2. Also includes, verification samples between AOC 35-F and AOC 49	--	--	--	22 (P1-S135 [6-6.5], P1-S136 [4-4.5 & 6-6.5], P1-S137 [4-4.5 & 6-6.5], P1-S140 [0-0.5], P1-S141 [0-0.2, 2-2.5, 4-4.5, & 6-6.5], P1-S143 [6-6.5, 8-8.5, & 10-10.5], P1-S144 [2-2.5 & 10-10.5], P1-S146 [0-0.2, 2-2.5, & 6-6.5], P1-S147 [0-0.5], P1-S148 [0-0.5 & 2-2.5], and P1-S149 [0-0.5])
North of AOC-28 and AOC-29 to the site boundary including the former shed area	--	--	--	14 (P1-S85 [0-0.2 & 2-2.5], P1-S86 [0-0.2 & 2-2.5], P1-S108 [6-6.5, & 8-8.5], P1-S109 [0-0.2], P1-S110 [0-0.2 & 2-2.5], P1-S127 [0-0.2, 2-2.5, & 4-4.5], DW072 [0-20], and DW076 [6-20])
The northeast corner of former plant 1 south of AOC-11, north of AOC-42, east of AOC-10, and west of former east plant wall	--	--	--	1 (P1-S7 [4-4.5])
South of AOC-7 to Southern Site Boundary, and east of AOC-5 and west of AOC-9	--	--	1 (F034 [0-5])	17 (P1-S63 [0-0.2, 2-2.5, 4-4.5, & 6-6.5], P1-S64 [0-0.2, 2-2.5, & 4-4.5], <b>P1-S65 [0-0.2 &amp; 2-2.5]</b> , P1-S82 [0-0.2 & 2-2.5], P1-S103 [0-0.2, 2-2.5, 4-4.5, & 6-6.5], P1-S129 [0-0.2], and F034 [0-5])
North of AOC-25 and AOC-30 to Site Boundary	--	--	--	6 (P1-S111 [6-6.5, 8-8.5, & 10-10.5], P1-S112 [0-0.2], P1-S113 [0-0.2], and P1-S116 [4-4.5])
South of AOC-49 and north of AOC-11	--	--	--	11 (P1-S49 [0-0.2, 2-2.5, & 4-4.5], <b>P1-S50 [0-0.2 &amp; 2-2.5]</b> , P1-S51 [2-2.5, & 4-4.5], P1-S71 [0-0.2], P1-S72 [0-0.2 & 2-2.5], and T013 [0-5])
South of AOC-28 and AOC-29, east of AOC-9, to southeast site boundary	--	--	--	13 (P1-S83 [0-0.2 & 2-2.5], P1-S104 [2-2.5], P1-S105 [0-0.2 & 2-2.5], P1-S106 [2-2.5], P1-S107 [0-0.2 & 2-2.5], P1-S131 [0-0.2 & 2-2.5], P1-S132 [0-0.2 & 2-2.5], and DW117 [0-20])
South of AOC-48 to southern site boundary	--	--	--	3 (P1-S79 [0-0.2], P1-S97 [0-0.2], and P1-S99 [0-0.2])

**TABLE 2**  
**SUMMARY OF SAMPLING LOCATIONS WHERE REMAINING SOIL EXCEEDS COMMERCIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

AOC/ Location	Locations with VOC Exceedances	Locations with SVOC Exceedances	Location(s) with Metal Exceedance	Locations with PCB Exceedance
<b>Locations Between AOCs</b>				
South of AOC-35 L to the southern site boundary	--	--	--	3 (P1-S81 [0-0.2 & 2-2.5] and P1-S102 [0-0.2])
Western half of Former Plant 1. West of western boundary for AOC 42 to former western exterior wall of plant 1. North of AOC-2 and south of AOC 50	--	3 (P1-S33 [0-0.2], P1-S69 [0-0.2], and P1-S70 [0-0.2])	--	7 (P1-S33 [0-0.2 & 2-2.5], P1-S69 [0-0.2], P1-S70 [0-0.2], P1-S76 [0-0.2], and P1-S78 [0-0.2 & 2-2.5])
Between AOC 42 and AOC 8	--	1 (P1-S20 [0-0.2])	--	--
Between AOC 39 and AOC 35-F	--	--	--	2 (P1-S74 [0-0.2] and P1-S94 [0-0.2])
Between AOC 25 and AOC 49	--	--	--	6 (P1-S91 [2-2.5 & 4-4.5], P1-S114 [0-0.2 & 2-2.5], and P1-S115 [0-0.2 & 2-2.5])
Plant 2	--	2 (F069 [0-5] and T008 [0-5])	2 (F069 [0-5] and T008 [0-5])	--
Plant 3	--	--	--	1 (DW081 [0-20])
Northwest Corner of AOC 35-F	--	--	--	2 (P1-S145 [0-0.2 & 2-2.5])
Between AOC 12 and Eastern Site Boundary	--	--	--	1 (T010 [0-5])
North of AOC 27-G and West of AOC 32	--	--	3 (F057 [0-5], F059 [0-5], and F061 [0-5])	2 (DW069 [0-20] and F061 [0-5])
Northwest of AOC 24	--	1 (F051 [0-5])	2 (F053 [0-5] and F055 [0-5])	--
Northwest of AOC 32	--	1 (DW064 [0-20])	3 (DW066 [0-20], F045 [0-5], and F047 [0-5])	4 (P1-S138 [0-0.2 & 2-2.5], DW064 [0-20], and DW065 [0-20])
West of AOC 35M	--	--	--	1 (P1-S142A [2-2.5])



**TABLE 2**  
**SUMMARY OF SAMPLING LOCATIONS WHERE REMAINING SOIL EXCEEDS COMMERCIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

AOC/ Location	Locations with VOC Exceedances	Locations with SVOC Exceedances	Location(s) with Metal Exceedance	Locations with PCB Exceedance
Northern Corner of Site	--	--	M-S3 [0-0.5], M-S4 [0.5-2], M-S5 [0-0.5], M-S15 [0-0.5], M-S16 [0-0.5], M-S18 [0.5-2], M-S20 [0-0.5], M-S22 [0-0.5]	--

**Notes:**

1. AOC = Area of concern.
2. PCBs = Polychlorinated Biphenyls.
3. VOCs = Volatile Organic Compounds.
4. SVOCs = Semi-Volatile Organic Compounds.
6. - - = No sampling Location for AOC/Relative Site Location.
7. Exceedance = Constituent(s) Identified at concentrations above commercial use soil cleanup objectives presented in 6 NYCRR Part 375-6.8(b).
8. Bolding indicates that the result exceeds the 6 NYCRR Part 375 Industrial Use SCO.
9. Italics indicates that the sampling was a composite soil sample collected by Impact Environmental as part of a Phase II Investigation Environmental Site Assessment dated November 3, 2006.

**TABLE 2A**  
**RESULTS FOR REMAINING SOILS WITH SVOCs AT CONCENTRATIONS EXCEEDING COMMERCIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

AOC/ Location	Locations ID	Depth (feet)	Date Collected	Benzo(a) anthracene (ppm)	Benzo(a) pyrene (ppm)	Benzo(b) flouroanthene (ppm)	Dibenz(a,h) anthracene (ppm)	Indeno(1,2,3-cd) pyrene (ppm)
<b>6 NYCRR 375 Commercial Use SCOs (Exceedances in Bold)</b>				<b>5.6</b>	<b>1</b>	<b>5.6</b>	<b>0.56</b>	<b>5.6</b>
<b>6 NYCRR 375 Industrial Use SCOs (Exceedances Shaded)</b>				<b>11</b>	<b>1.1</b>	<b>11</b>	<b>1.1</b>	<b>11</b>
<b>Designated AOCs</b>								
AOC-2	AOC 2-4	0 - 1	2/12/2004	0.82	<b>1.2</b>	1.8	0.24 J	0.67 J
AOC-11	P1-S35	0 - 0.2	5/2/2006	2.6	<b>3.3</b>	3.0	<b>0.95</b>	2.9
AOC-17	AOC 17-1	0 - 1	2/16/2004	1.0 J [0.99 J]	<b>1.1 J [0.92 J]</b>	1.1 J [0.86 J]	0.25 J [0.27 J]	0.60 J [0.63 J]
AOC-18	AOC 18-3	0 - 1	2/16/2004	<b>12</b>	<b>10</b>	<b>9.9</b>	<b>3.0 J</b>	<b>6.7</b>
AOC-24	AOC 24-2	0 - 1	2/17/2004	2.9	<b>2.8</b>	2.6	0.49 J	1.1 J
	AOC 24-7	0 - 1	2/17/2004	<b>5.7</b>	<b>4.8</b>	5.4	<b>1.1 J</b>	2.2
AOC-27 C	P1-S95	0 - 0.2	10/23/2006	4.0 [3.5]	<b>3.2 [3.3]</b>	3.9 [3.4]	<b>&lt;2.7 [0.69 J]</b>	3.3 [3.0]
AOC-31	AOC31-1	0 - 2	2/9/2004	1.9 J	<b>2.4 J</b>	2.7 J	<10	3.2 J
AOC-37	AOC 37-3	0 - 1	2/18/2004	<b>6.3</b>	<b>5.0</b>	4.6	<b>0.97 J</b>	2.1 J
AOC-47	P2-S1	0 - 2	1/4/2006	<b>6.4</b>	<b>7.6</b>	<b>6.7</b>	<b>2.5</b>	<b>7.2</b>
AOC-48	AOC 48-1	0 - 1	2/19/2004	<b>45</b>	<b>35</b>	<b>42</b>	<b>13 J</b>	<b>23</b>
<b>Locations Between AOCs</b>								
East of AOC-1 and West of western exterior wall of plant 2, and between AOC-42 and the Former Railroad Tracks to the North and South	P1-S27	0 - 0.2	5/3/2006	2.1	<b>1.8</b>	2.3	0.36	1.3
Between AOC 7 and AOC 28	P1-S121	0 - 0.2	4/24/2007	<b>32</b>	<b>32</b>	<b>43</b>	<b>5.9 J</b>	<b>27</b>
		2 - 2.5	4/24/2007	1.1	<b>1.1</b>	1.6	0.17 J	0.86
Western half of Former Plant 1. West of western boundary for AOC 42 to former western exterior wall of plant 1. North of AOC-2 and south of AOC 50	P1-S33	0 - 0.2	5/2/2006	<b>5.7 [3.4]</b>	<b>5.2 [3.5]</b>	<b>5.7 [4.3]</b>	<b>1.6 [0.88 J]</b>	5.1 [3.0]
	P1-S69	0 - 0.2	8/22/2006	2.5	<b>2.5</b>	2.3 H	0.38 H	1.7 H
	P1-S70	0 - 0.2	8/22/2006	2.1	<b>2.2</b>	2.3 H	0.35	1.6
Plant 2	VS-P2-1S	0 - 0.2	5/9/2006	3.6	<b>3.8</b>	4.5	<b>1.1 J</b>	4.3
	F069	0 - 5	July - September 2006	1.3	<b>2.3</b>	1.6	<0.33	0.7
	T008	0 - 5	July - September 2006	3.4	<b>3.5</b>	2.6	0.43	2.2
Northwest of AOC 24	F051	0 - 5	July - September 2006	2.6	<b>2.3</b>	4	0.37	1.5
Northwest of AOC 32	DW064	0 - 20	July - September 2006	1.4	<b>1.2</b>	1.2	<0.33	0.62

**TABLE 2A**  
**RESULTS FOR REMAINING SOILS WITH SVOCs AT CONCENTRATIONS EXCEEDING COMMERCIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

**Notes:**

1. AOC = Area of concern.
2. SVOCs = Semi-Volatile Organic Compounds.
3. Exceedance = Constituent(s) Identified at concentrations above commercial use soil cleanup objectives presented in Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (6 NYCRR) Part 375-6.8(b).
4. Italics indicates that the sampling was a composite soil sample collected by Impact Environmental as part of a Phase II Investigation Environmental Site Assessment dated November 3, 2006. Samples not in italics were collected by ARCADIS.
5. Samples collected by ARCADIS were analyzed by TestAmerica Laboratories, Inc. (formerly Severn Trent Laboratories, Inc) located in Shelton, Connecticut for SVOCs using Environmental Protection Agency (USEPA) SW-846 Method 8270C.
6. Samples collected by Impact Environmental were analyzed by JMS Environmental Services, Inc.
7. All concentrations reported in dry weight parts per million (ppm), which is equivalent to milligrams per kilogram (mg/kg).
8. Field duplicate sample results are presented in brackets.
9. Data qualifiers are defined as follows:
  - < - Constituent not detected at a concentration above the reported detection limit.
  - H - Sample was prepped or analyzed beyond the specified holding time.
  - J - Indicates that the associated numerical value is an estimated concentration.
10. 6 NYCRR Part 375 Commercial and Industrial Use Soil Cleanup Objectives (SCOs) are from 6 NYCRR Part 375-6.8 (b).
11. Bolding indicates that the result exceeds the 6 NYCRR Part 375 Commercial Use SCO.
12. Shading indicates that the result exceeds the 6 NYCRR Part 375 Industrial Use SCO.

**TABLE 2B**  
**RESULTS FOR REMAINING SOILS WITH METALS AT CONCENTRATIONS EXCEEDING COMMERCIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

AOC/ Location	Location ID	Depth (feet)	Date Collected	Arsenic (ppm)	Cadmium (ppm)
<b>6 NYCRR 375 Commercial Use SCO (Exceedances in Bold)</b>				<b>16</b>	<b>9.3</b>
<b>6 NYCRR 375 Industrial Use SCO (Exceedances Shaded)</b>				<b>16</b>	<b>60</b>
<b>Designated AOCs</b>					
AOC-1	AOC 1-2	0 - 1	2/12/2004	<b>17.7</b>	<4.20
AOC-24	R003	0 - 5	July - September 2006	<b>17.2</b>	7.53
AOC-27 G	F063	0 - 5	July - September 2006	2.71	<b>11.0</b>
AOC-28	F042	0 - 5	July - September 2006	1.80	<b>9.78</b>
AOC-34	F067	0 - 5	July - September 2006	1.02	<b>9.52</b>
<b>Locations Between AOCs</b>					
South of AOC-7 to Southern Site Boundary, and east of AOC-5 and west of AOC-9	F034	0 - 5	July - September 2006	2.99	<b>9.88</b>
Plant 2	F069	0 - 5	July - September 2006	1.82	<b>11.0</b>
	T008	0 - 5	July - September 2006	2.09	<b>10.3</b>
North of AOC 27-G and West of AOC 32	F057	0 - 5	July - September 2006	2.06	<b>11.5</b>
	F059	0 - 5	July - September 2006	2.65	<b>11.8</b>
	F061	0 - 5	July - September 2006	1.76	<b>9.73</b>
Northwest of AOC 24	F053	0 - 5	July - September 2006	1.63	<b>10.9</b>
	F055	0 - 5	July - September 2006	6.85	<b>11.9</b>
Northwest of AOC 32	DW066	0 - 5	July - September 2006	<b>19.0</b>	3.05
	F045	0 - 5	July - September 2006	15.0	<b>9.75</b>
	F047	0 - 5	July - September 2006	9.30	<b>11.0</b>
Norther Corner of Site	M-S3	0-0.5	July 2011	<b>29.3</b>	<1.30
	M-S4	0.5-2	July 2011	<b>24.0</b>	<b>14.2</b>
	M-S5	0-0.5	July 2011	<b>25.9</b>	0.260 J
	M-S15	0-0.5	July 2011	<b>21.4</b>	0.360 J
	M-S16	0-0.5	July 2011	<b>22.5</b>	<1.30
	M-S18	0.5-2	July 2011	<b>16.2</b>	<1.30
	M-S20	0-0.5	July 2011	<b>25.7</b>	2.60
	M-S22	0-0.5	July 2011	<b>32.9</b>	<1.30

**TABLE 2B**  
**RESULTS FOR REMAINING SOILS WITH METALS AT CONCENTRATIONS EXCEEDING COMMERCIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

**Notes:**

1. AOC = Area of concern.
2. Exceedance = Constituent(s) Identified at concentrations above commercial use soil cleanup objectives presented in Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (6 NYCRR) Part 375-6.8(b)
3. Italics indicates that the sampling was a composite soil sample collected by Impact Environmental as part of a Phase II Investigation Environmental Site Assessment dated November 3, 2006. Samples not in italics were collected by ARCADIS as part of the RCRA Corrective Action Program between February 2004 and February 2009.
4. Samples collected by ARCADIS were analyzed by TestAmerica Laboratories, Inc. (formerly Severn Trent Laboratories, Inc.) located in Shelton, Connecticut for metals using United States Environmental Protection Agency (USEPA) SW-846 Methods 6010A.
5. Samples collected by Impact Environmental were analyzed by JMS Environmental Services, Inc.
6. All concentrations reported in dry weight parts per million (ppm), which is equivalent to milligrams per kilogram (mg/kg).
7. Data qualifiers, <, indicates that the constituent was not detected at a concentration above the reported detection limit; J, indicates that the associated numerical value is an estimated concentration.
8. 6 NYCRR Part 375 Commercial Use Soil Cleanup Objectives (SCOs) are from 6 NYCRR Part 375-6.8(b).
9. Shading indicates that the result exceeds the 6 NYCRR Part 375 Industrial Use SCO.
10. Bolding indicates that the result exceeds the 6 NYCRR Part 375 Commercial Use SCO.

**TABLE 2C**  
**RESULTS FOR REMAINING SOILS WITH PCBs AT CONCENTRATIONS EXCEEDING COMMERCIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

AOC/ Location	Location ID	Depth (feet)	Date Collected	Total PCBs (ppm)
<b>6 NYCRR 375 Commercial Use SCO (Exceedances in Bold)</b>				<b>1</b>
<b>6 NYCRR 375 Industrial Use SCO (Exceedances Shaded)</b>				<b>25</b>
<b>Designated AOCs</b>				
AOC-5	F032	0 - 5	July - September 2006	<b>3.9</b>
AOC-7	P1-S41	0 - 0.2	5/2/2006	<b>7.3 J</b>
		2 - 2.5	5/2/2006	<b>5.1 J</b>
	P1-S42	0 - 0.2	5/2/2006	<b>1.7 J</b>
		2 - 2.5	5/2/2006	<b>1.3</b>
	P1-S48	0 - 0.2	5/2/2006	<b>19</b>
		2 - 2.5	5/2/2006	<b>1.9 J</b>
	P1-S61	0 - 0.2	8/21/2006	<b>2.5 J</b>
		2 - 2.5	8/21/2006	<b>5.7 J</b>
AOC-10	P1-S62	2 - 2.5	8/21/2006	<b>1.1 J</b>
		0 - 0.2	5/2/2006	<b>14 J</b>
	P1-S34	4 - 4.5	5/2/2006	<b>33</b>
AOC-11	AOC11-2	0 - 1	2/12/2004	<b>47</b>
	AOC11-4S	0 - 0.17	10/20/2004	<b>1.3</b>
	P1-S36	0 - 0.2	5/2/2006	<b>23 J</b>
		2 - 2.5	5/2/2006	<b>1.6 J</b>
	P1-S37	2 - 2.5	5/2/2006	<b>5.1</b>
	VS-P1-S37A	0-0.2	7/24/2009	<b>4.36 [8.0]</b>
AOC-24	T006	0 - 5	July - September 2006	<b>10</b>
AOC-27 C	P1-S95	0 - 0.2	10/23/2006	<b>3.1</b>
		2 - 2.5	10/23/2006	<b>3.8</b>
AOC-28	V-A7-S2M	0-0.2	6/5/2009	<b>9.2 J</b>
AOC-31	AOC31-1	0 - 0.8	2/9/2004	<b>2.8 J</b>
	AOC31-2	0 - 0.2	2/9/2004	<b>5.2 J [13 J]</b>
	AOC31-3S	0 - 0.17	10/20/2004	<b>2.4</b>
	AOC31-4S	0 - 0.17	10/20/2004	<b>1.1 J</b>
AOC-33	AOC33-1	0 - 1	2/18/2004	<b>1.5 J</b>
AOC-34	F067	0 - 5	July - September 2006	<b>3.1</b>
AOC-35 F	P1-S139	0 - 0.5	6/3/2008	<b>2.3 J</b>
AOC-35 M	P1-S134	0 - 0.2	4/24/2007	<b>9.6 J</b>
		2 - 2.5	4/24/2007	<b>11 J</b>
		4 - 4.5	4/24/2007	<b>1.6 [0.32 J]</b>
		6 - 6.5	4/24/2007	<b>34</b>
	T011	0 - 5	July - September 2006	<b>2.6</b>
AOC-39	AOC39-2S	2 - 3	10/20/2004	<b>18</b>
		3 - 4	10/20/2004	<b>9.1 J [13]</b>
	AOC39-12S	0 - 0.17	10/20/2004	<b>7.5 J</b>
	VS-39-1	0 - 0.2	6/8/2005	<b>2.5</b>
	VS-39-5	0 - 0.2	6/8/2005	<b>1.1</b>
AOC-44	P1-S4	4 - 4.5	2/1/2006	<b>1.6 J</b>

**TABLE 2C**  
**RESULTS FOR REMAINING SOILS WITH PCBs AT CONCENTRATIONS EXCEEDING COMMERCIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

AOC/ Location	Location ID	Depth (feet)	Date Collected	Total PCBs (ppm)
6 NYCRR 375 Commercial Use SCO (Exceedances in Bold)				1
6 NYCRR 375 Industrial Use SCO (Exceedances Shaded)				25
Designated AOCs				
AOC-45	VS-45-2	34 - 36	8/4/2005	26 [48]
		40 - 42	8/4/2005	7.4
		44 - 46	8/4/2005	6.0
	VS-45-4	6.5 - 7.5	6/9/2005	12 J
	VS-45-11	22 - 24	6/29/2005	23
	VS-45-15	28 - 30	6/5/2008	3.7
	VS-45-23	4.5 - 5	8/9/2005	1.5 J [2.1]
AOC-50	UST-AOC-50	0 - 2.5	6/8/2005	1.1
AOC-52	AOC52-1	2 - 3	8/22/2006	1.7
	AOC52-3	1.5 - 2.5	8/22/2006	1.0 J
		2.5 - 3.5	8/22/2006	7.9 [17 J]
	AOC-52-5	6 - 6.5	6/4/2008	34
		8 - 8.5	6/4/2008	19
		10 - 10.5	6/4/2008	3.1 J
		16 - 18	6/4/2008	6.1
Locations Between AOCs				
East of AOC-1 and West of eastern exterior wall of plant 1, and between AOC-42 and the Former Railroad Tracks to the North and South	P1-S13	6 - 6.5	5/3/2006	2.5 J
	P1-S26	0 - 0.2	5/3/2006	16 J
		2 - 2.5	5/3/2006	1.1 J
	P1-S27	0 - 0.2	5/3/2006	1.3 J
	P1-S43	0 - 0.2	5/2/2006	2.8
	P1-S44	4 - 4.5	5/2/2006	1.2 J
	P1-S66	0 - 0.2	8/21/2006	32
		2 - 2.5	8/21/2006	12 J
		4 - 4.5	8/21/2006	8.8
	P1-S67	0 - 0.2	8/21/2006	9.4 J
		2 - 2.5	8/21/2006	18
		4 - 4.5	8/21/2006	15 J
P1-S68	0 - 0.2	8/21/2006	12	
Dirt Patch South of AOC 30, north of AOC-7, west of AOC 28, and east of former plant 1 eastern wall	P1-S38	0 - 0.2	5/2/2006	14 J
	P1-S39	2 - 2.5	5/2/2006	1.3 J
	P1-S40	2 - 2.5	5/2/2006	3.1 J
	P1-S52	0 - 0.2	8/21/2006	23 J
		2 - 2.5	8/21/2006	9.1 J [0.80 J]
	P1-S52A	0 - 0.2	8/21/2006	6.6
		2 - 2.5	8/21/2006	0.96 [2.9 J]
	P1-S56	4 - 4.5	8/21/2006	9.1
	P1-S57	0 - 0.2	8/21/2006	3.6 J
	P1-S58	0 - 0.2	8/21/2006	9.2 J
		2 - 2.5	8/21/2006	6.5 J
	P1-S59	0 - 0.2	8/21/2006	5.3 J
		2 - 2.5	8/21/2006	1.3
	P1-S90	0 - 0.2	10/24/2006	19 J
		2 - 2.5	10/24/2006	42 J [25]
		4 - 4.5	10/24/2006	11
		6 - 6.5	10/24/2006	3.0

**TABLE 2C**  
**RESULTS FOR REMAINING SOILS WITH PCBs AT CONCENTRATIONS EXCEEDING COMMERCIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

AOC/ Location	Location ID	Depth (feet)	Date Collected	Total PCBs (ppm)
<b>6 NYCRR 375 Commercial Use SCO (Exceedances in Bold)</b>				<b>1</b>
<b>6 NYCRR 375 Industrial Use SCO (Exceedances Shaded)</b>				<b>25</b>
<b>Locations Between AOCs</b>				
Between AOC 7 and AOC 28	P1-S84	4 - 4.5	10/24/2006	<b>11</b>
		6 - 6.5	10/24/2006	<b>15</b>
		8 - 8.5	4/23/2007	<b>13 J</b>
		10 - 10.5	4/23/2007	<b>5.5 J</b>
	P1-S121	0 - 0.2	4/24/2007	<b>1.7 J</b>
	P1-S122	0 - 0.2	4/24/2007	<b>13 J</b>
		2 - 2.5	4/24/2007	<b>11 J</b>
		4 - 4.5	4/24/2007	<b>9.2 J</b>
		6 - 6.5	4/24/2007	<b>7.3 J</b>
	P1-S123	0 - 0.2	4/24/2007	<b>5.4 J</b>
	P1-S124	0 - 0.2	4/24/2007	<b>7.1 J</b>
		2 - 2.5	4/24/2007	<b>11 J</b>
		4 - 4.5	4/24/2007	<b>10 J</b>
		6 - 6.5	4/24/2007	<b>23 J</b>
	P1-S125	8 - 8.5	4/24/2007	<b>4.8</b>
		0 - 0.2	4/24/2007	<b>8.1 J</b>
	VS-P1-S9	2 - 2.5	4/24/2007	<b>4.5 J</b>
		1.5 - 2	2/12/2009	<b>34</b>
	F083	3.5 - 4	2/12/2009	<b>3.8 J</b>
		0 - 5	July - September 2006	<b>1</b>
Around former overhead pipes, north of AOC-35 F and south of southern wall of former plant 2. Also includes, verification samples between AOC 35-F and AOC 49	P1-S135	6 - 6.5	4/24/2007	<b>2.5</b>
	P1-S136	4 - 4.5	4/24/2007	<b>5.4 J</b>
		6 - 6.5	4/24/2007	<b>3.0 J</b>
	P1-S137	4 - 4.5	4/24/2007	<b>1.3</b>
		6 - 6.5	4/24/2007	<b>5.8</b>
	P1-S140	0 - 0.5	6/6/2008	<b>2.5 J</b>
	P1-S141	0 - 0.5	6/9/2008	<b>1.9 J</b>
		2 - 2.5	6/9/2008	<b>20</b>
		4 - 4.5	6/9/2008	<b>4.1</b>
		6 - 6.5	6/9/2008	<b>1.4</b>
	P1-S143	6 - 6.5	6/10/2008	<b>9.5 J</b>
		8 - 8.5	6/10/2008	<b>6.4 J</b>
		10 - 10.5	6/10/2008	<b>5.9 J</b>
	P1-S144	2 - 2.5	6/6/2008	<b>2.3</b>
		10 - 10.5	6/6/2008	<b>2.4 J</b>
	P1-S146	0 - 0.5	6/10/2008	<b>1.6 J</b>
		2 - 2.5	6/10/2008	<b>12 J</b>
		6 - 6.5	6/10/2008	<b>6.4</b>
	P1-S147	0 - 0.5	6/9/2008	<b>1.1</b>
	P1-S148	0 - 0.5	6/9/2008	<b>7.6</b>
		2 - 2.5	6/9/2008	<b>1.4</b>
	P1-S149	0 - 0.5	6/10/2008	<b>5.3</b>



**TABLE 2C**  
**RESULTS FOR REMAINING SOILS WITH PCBs AT CONCENTRATIONS EXCEEDING COMMERCIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

AOC/ Location	Location ID	Depth (feet)	Date Collected	Total PCBs (ppm)
<b>6 NYCRR 375 Commercial Use SCO (Exceedances in Bold)</b>				<b>1</b>
<b>6 NYCRR 375 Industrial Use SCO (Exceedances Shaded)</b>				<b>25</b>
<b>Locations Between AOCs</b>				
North of AOC-28 and AOC-29 to the site boundary including the former shed area	P1-S85	0 - 0.2	10/24/2006	<b>19 J</b>
		2 - 2.2	10/24/2006	<b>6.6 J</b>
	P1-S86	0 - 0.2	10/24/2006	<b>3.4 J</b>
		2 - 2.5	10/24/2006	<b>2.9 J</b>
	P1-S108	6 - 6.5	10/24/2006	<b>12</b>
		8 - 8.5	4/23/2007	<b>15 J</b>
	P1-S109	0 - 0.2	10/24/2006	<b>3.9</b>
	P1-S110	0 - 0.2	10/24/2006	<b>4.3</b>
		2 - 2.5	10/24/2006	<b>5.8</b>
	P1-S127	0 - 0.2	4/24/2007	<b>17 J</b>
		2 - 2.5	4/24/2007	<b>4.5 J</b>
		4 - 4.5	4/24/2007	<b>12 J</b>
	DW072	0 - 20	July - September 2006	<b>9.4</b>
	DW076	6 - 20	July - September 2006	<b>8.4</b>
The northeast corner of former plant 1 south of AOC-11, north of AOC-42, east of AOC-10, and west of former east plant wall	P1-S7	4 - 4.5	1/31/2006	<b>5.3 J</b>
South of AOC-7 to Southern Site Boundary, and east of AOC-5 and west of AOC-9	P1-S63	0 - 0.2	8/21/2006	<b>18 J</b>
		2 - 2.5	8/21/2006	<b>12 J</b>
		4 - 4.5	8/21/2006	<b>22 J</b>
		6 - 6.5	8/21/2006	<b>2.6</b>
	P1-S64	0 - 0.2	8/21/2006	<b>23 J</b>
		2 - 2.5	8/21/2006	<b>14 J</b>
		4 - 4.5	8/21/2006	<b>3.3</b>
	P1-S65	0 - 0.2	8/21/2006	<b>28</b>
		2 - 2.5	8/21/2006	<b>25 J</b>
	P1-S82	0 - 0.2	10/24/2006	<b>1.7 J [15]</b>
		2 - 2.5	10/24/2006	<b>2.2 J</b>
	P1-S103	0 - 0.2	10/24/2006	<b>14</b>
		2 - 2.5	10/24/2006	<b>12</b>
		4 - 4.5	10/24/2006	<b>11</b>
		6 - 6.5	10/24/2006	<b>1.8</b>
	P1-S129	0 - 0.2	4/24/2007	<b>5.2 J</b>
	F034	0 - 5	July - September 2006	<b>1.2</b>
North of AOC-25 and AOC-30 to Site Boundary	P1-S111	6 - 6.5	10/24/2006	<b>17 J</b>
		8 - 8.5	4/23/2007	<b>11 J</b>
		10 - 10.5	4/23/2007	<b>20</b>
	P1-S112	0 - 0.2	10/24/2006	<b>2.0</b>
	P1-S113	0 - 0.2	10/24/2006	<b>4.3</b>
	P1-S116	4 - 4.5	4/23/2007	<b>1.6 J</b>

**TABLE 2C**  
**RESULTS FOR REMAINING SOILS WITH PCBs AT CONCENTRATIONS EXCEEDING COMMERCIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

AOC/ Location	Location ID	Depth (feet)	Date Collected	Total PCBs (ppm)
<b>6 NYCRR 375 Commercial Use SCO (Exceedances in Bold)</b>				<b>1</b>
<b>6 NYCRR 375 Industrial Use SCO (Exceedances Shaded)</b>				<b>25</b>
<b>Locations Between AOCs</b>				
South of AOC-49 and north of AOC-11	P1-S49	0 - 0.2	8/21/2006	<b>19 J</b>
		2 - 2.5	8/21/2006	<b>13 [1.9]</b>
		4 - 4.5	8/21/2006	<b>9.4 J</b>
	P1-S50	0 - 0.2	8/21/2006	<b>31 J</b>
		2 - 2.5	8/21/2006	<b>5.2 J</b>
	P1-S51	2 - 2.5	8/21/2006	<b>19 J</b>
		4 - 4.5	8/21/2006	<b>5.1 J</b>
	P1-S71	0 - 0.2	8/22/2006	<b>1.3 J</b>
	P1-S72	0 - 0.2	8/22/2006	<b>3.0</b>
		2 - 2.5	8/22/2006	<b>3.9</b>
	T013	0 - 5	July - September 2006	<b>1.4</b>
South of AOC-28 and AOC-29, east of AOC-9, to southeast site boundary	P1-S83	0 - 0.2	10/24/2006	<b>2.7</b>
		2 - 2.5	10/24/2006	<b>3.1 [2.3]</b>
	P1-S104	2 - 2.5	10/24/2006	<b>4.1</b>
	P1-S105	0 - 0.2	10/24/2006	<b>4.4</b>
		2 - 2.5	10/24/2006	<b>3.2</b>
	P1-S106	2 - 2.5	10/24/2006	<b>1.1</b>
	P1-S107	0 - 0.2	10/24/2006	<b>2.8</b>
		2 - 2.5	10/24/2006	<b>2.7</b>
	P1-S131	0 - 0.2	4/24/2007	<b>5.6 J</b>
		2 - 2.5	4/24/2007	<b>1.5 J</b>
	P1-S132	0 - 0.2	4/24/2007	<b>6.5 J [2.4 J]</b>
		2 - 2.5	4/24/2007	<b>2.7 J</b>
	DW117	0 - 20	July - September 2006	<b>1.1</b>
South of AOC-48 to southern site boundary	P1-S79	0 - 0.2	10/23/2006	<b>6.0 J</b>
	P1-S97	0 - 0.2	10/24/2006	<b>5.5</b>
	P1-S99	0 - 0.2	10/23/2006	<b>2.3</b>
South of AOC-35 L to the southern site boundary	P1-S81	0 - 0.2	10/24/2006	<b>3.2 J</b>
		2 - 2.5	10/24/2006	<b>2.5 [6.1]</b>
	P1-S102	0 - 0.2	10/24/2006	<b>1.1</b>
Western half of Former Plant 1. West of western boundary for AOC 42 to former western exterior wall of plant 1. North of AOC-2 and south of AOC 50	P1-S33	0 - 0.2	5/2/2006	<b>2.0 J [1.9 J]</b>
		2 - 2.5	5/2/2006	<b>1.7</b>
	P1-S69	0 - 0.2	8/22/2006	<b>3.5 J</b>
	P1-S70	0 - 0.2	8/22/2006	<b>2.7 J</b>
	P1-S76	0 - 0.2	10/23/2006	<b>1.5 J</b>
	P1-S78	0 - 0.2	10/23/2006	<b>1.4 J</b>
		2 - 2.5	10/23/2006	<b>2.0 J</b>
Between AOC 39 and AOC 35-F	P1-S74	0 - 0.2	10/23/2006	<b>6.8</b>
	P1-S94	0 - 0.2	10/23/2006	<b>1.5 J</b>
Between AOC 25 and AOC 49	P1-S91	2 - 2.5	10/24/2006	<b>25 [17]</b>
		4 - 4.5	10/24/2006	<b>2.6</b>
	P1-S114	0 - 0.2	10/24/2006	<b>7.2</b>
		2 - 2.5	10/24/2006	<b>1.7</b>
	P1-S115	0 - 0.2	4/23/2007	<b>1.8 J</b>
		2 - 2.5	4/23/2007	<b>2.8 J [1.4 J]</b>

**TABLE 2C**  
**RESULTS FOR REMAINING SOILS WITH PCBs AT CONCENTRATIONS EXCEEDING COMMERCIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

AOC/ Location	Location ID	Depth (feet)	Date Collected	Total PCBs (ppm)
<b>6 NYCRR 375 Commercial Use SCO (Exceedances in Bold)</b>				<b>1</b>
<b>6 NYCRR 375 Industrial Use SCO (Exceedances Shaded)</b>				<b>25</b>
<b>Locations Between AOCs</b>				
Plant 3	DW081	0 - 20	July - September 2006	<b>2.2</b>
Northwest Corner of AOC 35-F	P1-S145	0 - 0.5	6/11/2008	<b>2.1 J</b>
		2 - 2.5	6/11/2008	<b>5.2</b>
Between AOC 12 and Eastern Site Boundary	T010	0 - 5	July - September 2006	<b>1</b>
North of AOC 27-G and West of AOC 32	DW069	0 - 20	July - September 2006	<b>1.6</b>
	F061	0 - 5	July - September 2006	<b>1.8</b>
Northwest of AOC 32	P1-S138	0 - 0.2	4/24/2007	<b>29 J [39]</b>
		2 - 2.5	4/24/2007	<b>6.6</b>
	DW064	0 - 20	July - September 2006	<b>18</b>
	DW065	0 - 20	July - September 2006	<b>1.9</b>
West of AOC 35M	P1-S142A	2 - 2.5	7/24/2009	<b>42.6</b>

**Notes:**

1. AOC = Area of concern.
2. PCBs = Polychlorinated Biphenyls.
3. Exceedance = Constituent(s) Identified at concentrations above commercial use soil cleanup objectives presented in Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (6 NYCRR) Part 375-6.8(b).
4. Italics indicates that the sampling was a composite soil sample collected by Impact Environmental as part of a Phase II Investigator Environmental Site Assessment dated November 3, 2006. Samples not in italics were collected by ARCADIS as part of the RCRA Corrective Action Program between February 2004 and February 2009.
5. Samples collected by ARCADIS were analyzed by TestAmerica Laboratories, Inc. (formerly Severn Trent Laboratories, Inc) located Shelton, Connecticut for PCBs using USEPA SW-846 Method 8082.
6. Samples collected by Impact Environmental were analyzed by JMS Environmental Services, Inc.
7. All concentrations reported in dry weight parts per million (ppm), which is equivalent to milligrams per kilogram (mg/kg).
8. Field duplicate sample results are presented in brackets.
9. Data qualifier J, Indicates that the associated numerical value is an estimated concentration.
10. 6 NYCRR Part 375 Commercial and Industrial Use Soil Cleanup Objectives (SCOs) are from 6 NYCRR Part 375-6.8 (b).
11. Shading indicates that the result exceeds the 6 NYCRR Part 375 Industrial Use SCO.
12. Bolding indicates that the result exceeds the 6 NYCRR Part 375 Commercial Use SCO.

**TABLE 3**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED PCBs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID:	Depth (Feet)	Date Collected	Soil Removed Via Previous ICM	Soil Removed Via 2009 ICM	Data Validation Complete	Aroclor							Total PCBs
						1016	1221	1232	1242	1248	1254	1260	
6 NYCRR 375 Commercial Use SCOs (Exceedances in Bold)						--	--	--	--	--	--	--	1
6 NYCRR 375 Industrial Use SCOs (Exceedances Shaded)						--	--	--	--	--	--	--	25
AOC11-2	0 - 1	2/12/2004			X	<9.3	<18	<9.3	<9.3	47	<9.3	<9.3	47
AOC11-3	0 - 1	2/12/2004			X	<0.018	<0.034	<0.018	<0.018	0.16 J	0.17	<0.018	0.33 J
AOC11-4S	0 - 0.17	#####			X	<0.18	<0.34	<0.18	<0.18	1.3	<0.18	<0.070	1.3
	0.5 - 1.5	#####			X	<0.018	<0.035	<0.018	<0.018	0.077	<0.018	<0.018	0.077
AOC15-3	0 - 1	2/16/2004			X	<0.018	<0.034	<0.018	<0.018	0.0081 J	0.010 J	<0.018	0.018 J
AOC16-2	0 - 1	2/16/2004			X	<0.018	<0.034	<0.018	<0.018	<0.018	0.039	0.035 J	0.074 J
AOC23-3	0 - 1	2/17/2004			X	<0.019 [<0.019]	<0.036 [<0.036]	<0.019 [<0.019]	0.026 J [0.032]	<0.019 [<0.019]	0.021 J [0.022 JN]	<0.019 [<0.019]	0.047 J [0.054 J]
AOC23-4	0 - 1	2/17/2004			X	<0.019	<0.036	<0.019	0.014 J	<0.019	0.020 JN	<0.019	0.034 J
AOC31-1	0 - 0.8	2/9/2004			X	<0.25	<0.49	<0.25	<0.25	1.1 J	1.7 J	<0.25	2.8 J
AOC31-2	0 - 0.2	2/9/2004			X	<0.41 [<1.9]	<0.79 [<3.8]	<0.41 [<1.9]	<0.41 [<1.9]	2.6 [7.2]	2.6 [5.8]	<0.41 [<1.9]	5.2 J [13 J]
AOC31-3S	0 - 0.17	#####			X	<0.10	<0.20	<0.10	<0.10	1.1	1.3	<0.50	2.4
	0.5 - 1.5	#####			X	<0.017	<0.033	<0.017	<0.017	0.040	<0.026	<0.017	0.040
AOC31-4S	0 - 0.17	#####			X	<0.093 J	<0.18 J	<0.093 J	<0.093 J	0.36 J	0.59 J	0.14 J	1.1 J
	0.5 - 1.5	#####			X	<0.019 J	<0.037 J	<0.019 J	<0.019 J	0.11 J	0.055 J	<0.019 J	0.17 J
AOC32-1	0 - 1	2/18/2004			X	<0.018	<0.036	<0.018	<0.018	<0.018	<0.018	<0.018	<0.036
AOC33-1	0 - 1	2/18/2004			X	<0.39	<0.76	<0.39	<0.39	1.3	<0.39	0.24 J	1.5 J
AOC-39		6/9/2005			X	<0.096	<0.19	<0.096	<0.096	0.18	0.24	0.52	0.94
AOC39-1	0 - 1	2/18/2004			X	<0.019	<0.036	<0.019	<0.019	0.0070 J	<0.019	0.015 J	0.022 J
AOC39-2	0 - 1	2/18/2004	X		X	<18	<36	<18	<18	<18	<18	160	160
AOC39-2S	2 - 3	#####			X	<3.7	<7.1	<3.7	<3.7	<3.7	<3.7	18	18
	3 - 4	#####			X	<0.97 J [<0.92]	<1.9 J [<1.8]	<0.97 J [<0.92]	<0.97 J [<0.92]	<0.97 J [1.4]	<0.97 J [<0.92]	9.1 J [12]	9.1 J [13]
AOC39-3	0 - 1	2/18/2004	X		X	<0.018	<0.036	<0.018	<0.018	0.0080 J	<0.019	0.033	0.041 J
AOC39-4	1 - 2	2/18/2004	X		X	<0.019	<0.037	<0.019	<0.019	<0.019	0.0040 J	<0.019	0.0040 J
AOC39-5	1 - 2	2/18/2004	X		X	<18	<36	<18	<18	<18	<18	190	190
AOC39-6	1 - 2	2/18/2004	X		X	<0.020	<0.039	<0.020	<0.020	<0.020	<0.020	0.0070 J	0.0070 J
AOC39-12S	0 - 0.17	#####			X	<0.37 J	<0.71 J	<0.37 J	<0.37 J	3.2 J	3.7 J	0.61 J	7.5 J
	0.5 - 1.5	#####			X	<0.020 J	<0.038 J	<0.020 J	<0.020 J	0.20 J	0.25 J	0.052 J	0.50 J
	2 - 3	#####			X	<0.019 J	<0.038 J	<0.019 J	<0.019 J	0.12 J	0.12 J	0.024 J	0.26 J
	3 - 4	#####			X	<0.018	<0.035	<0.018	<0.018	0.074	0.090	<0.024	0.16
AOC45-4S	0 - 0.17	#####	X		X	<370	<710	<370	<370	2,300	<370	<370	2,300
	0.5 - 1.5	#####	X		X	<360	<710	<360	<360	1,700	<360	<360	1,700
AOC52-1	1.5 - 2	8/22/2006				<0.019	<0.036	<0.019	<0.019	0.087	<0.019	<0.019	0.087
	2 - 3	8/22/2006				<0.35	<0.67	<0.35	<0.35	1.7	<0.35	<0.35	1.7

**TABLE 3**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED PCBs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID:		Depth (Feet)	Date Collected	Soil Removed Via Previous ICM	Soil Removed Via 2009 ICM	Data Validation Complete	Aroclor							Total PCBs
							1016	1221	1232	1242	1248	1254	1260	
6 NYCRR 375 Commercial Use SCOs (Exceedances in Bold)							--	--	--	--	--	--	--	1
6 NYCRR 375 Industrial Use SCOs (Exceedances Shaded)							--	--	--	--	--	--	--	25
AOC52-2	1 - 1.5	8/22/2006		X		<3.9	<7.5	<3.9	<3.9	23	<3.9	<3.9	23	
	1.5 - 2.5	8/22/2006		X		<6.9	<13	<6.9	<6.9	53	<6.9	<6.9	53	
	4 - 4.5	#####		X		<35 [ <b>&lt;34</b> ]	<68 [ <b>&lt;66</b> ]	<35 [ <b>&lt;34</b> ]	<35 [ <b>&lt;34</b> ]	330 [220]	180 [ <b>&lt;34</b> ]	<35 [ <b>&lt;34</b> ]	510 [220]	
	6 - 6.5	#####		X		<34	<67	<34	<34	350	150	<34	500	
	12 - 14	6/3/2008		X		<8.8	<17	<8.8	<8.8	130	<8.8	3.5 J	130 J	
	16 - 18	6/3/2008		X		<8.8	<17	<8.8	<8.8	58	<8.8	<8.8	58	
	20 - 22	6/3/2008		X		<35	<68	<35	<35	300	<35	10 J	310 J	
	22 - 24	6/3/2008		X		<18	<34	<18	<18	120	<18	<18	120	
	24 - 26	6/3/2008		X		<0.86	<1.7	<0.86	<0.86	2.9	<0.86	<0.86	2.9	
	26 - 28	6/3/2008		X		<8.9	<17	<8.9	<8.9	43	<8.9	<8.9	43	
28 - 30	6/3/2008		X		<36	<69	<36	<36	100	<36	<36	100		
AOC52-2R	8 - 8.5	4/23/2007		X		<35 [ <b>&lt;35</b> ]	<69 [ <b>&lt;67</b> ]	<35 [ <b>&lt;35</b> ]	<35 [ <b>&lt;35</b> ]	230 [330 B]	<35 [ <b>&lt;35</b> ]	<35 [ <b>&lt;35</b> ]	230 [330]	
	10 - 10.5	4/23/2007		X		<18	<34	<18	<18	150	<18	6.5 J	160 J	
AOC52-3	1.5 - 2.5	8/22/2006				<0.10	<0.19	<0.10	<0.10	1	<0.10	0.033 J	1.0 J	
	2.5 - 3.5	8/22/2006				<1.7 [ <b>&lt;1.8</b> ]	<3.4 [ <b>&lt;3.6</b> ]	<1.7 [ <b>&lt;1.8</b> ]	<1.7 [ <b>&lt;1.8</b> ]	7.9 [16]	<1.7 [ <b>&lt;1.8</b> ]	<1.7 [0.62 J]	7.9 [17 J]	
AOC52-4	0 - 0.2	4/23/2007		X		<0.88	<1.7	<0.88	<0.88	4.8 B	2.8	<0.88	7.6	
	2 - 2.5	4/23/2007		X		<1.7	<3.3	<1.7	<1.7	20 B	<1.7	0.87 J	21 J	
	4 - 4.5	4/23/2007		X		<0.86 [ <b>&lt;1.7</b> ]	<1.7 [ <b>&lt;3.3</b> ]	<0.86 [ <b>&lt;1.7</b> ]	<0.86 [ <b>&lt;1.7</b> ]	6.3 B [9.7 B]	1.8 [3.3]	<0.86 [0.57 J]	8.1 [14 J]	
	6 - 6.5	4/23/2007		X		<0.17	<0.33	<0.17	<0.17	0.71 B	0.29	<0.17	1.0	
AOC-52-5	0 - 0.5	6/4/2008		X		<36	<70	<36	<36	140	24 J	<36	160 J	
	2 - 2.5	6/4/2008		X		<0.94	<1.8	<0.94	<0.94	9.1	<0.94	0.49 J	9.6 J	
	6 - 6.5	6/4/2008				<3.7	<7.1	<3.7	<3.7	34	<3.7	<3.7	34	
	8 - 8.5	6/4/2008				<1.8	<3.5	<1.8	<1.8	17	<1.8	1.9	19	
	10 - 10.5	6/4/2008				<0.36	<0.69	<0.36	<0.36	3.0	<0.36	0.14 J	3.1 J	
	16 - 18	6/4/2008				<0.89	<1.7	<0.89	<0.89	6.1	<0.89	<0.89	6.1	
AOC-52-6	0 - 0.5	6/5/2008		X		<1.9	<3.6	<1.9	<1.9	21	<1.9	0.52 J	22 J	
	2 - 2.5	6/5/2008		X		<1.9	<3.6	<1.9	<1.9	18	<1.9	0.38 J	18 J	
	4 - 4.5	6/5/2008		X		<0.35	<0.67	<0.35	<0.35	4.2	4.3	0.59	9.1	
	6 - 6.5	6/5/2008		X		<0.087	<0.17	<0.087	<0.087	0.23	<0.087	<0.087	0.23	
	10 - 10.5	6/5/2008		X		<0.18	<0.34	<0.18	<0.18	0.86	<0.18	<0.18	0.86	
	16 - 18	6/5/2008		X		<0.17	<0.33	<0.17	<0.17	1.0	<0.17	<0.17	1.0	
P1-S1	0 - 0.2	#####		X		<4.0 [ <b>&lt;3.9</b> ]	<7.7 [ <b>&lt;7.5</b> ]	<4.0 [ <b>&lt;3.9</b> ]	<4.0 [ <b>&lt;3.9</b> ]	10 [12]	<4.0 [ <b>&lt;3.9</b> ]	<4.0 [ <b>&lt;3.9</b> ]	10 [12]	
	2 - 2.5	#####		X		<9.2	<18	<9.2	<9.2	18	<9.2	<9.2	18	
	4 - 4.5	2/1/2006		X		<0.93	<1.8	<0.93	<0.93	3.4	2.5	<0.93	5.9	
	6 - 6.5	2/1/2006		X		<0.43 [ <b>&lt;20</b> ]	<0.83 [ <b>&lt;38</b> ]	<0.43 [ <b>&lt;20</b> ]	<0.43 [ <b>&lt;20</b> ]	5.6 [71]	2.4 [49]	<0.43 [ <b>&lt;20</b> ]	8.0 [120]	
	8 - 8.5	5/3/2006				<0.035	<0.068	<0.035	<0.035	0.44	0.21	0.051	0.70	
P1-S2	0 - 0.2	#####		X		<0.96	<1.9	<0.96	<0.96	8.1	4.7	<0.96	13	
	2 - 2.5	2/1/2006		X		<0.20	<0.39	<0.20	<0.20	0.98	0.58	<0.20	1.6	
	4 - 4.5	2/1/2006		X		<0.21 [ <b>&lt;0.038</b> ]	<0.42 [ <b>&lt;0.074</b> ]	<0.21 [ <b>&lt;0.038</b> ]	<0.21 [ <b>&lt;0.038</b> ]	1.5 [0.091]	0.68 [0.058]	<0.21 [ <b>&lt;0.038</b> ]	2.2 [0.15]	
P1-S3	0 - 0.2	2/1/2006		X		<1.0	<2.0	<1.0	<1.0	3.7	1.3	<1.0	5.0	
	2 - 2.5	2/1/2006		X		<0.24	<0.46	<0.24	<0.24	3.2	1.9	<0.24	5.1	
P1-S4	0 - 0.2	2/1/2006		X		<20	<39	<20	<20	64	26	<20	90	
	2 - 2.5	2/1/2006		X		<1.9	<3.7	<1.9	<1.9	8.8	3.9	<1.9	13	
	4 - 4.5	2/1/2006				<0.19	<0.36	<0.19	<0.19	1.5	<0.19	0.070 J	1.6 J	
P1-S5	0 - 0.2	1/31/2006		X		<1.9	<3.7	<1.9	<1.9	19	16	1.4 J	36 J	
	2 - 2.5	1/31/2006		X		<0.39	<0.77	<0.39	<0.39	2.5	2.5	0.62	5.6	
P1-S6	0 - 0.2	1/31/2006		X		<4.0	<7.8	<4.0	<4.0	20	24	2.8 J	47 J	
	2 - 2.5	1/31/2006		X		<1.9	<3.7	<1.9	<1.9	5.1	4.3	<1.9	9.4	
P1-S7	0 - 0.2	1/31/2006		X		<1.0	<2.0	<1.0	<1.0	7.9	5.8	<1.0	14	
	2 - 2.5	1/31/2006		X		<1.9	<3.7	<1.9	<1.9	9.4	6.5	<1.9	16	
	4 - 4.5	1/31/2006				<0.41	<0.80	<0.41	<0.41	5.1	<0.41	0.21 J	5.3 J	

**TABLE 3**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED PCBs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID:		Depth (Feet)	Date Collected	Soil Removed Via Previous ICM	Soil Removed Via 2009 ICM	Data Validation Complete	Aroclor							Total PCBs
							1016	1221	1232	1242	1248	1254	1260	
6 NYCRR 375 Commercial Use SCOs (Exceedances in Bold)							--	--	--	--	--	--	--	1
6 NYCRR 375 Industrial Use SCOs (Exceedances Shaded)							--	--	--	--	--	--	--	25
P1-S9	0 - 0.2	1/31/2006		X		<0.20	<0.39	<0.20	<0.20	0.78	0.80	0.15 J	1.7 J	
	2 - 2.5	1/31/2006		X		<0.19	<0.37	<0.19	<0.19	1.1	1.1	0.19 J	2.4 J	
P1-S10	0 - 0.2	1/31/2006		X		<2.0	<3.8	<2.0	<2.0	22	24	<2.0	46	
	2 - 2.5	1/31/2006		X		<0.98	<1.9	<0.98	<0.98	11	12	2.0	25	
	6 - 6.5	5/3/2006				<0.019	<0.037	<0.019	<0.019	0.11	0.090	0.016 J	0.22 J	
P1-S12	0 - 0.2	1/31/2006		X		<0.086	<0.17	<0.086	<0.086	0.96	0.84	0.16	2.0	
	2 - 2.5	1/31/2006		X		<0.40	<0.77	<0.40	<0.40	2.3	2.8	0.55	5.7	
P1-S13	0 - 0.2	1/31/2006		X		<1.0	<2.0	<1.0	<1.0	7.0	5.3	0.70 J	13 J	
	2 - 2.5	1/31/2006		X		<20	<39	<20	<20	54	57	<20	110	
	4 - 4.5	1/31/2006		X		<44	<86	<44	<44	350	<44	22 J	370 J	
	6 - 6.5	5/3/2006				<0.19	<0.37	<0.19	<0.19	1.5	0.84	0.19 J	2.5 J	
P1-S14	0 - 0.2	1/31/2006		X		<0.99 [ <b>&lt;0.23</b> ]	<1.9 [ <b>&lt;0.44</b> ]	<0.99 [ <b>&lt;0.23</b> ]	<0.99 [ <b>&lt;0.23</b> ]	7.8 [0.64]	4.7 [0.45]	0.39 J [ <b>&lt;0.23</b> ]	13 J [1.1]	
	2 - 2.5	1/31/2006		X		<1.1	<2.2	<1.1	<1.1	3.0	2.9	<1.1	5.9	
P1-S15	0 - 0.2	1/31/2006		X		<0.19	<0.38	<0.19	<0.19	1.8	1.2	<0.19	3.0	
	2 - 2.5	1/31/2006		X		<0.20	<0.38	<0.20	<0.20	1.2	0.86	<0.20	2.1	
P1-S16	0 - 0.2	1/31/2006		X		<0.39	<0.76	<0.39	<0.39	2.5	2.3	<0.39	4.8	
	2 - 2.5	1/31/2006		X		<4.1	<7.9	<4.1	<4.1	21	25	<4.1	46	
	4 - 4.5	1/31/2006				<0.20	<0.38	<0.20	<0.20	0.50	0.37	<0.20	0.87	
P1-S17	0 - 0.2	5/3/2006		X		<0.35	<0.68	<0.35	<0.35	4.4	3.7	0.69	8.8	
	2 - 2.5	5/3/2006		X		<0.18	<0.35	<0.18	<0.18	0.84	0.42	0.093 J	1.4 J	
	4 - 4.5	5/3/2006				<0.017	<0.033	<0.017	<0.017	0.0029 J	<0.017	<0.017	0.0029 J	
P1-S18	0 - 0.2	5/3/2006		X		<0.088 [ <b>&lt;0.087</b> ]	<0.17 [ <b>&lt;0.17</b> ]	<0.088 [ <b>&lt;0.087</b> ]	<0.088 [ <b>&lt;0.087</b> ]	0.92 [0.72]	0.63 [0.47]	0.11 [0.039 J]	1.7 [1.2 J]	
	2 - 2.5	5/3/2006		X		<0.036	<0.070	<0.036	<0.036	0.14	0.12	0.020 J	0.28 J	
	4 - 4.5	5/3/2006				<0.18	<0.34	<0.18	<0.18	0.58	0.2	0.056 J	0.84 J	
P1-S19	0 - 0.2	5/3/2006		X		<0.18	<0.35	<0.18	<0.18	1.6	1	0.32	2.9	
	2 - 2.5	5/3/2006		X		<0.037	<0.071	<0.037	<0.037	0.24	0.19	0.025 J	0.46 J	
	4 - 4.5	5/3/2006				<0.018	<0.035	<0.018	<0.018	0.023	<0.018	<0.018	0.023	
P1-S20	0 - 0.2	5/3/2006		X		<0.019 [ <b>&lt;0.094</b> ]	<0.038 [ <b>&lt;0.18</b> ]	<0.019 [ <b>&lt;0.094</b> ]	<0.019 [ <b>&lt;0.094</b> ]	0.15 [0.71]	0.12 [0.50]	0.026 [0.055 J]	0.30 [1.3 J]	
	2 - 2.5	5/3/2006		X		<0.037	<0.073	<0.037	<0.037	0.31	<0.037	<0.037	0.31	
	4 - 4.5	5/3/2006				<0.018	<0.035	<0.018	<0.018	0.021	<0.018	<0.018	0.021	
P1-S21	0 - 0.2	5/3/2006		X		<0.19	<0.37	<0.19	<0.19	1.3	<0.19	0.15 J	1.5 J	
	2 - 2.5	5/3/2006		X		<0.019	<0.037	<0.019	<0.019	0.15	0.22	0.082	0.45	
	4 - 4.5	5/3/2006				<0.017	<0.034	<0.017	<0.017	0.014 J	<0.017	<0.017	0.014 J	
P1-S22	0 - 0.2	5/3/2006		X		<0.019 [ <b>&lt;0.019</b> ]	<0.036 [ <b>&lt;0.037</b> ]	<0.019 [ <b>&lt;0.019</b> ]	<0.019 [ <b>&lt;0.019</b> ]	<0.019 [0.039]	<0.019 [0.025]	<0.019 [ <b>&lt;0.019</b> ]	<0.036 [0.064]	
	4 - 4.5	5/3/2006				<0.017	<0.033	<0.017	<0.017	0.031	<0.017	<0.017	0.031	
P1-S23	0 - 0.2	5/3/2006				<0.18	<0.35	<0.18	<0.18	0.63	0.26	0.11 J	1.0 J	
	2 - 2.5	5/3/2006				<0.018	<0.035	<0.018	<0.018	0.067	0.06	0.019	0.15	
	4 - 4.5	5/3/2006				<0.018	<0.035	<0.018	<0.018	0.019	<0.018	<0.018	0.019	
P1-S24	0 - 0.2	5/3/2006				<0.036	<0.070	<0.036	<0.036	0.3	0.14	0.020 J	0.46 J	
	4 - 4.5	5/3/2006				<0.019	<0.037	<0.019	<0.019	0.082	0.049	0.0055 J	0.14 J	
P1-S25	0 - 0.2	5/3/2006		X		<0.21 [ <b>&lt;0.098</b> ]	<0.41 [ <b>&lt;0.19</b> ]	<0.21 [ <b>&lt;0.098</b> ]	<0.21 [ <b>&lt;0.098</b> ]	0.73 [0.36]	1.1 [0.29]	0.34 [0.081 J]	2.2 [0.73 J]	
	2 - 2.5	5/3/2006				<0.019	<0.037	<0.019	<0.019	0.11	0.2	0.085	0.40	
	4 - 4.5	5/3/2006				<0.021	<0.040	<0.021	<0.021	0.086	0.1	0.089	0.28	
P1-S26	0 - 0.2	5/3/2006				<0.90	<1.8	<0.90	<0.90	7.2	8.2	0.27 J	16 J	
	2 - 2.5	5/3/2006				<0.098	<0.19	<0.098	<0.098	0.41	0.64	0.074 J	1.1 J	
	4 - 4.5	5/3/2006				<0.094	<0.18	<0.094	<0.094	0.38	0.3	0.022 J	0.70 J	
P1-S27	0 - 0.2	5/3/2006				<0.17	<0.33	<0.17	<0.17	0.61	0.68	0.050 J	1.3 J	
	2 - 2.5	5/3/2006				<0.019	<0.037	<0.019	<0.019	0.069	0.081	0.022	0.17	
	4 - 4.5	5/3/2006				<0.093	<0.18	<0.093	<0.093	0.33	0.43	0.026 J	0.79 J	

**TABLE 3**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED PCBs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

				Soil Removed Via Previous ICM	Soil Removed Via 2009 ICM	Data Validation Complete								
Location ID:		Depth (Feet)	Date Collected				Aroclor							Total PCBs
							1016	1221	1232	1242	1248	1254	1260	
6 NYCRR 375 Commercial Use SCOs (Exceedances in Bold)							--	--	--	--	--	--	--	1
6 NYCRR 375 Industrial Use SCOs (Exceedances Shaded)							--	--	--	--	--	--	--	25
P1-S28	0 - 0.2	5/3/2006		X			<0.93	<1.8	<0.93	<0.93	5.6	4	0.61 J	10 J
	2 - 2.5	5/3/2006		X			<0.37	<0.72	<0.37	<0.37	1.3	0.65	0.20 J	2.2 J
	4 - 4.5	5/3/2006					<0.018	<0.034	<0.018	<0.018	0.095	0.077	<0.018	0.17
P1-S29	0 - 0.2	5/3/2006		X			<0.18 [ <b>&lt;0.18</b> ]	<0.35 [ <b>&lt;0.35</b> ]	<0.18 [ <b>&lt;0.18</b> ]	<0.18 [ <b>&lt;0.18</b> ]	0.72 [1.2]	0.80 [1.7]	0.14 J [0.10 J]	1.7 J [3.0 J]
	2 - 2.5	5/3/2006		X			<0.18	<0.36	<0.18	<0.18	2.9	0.87	0.2	4.0
	4 - 4.5	5/3/2006					<0.020	<0.039	<0.020	<0.020	0.066	0.052	<0.020	0.12
P1-S30	0 - 0.2	5/3/2006		X			<0.36 [ <b>&lt;0.087</b> ]	<0.70 [ <b>&lt;0.17</b> ]	<0.36 [ <b>&lt;0.087</b> ]	<0.36 [ <b>&lt;0.087</b> ]	1.7 [0.62]	1.7 [0.78]	0.31 J [0.033 J]	3.7 J [1.4 J]
	2 - 2.5	5/3/2006		X			<0.38	<0.74	<0.38	<0.38	0.49	0.44	<0.38	0.93
	4 - 4.5	5/3/2006					<0.021	<0.041	<0.021	<0.021	0.044	0.035	<0.021	0.079
P1-S31	0 - 0.2	5/3/2006		X			<0.19	<0.36	<0.19	<0.19	0.75	0.76	0.26	1.8
	2 - 2.5	5/3/2006		X			<0.021	<0.040	<0.021	<0.021	0.017 J	0.036	<0.021	0.053 J
	4 - 4.5	5/3/2006					<0.019	<0.036	<0.019	<0.019	0.08	0.067	<0.019	0.15
P1-S32	0 - 0.2	5/3/2006		X			<0.017	<0.033	<0.017	<0.017	0.025	0.051	0.020	0.096
	4 - 4.5	5/3/2006					<0.018	<0.035	<0.018	<0.018	0.016 J	0.029	0.024	0.069 J
	0 - 0.2	5/2/2006					<0.19 [ <b>&lt;0.18</b> ]	<0.36 [ <b>&lt;0.35</b> ]	<0.19 [ <b>&lt;0.18</b> ]	<0.19 [ <b>&lt;0.18</b> ]	0.92 [0.93]	0.93 [0.87]	0.13 J [0.085 J]	2.0 J [1.9 J]
P1-S33	2 - 2.5	5/2/2006					<0.094	<0.18	<0.094	<0.094	0.78	0.78	0.13	1.7
	4 - 4.5	5/2/2006					<0.037	<0.071	<0.037	<0.037	0.22	0.19	0.023 J	0.43 J
	0 - 0.2	5/2/2006					<1.8	<3.5	<1.8	<1.8	8.9	4.5	0.72 J	14 J
P1-S34	4 - 4.5	5/2/2006					<3.7	<7.2	<3.7	<3.7	18	15	<3.7	33
	6 - 6.5	5/2/2006					<0.094	<0.18	<0.094	<0.094	0.47	<0.094	0.027 J	0.50 J
	0 - 0.2	5/2/2006					<1.8	<3.5	<1.8	<1.8	14	8.4	0.83 J	23 J
P1-S36	2 - 2.5	5/2/2006					<0.18	<0.36	<0.18	<0.18	1.4	<0.18	0.16 J	1.6 J
	4 - 4.5	5/2/2006					<0.035	<0.068	<0.035	<0.035	0.22	0.2	0.016 J	0.44 J
	0 - 0.2	5/2/2006		X			<3.6	<7.0	<3.6	<3.6	30	18	2.3 J	50 J
P1-S37	2 - 2.5	5/2/2006					<1.8	<3.5	<1.8	<1.8	5.1	<1.8	<1.8	5.1
	4 - 4.5	5/2/2006					<0.086	<0.17	<0.086	<0.086	0.37 B	0.3	<0.086	0.67
	0 - 0.2	5/2/2006					<1.8	<3.5	<1.8	<1.8	8.7 B	4.5	0.56 J	14 J
P1-S38	2 - 2.5	5/2/2006					<0.018	<0.034	<0.018	<0.018	0.025	<0.018	<0.018	0.025
	4 - 4.5	5/2/2006					<0.17	<0.33	<0.17	<0.17	0.44 B	0.37	<0.17	0.81
	0 - 0.2	5/2/2006		X			<90	<170	<90	<90	400 B	180	<90	580
P1-S39	2 - 2.5	5/2/2006					<0.18	<0.36	<0.18	<0.18	0.55	0.59	0.16 J	1.3 J
	4 - 4.5	5/2/2006					<0.017	<0.034	<0.017	<0.017	0.068	0.06	0.011 J	0.14 J
	0 - 0.2	5/2/2006		X			<1.8	<3.5	<1.8	<1.8	7.3 B	4.5	0.70 J	13 J
P1-S40	2 - 2.5	5/2/2006					<0.37	<0.71	<0.37	<0.37	1.4	1.6	0.12 J	3.1 J
	4 - 4.5	5/2/2006					<0.035	<0.069	<0.035	<0.035	0.22 B	0.28	0.029 J	0.53 J
	0 - 0.2	5/2/2006					<0.94	<1.8	<0.94	<0.94	4.3 B	2.7	0.27 J	7.3 J
P1-S41	2 - 2.5	5/2/2006					<0.39	<0.75	<0.39	<0.39	2.3	2.5	0.26 J	5.1 J
	4 - 4.5	5/2/2006					<0.035	<0.068	<0.035	<0.035	0.16 B	0.16	0.016 J	0.34 J
	0 - 0.2	5/2/2006					<0.19	<0.38	<0.19	<0.19	0.87	0.68	0.14 J	1.7 J
P1-S42	2 - 2.5	5/2/2006					<0.092	<0.18	<0.092	<0.092	0.55	0.60	0.096	1.3
	4 - 4.5	5/2/2006					<0.017	<0.034	<0.017	<0.017	0.086	0.071	0.012 J	0.17 J
	0 - 0.2	5/2/2006					<0.19	<0.36	<0.19	<0.19	1.4	1.4	<0.19	2.8
P1-S43	2 - 2.5	5/2/2006					<0.019	<0.037	<0.019	<0.019	0.12	0.12	<0.019	0.24
	4 - 4.5	5/2/2006					<0.019	<0.037	<0.019	<0.019	0.16	0.14	0.055	0.36
	0 - 0.2	5/2/2006		X			<0.093 [ <b>&lt;0.019</b> ]	<0.18 [ <b>&lt;0.036</b> ]	<0.093 [ <b>&lt;0.019</b> ]	<0.093 [ <b>&lt;0.019</b> ]	1.0 [0.19]	0.71 [0.20]	0.099 [0.015 J]	1.8 [0.41 J]
P1-S44	2 - 2.5	5/2/2006		X			<0.19	<0.37	<0.19	<0.19	1.4	2	0.079 J	3.5 J
	4 - 4.5	5/2/2006					<0.096	<0.19	<0.096	<0.096	0.7	0.44	0.077 J	1.2 J
	0 - 0.2	5/2/2006		X			<0.092	<0.18	<0.092	<0.092	0.32	0.31	0.062 J	0.69 J
P1-S45	4 - 4.5	5/2/2006					<0.086	<0.17	<0.086	<0.086	0.49	0.31	0.039 J	0.84 J

**TABLE 3**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED PCBs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID:	Depth (Feet)	Date Collected	Soil Removed Via Previous ICM	Soil Removed Via 2009 ICM	Data Validation Complete	Aroclor							Total PCBs
						1016	1221	1232	1242	1248	1254	1260	
6 NYCRR 375 Commercial Use SCOs (Exceedances in Bold)						--	--	--	--	--	--	--	1
6 NYCRR 375 Industrial Use SCOs (Exceedances Shaded)						--	--	--	--	--	--	--	25
P1-S46	0 - 0.2	5/2/2006		X		<0.096	<0.19	<0.096	<0.096	0.57	0.53	<0.096	1.1
	2 - 2.5	5/2/2006		X		<0.086	<0.17	<0.086	<0.086	0.61	0.33	<0.086	0.94
	4 - 4.5	5/2/2006				<0.017	<0.033	<0.017	<0.017	0.011 J	0.0099 J	<0.017	0.021 J
P1-S47	0 - 0.2	5/2/2006		X		<0.18	<0.36	<0.18	<0.18	1.3	1.1	<0.18	2.4
	2 - 2.5	5/2/2006		X		<0.19	<0.38	<0.19	<0.19	0.97	1.2	<0.19	2.2
	4 - 4.5	5/2/2006				<0.018	<0.034	<0.018	<0.018	0.078	0.071	0.022	0.17
P1-S48	0 - 0.2	5/2/2006				<1.8	<3.5	<1.8	<1.8	12	7.4	<1.8	19
	2 - 2.5	5/2/2006				<0.19	<0.37	<0.19	<0.19	0.86	0.93	0.077 J	1.9 J
	4 - 4.5	5/2/2006				<0.034	<0.066	<0.034	<0.034	0.25	0.3	0.12	0.67
P1-S49	0 - 0.2	8/21/2006				<1.7	<3.3	<1.7	<1.7	18	<1.7	0.90 J	19 J
	2 - 2.5	8/21/2006				<1.7 [ $<0.34$ ]	<3.3 [ $<0.67$ ]	<1.7 [ $<0.34$ ]	<1.7 [ $<0.34$ ]	13 [1.9]	<1.7 [ $<0.34$ ]	<1.7 [ $<0.34$ ]	13 [1.9]
	4 - 4.5	8/21/2006				<0.35	<0.67	<0.35	<0.35	9.1 A	<0.35	0.25 J	9.4 J
P1-S50	0 - 0.2	8/21/2006				<1.7	<3.3	<1.7	<1.7	21	8.7	1.2 J	31 J
	2 - 2.5	8/21/2006				<0.86	<1.7	<0.86	<0.86	4.9	<0.86	0.28 J	5.2 J
P1-S51	0 - 0.2	8/21/2006		X		<350	<680	<350	<350	920	<350	<350	920
	2 - 2.5	8/21/2006				<1.8	<3.5	<1.8	<1.8	11	6.8	0.98 J	19 J
	4 - 4.5	8/21/2006				<0.35	<0.68	<0.35	<0.35	2.7	2.1	0.27 J	5.1 J
P1-S52	0 - 0.2	8/21/2006				<1.8	<3.5	<1.8	<1.8	12	9.1	1.5 J	23 J
	2 - 2.5	8/21/2006				<1.8 [ $<0.36$ ]	<3.4 [ $<0.70$ ]	<1.8 [ $<0.36$ ]	<1.8 [ $<0.36$ ]	5.3 [0.68]	3.3 [ $<0.36$ ]	0.48 J [0.12 J]	9.1 J [0.80 J]
P1-S52A	0 - 0.2	8/21/2006				<0.89	<1.7	<0.89	<0.89	5.6	<0.89	0.95	6.6
	2 - 2.5	8/21/2006				<0.35 [ $<0.35$ ]	<0.68 [ $<0.68$ ]	<0.35 [ $<0.35$ ]	<0.35 [ $<0.35$ ]	0.96 [2.7]	<0.35 [ $<0.35$ ]	<0.35 [0.23 J]	0.96 [2.9 J]
P1-S53	0 - 0.2	8/21/2006		X		<8.9	<17	<8.9	<8.9	57	96	6.5 J	160 J
	2 - 2.5	8/21/2006		X		<0.34	<0.66	<0.34	<0.34	1.7	2.4	0.24 J	4.3 J
P1-S54	0 - 0.2	8/21/2006		X		<1.7	<3.4	<1.7	<1.7	6.6	14	1.6 J	22 J
	2 - 2.5	8/21/2006		X		<0.086	<0.17	<0.086	<0.086	0.54	0.56	0.079 J	1.2 J
P1-S55	0 - 0.2	8/21/2006		X		<1.8	<3.5	<1.8	<1.8	6.4	<1.8	<1.8	6.4
	2 - 2.5	8/21/2006		X		<0.35 [ $<0.017$ ]	<0.68 [ $<0.034$ ]	<0.35 [ $<0.017$ ]	<0.35 [ $<0.017$ ]	2.3 [ $<0.017$ ]	<0.35 [0.019]	0.16 J [0.027]	2.5 J [0.046]
P1-S56	0 - 0.2	8/21/2006		X		<3.5	<6.8	<3.5	<3.5	24	21	2.3 J	47 J
	2 - 2.5	8/21/2006		X		<3.5	<6.8	<3.5	<3.5	40	46	4.6	91
	4 - 4.5	8/21/2006				<0.35	<0.68	<0.35	<0.35	4	4.7	0.38	9.1
	6 - 6.5	8/21/2006				<0.34	<0.65	<0.34	<0.34	0.69	<0.34	<0.34	0.69
P1-S57	0 - 0.2	8/21/2006				<0.36	<0.70	<0.36	<0.36	3.5	<0.36	0.097 J	3.6 J
	2 - 2.5	8/21/2006				<0.091	<0.18	<0.091	<0.091	0.42	<0.091	0.049 J	0.47 J
P1-S58	0 - 0.2	8/21/2006				<0.94	<1.8	<0.94	<0.94	8.4	<0.94	0.78 J	9.2 J
	2 - 2.5	8/21/2006				<1.9	<3.7	<1.9	<1.9	5.6	<1.9	0.86 J	6.5 J
P1-S59	0 - 0.2	8/21/2006				<0.88	<1.7	<0.88	<0.88	5	<0.88	0.28 J	5.3 J
	2 - 2.5	8/21/2006				<0.37	<0.72	<0.37	<0.37	1.3	<0.37	<0.37	1.3
P1-S60	0 - 0.2	8/21/2006				<0.099	<0.19	<0.099	<0.099	0.59	<0.099	0.025 J	0.62 J
	2 - 2.5	8/21/2006				<0.019	<0.037	<0.019	<0.019	0.1	<0.019	0.012 J	0.11 J
P1-S61	0 - 0.2	8/21/2006				<0.36	<0.70	<0.36	<0.36	1.6	0.82	0.12 J	2.5 J
	2 - 2.5	8/21/2006				<0.91	<1.8	<0.91	<0.91	5.4	<0.91	0.26 J	5.7 J
P1-S62	0 - 0.2	8/21/2006				<0.18	<0.34	<0.18	<0.18	0.62	<0.18	0.072 J	0.69 J
	2 - 2.5	8/21/2006				<0.18	<0.34	<0.18	<0.18	0.65	0.37	0.043 J	1.1 J
P1-S63	0 - 0.2	8/21/2006				<0.93	<1.8	<0.93	<0.93	12	5.4	0.82 J	18 J
	2 - 2.5	8/21/2006				<0.91	<1.8	<0.91	<0.91	11	<0.91	0.50 J	12 J
	4 - 4.5	8/21/2006				<1.9	<3.7	<1.9	<1.9	11	10	1.2 J	22 J
	6 - 6.5	8/21/2006				<0.73	<1.4	<0.73	<0.73	1	1.6	<0.73	2.6
P1-S64	0 - 0.2	8/21/2006				<1.7	<3.4	<1.7	<1.7	16	6.2	0.77 J	23 J
	2 - 2.5	8/21/2006				<1.8	<3.4	<1.8	<1.8	9	4.2	0.57 J	14 J
	4 - 4.5	8/21/2006				<0.18	<0.34	<0.18	<0.18	1.3	2	<0.18	3.3



**CORRECTIVE MEASURES STUDY REPORT  
BAYER MATERIALSCIENCE LLC  
125 NEW SOUTH ROAD  
HICKSVILLE, NEW YORK**

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**TABLE 3**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED PCBs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

	Depth	Date	Soil Removed Via Previous ICM	Soil Removed Via 2009 ICM	Data Validation Complete	Aroclor							
Location ID:	(Feet)	Collected				1016	1221	1232	1242	1248	1254	1260	Total PCBs
6 NYCRR 375 Commercial Use SCOs (Exceedances in Bold)						--	--	--	--	--	--	--	1
6 NYCRR 375 Industrial Use SCOs (Exceedances Shaded)						--	--	--	--	--	--	--	25
P1-S86	0 - 0.2	#####				<0.18	<0.36	<0.18	<0.18	1.9	1.4	0.13 J	3.4 J
	2 - 2.5	#####				<0.18	<0.35	<0.18	<0.18	1.5	1.3	0.13 J	2.9 J
P1-S87	0 - 0.2	#####		X		<3.5 [<1.8]	<6.8 [<3.5]	<3.5 [<1.8]	<3.5 [<1.8]	10 [5.5]	9.6 [3.6]	0.97 J [<1.8]	21 J [9.1]
	2 - 2.5	#####		X		<0.18	<0.34	<0.18	<0.18	0.48	0.53	0.077 J	1.1 J
P1-S88	0 - 0.2	#####		X		<18 [<8.9]	<36 [<17]	<18 [<8.9]	<18 [<8.9]	41 [34]	28 [18]	<18 [<8.9]	69 [52]
	2 - 2.5	#####		X		<0.88	<1.7	<0.88	<0.88	3.3	2	0.33 J	5.6 J
P1-S90	0 - 0.2	#####				<3.5	<6.7	<3.5	<3.5	11	7.2	0.96 J	19 J
	2 - 2.5	#####				<3.5 [<1.8]	<6.8 [<3.4]	<3.5 [<1.8]	<3.5 [<1.8]	25 [16]	16 [8.7]	1.3 J [<1.8]	42 J [25]
	4 - 4.5	#####				<0.97	<1.9	<0.97	<0.97	7.3 B	3.3	<0.97	11
	6 - 6.5	#####				<0.19	<0.36	<0.19	<0.19	2.0 B	1.0	<0.19	3.0
P1-S91	0 - 0.2	#####		X		<19	<36	<19	<19	46	38	<19	84
	2 - 2.5	#####				<1.8 [<1.8]	<3.5 [<3.4]	<1.8 [<1.8]	<1.8 [<1.8]	10 [11]	15 [5.5]	<1.8 [<1.8]	25 [17]
	4 - 4.5	#####				<0.18	<0.34	<0.18	<0.18	1.8 B	0.83	<0.18	2.6
	6 - 6.5	#####				<0.087	<0.17	<0.087	<0.087	0.39 B	0.20	<0.087	0.59
P1-S93	0 - 0.2	#####				<0.035	<0.067	<0.035	<0.035	0.24	0.18	0.015 J	0.44 J
	2 - 2.5	#####				<0.017	<0.034	<0.017	<0.017	0.15	0.11	0.0095 J	0.27 J
P1-S94	0 - 0.2	#####				<0.18	<0.36	<0.18	<0.18	0.53	0.84	0.16 J	1.5 J
	2 - 2.5	#####				<0.073	<0.14	<0.073	<0.073	0.14	0.34	0.045 J	0.53 J
P1-S95	0 - 0.2	#####				<0.18	<0.35	<0.18	<0.18	1.3	1.5	0.27	3.1
	2 - 2.5	#####				<0.18	<0.34	<0.18	<0.18	2.1	1.7	<0.18	3.8
P1-S96	0 - 0.2	#####				<0.087	<0.17	<0.087	<0.087	0.11 B	0.13	<0.087	0.24
	2 - 2.5	#####				<0.018	<0.034	<0.018	<0.018	0.027 B	0.076	<0.018	0.10
P1-S97	0 - 0.2	#####				<0.36	<0.70	<0.36	<0.36	3.6	1.9	<0.36	5.5
	2 - 2.5	#####				<0.039	<0.077	<0.039	<0.039	0.078	0.12	<0.039	0.20
P1-S98	0 - 0.2	#####				<0.018	<0.036	<0.018	<0.018	0.014 J	0.013 J	<0.018	0.027 J
	2 - 2.5	#####				<0.018	<0.035	<0.018	<0.018	0.0097 J	0.0081 J	<0.018	0.018 J
P1-S99	0 - 0.2	#####				<0.18	<0.36	<0.18	<0.18	1.1	1.2	<0.18	2.3
	2 - 2.5	#####				<0.018	<0.035	<0.018	<0.018	0.020	0.021	<0.018	0.041
P1-S100	0 - 0.2	#####				<0.018	<0.034	<0.018	<0.018	<0.018	0.018	<0.018	0.018
	2 - 2.5	#####				<0.018	<0.036	<0.018	<0.018	0.0052 J	0.0066 J	<0.018	0.012 J
P1-S101	0 - 0.2	#####				<0.018	<0.034	<0.018	<0.018	0.027 B	0.051 B	<0.018	0.078
	2 - 2.5	#####				<0.018	<0.035	<0.018	<0.018	0.021 B	0.033 B	<0.018	0.054
P1-S102	0 - 0.2	#####				<0.19	<0.36	<0.19	<0.19	0.69	0.39	<0.19	1.1
	2 - 2.5	#####				<0.019	<0.037	<0.019	<0.019	0.038	0.024	<0.019	0.062
P1-S103	0 - 0.2	#####				<1.9	<3.6	<1.9	<1.9	9.7	4.2	<1.9	14
	2 - 2.5	#####				<0.96	<1.9	<0.96	<0.96	8.2	3.4	<0.96	12
	4 - 4.5	#####				<0.71	<1.4	<0.71	<0.71	7.7	2.8	<0.71	11
	6 - 6.5	#####				<0.18	<0.34	<0.18	<0.18	1.2	0.6	<0.18	1.8
P1-S104	0 - 0.2	#####		X		<3.6	<6.9	<3.6	<3.6	48 B	21	<3.6 B	69
	2 - 2.5	#####				<0.92	<1.8	<0.92	<0.92	2.9 B	1.2	<0.92 B	4.1
P1-S105	0 - 0.2	#####				<0.88	<1.7	<0.88	<0.88	3.0 B	1.4	<0.88 B	4.4
	2 - 2.5	#####				<0.18	<0.34	<0.18	<0.18	2.0 B	1.2	<0.18 B	3.2
P1-S106	0 - 0.2	#####				<0.088	<0.17	<0.088	<0.088	0.49 B	0.25	<0.088 B	0.74
	2 - 2.5	#####				<0.17	<0.33	<0.17	<0.17	0.77 B	0.34	<0.17 B	1.1
P1-S107	0 - 0.2	#####				<0.19	<0.36	<0.19	<0.19	1.8 B	1.0	<0.19 B	2.8
	2 - 2.5	#####				<0.19	<0.37	<0.19	<0.19	1.7 B	0.98	<0.19 B	2.7

**TABLE 3**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED PCBs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

				Soil Removed Via Previous ICM	Soil Removed Via 2009 ICM	Data Validation Complete								
Location ID:		Depth (Feet)	Date Collected				Aroclor							Total PCBs
							1016	1221	1232	1242	1248	1254	1260	
6 NYCRR 375 Commercial Use SCOs (Exceedances in Bold)							--	--	--	--	--	--	--	1
6 NYCRR 375 Industrial Use SCOs (Exceedances Shaded)							--	--	--	--	--	--	--	25
P1-S108	0 - 0.2	#####			X		<3.6	<7.0	<3.6	<3.6	22 B	11 B	<3.6	33
	2 - 2.5	#####			X		<9.1	<18	<9.1	<9.1	50 B	26 B	<9.1	76
	4 - 4.5	#####			X		<3.5	<6.8	<3.5	<3.5	19	8.6	<3.5	28
	6 - 6.5	#####					<1.7	<3.4	<1.7	<1.7	8.8	3.1	<1.7	12
	8 - 8.5	4/23/2007					<0.86	<1.7	<0.86	<0.86	9.9	4.5	0.55 J	15 J
	10 - 10.5	4/23/2007					<0.17	<0.34	<0.17	<0.17	0.59	0.10 J	0.064 J	0.75 J
P1-S109	0 - 0.2	#####					<0.35	<0.68	<0.35	<0.35	1.4 B	2.5 B	<0.35	3.9
	2 - 2.5	#####					<0.018	<0.035	<0.018	<0.018	0.049B	0.037 B	0.010 J	0.096 J
P1-S110	0 - 0.2	#####					<0.19	<0.37	<0.19	<0.19	2.2 B	1.1 B	1.0	4.3
	2 - 2.5	#####					<0.36	<0.69	<0.36	<0.36	4.0 B	1.8 B	<0.36	5.8
P1-S111	0 - 0.2	#####			X		<1.9	<3.8	<1.9	<1.9	13 B	6.6	<1.9	20
	2 - 2.5	#####			X		<3.7	<7.1	<3.7	<3.7	42 B	18	5.6	66
	4 - 4.5	#####			X		<3.5	<6.8	<3.5	<3.5	28	9.6	1.2 J	39 J
	6 - 6.5	#####					<1.7	<3.3	<1.7	<1.7	12	4.2	0.62 J	17 J
	8 - 8.5	4/23/2007					<0.87	<1.7	<0.87	<0.87	7.5	3	0.86 J	11 J
	10 - 10.5	4/23/2007					<1.8	<3.5	<1.8	<1.8	13	6.5	<1.8	20
P1-S112	0 - 0.2	#####					<0.18	<0.34	<0.18	<0.18	0.63 B	1.2	0.21	2.0
	2 - 2.5	#####					<0.087	<0.17	<0.087	<0.087	0.17B	0.22	0.1	0.49
P1-S113	0 - 0.2	#####					<0.18	<0.35	<0.18	<0.18	1.7 B	2.0	0.58	4.3
	2 - 2.5	#####					<0.086	<0.17	<0.086	<0.086	0.27B	0.24	0.19	0.70
P1-S114	0 - 0.2	#####					<0.37	<0.71	<0.37	<0.37	4.0 B	2.1	1.1	7.2
	2 - 2.5	#####					<0.19	<0.36	<0.19	<0.19	1.1 B	0.63	<0.19	1.7
P1-S115	0 - 0.2	4/23/2007					<0.35	<0.68	<0.35	<0.35	0.8	0.76	0.21 J	1.8 J
	2 - 2.5	4/23/2007					<0.35 [ $<0.18$ ]	<0.69 [ $<0.34$ ]	<0.35 [ $<0.18$ ]	<0.35 [ $<0.18$ ]	1.4 [0.80 B]	1.1 [0.48]	0.27 J [0.11 J]	2.8 J [1.4 J]
P1-S116	0 - 0.2	4/23/2007			X		<1.8	<3.6	<1.8	<1.8	27	8.2	3.8	39
	2 - 2.5	4/23/2007			X		<0.37	<0.71	<0.37	<0.37	1.6 B	0.5	0.27 J	2.4 J
	4 - 4.5	4/23/2007					<0.18	<0.34	<0.18	<0.18	1.1 B	0.36	0.16 J	1.6 J
P1-S117	0 - 0.2	4/23/2007					<0.086	<0.17	<0.086	<0.086	0.23 B	0.094	<0.086	0.32
	2 - 2.5	4/23/2007					<0.017	<0.033	<0.017	<0.017	0.042 B	0.036	0.0043 J	0.082 J
P1-S119	0 - 0.2	4/24/2007			X		<0.38 [ $<3.7$ ]	<0.74 [ $<7.2$ ]	<0.38 [ $<3.7$ ]	<0.38 [ $<3.7$ ]	2.6 B [19]	<0.38 [ $<3.7$ ]	<0.38 [1.2 J]	2.6 [20 J]
	2 - 2.5	4/24/2007			X		<18	<34	<18	<18	89 B	<18	<18	89
	4 - 4.5	4/24/2007			X		<1.8	<3.5	<1.8	<1.8	9.3	<1.8	0.78 J	10 J
	6 - 6.5	4/24/2007					<0.018	<0.035	<0.018	<0.018	0.02	0.0045 J	<0.018	0.025 J
P1-S120	0 - 0.2	4/24/2007			X		<1.8	<3.5	<1.8	<1.8	3.8 B	3.4	1.1 J	8.3 J
	2 - 2.5	4/24/2007			X		<7.0	<14	<7.0	<7.0	26 B	11	4.3 J	41 J
	4 - 4.5	4/24/2007			X		<0.36	<0.70	<0.36	<0.36	4.3	0.83	0.28 J	5.4 J
P1-S121	0 - 0.2	4/24/2007					<0.36	<0.70	<0.36	<0.36	1.5 B	<0.36	0.19 J	1.7 J
	2 - 2.5	4/24/2007					<0.38	<0.74	<0.38	<0.38	0.54 B	0.36 J	<0.38	0.90 J
	4 - 4.5	4/24/2007					<0.018	<0.035	<0.018	<0.018	0.10 B	0.076	0.015 J	0.19 J
	6 - 6.5	4/24/2007					<0.018	<0.034	<0.018	<0.018	0.097 B	0.062	0.015 J	0.17 J
P1-S122	0 - 0.2	4/24/2007					<1.7	<3.4	<1.7	<1.7	9.8 B	2.7	0.81 J	13 J
	2 - 2.5	4/24/2007					<0.88	<1.7	<0.88	<0.88	7.8	2.6	0.62 J	11 J
	4 - 4.5	4/24/2007					<0.90	<1.7	<0.90	<0.90	6.5	2.2	0.52 J	9.2 J
	6 - 6.5	4/24/2007					<0.89	<1.7	<0.89	<0.89	5.3	1.6	0.39 J	7.3 J
P1-S123	0 - 0.2	4/24/2007					<0.91	<1.8	<0.91	<0.91	3.6	1.5	0.34 J	5.4 J
	2 - 2.5	4/24/2007					<0.095 [ $<0.094$ ]	<0.18 [ $<0.18$ ]	<0.095 [ $<0.094$ ]	<0.095 [ $<0.094$ ]	0.44 [0.39]	0.23 [0.19]	0.049 J [0.051 J]	0.72 J [0.63 J]
	4 - 4.5	4/24/2007					<0.017	<0.033	<0.017	<0.017	0.016 J	0.0063 J	<0.017	0.022 J
	6 - 6.5	4/24/2007					<0.017	<0.034	<0.017	<0.017	0.015 J	0.0055 J	<0.017	0.021 J

**TABLE 3**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED PCBs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID:		Depth (Feet)	Date Collected	Soil Removed Via Previous ICM	Soil Removed Via 2009 ICM	Data Validation Complete	Aroclor							Total PCBs
							1016	1221	1232	1242	1248	1254	1260	
6 NYCRR 375 Commercial Use SCOs (Exceedances in Bold)							--	--	--	--	--	--	--	1
6 NYCRR 375 Industrial Use SCOs (Exceedances Shaded)							--	--	--	--	--	--	--	25
P1-S124	0 - 0.2	4/24/2007				<0.90	<1.7	<0.90	<0.90	4.5	2.1	0.51 J	7.1 J	
	2 - 2.5	4/24/2007				<0.87	<1.7	<0.87	<0.87	7.8	2	0.87 J	11 J	
	4 - 4.5	4/24/2007				<0.88	<1.7	<0.88	<0.88	7.5	2	0.55 J	10 J	
	6 - 6.5	4/24/2007				<3.6	<6.9	<3.6	<3.6	18	4.2	0.99 J	23 J	
	8 - 8.5	4/24/2007				<0.35	<0.68	<0.35	<0.35	3.4	1	0.4	4.8	
P1-S125	0 - 0.2	4/24/2007				<0.89	<1.7	<0.89	<0.89	5.4	2.2	0.48 J	8.1 J	
	2 - 2.5	4/24/2007				<0.36	<0.69	<0.36	<0.36	3.1	1.1	0.26 J	4.5 J	
P1-S126	0 - 0.2	4/24/2007				<0.019	<0.037	<0.019	<0.019	0.13	0.073	0.012 J	0.22 J	
	2 - 2.5	4/24/2007				<0.019	<0.037	<0.019	<0.019	0.13	0.11	0.021	0.26	
	4 - 4.5	4/24/2007				<0.019	<0.037	<0.019	<0.019	0.16	0.067	0.014 J	0.24 J	
	6 - 6.5	4/24/2007				<0.019	<0.037	<0.019	<0.019	0.092	0.077	0.015 J	0.18 J	
P1-S127	0 - 0.2	4/24/2007				<1.8	<3.5	<1.8	<1.8	12	4	0.68 J	17 J	
	2 - 2.5	4/24/2007				<0.37	<0.71	<0.37	<0.37	3.4	0.96	0.13 J	4.5 J	
	4 - 4.5	4/24/2007				<0.95	<1.8	<0.95	<0.95	8.8	3.2	0.29 J	12 J	
	6 - 6.5	4/24/2007				<0.017	<0.033	<0.017	<0.017	0.034	0.014 J	<0.017	0.048 J	
P1-S128	0 - 0.2	4/24/2007		X		<3.7	<7.2	<3.7	<3.7	35	<3.7	3.4 J	38 J	
	2 - 2.5	4/24/2007		X		<3.6	<7.0	<3.6	<3.6	36	<3.6	1.6 J	38 J	
	4 - 4.5	4/24/2007		X		<0.95	<1.8	<0.95	<0.95	7.7	2.2	0.88 J	11 J	
	6 - 6.5	4/24/2007				<0.18	<0.34	<0.18	<0.18	0.73	0.23	<0.18	0.96	
P1-S129	0 - 0.2	4/24/2007				<0.35	<0.68	<0.35	<0.35	3.7	1.3	0.19 J	5.2 J	
	2 - 2.5	4/24/2007				<0.018	<0.035	<0.018	<0.018	0.074	0.044	<0.018	0.12	
P1-S130	0 - 0.2	4/24/2007		X		<9.4	<18	<9.4	<9.4	51	15	3.0 J	69 J	
	2 - 2.5	4/24/2007		X		<0.40	<0.78	<0.40	<0.40	3.4	1.1	0.15 J	4.7 J	
P1-S131	0 - 0.2	4/24/2007				<0.38	<0.75	<0.38	<0.38	4.2	1.3	0.13 J	5.6 J	
	2 - 2.5	4/24/2007				<0.19	<0.36	<0.19	<0.19	1	0.43	0.044 J	1.5 J	
P1-S132	0 - 0.2	4/24/2007				<0.86 [<0.89]	<1.7 [<1.7]	<0.86 [<0.89]	<0.86 [<0.89]	6.2 [1.9]	<0.86 [0.47 J]	0.29 J [<0.89]	6.5 J [2.4 J]	
	2 - 2.5	4/24/2007				<0.37	<0.72	<0.37	<0.37	2.6	<0.37	0.093 J	2.7 J	
P1-S133	0 - 0.2	4/24/2007		X		<9.4	<18	<9.4	<9.4	110	28	2.5 J	140 J	
	2 - 2.5	4/24/2007				<0.018	<0.035	<0.018	<0.018	0.15	0.083	0.019	0.25	
P1-S134	0 - 0.2	4/24/2007				<0.90	<1.8	<0.90	<0.90	6.2	3.1	0.30 J	9.6 J	
	2 - 2.5	4/24/2007				<0.90	<1.7	<0.90	<0.90	7	3.3	0.80 J	11 J	
	4 - 4.5	4/24/2007				<0.36 [<0.017]	<0.69 [<0.034]	<0.36 [<0.017]	<0.36 [<0.017]	1.1 [0.20]	0.53 [0.11]	<0.36 [0.013 J]	1.6 [0.32 J]	
	6 - 6.5	4/24/2007				<8.8	<17	<8.8	<8.8	34	<8.8	<8.8	34	
P1-S135	0 - 0.2	4/24/2007		X		<0.89	<1.7	<0.89	<0.89	11	4.5	0.75 J	16 J	
	2 - 2.5	4/24/2007		X		<0.92	<1.8	<0.92	<0.92	8.1	<0.92	0.28 J	8.4 J	
	4 - 4.5	4/24/2007				<0.018	<0.035	<0.018	<0.018	0.22	<0.018	<0.018	0.22	
	6 - 6.5	4/24/2007				<0.89	<1.7	<0.89	<0.89	2.5	<0.89	<0.89	2.5	
P1-S136	0 - 0.2	4/24/2007		X		<9.0	<18	<9.0	<9.0	64	<9.0	3.5 J	68 J	
	2 - 2.5	4/24/2007		X		<3.8	<7.3	<3.8	<3.8	31	<3.8	1.1 J	32 J	
	4 - 4.5	4/24/2007				<0.90	<1.7	<0.90	<0.90	5.1	<0.90	0.30 J	5.4 J	
	6 - 6.5	4/24/2007				<0.36	<0.69	<0.36	<0.36	2	0.86	0.14 J	3.0 J	
P1-S137	0 - 0.2	4/24/2007		X		<8.8	<17	<8.8	<8.8	74	32	5.1 J	110 J	
	2 - 2.5	4/24/2007		X		<3.6	<7.1	<3.6	<3.6	38	<3.6	1.5 J	40 J	
	4 - 4.5	4/24/2007				<0.35	<0.67	<0.35	<0.35	0.92	0.37	<0.35	1.3	
	6 - 6.5	4/24/2007				<0.88	<1.7	<0.88	<0.88	4.3	1.5	<0.88	5.8	
P1-S138	0 - 0.2	4/24/2007				<1.9 [<3.8]	<3.6 [<7.3]	<1.9 [<3.8]	<1.9 [<3.8]	18 [26]	9.9 [13]	0.70 J [<3.8]	29 J [39]	
	2 - 2.5	4/24/2007				<0.96	<1.9	<0.96	<0.96	4.4	2.2	<0.96	6.6	
P1-S139	0 - 0.5	6/3/2008				<0.18	<0.34	<0.18	<0.18	2.2	<0.18	0.11 J	2.3 J	
	2 - 2.5	6/3/2008				<0.089	<0.17	<0.089	<0.089	0.84	<0.089	0.044 J	0.88 J	
P1-S140	0 - 0.5	6/6/2008				<0.37	<0.72	<0.37	<0.37	2.4	<0.37	0.14 J	2.5 J	
	2 - 2.5	6/6/2008				<0.094	<0.18	<0.094	<0.094	0.32	0.19	0.036 J	0.55 J	

**TABLE 3**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED PCBs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

			Soil Removed Via Previous ICM	Soil Removed Via 2009 ICM	Data Validation Complete								
Location ID:	Depth (Feet)	Date Collected				Aroclor							Total PCBs
						1016	1221	1232	1242	1248	1254	1260	
6 NYCRR 375 Commercial Use SCOs (Exceedances in Bold)						--	--	--	--	--	--	--	1
6 NYCRR 375 Industrial Use SCOs (Exceedances Shaded)						--	--	--	--	--	--	--	25
P1-S141	0 - 0.5	6/9/2008				<0.20	<0.38	<0.20	<0.20	1.1	0.63	0.18 J	1.9 J
	2 - 2.5	6/9/2008				<2.0	<3.9	<2.0	<2.0	18	<2.0	2.4	20
	4 - 4.5	6/9/2008				<0.39	<0.75	<0.39	<0.39	4.1	<0.39	<0.39 *	4.1
	6 - 6.5	6/9/2008				<0.39	<0.75	<0.39	<0.39	1.4	<0.39	<0.39 *	1.4
P1-S142	0 - 0.5	6/2/2008		X		<3.6	<7.0	<3.6	<3.6	47	<3.6	1.9 J	49 J
	2 - 2.5	6/2/2008		X		<0.022	<0.043	<0.022	<0.022	0.19	<0.022	0.0067 J	0.20 J
P1-S143	0 - 0.5	6/10/2008		X		<38	<74	<38	<38	110	<38	<38	110
	2 - 2.5	6/10/2008		X		<9.6	<19	<9.6	<9.6	79	<9.6	<9.6	79
	6 - 6.5	6/10/2008				<0.92	<1.8	<0.92	<0.92	9.0	<0.92	0.51 J*	9.5 J
	8 - 8.5	6/10/2008				<0.36	<0.70	<0.36	<0.36	4.1	2.1	0.19 J*	6.4 J
P1-S144	10 - 10.5	6/10/2008				<0.88	<1.7	<0.88	<0.88	5.6	<0.88	0.32 J	5.9 J
	0 - 0.5	6/6/2008				<0.35	<0.68	<0.35	<0.35	0.76	<0.35	0.14 J	0.90 J
	2 - 2.5	6/6/2008				<0.36	<0.70	<0.36	<0.36	2.3	<0.36	<0.36	2.3
P1-S145	10 - 10.5	6/6/2008				<0.36	<0.70	<0.36	<0.36	2.3	<0.36	0.079 J	2.4 J
	0 - 0.5	6/11/2008				<0.18	<0.35	<0.18	<0.18	1.0	1.0	0.12 J	2.1 J
	2 - 2.5	6/11/2008				<0.19	<0.37	<0.19	<0.19	2.1	2.7	0.40	5.2
P1-S146	0 - 0.5	6/10/2008				<0.18	<0.35	<0.18	<0.18	0.86	0.65	0.075 J	1.6 J
	2 - 2.5	6/10/2008				<0.91	<1.8	<0.91	<0.91	8.6	2.8	0.49 J	12 J
	4 - 4.5	6/10/2008				<0.088	<0.17	<0.088	<0.088	0.43	0.29	0.058 J*	0.78 J
	6 - 6.5	6/10/2008				<0.36	<0.71	<0.36	<0.36	3.9	2.0	0.46 *	6.4
P1-S147	0 - 0.5	6/9/2008				<0.092	<0.18	<0.092	<0.092	0.60	0.48	<0.092	1.1
	2 - 2.5	6/9/2008				<0.039	<0.075	<0.039	<0.039	0.37	0.27	<0.039	0.64
P1-S148	0 - 0.5	6/9/2008				<0.38	<0.75	<0.38	<0.38	4.7	2.9	<0.38	7.6
	2 - 2.5	6/9/2008				<0.099	<0.19	<0.099	<0.099	0.81	0.56	<0.099	1.4
P1-S149	0 - 0.5	6/10/2008				<0.37	<0.73	<0.37	<0.37	2.2	3.1	<0.37	5.3
	2 - 2.5	6/10/2008				<0.020	<0.039	<0.020	<0.020	0.18	0.096	<0.020	0.28
P2-S1	0 - 0.2	1/4/2006				<0.019	<0.036	<0.019	<0.019	0.21	0.27	0.12	0.60
UST-AOC-50	0 - 2.5	6/8/2005				<0.089	<0.17	<0.089	<0.089	0.37	0.70	<0.089	1.1
VS-39-1	0 - 0.2	6/8/2005			X	<0.38	<0.73	<0.38	<0.38	0.58	<0.38	1.9	2.5
	0.5 - 1.5	6/8/2005			X	<0.019	<0.037	<0.019	<0.019	0.022 J	<0.019	0.11	0.13 J
VS-39-2	2.5 - 3.5	6/8/2005			X	<0.018	<0.035	<0.018	<0.018	0.012 J	<0.018	0.078	0.090 J
VS-39-3	2.5 - 3.5	6/8/2005			X	<0.017	<0.034	<0.017	<0.017	0.030	<0.017	0.18	0.21
VS-39-4	0 - 0.2	6/8/2005	X		X	<0.37	<0.72	<0.37	<0.37	<0.37	<0.37	3.9	3.9
	0.5 - 1.5	6/8/2005	X		X	<0.020 [ <b>&lt;0.019</b> ]	<0.039 [ <b>&lt;0.038</b> ]	<0.020 [ <b>&lt;0.019</b> ]	<0.020 [ <b>&lt;0.019</b> ]	<0.020 [0.015 J]	<0.020 [ <b>&lt;0.019</b> ]	0.26 [0.26]	0.26 J [0.28 J]
	2.5 - 3.5	6/8/2005			X	<0.017	<0.034	<0.017	<0.017	<0.017	<0.017	0.054	0.054
VS-39-5	0 - 0.2	6/8/2005			X	<0.18	<0.35	<0.18	<0.18	0.19	<0.18	0.87	1.1
	0.5 - 1.5	6/8/2005			X	<0.020	<0.039	<0.020	<0.020	0.0058 J	<0.020	0.026	0.032 J
VS-45-1	6.8 - 7.3	6/9/2005	X		X	<3.5	<6.7	<3.5	<3.5	46	25 J	<3.5	71 J
	8.8 - 9.8	6/9/2005	X		X	<0.87 [ <b>&lt;0.87</b> ]	<1.7 [ <b>&lt;1.7</b> ]	<0.87 [ <b>&lt;0.87</b> ]	<0.87 [ <b>&lt;0.87</b> ]	4.6 [7.3]	2.7 [4.5]	<0.87 [ <b>&lt;0.87</b> ]	7.3 [12]

**TABLE 3**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED PCBs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

			Soil Removed Via Previous ICM	Soil Removed Via 2009 ICM	Data Validation Complete								
Location ID:	Depth (Feet)	Date Collected				Aroclor							Total PCBs
						1016	1221	1232	1242	1248	1254	1260	
6 NYCRR 375 Commercial Use SCOs (Exceedances in Bold)						--	--	--	--	--	--	--	1
6 NYCRR 375 Industrial Use SCOs (Exceedances Shaded)						--	--	--	--	--	--	--	25
VS-45-2	0 - 0.5	6/15/2005	X			<0.36	<0.71	<0.36	<0.36	5.3	<0.36	<0.36	5.3
	0.5 - 2	6/15/2005	X			<3.8	<7.4	<3.8	<3.8	28	<3.8	<3.8	28
	4 - 6	6/15/2005	X			<99	<190	<99	<99	830	<99	<99	830
	6.8 - 7.3	6/9/2005	X		X	<170	<340	<170	<170	2,000	<170	<170	2,000
	6.8 - 7.3	6/15/2005	X			<170	<330	<170	<170	660	<170	<170	660
	8.8 - 9.8	6/9/2005	X		X	<350	<680	<350	<350	5,500	<350	<350	5,500
	8.8 - 9.8	6/15/2005	X			<180	<340	<180	<180	1,800	<180	<180	1,800
	10.3 - 12.3	6/15/2005	X			<360	<690	<360	<360	4,100	<360	<360	4,100
	12.3 - 14.3	6/15/2005	X			<170	<330	<170	<170	2,300	<170	<170	2,300
	14.3 - 16	6/15/2005	X			<700	<1,400	<700	<700	2,400	<700	<700	2,400
	16 - 18	6/29/2005	X		X	<360 [<880]	<700 [<1,700]	<360 [<880]	<360 [<880]	3,700 [5,400]	<360 [<880]	<360 [<880]	3,700 [5,400]
	22 - 24	6/29/2005	X		X	<170	<340	<170	<170	590	<170	<170	590
	26 - 28	8/4/2005	X			<8.8	<17	<8.8	<8.8	91	<8.8	<8.8	91
	30 - 32	8/4/2005			X	<0.17	<0.34	<0.17	<0.17	1.0	<0.17	<0.17	1.0
	34 - 36	8/4/2005			X	<3.4 [<3.5]	<6.7 [<6.8]	<3.4 [<3.5]	<3.4 [<3.5]	26 [48]	<3.4 [<3.5]	<3.4 [<3.5]	26 [48]
	40 - 42	8/4/2005			X	<1.8	<3.5	<1.8	<1.8	7.4	<1.8	<1.8	7.4
	44 - 46	8/4/2005			X	<0.90	<1.8	<0.90	<0.90	6.0	<0.90	<0.90	6.0
	50 - 52	8/4/2005			X	<0.019	<0.036	<0.019	<0.019	0.028 J	<0.019	<0.019	0.028 J
VS-45-3	4.5 - 5	6/9/2005	X		X	<0.036	<0.069	<0.036	<0.036	0.31	0.20 J	<0.036	0.051 J
	6.5 - 7.5	6/9/2005	X		X	<0.017	<0.034	<0.017	<0.017	0.061 NJ	0.14 J	<0.017	0.20 J
VS-45-4	4.5 - 5	6/9/2005	X		X	<1.9	<3.6	<1.9	<1.9	28	17	<1.9	45
	6.5 - 7.5	6/9/2005			X	<0.87	<1.7	<0.87	<0.87	7.9	3.6 J	<0.87	12 J
VS-45-5	4.5 - 5	6/8/2005		X	X	<0.88	<1.7	<0.88	<0.88	3.7	2.0	<0.88	5.7
	6.5 - 7.5	6/8/2005		X	X	<0.035	<0.068	<0.035	<0.035	0.28	0.22	<0.035	0.50
VS-45-6	4.5 - 5	6/8/2005	X		X	<0.017	<0.034	<0.017	<0.017	0.080	0.077	<0.017	0.16
	6.5 - 7.5	6/8/2005	X		X	<0.018	<0.034	<0.018	<0.018	0.057	0.038	<0.018	0.095
VS-45-7	0 - 0.5	6/29/2005	X		X	<3.9	<7.6	<3.9	<3.9	22 J	<3.9	<3.9	22 J
	6.8 - 7.3	6/9/2005	X		X	<870	<1,700	<870	<870	6,000	3,300 J	<870	9,300 J
	8.8 - 9.8	6/9/2005	X		X	<860	<1,700	<860	<860	8,800	5,200 J	<860	14,000 J
	10.3 - 12.3	6/29/2005	X		X	<350	<670	<350	<350	3,600	<350	<350	3,600
	12.3 - 14.3	6/29/2005	X		X	<870	<1,700	<870	<870	8,500	<870	<870	8,500
	14.3 - 16	6/29/2005	X		X	<870	<1,700	<870	<870	7,200	<870	<870	7,200
	22 - 24	6/29/2005	X		X	<0.88	<1.7	<0.88	<0.88	4.1	<0.88	<0.88	4.1
VS-45-8	4.5 - 5	6/8/2005	X		X	<0.018	<0.034	<0.018	<0.018	0.031	0.022	<0.018	0.053
	6.5 - 7.5	6/8/2005	X		X	<0.35	<0.68	<0.35	<0.35	1.0	<0.35	<0.35	1.0
VS-45-9	4.5 - 5	6/8/2005	X		X	<0.018	<0.034	<0.018	<0.018	0.23	0.20	<0.018	0.43
	6.5 - 7.5	6/8/2005	X		X	<0.018	<0.034	<0.018	<0.018	<0.036	0.070	<0.018	0.070
VS-45-10	4.5 - 5	6/9/2005	X		X	<0.87	<1.7	<0.87	<0.87	2.6	0.89 J	<0.87	3.5 J
	6.5 - 7.5	6/9/2005	X		X	<0.35	<0.67	<0.35	<0.35	1.3	0.58 J	<0.35	1.9 J
VS-45-11	0 - 0.5	6/15/2005	X			<96	<190	<96	<96	290	<96	<96	290
	2 - 4	6/15/2005	X			<9.8	<19	<9.8	<9.8	58	<9.8	<9.8	58
	6.8 - 7.3	6/15/2005	X			<180	<350	<180	<180	2,200	<180	<180	2,200
	8.8 - 9.8	6/15/2005	X			<170	<330	<170	<170	1,100	<170	<170	1,100
	10.3 - 12.3	6/15/2005	X			<170 [<170]	<340 [<340]	<170 [<170]	<170 [<170]	700 [830]	<170 [<170]	<170 [<170]	700 [830]
	12.3 - 14.3	6/15/2005	X			<170	<330	<170	<170	680	<170	<170	680
	14.3 - 16	6/15/2005	X			<680	<1,300	<680	<680	4,000	<680	<680	4,000
	16 - 18	6/29/2005	X		X	<170	<330	<170	<170	1,500	<170	<170	1,500
	22 - 24	6/29/2005			X	<3.5	<6.8	<3.5	<3.5	23	<3.5	<3.5	23

**TABLE 3**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED PCBs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID:	Depth (Feet)	Date Collected	Soil Removed Via Previous ICM	Soil Removed Via 2009 ICM	Data Validation Complete	Aroclor							Total PCBs
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6 NYCRR 375 Commercial Use SCOs (Exceedances in Bold)						--	--	--	--	--	--	--	1
6 NYCRR 375 Industrial Use SCOs (Exceedances Shaded)						--	--	--	--	--	--	--	25
VS-45-12	0 - 0.5	6/29/2005	X		X	<0.93	<1.8	<0.93	<0.93	4.4	<0.93	<0.93	4.4
	6.8 - 7.3	6/29/2005	X		X	<0.089	<0.17	<0.089	<0.089	0.56	<0.089	<0.089	0.56
	10.3 - 12.3	6/29/2005	X		X	<0.017	<0.034	<0.017	<0.017	0.14	<0.017	<0.017	0.14
	16 - 18	6/29/2005	X		X	<0.017	<0.034	<0.017	<0.017	0.16	0.071 JN	<0.017	0.23 J
VS-45-13	0 - 0.5	6/29/2005			X	<0.019	<0.037	<0.019	<0.019	0.16	0.16	<0.019	0.32
	6.8 - 7.3	6/29/2005			X	<0.017	<0.033	<0.017	<0.017	0.048	<0.017	<0.017	0.048
	10.3 - 12.3	6/29/2005			X	<0.017	<0.033	<0.017	<0.017	0.042	<0.017	<0.017	0.042
	16 - 18	6/29/2005			X	<0.034	<0.066	<0.034	<0.034	0.44	0.23 J	<0.034	0.67 J
VS-45-14	0 - 0.5	6/30/2005			X	<0.019 [ $<0.019$ ]	<0.036 [ $<0.037$ ]	<0.019 [ $<0.019$ ]	<0.019 [ $<0.019$ ]	0.14 [0.20]	0.16 [0.14 J]	<0.019 [ $<0.019$ ]	0.30 [0.34 J]
	6.8 - 7.3	6/30/2005			X	<0.017	<0.033	<0.017	<0.017	0.024	<0.017	<0.017	0.024
	10.3 - 12.3	6/30/2005			X	<0.017	<0.033	<0.017	<0.017	0.11	0.071 J	<0.017	0.18 J
	16 - 18	6/30/2005			X	<0.017	<0.033	<0.017	<0.017	0.035	<0.017	<0.017	0.035
VS-45-15	12 - 14	6/5/2008		X		<9.1	<18	<9.1	<9.1	120	<9.1	5.3 J	130 J
	16 - 18	6/5/2008		X		<3.6	<7.0	<3.6	<3.6	54	<3.6	0.88 J	55 J
	18 - 20	6/5/2008		X		<8.8	<17	<8.8	<8.8	58	<8.8	<8.8	58
	20 - 22	6/5/2008		X		<0.88	<1.7	<0.88	<0.88	6.2	<0.88	<0.88	6.2
	22 - 24	6/5/2008		X		<0.17	<0.34	<0.17	<0.17	0.94	<0.17	<0.17	0.94
	24 - 26	6/5/2008		X		<1.8 [ $<1.8$ ]	<3.4 [ $<3.4$ ]	<1.8 [ $<1.8$ ]	<1.8 [ $<1.8$ ]	27 [15]	<1.8 [ $<1.8$ ]	<1.8 [ $<1.8$ ]	27 [15]
	26 - 28	6/5/2008		X		<8.8	<17	<8.8	<8.8	58	<8.8	<8.8	58
	28 - 30	6/5/2008				<0.36	<0.69	<0.36	<0.36	3.7	<0.36	<0.36	3.7
VS-45-15R	0 - 0.2	4/23/2007		X		<0.93	<1.8	<0.93	<0.93	5	2.7	0.39 J	8.1 J
	2 - 2.5	4/23/2007		X		<0.18	<0.36	<0.18	<0.18	0.93	<0.18	0.049 J	0.98 J
	4 - 4.5	4/23/2007		X		<0.37	<0.72	<0.37	<0.37	2.8	<0.37	0.20 J	3.0 J
	6 - 6.5	4/23/2007		X		<3.5	<6.8	<3.5	<3.5	37	<3.5	0.85 J	38 J
	8 - 8.5	4/23/2007		X		<18	<35	<18	<18	260	<18	19	280
	10 - 10.5	4/23/2007		X		<8.8	<17	<8.8	<8.8	65	12	5.8 J	83 J
VS-45-16R	0 - 0.2	4/23/2007		X		<3.5	<6.8	<3.5	<3.5	55	<3.5	1.7 J	57 J
	2 - 2.5	4/23/2007		X		<8.7	<17	<8.7	<8.7	46	<8.7	<8.7	46
	4 - 4.5	4/23/2007		X		<0.88	<1.7	<0.88	<0.88	6.1	<0.88	0.30 J	6.4 J
	6 - 6.5	4/23/2007		X		<0.85	<1.7	<0.85	<0.85	8	<0.85	0.25 J	8.3 J
	8 - 8.5	4/23/2007		X		<0.35	<0.68	<0.35	<0.35	2.8	0.84	<0.35	3.6
	10 - 10.5	4/23/2007		X		<0.35	<0.67	<0.35	<0.35	1.7	0.34 J	<0.35	2.0 J
VS-45-18R	0 - 0.2	4/23/2007		X		<1.7	<3.3	<1.7	<1.7	12	<1.7	0.75 J	13 J
	2 - 2.5	4/23/2007		X		<0.017	<0.033	<0.017	<0.017	0.0073 J	<0.017	<0.017	0.0073 J
	4 - 4.5	4/23/2007		X		<0.87	<1.7	<0.87	<0.87	6.8	1.9	0.23 J	8.9 J
	6 - 6.5	4/23/2007		X		<0.17	<0.34	<0.17	<0.17	0.89	0.19	<0.17	1.1
	8 - 8.5	4/23/2007		X		<0.17	<0.33	<0.17	<0.17	0.64	0.21	<0.17	0.85
	10 - 10.5	4/23/2007		X		<0.35	<0.68	<0.35	<0.35	1.2	<0.35	<0.35	1.2
VS-45-20	0 - 0.5	8/9/2005	X		X	<0.019	<0.037	<0.019	<0.019	0.079	0.097 J	<0.019	0.18 J
	6.8 - 7.3	8/9/2005	X		X	<0.88	<1.7	<0.88	<0.88	2.4	1.9 JN	<0.88	4.3 J
	10 - 12	8/9/2005	X		X	<34	<66	<34	<34	110	<34	<34	110
	16 - 18	8/9/2005	X		X	<340	<660	<340	<340	1,100	<340	<340	1,100
	20 - 22	8/9/2005	X			<35	<68	<35	<35	320	<35	<35	320
VS-45-21	0 - 0.5	8/9/2005	X		X	<0.19	<0.36	<0.19	<0.19	0.57	0.72	<0.19	1.3
	6.8 - 7.3	8/9/2005	X		X	<0.18	<0.36	<0.18	<0.18	0.99	1.3	<0.18	2.3
	10 - 12	8/9/2005	X		X	<0.36	<0.69	<0.36	<0.36	1.3	1.6	<0.36	2.9
	16 - 18	8/9/2005	X		X	<0.017	<0.034	<0.017	<0.017	0.095	<0.017	<0.017	0.095
VS-45-22	0 - 0.5	8/8/2005	X		X	<0.095	<0.18	<0.095	<0.095	0.22	0.31	<0.095	0.53
	6.8 - 7.3	8/8/2005	X		X	<0.37 [ $<0.38$ ]	<0.71 [ $<0.74$ ]	<0.37 [ $<0.38$ ]	<0.37 [ $<0.38$ ]	1.6 [1.9]	2.2 [2.5]	<0.37 [ $<0.38$ ]	3.8 [4.4]
	10 - 12	8/8/2005	X		X	<0.017	<0.034	<0.017	<0.017	0.094	0.12	<0.017	0.21
	16 - 18	8/8/2005	X		X	<0.087	<0.17	<0.087	<0.087	0.36	0.58	<0.087	0.94

**TABLE 3**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED PCBs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID:	Depth (Feet)	Date Collected	Soil Removed Via Previous ICM	Soil Removed Via 2009 ICM	Data Validation Complete	Aroclor							Total PCBs
						1016	1221	1232	1242	1248	1254	1260	
6 NYCRR 375 Commercial Use SCOs (Exceedances in Bold)						--	--	--	--	--	--	--	1
6 NYCRR 375 Industrial Use SCOs (Exceedances Shaded)						--	--	--	--	--	--	--	25
VS-45-23	4.5 - 5	8/9/2005			X	<0.17 [ <b>&lt;0.17</b> ]	<0.34 [ <b>&lt;0.33</b> ]	<0.17 [ <b>&lt;0.17</b> ]	<0.17 [ <b>&lt;0.17</b> ]	0.74 [1.0]	0.71 J [1.1]	<0.17 [ <b>&lt;0.17</b> ]	1.5 J [2.1]
	6.5 - 7.5	8/9/2005			X	<0.086	<0.17	<0.086	<0.086	0.49	0.50 J	<0.086	0.99 J
VS-P2-1B	0 - 0.2	5/9/2006		X		<0.017 [ <b>&lt;0.017</b> ]	<0.034 [ <b>&lt;0.033</b> ]	<0.017 [ <b>&lt;0.017</b> ]	<0.017 [ <b>&lt;0.017</b> ]	<0.017 [0.029]	0.0087 J [0.026]	<0.017 [0.0089 J]	0.0087 J [0.064 J]
VS-P2-1S	0 - 0.2	5/9/2006		X		<0.094	<0.18	<0.094	<0.094	0.85	0.61	0.15	1.6
VS-P1-S1	0.5 - 1	2/17/2009		X		<0.035	<0.035	<0.035	<0.035	0.31	0.28	0.035 J	0.63 J
	1.5 - 2	2/17/2009		X		<0.37	<0.37	<0.37	<0.37	2.9	<0.37	0.39	3.3
VS-P1-S2	0.5 - 1	2/17/2009		X		<0.37	<0.37	<0.37	<0.37	3.6	<0.37	0.40	4.0
	1.5 - 2	2/17/2009		X		<0.94	<0.94	<0.94	<0.94	11	<0.94	1.3	12
VS-P1-S3	1.5 - 2	2/17/2009		X		<0.37	<0.37	<0.37	<0.37	2.1	<0.37	0.47	2.6
	3.5 - 4	2/17/2009		X		<0.018	<0.018	<0.018	<0.018	0.0087 J	<0.018	<0.018	0.0087 J
VS-P1-S4	1.5 - 2	2/17/2009		X		<0.018	<0.018	<0.018	<0.018	0.030	<0.018	0.010 J	0.040 J
	3.5 - 4	2/17/2009		X		<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
VS-P1-S5	1.5 - 2	2/11/2009		X		<0.90 [ <b>&lt;0.89</b> ]	<0.90 [ <b>&lt;0.89</b> ]	<0.90 [ <b>&lt;0.89</b> ]	<0.90 [ <b>&lt;0.89</b> ]	7.6 [12]	<0.90 [ <b>&lt;0.89</b> ]	<0.90 [0.99]	7.6 [13]
	3.5 - 4	2/11/2009		X		<0.018	<0.018	<0.018	<0.018	0.053	<0.018	<0.018	0.053
VS-P1-S6	1.5 - 2	2/11/2009		X		<0.018	<0.018	<0.018	<0.018	<0.018	0.0078 J	<0.018	0.0078 J
	3.5 - 4	2/11/2009		X		<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
VS-P1-S7	1.5 - 2	2/11/2009		X		<0.017	<0.017	<0.017	<0.017	<0.017	0.045	<0.017	0.045
	3.5 - 4	2/11/2009		X		<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
VS-P1-S8	1.5 - 2	2/12/2009		X		<1.8	<1.8	<1.8	<1.8	25	22	2.1	49
	3.5 - 4	2/12/2009		X		<1.8	<1.8	<1.8	<1.8	13	<1.8	<1.8	13
VS-P1-S9	1.5 - 2	2/12/2009				<3.5	<3.5	<3.5	<3.5	34	<3.5	<3.5	34
	3.5 - 4	2/12/2009				<0.35	<0.35	<0.35	<0.35	3.5	<0.35	0.32 J	3.8 J
VS-P1-S10	3.5 - 4	2/12/2009		X		<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
	7.5 - 8	2/12/2009		X		<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
VS-P1-S11	2.5 - 3	2/13/2009		X		<0.021	<0.021	<0.021	<0.021	0.29	<0.021	0.017 J	0.31 J
	5.5 - 6	2/13/2009		X		<0.18	<0.18	<0.18	<0.18	2.7	<0.18	<0.18	2.7
VS-P1-S12	1.5 - 2	2/17/2009		X		<0.020	<0.020	<0.020	<0.020	0.074	0.074	0.011 J	0.16 J
	3.5 - 4	2/17/2009		X		<0.020	<0.020	<0.020	<0.020	0.032	0.016 J	<0.020	0.048 J
VS-P1-S13	13.5-14	2/25/2009		X		<0.018	<0.018	<0.018	<0.018	0.055	<0.018	<0.018	0.055
	27.5-28	2/25/2009		X		<0.017	<0.017	<0.017	<0.017	0.01	<0.017	<0.017	0.01
VS-P1-S14	13.5-14	2/24/2009		X		<1	<1	<1	11	<1	4.7	0.560 J	16 J
	27.5-28	2/24/2009		X		<0.017	<0.017	<0.017	<0.017	0.068	<0.017	<0.017	0.068
VS-P1-S15	15.5-16	2/23/2009		X		<0.017	<0.017	<0.017	<0.017	0.047	<0.017	<0.017	0.047
	31.5-32	2/24/2009		X		<0.017	<0.017	<0.017	<0.017	0.013 J	<0.017	<0.017	0.013 J
VS-P1-S16	1.5 - 2	2/16/2009		X		<0.035	<0.035	<0.035	<0.035	0.34	<0.035	0.024 J	0.36 J
VS-P1-S17	1.5 - 2	2/16/2009		X		<0.035	<0.035	<0.035	<0.035	0.15	<0.035	0.037	0.19
VS-P1-S18	0.5 - 1	2/17/2009		X		<1.8 [ <b>&lt;0.93</b> ]	<1.8 [ <b>&lt;0.93</b> ]	<1.8 [ <b>&lt;0.93</b> ]	<1.8 [ <b>&lt;0.93</b> ]	19 [10]	<1.8 [7.8]	<1.8 [0.67 J]	19 [19 J]
	1.5 - 2	2/17/2009		X		<0.018	<0.018	<0.018	<0.018	0.058	<0.018	0.012 J	0.070 J
VS-P1-S19	1.5 - 2	2/16/2009		X		<0.018	<0.018	<0.018	<0.018	0.13	<0.018	0.013 J	0.14 J
VS-P1-S20	1.5 - 2	2/16/2009		X		<0.019	<0.019	<0.019	<0.019	0.059	<0.019	0.012 J	0.071 J
VS-P1-S21	0.5 - 1	2/17/2009		X		<0.18	<0.18	<0.18	<0.18	0.73	<0.18	0.16 J	0.89 J
	1.5 - 2	2/17/2009		X		<0.37	<0.37	<0.37	<0.37	3.9	<0.37	0.84	4.7
VS-P1-S22	0.5 - 1	2/17/2009		X		<0.89 [ <b>&lt;1.8</b> ]	<0.89 [ <b>&lt;1.8</b> ]	<0.89 [ <b>&lt;1.8</b> ]	<0.89 [ <b>&lt;1.8</b> ]	10 [12]	<0.89 [ <b>&lt;1.8</b> ]	0.91 [1.2 J]	11 [13 J]
VS-P1-S23	1.5 - 2	2/17/2009		X		<0.038	<0.038	<0.038	<0.038	0.48	<0.038	0.016 J	0.50 J
	3.5 - 4	2/17/2009		X		<20	<20	<20	<20	270	<20	49	320
VS-P1-S24	3.5 - 4	2/17/2009		X		<0.35	<0.35	<0.35	<0.35	5.2	<0.35	1.0	6.2
VS-P1-S24	3.5 - 4	2/17/2009		X		<0.87	<0.87	<0.87	<0.87	13	<0.87	2.8	16
VS-P1-S25	3.5 - 4	2/17/2009		X		<0.17	<0.17	<0.17	<0.17	1.4	1.2	0.22	2.8
VS-P1-S26	1.5 - 2	2/17/2009		X		<0.35	<0.35	<0.35	<0.35	5.4	3.4	0.39	9.2
	3.5 - 4	2/17/2009		X		<0.017	<0.017	<0.017	<0.017	0.052	0.043	0.019	0.11



**TABLE 3**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED PCBs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID:	Depth (Feet)	Date Collected	Soil Removed Via Previous ICM	Soil Removed Via 2009 ICM	Data Validation Complete	Aroclor							Total PCBs
						1016	1221	1232	1242	1248	1254	1260	
6 NYCRR 375 Commercial Use SCOs (Exceedances in Bold)						--	--	--	--	--	--	--	1
6 NYCRR 375 Industrial Use SCOs (Exceedances Shaded)						--	--	--	--	--	--	--	25
VS-P1-S27	0.5 - 1	2/12/2009		X		<1.8	<1.8	<1.8	<1.8	17	<1.8	2.0	19
	1.5 - 2	2/12/2009		X		<0.018	<0.018	<0.018	<0.018	0.16	<0.018	<0.018	0.16
VS-P1-S28	0.5 - 1	2/12/2009		X		<0.94	<0.94	<0.94	<0.94	5.8	<0.94	1.1	6.9
	1.5 - 2	2/12/2009		X		<0.18	<0.18	<0.18	<0.18	0.89	<0.18	0.56	1.5
VS-P1-S29	1.5 - 2	2/11/2009		X		<0.19	<0.19	<0.19	<0.19	2.6	<0.19	0.30	2.9
VS-P1-S30	1.5 - 2	2/12/2009		X		<0.020	<0.020	<0.020	<0.020	0.022	<0.020	0.0088 J	0.031 J
	3.5 - 4	2/12/2009		X		<0.017	<0.017	<0.017	<0.017	0.013 J	<0.017	<0.017	0.013 J
VS-P1-S31	3.5 - 4	2/12/2009		X		<0.034	<0.034	<0.034	<0.034	0.36	0.26	0.10	0.72
VS-P1-S32	1.5 - 2	2/12/2009		X		<0.34	<0.34	<0.34	<0.34	4.8	<0.34	1.0	5.8
	3.5 - 4	2/12/2009		X		<0.88	<0.88	<0.88	<0.88	12	<0.88	1.6	14
VS-P1-S33	3.5 - 4	2/12/2009		X		<4.0	<4.0	<4.0	<4.0	61	<4.0	<4.0	61
	7.5 - 8	2/12/2009		X		<0.085	<0.085	<0.085	<0.085	1.1	<0.085	0.074 J	1.2 J
VS-P1-S34	3.5 - 4	2/12/2009		X		<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021
	7.5 - 8	2/12/2009		X		<0.017	<0.017	<0.017	<0.017	0.014 J	<0.017	<0.017	0.014 J
VS-P1-S35	3.5 - 4	2/12/2009		X		<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021
	7.5 - 8	2/12/2009		X		<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
VS-P1-S36	1.5 - 2	2/13/2009		X		<0.20	<0.20	<0.20	<0.20	2.0	3.0	<0.20	5.0
	3.5 - 4	2/13/2009		X		<0.19	<0.19	<0.19	<0.19	1.4	1.9	<0.19	3.3
VS-P1-S37	0.5 - 1	2/13/2009		X		<1.8	<1.8	<1.8	<1.8	23	<1.8	<1.8	23
	1.5 - 2	2/13/2009		X		<0.019	<0.019	<0.019	<0.019	0.094	<0.019	<0.019	0.094
VS-P1-S38	0.5 - 1	2/13/2009		X		<0.98	<0.98	<0.98	<0.98	12	<0.98	0.93 J	13 J
	1.5 - 2	2/13/2009		X		<0.021	<0.021	<0.021	<0.021	0.15	<0.021	0.0084 J	0.16 J
VS-P1-S39	0.5 - 1	2/13/2009		X		<1.0 [ $<1.0$ ]	<1.0 [ $<1.0$ ]	<1.0 [ $<1.0$ ]	<1.0 [ $<1.0$ ]	14 [11]	<1.0 [ $<1.0$ ]	<1.0 [ $<1.0$ ]	14 [11]
	1.5 - 2	2/13/2009		X		<0.021	<0.021	<0.021	<0.021	0.097	<0.021	<0.021	0.097
VS-P1-S40	0.5 - 1	2/13/2009		X		<0.20	<0.20	<0.20	<0.20	1.8	<0.20	<0.20	1.8
	1.5 - 2	2/13/2009		X		<0.020	<0.020	<0.020	<0.020	0.035	<0.020	<0.020	0.035
V-A11-S1	3	6/3/2009				<0.017 [ $<0.018$ ]	<0.017 [ $<0.018$ ]	<0.017 [ $<0.018$ ]	<0.017 [ $<0.018$ ]	0.048 [0.033]	0.049 [0.015 J]	<0.017 [ $<0.018$ ]	0.097 [0.051 J]
V-A7-S2M	0-0.2	6/5/2009				<0.95	<0.95	<0.95	<0.95	6	2.9	0.330 J	9.2 J
V-A7-S3B	4-4.5	6/5/2009		X		<0.92	<0.92	<0.92	<0.92	6.4	5.4	0.5 J	12 J
V-A9-S4B	6.5	6/8/2009		X		<0.018	<0.018	<0.018	<0.018	0.120	0.055	0.012 J	0.19 J
V-A9-S6MS	6	6/8/2009		X		<0.018	<0.018	<0.018	<0.018	1.6	0.58	0.074 J	2.3
V-A9-S7SWN	4	6/9/2009		X		<0.180	<0.180	<0.180	<0.180	2.2	0.880	0.190	3.3
V-A9-S8SWE	4	6/9/2009		X		<8.9	<8.9	<8.9	<8.9	43	15	3.3 J	61 J
V-A9-S9B	6.5	6/17/2009				<0.180	<0.180	<0.180	<0.180	0.530	0.260	0.074 J	0.864 J
V-A9-S10SW	5.5	6/17/2009		X		<0.360	<0.360	<0.360	<0.360	0.600	0.610	0.260 J	1.470 J
VS-P1-S37A	0-0.2	7/24/2009				<0.2 [ $<0.37$ ]	<0.2 [ $<0.37$ ]	<0.2 [ $<0.37$ ]	<0.2 [ $<0.37$ ]	1.4 [2.5]	2.4 [4.5]	0.56 [1.0]	4.36 [8.0]
P1-S142A	2-2.5	7/24/2009				<1.9	<1.9	<1.9	<1.9	21	19	2.6	42.6
V-A5-B1	4	7/24/2009				<0.017	<0.017	<0.017	<0.017	0.0077 J	<0.017	<0.017	0.0077 J

**TABLE 3**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED PCBs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

**Notes:**

1. Samples were collected by ARCADIS as part of the RCRA Corrective Action Program between February 2004 and February 2009.
2. PCBs = Polychlorinated Biphenyls.
3. Samples were analyzed by TestAmerica Laboratories, Inc. (formerly Severn Trent Laboratories, Inc) located in Shelton, Connecticut for PCBs using USEPA SW-846 Method 8082.
4. Depths identified in the sample ID for samples collected outside the former Pilot Plant footprint are relative to the surrounding ground surface. Depths identified in the sample ID for samples collected within the former Pilot Plant footprint (sampling locations VS-45-1, VS-45-2, VS-45-2R, VS-45-7, and VS-45-11) are relative to the top of the soil surface beneath the floor slab, which is approximately 2.3 feet higher than the surrounding ground surface.
5. Only those constituents detected are summarized.
6. All concentrations reported in dry weight parts per million (ppm), which is equivalent to milligrams per kilogram (mg/kg).
7. Field duplicate sample results are presented in brackets.
8. **X** indicates the following:
  - Data was validated (for **X** under column titled "Data Validation Completed").
  - Soil at sampling location was removed as part of a 2009 interim corrective measure (for **X** under column titled "Soil Removed Via Additional 2009 ICM")
  - Soil at sampling location was removed as part of a previous interim corrective measure (for **X** under column titled " Soil Removed Via Previous ICM")
9. Data qualifiers are defined as follows:
  - < - Aroclor not detected at a concentration above the reported detection limit.
  - A - Aroclor exceeds the calibration limit.
  - B - Aroclor was found in the sample as well as its associated blank.
  - J - Indicates that the associated numerical value is an estimated concentration.
  - N - The spike recovery exceeded the upper or lower control limits.
10. 6 NYCRR Part 375 Commercial and Industrial Use Soil Cleanup Objectives (SCOs) are from Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (6 NYCRR) Part 375-6.8 (b).
11. Shading indicates that the result exceeds the 6 NYCRR Part 375 Industrial Use SCO.
12. Bolding indicates that the result exceeds the 6 NYCRR Part 375 Commercial Use SCO.
13. - - = No 6 NYCRR Part 375 SCO listed.

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	AOC1-2 0 - 1 02/12/04	AOC2-1 0 - 1 02/12/04	AOC2-2 0 - 1 02/12/04	AOC2-3 0 - 1 02/12/04	AOC2-4 0 - 1 02/12/04	AOC3-3 0 - 1 02/12/04	AOC3-4 0 - 1 02/12/04	AOC4-2 0 - 1 02/12/04
Data Validation Complete			X	X	X	X	X	X	X	X
Soil Removed Via 2009 ICM								X	X	
Soil Removal Via Previous ICM										
<b>VOCs</b>										
4-Methyl-2-pentanone (MIBK)	--	--	<0.012	<0.011	<0.011	<0.011	<0.011	<0.023	<0.012	<0.011 [<0.011]
2-Butanone (MEK)	1,000	500	<0.012 J	<0.011 J	<0.011 J	<0.011	<0.011 J	<0.023 J	0.011 J	<0.011 [<0.011 J]
Bromomethane	--	--	<0.0060 J	<0.0050 J	<0.0050 J	<0.0060 J	<0.0060 J	<0.012 J	<0.0060 J	<0.0050 J [<0.0050 J]
2-Hexanone	--	--	<0.012	<0.011	<0.011	<0.011	<0.011 J	<0.023 J	<0.012	<0.011 [<0.011 J]
Acetone	1,000	500	<0.013 J	<0.011 J	<0.011 J	<0.011	<0.011 J	0.38 J	0.081 J	<0.011 [<0.011 J]
Benzene	89	44	<0.0060	<0.0050	<0.0050	<0.0060	<0.0060	<0.012	<0.0060	<0.0050 [<0.0050]
Carbon disulfide	--	--	<0.0060	<0.0050	<0.0050	<0.0060	0.00060 J	0.0050 J	0.00090 J	<0.0050 [0.00090 J]
Chlorobenzene	1,000	500	<0.0060	<0.0050	<0.0050	<0.0060	<0.0060	<0.012	<0.0060 J	<0.0050 [<0.0050]
Chloroform	700	350	<0.0060	<0.0050	<0.0050	<0.0060	<0.0060	<0.012	<0.0060	<0.0050 [<0.0050]
cis-1,2-Dichloroethene	1,000	500	<0.0060	<0.0050	0.0080	0.00040 J	<0.0060	0.041	0.040	<0.0050 [<0.0050]
Ethylbenzene	780	--	<0.0060	<0.0050	<0.0050	<0.0060	<0.0060	<0.012	<0.0060 J	<0.0050 [<0.0050]
Tetrachloroethene	300	150	0.19	0.0030 J	0.020	0.012	0.0020 J	0.013	0.046 J	0.014 [0.025]
Methylene chloride	1,000	500	<0.0080	<0.0060	<0.0090	<0.0060	<0.0060	<0.012	<0.0060	<0.0050 [<0.0050]
Toluene	1,000	500	0.033	0.0010 J	0.058	<0.0060	0.0030 J	0.024	0.050 J	<0.0050 [0.018]
Styrene	--	--	<0.0060	<0.0050	<0.0050	<0.0060	<0.0060	<0.012	<0.0060 J	<0.0050 [<0.0050]
trans-1,2-Dichloroethene	1,000	500	<0.0060	<0.0050	0.00080 J	<0.0060	<0.0060	0.0070 J	0.00070 J	<0.0050 [<0.0050]
Trichloroethene	400	200	0.0010 J	<0.0050	0.0020 J	0.0020 J	<0.0060	0.0010 J	0.012	<0.0050 [<0.0050]
Vinyl chloride	27	13	<0.0060	<0.0050	<0.0050	<0.0060	<0.0060	0.00080 J	0.0020 J	<0.0050 [<0.0050]
Xylenes (total)	1,000	500	<0.0060 J	<0.0050	<0.0050	<0.0060	<0.0060	<0.012	<0.0060	<0.0050 [0.0020 J]
Total TCL VOCs	--	--	0.22 J	0.0040 J	0.089 J	0.014 J	0.0056 J	0.47 J	0.24 J	0.014 [0.046 J]
<b>SVOCs</b>										
1,2,4-Trichlorobenzene	--	--	<0.38	<1.4	<0.34	<1.4	<0.75	<0.37	<0.39 J	<0.36 [<0.35]
2,4-Dimethylphenol	--	--	<0.38	<1.4	<0.34	<1.4	<0.75	<0.37	<0.39	<0.36 [<0.35]
2-Methylnaphthalene	--	--	<0.38	<1.4	<0.34	<1.4	<0.75	<0.37	<0.39	0.21 J [0.24 J]
2-Methylphenol	1,000	500	<0.38	<1.4	<0.34	<1.4	<0.75	<0.37	<0.39	<0.36 [<0.35]
4-Methylphenol	1,000	500	<0.38	<1.4	<0.34	<1.4	<0.75	<0.37	0.088 J	<0.36 [<0.35]
4-Nitroaniline	--	--	<0.76	<2.7	<0.68	<2.9	<1.5	<0.75	<0.78	<0.71 [<0.69]
Acenaphthene	1,000	500	<0.38	<1.4	0.025 J	0.082 J	0.050 J	<0.37	<0.39	<0.36 [0.093 J]
Acenaphthylene	1,000	500	<0.38	<1.4	<0.34	0.40 J	0.61 J	<0.37	<0.39	<0.36 [<0.35]
Anthracene	1,000	500	<0.38	0.082 J	0.048 J	0.80 J	1.3	0.017 J	<0.39	0.50 [0.31 J]
Benzo(a)anthracene	11	5.6	<0.38	0.23 J	0.14 J	0.75 J	0.82	0.052 J	<0.39	<0.36 [<0.35]
Benzo(a)pyrene	1.1	1	<0.38	0.21 J	0.12 J	0.98 J	1.2	0.033 J	<0.39	<0.36 [<0.35]
Benzo(b)fluoranthene	11	5.6	<0.38	0.18 J	0.11 J	1.5	1.8	0.049 J	<0.39	<0.36 [<0.35]
Benzo(ghi)perylene	1,000	500	<0.38	0.071 J	0.045 J	0.49 J	0.59 J	<0.37	<0.39	<0.36 [<0.35]
Benzo(k)fluoranthene	110	56	<0.38	0.24 J	0.14 J	1.7	2.0	0.047 J	<0.39	<0.36 [<0.35]
Benzoic acid	--	--	<1.8	<6.6	<1.6	<7.0	<3.6	<1.8	<1.9	<1.7 [<1.7]
Bis(2-ethylhexyl)phthalate	--	--	<0.38 J	<1.4	<0.34	0.97 J	<0.75 J	<0.37 J	<0.39 J	0.87 [0.82]
Butyl benzyl phthalate	--	--	<0.38	<1.4	<0.34	<1.4	<0.75	<0.37	<0.39	<0.36 [<0.35]
Carbazole	--	--	<0.38	<1.4	<0.34	0.20 J	0.20 J	<0.37	<0.39	<0.36 [<0.35]
Chrysene	110	56	0.047 J	0.25 J	0.15 J	1.1 J	1.7	0.11 J	<0.39	<0.36 [0.069 J]
Dibenz(a,h)anthracene	1.1	0.56	<0.38	<1.4	<0.34	0.20 J	0.24 J	<0.37	<0.39	<0.36 [<0.35]
Dibenzofuran	1,000	350	<0.38	<1.4	<0.34	0.072 J	0.082 J	<0.37	<0.39	<0.36 [<0.35]
Diethyl phthalate	--	--	<0.38	<1.4	<0.34	<1.4	<0.75	<0.37	<0.39	<0.36 [<0.35]
Dimethyl phthalate	--	--	<0.38	<1.4	<0.34	<1.4	0.074 J	<0.37	<0.39	<0.36 [<0.35]
Di-n-butyl phthalate	--	--	<0.38 J	<1.4	<0.34	<1.4 J	<0.75	<0.37	<0.39	<0.36 [<0.35]
Di-n-octyl phthalate	--	--	<0.38	0.073 J	<0.34	<1.4	<0.75	0.019 J	<0.39	0.058 J [0.033 J]
Fluoranthene	1,000	500	0.033 J	0.43 J	0.28 J	1.2 J	1.1	0.093 J	<0.39	<0.36 [<0.35]
Fluorene	1,000	500	<0.38	<1.4	<0.34	<1.4	0.049 J	<0.37	<0.39	0.071 J [<0.35]
Indeno(1,2,3-cd)pyrene	11	5.6	<0.38	<1.4	0.048 J	0.57 J	0.67 J	<0.37	<0.39	<0.36 [<0.35]
Isophorone	--	--	<0.38	<1.4	<0.34	<1.4	<0.75	<0.37	<0.39	<0.36 [<0.35]
Naphthalene	1,000	500	<0.38	<1.4	<0.34	<1.4	0.14 J	<0.37	<0.39	<0.36 [<0.35]
Pentachlorophenol	55	6.7	<1.8	<6.6	<1.6	<7.0	<3.6	<1.8	<1.9	<1.7 [<1.7]
Phenanthrene	1,000	500	0.078 J	0.28 J	0.18 J	0.53 J	0.43 J	0.12 J	<0.39	<0.36 [<0.35]
Phenol	1,000	500	<0.38	<1.4	<0.34	0.69 J	<0.75	<0.37	<0.39	<0.36 [<0.35]
Pyrene	1,000	500	0.029 J	0.35 J	0.24 J	1.1 J	0.92	0.073 J	<0.39	<0.36 [<0.35]
Total Carcinogenic PAHs	--	--	0.047 J	1.1 J	0.71 J	6.8 J	8.4 J	0.29 J	ND	ND [0.069 J]
Total TCL SVOCs	--	--	0.19 J	2.4 J	1.5 J	13 J	14 J	0.61 J	0.088 J	1.7 J [1.6 J]

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	AOC5-1	AOC5-2	AOC6-1	AOC7-1	AOC7-2	AOC8-1	AOC8-2	AOC9-1	AOC9-2
			0 - 1 02/12/04	0 - 1 02/12/04	0 - 1 02/12/04	0 - 1 02/12/04	0 - 1 02/12/04	0 - 1 02/12/04	0 - 1 02/12/04	0 - 1 02/12/04	0 - 1 02/12/04
Data Validation Complete			X	X	X	X	X	X	X	X	X
Soil Removed Via 2009 ICM							X				
Soil Removal Via Previous ICM											
<b>VOCs</b>											
4-Methyl-2-pentanone (MIBK)	--	--	<0.012	<0.012	<0.011	<0.011	<0.011	<0.011 J	<0.011 J	<0.011 J	<0.011 J
2-Butanone (MEK)	1,000	500	0.021	<0.012	0.018	<0.011	0.0030 J	<0.011 J	<0.011 J	<0.011 J	<0.011 J
Bromomethane	--	--	<0.0060 J	<0.0060 J	<0.0060 J	<0.0060 J	<0.0060 J	<0.0050 J	<0.0050 J	<0.0060 J	<0.0050 J
2-Hexanone	--	--	<0.012	<0.012	<0.011	<0.011	<0.011	<0.011 J	<0.011 J	<0.011 J	<0.011 J
Acetone	1,000	500	0.042	<0.012	0.14	<0.017	<0.011	<0.011 J	<0.011 J	<0.011 J	<0.011 J
Benzene	89	44	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0060	<0.0050
Carbon disulfide	--	--	0.0010 J	<0.0060	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0060	<0.0050
Chlorobenzene	1,000	500	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0060	<0.0050
Chloroform	700	350	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0060	<0.0050
cis-1,2-Dichloroethene	1,000	500	<0.0060	0.0010 J	0.0060	0.0020 J	<0.0060	<0.0050	<0.0050	<0.0060	<0.0050
Ethylbenzene	780	--	<0.0060	<0.0060	0.00070 J	<0.0060	<0.0060	<0.0050	<0.0050	<0.0060	<0.0050
Tetrachloroethene	300	150	0.030	0.0010 J	0.0090	0.0020 J	0.0050 J	0.050	<0.0050	<0.0060	0.0060
Methylene chloride	1,000	500	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0050 J	<0.0050 J	<0.0060 J	<0.0050 J
Toluene	1,000	500	0.12	0.0020 J	0.20	0.14	0.10	0.15	0.026	0.042	0.076
Styrene	--	--	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0060	<0.0050
trans-1,2-Dichloroethene	1,000	500	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0060	<0.0050
Trichloroethene	400	200	<0.0060	0.00050 J	0.0020 J	<0.0060	0.0020 J	<0.0050	<0.0050	<0.0060	<0.0050
Vinyl chloride	27	13	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0060	<0.0050
Xylenes (total)	1,000	500	0.0030 J	<0.0060	0.0050 J	<0.0060	<0.0060	<0.0050 J	<0.0050	<0.0060	<0.0050
Total TCL VOCs	--	--	0.22 J	0.0045 J	0.38 J	0.14 J	0.11 J	0.20	0.026	0.042	0.082
<b>SVOCs</b>											
1,2,4-Trichlorobenzene	--	--	<19	<3.2	<1.4	<0.35	<0.71	<1.4	<0.70	<0.36	<1.4
2,4-Dimethylphenol	--	--	<19	<3.2	<1.4	<0.35	<0.71	<1.4	<0.70	<0.36	<1.4
2-Methylnaphthalene	--	--	23	<3.2	<1.4	<0.35	<0.71	<1.4	<0.70	<0.36	<1.4
2-Methylphenol	1,000	500	<19	<3.2	<1.4	<0.35	<0.71	<1.4	<0.70	<0.36	<1.4
4-Methylphenol	1,000	500	<19	<3.2	<1.4	<0.35	<0.71	<1.4	<0.70	<0.36	<1.4
4-Nitroaniline	--	--	<39	<6.4	<2.8	<0.71	<1.4	<2.8	<1.4	<0.71	<2.7
Acenaphthene	1,000	500	36	<3.2	<1.4	<0.35	0.16 J	<1.4	<0.70	<0.36	<1.4
Acenaphthylene	1,000	500	<19	<3.2	<1.4	<0.35	<0.71	<1.4	<0.70	<0.36	<1.4
Anthracene	1,000	500	1.4 J	<3.2	<1.4	<0.35	0.51 J	<1.4	<0.70	<0.36	<1.4
Benzo(a)anthracene	11	5.6	1.0 J	0.34 J	0.15 J	0.041 J	1.7	<1.4	0.070 J	<0.36	<1.4
Benzo(a)pyrene	1.1	1	<19	0.34 J	0.18 J	0.041 J	1.6	<1.4	0.061 J	<0.36	<1.4
Benzo(b)fluoranthene	11	5.6	<19	0.98 J	0.77 J	<0.35	1.4	<1.4	0.085 J	<0.36	<1.4
Benzo(ghi)perylene	1,000	500	<19	0.51 J	0.21 J	0.021 J	1.1	<1.4	<0.70	<0.36	<1.4
Benzo(k)fluoranthene	110	56	<19	0.86 J	0.64 J	0.047 J	1.6	<1.4	<0.70	<0.36	<1.4
Benzoic acid	--	--	<94	<15	<6.8	<1.7	<3.5	<6.7	<3.4	<1.7	<6.6
Bis(2-ethylhexyl)phthalate	--	--	150	25	7.7	0.41	0.43 J	<1.4	<0.70	0.14 J	0.55 J
Butyl benzyl phthalate	--	--	<19	<3.2	<1.4	<0.35	<0.71	<1.4	<0.70	<0.36	<1.4
Carbazole	--	--	4.7 J	<3.2	<1.4	<0.35	0.18 J	<1.4	<0.70	<0.36	<1.4
Chrysene	110	56	1.3 J	1.2 J	0.86 J	0.053 J	2.1	<1.4	0.078 J	0.024 J	<1.4
Dibenz(a,h)anthracene	1.1	0.56	<19	<3.2	0.077 J	<0.35	0.38 J	<1.4	<0.70	<0.36	<1.4
Dibenzofuran	1,000	350	15 J	<3.2	<1.4	<0.35	0.10 J	<1.4	<0.70	<0.36	<1.4
Diethyl phthalate	--	--	2.3 J	<3.2	<1.4	<0.35	<0.71	<1.4	<0.70	<0.36	<1.4
Dimethyl phthalate	--	--	<19	<3.2	<1.4	<0.35	<0.71	<1.4	<0.70	<0.36	<1.4
Di-n-butyl phthalate	--	--	1.1 J	2.0 J	<0.16 J	<0.017 J	<0.047 J	<1.4	<0.70	<0.36 J	<1.4
Di-n-octyl phthalate	--	--	<19	<3.2	0.49 J	<0.35	0.047 J	<1.4	<0.70	<0.36	<1.4
Fluoranthene	1,000	500	6.6 J	1.8 J	0.71 J	0.096 J	3.7	<1.4	0.080 J	0.029 J	<1.4
Fluorene	1,000	500	13 J	<3.2	<1.4	<0.35	0.20 J	<1.4	<0.70	<0.36	<1.4
Indeno(1,2,3-cd)pyrene	11	5.6	<19	0.51 J	0.25 J	0.020 J	1.1	<1.4	0.044 J	<0.36	<1.4
Isophorone	--	--	<19	<3.2	<1.4	<0.35	<0.71	<1.4	<0.70	<0.36	<1.4
Naphthalene	1,000	500	110	<3.2	<1.4	<0.35	<0.71	<1.4	<0.70	<0.36	<1.4
Pentachlorophenol	55	6.7	<94	<15	<6.8	<1.7	<3.5	<6.7	<3.4	<1.7	<6.6
Phenanthrene	1,000	500	18 J	0.39 J	0.16 J	0.077 J	2.6	<1.4	<0.70	<0.36	<1.4
Phenol	1,000	500	<19	<3.2	<1.4	<0.35	<0.71	<1.4	<0.70	<0.36	<1.4
Pyrene	1,000	500	5.2 J	1.5 J	0.77 J	0.085 J	4.0	<1.4	0.089 J	0.035 J	<1.4
Total Carcinogenic PAHs	--	--	2.3 J	4.2 J	2.9 J	0.20 J	9.9 J	ND	0.34 J	0.024 J	ND
Total TCL SVOCs	--	--	390 J	35 J	13 J	0.89 J	23 J	ND	0.51 J	0.23 J	0.55 J

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	AOC10-1 0 - 1 02/19/04	AOC10-2 0 - 1 02/19/04	AOC11-1 0 - 0.8 02/09/04	AOC11-2 0 - 1 02/12/04	AOC11-3 0 - 1 02/12/04	AOC12-1 1 - 2 02/16/04	AOC13-1 0 - 1 02/16/04	AOC15-3 0 - 1 02/16/04	AOC16-2 0 - 1 02/16/04
Data Validation Complete			X	X	X	X	X	X	X	X	X
Soil Removed Via 2009 ICM											
Soil Removal Via Previous ICM											
<b>VOCs</b>											
4-Methyl-2-pentanone (MIBK)	--	--	<0.052 J	<0.010 J	<0.014	<0.011	<0.010	<0.012	<0.011	<0.011	<0.011
2-Butanone (MEK)	1,000	500	<0.052 J	<0.010 J	0.017	0.0060 J	0.028	0.045 J	<0.011 J	0.040 J	0.0030 J
Bromomethane	--	--	<0.026 J	<0.0050 J	<0.0070	<0.0050 J	<0.0050 J	<0.0060 J	<0.0060 J	<0.0050 J	<0.0050 J
2-Hexanone	--	--	<0.052 J	<0.010 J	<0.014	<0.011	<0.010	<0.012 J	<0.011 J	<0.011 J	<0.011
Acetone	1,000	500	0.092	<0.010 J	0.16	<0.030	0.20	0.21 J	<0.011	<0.020 J	<0.011
Benzene	89	44	<0.026	<0.0050	<0.0070	<0.0050	<0.0050	<0.0060	<0.0060	<0.0050	<0.0050
Carbon disulfide	--	--	<0.026	<0.0050	<0.0070	<0.0050	0.0030 J	<0.0030 J	<0.0060	<0.0050	<0.0050
Chlorobenzene	1,000	500	<0.026	<0.0050	0.00070 J	<0.0050	<0.0050	0.0010 J	<0.0060	<0.0050	<0.0050
Chloroform	700	350	<0.026	<0.0050	<0.0070	<0.0050	<0.0050	<0.0060	<0.0060	<0.0050	<0.0050
cis-1,2-Dichloroethene	1,000	500	<0.026	<0.0050	<0.0070	<0.0050	0.023	0.0090	0.00040 J	<0.0050	0.0020 J
Ethylbenzene	780	--	<0.026	<0.0050	0.00080 J	<0.0050	<0.0050	0.0020 J	<0.0060	<0.0050	<0.0050
Tetrachloroethene	300	150	0.0060 J	<0.0050	0.0010 J	<0.0050	0.0050	0.048	0.0060	<0.0050	<0.0050
Methylene chloride	1,000	500	0.016 J	<0.0050 J	<0.0070	<0.0050	<0.0050	<0.0060	<0.0060	<0.0050	<0.0050
Toluene	1,000	500	0.25	0.0070	0.010	0.0090	0.087	0.18	0.16	0.065	0.16
Styrene	--	--	<0.026	<0.0050	<0.0070 J	<0.0050	<0.0050	<0.0060	<0.0060	<0.0050	<0.0050
trans-1,2-Dichloroethene	1,000	500	<0.026	<0.0050	<0.0070	<0.0050	0.0020 J	<0.0060	<0.0060	<0.0050	<0.0050
Trichloroethene	400	200	<0.026	<0.0050	<0.0070 J	<0.0050	0.0030 J	0.0020 J	0.00080 J	<0.0050	0.0060
Vinyl chloride	27	13	<0.026	<0.0050	<0.0070	<0.0050	<0.0050	<0.0060	<0.0060	<0.0050	<0.0050
Xylenes (total)	1,000	500	<0.026	<0.0050	<0.0070 J	<0.0050	<0.0050	0.0080	<0.0060	<0.0050	<0.0050
Total TCL VOCs	--	--	0.36 J	0.0070	0.19 J	0.015 J	0.35 J	0.51 J	0.17 J	0.11 J	0.17 J
<b>SVOCs</b>											
1,2,4-Trichlorobenzene	--	--	<1.3	<0.34	<9.3	<0.35	<0.33	<1.5	<0.73	<0.34	<0.35
2,4-Dimethylphenol	--	--	<1.3	<0.34	<9.3	<0.35	<0.33	<1.5	<0.73	<0.34	<0.35
2-Methylnaphthalene	--	--	<1.3	<0.34	0.85 J	<0.35	<0.33	<1.5	<0.73	<0.34	<0.35
2-Methylphenol	1,000	500	<1.3	<0.34	<9.3	<0.35	<0.33	<1.5	<0.73	<0.34	0.024 J
4-Methylphenol	1,000	500	<1.3	<0.34	<9.3	<0.35	<0.33	<1.5	<0.73	<0.34	<0.35
4-Nitroaniline	--	--	<2.7	<0.67	<19	<0.70	<0.66	<3.0	<1.5	<0.68	<0.71
Acenaphthene	1,000	500	<1.3	<0.34	3.7 J	<0.35	<0.33	<1.5	<0.73	<0.34	0.019 J
Acenaphthylene	1,000	500	<1.3	<0.34	<9.3	<0.35	<0.33	<1.5	<0.73	<0.34	<0.35
Anthracene	1,000	500	<1.3	<0.34	4.2 J	<0.35	0.022 J	<1.5 J	<0.73 J	<0.34	0.031 J
Benzo(a)anthracene	11	5.6	0.062 J	<0.34	6.8 J	0.018 J	0.061 J	<1.5 J	<0.73 J	0.029 J	0.12 J
Benzo(a)pyrene	1.1	1	0.12 J	<0.34	5.7 J	<0.35	0.061 J	<1.5	<0.73	0.030 J	0.16 J
Benzo(b)fluoranthene	11	5.6	<1.3	<0.34	5.1 J	<0.35	0.056 J	<1.5	<0.73	<0.34	0.15 J
Benzo(ghi)perylene	1,000	500	<1.3	<0.34	5.7 J	<0.35	0.031 J	<1.5	<0.73	0.025 J	0.28 J
Benzo(k)fluoranthene	110	56	<1.3	<0.34	4.1 J	<0.35	0.058 J	<1.5	<0.73	<0.34	0.19 J
Benzoic acid	--	--	<6.5	<1.6	<45	<1.7	<1.6	<7.2	<3.5	<1.6	<1.7
Bis(2-ethylhexyl)phthalate	--	--	<1.3	<0.34	14	0.43	<0.052 J	<1.5	<0.73	<0.34	<0.35 J
Butyl benzyl phthalate	--	--	<1.3	<0.34	<9.3	<0.35	<0.33	<1.5	<0.73	<0.34	<0.35
Carbazole	--	--	<1.3	<0.34	2.4 J	<0.35	<0.33	<1.5 J	<0.73 J	<0.34	<0.35
Chrysene	110	56	0.33 J	<0.34	11	0.033 J	0.067 J	<1.5 J	<0.73 J	0.039 J	0.15 J
Dibenz(a,h)anthracene	1.1	0.56	<1.3	<0.34	1.6 J	<0.35	<0.33	<1.5	<0.73	<0.34	0.074 J
Dibenzofuran	1,000	350	<1.3	<0.34	0.89 J	<0.35	<0.33	<1.5	<0.73	<0.34	<0.35
Diethyl phthalate	--	--	<1.3	<0.34	<9.3	<0.35	<0.33	<1.5	<0.73	<0.34	<0.35
Dimethyl phthalate	--	--	<1.3	<0.34	<9.3	<0.35	<0.33	<1.5	<0.73	<0.34	<0.35
Di-n-butyl phthalate	--	--	<1.3	<0.34	3.8 J	<0.098 J	<0.017 J	<1.5	<0.73 J	<0.34	<0.35 J
Di-n-octyl phthalate	--	--	<1.3	<0.34	1.4 J	0.13 J	<0.33	<1.5	<0.73	<0.34	<0.35
Fluoranthene	1,000	500	<1.3	<0.34	17	0.044 J	0.11 J	<1.5	<0.73	0.054 J	0.21 J
Fluorene	1,000	500	0.089 J	<0.34	47	<0.35	<0.33	<1.5	<0.73	<0.34	<0.35
Indeno(1,2,3-cd)pyrene	11	5.6	<1.3	<0.34	4.8 J	<0.35	0.031 J	<1.5	<0.73	0.025 J	0.25 J
Isophorone	--	--	<1.3	<0.34	<9.3	<0.35	<0.33	<1.5	<0.73	<0.34	<0.35
Naphthalene	1,000	500	<1.3	<0.34	2.3 J	<0.35	<0.33	<1.5	<0.73	<0.34	<0.35
Pentachlorophenol	55	6.7	<6.5	<1.6	<45	<1.7	<1.6	<7.2	<3.5	<1.6	<1.7
Phenanthrene	1,000	500	<1.3	<0.34	14	0.045 J	0.074 J	<1.5 J	<0.73 J	0.025 J	0.13 J
Phenol	1,000	500	<1.3	<0.34	5.0 J	<0.35	<0.33	<1.5	0.20 J	<0.34	<0.35
Pyrene	1,000	500	0.18 J	<0.34	18 J	0.040 J	0.10 J	<1.5	<0.73	0.053 J	0.21 J
Total Carcinogenic PAHs	--	--	0.51 J	ND	39 J	0.051 J	0.33 J	ND	ND	0.12 J	1.1 J
Total TCL SVOCs	--	--	0.78 J	ND	180 J	0.74 J	0.67 J	ND	0.20 J	0.28 J	2.0 J

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	AOC17-1	AOC18-1	AOC18-2	AOC18-3	AOC20-2	AOC21A-1	AOC21A-2	AOC22-1
			0 - 1 02/16/04	0 - 1 02/16/04	0 - 1 02/16/04	0 - 1 02/16/04	0 - 1 02/16/04	0 - 1 02/16/04	0 - 1 02/16/04	0 - 1 02/16/04
Data Validation Complete			X	X	X	X	X	X	X	X
Soil Removed Via 2009 ICM										
Soil Removal Via Previous ICM										
<b>VOCs</b>										
4-Methyl-2-pentanone (MIBK)	--	--	<0.011 [ $<0.011$ ]	<0.011	<0.011	<0.011	<0.011	<0.010	<0.011	<0.0080
2-Butanone (MEK)	1,000	500	<0.011 [ $<0.011$ ]	<0.011 J	<0.011 J	<0.011 J	<0.011	<0.010	<0.011	<0.0080
Bromomethane	--	--	<0.0050 J [ $<0.0050$ J]	<0.0050 J	<0.0050 J	<0.0050 J	<0.0050 J	<0.0050 J	<0.0050 J	<0.0040 J
2-Hexanone	--	--	<0.011 [ $<0.011$ ]	<0.011 J	<0.011 J	<0.011 J	<0.011	<0.010	<0.011	<0.0080
Acetone	1,000	500	<0.013 [ $<0.017$ ]	<0.011	<0.011	<0.014 J	<0.011	<0.018	<0.011	<0.015 J
Benzene	89	44	<0.0050 [ $<0.0050$ ]	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040
Carbon disulfide	--	--	<0.0050 [ $<0.0050$ ]	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040
Chlorobenzene	1,000	500	<0.0050 [ $<0.0050$ ]	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040
Chloroform	700	350	<0.0050 [ $<0.0050$ ]	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040
cis-1,2-Dichloroethene	1,000	500	<0.0050 [ $<0.0050$ ]	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040
Ethylbenzene	780	--	<0.0050 [ $<0.0050$ ]	<0.0050	<0.0050	0.00050 J	<0.0050	0.0020 J	<0.0050	<0.0040
Tetrachloroethene	300	150	<0.0050 [ $<0.0050$ ]	0.0010 J	0.0030 J	<0.0050	0.0010 J	0.00070 J	0.0020 J	0.00090 J
Methylene chloride	1,000	500	<0.0050 [ $<0.0050$ ]	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040
Toluene	1,000	500	<0.011 [ $<0.0050$ ]	0.00060 J	0.067	0.075	0.075	0.066	0.0090	0.00090 J
Styrene	--	--	<0.0050 [ $<0.0050$ ]	<0.0050	<0.0050	0.0020 J	<0.0050	<0.0050	<0.0050	<0.0040
trans-1,2-Dichloroethene	1,000	500	<0.0050 [ $<0.0050$ ]	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040
Trichloroethene	400	200	<0.0050 [ $<0.0050$ ]	<0.0050	0.0010 J	<0.0050	<0.0050	0.0020 J	0.0020 J	<0.0040
Vinyl chloride	27	13	<0.0050 [ $<0.0050$ ]	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0040
Xylenes (total)	1,000	500	<0.0050 [ $<0.0050$ ]	<0.0050 J	<0.0050	0.0020 J	<0.0050	0.036	<0.0050	<0.0040
Total TCL VOCs	--	--	ND [ND]	0.0016 J	0.071 J	0.080 J	0.076 J	0.11 J	0.013 J	0.0018 J
<b>SVOCs</b>										
1,2,4-Trichlorobenzene	--	--	<1.3 [ $<1.4$ J]	<0.34	<0.35	<5.4	<0.69	<1.4 J	<0.34	<0.36
2,4-Dimethylphenol	--	--	<1.3 [ $<1.4$ ]	<0.34	<0.35	<5.4	<0.69	<1.4	<0.34	<0.36
2-Methylnaphthalene	--	--	0.16 J [ $<1.4$ ]	<0.34	<0.35	<5.4	<0.69	<1.4	<0.34	<0.36
2-Methylphenol	1,000	500	<1.3 [ $<1.4$ ]	<0.34	<0.35	<5.4	<0.69	<1.4	<0.34	<0.36
4-Methylphenol	1,000	500	<1.3 [ $<1.4$ ]	<0.34	<0.35	<5.4	<0.69	<1.4	<0.34	<0.36
4-Nitroaniline	--	--	<2.7 [ $<2.8$ ]	<0.68	<0.70	<11	<1.4	<2.7	<0.68	<0.73
Acenaphthene	1,000	500	0.22 J [0.20 J]	<0.34	<0.35	3.5 J	<0.69	<1.4	<0.34	0.034 J
Acenaphthylene	1,000	500	<1.3 [ $<1.4$ ]	<0.34	<0.35	<5.4	<0.69	<1.4	<0.34	<0.36
Anthracene	1,000	500	0.28 J [0.27 J]	0.024 J	0.017 J	5.0 J	<0.69	<1.4	<0.34	0.049 J
Benzo(a)anthracene	11	5.6	1.0 J [0.99 J]	0.082 J	0.062 J	<b>12</b>	<0.69	<1.4	<0.34	0.13 J
Benzo(a)pyrene	1.1	1	<b>1.1 J [0.92 J]</b>	0.069 J	0.054 J	<b>10</b>	<0.69	<1.4	<0.34	0.11 J
Benzo(b)fluoranthene	11	5.6	1.1 J [0.86 J]	0.071 J	0.057 J	<b>9.9</b>	<0.69	<1.4	<0.34	0.11 J
Benzo(ghi)perylene	1,000	500	0.51 J [0.64 J]	0.054 J	0.026 J	6.7	<0.69	<1.4	<0.34	0.053 J
Benzo(k)fluoranthene	110	56	0.92 J [0.95 J]	0.070 J	0.072 J	10	<0.69	<1.4	<0.34	0.11 J
Benzoic acid	--	--	<6.5 [ $<6.7$ ]	<1.6	<1.7	<26	<3.3	<6.6	<1.7	<1.8
Bis(2-ethylhexyl)phthalate	--	--	0.66 J [0.56 J]	<0.34 J	0.83	1.5 J	<0.69	0.78 J	<0.34 J	1.7
Butyl benzyl phthalate	--	--	<1.3 [ $<1.4$ ]	<0.34	<0.35	<5.4	<0.69	<1.4	<0.34	<0.36
Carbazole	--	--	0.17 J [0.17 J]	<0.34	<0.35	2.9 J	<0.69	<1.4	<0.34	<0.36
Chrysene	110	56	1.3 J [1.2 J]	0.094 J	0.086 J	12	<0.69	<1.4	<0.34	0.14 J
Dibenz(a,h)anthracene	1.1	0.56	0.25 J [0.27 J]	0.020 J	<0.35	<b>3.0 J</b>	<0.69	<1.4	<0.34	<0.36
Dibenzofuran	1,000	350	0.073 J [0.070 J]	<0.34	<0.35	1.5 J	<0.69	<1.4	<0.34	<0.36
Diethyl phthalate	--	--	<1.3 [ $<1.4$ ]	<0.34	<0.35	<5.4	<0.69	<1.4	<0.34	<0.36
Dimethyl phthalate	--	--	<1.3 [ $<1.4$ ]	<0.34	0.057 J	<5.4	<0.69	<1.4	<0.34	<0.36
Di-n-butyl phthalate	--	--	0.18 J [0.11 J]	<0.34 J	<0.35 J	0.36 J	<0.69	<1.4	<0.34	<0.36
Di-n-octyl phthalate	--	--	<1.3 [ $<1.4$ ]	<0.34	0.023 J	<5.4	<0.69	<1.4	<0.34	<0.36
Fluoranthene	1,000	500	1.8 [1.9]	0.15 J	0.11 J	24	<0.69	<1.4	<0.34	0.29 J
Fluorene	1,000	500	0.17 J [0.15 J]	<0.34	<0.35	1.9 J	<0.69	<1.4	<0.34	0.023 J
Indeno(1,2,3-cd)pyrene	11	5.6	0.60 J [0.63 J]	0.055 J	0.029 J	<b>6.7</b>	<0.69	<1.4	<0.34	0.055 J
Isophorone	--	--	<1.3 [ $<1.4$ ]	<0.34	<0.35	<5.4	<0.69	<1.4	<0.34	<0.36
Naphthalene	1,000	500	<1.3 J [ $<1.4$ J]	<0.34	0.059 J	0.77 J	<0.69	<1.4 J	<0.34	<0.36
Pentachlorophenol	55	6.7	<6.5 [ $<6.7$ ]	<1.6	<1.7	<26	<3.3	<6.6	<1.7	<1.8
Phenanthrene	1,000	500	1.3 J [1.2 J]	0.11 J	0.088 J	20	<0.69	<1.4	<0.34	0.20 J
Phenol	1,000	500	<1.3 J [ $<1.4$ ]	<0.34	<0.35	<5.4	<0.69	<1.4	<0.34	<0.36
Pyrene	1,000	500	1.7 [1.6]	0.14 J	0.11 J	22	<0.69	<1.4	<0.34	0.26 J
Total Carcinogenic PAHs	--	--	6.3 J [5.8 J]	0.46 J	0.36 J	64 J	ND	ND	ND	0.66 J
Total TCL SVOCs	--	--	14 J [13 J]	0.94 J	1.7 J	150 J	ND	0.78 J	ND	3.3 J

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	AOC22-2 0 - 1 02/16/04	AOC22-3 0 - 1 02/16/04	AOC22-4 0 - 1 02/17/04	AOC23-3 0 - 1 02/17/04	AOC23-4 0 - 1 02/17/04	AOC24-1 0 - 1 02/17/04	AOC24-2 0 - 1 02/17/04	AOC24-3 1 - 2 02/17/04
Data Validation Complete			X	X	X	X	X	X	X	X
Soil Removed Via 2009 ICM										
Soil Removal Via Previous ICM										
<b>VOCs</b>										
4-Methyl-2-pentanone (MIBK)	--	--	<0.011	<0.012 J	<0.012	<0.011 [ $<0.011$ J]	<0.011	<0.011 J	<0.021 J	<0.010 J
2-Butanone (MEK)	1,000	500	0.032	<0.012 J	<0.012	<0.011 [ $<0.011$ J]	<0.011	<0.011 J	<0.021 J	<0.010 J
Bromomethane	--	--	<0.0050 J	<0.0060 J	<0.0060	<0.0060 [ $<0.0060$ J]	<0.0060	<0.0050 J	<0.010 J	<0.0050 J
2-Hexanone	--	--	<0.011	<0.012 J	<0.012	<0.011 J [ $<0.011$ J]	<0.011	<0.011 J	<0.021 J	<0.010 J
Acetone	1,000	500	0.18 J	<0.022 J	<0.012 J	<0.020 J [ $0.032$ J]	0.0060 J	<0.016 J	<0.021 J	<0.016 J
Benzene	89	44	<0.0050	<0.0060	<0.0060	<0.0060 [ $<0.0060$ ]	<0.0060	<0.0050	<0.010	<0.0050
Carbon disulfide	--	--	<0.0050	0.0010 J	<0.0060	<0.0060 [ $<0.0060$ ]	<0.0060	<0.0050	<0.010	<0.0050
Chlorobenzene	1,000	500	<0.0050	<0.0060	<0.0060	<0.0060 [ $<0.0060$ ]	<0.0060	<0.0050	<0.010	<0.0050
Chloroform	700	350	<0.0050	<0.0060	<0.0060	<0.0060 [ $<0.0060$ ]	<0.0060	<0.0050	<0.010	<0.0050
cis-1,2-Dichloroethene	1,000	500	<0.0050	<0.0060	<0.0060	<0.0060 [ $<0.0060$ ]	<0.0060	<0.0050	<0.010	<0.0050
Ethylbenzene	780	--	<0.0050	<0.0060	<0.0060	<0.0060 [ $<0.0060$ ]	<0.0060	0.0020 J	0.17	<0.0050
Tetrachloroethene	300	150	<0.0050	0.0010 J	0.0030 J	<0.0060 [ $<0.0060$ ]	0.0020 J	<0.0050	<0.010	0.0020 J
Methylene chloride	1,000	500	<0.0050	<0.0060	<0.0060	<0.0060 [ $<0.0060$ ]	<0.0060	<0.0050	<0.010	<0.0050
Toluene	1,000	500	0.034	0.082	0.066	0.050 [ $0.037$ ]	0.066 J	0.15	0.010	0.00080 J
Styrene	--	--	<0.0050	<0.0060	<0.0060	<0.0060 [ $<0.0060$ ]	<0.0060	0.0010 J	0.0020 J	<0.0050
trans-1,2-Dichloroethene	1,000	500	<0.0050	<0.0060	<0.0060	<0.0060 [ $<0.0060$ ]	<0.0060	<0.0050	<0.010	<0.0050
Trichloroethene	400	200	<0.0050	<0.0060	<0.0060	<0.0060 [ $<0.0060$ ]	<0.0060	0.0010 J	<0.010	<0.0050
Vinyl chloride	27	13	<0.0050	<0.0060 J	<0.0060	<0.0060 [ $<0.0060$ J]	<0.0060	<0.0050	<0.010 J	<0.0050
Xylenes (total)	1,000	500	<0.0050	<0.0060	<0.0060	<0.0060 [ $<0.0060$ ]	<0.0060	<0.0050	0.0090 J	<0.0050
Total TCL VOCs	--	--	0.25 J	0.084 J	0.069 J	0.050 [ $0.069$ J]	0.074 J	0.15 J	0.19 J	0.0028 J
<b>SVOCs</b>										
1,2,4-Trichlorobenzene	--	--	<0.36	<0.38	<0.38	<0.35 J [ $<0.35$ ]	<0.35 J	<1.4 J	<1.4 J	<0.67
2,4-Dimethylphenol	--	--	<0.36	<0.38	<0.38	R [ $<0.35$ ]	<0.35	<1.4	<1.4	<0.67
2-Methylnaphthalene	--	--	<0.36	<0.38	<0.38	<0.35 [ $<0.35$ ]	<0.35	<1.4	0.88 J	<0.67
2-Methylphenol	1,000	500	<0.36	<0.38	<0.38	R [ $<0.35$ ]	<0.35	<1.4	<1.4	<0.67
4-Methylphenol	1,000	500	<0.36	<0.38	<0.38	R [ $<0.35$ ]	<0.35	<1.4	<1.4	<0.67
4-Nitroaniline	--	--	<0.72	<0.77	<0.77	<0.70 [ $<0.71$ ]	<0.70	<2.9	<2.7	<1.3
Acenaphthene	1,000	500	0.038 J	<0.38	<0.38	<0.35 [ $<0.35$ ]	<0.35	0.070 J	0.55 J	<0.67
Acenaphthylene	1,000	500	<0.36	<0.38	<0.38	<0.35 [ $<0.35$ ]	<0.35	0.075 J	<1.4	<0.67
Anthracene	1,000	500	0.049 J	<0.38	<0.38	<0.35 [ $<0.35$ ]	<0.35	0.12 J	0.79 J	<0.67
Benzo(a)anthracene	11	5.6	0.098 J	0.033 J	<0.38	<0.35 [ $<0.35$ ]	<0.35	0.41 J	2.9	<0.67
Benzo(a)pyrene	1.1	1	0.084 J	0.035 J	<0.38	<0.35 [ $<0.35$ ]	<0.35	0.49 J	2.8	<0.67
Benzo(b)fluoranthene	11	5.6	0.070 J	<0.38	<0.38	<0.35 [ $<0.35$ ]	<0.35	0.48 J	2.6	<0.67
Benzo(ghi)perylene	1,000	500	0.033 J	<0.38	<0.38	<0.35 [ $<0.35$ ]	<0.35	0.37 J	0.99 J	<0.67
Benzo(k)fluoranthene	110	56	0.094 J	<0.38	<0.38	<0.35 [ $<0.35$ ]	<0.35	0.45 J	3.1	<0.67
Benzoic acid	--	--	<1.7	<1.9	<1.9	<1.7 [ $<1.7$ ]	<1.7	<6.9	<6.6	<3.2
Bis(2-ethylhexyl)phthalate	--	--	0.97	0.51	0.27 J	0.43 J [ $2.2$ J]	0.13 J	4.2	0.72 J	0.15 J
Butyl benzyl phthalate	--	--	<0.36	<0.38	<0.38	<0.35 [ $0.058$ J]	<0.35	<1.4	<1.4	<0.67
Carbazole	--	--	0.026 J	<0.38	<0.38	<0.35 [ $<0.35$ ]	<0.35	<1.4	0.27 J	<0.67
Chrysene	110	56	0.11 J	0.048 J	<0.38	<0.35 [ $<0.35$ ]	<0.35	0.51 J	3.4	<0.67
Dibenzo(a,h)anthracene	1.1	0.56	<0.36	<0.38	<0.38	<0.35 [ $<0.35$ ]	<0.35	0.13 J	0.49 J	<0.67
Dibenzofuran	1,000	350	0.024 J	<0.38	<0.38	<0.35 [ $<0.35$ ]	<0.35	<1.4	0.29 J	<0.67
Diethyl phthalate	--	--	<0.36	<0.38	0.022 J	<0.35 [ $<0.35$ ]	<0.35	<1.4	<1.4	<0.67
Dimethyl phthalate	--	--	<0.36	0.031 J	0.035 J	<0.35 [ $<0.35$ ]	<0.35	<1.4	<1.4	<0.67
Di-n-butyl phthalate	--	--	<0.36 J	<0.38	<0.38	<0.35 [ $<0.35$ ]	<0.35	0.41 J	0.097 J	<0.67
Di-n-octyl phthalate	--	--	<0.36	<0.38	0.11 J	<0.35 [ $<0.35$ ]	<0.35	0.067 J	<1.4	0.025 J
Fluoranthene	1,000	500	0.20 J	0.077 J	<0.38	<0.35 [ $<0.35$ ]	<0.35	0.73 J	5.7	<0.67
Fluorene	1,000	500	0.033 J	<0.38	<0.38	<0.35 [ $<0.35$ ]	<0.35	<1.4	0.69 J	<0.67
Indeno(1,2,3-cd)pyrene	11	5.6	0.035 J	<0.38	<0.38	<0.35 [ $<0.35$ ]	<0.35	0.30 J	1.1 J	<0.67
Isophorone	--	--	<0.36	<0.38	<0.38	<0.35 [ $<0.35$ ]	<0.35	<1.4	<1.4	<0.67
Naphthalene	1,000	500	<0.36	<0.38	<0.38	<0.35 J [ $0.12$ J]	<0.35 J	<1.4 J	0.27 J	<0.67
Pentachlorophenol	55	6.7	<1.7	<1.9	<1.9	R [ $<1.7$ ]	<1.7	<6.9	<6.6	<3.2
Phenanthrene	1,000	500	0.18 J	0.069 J	<0.38	<0.35 [ $0.030$ J]	<0.35	0.44 J	3.9	<0.67
Phenol	1,000	500	0.034 J	<0.38	<0.38	R [ $<0.35$ ]	<0.35	0.14 J	<1.4	<0.67
Pyrene	1,000	500	0.16 J	0.068 J	<0.38	<0.35 [ $<0.35$ ]	<0.35	0.76 J	5.7	0.042 J
Total Carcinogenic PAHs	--	--	0.49 J	0.12 J	ND	ND [ND]	ND	2.8 J	16 J	ND
Total TCL SVOCs	--	--	2.2 J	0.87 J	0.44 J	0.43 J [ $2.4$ J]	0.13 J	10 J	37 J	0.22 J

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	AOC24-4 0 - 1 02/17/04	AOC24-5 0 - 1 02/17/04	AOC24-6 0 - 1 02/17/04	AOC24-7 0 - 1 02/17/04	AOC24-8 0 - 1 02/17/04	AOC27A-1 0 - 1 02/17/04	AOC27A-2 0 - 1 02/17/04	AOC27B-1 0 - 1 02/17/04	AOC27B-2 0 - 1 02/17/04
<b>Data Validation Complete</b>			X	X	X	X	X	X	X	X	X
<b>Soil Removed Via 2009 ICM</b>											
<b>Soil Removal Via Previous ICM</b>											
<b>VOCs</b>											
4-Methyl-2-pentanone (MIBK)	--	--	<0.011 J	<0.011 J	<0.011 J	<0.012 J	<0.011	<0.011 J	<0.011 J	<0.011 J	<0.011 J
2-Butanone (MEK)	1,000	500	<0.011 J	<0.011 J	<0.011 J	<0.012 J	<0.011 J	<0.011 J	<0.011 J	<0.011 J	<0.011 J
Bromomethane	--	--	<0.0050 J	<0.0050 J	<0.0060 J	<0.0060 J	<0.0060 J	<0.0050 J	<0.0050 J	<0.0060 J	<0.0060 J
2-Hexanone	--	--	<0.011 J	<0.011 J	<0.011 J	<0.012 J	<0.011	<0.011 J	<0.011 J	<0.011 J	<0.011 J
Acetone	1,000	500	<0.014 J	<0.012 J	<0.011 J	<0.012 J	<0.029 J	<0.011	<0.011 J	<0.011 J	<0.017 J
Benzene	89	44	<0.0050	<0.0050	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0060	<0.0060
Carbon disulfide	--	--	<0.0050	<0.0050	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0060	<0.0060
Chlorobenzene	1,000	500	<0.0050	<0.0050	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0060	<0.0060
Chloroform	700	350	<0.0050	<0.0050	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0060	<0.0060
cis-1,2-Dichloroethene	1,000	500	<0.0050	<0.0050	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0060	<0.0060
Ethylbenzene	780	--	<0.0050	<0.0050	<0.0060	<0.0060	0.0030 J	<0.0050	<0.0050	<0.0060	<0.0060
Tetrachloroethene	300	150	0.013	<0.0050	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0060	<0.0060
Methylene chloride	1,000	500	<0.0050	<0.0050 J	<0.0060	<0.0060 J	<0.0060	<0.0050	<0.0050 J	<0.0060	<0.0060
Toluene	1,000	500	0.095	0.086	0.0040 J	0.013	0.025	0.057	0.086	0.064	0.076
Styrene	--	--	<0.0050	<0.0050	<0.0060	<0.0060	0.015	<0.0050	<0.0050	<0.0060	<0.0060
trans-1,2-Dichloroethene	1,000	500	<0.0050	<0.0050	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0060	<0.0060
Trichloroethene	400	200	0.023	<0.0050	<0.0060	<0.0060	0.020	<0.0050	<0.0050	<0.0060	<0.0060
Vinyl chloride	27	13	<0.0050	<0.0050	<0.0060 J	0.0060 J	<0.0060	<0.0050 J	<0.0050 J	<0.0060 J	<0.0060 J
Xylenes (total)	1,000	500	<0.0050	<0.0050	<0.0060	<0.0060	<0.0060 J	<0.0050	<0.0050	<0.0060	<0.0060
Total TCL VOCs	--	--	0.13	0.086	0.0040 J	0.014 J	0.063 J	0.057	0.086	0.064	0.076
<b>SVOCs</b>											
1,2,4-Trichlorobenzene	--	--	<2.8	<0.71	<0.36	<1.5	<7.1	<0.34	<140	<0.36	<0.37
2,4-Dimethylphenol	--	--	<2.8	<0.71	<0.36	<1.5	<7.1	<0.34	<140	<0.36	<0.37
2-Methylnaphthalene	--	--	<2.8	<0.71	<0.36	<1.5	<7.1	<0.34	<140	<0.36	<0.37
2-Methylphenol	1,000	500	<2.8	<0.71	<0.36	<1.5	<7.1	<0.34	<140	<0.36	<0.37
4-Methylphenol	1,000	500	<2.8	<0.71	<0.36	<1.5	<7.1	<0.34	<140	<0.36	<0.37
4-Nitroaniline	--	--	<5.5	<1.4	<0.73	<3.0	<14	<0.67	<280	<0.72	<0.74
Acenaphthene	1,000	500	<2.8	<0.71	<0.36	0.45 J	<7.1	<0.34	<140	0.036 J	<0.37
Acenaphthylene	1,000	500	<2.8	<0.71	<0.36	<1.5	<7.1	<0.34	<140	<0.36	<0.37
Anthracene	1,000	500	<2.8	<0.71	<0.36	1.3 J	<7.1	<0.34	<140	0.052 J	<0.37
Benzo(a)anthracene	11	5.6	<2.8	0.054 J	<0.36	<b>5.7</b>	<7.1	0.055 J	<140	0.20 J	<0.37
Benzo(a)pyrene	1.1	1	<2.8	0.050 J	<0.36	<b>4.8</b>	<7.1	0.065 J	<140	0.16 J	<0.37
Benzo(b)fluoranthene	11	5.6	<2.8	<0.71	<0.36	5.4	<7.1	0.064 J	<140	0.23 J	<0.37
Benzo(ghi)perylene	1,000	500	<2.8	<0.71	<0.36	2.2	<7.1	0.042 J	<140	0.085 J	<0.37
Benzo(k)fluoranthene	110	56	<2.8	<0.71	<0.36	5.2	<7.1	0.063 J	<140	0.22 J	<0.37
Benzoic acid	--	--	<13	<3.4	<1.8	<7.3	47	<1.6	<690	2.5	<1.8
Bis(2-ethylhexyl)phthalate	--	--	0.48 J	0.17 J	0.052 J	0.77 J	2.5 J	0.35	720	0.70	0.37 J
Butyl benzyl phthalate	--	--	<2.8	<0.71	<0.36	<1.5	<7.1	<0.34	<140	<0.36	<0.37
Carbazole	--	--	<2.8	<0.71	<0.36	0.66 J	<7.1	<0.34	<140	<0.36	<0.37
Chrysene	110	56	<2.8	0.079 J	0.024 J	6.5	<7.1	0.074 J	<140	0.26 J	<0.37
Dibenz(a,h)anthracene	1.1	0.56	<2.8	<0.71	<0.36	<b>1.1 J</b>	<7.1	0.018 J	<140	0.036 J	<0.37
Dibenzofuran	1,000	350	<2.8	<0.71	<0.36	0.17 J	<7.1	<0.34	<140	0.017 J	<0.37
Diethyl phthalate	--	--	<2.8	<0.71	<0.36	<1.5	<7.1	<0.34	<140	<0.36	<0.37
Dimethyl phthalate	--	--	<2.8	<0.71	<0.36	<1.5	<7.1	<0.34	<140	<0.36	<0.37
Di-n-butyl phthalate	--	--	<2.8	<0.71	<0.36	<1.5	<7.1	0.019 J	<140	0.029 J	0.018 J
Di-n-octyl phthalate	--	--	<2.8	<0.71	<0.36	<1.5	0.63 J	<0.34	<140	<0.36	<0.37
Fluoranthene	1,000	500	<2.8	0.10 J	0.032 J	11	<7.1	0.10 J	<140	0.41	<0.37
Fluorene	1,000	500	<2.8	<0.71	<0.36	0.30 J	<7.1	<0.34	<140	0.032 J	<0.37
Indeno(1,2,3-cd)pyrene	11	5.6	<2.8	<0.71	<0.36	2.2	<7.1	0.037 J	<140	0.092 J	<0.37
Isophorone	--	--	<2.8	<0.71	<0.36	<1.5	<7.1	<0.34	<140	<0.36	<0.37
Naphthalene	1,000	500	<2.8	<0.71	<0.36	<1.5	<7.1	<0.34	<140	0.066 J	<0.37
Pentachlorophenol	55	6.7	<13	<3.4	<1.8	<7.3	<35	<1.6	<690	<1.7	<1.8
Phenanthrene	1,000	500	<2.8	0.086 J	<0.36	6.7	<7.1	0.042 J	<140	0.28 J	<0.37
Phenol	1,000	500	<2.8	0.097 J	<0.36	<1.5	<7.1	<0.34	<140	0.092 J	<0.37
Pyrene	1,000	500	<2.8	0.11 J	0.033 J	9.2	<7.1	0.11 J	<140	0.32 J	<0.37
Total Carcinogenic PAHs	--	--	ND	0.18 J	0.024 J	31 J	ND	0.38 J	ND	1.2 J	ND
Total TCL SVOCs	--	--	0.48 J	0.75 J	0.14 J	64 J	50 J	1.0 J	720	5.8 J	0.39 J



**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	AOC27C-1 0 - 1 02/17/04	AOC27C-2 0 - 1 02/17/04	AOC27D-1 0 - 1 02/17/04	AOC27F-1 0 - 1 02/17/04	AOC27F-2 0 - 1 02/18/04	AOC27G-1 0 - 1 02/18/04	AOC27G-2 0 - 1 02/18/04	AOC27H-1 0 - 1 02/18/04
<b>Data Validation Complete</b>			X	X	X	X	X	X	X	X
<b>Soil Removed Via 2009 ICM</b>										
<b>Soil Removal Via Previous ICM</b>										
<b>VOCs</b>										
4-Methyl-2-pentanone (MIBK)	--	--	<0.011 J	<0.011 J	<0.011 J	<0.011 J	<0.0090	<0.011	<0.011	<0.011 [ $<0.011$ ]
2-Butanone (MEK)	1,000	500	<0.011 J	<0.011 J	<0.011 J	<0.011 J	<0.0090	<0.011	<0.011	<0.011 [ $<0.011$ ]
Bromomethane	--	--	<0.0050 J	<0.0050 J	<0.0050 J	<0.0050 J	<0.0050 J	<0.0060 J	<0.0050 J	<0.0060 J [ $<0.0060$ ]
2-Hexanone	--	--	<0.011 J	<0.011 J	<0.011 J	<0.011 J	<0.0090	<0.011	<0.011	<0.011 [ $<0.011$ ]
Acetone	1,000	500	<0.011 J	<0.011 J	<0.011	<0.011	<0.017 J	<0.011 J	<0.011 J	<0.011 J [ $0.011$ J]
Benzene	89	44	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0060	<0.0050	<0.0060 [ $<0.0060$ ]
Carbon disulfide	--	--	<0.0050	<0.0050	<0.0010 J	<0.0050	<0.0050	<0.0060	<0.0050	<0.0060 [ $<0.0060$ ]
Chlorobenzene	1,000	500	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0060	<0.0050 J	<0.0060 [ $<0.0060$ ]
Chloroform	700	350	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0060	<0.0050	<0.0060 [ $<0.0060$ ]
cis-1,2-Dichloroethene	1,000	500	<0.0050	<0.0050	0.0040 J	0.0070	<0.0050	<0.0060	<0.0050	<0.0060 [ $<0.0060$ ]
Ethylbenzene	780	--	<0.0050	<0.0050	<0.0050	0.00070 J	<0.0050	<0.0060	<0.0050 J	<0.0060 [ $<0.0060$ ]
Tetrachloroethene	300	150	<0.0050	<0.0050	0.0030 J	0.0010 J	<0.0050	0.00070 J	<0.0050	<0.0060 [ $<0.0060$ ]
Methylene chloride	1,000	500	<0.0050	<0.0050 J	<0.0050	<0.0050	<0.0050 J	<0.0060	<0.0050	<0.0060 [ $<0.0060$ ]
Toluene	1,000	500	0.076	0.0040 J	0.066	0.010	0.017	0.11	0.10	0.070 [ $0.079$ ]
Styrene	--	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0060	<0.0050 J	<0.0060 [ $<0.0060$ ]
trans-1,2-Dichloroethene	1,000	500	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0060	<0.0050	<0.0060 [ $<0.0060$ ]
Trichloroethene	400	200	<0.0050	<0.0050	<0.0050	0.022	0.0020 J	0.018	<0.0050	<0.0060 [ $<0.0060$ ]
Vinyl chloride	27	13	<0.0050 J	<0.0050 J	<0.0050 J	<0.0050 J	<0.0050	<0.0060	<0.0050	<0.0060 [ $<0.0060$ ]
Xylenes (total)	1,000	500	<0.0050	<0.0050	0.0020 J	<0.0050	<0.0050	<0.0060	<0.0050 J	<0.0060 [ $<0.0060$ ]
Total TCL VOCs	--	--	0.076	0.0040 J	0.072 J	0.041 J	0.019 J	0.13 J	0.10	0.070 [ $0.090$ J]
<b>SVOCs</b>										
1,2,4-Trichlorobenzene	--	--	<0.69	<1.4	<1.3	<0.35	<0.34	<0.74 J	<0.35	<0.36 [ $<0.35$ J]
2,4-Dimethylphenol	--	--	<0.69	<1.4	<1.3	<0.35	<0.34	<0.74	<0.35	<0.36 [ $<0.35$ ]
2-Methylnaphthalene	--	--	<0.69	<1.4	<1.3	<0.35	<0.34	<0.74	<0.35	<0.36 [ $<0.35$ ]
2-Methylphenol	1,000	500	<0.69	<1.4	<1.3	<0.35	<0.34	<0.74	<0.35	<0.36 [ $<0.35$ ]
4-Methylphenol	1,000	500	<0.69	<1.4	<1.3	<0.35	<0.34	<0.74	<0.35	<0.36 [ $<0.35$ ]
4-Nitroaniline	--	--	<1.4	<2.8	<2.7	<0.69	<0.69	<1.5	<0.70	<0.72 [ $<0.70$ ]
Acenaphthene	1,000	500	<0.69	<1.4	<1.3	<0.35	<0.34	<0.74	<0.35 J	0.078 J [ $0.046$ J]
Acenaphthylene	1,000	500	<0.69	<1.4	<1.3	<0.35	<0.34	<0.74	<0.35	<0.36 [ $<0.35$ ]
Anthracene	1,000	500	<0.69	0.078 J	0.075 J	<0.35	<0.34	0.038 J	<0.35	0.11 J [ $0.059$ J]
Benzo(a)anthracene	11	5.6	<0.69	0.51 J	0.22 J	<0.35	0.038 J	0.20 J	0.016 J	0.33 J [ $0.16$ J]
Benzo(a)pyrene	1.1	1	0.034 J	0.52 J	0.18 J	<0.35	0.044 J	0.22 J	<0.35	0.32 J [ $0.15$ J]
Benzo(b)fluoranthene	11	5.6	<0.69	0.50 J	0.32 J	<0.35	0.046 J	0.26 J	<0.35	0.29 J [ $0.14$ J]
Benzo(ghi)perylene	1,000	500	<0.69	0.40 J	0.31 J	<0.35	<0.34	0.11 J	<0.35	0.13 J [ $0.094$ J]
Benzo(k)fluoranthene	110	56	<0.69	0.66 J	0.28 J	<0.35	0.046 J	0.21 J	<0.35	0.41 [ $0.14$ J]
Benzoic acid	--	--	<3.3	<6.8	<6.5	<1.7	<1.7	<3.6	<1.7	<1.8 [ $<1.7$ ]
Bis(2-ethylhexyl)phthalate	--	--	0.84	6.7	6.7	0.19 J	<0.34 J	1.4	<0.35	<0.36 [ $<0.35$ ]
Butyl benzyl phthalate	--	--	<0.69	<1.4	<1.3	<0.35	<0.34	<0.74	<0.35	<0.36 [ $<0.35$ ]
Carbazole	--	--	<0.69	<1.4	<1.3	<0.35	<0.34	<0.74	<0.35	0.061 J [ $0.037$ J]
Chrysene	110	56	0.052 J	0.64 J	0.38 J	0.024 J	0.058 J	0.26 J	0.024 J	0.37 [ $0.18$ J]
Dibenz(a,h)anthracene	--	0.56	<0.69	0.11 J	<1.3	<0.35	<0.34	0.047 J	<0.35	0.060 J [ $0.036$ J]
Dibenzofuran	1,000	350	<0.69	<1.4	<1.3	<0.35	<0.34	<0.74	<0.35	0.029 J [ $0.018$ J]
Diethyl phthalate	--	--	<0.69	<1.4	<1.3	<0.35	<0.34	<0.74	<0.35	<0.36 [ $<0.35$ ]
Dimethyl phthalate	--	--	<0.69	<1.4	<1.3	<0.35	<0.34	0.15 J	<0.35	<0.36 [ $<0.35$ ]
Di-n-butyl phthalate	--	--	<0.69	<1.4	0.57 J	0.035 J	<0.34 J	<0.74 J	<0.35	<0.36 [ $<0.35$ ]
Di-n-octyl phthalate	--	--	0.068 J	<1.4	0.64 J	<0.35	<0.34	<0.74	<0.35	<0.36 [ $<0.35$ ]
Fluoranthene	1,000	500	0.060 J	1.1 J	0.53 J	0.024 J	0.059 J	0.41 J	0.033 J	0.67 [ $0.34$ J]
Fluorene	1,000	500	<0.69	<1.4	<1.3	<0.35	<0.34	<0.74	<0.35	0.055 J [ $0.033$ J]
Indeno(1,2,3-cd)pyrene	11	5.6	<0.69	0.34 J	0.23 J	<0.35	<0.34	0.11 J	<0.35	0.14 J [ $0.086$ J]
Isophorone	--	--	<0.69	<1.4	<1.3	<0.35	<0.34	<0.74	<0.35	<0.36 [ $<0.35$ ]
Naphthalene	1,000	500	<0.69	<1.4	<1.3	<0.35	<0.34	<0.74 J	<0.35	<0.36 [ $<0.35$ J]
Pentachlorophenol	55	6.7	<3.3	<6.8	<6.5	<1.7	<1.7	<3.6	<1.7 J	<1.8 [ $<1.7$ ]
Phenanthrene	1,000	500	<0.69	0.45 J	0.35 J	<0.35	0.034 J	0.20 J	<0.35	0.49 [ $0.28$ J]
Phenol	1,000	500	0.10 J	<1.4	<1.3	<0.35	<0.34	<0.74	<0.35	<0.36 [ $<0.35$ ]
Pyrene	1,000	500	0.067 J	1.0 J	0.44 J	0.022 J	0.055 J	0.39 J	0.030 J	0.62 [ $0.35$ ]
Total Carcinogenic PAHs	--	--	0.086 J	3.3 J	1.6 J	0.024 J	0.23 J	1.3 J	0.040 J	1.9 J [ $0.89$ J]
Total TCL SVOCs	--	--	1.2 J	13 J	11 J	0.30 J	0.38 J	4.0 J	0.10 J	4.2 J [ $2.2$ J]

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	AOC27H-2 0 - 1 02/18/04	AOC27I-1 0 - 1 02/18/04	AOC27I-2 0 - 1 02/18/04	AOC27J-1 0 - 1 02/18/04	AOC27J-2 0 - 1 02/18/04	AOC31-1 0 - 2 02/09/04	AOC31-2 0 - 2 02/09/04	AOC35A-1 12 - 14 02/23/04
<b>Data Validation Complete</b>			<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Soil Removed Via 2009 ICM</b>										
<b>Soil Removal Via Previous ICM</b>										
<b>VOCs</b>										
4-Methyl-2-pentanone (MIBK)	--	--	<0.013	<0.011	<0.011	<0.011	<0.011	<0.015 J	<0.012 [ $<0.011$ ]	<0.0090
2-Butanone (MEK)	1,000	500	<0.013	<0.011	<0.011	<0.011	<0.011	<0.015	<0.012 [ $<0.011$ ]	<0.0090
Bromomethane	--	--	<0.0060	<0.0060	<0.0050	<0.0060	<0.0060	0.0060 J	<0.0060 [ $<0.0060$ ]	<0.0040
2-Hexanone	--	--	<0.013	<0.011	<0.011	<0.011	<0.015 J	<0.012 [ $<0.011$ ]	<0.0090 J	<0.0090 J
Acetone	1,000	500	<0.013 J	<0.011 J	<0.011 J	<0.011 J	0.016 J	<0.015	<0.012 [ $<0.011$ ]	<0.0090
Benzene	89	44	<0.0060	<0.0060	<0.0050	<0.0060	<0.0060	<0.0080	<0.0060 [ $<0.0060$ ]	<0.0040
Carbon disulfide	--	--	<0.0060	<0.0060	<0.0050	<0.0060	<0.0060	0.0050 J	<0.0060 [ $<0.0060$ ]	<0.0040
Chlorobenzene	1,000	500	<0.0060	<0.0060	<0.0050	<0.0060	<0.0060	<0.0080	<0.0060 [ $<0.0060$ ]	<0.0040
Chloroform	700	350	<0.0060	<0.0060	<0.0050	<0.0060	<0.0060	<0.0080	<0.0060 [ $<0.0060$ ]	<0.0040
cis-1,2-Dichloroethene	1,000	500	<0.0060	<0.0060	<0.0050	<0.0060	<0.0060	<0.0080 J	<0.0060 [ $<0.0060$ ]	<0.0040
Ethylbenzene	780	--	<0.0060	<0.0060	<0.0050	<0.0060	<0.0060	<0.0080 J	<0.0060 [0.0060 J]	<0.0040
Tetrachloroethene	300	150	<0.0060	<0.0060	<0.0050	0.010	0.0090	<0.0080 J	<0.0060 [ $<0.0060$ ]	<0.0040
Methylene chloride	1,000	500	<0.0060	<0.0060	<0.0050	<0.0060	<0.0060	<0.0080	<0.0060 [ $<0.0060$ ]	<0.0040
Toluene	1,000	500	0.044	0.0080	0.0030 J	0.037	0.073	<0.0080 J	<0.0060 [0.0010 J]	0.012
Styrene	--	--	<0.0060	<0.0060	<0.0050	<0.0060	<0.0060	<0.0080 J	<0.0060 [ $<0.0060$ ]	<0.0040
trans-1,2-Dichloroethene	1,000	500	<0.0060	<0.0060	<0.0050	<0.0060	<0.0060	<0.0080 J	<0.0060 [ $<0.0060$ ]	<0.0040
Trichloroethene	400	200	<0.0060	0.0020 J	<0.0050	<0.0060	<0.0060	0.0060 J	0.0040 J [0.0040 J]	<0.0040
Vinyl chloride	27	13	<0.0060	<0.0060	<0.0050	<0.0060	<0.0060	<0.0080	<0.0060 [ $<0.0060$ ]	<0.0040
Xylenes (total)	1,000	500	<0.0060	<0.0060	<0.0050	<0.0060	<0.0060	<0.0080 J	<0.0060 [0.0020 J]	<0.0040
Total TCL VOCs	--	--	0.044	0.010 J	0.0030 J	0.047	0.098 J	0.013 J	0.0040 J [0.0076 J]	0.012
<b>SVOCs</b>										
1,2,4-Trichlorobenzene	--	--	<0.82 J	<0.73 J	<0.70 J	<0.73 J	<0.75 J	<10	<1.5 [ $<0.75$ ]	<0.33
2,4-Dimethylphenol	--	--	<0.82	<0.73	<0.70	<0.73	<0.75	<10	<1.5 [ $<0.75$ ]	<0.33
2-Methylnaphthalene	--	--	<0.82	<0.73	<0.70	<0.73	<0.75	<10	<1.5 [ $<0.75$ ]	<0.33
2-Methylphenol	1,000	500	<0.82	<0.73	<0.70	<0.73	<0.75	<10	<1.5 [ $<0.75$ ]	<0.33
4-Methylphenol	1,000	500	<0.82	<0.73	<0.70	<0.73	<0.75	<10	<1.5 [ $<0.75$ ]	<0.33
4-Nitroaniline	--	--	<1.6	<1.5	<1.4	<1.5	<1.5	<20	<3.1 [ $<1.5$ ]	<0.65
Acenaphthene	1,000	500	<0.82	0.12 J	<0.70	0.11 J	<0.75	<10	<1.5 [ $<0.75$ ]	<0.33
Acenaphthylene	1,000	500	<0.82	0.053 J	<0.70	<0.73	<0.75	0.58 J	0.064 J [0.13 J]	<0.33
Anthracene	1,000	500	<0.82	0.20 J	<0.70	0.19 J	<0.75	0.67 J	0.11 J [0.080 J]	<0.33
Benzo(a)anthracene	11	5.6	0.043 J	0.76	<0.70	0.58 J	<0.75	1.9 J	0.087 J [0.060 J]	<0.33
Benzo(a)pyrene	1.1	1	0.048 J	0.79	<0.70	0.52 J	<0.75	<b>2.4 J</b>	0.092 J [0.059 J]	<0.33
Benzo(b)fluoranthene	11	5.6	<0.82	0.74	<0.70	0.46 J	<0.75	2.7 J	<1.5 [ $<0.75$ ]	<0.33
Benzo(ghi)perylene	1,000	500	<0.82	0.41 J	<0.70	0.21 J	<0.75	4.3 J	0.18 J [ $<0.75$ ]	<0.33
Benzo(k)fluoranthene	110	56	<0.82	0.84	<0.70	0.56 J	<0.75	2.1 J	<1.5 [ $<0.75$ ]	<0.33
Benzoic acid	--	--	<4.0	<3.5	<3.4	<3.6	<3.6	<48	<7.5 [ $<3.7$ J]	<1.6
Bis(2-ethylhexyl)phthalate	--	--	<0.82	0.80	<0.70	0.50 J	0.10 J	7.4 J	0.86 J [1.3]	<0.33
Butyl benzyl phthalate	--	--	<0.82	<0.73	<0.70	<0.73	<0.75	<10	0.20 J [ $<0.75$ ]	<0.33
Carbazole	--	--	<0.82	0.059 J	<0.70	0.057 J	<0.75	0.72 J	<1.5 [ $<0.75$ ]	<0.33
Chrysene	110	56	0.054 J	0.83	<0.70	0.62 J	<0.75	4.0 J	0.29 J [0.13 J]	<0.33
Dibenz(a,h)anthracene	1.1	0.56	<0.82	0.18 J	<0.70	0.095 J	<0.75	<10	<1.5 [ $<0.75$ ]	<0.33
Dibenzofuran	1,000	350	<0.82	0.034 J	<0.70	<0.73	<0.75	<10	<1.5 [ $<0.75$ ]	<0.33
Diethyl phthalate	--	--	<0.82	<0.73	<0.70	<0.73	<0.75	<10	<1.5 [ $<0.75$ ]	<0.33
Dimethyl phthalate	--	--	<0.82	<0.73	<0.70	<0.73	<0.75	<10	<1.5 [ $<0.75$ ]	<0.33
Di-n-butyl phthalate	--	--	<0.82	0.19 J	<0.70	<0.73	<0.75	<10	0.070 J [0.049 J]	<0.33 J
Di-n-octyl phthalate	--	--	<0.82	<0.73	<0.70	<0.73	<0.75	<10	<1.5 [ $<0.75$ ]	<0.33
Fluoranthene	1,000	500	0.086 J	1.3	<0.70	1.1	<0.75	3.7 J	0.21 J [0.15 J]	<0.33
Fluorene	1,000	500	<0.82	0.069 J	<0.70	0.068 J	<0.75	<10	0.43 J [0.22 J]	<0.33
Indeno(1,2,3-cd)pyrene	11	5.6	<0.82	0.41 J	<0.70	0.23 J	<0.75	3.2 J	<1.5 [0.064 J]	<0.33
Isophorone	--	--	<0.82	<0.73	<0.70	<0.73	<0.75	<10	<1.5 [ $<0.75$ ]	<0.33
Naphthalene	1,000	500	<0.82 J	<0.73 J	<0.70 J	<0.73 J	<0.75 J	1.2 J	4.3 [1.5]	<0.33
Pentachlorophenol	55	6.7	<4.0	<3.5	<3.4	<3.6	<3.6	<48	<7.5 [ $<3.7$ ]	<1.6
Phenanthrene	1,000	500	0.063 J	0.68 J	<0.70	0.76	<0.75	2.2 J	0.78 J [0.32 J]	<0.33
Phenol	1,000	500	<0.82	<0.73	0.079 J	<0.73	<0.75	<10	<1.5 [0.17 J]	<0.33
Pyrene	1,000	500	0.085 J	1.2	<0.70	0.97	0.044 J	3.8 J	0.17 J [0.12 J]	<0.33
Total Carcinogenic PAHs	--	--	0.15 J	4.6 J	ND	3.1 J	ND	16 J	0.47 J [0.31 J]	ND
Total TCL SVOCs	--	--	0.38 J	9.7 J	0.079 J	7.0 J	0.14 J	41 J	7.8 J [4.4 J]	ND

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	AOC35A-2 12 - 14 02/23/04	AOC35B-1 12 - 14 02/23/04	AOC35B-2 12 - 14 02/23/04	AOC35C-1 12 - 14 02/23/04	AOC35C-2 12 - 14 02/23/04	AOC35C-3 12 - 14 02/23/04	AOC35D-1 6 - 8 02/23/04	AOC35D-2 12 - 14 02/23/04
<b>Data Validation Complete</b>			X	X	X	X	X	X	X	X
<b>Soil Removed Via 2009 ICM</b>										
<b>Soil Removal Via Previous ICM</b>										
<b>VOCs</b>										
4-Methyl-2-pentanone (MIBK)	--	--	<0.012	<0.010 [<0.010]	<0.010	<0.0090	<0.012	<0.010	<0.013	<0.012
2-Butanone (MEK)	1,000	500	<0.012	<0.010 [<0.010]	<0.010	<0.0090	<0.012	<0.010	<0.013	<0.012
Bromomethane	--	--	<0.0060	<0.0050 [<0.0050 J]	<0.0050	<0.0050 J	<0.0060 J	<0.0050 J	<0.0070 J	<0.0060 J
2-Hexanone	--	--	<0.012 J	<0.010 J [<0.010]	<0.010 J	<0.0090	<0.012	<0.010	<0.013	<0.012
Acetone	1,000	500	<0.012	<0.010 [<0.010]	<0.010	<0.0090 J	<0.012	<0.010	<0.013	<0.012
Benzene	89	44	<0.0060	<0.0050 [<0.0050]	<0.0050	<0.0050	<0.0060	<0.0050	<0.0070	<0.0060
Carbon disulfide	--	--	<0.0060	<0.0050 [<0.0050]	<0.0050	<0.0050	<0.0060	<0.0050	<0.0070	<0.0060
Chlorobenzene	1,000	500	<0.0060	<0.0050 [<0.0050]	<0.0050	<0.0050	<0.0060	<0.0050	<0.0070	<0.0060
Chloroform	700	350	<0.0060	<0.0050 [0.00090 J]	<0.0050	<0.0050	<0.0060	<0.0050	<0.0070	<0.0060
cis-1,2-Dichloroethene	1,000	500	<0.0060	<0.0050 [<0.0050]	<0.0050	<0.0050	<0.0060	<0.0050	<0.0070	<0.0060
Ethylbenzene	780	--	<0.0060	<0.0050 [<0.0050]	<0.0050	<0.0050	<0.0060	<0.0050	<0.0070	<0.0060
Tetrachloroethene	300	150	<0.0060	<0.0050 [<0.0050]	<0.0050	<0.0050	<0.0060	<0.0050	<0.0070	0.00090 J
Methylene chloride	1,000	500	<0.0060	<0.0050 [<0.0050]	<0.0050	<0.0050	<0.0060	<0.0050	<0.0070	<0.0060
Toluene	1,000	500	0.0090	0.010 [0.00090 J]	0.0010 J	0.0030 J	<0.0060	0.0080	0.0010 J	0.024
Styrene	--	--	<0.0060	<0.0050 [<0.0050]	<0.0050	<0.0050	<0.0060	<0.0050	<0.0070	<0.0060
trans-1,2-Dichloroethene	1,000	500	<0.0060	<0.0050 [<0.0050]	<0.0050	<0.0050	<0.0060	<0.0050	<0.0070	<0.0060
Trichloroethene	400	200	<0.0060	<0.0050 [<0.0050]	<0.0050	<0.0050	<0.0060	<0.0050	<0.0070	<0.0060
Vinyl chloride	27	13	<0.0060	<0.0050 [<0.0050]	<0.0050	<0.0050	<0.0060	<0.0050	<0.0070	<0.0060
Xylenes (total)	1,000	500	<0.0060	<0.0050 [<0.0050]	<0.0050	<0.0050	<0.0060	<0.0050	<0.0070	<0.0060
Total TCL VOCs	--	--	0.0090	0.010 [0.0018 J]	0.0010 J	0.0030 J	ND	0.0080	0.0010 J	0.025 J
<b>SVOCs</b>										
1,2,4-Trichlorobenzene	--	--	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
2,4-Dimethylphenol	--	--	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
2-Methylnaphthalene	--	--	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
2-Methylphenol	1,000	500	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
4-Methylphenol	1,000	500	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
4-Nitroaniline	--	--	<0.66	<0.64 [<0.66]	<0.67	<0.66	<0.64	<0.67	<0.66	<1.3
Acenaphthene	1,000	500	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Acenaphthylene	1,000	500	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Anthracene	1,000	500	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Benzo(a)anthracene	11	5.6	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	0.077 J
Benzo(a)pyrene	1.1	1	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	0.065 J
Benzo(b)fluoranthene	11	5.6	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Benzo(ghi)perylene	1,000	500	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	0.065 J
Benzo(k)fluoranthene	110	56	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Benzoic acid	--	--	<1.6	<1.5 [<1.6]	<1.6	<1.6	<1.5	<1.6	<1.6	<3.2
Bis(2-ethylhexyl)phthalate	--	--	<0.33	0.067 J [<0.33]	<0.33	<0.33	0.056 J	<0.34	<0.33	<0.66
Butyl benzyl phthalate	--	--	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Carbazole	--	--	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Chrysene	110	56	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	0.10 J
Dibenz(a,h)anthracene	1.1	0.56	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Dibenzofuran	1,000	350	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Diethyl phthalate	--	--	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Dimethyl phthalate	--	--	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Di-n-butyl phthalate	--	--	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Di-n-octyl phthalate	--	--	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Fluoranthene	1,000	500	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	0.15 J
Fluorene	1,000	500	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Indeno(1,2,3-cd)pyrene	11	5.6	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	0.050 J
Isophorone	--	--	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Naphthalene	1,000	500	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Pentachlorophenol	55	6.7	<1.6	<1.5 [<1.6]	<1.6	<1.6	<1.5	<1.6	<1.6	<3.2
Phenanthrene	1,000	500	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Phenol	1,000	500	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	<0.66
Pyrene	1,000	500	<0.33	<0.32 [<0.33]	<0.33	<0.33	<0.32	<0.34	<0.33	0.17 J
Total Carcinogenic PAHs	--	--	ND	ND [ND]	ND	ND	ND	ND	ND	0.29 J
Total TCL SVOCs	--	--	ND	0.067 J [ND]	ND	ND	0.056 J	ND	ND	0.68 J

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	AOC35E-1	AOC35E-2	AOC35F-1	AOC35F-2	AOC35F-3S	AOC35G-1	AOC35G-2	AOC35H-1S
			6 - 8 02/24/04	12 - 14 02/24/04	6 - 8 02/24/04	12 - 14 02/24/04	6 - 8 10/20/04	6 - 8 02/24/04	12 - 14 02/24/04	12 - 14 10/19/04
Data Validation Complete			X	X	X	X	X	X	X	X
Soil Removed Via 2009 ICM										
Soil Removal Via Previous ICM										
<b>VOCs</b>										
4-Methyl-2-pentanone (MIBK)	--	--	<0.010	<0.010	<0.010	<0.0090	<0.010	<0.012	<0.012	<0.010
2-Butanone (MEK)	1,000	500	<0.010	<0.010	<0.010	<0.0090	<0.010	<0.012	<0.012 J	<0.010
Bromomethane	--	--	<0.0050 J	<0.0050 J	<0.0050 J	<0.0050	<0.0052 J	<0.0060	<0.0060	<0.0052
2-Hexanone	--	--	<0.010	<0.010	<0.010	<0.0090 J	<0.010	<0.012 J	<0.012 J	<0.010
Acetone	1,000	500	<0.010 J	<0.010 J	<0.010 J	<0.0090	<0.010	<0.012	<0.012	<0.010
Benzene	89	44	<0.0050	<0.0050	<0.0050	<0.0050	<0.0052	<0.0060	<0.0060	<0.0052
Carbon disulfide	--	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.0052	<0.0060	<0.0060	<0.0052
Chlorobenzene	1,000	500	<0.0050	<0.0050	<0.0050	<0.0050	<0.0052	<0.0060	<0.0060	<0.0052
Chloroform	700	350	<0.0050	<0.0050	<0.0050	<0.0050	<0.0052 J	<0.0060	<0.0060	<0.0052
cis-1,2-Dichloroethene	1,000	500	<0.0050	<0.0050	<0.0050	<0.0050	<0.0052	<0.0060	<0.0060	<0.0052
Ethylbenzene	780	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.0052	<0.0060	<0.0060	<0.0052
Tetrachloroethene	300	150	<0.0050	<0.0050	<0.0050	<0.0050	<0.0052 J	<0.0060	<0.0060	<0.0052
Methylene chloride	1,000	500	0.0030 J	<0.0050	0.0030 J	<0.0050	<0.0057 J	<0.0060	<0.0060	<0.0056
Toluene	1,000	500	0.0030 J	0.0090	0.0020 J	0.0020 J	<0.0052	0.0030 J	0.0080	0.00078 J
Styrene	--	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.0052	<0.0060	<0.0060	<0.0052
trans-1,2-Dichloroethene	1,000	500	<0.0050	<0.0050	<0.0050	<0.0050	<0.0052	<0.0060	<0.0060	<0.0052
Trichloroethene	400	200	<0.0050	<0.0050	<0.0050	<0.0050	<0.0052	<0.0060	<0.0060	<0.0052
Vinyl chloride	27	13	<0.0050	<0.0050	<0.0050	<0.0050	<0.0052 J	<0.0060	<0.0060	<0.0052
Xylenes (total)	1,000	500	<0.0050 J	<0.0050 J	<0.0050 J	<0.0050	<0.0052	<0.0060	<0.0060	<0.0052
Total TCL VOCs	--	--	0.0060 J	0.0090	0.0050 J	0.0020 J	ND	0.0030 J	0.0080	0.00078 J
<b>SVOCs</b>										
1,2,4-Trichlorobenzene	--	--	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
2,4-Dimethylphenol	--	--	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
2-Methylnaphthalene	--	--	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
2-Methylphenol	1,000	500	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
4-Methylphenol	1,000	500	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
4-Nitroaniline	--	--	<0.65	<0.68	<0.67	<0.67	<0.67	<0.66	<0.68	<0.67
Acenaphthene	1,000	500	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Acenaphthylene	1,000	500	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Anthracene	1,000	500	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Benzo(a)anthracene	11	5.6	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Benzo(a)pyrene	1.1	1	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Benzo(b)fluoranthene	11	5.6	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Benzo(ghi)perylene	1,000	500	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Benzo(k)fluoranthene	110	56	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Benzoic acid	--	--	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Bis(2-ethylhexyl)phthalate	--	--	<0.33	0.049 J	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Butyl benzyl phthalate	--	--	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Carbazole	--	--	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Chrysene	110	56	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Dibenz(a,h)anthracene	1.1	0.56	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Dibenzofuran	1,000	350	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Diethyl phthalate	--	--	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Dimethyl phthalate	--	--	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Di-n-butyl phthalate	--	--	<0.33	<0.34	<0.34	<0.33 J	<0.34	<0.33 J	<0.34 J	<0.33
Di-n-octyl phthalate	--	--	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Fluoranthene	1,000	500	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Fluorene	1,000	500	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Indeno(1,2,3-cd)pyrene	11	5.6	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Isophorone	--	--	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Naphthalene	1,000	500	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Pentachlorophenol	55	6.7	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Phenanthrene	1,000	500	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Phenol	1,000	500	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Pyrene	1,000	500	<0.33	<0.34	<0.34	<0.33	<0.34	<0.33	<0.34	<0.33
Total Carcinogenic PAHs	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Total TCL SVOCs	--	--	ND	0.049 J	ND	ND	ND	ND	ND	ND

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	AOC35I-1S 12 - 14 10/19/04	AOC35I-2S 12 - 14 10/19/04	AOC35J-1S 12 - 14 10/19/04	AOC35K-1S 12 - 14 10/19/04	AOC35L-1S 12 - 14 10/20/04	AOC35M-1S 12 - 14 10/19/04	AOC35N-1S 12 - 14 10/20/04
<b>Data Validation Complete</b>			X	X	X	X	X	X	X
<b>Soil Removed Via 2009 ICM</b>									
<b>Soil Removal Via Previous ICM</b>									
<b>VOCs</b>									
4-Methyl-2-pentanone (MIBK)	--	--	<0.011	<0.011	<0.011	<0.010	<0.010	<0.010	<0.010 [<0.010]
2-Butanone (MEK)	1,000	500	<0.011	<0.011	<0.011	<0.010	<0.010	<0.010	<0.010 [<0.010]
Bromomethane	--	--	<0.0053 J	<0.0054 J	<0.0053 J	<0.0052	<0.0052 J	<0.0052 J	<0.0051 J [<0.0052 J]
2-Hexanone	--	--	<0.011	<0.011	<0.011	<0.010	<0.010	<0.010	<0.010 [<0.010]
Acetone	1,000	500	<0.011	<0.011	0.010 J	<0.010	<0.010	<0.010	<0.010 [<0.010]
Benzene	89	44	<0.0053	<0.0054	<0.0053	<0.0052	<0.0052	<0.0052	<0.0051 [<0.0052]
Carbon disulfide	--	--	<0.0053	<0.0054	<0.0053	<0.0052	<0.0052	<0.0052	<0.0051 [<0.0052]
Chlorobenzene	1,000	500	<0.0053	<0.0054	<0.0053	<0.0052	<0.0052	<0.0052	<0.0051 [<0.0052]
Chloroform	700	350	<0.0053	<0.0054	<0.0053	<0.0052	<0.0052	<0.0052	<0.0051 [<0.0052]
cis-1,2-Dichloroethene	1,000	500	<0.0053	<0.0054	<0.0053	<0.0052	<0.0052	<0.0052	<0.0051 [<0.0052]
Ethylbenzene	780	--	<0.0053	<0.0054	<0.0053	<0.0052	<0.0052	<0.0052	<0.0051 [<0.0052]
Tetrachloroethene	300	150	<0.0053 J	<0.0054 J	<0.0053 J	<0.0052	<0.0052 J	<0.0052 J	<0.0051 J [<0.0052 J]
Methylene chloride	1,000	500	<0.0054 J	<0.0062 J	<0.0069 J	<0.0063	<0.0028 J	<0.0056 J	<0.0037 J [<0.0062 J]
Toluene	1,000	500	<0.0053	<0.0054	0.0065	<0.0052	<0.0052	<0.0052	<0.0051 [0.0013 J]
Styrene	--	--	<0.0053	<0.0054	<0.0053	<0.0052	<0.0052	<0.0052	<0.0051 [<0.0052]
trans-1,2-Dichloroethene	1,000	500	<0.0053	<0.0054	<0.0053	<0.0052	<0.0052	<0.0052	<0.0051 [<0.0052]
Trichloroethene	400	200	<0.0053	<0.0054	<0.0053	<0.0052	<0.0052	<0.0052	<0.0051 [<0.0052]
Vinyl chloride	27	13	<0.0053 J	<0.0054 J	<0.0053 J	<0.0052	<0.0052 J	<0.0052 J	<0.0051 J [<0.0052 J]
Xylenes (total)	1,000	500	<0.0053	<0.0054	<0.0053	<0.0052	<0.0052	<0.0052	<0.0051 [<0.0052]
Total TCL VOCs	--	--	ND	ND	0.017 J	ND	ND	ND	ND [0.0013 J]
<b>SVOCs</b>									
1,2,4-Trichlorobenzene	--	--	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
2,4-Dimethylphenol	--	--	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
2-Methylnaphthalene	--	--	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
2-Methylphenol	1,000	500	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
4-Methylphenol	1,000	500	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
4-Nitroaniline	--	--	<0.69	<0.67	<0.70	<0.67	<0.67	<0.67	<0.65 [<0.66]
Acenaphthene	1,000	500	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Acenaphthylene	1,000	500	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Anthracene	1,000	500	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Benzo(a)anthracene	11	5.6	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Benzo(a)pyrene	1.1	1	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Benzo(b)fluoranthene	11	5.6	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Benzo(ghi)perylene	1,000	500	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Benzo(k)fluoranthene	110	56	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Benzoic acid	--	--	<1.7	<1.6	<1.7	<1.6	<1.6	<1.6	<1.6 [<1.6]
Bis(2-ethylhexyl)phthalate	--	--	<0.35	<0.34	0.26 J	<0.34	<0.33	<0.34	<0.32 [<0.33]
Butyl benzyl phthalate	--	--	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Carbazole	--	--	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Chrysene	110	56	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Dibenz(a,h)anthracene	1.1	0.56	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Dibenzofuran	1,000	350	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Diethyl phthalate	--	--	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Dimethyl phthalate	--	--	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Di-n-butyl phthalate	--	--	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Di-n-octyl phthalate	--	--	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Fluoranthene	1,000	500	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Fluorene	1,000	500	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Indeno(1,2,3-cd)pyrene	11	5.6	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Isophorone	--	--	<0.35	<0.34	0.27 J	<0.34	<0.33	<0.34	<0.32 [<0.33]
Naphthalene	1,000	500	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Pentachlorophenol	55	6.7	<1.7	<1.6	<1.7	<1.6	<1.6	<1.6	<1.6 [<1.6]
Phenanthrene	1,000	500	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Phenol	1,000	500	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Pyrene	1,000	500	<0.35	<0.34	<0.35	<0.34	<0.33	<0.34	<0.32 [<0.33]
Total Carcinogenic PAHs	--	--	ND	ND	ND	ND	ND	ND	ND [ND]
Total TCL SVOCs	--	--	ND	ND	0.53 J	ND	ND	ND	ND [ND]

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	AOC35-O 12 - 14 10/23/06	AOC37-3 0 - 1 02/18/04	AOC39-1 0 - 1 02/18/04	AOC39-2 0 - 1 02/18/04	AOC39-3 0 - 1 02/18/04	AOC39-4 1 - 2 02/18/04	AOC39-5 1 - 2 02/18/04	AOC39-6 1 - 2 02/18/04
<b>Data Validation Complete</b>			<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Soil Removed Via 2009 ICM</b>										
<b>Soil Removal Via Previous ICM</b>						<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>VOCs</b>										
4-Methyl-2-pentanone (MIBK)	--	--	<0.010 [ $<0.010$ ]	<0.011	NA	NA	NA	NA	NA	NA
2-Butanone (MEK)	1,000	500	0.0022 JB [ $<0.010$ ]	0.0070 J	NA	NA	NA	NA	NA	NA
Bromomethane	--	--	<0.0052 [ $<0.0051$ ]	<0.0050	NA	NA	NA	NA	NA	NA
2-Hexanone	--	--	<0.010 [ $<0.010$ ]	<0.011	NA	NA	NA	NA	NA	NA
Acetone	1,000	500	0.0051 JB [ $0.0076$ J]	0.090 J	NA	NA	NA	NA	NA	NA
Benzene	89	44	<0.0052 [ $<0.0051$ ]	<0.0050	NA	NA	NA	NA	NA	NA
Carbon disulfide	--	--	<0.0052 [ $<0.0051$ ]	<0.0050	NA	NA	NA	NA	NA	NA
Chlorobenzene	1,000	500	<0.0052 [ $<0.0051$ ]	<0.0050	NA	NA	NA	NA	NA	NA
Chloroform	700	350	<0.0052 [ $<0.0051$ ]	<0.0050	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	1,000	500	<0.0052 [ $<0.0051$ ]	<0.0050	NA	NA	NA	NA	NA	NA
Ethylbenzene	780	--	<0.0052 [ $<0.0051$ ]	0.0040 J	NA	NA	NA	NA	NA	NA
Tetrachloroethene	300	150	<0.0052 [ $<0.0051$ ]	<0.0050	NA	NA	NA	NA	NA	NA
Methylene chloride	1,000	500	0.0055 JB [ $0.0046$ JB]	<0.0050	NA	NA	NA	NA	NA	NA
Toluene	1,000	500	0.00090 JB [ $<0.0051$ ]	0.20	NA	NA	NA	NA	NA	NA
Styrene	--	--	<0.0052 [ $<0.0051$ ]	<0.0050	NA	NA	NA	NA	NA	NA
trans-1,2-Dichloroethene	1,000	500	<0.0052 [ $<0.0051$ ]	<0.0050	NA	NA	NA	NA	NA	NA
Trichloroethene	400	200	<0.0052 [ $<0.0051$ ]	<0.0050	NA	NA	NA	NA	NA	NA
Vinyl chloride	27	13	<0.0052 [ $<0.0051$ ]	<0.0050	NA	NA	NA	NA	NA	NA
Xylenes (total)	1,000	500	<0.0052 [ $<0.0051$ ]	0.025	NA	NA	NA	NA	NA	NA
Total TCL VOCs	--	--	0.014 J [ $0.012$ J]	0.33 J	NA	NA	NA	NA	NA	NA
<b>SVOCs</b>										
1,2,4-Trichlorobenzene	--	--	<0.33	<2.8 J	<0.35 J	28 J	<0.36 J	<0.36 J	7.7 J	<0.38 J
2,4-Dimethylphenol	--	--	<0.33	<2.8	<0.35	<6.9	<0.36	<0.36	<1.4	<0.38
2-Methylnaphthalene	--	--	<0.33	2.3 J	<0.35	4.3 J	<0.36	<0.36	<1.4	<0.38
2-Methylphenol	1,000	500	<0.33	<2.8	<0.35	<6.9	<0.36	<0.36	<1.4	<0.38
4-Methylphenol	1,000	500	<0.33	<2.8	<0.35	<6.9	<0.36	<0.36	<1.4	<0.38
4-Nitroaniline	--	--	<0.66	<5.7	<0.71	<14	<0.71	<0.72	<2.8	<0.75
Acenaphthene	1,000	500	<0.33	2.7 J	<0.35	3.0 J	<0.36	<0.36	<1.4	<0.38
Acenaphthylene	1,000	500	<0.33	<2.8	<0.35	<6.9	<0.36	<0.36	<1.4	<0.38
Anthracene	1,000	500	<0.33	4.3	<0.35	8.7	<0.36	<0.36	0.23 J	<0.38
Benzo(a)anthracene	11	5.6	0.072 J	<b>6.3</b>	<0.35	3.3 J	0.018 J	<0.36	0.094 J	<0.38
Benzo(a)pyrene	1.1	1	0.066 J	<b>5.0</b>	<0.35	<b>1.8 J</b>	<0.36	<0.36	<1.4	<0.38
Benzo(b)fluoranthene	11	5.6	<0.33	4.6	<0.35	1.6 J	<0.36	<0.36	<1.4	<0.38
Benzo(ghi)perylene	1,000	500	<0.33	2.1 J	<0.35	0.87 J	<0.36	<0.36	<1.4	<0.38
Benzo(k)fluoranthene	110	56	0.060 JM	5.1	<0.35	1.7 J	<0.36	<0.36	<1.4	<0.38
Benzoic acid	--	--	<1.6	<14	<1.7	<34	<1.7	<1.8	<6.9	<1.8
Bis(2-ethylhexyl)phthalate	--	--	<0.33	1.8 J	<0.35	<6.9	0.061 J	<0.36	<1.4	<0.38
Butyl benzyl phthalate	--	--	<0.33	<2.8	<0.35	<6.9	<0.36	<0.36	<1.4	<0.38
Carbazole	--	--	<0.33	1.9 J	<0.35	<6.9	<0.36	<0.36	<1.4	<0.38
Chrysene	110	56	0.065 J	6.9	<0.35	4.6 J	0.022 J	<0.36	0.14 J	<0.38
Dibenz(a,h)anthracene	1.1	0.56	<0.33	<b>0.97 J</b>	<0.35	<6.9	<0.36	<0.36	<1.4	<0.38
Dibenzofuran	1,000	350	<0.33	1.7 J	<0.35	<6.9	<0.36	<0.36	<1.4	<0.38
Diethyl phthalate	--	--	<0.33	<2.8	<0.35	<6.9	<0.36	<0.36	<1.4	<0.38
Dimethyl phthalate	--	--	<0.33	<2.8	<0.35	<6.9	<0.36	<0.36	<1.4	<0.38
Di-n-butyl phthalate	--	--	<0.33	0.16 J	<0.35	<6.9	<0.36	<0.36 J	<1.4	<0.38
Di-n-octyl phthalate	--	--	<0.33	0.51 J	<0.35	<6.9	<0.36	<0.36	<1.4	<0.38
Fluoranthene	1,000	500	0.11 J	15	<0.35	11	0.029 J	<0.36	0.28 J	<0.38
Fluorene	1,000	500	<0.33	3.1	<0.35	5.5 J	<0.36	<0.36	0.11 J	<0.38
Indeno(1,2,3-cd)pyrene	11	5.6	0.041 J	2.1 J	<0.35	0.80 J	<0.36	<0.36	<1.4	<0.38
Isophorone	--	--	<0.33	<2.8	<0.35	<6.9	<0.36	<0.36	<1.4	<0.38
Naphthalene	1,000	500	<0.33	1.3 J	<0.35 J	<6.9 J	<0.36 J	<0.36 J	<1.4 J	<0.38 J
Pentachlorophenol	55	6.7	<1.6	<14	<1.7	<34	<1.7	<1.8	<6.9	<1.8
Phenanthrene	1,000	500	0.063 J	19	<0.35	52	<0.36	<0.36	1.0 J	<0.38
Phenol	1,000	500	<0.33	<2.8	<0.35	<6.9	<0.36	<0.36	<1.4	0.054 J
Pyrene	1,000	500	0.12 J	14	<0.35	52	0.034 J	<0.36	1.1 J	<0.38
Total Carcinogenic PAHs	--	--	0.30 J	31 J	ND	14 J	0.040 J	ND	0.23 J	ND
Total TCL SVOCs	--	--	0.60 J	100 J	ND	180 J	0.16 J	ND	11 J	0.054 J

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	AOC41-4	AOC41-5	AOC41-6	AOC41-7	AOC41-8	AOC45-4	AOC46-4	AOC48-1	AOC48-2
			0 - 1 02/19/04	0 - 1 02/19/04	0 - 1 02/19/04	0 - 1 02/19/04	0 - 1 02/19/04	0 - 1 02/19/04	0 - 1 02/19/04	0 - 1 02/19/04	0 - 1 02/19/04
Data Validation Complete			X	X	X	X	X	X	X	X	X
Soil Removed Via 2009 ICM											
Soil Removal Via Previous ICM								X			
<b>VOCs</b>											
4-Methyl-2-pentanone (MIBK)	--	--	<0.012	<0.013	<0.011	<0.011	<0.011	<0.011 J	<0.010	<0.011 J	<0.011 J
2-Butanone (MEK)	1,000	500	<0.012 J	<0.013 J	<0.011 J	<0.011 J	<0.011 J	<0.011 J	<0.010 J	<0.011 J	<0.011 J
Bromomethane	--	--	<0.0060 J	<0.0060 J	<0.0060 J	<0.0050 J	<0.0050 J	<0.0050 J	<0.0050 J	<0.0050 J	<0.0050 J
2-Hexanone	--	--	<0.012	<0.013	<0.011	<0.011	<0.011	<0.011 J	<0.010	<0.011 J	<0.011 J
Acetone	1,000	500	<0.024 J	<0.023 J	<0.011 J	<0.052 J	<0.011 J	<0.019 J	<0.010 J	<0.011 J	<0.011 J
Benzene	89	44	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Carbon disulfide	--	--	<0.0060	<0.0060	<0.0060	<0.0010 J	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chlorobenzene	1,000	500	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chloroform	700	350	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
cis-1,2-Dichloroethene	1,000	500	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ethylbenzene	780	--	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Tetrachloroethene	300	150	0.0010 J	0.0010 J	0.0030 J	<0.0050	0.0010 J	0.047	<0.0050	0.10	0.0080
Methylene chloride	1,000	500	<0.0070	<0.0070	0.0080	<0.0060	0.0080	<0.0050 J	<0.0060	<0.0050 J	<0.0050 J
Toluene	1,000	500	0.15	0.059	0.084	0.016	0.058	0.17 D	0.045	0.015	0.020
Styrene	--	--	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
trans-1,2-Dichloroethene	1,000	500	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Trichloroethene	400	200	<0.0060	0.00050 J	<0.0060	<0.0050	<0.0050	0.0010 J	0.0020 J	0.0020 J	<0.0050
Vinyl chloride	27	13	<0.0060	<0.0060	<0.0060	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Xylenes (total)	1,000	500	<0.0060	<0.0060	<0.0060	<0.0050 J	<0.0050 J	<0.0050 J	<0.0050	<0.0050	<0.0050
Total TCL VOCs	--	--	0.15 J	0.061 J	0.095 J	0.017 J	0.067 J	0.22 J	0.047 J	0.12 J	0.028
<b>SVOCs</b>											
1,2,4-Trichlorobenzene	--	--	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	<14	<1.4
2,4-Dimethylphenol	--	--	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	<14	<1.4
2-Methylnaphthalene	--	--	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	3.0 J	<1.4
2-Methylphenol	1,000	500	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	<14	<1.4
4-Methylphenol	1,000	500	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	<14	<1.4
4-Nitroaniline	--	--	<1.6	<1.7	<1.5	<7.1	<7.0	<2.8	<2.8	<29	<2.8
Acenaphthene	1,000	500	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	19	0.12 J
Acenaphthylene	1,000	500	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	<14	<1.4
Anthracene	1,000	500	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	23	0.17 J
Benzo(a)anthracene	11	5.6	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	45	0.40 J
Benzo(a)pyrene	1.1	1	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	35	0.30 J
Benzo(b)fluoranthene	11	5.6	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	42	0.22 J
Benzo(ghi)perylene	1,000	500	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	26	0.15 J
Benzo(k)fluoranthene	110	56	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	<14	0.26 J
Benzoic acid	--	--	<4.0	<4.1	<3.7	<17	<17	<6.7	<6.7	<70	<6.9
Bis(2-ethylhexyl)phthalate	--	--	0.12 J	<0.84	0.93	3.7	5.8	0.41 J	<1.4	<14	<1.4
Butyl benzyl phthalate	--	--	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	<14	<1.4
Carbazole	--	--	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	11 J	<1.4
Chrysene	110	56	<0.82	<0.84	<0.75	0.23 J	0.33 J	6.1	<1.4	42	0.43 J
Dibenz(a,h)anthracene	1.1	0.56	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	13 J	0.093 J
Dibenzofuran	1,000	350	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	7.7 J	<1.4
Diethyl phthalate	--	--	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	<14	<1.4
Dimethyl phthalate	--	--	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	<14	<1.4
Di-n-butyl phthalate	--	--	<0.82 J	<0.84 J	<0.75	<3.6	<3.5	<1.4	<1.4	<14	<1.4
Di-n-octyl phthalate	--	--	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	<14	<1.4
Fluoranthene	1,000	500	<0.82	<0.84	<0.75	<3.6	0.25 J	<1.4	<1.4	93	0.73 J
Fluorene	1,000	500	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	11 J	<1.4
Indeno(1,2,3-cd)pyrene	11	5.6	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	23	0.14 J
Isophorone	--	--	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	<14	<1.4
Naphthalene	1,000	500	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	0.21 J	12 J	<1.4
Pentachlorophenol	55	6.7	<4.0	<4.1	<3.7	<17	<17	<6.7	<6.7	<70	<6.9
Phenanthrene	1,000	500	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	95	0.59 J
Phenol	1,000	500	<0.82	<0.84	<0.75	<3.6	<3.5	<1.4	<1.4	<14	<1.4
Pyrene	1,000	500	<0.82	<0.84	<0.75	<3.6	0.23 J	<1.4	<1.4	87	0.64 J
Total Carcinogenic PAHs	--	--	ND	ND	ND	0.23 J	0.33 J	6.1	ND	200 J	1.8 J
Total TCL SVOCs	--	--	0.12 J	ND	0.93	3.9 J	6.6 J	6.5 J	0.21 J	590 J	4.2 J

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	AOC49-4	AOC50-1S	AOC50-2S	AOC52-1		AOC52-2	
			0 - 1 02/19/04	10 - 12 10/19/04	10 - 12 10/19/04	1.5 - 2 08/22/06	2 - 3 08/22/06	1 - 1.5 08/22/06	1.5 - 2.5 08/22/06
Data Validation Complete			X	X	X				
Soil Removed Via 2009 ICM								X	X
Soil Removal Via Previous ICM									
<b>VOCs</b>									
4-Methyl-2-pentanone (MIBK)	--	--	<0.011 J	<0.010	<0.010	<0.011 [<0.011]	<0.010	0.0085 J	<0.010
2-Butanone (MEK)	1,000	500	<0.011 J	<0.010	<0.010	<0.011 [<0.011]	<0.010	<0.024	<0.010
Bromomethane	--	--	<0.0050 J	<0.0052	<0.0052	<0.0055 [<0.0055]	<0.0052	<0.012	<0.0051
2-Hexanone	--	--	<0.011 J	<0.010	<0.010	<0.011 [<0.011]	<0.010	<0.024	<0.010
Acetone	1,000	500	<0.011 J	<0.010	<0.010	0.090 B [0.059 B]	0.0052 JB	0.21 B	0.0045 J
Benzene	89	44	<0.0050	<0.0052	<0.0052	<0.0055 [<0.0055]	<0.0052	<0.012	<0.0051
Carbon disulfide	--	--	<0.0050	<0.0052	<0.0052	<0.0055 [<0.0055]	<0.0052	<0.012	<0.0051
Chlorobenzene	1,000	500	<0.0050	<0.0052	<0.0052	<0.0055 [<0.0055]	<0.0052	<0.012	<0.0051
Chloroform	700	350	<0.0050	<0.0052	<0.0052	<0.0055 [<0.0055]	<0.0052	<0.012	<0.0051
cis-1,2-Dichloroethene	1,000	500	<0.0050	<0.0052	<0.0052	<0.0055 [<0.0055]	<0.0052	0.066	<0.0051
Ethylbenzene	780	--	<0.0050	<0.0052	<0.0052	<0.0055 [<0.0055]	<0.0052	0.014	<0.0051
Tetrachloroethene	300	150	0.00090 J	<0.0052	<0.0052	<0.0055 [<0.0055]	<0.0052	0.14	<0.0051
Methylene chloride	1,000	500	<0.0050 J	<0.0071	<0.0064	0.0057 JB [0.0069 JB]	0.0066 JB	0.014 JB	0.0073 JB
Toluene	1,000	500	0.0020 J	0.0023 J	<0.0052	<0.0055 [<0.0055]	<0.0052	0.047	<0.0051
Styrene	--	--	<0.0050	<0.0052	<0.0052	<0.0055 [<0.0055]	<0.0052	<0.012	<0.0051
trans-1,2-Dichloroethene	1,000	500	<0.0050	<0.0052	<0.0052	<0.0055 [<0.0055]	<0.0052	<0.012	<0.0051
Trichloroethene	400	200	<0.0050	<0.0052	<0.0052	<0.0055 [<0.0055]	<0.0052	0.034	<0.0051
Vinyl chloride	27	13	<0.0050	<0.0052	<0.0052	<0.0055 [<0.0055]	<0.0052	<0.012	<0.0051
Xylenes (total)	1,000	500	<0.0050	<0.0052	<0.0052	<0.0055 [<0.0055]	<0.0052	0.060	<0.0051
Total TCL VOCs	--	--	0.0029 J	0.0023 J	ND	0.096 J [0.066 J]	0.012 J	0.59 J	0.012 J
<b>SVOCs</b>									
1,2,4-Trichlorobenzene	--	--	<0.36	<0.33	<0.33	<0.35	<0.33	<0.39	<0.33
2,4-Dimethylphenol	--	--	<0.36	<0.33	<0.33	<0.35	<0.33	<0.39	<0.33
2-Methylnaphthalene	--	--	<0.36	<0.33	<0.33	<0.35	<0.33	<0.39	<0.33
2-Methylphenol	1,000	500	<0.36	<0.33	<0.33	<0.35	<0.33	<0.39	<0.33
4-Methylphenol	1,000	500	<0.36	<0.33	<0.33	<0.35	<0.33	<0.39	<0.33
4-Nitroaniline	--	--	<0.72	<0.66	<0.65	<0.70	<0.67	<0.77	<0.65
Acenaphthene	1,000	500	<0.36	<0.33	<0.33	<0.35	<0.33	0.099 J	<0.33
Acenaphthylene	1,000	500	<0.36	<0.33	<0.33	<0.35	<0.33	<0.39	<0.33
Anthracene	1,000	500	<0.36	<0.33	<0.33	0.15 J	<0.33	0.070 J	<0.33
Benzo(a)anthracene	11	5.6	0.055 J	0.050 J	0.058 J	0.28 J	<0.33	0.092 J	<0.33
Benzo(a)pyrene	1.1	1	0.067 J	0.054 J	0.063 J	0.28 J	<0.33	0.062 J	<0.33
Benzo(b)fluoranthene	11	5.6	0.080 J	<0.33	<0.33	0.20 JM	<0.33	<0.39	<0.33
Benzo(ghi)perylene	1,000	500	0.030 J	<0.33	<0.33	0.22 JM	<0.33	<0.39	<0.33
Benzo(k)fluoranthene	110	56	0.067 J	0.045 J	0.061 J	0.21 JM	<0.33	0.046 JM	<0.33
Benzoic acid	--	--	<1.7	<1.6	<1.6	<1.7	<1.6	<1.9	<1.6
Bis(2-ethylhexyl)phthalate	--	--	0.20 J	<0.33	<0.33	<0.35	<0.33	<0.39	<0.33
Butyl benzyl phthalate	--	--	<0.36	<0.33	<0.33	<0.35	<0.33	<0.39	<0.33
Carbazole	--	--	<0.36	<0.33	<0.33	0.068 J	<0.33	0.22 J	<0.33
Chrysene	110	56	0.082 J	0.058 J	0.062 J	0.30 J	<0.33	0.094 JM	<0.33
Dibenz(a,h)anthracene	1.1	0.56	<0.36	<0.33	<0.33	<0.35	<0.33	<0.39	<0.33
Dibenzofuran	1,000	350	<0.36	<0.33	<0.33	<0.35	<0.33	<0.39	<0.33
Diethyl phthalate	--	--	<0.36	<0.33	<0.33	<0.35	<0.33	<0.39	<0.33
Dimethyl phthalate	--	--	<0.36	<0.33	<0.33	<0.35	<0.33	<0.39	<0.33
Di-n-butyl phthalate	--	--	<0.36 J	<0.33	<0.33	<0.35	<0.33	<0.39	<0.33
Di-n-octyl phthalate	--	--	<0.36	<0.33	<0.33	<0.35	<0.33	<0.39	<0.33
Fluoranthene	1,000	500	0.093 J	0.12 J	0.13 J	0.59	0.072 J	0.18 J	<0.33
Fluorene	1,000	500	0.17 J	<0.33	<0.33	<0.35	<0.33	0.085 J	<0.33
Indeno(1,2,3-cd)pyrene	11	5.6	0.030 J	<0.33	<0.33	0.22 J	0.040 J	<0.39	<0.33
Isophorone	--	--	<0.36	<0.33	<0.33	<0.35	<0.33	<0.39	<0.33
Naphthalene	1,000	500	<0.36	<0.33	<0.33	<0.35	<0.33	0.089 J	<0.33
Pentachlorophenol	55	6.7	<1.7	<1.6	<1.6	<1.7	<1.6	<1.9	<1.6
Phenanthrene	1,000	500	0.047 J	0.057 J	0.077 J	0.49	<0.33	0.25 J	<0.33
Phenol	1,000	500	<0.36	<0.33	<0.33	<0.35	<0.33	<0.39	<0.33
Pyrene	1,000	500	0.090 J	0.094 J	0.10 J	0.57	0.087 J	0.18 J	<0.33
Total Carcinogenic PAHs	--	--	0.38 J	0.21 J	0.24 J	1.5 J	0.040 J	0.29 J	ND
Total TCL SVOCs	--	--	1.0 J	0.48 J	0.55 J	3.6 J	0.20 J	1.5 J	ND



**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	AOC52-3		P1-S1				
			1.5 - 2.5 08/22/06	2.5 - 3.5 08/22/06	0 - 0.2 12/27/05	2 - 2.5 12/27/05	4 - 4.5 02/01/06	6 - 6.5 02/01/06	8 - 8.5 05/03/06
Data Validation Complete									
Soil Removed Via 2009 ICM					X	X	X	X	
Soil Removal Via Previous ICM									
<b>VOCs</b>									
4-Methyl-2-pentanone (MIBK)	--	--	<0.024	<0.010	0.049 J [ $<0.61$ ]	0.059	<1.1	3.2 [ $<5.8$ ]	<0.010
2-Butanone (MEK)	1,000	500	<0.024	<0.010	<0.060 [ $<0.61$ ]	0.033	<1.1	<2.5 [ $<5.8$ ]	<0.010
Bromomethane	--	--	<0.012	<0.0052	<0.030 [ $<0.61$ ]	<0.0055	<1.1	<2.5 [ $<5.8$ ]	<0.0052
2-Hexanone	--	--	<0.024	<0.010	<0.060 [ $<0.61$ ]	<0.011	<1.1	<2.5 [ $<5.8$ ]	<0.010
Acetone	1,000	500	0.24 B	0.0041 JB	0.047 J [0.29 J]	0.17	<2.8	1.0 J [2.3 J]	0.0066 JB
Benzene	89	44	<0.012	<0.0052	<0.030 [ $<0.61$ ]	<0.0055	<1.1	<2.5 [ $<5.8$ ]	<0.0052
Carbon disulfide	--	--	<0.012	<0.0052	0.020 J [ $<0.61$ ]	0.0021 J	<1.1	<2.5 [ $<5.8$ ]	<0.0052
Chlorobenzene	1,000	500	<0.012	<0.0052	0.097 [0.22 J]	0.059	<1.1	0.89 J [ $<5.8$ ]	<0.0052
Chloroform	700	350	<0.012	<0.0052	<0.030 [ $<0.61$ ]	<0.0055	<1.1	<2.5 [ $<5.8$ ]	<0.0052
cis-1,2-Dichloroethene	1,000	500	<0.012	<0.0052	0.90 [1.4]	0.050	30	59 [13]	<0.0052
Ethylbenzene	780	--	<0.012	<0.0052	0.0079 J [ $<0.61$ ]	0.018	<1.1	<2.5 [ $<5.8$ ]	<0.0052
Tetrachloroethene	300	150	<0.012	<0.0052	0.15 [0.58 J]	0.036	29	61 [15]	<0.0052
Methylene chloride	1,000	500	0.015 JB	0.0062 JB	0.068 J [0.52 J]	0.0052 J	0.15 J	1.2 J [0.47 J]	0.0043 JB
Toluene	1,000	500	<0.012	<0.0052	0.030 [ $<0.61$ ]	0.040	0.11 J	0.42 J [ $<5.8$ ]	<0.0052
Styrene	--	--	<0.012	<0.0052	<0.030 [ $<0.61$ ]	<0.0055	<1.1	<2.5 [ $<5.8$ ]	<0.0052
trans-1,2-Dichloroethene	1,000	500	<0.012	<0.0052	0.078 [0.15 J]	0.0036 J	1.7	1.2 J [ $<5.8$ ]	<0.0052
Trichloroethene	400	200	<0.012	<0.0052	0.0069 J [ $<0.61$ ]	<0.0055	8.3	7.0 [1.3 J]	<0.0052
Vinyl chloride	27	13	<0.012	<0.0052	<0.030 [ $<0.61$ ]	<0.0055	1.5	<2.5 [ $<5.8$ ]	<0.0052
Xylenes (total)	1,000	500	<0.012	<0.0052	0.029 J [ $<0.61$ ]	0.026	<1.1	0.54 J [ $<5.8$ ]	<0.0052
Total TCL VOCs	--	--	0.26 J	0.010 J	1.5 J [3.2 J]	0.50 J	71 J	140 J [32 J]	0.011 J
<b>SVOCs</b>									
1,2,4-Trichlorobenzene	--	--	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [ $<15$ ]	NA
2,4-Dimethylphenol	--	--	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [ $<15$ ]	NA
2-Methylnaphthalene	--	--	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [ $<15$ ]	NA
2-Methylphenol	1,000	500	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [ $<15$ ]	NA
4-Methylphenol	1,000	500	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [ $<15$ ]	NA
4-Nitroaniline	--	--	<0.77	<0.68 [ $<0.70$ ]	<40 [ $<74$ ]	<6.9	<12	<16 [ $<30$ ]	NA
Acenaphthene	1,000	500	0.17 J	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [ $<15$ ]	NA
Acenaphthylene	1,000	500	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [ $<15$ ]	NA
Anthracene	1,000	500	0.14 J	<0.34 [ $<0.35$ ]	3.6 J [ $<37$ ]	0.90 J	<5.8	<7.9 [ $<15$ ]	NA
Benzo(a)anthracene	11	5.6	0.053 J	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [2.9 J]	NA
Benzo(a)pyrene	1.1	1	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [2.0 J]	NA
Benzo(b)fluoranthene	11	5.6	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [ $<15$ ]	NA
Benzo(ghi)perylene	1,000	500	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [2.3 J]	NA
Benzo(k)fluoranthene	110	56	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [ $<15$ ]	NA
Benzoic acid	--	--	<1.9	<1.6 [ $<1.7$ ]	<96 [ $<180$ ]	<17	<28	<38 [ $<73$ ]	NA
Bis(2-ethylhexyl)phthalate	--	--	0.061 J	0.14 J [0.23 J]	34 [19 J]	11	24	110 [170]	NA
Butyl benzyl phthalate	--	--	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [ $<15$ ]	NA
Carbazole	--	--	0.18 J	<0.34 [ $<0.35$ ]	<20 [170]	40	<5.8	<7.9 [ $<15$ ]	NA
Chrysene	110	56	0.051 J	<0.34 [ $<0.35$ ]	85 [120]	9.5	19	<7.9 [17]	NA
Dibenz(a,h)anthracene	1.1	0.56	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [ $<15$ ]	NA
Dibenzofuran	1,000	350	0.14 J	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [ $<15$ ]	NA
Diethyl phthalate	--	--	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [ $<15$ ]	NA
Dimethyl phthalate	--	--	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [ $<15$ ]	NA
Di-n-butyl phthalate	--	--	<0.39	<0.34 [ $<0.35$ ]	14 J [6.3 J]	6.4	12	35 [80]	NA
Di-n-octyl phthalate	--	--	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [3.8 J]	NA
Fluoranthene	1,000	500	0.18 J	<0.34 [0.048 J]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [26]	NA
Fluorene	1,000	500	0.19 J	<0.34 [ $<0.35$ ]	9.8 J [9.3 J]	2.6 J	8.8	<7.9 [4.2 J]	NA
Indeno(1,2,3-cd)pyrene	11	5.6	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [1.8 J]	NA
Isophorone	--	--	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [ $<15$ ]	NA
Naphthalene	1,000	500	0.067 J	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [ $<15$ ]	NA
Pentachlorophenol	55	6.7	<1.9	<1.6 [ $<1.7$ ]	<96 [ $<180$ ]	<17	<28	<38 [ $<73$ ]	NA
Phenanthrene	1,000	500	0.55	<0.34 [ $<0.35$ ]	14 J [21 J]	4.9	12	<7.9 [12 J]	NA
Phenol	1,000	500	<0.39	<0.34 [ $<0.35$ ]	<20 [ $<37$ ]	<3.5	<5.8	64 [26]	NA
Pyrene	1,000	500	0.12 J	<0.34 [0.061 J]	<20 [ $<37$ ]	<3.5	<5.8	<7.9 [11 J]	NA
Total Carcinogenic PAHs	--	--	0.10 J	ND [ND]	85 [120]	9.5	19	ND [24 J]	NA
Total TCL SVOCs	--	--	1.9 J	0.14 J [0.34 J]	160 J [350 J]	75 J	76	210 [360 J]	NA

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	P1-S2				P1-S3			
			0 - 0.2 12/27/05	2 - 2.5 02/01/06	4 - 4.5 02/01/06	6 - 6.5 02/01/06	0 - 0.2 02/01/06	2 - 2.5 02/01/06	4 - 4.5 02/01/06	6 - 6.5 05/03/06
<b>Data Validation Complete</b>										
<b>Soil Removed Via 2009 ICM</b>			<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>	
<b>Soil Removal Via Previous ICM</b>										
<b>VOCs</b>										
4-Methyl-2-pentanone (MIBK)	--	--	<30	2.9	2.1 J [<0.56]	0.16	<4.9	<7.0	<2.2	<0.011
2-Butanone (MEK)	1,000	500	<30	<2.4	<2.6 [<0.56]	<0.056	<4.9	<7.0	<2.2	<0.011
Bromomethane	--	--	<30	<2.4	<2.6 [<0.56]	<0.028	<4.9	<7.0	<2.2	<0.0055
2-Hexanone	--	--	<30	<2.4	<2.6 [<0.56]	<0.056	<4.9	<7.0	<2.2	<0.011
Acetone	1,000	500	<75	<6.1	<6.4 [1.0 J]	0.14	<12	<18	<5.5	0.0062 JB
Benzene	89	44	<30	<2.4	<2.6 [<0.56]	<0.028	<4.9	<7.0	<2.2	<0.0055
Carbon disulfide	--	--	<30	<2.4	<2.6 [<0.56]	<0.028	<4.9	<7.0	<2.2	<0.0055
Chlorobenzene	1,000	500	<30	0.39 J	0.51 J [<0.56]	0.0055 J	<4.9	<7.0	<2.2	<0.0055
Chloroform	700	350	<30	<2.4	<2.6 [<0.56]	<0.028	<4.9	<7.0	<2.2	<0.0055
cis-1,2-Dichloroethene	1,000	500	9.0 J	57	30 [14]	0.078	7.1	18	3.5	<0.0055
Ethylbenzene	780	--	<30	<2.4	<2.6 [<0.56]	<0.028	<4.9	<7.0	<2.2	<0.0055
Tetrachloroethene	300	150	<b>240</b>	70	57 [17]	0.068	120	<b>220</b>	67	0.0017 J
Methylene chloride	1,000	500	27 J	0.30 J	0.36 J [0.070 J]	0.026 J	0.59 J	0.71 J	0.35 J	0.0042 JB
Toluene	1,000	500	<30	0.36 J	0.28 J [0.082 J]	<0.028	<4.9	<7.0	<2.2	<0.0055
Styrene	--	--	<30	<2.4	<2.6 [<0.56]	<0.028	<4.9	<7.0	<2.2	<0.0055
trans-1,2-Dichloroethene	1,000	500	<30	1.9 J	1.5 J [0.41 J]	<0.028	<4.9	<7.0	<2.2	<0.0055
Trichloroethene	400	200	8.2 J	19	6.7 [2.9]	0.0051 J	10	21	5.1	<0.0055
Vinyl chloride	27	13	<30	2.0 J	1.3 J [0.26 J]	<0.028	<4.9	<7.0	<2.2	<0.0055
Xylenes (total)	1,000	500	<30	<2.4	<2.6 [<0.56]	<0.028	<4.9	<7.0	<2.2	<0.0055
Total TCL VOCs	--	--	280 J	150 J	100 J [36 J]	0.48 J	140 J	260 J	76 J	0.012 J
<b>SVOCs</b>										
1,2,4-Trichlorobenzene	--	--	<0.38	<9.8	<9.9 [<1.4]	NA	<0.78	<0.45	NA	NA
2,4-Dimethylphenol	--	--	<0.38	<9.8	<9.9 [<1.4]	NA	<0.78	<0.45	NA	NA
2-Methylnaphthalene	--	--	0.073 J	<9.8	<9.9 [<1.4]	NA	0.14 J	0.13 J	NA	NA
2-Methylphenol	1,000	500	<0.38	<9.8	<9.9 [<1.4]	NA	<0.78	<0.45	NA	NA
4-Methylphenol	1,000	500	<0.38	<9.8	<9.9 [<1.4]	NA	<0.78	<0.45	NA	NA
4-Nitroaniline	--	--	<0.75	<20	<20 [<2.9]	NA	<1.6	<0.90	NA	NA
Acenaphthene	1,000	500	0.14 J	<9.8	<9.9 [<1.4]	NA	0.37 J	0.29 J	NA	NA
Acenaphthylene	1,000	500	<0.38	<9.8	<9.9 [<1.4]	NA	<0.78	<0.45	NA	NA
Anthracene	1,000	500	0.35 J	<9.8	<9.9 [<1.4]	NA	0.65 J	0.55	NA	NA
Benzo(a)anthracene	11	5.6	1.1	1.4 J	<9.9 [<1.4]	NA	2.3	1.3	NA	NA
Benzo(a)pyrene	1.1	1	<b>1.3</b>	<9.8	<9.9 [<1.4]	NA	<b>2.0</b>	1.1	NA	NA
Benzo(b)fluoranthene	11	5.6	1.3	<9.8	<9.9 [<1.4]	NA	3.1	1.7	NA	NA
Benzo(ghi)perylene	1,000	500	0.39	<9.8	<9.9 [<1.4]	NA	1.1	0.52	NA	NA
Benzo(k)fluoranthene	110	56	0.51	<9.8	<9.9 [<1.4]	NA	1.2	0.60	NA	NA
Benzoic acid	--	--	0.59 J	<48	<48 [<7.0]	NA	<3.8	<2.2	NA	NA
Bis(2-ethylhexyl)phthalate	--	--	3.1	95	90 [16]	NA	1.6	0.63	NA	NA
Butyl benzyl phthalate	--	--	<0.38	<9.8	<9.9 [<1.4]	NA	<0.78	<0.45	NA	NA
Carbazole	--	--	0.21 J	<9.8	<9.9 [<1.4]	NA	0.38 J	0.35 J	NA	NA
Chrysene	110	56	1.6	1.3 J	<9.9 [<1.4]	NA	2.6	1.6	NA	NA
Dibenz(a,h)anthracene	1.1	0.56	0.12 J	<9.8	<9.9 [<1.4]	NA	0.24 J	0.13 J	NA	NA
Dibenzofuran	1,000	350	0.086 J	<9.8	<9.9 [<1.4]	NA	0.20 J	0.15 J	NA	NA
Diethyl phthalate	--	--	<0.38	<9.8	<9.9 [<1.4]	NA	<0.78	<0.45	NA	NA
Dimethyl phthalate	--	--	<0.38	<9.8	<9.9 [<1.4]	NA	<0.78	<0.45	NA	NA
Di-n-butyl phthalate	--	--	0.29 J	9.1 J	12 [4.9]	NA	0.13 J	0.44 J	NA	NA
Di-n-octyl phthalate	--	--	<0.38	<9.8	<9.9 [<1.4]	NA	<0.78	<0.45	NA	NA
Fluoranthene	1,000	500	4.4	2.8 J	<9.9 [<1.4]	NA	4.6	4.7	NA	NA
Fluorene	1,000	500	0.11 J	<9.8	<9.9 [<1.4]	NA	0.30 J	0.26 J	NA	NA
Indeno(1,2,3-cd)pyrene	11	5.6	0.47	<9.8	<9.9 [<1.4]	NA	1.2	0.58	NA	NA
Isophorone	--	--	<0.38	<9.8	<9.9 [<1.4]	NA	<0.78	<0.45	NA	NA
Naphthalene	1,000	500	0.085 J	<9.8	<9.9 [<1.4]	NA	0.21 J	0.20 J	NA	NA
Pentachlorophenol	55	6.7	<1.8	<48	<48 [<7.0]	NA	<3.8	<2.2	NA	NA
Phenanthrene	1,000	500	1.5	3.6 J	<9.9 [<1.4]	NA	2.8	2.3	NA	NA
Phenol	1,000	500	0.19 J	22	37 [12]	NA	<0.78	<0.45	NA	NA
Pyrene	1,000	500	3.1	2.9 J	<9.9 [<1.4]	NA	4.8	3.3	NA	NA
Total Carcinogenic PAHs	--	--	6.4 J	2.7 J	ND [ND]	NA	13 J	7.0 J	NA	NA
Total TCL SVOCs	--	--	21 J	140 J	140 [33]	NA	30 J	21 J	NA	NA

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	P1-S4			P1-S5			P1-S6		
			0 - 0.2 02/01/06	2 - 2.5 02/01/06	4 - 4.5 02/01/06	0 - 0.2 01/31/06	2 - 2.5 01/31/06	4 - 4.5 01/31/06	0 - 0.2 01/31/06	2 - 2.5 01/31/06	4 - 4.5 01/31/06
<b>Data Validation Complete</b>											
<b>Soil Removed Via 2009 ICM</b>			<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>	
<b>Soil Removal Via Previous ICM</b>											
<b>VOCs</b>											
4-Methyl-2-pentanone (MIBK)	--	--	<0.012	<2.9	0.0032 J	<0.58	<1.2	<0.022	<2.4	<2.9	0.018 J
2-Butanone (MEK)	1,000	500	<0.012	<2.9	<0.011	<0.58	<1.2	<0.022	<2.4	<2.9	<0.023
Bromomethane	--	--	<0.0060	<2.9	<0.0056	<0.58	<1.2	<0.011	<2.4	<2.9	<0.011
2-Hexanone	--	--	<0.012	<2.9	<0.011	<0.58	<1.2	<0.022	<2.4	<2.9	<0.023
Acetone	1,000	500	0.025	<7.2	0.079	<1.4	<2.9	<0.044	<6.0	<7.2	<0.045
Benzene	89	44	<0.0060	<2.9	<0.0056	<0.58	<1.2	<0.011	<2.4	<2.9	<0.011
Carbon disulfide	--	--	<0.0060	<2.9	<0.0056	<0.58	<1.2	<0.011	<2.4	<2.9	0.0028 J
Chlorobenzene	1,000	500	<0.0060	<2.9	<0.0056	<0.58	0.12 J	<0.011	<2.4	<2.9	0.0071 J
Chloroform	700	350	<0.0060	<2.9	<0.0056	<0.58	<1.2	<0.011	<2.4	<2.9	<0.011
cis-1,2-Dichloroethene	1,000	500	0.028	14	0.0078	1.5	3.3	<0.011	16	6.5	0.077
Ethylbenzene	780	--	<0.0060	<2.9	<0.0056	0.40 J	<1.2	<0.011	<2.4	<2.9	<0.011
Tetrachloroethene	300	150	0.17	85	0.010	16	40	0.041	67	90	0.029
Methylene chloride	1,000	500	0.0044 J	0.29 J	0.0059 J	0.059 J	0.14 J	0.018 J	<2.4	0.26 J	0.023 J
Toluene	1,000	500	<0.0060	<2.9	<0.0056	1.2	<1.2	<0.011	<2.4	<2.9	<0.011
Styrene	--	--	<0.0060	<2.9	<0.0056	3.2	<1.2	<0.011	<2.4	<2.9	<0.011
trans-1,2-Dichloroethene	1,000	500	<0.0060	<2.9	<0.0056	<0.58	<1.2	<0.011	0.29 J	<2.9	0.0066 J
Trichloroethene	400	200	0.015	4.6	0.0014 J	1.9	2.3	<0.011	4.6	8.1	0.0023 J
Vinyl chloride	27	13	<0.0060	<2.9	<0.0056	<0.58	<1.2	<0.011	<2.4	<2.9	<0.011
Xylenes (total)	1,000	500	<0.0060	<2.9	<0.0056	0.55 J	<1.2	<0.011	<2.4	<2.9	<0.011
Total TCL VOCs	--	--	0.24 J	100 J	0.11 J	25 J	46 J	0.059 J	88 J	110 J	0.17 J
<b>SVOCs</b>											
1,2,4-Trichlorobenzene	--	--	<3.9	<0.37	NA	<0.74	<7.7	NA	<3.2	<0.38	NA
2,4-Dimethylphenol	--	--	<3.9	<0.37	NA	<0.74	<7.7	NA	<3.2	<0.38	NA
2-Methylnaphthalene	--	--	0.63 J	<0.37	NA	0.21 J	<7.7	NA	<3.2	0.15 J	NA
2-Methylphenol	1,000	500	<3.9	<0.37	NA	<0.74	<7.7	NA	<3.2	<0.38	NA
4-Methylphenol	1,000	500	<3.9	<0.37	NA	<0.74	<7.7	NA	<3.2	<0.38	NA
4-Nitroaniline	--	--	<7.8	<0.74	NA	<1.5	<15	NA	<6.3	<0.76	NA
Acenaphthene	1,000	500	2.4 J	0.11 J	NA	0.64 J	4.3 J	NA	<3.2	0.15 J	NA
Acenaphthylene	1,000	500	<3.9	<0.37	NA	<0.74	<7.7	NA	<3.2	<0.38	NA
Anthracene	1,000	500	5.6	0.29 J	NA	1.3	9.6	NA	<3.2	0.32 J	NA
Benzo(a)anthracene	11	5.6	11	0.80	NA	3.9	34	NA	2.0 J	1.2	NA
Benzo(a)pyrene	1.1	1	8.9	0.73	NA	4.2	37	NA	1.9 J	1.4	NA
Benzo(b)fluoranthene	11	5.6	11	1.1	NA	3.1	35	NA	1.9 J	1.4	NA
Benzo(ghi)perylene	1,000	500	4.6	<0.37	NA	3.3	40	NA	1.4 J	1.2	NA
Benzo(k)fluoranthene	110	56	4.2	0.35 J	NA	3.2	30	NA	1.3 J	1.0	NA
Benzoic acid	--	--	<19	<1.8	NA	<3.6	<37	NA	<15	<1.8	NA
Bis(2-ethylhexyl)phthalate	--	--	3.2 J	2.2	NA	4.6	17	NA	23	2.8	NA
Butyl benzyl phthalate	--	--	<3.9	<0.37	NA	<0.74	<7.7	NA	<3.2	<0.38	NA
Carbazole	--	--	2.4 J	0.14 J	NA	0.50 J	3.8 J	NA	<3.2	0.13 J	NA
Chrysene	110	56	12	1.2	NA	4.9	42	NA	6.2	1.9	NA
Dibenz(a,h)anthracene	1.1	0.56	1.1 J	0.098 J	NA	1.2	11	NA	<3.2	0.40	NA
Dibenzofuran	1,000	350	1.6 J	0.060 J	NA	0.32 J	1.8 J	NA	<3.2	0.063 J	NA
Diethyl phthalate	--	--	<3.9	<0.37	NA	<0.74	<7.7	NA	<3.2	<0.38	NA
Dimethyl phthalate	--	--	<3.9	<0.37	NA	<0.74	<7.7	NA	<3.2	<0.38	NA
Di-n-butyl phthalate	--	--	0.64 J	0.54	NA	1.4	4.2 J	NA	2.3 J	0.29 J	NA
Di-n-octyl phthalate	--	--	<3.9	<0.37	NA	0.19 J	<7.7	NA	1.2 J	0.18 J	NA
Fluoranthene	1,000	500	24	2.4	NA	9.7	72	NA	5.2	2.7	NA
Fluorene	1,000	500	2.9 J	0.094 J	NA	0.55 J	3.3 J	NA	<3.2	0.14 J	NA
Indeno(1,2,3-cd)pyrene	11	5.6	4.8	0.42	NA	3.3	35	NA	1.4 J	1.1	NA
Isophorone	--	--	<3.9	<0.37	NA	<0.74	<7.7	NA	<3.2	<0.38	NA
Naphthalene	1,000	500	1.9 J	0.067 J	NA	0.38 J	<7.7	NA	<3.2	0.17 J	NA
Pentachlorophenol	55	6.7	<19	<1.8	NA	<3.6	<37	NA	<15	<1.8	NA
Phenanthrene	1,000	500	21	0.92	NA	4.5	31	NA	1.8 J	1.1	NA
Phenol	1,000	500	<3.9	1.9	NA	<0.74	<7.7	NA	2.4 J	0.17 J	NA
Pyrene	1,000	500	23	1.9	NA	7.9	67	NA	3.5	2.9	NA
Total Carcinogenic PAHs	--	--	53 J	4.7 J	NA	24	220	NA	15 J	8.4	NA
Total TCL SVOCs	--	--	150 J	15 J	NA	59 J	480 J	NA	56 J	21 J	NA

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	P1-S7			P1-S8				P1-S9		
			0 - 0.2 01/31/06	2 - 2.5 01/31/06	4 - 4.5 01/31/06	0 - 0.2 01/31/06	2 - 2.5 01/31/06	4 - 4.5 01/31/06	6 - 6.5 05/03/06	0 - 0.2 01/31/06	2 - 2.5 01/31/06	4 - 4.5 01/31/06
<b>Data Validation Complete</b>												
<b>Soil Removed Via 2009 ICM</b>			X	X		X	X	X		X	X	X
<b>Soil Removal Via Previous ICM</b>												
<b>VOCs</b>												
4-Methyl-2-pentanone (MIBK)	--	--	<1.2	<0.012	<0.012	<0.57	<2.2	<1.2	<0.010	<4.9	<2.9	<6.1
2-Butanone (MEK)	1,000	500	<1.2	<0.012	<0.012	<0.57	<2.2	<1.2	<0.010	<4.9	<2.9	<6.1
Bromomethane	--	--	<1.2	<0.0058	<0.0061	<0.57	<2.2	<1.2	<0.0052	<4.9	<2.9	<6.1
2-Hexanone	--	--	<1.2	<0.012	<0.012	<0.57	<2.2	<1.2	<0.010	<4.9	<2.9	<6.1
Acetone	1,000	500	<3.0	0.018 J	0.015 J	0.31 J	<5.6	0.34 J	0.0069 JB	<12	<7.3	<15
Benzene	89	44	<1.2	<0.0058	<0.0061	<0.57	<2.2	<1.2	<0.0052	<4.9	<2.9	<6.1
Carbon disulfide	--	--	<1.2	<0.0058	<0.0061	<0.57	<2.2	<1.2	<0.0052	<4.9	<2.9	<6.1
Chlorobenzene	1,000	500	<1.2	<0.0058	<0.0061	<0.57	<2.2	<1.2	<0.0052	<4.9	<2.9	<6.1
Chloroform	700	350	<1.2	<0.0058	<0.0061	<0.57	<2.2	<1.2	<0.0052	<4.9	<2.9	<6.1
cis-1,2-Dichloroethene	1,000	500	4.5	<0.0058	0.0015 J	0.33 J	0.96 J	0.23 J	<0.0052	0.72 J	0.65 J	0.79 J
Ethylbenzene	780	--	<1.2	<0.0058	<0.0061	<0.57	<2.2	<1.2	<0.0052	<4.9	<2.9	<6.1
Tetrachloroethene	300	150	34	<0.0058	0.0080	22	60	27	<0.0052	110	110	110
Methylene chloride	1,000	500	0.13 J	0.0060 J	0.0049 J	0.060 J	<2.2	0.081 J	0.0048 JB	<4.9	<2.9	0.23 J
Toluene	1,000	500	<1.2	<0.0058	<0.0061	0.030 J	<2.2	<1.2	<0.0052	<4.9	0.32 J	<6.1
Styrene	--	--	<1.2	<0.0058	<0.0061	<0.57	<2.2	<1.2	<0.0052	<4.9	<2.9	<6.1
trans-1,2-Dichloroethene	1,000	500	<1.2	<0.0058	<0.0061	<0.57	<2.2	<1.2	<0.0052	<4.9	<2.9	<6.1
Trichloroethene	400	200	2.9	<0.0058	<0.0061	0.60	2.2 J	0.79 J	<0.0052	1.7 J	1.8 J	1.7 J
Vinyl chloride	27	13	<1.2	<0.0058	<0.0061	<0.57	<2.2	<1.2	<0.0052	<4.9	<2.9	<6.1
Xylenes (total)	1,000	500	<1.2	<0.0058	<0.0061	<0.57	<2.2	<1.2	<0.0052	<4.9	<2.9	<6.1
Total TCL VOCs	--	--	42 J	0.024 J	0.029 J	23 J	63 J	28 J	0.012 J	110 J	110 J	110 J
<b>SVOCs</b>												
1,2,4-Trichlorobenzene	--	--	<0.78	<0.38	NA	NA	NA	NA	NA	<0.80	<0.77	NA
2,4-Dimethylphenol	--	--	<0.78	<0.38	NA	NA	NA	NA	NA	<0.80	<0.77	NA
2-Methylnaphthalene	--	--	0.13 J	0.092 J	NA	NA	NA	NA	NA	0.29 J	0.27 J	NA
2-Methylphenol	1,000	500	<0.78	<0.38	NA	NA	NA	NA	NA	<0.80	<0.77	NA
4-Methylphenol	1,000	500	<0.78	<0.38	NA	NA	NA	NA	NA	<0.80	<0.77	NA
4-Nitroaniline	--	--	<1.6	<0.75	NA	NA	NA	NA	NA	<1.6	<1.5	NA
Acenaphthene	1,000	500	0.35 J	0.30 J	NA	NA	NA	NA	NA	0.90	0.53 J	NA
Acenaphthylene	1,000	500	<0.78	<0.38	NA	NA	NA	NA	NA	<0.80	<0.77	NA
Anthracene	1,000	500	0.77 J	0.53	NA	NA	NA	NA	NA	1.5	0.93	NA
Benzo(a)anthracene	11	5.6	2.5	1.8	NA	NA	NA	NA	NA	3.9	2.6	NA
Benzo(a)pyrene	1.1	1	<b>3.0</b>	<b>2.1</b>	NA	NA	NA	NA	NA	<b>3.8</b>	<b>2.6</b>	NA
Benzo(b)fluoranthene	11	5.6	2.3	1.7	NA	NA	NA	NA	NA	3.4	2.2	NA
Benzo(ghi)perylene	1,000	500	1.8	1.3	NA	NA	NA	NA	NA	4.1	2.9	NA
Benzo(k)fluoranthene	110	56	2.5	1.6	NA	NA	NA	NA	NA	3.2	2.2	NA
Benzoic acid	--	--	<3.8	<1.8	NA	NA	NA	NA	NA	<3.9	<3.7	NA
Bis(2-ethylhexyl)phthalate	--	--	5.4	3.4	NA	NA	NA	NA	NA	2.0	2.6	NA
Butyl benzyl phthalate	--	--	<0.78	<0.38	NA	NA	NA	NA	NA	<0.80	0.15 J	NA
Carbazole	--	--	0.33 J	0.25 J	NA	NA	NA	NA	NA	0.83	0.44 J	NA
Chrysene	110	56	3.7	2.8	NA	NA	NA	NA	NA	4.5	3.0	NA
Dibenz(a,h)anthracene	1.1	0.56	<b>0.65 J</b>	0.49	NA	NA	NA	NA	NA	<b>1.1</b>	<b>0.89</b>	NA
Dibenzofuran	1,000	350	0.16 J	0.12 J	NA	NA	NA	NA	NA	0.43 J	0.24 J	NA
Diethyl phthalate	--	--	<0.78	<0.38	NA	NA	NA	NA	NA	<0.80	<0.77	NA
Dimethyl phthalate	--	--	<0.78	<0.38	NA	NA	NA	NA	NA	<0.80	<0.77	NA
Di-n-butyl phthalate	--	--	1.3	0.86	NA	NA	NA	NA	NA	<0.80	0.16 J	NA
Di-n-octyl phthalate	--	--	<0.78	<0.38	NA	NA	NA	NA	NA	<0.80	<0.77	NA
Fluoranthene	1,000	500	6.7	4.7	NA	NA	NA	NA	NA	9.2	6.0	NA
Fluorene	1,000	500	0.33 J	0.24 J	NA	NA	NA	NA	NA	0.72 J	0.43 J	NA
Indeno(1,2,3-cd)pyrene	11	5.6	1.9	1.3	NA	NA	NA	NA	NA	3.4	2.3	NA
Isophorone	--	--	<0.78	<0.38	NA	NA	NA	NA	NA	<0.80	<0.77	NA
Naphthalene	1,000	500	0.19 J	0.11 J	NA	NA	NA	NA	NA	0.44 J	0.32 J	NA
Pentachlorophenol	55	6.7	<3.8	<1.8	NA	NA	NA	NA	NA	<3.9	<3.7	NA
Phenanthrene	1,000	500	2.7	2.1	NA	NA	NA	NA	NA	6.4	3.8	NA
Phenol	1,000	500	0.46 J	0.12 J	NA	NA	NA	NA	NA	<0.80	<0.77	NA
Pyrene	1,000	500	5.1	4.3	NA	NA	NA	NA	NA	8.5	5.3	NA
Total Carcinogenic PAHs	--	--	17 J	12	NA	NA	NA	NA	NA	23	16	NA
Total TCL SVOCs	--	--	42 J	30 J	NA	NA	NA	NA	NA	59 J	40 J	NA

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	P1-S9	P1-S10				P1-S11			P1-S12	
			6 - 6.5 05/03/06	0 - 0.2 01/31/06	2 - 2.5 01/31/06	4 - 4.5 01/31/06	6 - 6.5 05/03/06	0 - 0.2 01/31/06	2 - 2.5 01/31/06	4 - 4.5 01/31/06	0 - 0.2 01/31/06	2 - 2.5 01/31/06
<b>Data Validation Complete</b>												
<b>Soil Removed Via 2009 ICM</b>				X	X			X	X	X	X	X
<b>Soil Removal Via Previous ICM</b>												
<b>VOCs</b>												
4-Methyl-2-pentanone (MIBK)	--	--	<0.012	<5.9	<2.3	<0.58	<0.011	<3.1	<2.4	<0.059	<6.3	<5.9
2-Butanone (MEK)	1,000	500	<0.012	<5.9	<2.3	0.45 J	<0.011	<3.1	<2.4	<0.059	<6.3	<5.9
Bromomethane	--	--	<0.0058	<5.9	<2.3	<0.58	<0.0056	<3.1	<2.4	<0.029	<6.3	<5.9
2-Hexanone	--	--	<0.012	<5.9	<2.3	<0.58	<0.011	<3.1	<2.4	<0.059	<6.3	<5.9
Acetone	1,000	500	0.023 B	<15	<5.8	2.8	<0.022 B	<7.7	0.89 J	<0.12	<16	<15
Benzene	89	44	<0.0058	<5.9	<2.3	<0.58	<0.0056	<3.1	<2.4	<0.029	<6.3	<5.9
Carbon disulfide	--	--	0.00079 J	<5.9	<2.3	<0.58	<0.0056	<3.1	<2.4	<0.029	<6.3	<5.9
Chlorobenzene	1,000	500	<0.0058	<5.9	<2.3	<0.58	<0.0056	<3.1	<2.4	<0.029	<6.3	<5.9
Chloroform	700	350	<0.0058	<5.9	<2.3	<0.58	<0.0056	<3.1	<2.4	<0.029	<6.3	<5.9
cis-1,2-Dichloroethene	1,000	500	0.0050 J	36	55	8.1	<0.0056	7.4	4.3	<0.029	8.3	2.5 J
Ethylbenzene	780	--	<0.0058	<5.9	<2.3	<0.58	<0.0056	<3.1	<2.4	<0.029	<6.3	<5.9
Tetrachloroethene	300	150	0.044	12	14	5.4	<0.0056	81	72	0.0075 J	210	120
Methylene chloride	1,000	500	0.0051 JB	2.3 J	0.29 J	0.063 J	0.0055 JB	0.26 J	0.41 J	0.047 J	<6.3	<5.9
Toluene	1,000	500	<0.0058	<5.9	<2.3	<0.58	<0.0056	<3.1	<2.4	<0.029	<6.3	<5.9
Styrene	--	--	<0.0058	<5.9	<2.3	<0.58	<0.0056	<3.1	<2.4	<0.029	<6.3	<5.9
trans-1,2-Dichloroethene	1,000	500	<0.0058	1.7 J	2.7	0.44 J	<0.0056	0.80 J	0.51 J	<0.029	<6.3	<5.9
Trichloroethene	400	200	0.0018 J	4.0 J	6.2	2.0	<0.0056	3.6	2.3 J	<0.029	8.4	5.9
Vinyl chloride	27	13	<0.0058	<5.9	<2.3	<0.58	<0.0056	0.076 J	0.13 J	<0.029	<6.3	<5.9
Xylenes (total)	1,000	500	<0.0058	<5.9	<2.3	<0.58	<0.0056	<3.1	<2.4	<0.029	<6.3	<5.9
Total TCL VOCs	--	--	0.080 J	56 J	78 J	19 J	0.0055 J	93 J	81 J	0.055 J	230	130 J
<b>SVOCs</b>												
1,2,4-Trichlorobenzene	--	--	NA	<76	<38	NA	NA	NA	NA	NA	<1.6	<0.77
2,4-Dimethylphenol	--	--	NA	<76	<38	NA	NA	NA	NA	NA	<1.6	<0.77
2-Methylnaphthalene	--	--	NA	<76	<38	NA	NA	NA	NA	NA	0.28 J	<0.77
2-Methylphenol	1,000	500	NA	<76	<38	NA	NA	NA	NA	NA	<1.6	<0.77
4-Methylphenol	1,000	500	NA	<76	<38	NA	NA	NA	NA	NA	<1.6	<0.77
4-Nitroaniline	--	--	NA	<150	<76	NA	NA	NA	NA	NA	<3.1	<1.5
Acenaphthene	1,000	500	NA	<76	<38	NA	NA	NA	NA	NA	1.1 J	<0.77
Acenaphthylene	1,000	500	NA	<76	<38	NA	NA	NA	NA	NA	<1.6	<0.77
Anthracene	1,000	500	NA	<76	<38	NA	NA	NA	NA	NA	1.5 J	0.28 J
Benzo(a)anthracene	11	5.6	NA	<76	<38	NA	NA	NA	NA	NA	4.6	1.0
Benzo(a)pyrene	1.1	1	NA	<76	<38	NA	NA	NA	NA	NA	4.5	1.9
Benzo(b)fluoranthene	11	5.6	NA	<76	<38	NA	NA	NA	NA	NA	4.7	1.4
Benzo(ghi)perylene	1,000	500	NA	<76	<38	NA	NA	NA	NA	NA	4.1	2.1
Benzo(k)fluoranthene	110	56	NA	<76	<38	NA	NA	NA	NA	NA	3.7	1.5
Benzoic acid	--	--	NA	<370	<190	NA	NA	NA	NA	NA	<7.6	<3.8
Bis(2-ethylhexyl)phthalate	--	--	NA	590	300	NA	NA	NA	NA	NA	0.60 J	0.75 J
Butyl benzyl phthalate	--	--	NA	<76	<38	NA	NA	NA	NA	NA	<1.6	<0.77
Carbazole	--	--	NA	<76	<38	NA	NA	NA	NA	NA	1.1 J	0.16 J
Chrysene	110	56	NA	<76	<38	NA	NA	NA	NA	NA	6.3	1.4
Dibenz(a,h)anthracene	1.1	0.56	NA	<76	<38	NA	NA	NA	NA	NA	1.3 J	0.76 J
Dibenzofuran	1,000	350	NA	<76	<38	NA	NA	NA	NA	NA	0.47 J	<0.77
Diethyl phthalate	--	--	NA	<76	<38	NA	NA	NA	NA	NA	<1.6	<0.77
Dimethyl phthalate	--	--	NA	<76	<38	NA	NA	NA	NA	NA	<1.6	<0.77
Di-n-butyl phthalate	--	--	NA	320	150	NA	NA	NA	NA	NA	<1.6	<0.77
Di-n-octyl phthalate	--	--	NA	<76	<38	NA	NA	NA	NA	NA	<1.6	<0.77
Fluoranthene	1,000	500	NA	<76	5.7 J	NA	NA	NA	NA	NA	18	1.7
Fluorene	1,000	500	NA	<76	<38	NA	NA	NA	NA	NA	0.76 J	0.11 J
Indeno(1,2,3-cd)pyrene	11	5.6	NA	<76	<38	NA	NA	NA	NA	NA	3.5	1.9
Isophorone	--	--	NA	<76	<38	NA	NA	NA	NA	NA	<1.6	<0.77
Naphthalene	1,000	500	NA	<76	7.6 J	NA	NA	NA	NA	NA	0.46 J	<0.77
Pentachlorophenol	55	6.7	NA	<370	<190	NA	NA	NA	NA	NA	<7.6	<3.8
Phenanthrene	1,000	500	NA	<76	<38	NA	NA	NA	NA	NA	8.5	1.1
Phenol	1,000	500	NA	<76	<38	NA	NA	NA	NA	NA	<1.6	<0.77
Pyrene	1,000	500	NA	<76	6.2 J	NA	NA	NA	NA	NA	10	1.7
Total Carcinogenic PAHs	--	--	NA	ND	ND	NA	NA	NA	NA	NA	29 J	9.9 J
Total TCL SVOCs	--	--	NA	910	470 J	NA	NA	NA	NA	NA	76 J	18 J

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	P1-S12		P1-S13				P1-S14		
			4 - 4.5 01/31/06	6 - 6.5 05/03/06	0 - 0.2 01/31/06	2 - 2.5 01/31/06	4 - 4.5 01/31/06	6 - 6.5 05/03/06	0 - 0.2 01/31/06	2 - 2.5 01/31/06	4 - 4.5 01/31/06
<b>Data Validation Complete</b>											
<b>Soil Removed Via 2009 ICM</b>			<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>
<b>Soil Removal Via Previous ICM</b>											
<b>VOCs</b>											
4-Methyl-2-pentanone (MIBK)	--	--	<6.0	<0.012	<4.9	<0.59	<6.5	<0.056	<5.9 [<14]	<6.7	<2.6
2-Butanone (MEK)	1,000	500	<6.0	<0.012	<4.9	<0.59	<6.5	<0.056	<5.9 [<14]	<6.7	<2.6
Bromomethane	--	--	<6.0	<0.0062	<4.9	<0.59	<6.5	<0.028	<5.9 [<14]	<6.7	<2.6
2-Hexanone	--	--	<6.0	<0.012	<4.9	<0.59	<6.5	<0.056	<5.9 [<14]	<6.7	<2.6
Acetone	1,000	500	1.9 J	0.0078 JB	<12	0.33 J	<16	0.99 B	2.7 J [4.9 J]	<17	2.0 J
Benzene	89	44	<6.0	<0.0062	<4.9	<0.59	<6.5	<0.028	<5.9 [<14]	<6.7	<2.6
Carbon disulfide	--	--	<6.0	<0.0062	<4.9	<0.59	<6.5	<0.028	<5.9 [<14]	<6.7	<2.6
Chlorobenzene	1,000	500	<6.0	<0.0062	<4.9	<0.59	<6.5	<0.028	<5.9 [<14]	<6.7	<2.6
Chloroform	700	350	<6.0	<0.0062	<4.9	<0.59	<6.5	<0.028	<5.9 [<14]	<6.7	<2.6
cis-1,2-Dichloroethene	1,000	500	1.7 J	0.013	13	0.85	18	0.056	23 [42]	66	31
Ethylbenzene	780	--	<6.0	<0.0062	<4.9	0.17 J	<6.5	<0.028	<5.9 [<14]	<6.7	<2.6
Tetrachloroethene	300	150	<b>170</b>	0.097	130	3.1	<b>160</b>	0.064	<b>160 [290]</b>	130	100
Methylene chloride	1,000	500	0.22 J	0.0053 JB	<4.9	0.17 J	0.29 J	0.042 JB	1.9 J [12 J]	<6.7	0.21 J
Toluene	1,000	500	<6.0	<0.0062	<4.9	1.3	<6.5	<0.028	<5.9 [<14]	<6.7	<2.6
Styrene	--	--	<6.0	<0.0062	<4.9	<0.59	<6.5	<0.028	<5.9 [<14]	<6.7	<2.6
trans-1,2-Dichloroethene	1,000	500	<6.0	<0.0062	<4.9	<0.59	0.37 J	<0.028	<5.9 [<14]	3.1 J	1.7 J
Trichloroethene	400	200	5.7 J	0.0079	6.9	0.29 J	8.3	<0.028	8.4 [15]	15	8.2
Vinyl chloride	27	13	<6.0	<0.0062	<4.9	<0.59	0.22 J	<0.028	<5.9 [<14]	6.0 J	6.6
Xylenes (total)	1,000	500	<6.0	<0.0062	<4.9	<0.59	<6.5	<0.028	<5.9 [<14]	<6.7	3.8
Total TCL VOCs	--	--	180 J	0.13 J	150	6.2 J	190 J	1.2 J	200 J [360 J]	220 J	150 J
<b>SVOCs</b>											
1,2,4-Trichlorobenzene	--	--	NA	NA	<0.39	<19	NA	NA	<3.9 [<0.44]	<1.8	NA
2,4-Dimethylphenol	--	--	NA	NA	<0.39	<19	NA	NA	<3.9 [0.24 J]	<1.8	NA
2-Methylnaphthalene	--	--	NA	NA	0.10 J	<19	NA	NA	<3.9 [<0.44]	<1.8	NA
2-Methylphenol	1,000	500	NA	NA	0.37 J	<19	NA	NA	<3.9 [0.30 J]	<1.8	NA
4-Methylphenol	1,000	500	NA	NA	1.1	<19	NA	NA	<3.9 [0.96]	<1.8	NA
4-Nitroaniline	--	--	NA	NA	<0.77	<39	NA	NA	<7.8 [<0.88]	<3.5	NA
Acenaphthene	1,000	500	NA	NA	0.28 J	8.4 J	NA	NA	<3.9 [<0.44]	<1.8	NA
Acenaphthylene	1,000	500	NA	NA	<0.39	<19	NA	NA	<3.9 [<0.44]	<1.8	NA
Anthracene	1,000	500	NA	NA	0.57	12 J	NA	NA	<3.9 [<0.44]	<1.8	NA
Benzo(a)anthracene	11	5.6	NA	NA	1.5	<b>38</b>	NA	NA	<3.9 [0.14 J]	0.31 J	NA
Benzo(a)pyrene	1.1	1	NA	NA	<b>1.4</b>	<b>35</b>	NA	NA	<b>1.2 J [0.16 J]</b>	0.22 J	NA
Benzo(b)fluoranthene	11	5.6	NA	NA	1.3	<b>32</b>	NA	NA	1.2 J [0.16 J]	<1.8	NA
Benzo(ghi)perylene	1,000	500	NA	NA	1.0	30	NA	NA	1.3 J [0.11 J]	<1.8	NA
Benzo(k)fluoranthene	110	56	NA	NA	0.96	26	NA	NA	0.99 J [0.085 J]	<1.8	NA
Benzoic acid	--	--	NA	NA	<1.9	<94	NA	NA	<19 [<2.1]	<8.6	NA
Bis(2-ethylhexyl)phthalate	--	--	NA	NA	2.9	5.7 J	NA	NA	36 [0.98]	13	NA
Butyl benzyl phthalate	--	--	NA	NA	<0.39	<19	NA	NA	<3.9 [<0.44]	<1.8	NA
Carbazole	--	--	NA	NA	0.28 J	9.0 J	NA	NA	<3.9 [<0.44]	<1.8	NA
Chrysene	110	56	NA	NA	2.2	44	NA	NA	<3.9 [0.37 J]	0.49 J	NA
Dibenz(a,h)anthracene	1.1	0.56	NA	NA	0.37 J	<b>10 J</b>	NA	NA	<3.9 [<0.44]	<1.8	NA
Dibenzofuran	1,000	350	NA	NA	0.13 J	<19	NA	NA	<3.9 [<0.44]	<1.8	NA
Diethyl phthalate	--	--	NA	NA	<0.39	<19	NA	NA	<3.9 [<0.44]	<1.8	NA
Dimethyl phthalate	--	--	NA	NA	<0.39	<19	NA	NA	<3.9 [<0.44]	<1.8	NA
Di-n-butyl phthalate	--	--	NA	NA	1.4	<19	NA	NA	13 [0.34 J]	6.6	NA
Di-n-octyl phthalate	--	--	NA	NA	<0.39	<19	NA	NA	<3.9 [<0.44]	<1.8	NA
Fluoranthene	1,000	500	NA	NA	4.6	100	NA	NA	4.5 [0.34 J]	0.86 J	NA
Fluorene	1,000	500	NA	NA	0.23 J	6.5 J	NA	NA	<3.9 [<0.44]	<1.8	NA
Indeno(1,2,3-cd)pyrene	11	5.6	NA	NA	0.94	<b>29</b>	NA	NA	1.1 J [0.079 J]	<1.8	NA
Isophorone	--	--	NA	NA	<0.39	<19	NA	NA	<3.9 [<0.44]	<1.8	NA
Naphthalene	1,000	500	NA	NA	0.11 J	<19	NA	NA	<3.9 [<0.44]	<1.8	NA
Pentachlorophenol	55	6.7	NA	NA	<1.9	<94	NA	NA	<19 [<2.1]	<8.6	NA
Phenanthrene	1,000	500	NA	NA	2.2	62	NA	NA	1.8 J [0.31 J]	0.81 J	NA
Phenol	1,000	500	NA	NA	0.53	<19	NA	NA	1.2 J [0.56]	16	NA
Pyrene	1,000	500	NA	NA	3.0	68	NA	NA	3.1 J [0.35 J]	0.71 J	NA
Total Carcinogenic PAHs	--	--	NA	NA	8.7 J	210 J	NA	NA	4.5 J [0.99 J]	1.0 J	NA
Total TCL SVOCs	--	--	NA	NA	28 J	520 J	NA	NA	65 J [5.5 J]	39 J	NA

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	P1-S14	P1-S15			P1-S16			P1-S17	
			6 - 6.5 05/03/06	0 - 0.2 01/31/06	2 - 2.5 01/31/06	4 - 4.5 01/31/06	0 - 0.2 01/31/06	2 - 2.5 01/31/06	4 - 4.5 01/31/06	0 - 0.2 05/03/06	4 - 4.5 05/03/06
Data Validation Complete											
Soil Removed Via 2009 ICM				X	X		X	X		X	
Soil Removal Via Previous ICM											
<b>VOCs</b>											
4-Methyl-2-pentanone (MIBK)	--	--	<0.062	<2.3	<2.3	0.072	<0.058	<6.1	0.063	<0.010	<0.010
2-Butanone (MEK)	1,000	500	<0.062	<2.3	<2.3	<0.057	<0.058	<6.1	<0.058	<0.010	<0.010
Bromomethane	--	--	<0.031	<2.3	<2.3	<0.029	<0.029	<6.1	<0.029	<0.0052	<0.0051
2-Hexanone	--	--	<0.062	<2.3	<2.3	<0.057	<0.058	<6.1	<0.058	<0.010	<0.010
Acetone	1,000	500	0.072 JB	1.9 J	2.3 J	<0.11	0.044 J	2.4 J	0.48	0.0072 JB	0.0066 JB
Benzene	89	44	<0.031	<2.3	<2.3	<0.029	<0.029	<6.1	<0.029	<0.0052	<0.0051
Carbon disulfide	--	--	0.0086 J	<2.3	<2.3	<0.029	<0.029	<6.1	<0.029	<0.0052	<0.0051
Chlorobenzene	1,000	500	0.013 J	<2.3	<2.3	<0.029	<0.029	<6.1	<0.029	<0.0052	<0.0051
Chloroform	700	350	<0.031	<2.3	<2.3	<0.029	<0.029	<6.1	<0.029	<0.0052	<0.0051
cis-1,2-Dichloroethene	1,000	500	0.77	59	62	0.11	0.062	45	0.011 J	<0.0052	<0.0051
Ethylbenzene	780	--	<0.031	<2.3	<2.3	<0.029	<0.029	<6.1	<0.029	<0.0052	<0.0051
Tetrachloroethene	300	150	0.96	41	43	0.049	0.0080 J	13	0.098	0.0013 J	<0.0051
Methylene chloride	1,000	500	0.039 JB	<2.3	0.56 J	0.050 J	0.038 J	2.4 J	0.045 J	0.0062 JB	0.0053 JB
Toluene	1,000	500	0.0076 J	<2.3	<2.3	<0.029	<0.029	<6.1	<0.029	<0.0052	<0.0051
Styrene	--	--	<0.031	<2.3	<2.3	<0.029	<0.029	<6.1	<0.029	<0.0052	<0.0051
trans-1,2-Dichloroethene	1,000	500	0.024 J	3.7	3.5	0.0059 J	<0.029	2.7 J	<0.029	<0.0052	<0.0051
Trichloroethene	400	200	0.061	10	12	0.0056 J	<0.029	4.2 J	<0.029	<0.0052	<0.0051
Vinyl chloride	27	13	<0.031	1.6 J	1.7 J	<0.029	<0.029	<6.1	<0.029	<0.0052	<0.0051
Xylenes (total)	1,000	500	<0.031	<2.3	<2.3	<0.029	<0.029	<6.1	<0.029	<0.0052	<0.0051
Total TCL VOCs	--	--	2.0 J	120 J	130 J	0.29 J	0.15 J	70 J	0.70 J	0.015 J	0.012 J
<b>SVOCs</b>											
1,2,4-Trichlorobenzene	--	--	NA	<76	<38	NA	<19	<39	NA	NA	NA
2,4-Dimethylphenol	--	--	NA	<76	<38	NA	<19	<39	NA	NA	NA
2-Methylnaphthalene	--	--	NA	<76	<38	NA	<19	<39	NA	NA	NA
2-Methylphenol	1,000	500	NA	<76	<38	NA	<19	<39	NA	NA	NA
4-Methylphenol	1,000	500	NA	<76	<38	NA	<19	<39	NA	NA	NA
4-Nitroaniline	--	--	NA	<150	<76	NA	<37	<79	NA	NA	NA
Acenaphthene	1,000	500	NA	<76	<38	NA	<19	<39	NA	NA	NA
Acenaphthylene	1,000	500	NA	<76	<38	NA	<19	<39	NA	NA	NA
Anthracene	1,000	500	NA	<76	<38	NA	<19	<39	NA	NA	NA
Benzo(a)anthracene	11	5.6	NA	<76	<38	NA	<19	<39	NA	NA	NA
Benzo(a)pyrene	1.1	1	NA	<76	<38	NA	<19	<39	NA	NA	NA
Benzo(b)fluoranthene	11	5.6	NA	<76	<38	NA	<19	<39	NA	NA	NA
Benzo(ghi)perylene	1,000	500	NA	<76	<38	NA	<19	<39	NA	NA	NA
Benzo(k)fluoranthene	110	56	NA	<76	<38	NA	<19	<39	NA	NA	NA
Benzoic acid	--	--	NA	<370	<180	NA	<91	<190	NA	NA	NA
Bis(2-ethylhexyl)phthalate	--	--	NA	1,000	470	NA	170	590	NA	NA	NA
Butyl benzyl phthalate	--	--	NA	<76	<38	NA	<19	<39	NA	NA	NA
Carbazole	--	--	NA	<76	<38	NA	<19	<39	NA	NA	NA
Chrysene	110	56	NA	<76	<38	NA	<19	<39	NA	NA	NA
Dibenz(a,h)anthracene	1.1	0.56	NA	<76	<38	NA	<19	<39	NA	NA	NA
Dibenzofuran	1,000	350	NA	<76	<38	NA	<19	<39	NA	NA	NA
Diethyl phthalate	--	--	NA	<76	<38	NA	<19	<39	NA	NA	NA
Dimethyl phthalate	--	--	NA	<76	<38	NA	<19	<39	NA	NA	NA
Di-n-butyl phthalate	--	--	NA	860	520	NA	100	400	NA	NA	NA
Di-n-octyl phthalate	--	--	NA	<76	<38	NA	<19	<39	NA	NA	NA
Fluoranthene	1,000	500	NA	<76	<38	NA	<19	<39	NA	NA	NA
Fluorene	1,000	500	NA	<76	<38	NA	<19	<39	NA	NA	NA
Indeno(1,2,3-cd)pyrene	11	5.6	NA	<76	<38	NA	<19	<39	NA	NA	NA
Isophorone	--	--	NA	<76	<38	NA	<19	<39	NA	NA	NA
Naphthalene	1,000	500	NA	<76	<38	NA	<19	<39	NA	NA	NA
Pentachlorophenol	55	6.7	NA	<370	<180	NA	<91	<190	NA	NA	NA
Phenanthrene	1,000	500	NA	<76	<38	NA	<19	<39	NA	NA	NA
Phenol	1,000	500	NA	<76	<38	NA	<19	<39	NA	NA	NA
Pyrene	1,000	500	NA	<76	<38	NA	<19	<39	NA	NA	NA
Total Carcinogenic PAHs	--	--	NA	ND	ND	NA	ND	ND	NA	NA	NA
Total TCL SVOCs	--	--	NA	1,900	990	NA	270	990	NA	NA	NA

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	P1-S18		P1-S19		P1-S20	
			0 - 0.2 05/03/06	4 - 4.5 05/03/06	0 - 0.2 05/03/06	4 - 4.5 05/03/06	0 - 0.2 05/03/06	4 - 4.5 05/03/06
Data Validation Complete								
Soil Removed Via 2009 ICM			X		X		X	
Soil Removal Via Previous ICM								
<b>VOCs</b>								
4-Methyl-2-pentanone (MIBK)	--	--	<0.011 [ <0.011]	<0.011	<0.011	<0.011	<0.012 [ <0.011]	<0.011
2-Butanone (MEK)	1,000	500	<0.011 [ <0.011]	<0.011	<0.011	<0.011	<0.012 [ <0.011]	<0.011
Bromomethane	--	--	<0.0053 [ <0.0053]	<0.0053	<0.0054	<0.0053	<0.0058 [ <0.0057]	<0.0054
2-Hexanone	--	--	<0.011 [ <0.011]	<0.011	<0.011	<0.011	<0.012 [ <0.011]	<0.011
Acetone	1,000	500	0.025 B [0.0068 J]	0.0073 JB	0.0073 JB	0.0058 JB	0.0089 JB [0.0078 J]	0.0077 JB
Benzene	89	44	<0.0053 [ <0.0053]	<0.0053	<0.0054	<0.0053	<0.0058 [ <0.0057]	<0.0054
Carbon disulfide	--	--	<0.0053 [ <0.0053]	<0.0053	<0.0054	<0.0053	<0.0058 [ <0.0057]	<0.0054
Chlorobenzene	1,000	500	<0.0053 [ <0.0053]	<0.0053	<0.0054	<0.0053	<0.0058 [ <0.0057]	<0.0054
Chloroform	700	350	<0.0053 [ <0.0053]	<0.0053	<0.0054	<0.0053	<0.0058 [ <0.0057]	<0.0054
cis-1,2-Dichloroethene	1,000	500	<0.0053 [ <0.0053]	<0.0053	0.0051 J	0.010	<0.0058 [ <0.0057]	<0.0054
Ethylbenzene	780	--	<0.0053 [ <0.0053]	<0.0053	<0.0054	<0.0053	<0.0058 [ <0.0057]	<0.0054
Tetrachloroethene	300	150	0.080 [0.029]	0.020	0.032	0.044	0.0073 [0.0071]	<0.0054
Methylene chloride	1,000	500	0.0058 JB [0.0037 JB]	0.0057 JB	0.0064 JB	0.0066 JB	0.0077 JB [0.0038 JB]	0.0066 JB
Toluene	1,000	500	<0.0053 [ <0.0053]	<0.0053	<0.0054	<0.0053	<0.0058 [ <0.0057]	<0.0054
Styrene	--	--	<0.0053 [ <0.0053]	<0.0053	<0.0054	<0.0053	<0.0058 [ <0.0057]	<0.0054
trans-1,2-Dichloroethene	1,000	500	<0.0053 [ <0.0053]	<0.0053	<0.0054	<0.0053	<0.0058 [ <0.0057]	<0.0054
Trichloroethene	400	200	0.0021 J [0.0080 JM]	<0.0053	0.0032 J	0.0056	<0.0058 [ <0.0057]	<0.0054
Vinyl chloride	27	13	<0.0053 [ <0.0053]	<0.0053	<0.0054	<0.0053	<0.0058 [ <0.0057]	<0.0054
Xylenes (total)	1,000	500	<0.0053 [ <0.0053]	<0.0053	<0.0054	<0.0053	<0.0058 [ <0.0057]	<0.0054
Total TCL VOCs	--	--	0.11 J [0.040 J]	0.033 J	0.054 J	0.072 J	0.024 J [0.019 J]	0.014 J
<b>SVOCs</b>								
1,2,4-Trichlorobenzene	--	--	<0.70 [ <0.34]	NA	NA	NA	<0.37 [ <0.37]	NA
2,4-Dimethylphenol	--	--	<0.70 [ <0.34]	NA	NA	NA	<0.37 [ <0.37]	NA
2-Methylnaphthalene	--	--	<0.70 [0.059 J]	NA	NA	NA	<0.37 [ <0.37]	NA
2-Methylphenol	1,000	500	<0.70 [ <0.34]	NA	NA	NA	<0.37 [ <0.37]	NA
4-Methylphenol	1,000	500	<0.70 [ <0.34]	NA	NA	NA	<0.37 [ <0.37]	NA
4-Nitroaniline	--	--	<1.4 [ <0.68]	NA	NA	NA	<0.75 [ <0.74]	NA
Acenaphthene	1,000	500	<0.70 [0.18 J]	NA	NA	NA	<0.37 [0.16 J]	NA
Acenaphthylene	1,000	500	<0.70 [ <0.34]	NA	NA	NA	<0.37 [ <0.37]	NA
Anthracene	1,000	500	0.15 J [0.34]	NA	NA	NA	0.14 J [0.29 J]	NA
Benzo(a)anthracene	11	5.6	0.59 J [0.74]	NA	NA	NA	0.75 [1.2]	NA
Benzo(a)pyrene	1.1	1	0.60 J [0.65]	NA	NA	NA	<b>0.75 [1.1]</b>	NA
Benzo(b)fluoranthene	11	5.6	0.78 [0.66]	NA	NA	NA	0.98 [1.6]	NA
Benzo(ghi)perylene	1,000	500	0.51 J [0.60]	NA	NA	NA	0.77 [1.1]	NA
Benzo(k)fluoranthene	110	56	0.25 J [0.29 J]	NA	NA	NA	0.45 [0.60]	NA
Benzoic acid	--	--	<3.4 [ <1.6]	NA	NA	NA	<1.8 [ <1.8]	NA
Bis(2-ethylhexyl)phthalate	--	--	4.4 B [5.0]	NA	NA	NA	0.64 B [0.49]	NA
Butyl benzyl phthalate	--	--	<0.70 [ <0.34]	NA	NA	NA	<0.37 [ <0.37]	NA
Carbazole	--	--	<0.70 [0.14 J]	NA	NA	NA	0.11 J [0.20 J]	NA
Chrysene	110	56	0.70 J [0.77]	NA	NA	NA	0.85 [1.4]	NA
Dibenz(a,h)anthracene	1.1	0.56	0.11 J [0.14 JM]	NA	NA	NA	0.18 J [0.21 JM]	NA
Dibenzofuran	1,000	350	<0.70 [0.096 J]	NA	NA	NA	<0.37 [0.070 J]	NA
Diethyl phthalate	--	--	<0.70 [ <0.34]	NA	NA	NA	<0.37 [ <0.37]	NA
Dimethyl phthalate	--	--	<0.70 [ <0.34]	NA	NA	NA	<0.37 [ <0.37]	NA
Di-n-butyl phthalate	--	--	0.24 J [0.37]	NA	NA	NA	<0.37 [0.098 J]	NA
Di-n-octyl phthalate	--	--	<0.70 [ <0.34]	NA	NA	NA	<0.37 [ <0.37]	NA
Fluoranthene	1,000	500	1.0 [1.3]	NA	NA	NA	1.5 [2.3]	NA
Fluorene	1,000	500	<0.70 [0.16 J]	NA	NA	NA	0.050 J [0.13 J]	NA
Indeno(1,2,3-cd)pyrene	11	5.6	0.45 J [0.60]	NA	NA	NA	0.69 [1.0]	NA
Isophorone	--	--	1.3 H [0.12 JH]	NA	NA	NA	<0.37 [ <0.37]	NA
Naphthalene	1,000	500	<0.70 [ <0.34]	NA	NA	NA	<0.37 [0.070 J]	NA
Pentachlorophenol	55	6.7	<3.4 [ <1.6]	NA	NA	NA	<1.8 [ <1.8]	NA
Phenanthrene	1,000	500	0.55 J [1.2]	NA	NA	NA	0.69 [1.4]	NA
Phenol	1,000	500	<0.70 [ <0.34]	NA	NA	NA	<0.37 [ <0.37]	NA
Pyrene	1,000	500	1.3 [1.4]	NA	NA	NA	1.4 [2.4]	NA
Total Carcinogenic PAHs	--	--	3.5 J [3.9 J]	NA	NA	NA	4.7 J [7.1 J]	NA
Total TCL SVOCs	--	--	13 J [15 J]	NA	NA	NA	10 J [16 J]	NA



**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	P1-S21		P1-S22		P1-S23		P1-S24	
			0 - 0.2 05/03/06	4 - 4.5 05/03/06	0 - 0.2 05/03/06	4 - 4.5 05/03/06	0 - 0.2 05/03/06	4 - 4.5 05/03/06	0 - 0.2 05/03/06	4 - 4.5 05/03/06
Data Validation Complete										
Soil Removed Via 2009 ICM			X		X					
Soil Removal Via Previous ICM										
<b>VOCs</b>										
4-Methyl-2-pentanone (MIBK)	--	--	<0.011	<0.010	<0.056 [ $<0.58$ ]	<0.051	<0.011	<0.011	<0.011	<0.011
2-Butanone (MEK)	1,000	500	<0.011	<0.010	<0.056 [ $<0.58$ ]	<0.051	<0.011	<0.011	<0.011	<0.011
Bromomethane	--	--	<0.0057	<0.0052	<0.028 [ $<0.58$ ]	<0.025	<0.0053	<0.0054	<0.0054	<0.0057
2-Hexanone	--	--	<0.011	<0.010	<0.056 [ $<0.58$ ]	<0.051	<0.011	<0.011	<0.011	<0.011
Acetone	1,000	500	0.0045 JB	0.0070 JB	0.95 B [2.1]	0.46 B	0.0079 JB	0.015 JB	0.021 JB	0.013 JB
Benzene	89	44	<0.0057	<0.0052	<0.028 [ $<0.58$ ]	<0.025	<0.0053	<0.0054	<0.0054	<0.0057
Carbon disulfide	--	--	<0.0057	<0.0052	<0.028 [ $<0.58$ ]	<0.025	<0.0053	<0.0054	<0.0054	<0.0057
Chlorobenzene	1,000	500	<0.0057	<0.0052	<0.028 [ $<0.58$ ]	<0.025	<0.0053	<0.0054	<0.0054	<0.0057
Chloroform	700	350	<0.0057	<0.0052	<0.028 [ $<0.58$ ]	<0.025	<0.0053	<0.0054	<0.0054	<0.0057
cis-1,2-Dichloroethene	1,000	500	<0.0057	<0.0052	<0.028 [ $<0.58$ ]	<0.025	<0.0053	<0.0054	<0.0054	<0.0057
Ethylbenzene	780	--	<0.0057	<0.0052	<0.028 [ $<0.58$ ]	<0.025	<0.0053	<0.0054	<0.0054	<0.0057
Tetrachloroethene	300	150	0.0045 J	<0.0052	<0.028 [ $<0.58$ ]	<0.025	0.0053 J	<0.0054	0.026	0.075
Methylene chloride	1,000	500	0.0099 JB	0.0081 JB	0.038 JB [ $<0.58$ ]	0.029 JB	0.0067 JB	0.0071 JB	0.0098 JB	0.0082 JB
Toluene	1,000	500	<0.0057	<0.0052	<0.028 [ $<0.58$ ]	<0.025	<0.0053	<0.0054	<0.0054	<0.0057
Styrene	--	--	<0.0057	<0.0052	<0.028 [ $<0.58$ ]	<0.025	<0.0053	<0.0054	<0.0054	<0.0057
trans-1,2-Dichloroethene	1,000	500	<0.0057	<0.0052	<0.028 [ $<0.58$ ]	<0.025	<0.0053	<0.0054	<0.0054	<0.0057
Trichloroethene	400	200	<0.0057	<0.0052	<0.028 [ $<0.58$ ]	<0.025	<0.0053	<0.0054	<0.0054	0.0018 J
Vinyl chloride	27	13	<0.0057	<0.0052	<0.028 [ $<0.58$ ]	<0.025	<0.0053	<0.0054	<0.0054	<0.0057
Xylenes (total)	1,000	500	<0.0057	<0.0052	<0.028 [ $<0.58$ ]	<0.025	<0.0053	<0.0054	<0.0054	<0.0057
Total TCL VOCs	--	--	0.019 J	0.015 J	0.99 J [2.1]	0.49 J	0.020 J	0.022 J	0.057 J	0.098 J
<b>SVOCs</b>										
1,2,4-Trichlorobenzene	--	--	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
2,4-Dimethylphenol	--	--	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
2-Methylnaphthalene	--	--	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
2-Methylphenol	1,000	500	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
4-Methylphenol	1,000	500	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
4-Nitroaniline	--	--	NA	NA	<0.72 [ $<0.75$ ]	NA	NA	NA	NA	NA
Acenaphthene	1,000	500	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
Acenaphthylene	1,000	500	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
Anthracene	1,000	500	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
Benzo(a)anthracene	11	5.6	NA	NA	0.29 J [0.10 J]	NA	NA	NA	NA	NA
Benzo(a)pyrene	1.1	1	NA	NA	0.27 J [0.098 J]	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	11	5.6	NA	NA	0.40 [0.13 J]	NA	NA	NA	NA	NA
Benzo(ghi)perylene	1,000	500	NA	NA	0.30 J [0.071 J]	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	110	56	NA	NA	0.17 J [0.054 J]	NA	NA	NA	NA	NA
Benzoic acid	--	--	NA	NA	<1.7 [ $<1.8$ ]	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	--	--	NA	NA	0.76 B [0.057 J]	NA	NA	NA	NA	NA
Butyl benzyl phthalate	--	--	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
Carbazole	--	--	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
Chrysene	110	56	NA	NA	0.37 [0.10 J]	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	1.1	0.56	NA	NA	0.069 J [ $<0.38$ ]	NA	NA	NA	NA	NA
Dibenzofuran	1,000	350	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
Diethyl phthalate	--	--	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
Dimethyl phthalate	--	--	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
Di-n-butyl phthalate	--	--	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
Di-n-octyl phthalate	--	--	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
Fluoranthene	1,000	500	NA	NA	0.70 [0.22 J]	NA	NA	NA	NA	NA
Fluorene	1,000	500	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	11	5.6	NA	NA	0.27 J [0.063 J]	NA	NA	NA	NA	NA
Isophorone	--	--	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
Naphthalene	1,000	500	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
Pentachlorophenol	55	6.7	NA	NA	<1.7 [ $<1.8$ ]	NA	NA	NA	NA	NA
Phenanthrene	1,000	500	NA	NA	0.18 J [0.11 J]	NA	NA	NA	NA	NA
Phenol	1,000	500	NA	NA	<0.36 [ $<0.38$ ]	NA	NA	NA	NA	NA
Pyrene	1,000	500	NA	NA	0.60 [0.18 J]	NA	NA	NA	NA	NA
Total Carcinogenic PAHs	--	--	NA	NA	1.8 J [0.55 J]	NA	NA	NA	NA	NA
Total TCL SVOCs	--	--	NA	NA	4.4 J [1.2 J]	NA	NA	NA	NA	NA

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	P1-S25				P1-S26		P1-S27	
			0 - 0.2 05/03/06	2 - 2.5 05/03/06	4 - 4.5 05/03/06	6 - 6.5 05/03/06	0 - 0.2 05/03/06	4 - 4.5 05/03/06	0 - 0.2 05/03/06	4 - 4.5 05/03/06
Data Validation Complete										
Soil Removed Via 2009 ICM			X							
Soil Removal Via Previous ICM										
<b>VOCs</b>										
4-Methyl-2-pentanone (MIBK)	--	--	<0.012 [ <u>&lt;0.012</u> ]	NA	<0.012	NA	<0.011	<0.011	<0.010	<0.011
2-Butanone (MEK)	1,000	500	<0.012 [ <u>&lt;0.012</u> ]	NA	<0.012	NA	<0.011	<0.011	<0.010	<0.011
Bromomethane	--	--	<0.0062 [ <u>&lt;0.0059</u> ]	NA	<0.0061	NA	<0.0054	<0.0056	<0.0052	<0.0056
2-Hexanone	--	--	<0.012 [ <u>&lt;0.012</u> ]	NA	<0.012	NA	<0.011	<0.011	<0.010	<0.011
Acetone	1,000	500	0.011 JB [0.0061 J]	NA	0.11 B	NA	0.0055 JB	0.015 JB	0.0068 JB	0.0050 JB
Benzene	89	44	<0.0062 [ <u>&lt;0.0059</u> ]	NA	<0.0061	NA	<0.0054	<0.0056	<0.0052	<0.0056
Carbon disulfide	--	--	<0.0062 [ <u>&lt;0.0059</u> ]	NA	<0.0061	NA	<0.0054	<0.0056	<0.0052	<0.0056
Chlorobenzene	1,000	500	<0.0062 [ <u>&lt;0.0059</u> ]	NA	<0.0061	NA	<0.0054	<0.0056	<0.0052	<0.0056
Chloroform	700	350	<0.0062 [ <u>&lt;0.0059</u> ]	NA	<0.0061	NA	<0.0054	<0.0056	<0.0052	<0.0056
cis-1,2-Dichloroethene	1,000	500	0.030 [0.013]	NA	0.0068	NA	<0.0054	<0.0056	<0.0052	<0.0056
Ethylbenzene	780	--	<0.0062 [ <u>&lt;0.0059</u> ]	NA	<0.0061	NA	<0.0054	<0.0056	<0.0052	<0.0056
Tetrachloroethene	300	150	0.045 [0.031]	NA	0.0035 J	NA	0.0013 J	0.022	0.0038 J	0.030
Methylene chloride	1,000	500	0.020 JB [0.0033 JB]	NA	0.0081 JB	NA	0.0090 JB	0.038 B	0.0073 JB	0.0085 JB
Toluene	1,000	500	<0.0062 [ <u>&lt;0.0059</u> ]	NA	<0.0061	NA	<0.0054	<0.0056	<0.0052	<0.0056
Styrene	--	--	<0.0062 [ <u>&lt;0.0059</u> ]	NA	<0.0061	NA	<0.0054	<0.0056	<0.0052	<0.0056
trans-1,2-Dichloroethene	1,000	500	0.0010 J [ <u>&lt;0.0059</u> ]	NA	<0.0061	NA	<0.0054	<0.0056	<0.0052	<0.0056
Trichloroethene	400	200	0.0053 J [0.0030 J]	NA	<0.0061	NA	<0.0054	0.00077 J	<0.0052	<0.0056
Vinyl chloride	27	13	<0.0062 [ <u>&lt;0.0059</u> ]	NA	<0.0061	NA	<0.0054	<0.0056	<0.0052	<0.0056
Xylenes (total)	1,000	500	<0.0062 [ <u>&lt;0.0059</u> ]	NA	<0.0061	NA	<0.0054	<0.0056	<0.0052	<0.0056
Total TCL VOCs	--	--	0.11 J [0.056 J]	NA	0.13 J	NA	0.016 J	0.076 J	0.018 J	0.044 J
<b>SVOCs</b>										
1,2,4-Trichlorobenzene	--	--	<24 [ <u>&lt;3.7</u> ]	<1.4	NA	<0.33	NA	NA	<0.33	NA
2,4-Dimethylphenol	--	--	<24 [ <u>&lt;3.7</u> ]	<1.4	NA	<0.33	NA	NA	<0.33	NA
2-Methylnaphthalene	--	--	<24 [1.0 J]	<1.4	NA	<0.33	NA	NA	0.086 J	NA
2-Methylphenol	1,000	500	<24 [ <u>&lt;3.7</u> ]	<1.4	NA	<0.33	NA	NA	<0.33	NA
4-Methylphenol	1,000	500	<24 [ <u>&lt;3.7</u> ]	<1.4	NA	<0.33	NA	NA	<0.33	NA
4-Nitroaniline	--	--	<49 [ <u>&lt;7.5</u> ]	<2.9	NA	<0.66	NA	NA	<0.65	NA
Acenaphthene	1,000	500	14 J [4.7]	1.2 J	NA	0.097 J	NA	NA	0.34	NA
Acenaphthylene	1,000	500	<24 [ <u>&lt;3.7</u> ]	<1.4	NA	<0.33	NA	NA	<0.33	NA
Anthracene	1,000	500	31 [9.4]	2.9	NA	0.31 J	NA	NA	0.63	NA
Benzo(a)anthracene	11	5.6	<b>74 [26]</b>	<b>10</b>	NA	1.3	NA	NA	2.1	NA
Benzo(a)pyrene	1.1	1	<b>65 [25]</b>	<b>9.6</b>	NA	<b>1.3</b>	NA	NA	<b>1.8</b>	NA
Benzo(b)fluoranthene	11	5.6	<b>71 [31]</b>	<b>12</b>	NA	1.5	NA	NA	2.3	NA
Benzo(ghi)perylene	1,000	500	46 [28]	6.2	NA	1.0	NA	NA	1.4	NA
Benzo(k)fluoranthene	110	56	28 [10]	4.1	NA	0.55	NA	NA	0.85	NA
Benzoic acid	--	--	<120 * [ <u>&lt;18</u> ]	<7.0	NA	<1.6	NA	NA	<1.6 *	NA
Bis(2-ethylhexyl)phthalate	--	--	8.4 JB [10]	1.8 B	NA	0.79 B	NA	NA	0.99 B	NA
Butyl benzyl phthalate	--	--	<24 [ <u>&lt;3.7</u> ]	<1.4	NA	<0.33	NA	NA	<0.33	NA
Carbazole	--	--	14 J [3.8]	1.5	NA	0.22 J	NA	NA	0.44	NA
Chrysene	110	56	<b>66 [26]</b>	<b>9.6</b>	NA	1.4	NA	NA	2.1	NA
Dibenz(a,h)anthracene	1.1	0.56	<b>13 J [<u>&lt;3.7</u>]</b>	<b>1.6</b>	NA	0.27 J	NA	NA	0.36	NA
Dibenzofuran	1,000	350	8.2 J [2.1 J]	0.64 J	NA	0.071 J	NA	NA	0.16 J	NA
Diethyl phthalate	--	--	<24 [ <u>&lt;3.7</u> ]	<1.4	NA	<0.33	NA	NA	<0.33	NA
Dimethyl phthalate	--	--	<24 [ <u>&lt;3.7</u> ]	<1.4	NA	<0.33	NA	NA	<0.33	NA
Di-n-butyl phthalate	--	--	<24 [ <u>&lt;3.7</u> ]	0.23 J	NA	<0.33	NA	NA	0.087 J	NA
Di-n-octyl phthalate	--	--	<24 [ <u>&lt;3.7</u> ]	<1.4	NA	<0.33	NA	NA	<0.33	NA
Fluoranthene	1,000	500	160 [50]	20	NA	2.7	NA	NA	4.3	NA
Fluorene	1,000	500	14 J [4.2]	1.4 JH	NA	0.19 J	NA	NA	0.28 J	NA
Indeno(1,2,3-cd)pyrene	11	5.6	<b>48 [28]</b>	<b>6.3</b>	NA	1.0	NA	NA	1.3	NA
Isophorone	--	--	<24 [ <u>&lt;3.7</u> ]	<1.4	NA	<0.33	NA	NA	<0.33	NA
Naphthalene	1,000	500	8.5 J [1.7 J]	<1.4	NA	<0.33	NA	NA	0.10 J	NA
Pentachlorophenol	55	6.7	<120 [ <u>&lt;18</u> ]	<7.0	NA	<1.6	NA	NA	<1.6	NA
Phenanthrene	1,000	500	110 [33]	12	NA	1.8	NA	NA	2.8	NA
Phenol	1,000	500	<24 [ <u>&lt;3.7</u> ]	<1.4	NA	<0.33	NA	NA	<0.33	NA
Pyrene	1,000	500	110 [44]	15	NA	2.2	NA	NA	3.2	NA
Total Carcinogenic PAHs	--	--	370 J [150]	53	NA	7.3 J	NA	NA	11	NA
Total TCL SVOCs	--	--	890 J [340 J]	120 J	NA	17 J	NA	NA	26 J	NA

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	P1-S28		P1-S29		P1-S30	
			0 - 0.2 05/03/06	4 - 4.5 05/03/06	0 - 0.2 05/03/06	4 - 4.5 05/03/06	0 - 0.2 05/03/06	4 - 4.5 05/03/06
<b>Data Validation Complete</b>								
<b>Soil Removed Via 2009 ICM</b>			<b>X</b>		<b>X</b>		<b>X</b>	
<b>Soil Removal Via Previous ICM</b>								
<b>VOCs</b>								
4-Methyl-2-pentanone (MIBK)	--	--	<0.011	<0.010	<0.011 [ $<0.011$ ]	0.056	<0.011 [ $<0.010$ ]	0.76
2-Butanone (MEK)	1,000	500	<0.011	<0.010	<0.011 [ $<0.011$ ]	0.023	<0.011 [ $<0.010$ ]	<0.62
Bromomethane	--	--	<0.0055	<0.0052	<0.0053 [ $<0.0054$ ]	<0.0059	<0.0053 [ $<0.0052$ ]	<0.62
2-Hexanone	--	--	<0.011	<0.010	<0.011 [ $<0.011$ ]	<0.012	<0.011 [ $<0.010$ ]	<0.62
Acetone	1,000	500	0.0042 JB	0.068 B	0.0083 JB [0.0036 J]	0.13 B	0.0083 JB [0.0058 J]	3.6
Benzene	89	44	<0.0055	<0.0052	<0.0053 [ $<0.0054$ ]	<0.0059	<0.0053 [ $<0.0052$ ]	<0.62
Carbon disulfide	--	--	<0.0055	<0.0052	<0.0053 [ $<0.0054$ ]	0.0014 J	<0.0053 [ $<0.0052$ ]	<0.62
Chlorobenzene	1,000	500	<0.0055	<0.0052	<0.0053 [ $<0.0054$ ]	<0.0059	<0.0053 [ $<0.0052$ ]	<0.62
Chloroform	700	350	<0.0055	<0.0052	<0.0053 [ $<0.0054$ ]	<0.0059	<0.0053 [ $<0.0052$ ]	<0.62
cis-1,2-Dichloroethene	1,000	500	0.0055	0.011	<0.0053 [ $<0.0054$ ]	0.016	<0.0053 [ $<0.0052$ ]	<0.62
Ethylbenzene	780	--	<0.0055	<0.0052	<0.0053 [ $<0.0054$ ]	<0.0059	<0.0053 [ $<0.0052$ ]	<0.62
Tetrachloroethene	300	150	0.018	0.086	<0.0053 [0.0015 J]	0.0010 J	<0.0053 [0.0018 J]	<0.62
Methylene chloride	1,000	500	0.0086 JB	0.0068 JB	0.019 JB [0.0034 JB]	0.010 JB	0.021 JB [0.0031 JB]	0.13 J
Toluene	1,000	500	<0.0055	<0.0052	<0.0053 [ $<0.0054$ ]	<0.0059	<0.0053 [ $<0.0052$ ]	<0.62
Styrene	--	--	<0.0055	<0.0052	<0.0053 [ $<0.0054$ ]	<0.0059	<0.0053 [ $<0.0052$ ]	<0.62
trans-1,2-Dichloroethene	1,000	500	<0.0055	<0.0052	<0.0053 [ $<0.0054$ ]	<0.0059	<0.0053 [ $<0.0052$ ]	<0.62
Trichloroethene	400	200	0.0038 J	0.0096	<0.0053 [ $<0.0054$ ]	<0.0059	<0.0053 [ $<0.0052$ ]	<0.62
Vinyl chloride	27	13	<0.0055	<0.0052	<0.0053 [ $<0.0054$ ]	<0.0059 M	<0.0053 [ $<0.0052$ ]	<0.62
Xylenes (total)	1,000	500	<0.0055	<0.0052	<0.0053 [ $<0.0054$ ]	<0.0059	<0.0053 [ $<0.0052$ ]	<0.62
Total TCL VOCs	--	--	0.040 J	0.18 J	0.027 J [0.0085 J]	0.24 J	0.029 J [0.011 J]	4.5 J
<b>SVOCs</b>								
1,2,4-Trichlorobenzene	--	--	NA	NA	<0.33 [ $<0.35$ ]	NA	<3.5 [ $<0.34$ ]	NA
2,4-Dimethylphenol	--	--	NA	NA	<0.33 [ $<0.35$ ]	NA	<3.5 [ $<0.34$ ]	NA
2-Methylnaphthalene	--	--	NA	NA	<0.33 [ $<0.35$ ]	NA	<3.5 [ $<0.34$ ]	NA
2-Methylphenol	1,000	500	NA	NA	<0.33 [ $<0.35$ ]	NA	<3.5 [ $<0.34$ ]	NA
4-Methylphenol	1,000	500	NA	NA	<0.33 [ $<0.35$ ]	NA	<3.5 [ $<0.34$ ]	NA
4-Nitroaniline	--	--	NA	NA	<0.66 [ $<0.69$ ]	NA	<7.0 [ $<0.68$ ]	NA
Acenaphthene	1,000	500	NA	NA	<0.33 [ $<0.35$ ]	NA	<3.5 [0.13 J]	NA
Acenaphthylene	1,000	500	NA	NA	<0.33 [ $<0.35$ ]	NA	<3.5 [ $<0.34$ ]	NA
Anthracene	1,000	500	NA	NA	<0.33 [0.098 J]	NA	<3.5 [0.23 J]	NA
Benzo(a)anthracene	11	5.6	NA	NA	0.29 J [0.33 J]	NA	<3.5 [0.61]	NA
Benzo(a)pyrene	1.1	1	NA	NA	<0.33 [0.27 J]	NA	<3.5 [0.52]	NA
Benzo(b)fluoranthene	11	5.6	NA	NA	<0.33 [0.41]	NA	<3.5 [0.62]	NA
Benzo(ghi)perylene	1,000	500	NA	NA	0.049 J [0.35]	NA	<3.5 [0.52]	NA
Benzo(k)fluoranthene	110	56	NA	NA	<0.33 [0.13 J]	NA	<3.5 [0.24 J]	NA
Benzoic acid	--	--	NA	NA	<1.6 * [ $<1.7$ ]	NA	<17 * [ $<1.7$ ]	NA
Bis(2-ethylhexyl)phthalate	--	--	NA	NA	3.7 B [0.34 J]	NA	32 B [0.19 J]	NA
Butyl benzyl phthalate	--	--	NA	NA	<0.33 [ $<0.35$ ]	NA	<3.5 [ $<0.34$ ]	NA
Carbazole	--	--	NA	NA	<0.33 [0.061 J]	NA	<3.5 [0.13 J]	NA
Chrysene	110	56	NA	NA	<0.33 [0.34 J]	NA	<3.5 [0.61]	NA
Dibenz(a,h)anthracene	1.1	0.56	NA	NA	<0.33 [0.066 JM]	NA	<3.5 [0.12 JM]	NA
Dibenzofuran	1,000	350	NA	NA	<0.33 [ $<0.35$ ]	NA	<3.5 [0.061 J]	NA
Diethyl phthalate	--	--	NA	NA	<0.33 [ $<0.35$ ]	NA	<3.5 [ $<0.34$ ]	NA
Dimethyl phthalate	--	--	NA	NA	<0.33 [ $<0.35$ ]	NA	<3.5 [ $<0.34$ ]	NA
Di-n-butyl phthalate	--	--	NA	NA	0.33 J [0.052 J]	NA	1.7 J [ $<0.34$ ]	NA
Di-n-octyl phthalate	--	--	NA	NA	<0.33 [ $<0.35$ ]	NA	24 M [ $<0.34$ ]	NA
Fluoranthene	1,000	500	NA	NA	<0.33 [0.63]	NA	<3.5 [1.2]	NA
Fluorene	1,000	500	NA	NA	<0.33 [ $<0.35$ ]	NA	<3.5 [0.11 J]	NA
Indeno(1,2,3-cd)pyrene	11	5.6	NA	NA	0.041 J [0.33 J]	NA	<3.5 [0.54]	NA
Isophorone	--	--	NA	NA	<0.33 [ $<0.35$ ]	NA	<3.5 [ $<0.34$ ]	NA
Naphthalene	1,000	500	NA	NA	<0.33 [ $<0.35$ ]	NA	<3.5 [ $<0.34$ ]	NA
Pentachlorophenol	55	6.7	NA	NA	<1.6 [ $<1.7$ ]	NA	<17 [ $<1.7$ ]	NA
Phenanthrene	1,000	500	NA	NA	0.047 J [0.40]	NA	<3.5 [0.96]	NA
Phenol	1,000	500	NA	NA	<0.33 [ $<0.35$ ]	NA	<3.5 [ $<0.34$ ]	NA
Pyrene	1,000	500	NA	NA	0.14 J [0.61]	NA	<3.5 [1.1]	NA
Total Carcinogenic PAHs	--	--	NA	NA	0.33 J [1.9 J]	NA	ND [3.3 J]	NA
Total TCL SVOCs	--	--	NA	NA	4.6 J [4.4 J]	NA	58 J [7.9 J]	NA

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	P1-S32		P1-S33		P1-S35		P1-S36	
			0 - 0.2 05/03/06	4 - 4.5 05/03/06	0 - 0.2 05/02/06	4 - 4.5 05/02/06	0 - 0.2 05/02/06	4 - 4.5 05/02/06	0 - 0.2 05/02/06	4 - 4.5 05/02/06
<b>Data Validation Complete</b>										
<b>Soil Removed Via 2009 ICM</b>			<b>X</b>							
<b>Soil Removal Via Previous ICM</b>										
<b>VOCs</b>										
4-Methyl-2-pentanone (MIBK)	--	--	<0.010	<0.011	<0.011 [ <u>&lt;0.011</u> ]	<0.011	<0.010	<0.010	<0.011	<0.010
2-Butanone (MEK)	1,000	500	<0.010	<0.011	<0.011 [ <u>&lt;0.011</u> ]	<0.011	<0.010	<0.010	<0.011	<0.010
Bromomethane	--	--	<0.0051	<0.0054	<0.0055 [ <u>&lt;0.0054</u> ]	<0.0055	<0.0052	<0.0052	<0.0054	<0.0052
2-Hexanone	--	--	<0.010	<0.011	<0.011 [ <u>&lt;0.011</u> ]	<0.011	<0.010	<0.010	<0.011	<0.010
Acetone	1,000	500	0.016 JB	0.0094 JB	0.0076 J [ <u>0.0057 J</u> ]	0.0060 J	0.0053 J	0.0057 J	0.0088 J	0.0073 J
Benzene	89	44	<0.0051	<0.0054	<0.0055 [ <u>&lt;0.0054</u> ]	<0.0055	<0.0052	<0.0052	<0.0054	<0.0052
Carbon disulfide	--	--	<0.0051	<0.0054	<0.0055 [ <u>&lt;0.0054</u> ]	<0.0055	<0.0052	<0.0052	<0.0054	<0.0052
Chlorobenzene	1,000	500	<0.0051	<0.0054	<0.0055 [ <u>&lt;0.0054</u> ]	<0.0055	<0.0052	<0.0052	<0.0054	<0.0052
Chloroform	700	350	<0.0051	<0.0054	<0.0055 [ <u>&lt;0.0054</u> ]	<0.0055	<0.0052	<0.0052	<0.0054	<0.0052
cis-1,2-Dichloroethene	1,000	500	<0.0051	<0.0054	<0.0055 [ <u>&lt;0.0054</u> ]	<0.0055	<0.0052	<0.0052	<0.0054	<0.0052
Ethylbenzene	780	--	<0.0051	<0.0054	<0.0055 [ <u>&lt;0.0054</u> ]	<0.0055	<0.0052	<0.0052	<0.0054	<0.0052
Tetrachloroethene	300	150	<0.0051	0.035	0.043 [ <u>0.0069</u> ]	0.016	0.0010 J	<0.0052	0.0019 J	<0.0052
Methylene chloride	1,000	500	0.021 B	0.0079 JB	0.010 JB [ <u>0.0070 JB</u> ]	0.0056 JB	0.0063 JB	0.0068 JB	0.0074 JB	0.0070 JB
Toluene	1,000	500	<0.0051	<0.0054	<0.0055 [ <u>&lt;0.0054</u> ]	<0.0055	<0.0052	<0.0052	<0.0054	<0.0052
Styrene	--	--	<0.0051	<0.0054	<0.0055 [ <u>&lt;0.0054</u> ]	<0.0055	<0.0052	<0.0052	<0.0054	<0.0052
trans-1,2-Dichloroethene	1,000	500	<0.0051	<0.0054	<0.0055 [ <u>&lt;0.0054</u> ]	<0.0055	<0.0052	<0.0052	<0.0054	<0.0052
Trichloroethene	400	200	<0.0051	<0.0054	0.0018 J [ <u>&lt;0.0054</u> ]	<0.0055	<0.0052	<0.0052	<0.0054	<0.0052
Vinyl chloride	27	13	<0.0051	<0.0054	<0.0055 [ <u>&lt;0.0054</u> ]	<0.0055	<0.0052	<0.0052	<0.0054	<0.0052
Xylenes (total)	1,000	500	<0.0051	<0.0054	<0.0055 [ <u>&lt;0.0054</u> ]	<0.0055	<0.0052	<0.0052	<0.0054	<0.0052
Total TCL VOCs	--	--	0.037 J	0.052 J	0.062 J [ <u>0.020 J</u> ]	0.028 J	0.013 J	0.013 J	0.018 J	0.014 J
<b>SVOCs</b>										
1,2,4-Trichlorobenzene	--	--	NA	NA	<1.4 [ <u>&lt;1.8</u> ]	NA	<0.68	NA	NA	NA
2,4-Dimethylphenol	--	--	NA	NA	<1.4 [ <u>&lt;1.8</u> ]	NA	<0.68	NA	NA	NA
2-Methylnaphthalene	--	--	NA	NA	<1.4 [ <u>&lt;1.8</u> ]	NA	<0.68	NA	NA	NA
2-Methylphenol	1,000	500	NA	NA	<1.4 [ <u>&lt;1.8</u> ]	NA	<0.68	NA	NA	NA
4-Methylphenol	1,000	500	NA	NA	<1.4 [ <u>&lt;1.8</u> ]	NA	<0.68	NA	NA	NA
4-Nitroaniline	--	--	NA	NA	<2.8 [ <u>&lt;3.5</u> ]	NA	<1.4	NA	NA	NA
Acenaphthene	1,000	500	NA	NA	0.79 J [ <u>0.64 J</u> ]	NA	0.45 J	NA	NA	NA
Acenaphthylene	1,000	500	NA	NA	<1.4 [ <u>&lt;1.8</u> ]	NA	<0.68	NA	NA	NA
Anthracene	1,000	500	NA	NA	2.2 [ <u>1.4 J</u> ]	NA	0.99	NA	NA	NA
Benzo(a)anthracene	11	5.6	NA	NA	<b>5.7 [3.4]</b>	NA	2.6	NA	NA	NA
Benzo(a)pyrene	1.1	1	NA	NA	<b>5.2 [3.5]</b>	NA	<b>3.3</b>	NA	NA	NA
Benzo(b)fluoranthene	11	5.6	NA	NA	<b>5.7 [4.3]</b>	NA	3.0	NA	NA	NA
Benzo(ghi)perylene	1,000	500	NA	NA	6.5 [3.7]	NA	3.7	NA	NA	NA
Benzo(k)fluoranthene	110	56	NA	NA	1.7 [ <u>1.6 J</u> ]	NA	1.7	NA	NA	NA
Benzoic acid	--	--	NA	NA	<6.8 [ <u>&lt;8.5</u> ]	NA	<3.3	NA	NA	NA
Bis(2-ethylhexyl)phthalate	--	--	NA	NA	8.9 [9.6]	NA	2.3	NA	NA	NA
Butyl benzyl phthalate	--	--	NA	NA	<1.4 [ <u>&lt;1.8</u> ]	NA	<0.68	NA	NA	NA
Carbazole	--	--	NA	NA	0.83 J [ <u>0.68 J</u> ]	NA	0.41 J	NA	NA	NA
Chrysene	110	56	NA	NA	6.2 [3.4]	NA	3.6	NA	NA	NA
Dibenz(a,h)anthracene	1.1	0.56	NA	NA	<b>1.6 [0.88 J]</b>	NA	<b>0.95</b>	NA	NA	NA
Dibenzofuran	1,000	350	NA	NA	0.34 J [ <u>0.28 J</u> ]	NA	0.19 J	NA	NA	NA
Diethyl phthalate	--	--	NA	NA	<1.4 [ <u>&lt;1.8</u> ]	NA	<0.68	NA	NA	NA
Dimethyl phthalate	--	--	NA	NA	<1.4 [ <u>&lt;1.8</u> ]	NA	<0.68	NA	NA	NA
Di-n-butyl phthalate	--	--	NA	NA	3.7 [20]	NA	0.24 J	NA	NA	NA
Di-n-octyl phthalate	--	--	NA	NA	0.27 J [ <u>&lt;1.8</u> ]	NA	0.10 J	NA	NA	NA
Fluoranthene	1,000	500	NA	NA	8.7 [6.9]	NA	5.6	NA	NA	NA
Fluorene	1,000	500	NA	NA	0.68 J [ <u>0.51 J</u> ]	NA	0.36 J	NA	NA	NA
Indeno(1,2,3-cd)pyrene	11	5.6	NA	NA	5.1 [3.0]	NA	2.9	NA	NA	NA
Isophorone	--	--	NA	NA	<1.4 [ <u>&lt;1.8</u> ]	NA	<0.68	NA	NA	NA
Naphthalene	1,000	500	NA	NA	0.36 J [ <u>&lt;1.8</u> ]	NA	0.15 J	NA	NA	NA
Pentachlorophenol	55	6.7	NA	NA	<6.8 [ <u>&lt;8.5</u> ]	NA	<3.3	NA	NA	NA
Phenanthrene	1,000	500	NA	NA	7.3 [4.8]	NA	3.3	NA	NA	NA
Phenol	1,000	500	NA	NA	<1.4 [ <u>&lt;1.8</u> ]	NA	<0.68	NA	NA	NA
Pyrene	1,000	500	NA	NA	12 [5.8]	NA	6.5	NA	NA	NA
Total Carcinogenic PAHs	--	--	NA	NA	31 [20 J]	NA	18	NA	NA	NA
Total TCL SVOCs	--	--	NA	NA	84 J [74 J]	NA	42 J	NA	NA	NA

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	P1-S37		P1-S38		P1-S39		P1-S40		
			0 - 0.2 05/02/06	4 - 4.5 05/02/06	0 - 0.2 05/02/06	4 - 4.5 05/02/06	0 - 0.2 05/02/06	4 - 4.5 05/02/06	0 - 0.2 05/02/06	4 - 4.5 05/02/06	6 - 6.5 05/02/06
<b>Data Validation Complete</b>											
<b>Soil Removed Via 2009 ICM</b>			<b>X</b>				<b>X</b>		<b>X</b>		
<b>Soil Removal Via Previous ICM</b>											
<b>VOCs</b>											
4-Methyl-2-pentanone (MIBK)	--	--	0.018	<0.010	<0.011	<0.010	<0.011	<0.010	<0.011	<0.011	<0.011
2-Butanone (MEK)	1,000	500	<0.011	<0.010	<0.011	<0.010	<0.011	<0.010	<0.011	<0.011	<0.011
Bromomethane	--	--	<0.0054	<0.0051	<0.0053	<0.0051	<0.0054	<0.0052	<0.0054	<0.0053	<0.0054
2-Hexanone	--	--	<0.011	<0.010	<0.011	<0.010	<0.011	<0.010	<0.011	<0.011	<0.011
Acetone	1,000	500	0.0051 J	0.0047 J	<0.021	0.0086 J	<0.022	0.0046 J	0.0067 JB	0.0056 J	<0.022
Benzene	89	44	<0.0054	<0.0051	<0.0053	<0.0051	<0.0054	<0.0052	<0.0054	<0.0053	<0.0054
Carbon disulfide	--	--	<0.0054	<0.0051	<0.0053	<0.0051	<0.0054	<0.0052	<0.0054	<0.0053	<0.0054
Chlorobenzene	1,000	500	<0.0054	<0.0051	<0.0053	<0.0051	<0.0054	<0.0052	<0.0054	<0.0053	<0.0054
Chloroform	700	350	<0.0054	<0.0051	<0.0053	<0.0051	<0.0054	<0.0052	<0.0054	<0.0053	<0.0054
cis-1,2-Dichloroethene	1,000	500	0.0043 J	0.0021 J	0.0018 J	<0.0051	<0.0054	<0.0052	0.0016 J	<0.0053	<0.0054
Ethylbenzene	780	--	<0.0054	<0.0051	<0.0053	<0.0051	<0.0054	<0.0052	<0.0054	<0.0053	<0.0054
Tetrachloroethene	300	150	0.0058	0.0032 J	<0.0053	<0.0051	0.0022 J	<0.0052	0.021	0.0086	0.0083
Methylene chloride	1,000	500	0.0056 JB	0.0064 JB	0.0057 JB	0.0055 JB	0.0065 JB	0.0068 JB	0.0052 JB	0.0068 JB	0.0033 JB
Toluene	1,000	500	<0.0054	<0.0051	<0.0053	<0.0051	<0.0054	<0.0052	<0.0054	<0.0053	<0.0054
Styrene	--	--	<0.0054	<0.0051	<0.0053	<0.0051	<0.0054	<0.0052	<0.0054	<0.0053	<0.0054
trans-1,2-Dichloroethene	1,000	500	<0.0054	<0.0051	<0.0053 M	<0.0051	<0.0054	<0.0052	<0.0054	<0.0053	<0.0054
Trichloroethene	400	200	0.0010 J	<0.0051	<0.0053	<0.0051	<0.0054	<0.0052	0.0011 J	<0.0053	<0.0054
Vinyl chloride	27	13	<0.0054 M	<0.0051	<0.0053 M	<0.0051	<0.0054	<0.0052	<0.0054	<0.0053	<0.0054
Xylenes (total)	1,000	500	<0.0054	<0.0051	<0.0053	<0.0051	<0.0054	<0.0052	<0.0054	<0.0053	<0.0054
Total TCL VOCs	--	--	0.040 J	0.016 J	0.0075 J	0.014 J	0.0087 J	0.011 J	0.036 J	0.021 J	0.012 J
<b>SVOCs</b>											
1,2,4-Trichlorobenzene	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	1,000	500	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	1,000	500	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	1,000	500	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	1,000	500	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	1,000	500	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	11	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1.1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	11	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(ghi)perylene	1,000	500	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	110	56	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic acid	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	110	56	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	1.1	0.56	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	1,000	350	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	1,000	500	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	1,000	500	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	11	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	1,000	500	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	55	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	1,000	500	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	1,000	500	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	1,000	500	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Carcinogenic PAHs	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total TCL SVOCs	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	P1-S43		P1-S44		P1-S48		P1-S49	
			0 - 0.2 05/02/06	4 - 4.5 05/02/06	0 - 0.2 05/02/06	4 - 4.5 05/02/06	0 - 0.2 05/02/06	4 - 4.5 05/02/06	0 - 0.2 08/21/06	2 - 2.5 08/21/06
Data Validation Complete										
Soil Removed Via 2009 ICM					X					
Soil Removal Via Previous ICM										
<b>VOCs</b>										
4-Methyl-2-pentanone (MIBK)	--	--	<0.011	<0.011	<0.011 [ $<0.011$ ]	<0.011	<0.011	<0.010	NA	NA
2-Butanone (MEK)	1,000	500	<0.011	<0.011	<0.011 [ $<0.011$ ]	<0.011	<0.011	<0.010	NA	NA
Bromomethane	--	--	<0.0056	<0.0057	<0.0055 [ $<0.0055$ ]	<0.0057	<0.0054	<0.0051	NA	NA
2-Hexanone	--	--	<0.011	<0.011	<0.011 [ $<0.011$ ]	<0.011	<0.011	<0.010	NA	NA
Acetone	1,000	500	0.0058 JB	<0.023 B	0.0093 JB [0.0064 J]	0.0072 JB	0.0060 JB	0.0040 JB	NA	NA
Benzene	89	44	<0.0056	<0.0057	<0.0055 [ $<0.0055$ ]	<0.0057	<0.0054	<0.0051	NA	NA
Carbon disulfide	--	--	<0.0056	<0.0057	<0.0055 [ $<0.0055$ ]	<0.0057	<0.0054	<0.0051	NA	NA
Chlorobenzene	1,000	500	<0.0056	<0.0057	<0.0055 [ $<0.0055$ ]	<0.0057	<0.0054	<0.0051	NA	NA
Chloroform	700	350	<0.0056	<0.0057	<0.0055 [ $<0.0055$ ]	<0.0057	<0.0054	<0.0051	NA	NA
cis-1,2-Dichloroethene	1,000	500	<0.0056	<0.0057	<0.0055 [ $<0.0055$ ]	<0.0057	<0.0054	<0.0051	NA	NA
Ethylbenzene	780	--	<0.0056	<0.0057	<0.0055 [ $<0.0055$ ]	<0.0057	<0.0054	<0.0051	NA	NA
Tetrachloroethene	300	150	0.0070	0.0063	0.0068 [0.049]	0.030	<0.0054	0.0049 J	NA	NA
Methylene chloride	1,000	500	0.019 JB	0.017 JB	0.017 JB [0.011 JB]	0.0043 JB	0.011 JB	0.0086 JB	NA	NA
Toluene	1,000	500	<0.0056	<0.0057	<0.0055 [ $<0.0055$ ]	<0.0057	<0.0054	<0.0051	NA	NA
Styrene	--	--	<0.0056	<0.0057	<0.0055 [ $<0.0055$ ]	<0.0057	<0.0054	<0.0051	NA	NA
trans-1,2-Dichloroethene	1,000	500	<0.0056	<0.0057	<0.0055 [ $<0.0055$ ]	<0.0057	<0.0054	<0.0051	NA	NA
Trichloroethene	400	200	<0.0056	<0.0057	<0.0055 [0.0024 J]	<0.0057	<0.0054	<0.0051	NA	NA
Vinyl chloride	27	13	<0.0056	<0.0057	<0.0055 [ $<0.0055$ ]	<0.0057	<0.0054	<0.0051	NA	NA
Xylenes (total)	1,000	500	<0.0056	<0.0057	<0.0055 [ $<0.0055$ ]	<0.0057	<0.0054	<0.0051	NA	NA
Total TCL VOCs	--	--	0.032 J	0.023 J	0.033 J [0.069 J]	0.042 J	0.017 J	0.018 J	NA	NA
<b>SVOCs</b>										
1,2,4-Trichlorobenzene	--	--	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
2,4-Dimethylphenol	--	--	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
2-Methylnaphthalene	--	--	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
2-Methylphenol	1,000	500	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
4-Methylphenol	1,000	500	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
4-Nitroaniline	--	--	NA	NA	<0.71 [ $<0.72$ ]	NA	NA	NA	<0.65	<0.66 [ $<0.67$ ]
Acenaphthene	1,000	500	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
Acenaphthylene	1,000	500	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
Anthracene	1,000	500	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
Benzo(a)anthracene	11	5.6	NA	NA	0.059 J [ $<0.36$ ]	NA	NA	NA	0.045 J	0.059 J [ $<0.34$ ]
Benzo(a)pyrene	1.1	1	NA	NA	0.077 J [0.049 J]	NA	NA	NA	<0.33	0.073 J [ $<0.34$ ]
Benzo(b)fluoranthene	11	5.6	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
Benzo(ghi)perylene	1,000	500	NA	NA	0.066 J [0.065 J]	NA	NA	NA	0.056 J	0.069 J [ $<0.34$ ]
Benzo(k)fluoranthene	110	56	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	0.053 J [ $<0.34$ ]
Benzoic acid	--	--	NA	NA	<1.7 [ $<1.7$ ]	NA	NA	NA	<1.6	<1.6 [ $<1.6$ ]
Bis(2-ethylhexyl)phthalate	--	--	NA	NA	0.19 J [0.12 J]	NA	NA	NA	0.69	0.34 [0.36]
Butyl benzyl phthalate	--	--	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
Carbazole	--	--	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
Chrysene	110	56	NA	NA	0.10 J [ $<0.36$ ]	NA	NA	NA	0.049 J	0.075 J [ $<0.34$ ]
Dibenz(a,h)anthracene	--	0.56	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
Dibenzofuran	1,000	350	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
Diethyl phthalate	--	--	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
Dimethyl phthalate	--	--	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
Di-n-butyl phthalate	--	--	NA	NA	0.083 J [0.066 J]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
Di-n-octyl phthalate	--	--	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
Fluoranthene	1,000	500	NA	NA	0.11 J [0.068 J]	NA	NA	NA	0.048 J	0.091 J [ $<0.34$ ]
Fluorene	1,000	500	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	0.060 JH	<0.33 [ $<0.34$ ]
Indeno(1,2,3-cd)pyrene	11	5.6	NA	NA	0.045 J [ $<0.36$ ]	NA	NA	NA	0.045 J	0.065 J [ $<0.34$ ]
Isophorone	--	--	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
Naphthalene	1,000	500	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
Pentachlorophenol	55	6.7	NA	NA	<1.7 [ $<1.7$ ]	NA	NA	NA	<1.6	<1.6 [ $<1.6$ ]
Phenanthrene	1,000	500	NA	NA	0.074 J [0.064 J]	NA	NA	NA	<0.33	0.044 J [ $<0.34$ ]
Phenol	1,000	500	NA	NA	<0.36 [ $<0.36$ ]	NA	NA	NA	<0.33	<0.33 [ $<0.34$ ]
Pyrene	1,000	500	NA	NA	0.11 J [0.074 J]	NA	NA	NA	<0.33	0.081 J [ $<0.34$ ]
Total Carcinogenic PAHs	--	--	NA	NA	0.28 J [0.049 J]	NA	NA	NA	0.14 J	0.33 J [ND]
Total TCL SVOCs	--	--	NA	NA	0.91 J [0.51 J]	NA	NA	NA	0.99 J	0.95 J [0.36]

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	P1-S62				P1-S69		P1-S70		P1-S71
			0 - 0.2 08/22/06	2 - 2.5 08/22/06	4 - 4.5 08/22/06	6 - 6.5 08/22/06	0 - 0.2 08/22/06	2 - 2.5 08/22/06	0 - 0.2 08/22/06	2 - 2.5 08/22/06	0 - 0.2 08/22/06
<b>Data Validation Complete</b>											
<b>Soil Removed Via 2009 ICM</b>											
<b>Soil Removal Via Previous ICM</b>											
<b>VOCs</b>											
4-Methyl-2-pentanone (MIBK)	--	--	<0.011	<0.011	<0.011	<0.011	NA	NA	NA	NA	NA
2-Butanone (MEK)	1,000	500	<0.011	<0.011	<0.011	<0.011	NA	NA	NA	NA	NA
Bromomethane	--	--	<0.0053	<0.0053	<0.0054	<0.0053	NA	NA	NA	NA	NA
2-Hexanone	--	--	<0.011	<0.011	<0.011	<0.011	NA	NA	NA	NA	NA
Acetone	1,000	500	<0.021 B	0.0036 JB	<0.022 B	0.0034 J	NA	NA	NA	NA	NA
Benzene	89	44	<0.0053	<0.0053	<0.0054	<0.0053	NA	NA	NA	NA	NA
Carbon disulfide	--	--	<0.0053	<0.0053	<0.0054	<0.0053	NA	NA	NA	NA	NA
Chlorobenzene	1,000	500	<0.0053	<0.0053	<0.0054	<0.0053	NA	NA	NA	NA	NA
Chloroform	700	350	<0.0053	<0.0053	<0.0054	<0.0053	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	1,000	500	<0.0053	<0.0053	<0.0054	<0.0053	NA	NA	NA	NA	NA
Ethylbenzene	780	--	<0.0053	<0.0053	<0.0054	<0.0053	NA	NA	NA	NA	NA
Tetrachloroethene	300	150	<0.0053	<0.0053	<0.0054	<0.0053	NA	NA	NA	NA	NA
Methylene chloride	1,000	500	0.011 JB	0.015 JB	0.0095 JB	0.0078 JB	NA	NA	NA	NA	NA
Toluene	1,000	500	<0.0053	<0.0053	<0.0054	<0.0053	NA	NA	NA	NA	NA
Styrene	--	--	<0.0053	<0.0053	<0.0054	<0.0053	NA	NA	NA	NA	NA
trans-1,2-Dichloroethene	1,000	500	<0.0053	<0.0053	<0.0054	<0.0053	NA	NA	NA	NA	NA
Trichloroethene	400	200	<0.0053	<0.0053	<0.0054	<0.0053	NA	NA	NA	NA	NA
Vinyl chloride	27	13	<0.0053	<0.0053	<0.0054	<0.0053	NA	NA	NA	NA	NA
Xylenes (total)	1,000	500	<0.0053	<0.0053	<0.0054	<0.0053	NA	NA	NA	NA	NA
Total TCL VOCs	--	--	0.011 J	0.019 J	0.0095 J	0.011 J	NA	NA	NA	NA	NA
<b>SVOCs</b>											
1,2,4-Trichlorobenzene	--	--	NA	NA	NA	NA	<0.34	<0.34 [<0.34]	<0.32	<0.36	<0.33
2,4-Dimethylphenol	--	--	NA	NA	NA	NA	<0.34	<0.34 [<0.34]	<0.32	<0.36	<0.33
2-Methylnaphthalene	--	--	NA	NA	NA	NA	<0.34	<0.34 [<0.34]	0.077 J	<0.36	<0.33
2-Methylphenol	1,000	500	NA	NA	NA	NA	<0.34	<0.34 [<0.34]	<0.32	<0.36	<0.33
4-Methylphenol	1,000	500	NA	NA	NA	NA	<0.34	<0.34 [<0.34]	<0.32	<0.36	<0.33
4-Nitroaniline	--	--	NA	NA	NA	NA	<0.69	<0.68 [<0.68]	<0.64	<0.72	<0.67
Acenaphthene	1,000	500	NA	NA	NA	NA	0.42	0.058 J [0.14 J]	0.36	<0.36	<0.33
Acenaphthylene	1,000	500	NA	NA	NA	NA	0.073 J	<0.34 [<0.34]	0.17 J	0.068 J	<0.33
Anthracene	1,000	500	NA	NA	NA	NA	0.84 M	0.10 J [0.27 J]	0.77	0.18 J	<0.33
Benzo(a)anthracene	11	5.6	NA	NA	NA	NA	2.5	0.39 [0.74 M]	2.1	0.60	0.060 JH
Benzo(a)pyrene	1.1	1	NA	NA	NA	NA	2.5	0.37 [0.78]	2.2	0.90	0.076 JM
Benzo(b)fluoranthene	11	5.6	NA	NA	NA	NA	2.3 H	0.32 JH [0.62]	2.3 H	1.0 M	<0.33
Benzo(ghi)perylene	1,000	500	NA	NA	NA	NA	1.3	0.34 J [0.60]	1.2	2.5	0.074 J
Benzo(k)fluoranthene	110	56	NA	NA	NA	NA	2.1	0.28 J [0.68 M]	1.5	0.53 M	0.052 J
Benzoic acid	--	--	NA	NA	NA	NA	<1.7	<1.7 [<1.7]	<1.6	<1.7	<1.6
Bis(2-ethylhexyl)phthalate	--	--	NA	NA	NA	NA	0.87	0.073 J [0.057 J]	2.0	1.7	0.14 J
Butyl benzyl phthalate	--	--	NA	NA	NA	NA	0.075 J	<0.34 [<0.34]	<0.32	0.060 JM	<0.33
Carbazole	--	--	NA	NA	NA	NA	0.38	<0.34 [0.11 J]	0.40	<0.36	<0.33
Chrysene	110	56	NA	NA	NA	NA	2.6	0.39 M [0.84]	2.2	0.82	0.070 J
Dibenzo(a,h)anthracene	1.1	0.56	NA	NA	NA	NA	0.38 H	0.085 J [0.096 J]	0.35	0.16 JH	<0.33
Dibenzofuran	1,000	350	NA	NA	NA	NA	0.14 JM	<0.34 [<0.34]	0.15 J	<0.36	<0.33
Diethyl phthalate	--	--	NA	NA	NA	NA	<0.34	<0.34 [<0.34]	<0.32	<0.36	<0.33
Dimethyl phthalate	--	--	NA	NA	NA	NA	<0.34	<0.34 [<0.34]	<0.32	<0.36	<0.33
Di-n-butyl phthalate	--	--	NA	NA	NA	NA	0.073 J	<0.34 [<0.34]	2.7	0.12 J	<0.33
Di-n-octyl phthalate	--	--	NA	NA	NA	NA	<0.34	<0.34 [<0.34]	0.20 J	<0.36	<0.33
Fluoranthene	1,000	500	NA	NA	NA	NA	5.1	0.71 [1.4]	4.6	1.0	0.088 J
Fluorene	1,000	500	NA	NA	NA	NA	0.29 J	<0.34 [0.062 J]	0.28 J	0.053 J	<0.33
Indeno(1,2,3-cd)pyrene	11	5.6	NA	NA	NA	NA	1.7 H	0.39 [0.69 M]	1.6	2.1	0.077 JH
Isophorone	--	--	NA	NA	NA	NA	<0.34	<0.34 [<0.34]	<0.32	<0.36	<0.33
Naphthalene	1,000	500	NA	NA	NA	NA	0.088 J	<0.34 [<0.34]	0.12 J	0.079 J	<0.33
Pentachlorophenol	55	6.7	NA	NA	NA	NA	<1.7	<1.7 [<1.7]	<1.6	<1.7	<1.6
Phenanthrene	1,000	500	NA	NA	NA	NA	2.8	0.39 [1.0]	2.6	0.71	<0.33
Phenol	1,000	500	NA	NA	NA	NA	<0.34	<0.34 [<0.34]	<0.32	<0.36	<0.33
Pyrene	1,000	500	NA	NA	NA	NA	3.0	0.62 [1.6]	2.5	1.3	0.079 J
Total Carcinogenic PAHs	--	--	NA	NA	NA	NA	14	2.2 J [4.5 J]	12	6.1 J	0.34 J
Total TCL SVOCs	--	--	NA	NA	NA	NA	30 J	4.5 J [9.7 J]	30 J	14 J	0.72 J

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	P1-S71	P1-S72		P1-S81		P1-S83			
			2 - 2.5 08/22/06	0 - 0.2 08/22/06	2 - 2.5 08/22/06	0 - 0.2 10/24/06	2 - 2.5 10/24/06	0 - 0.2 10/24/06	2 - 2.5 10/24/06	4 - 4.5 10/24/06	6 - 6.5 10/24/06
Data Validation Complete											
Soil Removed Via 2009 ICM											
Soil Removal Via Previous ICM											
<b>VOCs</b>											
4-Methyl-2-pentanone (MIBK)	--	--	NA	NA	NA	NA	NA	0.017	<0.011	<0.010	<0.010
2-Butanone (MEK)	1,000	500	NA	NA	NA	NA	NA	0.034	0.022	0.014	0.0072 J
Bromomethane	--	--	NA	NA	NA	NA	NA	<0.0052	<0.0053	<0.0052	<0.0051
2-Hexanone	--	--	NA	NA	NA	NA	NA	0.0058 J	0.0048 J	<0.010	<0.010
Acetone	1,000	500	NA	NA	NA	NA	NA	0.079 B	0.051 B	0.060 B	0.027 B
Benzene	89	44	NA	NA	NA	NA	NA	<0.0052	<0.0053	<0.0052	<0.0051
Carbon disulfide	--	--	NA	NA	NA	NA	NA	<0.0052	<0.0053	<0.0052	<0.0051
Chlorobenzene	1,000	500	NA	NA	NA	NA	NA	<0.0052	<0.0053	<0.0052	<0.0051
Chloroform	700	350	NA	NA	NA	NA	NA	<0.0052	<0.0053	<0.0052	<0.0051
cis-1,2-Dichloroethene	1,000	500	NA	NA	NA	NA	NA	<0.0052	<0.0053	<0.0052	<0.0051
Ethylbenzene	780	--	NA	NA	NA	NA	NA	<0.0052	<0.0053	<0.0052	<0.0051
Tetrachloroethene	300	150	NA	NA	NA	NA	NA	0.0058	0.0028 J	<0.0052	0.00090 J
Methylene chloride	1,000	500	NA	NA	NA	NA	NA	0.010 JB	0.012 JB	0.0098 JB	0.010 JB
Toluene	1,000	500	NA	NA	NA	NA	NA	0.0010 J	0.0015 J	0.0015 J	0.0012 J
Styrene	--	--	NA	NA	NA	NA	NA	<0.0052	<0.0053	<0.0052	<0.0051
trans-1,2-Dichloroethene	1,000	500	NA	NA	NA	NA	NA	<0.0052	<0.0053	<0.0052	<0.0051
Trichloroethene	400	200	NA	NA	NA	NA	NA	<0.0052	0.0013 J	0.00092 J	<0.0051
Vinyl chloride	27	13	NA	NA	NA	NA	NA	<0.0052	<0.0053	<0.0052	<0.0051
Xylenes (total)	1,000	500	NA	NA	NA	NA	NA	<0.0052	0.0031 J	0.0030 J	0.0022 J
Total TCL VOCs	--	--	NA	NA	NA	NA	NA	0.15 J	0.099 J	0.089 J	0.049 J
<b>SVOCs</b>											
1,2,4-Trichlorobenzene	--	--	<0.34 [ $\leq$ 0.33]	<0.33	<0.34	<0.35	<0.37	<6.9	<3.4	NA	NA
2,4-Dimethylphenol	--	--	<0.34 [ $\leq$ 0.33]	<0.33	<0.34	<0.35	<0.37	<6.9	<3.4	NA	NA
2-Methylnaphthalene	--	--	<0.34 [ $\leq$ 0.33]	<0.33	<0.34	<0.35	<0.37	<6.9	<3.4	NA	NA
2-Methylphenol	1,000	500	<0.34 [ $\leq$ 0.33]	<0.33	<0.34	<0.35	<0.37	<6.9	<3.4	NA	NA
4-Methylphenol	1,000	500	<0.34 [ $\leq$ 0.33]	<0.33	<0.34	<0.35	<0.37	<6.9	<3.4	NA	NA
4-Nitroaniline	--	--	<0.67 [ $\leq$ 0.65]	<0.66	<0.68	<0.69	<0.74	<14	<6.7	NA	NA
Acenaphthene	1,000	500	<0.34 [ $\leq$ 0.33]	0.079 J	<0.34	<0.35	<0.37	<6.9	<3.4	NA	NA
Acenaphthylene	1,000	500	<0.34 [ $\leq$ 0.33]	<0.33	<0.34	<0.35	<0.37	<6.9	<3.4	NA	NA
Anthracene	1,000	500	<0.34 [ $\leq$ 0.33]	0.25 J	0.16 J	<0.35	<0.37	<6.9	<3.4	NA	NA
Benzo(a)anthracene	11	5.6	<0.34 [ $\leq$ 0.33]	0.71	0.66	0.12 J	0.074 J	<6.9	<3.4	NA	NA
Benzo(a)pyrene	1.1	1	<0.34 [ $\leq$ 0.33]	0.80	0.98	0.12 J	0.064 J	<6.9	<3.4	NA	NA
Benzo(b)fluoranthene	11	5.6	<0.34 [ $\leq$ 0.33]	0.75	0.77 M	0.15 J	<0.37	<6.9	<3.4	NA	NA
Benzo(ghi)perylene	1,000	500	0.048 J [ $\leq$ 0.33]	0.84	1.2 M	0.15 JM	<0.37	<6.9	<3.4	NA	NA
Benzo(k)fluoranthene	110	56	<0.34 [ $\leq$ 0.33]	0.60	0.72	0.058 J	0.053 J	<6.9	<3.4	NA	NA
Benzoic acid	--	--	<1.6 [ $\leq$ 1.6]	<1.6	<1.7	<1.7	<1.8	<34	<16	NA	NA
Bis(2-ethylhexyl)phthalate	--	--	0.14 J [ $\leq$ 0.33]	0.25 J	0.22 J	0.63	0.23 J	96	41	NA	NA
Butyl benzyl phthalate	--	--	<0.34 [ $\leq$ 0.33]	<0.33	<0.34	<0.35	<0.37	1.1 J	<3.4	NA	NA
Carbazole	--	--	<0.34 [ $\leq$ 0.33]	0.11 J	0.071 J	<0.35	<0.37	<6.9	<3.4	NA	NA
Chrysene	110	56	<0.34 [ $\leq$ 0.33]	0.73	0.87	0.15 J	0.085 J	<6.9	<3.4	NA	NA
Dibenz(a,h)anthracene	1.1	0.56	<0.34 [ $\leq$ 0.33]	<0.33	0.27 J	<0.35	<0.37	<6.9	<3.4	NA	NA
Dibenzofuran	1,000	350	<0.34 [ $\leq$ 0.33]	<0.33	<0.34	<0.35	<0.37	<6.9	<3.4	NA	NA
Diethyl phthalate	--	--	<0.34 [ $\leq$ 0.33]	0.14 JMB	0.17 JMB	<0.35	<0.37	<6.9	<3.4	NA	NA
Dimethyl phthalate	--	--	<0.34 [ $\leq$ 0.33]	<0.33	<0.34	<0.35	<0.37	<6.9	<3.4	NA	NA
Di-n-butyl phthalate	--	--	<0.34 [ $\leq$ 0.33]	0.059 J	0.64	<0.35	<0.37	2.9 J	1.8 J	NA	NA
Di-n-octyl phthalate	--	--	<0.34 [ $\leq$ 0.33]	<0.33	<0.34	0.070 J	<0.37	1.6 J	0.77 J	NA	NA
Fluoranthene	1,000	500	<0.34 [ $\leq$ 0.33]	1.3	1.0	0.18 J	0.16 J	<6.9	<3.4	NA	NA
Fluorene	1,000	500	<0.34 [ $\leq$ 0.33]	0.073 J	0.049 J	<0.35	<0.37	<6.9	<3.4	NA	NA
Indeno(1,2,3-cd)pyrene	11	5.6	<0.34 [ $\leq$ 0.33]	0.79	1.2	0.14 JM	0.062 JM	<6.9	<3.4	NA	NA
Isophorone	--	--	<0.34 [ $\leq$ 0.33]	<0.33	<0.34	<0.35	<0.37	<6.9	<3.4	NA	NA
Naphthalene	1,000	500	<0.34 [ $\leq$ 0.33]	<0.33	<0.34	<0.35	<0.37	<6.9	<3.4	NA	NA
Pentachlorophenol	55	6.7	<1.6 [ $\leq$ 1.6]	<1.6	<1.7	<1.7	<1.8	<34	<16	NA	NA
Phenanthrene	1,000	500	<0.34 [ $\leq$ 0.33]	0.78	0.48	0.088 J	0.12 J	<6.9	<3.4	NA	NA
Phenol	1,000	500	<0.34 [ $\leq$ 0.33]	<0.33	<0.34	<0.35	<0.37	<6.9	<3.4	NA	NA
Pyrene	1,000	500	<0.34 [ $\leq$ 0.33]	1.5	1.3	0.21 J	0.16 J	<6.9	<3.4	NA	NA
Total Carcinogenic PAHs	--	--	ND [ND]	4.4	5.5 J	0.74 J	0.34 J	ND	ND	NA	NA
Total TCL SVOCs	--	--	0.19 J [ND]	9.8 J	11 J	2.1 J	1.0 J	100 J	44 J	NA	NA



**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs AND SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs Industrial	Restricted Use SCOs Commercial	P1-S84		P1-S95		P1-S96	
			0 - 0.2 10/24/06	2 - 2.5 10/24/06	0 - 0.2 10/23/06	2 - 2.5 10/23/06	0 - 0.2 10/23/06	2 - 2.5 10/23/06
<b>Data Validation Complete</b>								
<b>Soil Removed Via 2009 ICM</b>			<b>X</b>	<b>X</b>				
<b>Soil Removal Via Previous ICM</b>								
<b>VOCs</b>								
4-Methyl-2-pentanone (MIBK)	--	--	NA	NA	NA	NA	NA	NA
2-Butanone (MEK)	1,000	500	NA	NA	NA	NA	NA	NA
Bromomethane	--	--	NA	NA	NA	NA	NA	NA
2-Hexanone	--	--	NA	NA	NA	NA	NA	NA
Acetone	1,000	500	NA	NA	NA	NA	NA	NA
Benzene	89	44	NA	NA	NA	NA	NA	NA
Carbon disulfide	--	--	NA	NA	NA	NA	NA	NA
Chlorobenzene	1,000	500	NA	NA	NA	NA	NA	NA
Chloroform	700	350	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	1,000	500	NA	NA	NA	NA	NA	NA
Ethylbenzene	780	--	NA	NA	NA	NA	NA	NA
Tetrachloroethene	300	150	NA	NA	NA	NA	NA	NA
Methylene chloride	1,000	500	NA	NA	NA	NA	NA	NA
Toluene	1,000	500	NA	NA	NA	NA	NA	NA
Styrene	--	--	NA	NA	NA	NA	NA	NA
trans-1,2-Dichloroethene	1,000	500	NA	NA	NA	NA	NA	NA
Trichloroethene	400	200	NA	NA	NA	NA	NA	NA
Vinyl chloride	27	13	NA	NA	NA	NA	NA	NA
Xylenes (total)	1,000	500	NA	NA	NA	NA	NA	NA
Total TCL VOCs	--	--	NA	NA	NA	NA	NA	NA
<b>SVOCs</b>								
1,2,4-Trichlorobenzene	--	--	<1.5	<3.3	<2.7 [ <u>&lt;0.70</u> ]	<0.34	<0.32	<0.33
2,4-Dimethylphenol	--	--	<1.5	<3.3	<2.7 [ <u>&lt;0.70</u> ]	<0.34	<0.32	<0.33
2-Methylnaphthalene	--	--	<1.5	<3.3	<2.7 [ <u>&lt;0.70</u> ]	<0.34	<0.32	<0.33
2-Methylphenol	1,000	500	<1.5	<3.3	<2.7 [ <u>&lt;0.70</u> ]	<0.34	<0.32	<0.33
4-Methylphenol	1,000	500	<1.5	<3.3	<2.7 [ <u>&lt;0.70</u> ]	<0.34	<0.32	<0.33
4-Nitroaniline	--	--	<3.0	<6.7	<5.5 [ <u>&lt;1.4</u> ]	<0.67	<0.64	<0.66
Acenaphthene	1,000	500	<1.5	<3.3	0.76 J [0.64 J]	<0.34	<0.32	<0.33
Acenaphthylene	1,000	500	<1.5	<3.3	<2.7 [0.091 J]	<0.34	<0.32	<0.33
Anthracene	1,000	500	<1.5	<3.3	1.4 J [1.3]	<0.34	<0.32	<0.33
Benzo(a)anthracene	11	5.6	<1.5	<3.3	4.0 [3.5]	0.092 J	<0.32	<0.33
Benzo(a)pyrene	1.1	1	<1.5	<3.3	<b>3.2 [3.3]</b>	0.098 J	<0.32	<0.33
Benzo(b)fluoranthene	11	5.6	<1.5	<3.3	3.9 [3.4]	<0.34	<0.32	<0.33
Benzo(ghi)perylene	1,000	500	<1.5	<3.3	3.4 [2.6]	0.13 JM	<0.32	<0.33
Benzo(k)fluoranthene	110	56	<1.5	<3.3	1.7 JM [2.1]	0.091 J	<0.32	<0.33
Benzoic acid	--	--	1.7 JM	0.96 J	<13 [ <u>&lt;3.4</u> ]	<1.6	<1.5	<1.6
Bis(2-ethylhexyl)phthalate	--	--	17	25	33 [10]	1.6	0.12 J	0.088 J
Butyl benzyl phthalate	--	--	0.28 J	<3.3	<2.7 [0.11 J]	<0.34	<0.32	<0.33
Carbazole	--	--	<1.5	<3.3	0.68 J [0.64 J]	<0.34	<0.32	<0.33
Chrysene	110	56	0.31 J	<3.3	4.1 [3.5]	0.11 J	<0.32	<0.33
Dibenz(a,h)anthracene	1.1	0.56	<1.5	<3.3	<2.7 [ <b>0.69 J</b> ]	<0.34	<0.32	<0.33
Dibenzofuran	1,000	350	<1.5	<3.3	<2.7 [0.24 J]	<0.34	<0.32	<0.33
Diethyl phthalate	--	--	<1.5	<3.3	<2.7 [ <u>&lt;0.70</u> ]	<0.34	<0.32	<0.33
Dimethyl phthalate	--	--	<1.5	<3.3	<2.7 [0.15 J]	<0.34	<0.32	<0.33
Di-n-butyl phthalate	--	--	0.78 J	1.1 J	7.2 [4.8]	0.11 J	<0.32	<0.33
Di-n-octyl phthalate	--	--	0.38 J	<3.3	0.98 J [0.34 JM]	0.060 J	<0.32	<0.33
Fluoranthene	1,000	500	<1.5	<3.3	7.3 [6.4]	0.13 J	<0.32	<0.33
Fluorene	1,000	500	<1.5	<3.3	0.68 J [0.51 J]	<0.34	<0.32	<0.33
Indeno(1,2,3-cd)pyrene	11	5.6	<1.5	<3.3	3.3 [3.0]	0.14 J	<0.32	<0.33
Isophorone	--	--	<1.5	<3.3	<2.7 [ <u>&lt;0.70</u> ]	<0.34	<0.32	<0.33
Naphthalene	1,000	500	0.64 J	<3.3	<2.7 [0.16 J]	<0.34	<0.32	<0.33
Pentachlorophenol	55	6.7	<7.2	<16	<13 [ <u>&lt;3.4</u> ]	<1.6	<1.5	<1.6
Phenanthrene	1,000	500	0.23 J	<3.3	5.1 [4.6]	0.067 J	<0.32	<0.33
Phenol	1,000	500	<1.5	<3.3	<2.7 [ <u>&lt;0.70</u> ]	<0.34	<0.32	<0.33
Pyrene	1,000	500	0.22 J	<3.3	6.5 [5.5]	0.17 J	<0.32	<0.33
Total Carcinogenic PAHs	--	--	0.31 J	ND	20 J [20 J]	0.53 J	ND	ND
Total TCL SVOCs	--	--	22 J	27 J	87 J [58 J]	2.8 J	0.12 J	0.088 J

**TABLE 4**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED VOCs and SVOCs (ppm)**

**CORRECTIVE MEASURES STUDY**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

**Notes:**

1. Samples were collected by ARCADIS as part of the RCRA Corrective Action Program between February 2004 and February 2009.
2. VOCs = Volatile Organic Compounds.
3. SVOCs = Semi-Volatile Organic Compounds.
4. Samples were analyzed by TestAmerica Laboratories, Inc. (formerly Severn Trent Laboratories, Inc) located in Shelton, Connecticut
  - VOCs using United States Environmental Protection Agency (USEPA) SW-846 Method 8260B.
  - SVOCs using USEPA SW-846 Method 8270C.
5. Depths identified in the sample ID for samples collected outside the former Pilot Plant footprint are relative to the surrounding ground surface. Depths identified in the sample ID for samples collected within the former Pilot Plant footprint (sampling locations VS-45-1, VS-45-2, VS-45-2R, VS-45-7, and VS-45-11) are relative to the top of the soil surface beneath the floor slab, which is approximately 2.3 feet higher than the surrounding ground surface.
6. Only those constituents detected in one or more samples are summarized.
7. All concentrations reported in dry weight parts per million (ppm), which is equivalent to milligrams per kilogram (mg/kg).
8. Field duplicate sample results are presented in brackets.
9. **X** indicates the following:
  - Data was validated (for **X** under row titled "Data Validation Completed").
  - Soil at sampling location was removed as part of a 2009 interim corrective measure (for **X** under row titled "Soil Removed Via Additional 2009 ICM")
  - Soil at sampling location was removed as part of a previous interim corrective measure (for **X** under column titled " Soil Removed Via Previous ICM")
10. Data qualifiers are defined as follows:
  - \* - Laboratory control sample was outside the criteria for this analyte.
  - < - Constituent not detected at a concentration above the reported detection limit.
  - A - Concentration exceeds the calibration limit.
  - B - Constituent was found in the sample as well as its associated blank.
  - H - Sample was prepped or analyzed beyond the specified holding time.
  - J - Indicates that the associated numerical value is an estimated concentration.
  - M - Manually integrated compound.
  - N - The spike recovery exceeded the upper or lower control limits.
  - R - The sample results were rejected.
11. 6 NYCRR Part 375 Commercial Use Soil Cleanup Objectives (SCOs) are from Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (6 NYCRR) Part 375-6.8(b).
12. Bold indicates that the result exceeds the 6 NYCRR Part 375 Commercial Use SCO.
13. Shading indicates that the result exceeds the 6 NYCRR Part 375 Industrial Use SCO.
14. -- = No 6 NYCRR Part 375 SCO listed.
15. NA = Not Analyzed.

**TABLE 5**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED INORGANICS (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs: Commercial	AOC1-2 0 - 1 02/12/04	AOC3-3 0 - 1 02/12/04	AOC3-4 0 - 1 02/12/04	AOC4-2 0 - 1 02/12/04	AOC7-1 0 - 1 02/12/04	AOC7-2 0 - 1 02/12/04	AOC12-1 1 - 2 02/16/04	AOC13-1 0 - 1 02/16/04	AOC15-3 0 - 1 02/16/04	AOC16-2 0 - 1 02/16/04	AOC20-2 0 - 1 02/16/04	AOC23-3 0 - 1 02/17/04	AOC23-4 0 - 1 02/17/04	AOC35A-1 12 - 14 02/23/04	AOC35A-2 12 - 14 02/23/04	AOC35B-1 12 - 14 02/23/04
Data Validation Complete		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Soil Removed Via 2009 ICM																	
<b>Metals</b>																	
Aluminum	--	4,260	4,800	15,200	5,890 [5,270]	2,800	8,030	10,800	9,630	1,710	4,530	7,400	8,910 [6,170]	7,230	770 J	1,830 J	1,450 J [1,390 J]
Antimony	--	<16.3 J	<17.0 J	<16.0 J	<15.0 J [<14.3 J]	<14.3 J	<15.1 J	2.90 BJ	<16.1 J	<14.8 J	<14.1 J	<15.0 J	<15.0 J [<14.0 J]	<14.0 J	<13.1 J	<13.2 J	<13.7 J [<14.4 J]
Arsenic	16	17.6	13.9	7.10 B	2.80 B [2.80 B]	3.50 B	3.50 B	9.20 B	7.50 B	<10.1	2.00 B	10.2 B	2.00 BJ [1.00 BJ]	8.00 BJ	<9.00	<9.10	<9.40 [<9.90]
Barium	400	75.8	46.6	33.7	16.7 [14.2]	10.5	33.0	31.7	27.1	112	12.5	18.7	33.0 J [30.0 J]	18.0 J	4.70 J	4.60 J	5.60 J [4.70 J]
Beryllium	590	2.80 U	2.90 U	2.70 U	2.60 U [2.40 U]	2.40 U	2.60 U	2.50 U	2.80 U	2.50 U	2.40 U	2.60 U	2.00 U [2.00 U]	2.00 U	2.20 U	2.30 U	2.30 U [2.50 U]
Cadmium	9.3	<4.20	<4.40	<4.10	<3.90 [<3.70]	<3.70	<3.90	<3.80	<4.10	<3.80	<3.60	<3.80	<3.00 [<3.00]	<3.00	<3.40	<3.40	<3.50 [<3.70]
Calcium	--	1,410	1,720	678	472 [394]	16,400	3,820	674 J	440 J	1,400 J	5,420 J	510 J	14,100 J [18,100 J]	547 J	27.6 B	26.7 B	48.1 B [29.2 B]
Chromium	--	6.80	8.50	16.9	7.80 [15.5]	5.10	11.8	13.1	11.3	3.50 B	7.40	9.40	12.0 [9.00]	9.00	5.70	3.10 B	4.50 [3.70 B]
Cobalt	--	6.00 J	14.7 J	16.7 J	11.5 J [7.10 J]	1.50 BJ	42.0 J	4.90	4.60	5.80	9.00	12.0	7.00 J [7.00 J]	13.0 J	0.480 B	1.20 B	0.810 B [1.10 B]
Copper	270	<14.0 J	<15.2 J	<16.9 J	<9.30 J [<8.10 J]	<6.10 J	<27.3 J	15.7	9.10	5.40 B	7.70	16.1	8.00 J [8.00 J]	14.0 J	1.80 B	1.90 B	1.80 B [2.20 B]
Cyanide, Total	27	<0.591 J	<0.566 J	<0.591	<0.535 J [<0.542]	0.125 B	<0.555	NA	<0.568	<0.525	<0.524 J	<0.518	<0.526 [<0.536]	<0.552	<0.507	<0.506	<0.507 [<0.514]
Iron	--	10,600	9,330	17,800	8,090 [9,130]	6,310	13,900	13,100	12,500	6,720	7,730	9,710	10,400 [8,400]	9,140	4,210	3,850	3,230 [2,050]
Lead	1,000	4.70 B	6.50 B	10.4 B	7.10 B [6.70 B]	6.10 B	13.6	16.6	9.90 B	70.5	6.60 B	26.8	6.00 B [5.00 B]	19.0	<10.1	1.10 B	0.970 B [1.10 B]
Magnesium	--	775	726	1,890	861 [736]	9,210	2,560	1,460	1,220	335	3,410	839	1,650 [1,240]	862	189	207	147 [153]
Manganese	10,000	89.5	102	194	48.4 [42.3]	48.5	107	120	149	66.9	87.8	155	96.0 [98.0 J]	113	16.2	42.4	40.2 [41.6]
Mercury	2.8	<1.90	<2.20	<2.40	0.150 B [0.0590 B]	<1.80	0.0580 B	0.0660 B	0.0740 B	<2.00	<2.00	<1.90	<1.00 [<2.00]	<2.00	<1.80	<1.90	<1.90 [<1.60]
Nickel	310	10.2	7.60	13.0	8.40 [7.20]	2.20 B	9.30	8.80	6.80 B	2.20 B	5.90 B	4.80 B	7.00 [6.00]	5.00 B	1.50 B	1.50 B	1.50 B [1.70 B]
Potassium	--	215 B	377	415	208 B [176 B]	219 B	386	312 J	402 J	109 BJ	513 J	308 J	499 [470]	314	73.4 B	80.7 B	74.5 B [73.1 B]
Silver	1,500	<4.20	<4.40	<4.10	<3.90 [<3.70]	<3.70	1.00 B	<3.80	<4.10	<3.80	<3.60	<3.80	<3.00 [<3.00]	<3.00	<3.40	<3.40	<3.50 [<3.70]
Sodium	--	68.1 B	76.5 B	131	35.6 B [27.3 B]	44.0 B	67.3 B	41.3 B	45.7 B	<119	57.5 B	105 B	165 [163]	64.0 B	<106	<106	<110 [<116]
Thallium	--	<30.7	<32.1	<30.2	<28.3 [<26.9]	<26.8	<28.3	<27.6	<30.3	<27.8	<26.5	<28.2	<28.0 [<28.0]	<27.0	<24.7	<24.9	<25.8 [<27.2]
Vanadium	--	12.3	10.3	24.5	13.1 [14.8]	9.50	18.7	27.3	17.9	3.80 B	8.90	13.3	15.0 [11.0]	12.0	2.60 BJ	3.70 BJ	2.60 BJ [2.60 BJ]
Zinc	10,000	11.4 B	10.9 B	25.7 B	56.7 [42.1]	11.0 B	51.3	26.3	18.2 B	28.6	23.2 B	17.0 B	19.0 B [20.0 B]	14.0 B	<22.5	<22.6	6.00 B [<24.7]

**TABLE 5**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED INORGANICS (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs: Commercial	AOC35B-2 12 - 14 02/23/04	AOC35C-1 12 - 14 02/23/04	AOC35C-2 12 - 14 02/23/04	AOC35C-3 12 - 14 02/23/04	AOC35D-1 6 - 8 02/23/04	AOC35D-2 12 - 14 02/23/04	AOC35E-1 6 - 8 02/24/04	AOC35E-2 12 - 14 02/24/04	AOC35F-1 6 - 8 02/24/04	AOC35F-2 12 - 14 02/24/04	AOC35F-3S 6 - 8 10/20/04	AOC35G-1 6 - 8 02/24/04	AOC35G-2 12 - 14 02/24/04	AOC35H-1S 12 - 14 10/19/04	AOC35I-1S 12 - 14 10/19/04	AOC35I-2S 12 - 14 10/19/04
Data Validation Complete		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Soil Removed Via 2009 ICM																	
<b>Metals</b>																	
Aluminum	--	1,560 J	1,460 J	1,490 J	1,570 J	2,130 J	2,170 J	1,060	1,460	2,370	1,330 J	979	1,370 J	1,570 J	2,690 J	1,470	1,320
Antimony	--	<13.9 J	<13.9 J	<14.2 J	<13.0 J	<13.7 J	<15.0 J	<14.0 J	<14.5 J	<14.3 J	<13.9 J	<13.9 J	<14.6 J	<13.2 J	<14.1 J	<11.6 J	<14.6 J
Arsenic	16	<9.50	<9.50	<9.70	<8.90	<9.30	<10.3	<9.50	<9.90	<9.80	<9.50	<9.50	<10.0	<9.00	<5.40	<4.50	<5.60
Barium	400	5.10 J	5.00 J	5.90 J	4.90 J	6.90 J	11.5 J	6.10	7.60	11.1	4.30 J	5.80	7.70 J	6.90 J	12.5 J	5.30	5.70
Beryllium	590	2.40 U	2.40 U	2.40 U	2.20 U	2.30 U	2.60 U	2.40 U	2.50 U	2.40 U	2.40 U	2.40 U	2.50 U	2.30 U	2.40 U	2.00 U	2.50 U
Cadmium	9.3	<3.60	<3.60	<3.70	<3.30	<3.50	<3.80	<3.60	<3.70	<3.70	<3.60	<3.60	<3.70	<3.40	<1.30	<1.10	<1.40
Calcium	--	36.1 B	35.0 B	57.2 B	29.4 B	126	2,520	87.9 B	334	113	46.9 B	64.1 B	52.7 B	40.8 B	73.7 B	73.0 BJ	39.1 BJ
Chromium	--	2.50 B	2.70 B	3.50 B	2.40 B	8.60	6.20	2.80 B	22.8	4.80	2.60 B	3.00 B	3.40 B	4.00	4.80 J	2.70 BJ	3.40 BJ
Cobalt	--	1.10 B	0.840 B	1.10 B	0.650 B	2.50	1.50 B	1.30 BJ	0.950 BJ	1.70 BJ	0.800 B	1.70 B	1.70 B	1.10 B	1.20 B	0.790 B	<2.50
Copper	270	1.80 B	1.50 B	1.60 B	1.40 B	6.10	4.90 B	1.90 BJ	4.90 BJ	3.00 BJ	1.50 B	1.90 B	2.70 B	2.10 B	3.10 B	1.20 B	<6.30
Cyanide, Total	27	<0.509	<0.502	<0.496	<0.504	<0.494	<0.513	<0.506	<0.510	<0.504	<0.509	<0.502	<0.490	<0.505	<0.492	<0.513	<0.525
Iron	--	1,830	2,800	3,210	2,120	7,710	4,400	4,350	5,410	5,890	1,830	3,600	6,660	3,020	4,210 J	2,670	2,820
Lead	1,000	1.00 B	<10.7	1.00 B	<10.0	1.10 B	2.00 B	1.30 BJ	1.60 BJ	1.50 BJ	<10.7	1.50 BJ	1.60 B	1.10 B	1.10 BJ	1.90 B	1.70 B
Magnesium	--	234	129	155	122	125	1,570	325	198	581	165	198	405	173	466 J	173	146
Manganese	10,000	40.2	58.9	88.1	50.1	139	86.6	64.3	77.8	131	31.1	123 J	166	54.6	45.8 J	43.2	43.8
Mercury	2.8	<2.10	<1.90	<2.00	<1.80	<1.90	<1.70	<1.90	<1.80	<1.80	<1.70	<1.70	<1.80	<1.90	<0.0620	<0.0650	<0.0670
Nickel	310	1.70 B	1.40 B	1.30 B	1.10 B	3.00 B	2.40 B	1.60 BJ	3.70 BJ	2.50 BJ	1.70 B	2.20 B	3.40 B	1.60 B	2.90 B	1.20 B	0.770 B
Potassium	--	92.5 B	63.0 B	60.6 B	50.6 B	67.1 B	166 B	179 B	99.5 B	348	80.3 B	69.0 B	117 B	88.6 B	473 J	99.8 BJ	96.1 BJ
Silver	1,500	<3.60	<3.60	<3.70	<3.30	<3.50	<3.80	<3.60	<3.70	<3.70	<3.60	<3.60	<3.70	<3.40	<3.60	<3.00	<3.80
Sodium	--	<112	<111	<114	<104	<110	<121	<112	<116	<115	<112	<112	<117	<106	<113	<93.6	<118 J
Thallium	--	<26.2	<26.1	<26.8	<24.4	<25.7	<28.2	<26.3	<27.2	<26.9	<26.2	<26.1	<27.5	<24.8	<26.6	<21.9 J	<27.5 J
Vanadium	--	2.60 BJ	2.80 BJ	2.80 BJ	2.10 BJ	5.20 J	7.70 J	3.60 B	3.00 B	9.90	2.00 BJ	2.60 B	4.50 BJ	2.90 BJ	5.60 J	2.80 B	2.20 B
Zinc	10,000	<23.8	<23.7	<24.3	<22.2	8.90 B	7.40 B	4.80 B	11.4 B	8.00 B	<23.8	<23.7	9.00 B	<22.6	6.70 B	8.40 BJ	<25.0

**TABLE 5**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED INORGANICS (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs: Commercial	AOC35J-1S 12 - 14 10/19/04	AOC35K-1S 12 - 14 10/19/04	AOC35L-1S 12 - 14 10/20/04	AOC35M-1S 12 - 14 10/19/04	AOC35N-1S 12 - 14 10/20/04	AOC35-0 12 - 14 05/04/06	AOC37-3 0 - 1 02/18/04	AOC41-4 0 - 1 02/19/04	AOC41-5 0 - 1 02/19/04	AOC41-6 0 - 1 02/19/04	AOC41-7 0 - 1 02/19/04	AOC41-8 0 - 1 02/19/04	AOC45-4 0 - 1 02/19/04	AOC46-4 0 - 1 02/19/04	AOC48-1 0 - 1 02/19/04	AOC48-2 0 - 1 02/19/04	AOC49-4 0 - 1 02/19/04
Data Validation Complete		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Soil Removed Via 2009 ICM																		
<b>Metals</b>																		
Aluminum	--	4,030	1,880 J	1,600	1,240	888 [1,170]	676	3,990	10,400	11,500	8,330	5,280	5,730	1,660	2,340	6,190	4,180	1,740
Antimony	--	<10.9 J	<11.2 J	<14.5 J	<12.2 J	<13.4 J [ $<12.3$ J]	<11.8 N	<13.0 J	1.80 BJ	<17.4 J	<15.8 J	<15.1 J	<14.0 J	<13.7 J	<14.3 J	<14.8 J	<15.2 J	<15.2 J
Arsenic	16	1.80 B	<4.30	<9.90	<4.70	<9.20 [ $<4.70$ ]	<4.50 N	10.0 J	7.10 BJ	8.90 BJ	14.9 J	7.70 BJ	6.40 BJ	<9.40	2.70 BJ	9.50 BJ	4.70 BJ	<10.4
Barium	400	15.4	5.30 J	5.50	6.20	4.20 [5.50]	3.10	21.0 J	27.5	24.0	28.9	49.5	40.7	10.4	7.70	22.3	12.6	12.4
Beryllium	590	1.90 U	1.90 U	2.50 U	2.10 U	2.30 U [2.10 U]	2.00 U	2.00 U	2.70 U	3.00 U	2.70 U	2.60 U	2.40 U	2.30 U	2.50 U	2.50 U	2.60 U	2.60 U
Cadmium	9.3	<1.00	<1.10	<3.70	<1.10	<3.40 [ $<1.20$ ]	<1.10	1.00 B	<4.00	<4.50	<4.00	<3.90	<3.60	<3.50	<3.70	<3.80	<3.90	<3.90
Calcium	--	2,170 J	48.0 B	65.5 B	155 J	30.7 B [51.3 BJ]	60.5 B*	5,420 J	416	213	5,040	41,200	24,700	4,150	1,510	596	1,110	1,380
Chromium	--	7.70 J	3.90 J	2.70 B	11.3 J	2.90 B [4.30 J]	1.20 B	8.00	15.9	14.4	18.1	8.80	7.20	5.30	3.40 B	9.90	5.30	4.50
Cobalt	--	1.60 B	1.10 B	0.860 B	1.10 B	1.00 B [1.30 B]	0.630 B	79.0 J	5.20 J	4.10 J	17.6 J	4.20 J	4.20 J	32.9 J	19.7 J	2.30 BJ	2.60 BJ	1.70 BJ
Copper	270	4.00 B	1.60 B	2.80 B	1.80 B	1.40 B [2.00 B]	1.10 B*N	36.0 J	10.3 J	11.6 J	42.4 J	35.9 J	40.7 J	19.4 J	15.6 J	16.3 J	9.20 J	5.80 BJ
Cyanide, Total	27	<0.534	<0.504	<0.511	<0.512	<0.504 [ $<0.518$ ]	<0.515	<0.536	<0.598 J	<0.631 J	<0.555 J	<0.520 J	<0.516 J	<0.516 J	<0.504 J	<0.535 J	<0.525 J	<0.536 J
Iron	--	6,570	3,370 J	3,990	4,630	3,490 [4,150]	2,140 *	15,900	13,300	13,700	11,700	13,000	11,600	7,370	7,150	8,640	7,810	3,650
Lead	1,000	4.70 B	0.890 BJ	1.10 BJ	2.20 B	<10.3 J [2.00 B]	1.60 B*	63.0	14.6 J	11.9 BJ	24.8 J	17.4 J	19.5 J	3.20 BJ	4.10 BJ	135 J	16.4 J	7.90 BJ
Magnesium	--	723	191 J	147	454	139 [204]	106 *	1,170	1,310	1,360	1,080	25,100	14,600	509	926	810	989	871
Manganese	10,000	95.5	57.9 J	59.3 J	49.1	80.6 J [107]	45.0 *	95.0 J	191	134	136	156	148	67.2	79.8	97.2	99.0	53.4
Mercury	2.8	<0.0780	<0.0600	<1.80	<0.0670	<1.80 [ $<0.0810$ ]	<0.670	<1.00	0.0820 B	<2.30	0.180 B	0.0630 B	0.0890 B	0.0790 B	<2.00	0.0730 B	<2.10	<1.80
Nickel	310	3.10 B	1.80 B	1.50 B	1.60 B	1.40 B [1.80 B]	0.980 B	6.00	6.90 J	7.60 J	7.10 J	9.80 J	10.0 J	5.80 BJ	3.80 BJ	4.90 BJ	3.80 BJ	3.80 BJ
Potassium	--	200 J	98.9 BJ	108 B	195 BJ	<230 [111 BJ]	49.6 B*	273	320	315	287	280	365	179 B	146 B	208 B	181 B	121 B
Silver	1,500	<2.80	<2.90	<3.70	<3.10	<3.40 [ $<3.20$ ]	<3.00	<3.00	<4.00	<4.50	<4.00	<3.90	<3.60	<3.50	0.450 B	<3.80	<3.90	<3.90
Sodium	--	18.7 B	<90.4	<117	<98.1	<108 [ $<99.1$ ]	<94.6 *	51.0 B	28.2 B	<140	50.3 B	153	179	<110	163	<119	29.2 B	87.8 B
Thallium	--	<20.5 J	<21.2	<27.3	<23.0 J	<25.3 [ $<23.2$ J]	<22.1	<25.0	<29.5	<32.7	<29.6	<28.3	<26.4	<25.8	<27.0	<27.8	<28.6	<28.6
Vanadium	--	8.30	2.70 BJ	2.80 B	4.00 B	2.40 B [3.60 B]	2.20 B*N	12.0	18.2	18.9	16.4	37.2	31.8	13.5	10.7	13.4	10.7	8.20
Zinc	10,000	11.6 BJ	3.80 B	<24.8	5.40 BJ	<23.0 [6.50 BJ]	6.00 B*	43.0	38.6	26.7 B	49.8	144	168	142	26.1	23.1 B	18.2 B	17.1 B

**TABLE 5**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED INORGANICS (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs: Commercial	AOC52-1 1.5 - 2 08/22/06	AOC52-1 2 - 3 08/22/06	AOC52-2 1 - 1.5 08/22/06	AOC52-2 1.5 - 2.5 08/22/06	AOC52-3 1.5 - 2.5 08/22/06	AOC52-3 2.5 - 3.5 08/22/06	M-S1 0 - 0.5 07/15/11	M-S1 0.5 - 2 07/15/11	M-S1 2 - 4 07/15/11	M-S2 0 - 0.5 07/14/11	M-S2 0.5 - 2 07/14/11	M-S2 2 - 4 07/14/11	M-S3 0 - 0.5 07/14/11	M-S3 0.5 - 2 07/14/11	M-S3 2 - 4 07/14/11	M-S4 0 - 0.5 07/14/11	M-S4 0.5 - 2 07/14/11
Data Validation Complete								X	X	X	X	X	X	X	X	X	X	X
Soil Removed Via 2009 ICM				X	X													
<b>Metals</b>																		
Aluminum	--	11,300 *	1,250 *	18,400 *	1,310 *	19,100 *	1,230 * [9,760 *]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	--	<14.1 N	<10.3 N	<12.1 N	<10.6 N	<15.7 N	<11.0 N [<13.6 N]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	16	4.70 BN	<4.00 N	6.00 N	<4.10 N	5.70 BN	2.70 BN [3.60 BN]	4.30 J	2.20 J	2.00 J	6.20	6.10	<5.00	29.3	13.9	2.10 J	9.50	24.0
Barium	400	27.8 *	4.30 *	33.2 *	4.30 *	35.1 *	4.30 * [26.9 *]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	590	2.40 UN	1.80 UN	2.10 UN	1.80 UN	2.70 UN	1.90 UN [2.30 UN]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	9.3	<1.30	<0.970	<1.10	<1.00	<1.50	<1.00 [<1.30]	<1.30	<1.30	<1.30	<1.30	1.40 U	<1.20	<1.30	<1.30	<1.30	8.70	14.2
Calcium	--	265 *N	96.4 *N	1,090 *N	92.3 *N	858 *N	217 *N [448 *N]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	--	15.1 *N	1.90 B*N	20.0 *N	2.80 *N	20.7 *N	1.90 B*N [12.6 *N]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	--	6.80 *	1.10 B*	7.70 *	1.10 B*	8.30 *	2.00 * [6.60 *]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	270	8.70 *N	2.20 B*N	11.9 *N	2.70 B*N	15.7 *N	5.20 *N [8.40 *N]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide, Total	27	<0.552	0.0834 B	<0.589	<0.511	<0.596	<0.518 [<0.549]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	--	14,500 *	3,130 *	16,700 *	4,590 *	16,000 *	6,380 * [14,000 *]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	5.90 B*N	1.20 B*N	9.80 *N	0.940 B*N	13.5 *N	1.00 B*N [5.60 B*N]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	--	1,790 *N	247 *N	2,510 *N	257 *N	2,330 *N	213 *N [1,490 *N]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	10,000	333 *	69.5 *	118 *	69.1 *	92.2 *	129 * [248 *]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2.8	0.0160 B*N	<0.720 *N	0.0400 B*N	<0.690 *N	0.0560 B*N	<0.700 *N [<0.700 *N]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	310	9.90 *	1.70 B*	13.2 *	2.10 B*	14.2 *	1.90 B* [8.50 *]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	--	428 *N	79.1 B*N	693 *N	97.4 B*N	499 *N	68.4 B*N [365 *N]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	1,500	<3.60	<2.70	<3.10	<2.70	<4.00	<2.80 [<3.50]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	--	27.3 B	<83.1	61.1 B	<85.2	43.6 B	<88.2 [34.3 B]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	--	5.20 BN	<19.5 N	7.30 BN	<19.9 N	5.90 BN	<20.7 N [<25.6 N]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	--	21.4 *N	2.60 B*N	29.7 *N	3.10 B*N	31.4 *N	4.30 *N [18.3 *N]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	10,000	22.4 B*N	4.50 B*N	30.5 *N	5.40 B*N	50.4 *N	8.20 B*N [18.9 B*N]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**TABLE 5**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED INORGANICS (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs: Commercial	M-S4 2 - 4 07/14/11	M-S5 0 - 0.5 07/14/11	M-S5 0.5 - 2 07/14/11	M-S5 2 - 4 07/14/11	M-S6 0 - 0.5 07/14/11	M-S6 0.5 - 2 07/14/11	M-S6 2 - 4 07/14/11	M-S7 0 - 0.5 07/14/11	M-S7 0.5 - 2 07/14/11	M-S7 2 - 4 07/14/11	M-S8 0 - 0.5 07/13/11	M-S8 0.5 - 2 07/13/11	M-S8 2 - 4 07/13/11	M-S9 0 - 0.5 07/13/11	M-S9 0.5 - 2 07/13/11	M-S9 2 - 4 07/13/11	M-S10 0 - 0.5 07/13/11	M-S10 0.5 - 2 07/13/11
Data Validation Complete		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Soil Removed Via 2009 ICM																			
<b>Metals</b>																			
Aluminum	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	16	3.90 J	25.9	5.50	3.60 J	7.10	4.40 J	1.90 J	4.80 J	4.00 J [4.90 J]	<5.10	3.90 J	4.80 J	4.80 J	5.40	<5.20	<5.30	4.80 J	4.10 J [4.70 J]
Barium	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	590	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	9.3	<1.30	0.260 J	<1.30	<1.30	<1.20	<1.30	<1.30	<1.30	<1.30 [1.40]	<1.20	0.360 J	0.400 J	0.770 J	<1.30	<1.20	<1.30	0.660 J	1.10 J [1.40]
Calcium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	270	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide, Total	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	310	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**TABLE 5**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED INORGANICS (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCO's: Commercial	M-S10 2 - 4 07/13/11	M-S11 0 - 0.5 07/13/11	M-S11 0.5 - 2 07/13/11	M-S11 2 - 4 07/13/11	M-S12 0 - 0.5 07/13/11	M-S12 0.5 - 2 07/13/11	M-S12 2 - 4 07/13/11	M-S13 0 - 0.5 07/13/11	M-S13 0.5 - 2 07/13/11	M-S13 2 - 4 07/13/11	M-S14 0 - 0.5 07/12/11	M-S14 0.5 - 2 07/12/11	M-S14 2 - 4 07/12/11	M-S15 0 - 0.5 07/15/11	M-S15 0.5 - 2 07/15/11	M-S15 2 - 4 07/15/11	M-S16 0 - 0.5 07/15/11	M-S16 0.5 - 2 07/15/11
Data Validation Complete		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Soil Removed Via 2009 ICM																			
<b>Metals</b>																			
Aluminum	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	16	<5.00	4.10 J	3.40 J	2.60 J	11.4	2.40 J	2.40 J	2.60 J	1.70 J	2.10 J	4.40 J	6.70	2.40 J	21.4	3.00 J [2.40 J]	4.00 J	22.5	4.70 J
Barium	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	590	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	9.3	<1.20	0.850 J	1.70	1.00 J	0.450 J	0.310 J	5.10	2.10	<1.30	<1.30	0.530 J	<1.30	<1.40	0.360 J	<1.30 [<1.30]	<1.30	<1.30	<1.30
Calcium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	270	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide, Total	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	310	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA



**TABLE 5**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED INORGANICS (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs: Commercial	M-S16 2 - 4 07/15/11	M-S17 0 - 0.5 07/15/11	M-S17 0.5 - 2 07/15/11	M-S17 2 - 4 07/15/11	M-S18 0 - 0.5 07/14/11	M-S18 0.5 - 2 07/14/11	M-S18 2 - 4 07/14/11	M-S19 0 - 0.5 07/14/11	M-S19 0.5 - 2 07/14/11	M-S19 2 - 4 07/14/11	M-S20 0 - 0.5 07/13/11	M-S20 0.5 - 2 07/13/11	M-S20 2 - 4 07/13/11	M-S21 0 - 0.5 07/13/11	M-S21 0.5 - 2 07/13/11	M-S21 2 - 4 07/13/11	M-S22 0 - 0.5 07/12/11	M-S22 0.5 - 2 07/12/11	M-S22 2 - 4 07/12/11
Data Validation Complete		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Soil Removed Via 2009 ICM																				
<b>Metals</b>																				
Aluminum	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	16	4.10 J	11.2	15.5	5.60	14.6	16.2	4.30 J	5.80	6.10	5.10 J	25.7	4.50 J	2.10 J	6.10	13.4	3.90 J	32.9	5.80	3.10 J
Barium	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	590	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	9.3	<1.30	0.310 J	<1.30	<1.20	0.720 J	<1.30	<1.30	6.20	1.50	0.600 J	2.60	<1.30	<1.20	<1.30	<1.30	<1.20	<1.30	<1.20	<1.30
Calcium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	270	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide, Total	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	310	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**TABLE 5**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED INORGANICS (ppm)**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	Restricted Use SCOs: Commercial	M-S23 0 - 0.5 07/12/11	M-S23 0.5 - 2 07/12/11	M-S23 2 - 4 07/12/11	M-S24 0 - 0.5 07/12/11	M-S24 0.5 - 2 07/12/11	M-S24 2 - 4 07/12/11	M-S25 0 - 0.5 07/12/11	M-S25 0.5 - 2 07/12/11	M-S25 2 - 4 07/12/11	M-S26 2 - 4 07/12/11	M-S26 4 - 6 07/12/11
Data Validation Complete		X	X	X	X	X	X	X	X	X	X	X
Soil Removed Via 2009 ICM												
<b>Metals</b>												
Aluminum	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	16	4.00 J	3.90 J [4.20 J]	4.40 J	5.20 J	3.20 J	2.20 J	4.70 J	1.70 J	3.30 J	6.00	2.80 J
Barium	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	590	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	9.3	<1.30	<1.20 [<1.30]	<1.30	0.400 J	<1.20	0.880 J	<1.30	<1.30	<1.30	<1.40	<1.30
Calcium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	270	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide, Total	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	310	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**TABLE 5**  
**SUMMARY OF SOIL ANALYTICAL RESULTS FOR DETECTED INORGANICS (ppm)**

**CORRECTIVE MEASURES STUDY**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

**Notes:**

1. Samples were collected by ARCADIS as part of the RCRA Corrective Action Program between February 2004 and February 2009.
2. Inorganics = Target Analyte List (TAL) inorganic constituents.
3. Samples were analyzed by TestAmerica Laboratories, Inc. (formerly Severn Trent Laboratories, Inc) located in Shelton, Connecticut for inorganics using United States Environmental Protection Agency (USEPA) SW-846 Methods 6010, 7471 and 9012A.
4. Only those constituents detected in one or more samples are summarized.
5. All concentrations reported in dry weight parts per million (ppm), which is equivalent to milligrams per kilogram (mg/kg).
6. Field duplicate sample results are presented in brackets.
7. **X** indicates the following:
  - Data was validated (for **X** under row titled "Data Validation Completed").
  - Soil at sampling location was removed as part of a 2009 interim corrective measure (for **X** under row titled "Soil to be Removed Via Additional 2009 ICM")
8. Data qualifiers are defined as follows:
  - \* - Laboratory control sample was outside the criteria for this analyte.
  - < - Constituent not detected at a concentration above the reported detection limit.
  - B - Constituent was found in the sample as well as its associated blank.
  - J - Indicates that the associated numerical value is an estimated concentration.
  - N - The spike recovery exceeded the upper or lower control limits.
9. 6 NYCRR Part 375 Commercial Use Soil Cleanup Objectives (SCOs) are from Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (6 NYCRR) Part 375-6.8(b).
10. Shading indicates that the result exceeds the 6 NYCRR Part 375 Commercial Use SCO.
11. - - = No 6 NYCRR Part 375 SCO listed.
12. NA = Not Analyzed.

**TABLE 6**  
**SOIL VAPOR AND AMBIENT AIR ANALYTICAL RESULTS FOR DETECTED VOCs (µg/m<sup>3</sup>)**

**SOIL VAPOR INVESTIGATION SUMMARY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	USEPA 90th Percentile Background Levels	Ambient Air Analytical Results					Soil Vapor Analytical Results						
	Outdoor Air (Exceedences Shown via Italics)	Ambient		Up Wind		Down Wind	SG-1 5 - 5.5		SG-2 5 - 5.5	SG-3 5 - 5.5		SG-4 5 - 5.5	
		06/13/08	08/19/09	09/20/07	02/11/09	09/18/07	09/20/07	08/18/09	09/19/07	09/24/07	08/18/09	09/18/07	08/18/09
Isopropyl Alcohol	--	<9.8 J	<9.8	<9.8	<9.8	<9.8	<1,200	<1,500	<1,600	<1,100 [ <i>&lt;1,100</i> ]	<2,000	<250	<290
1,2,4-Trimethylbenzene	5.8	<0.79 J	<0.79	3.0	<0.79	4.9	<98	<110	<130	<88 [ <i>&lt;88</i> ]	<160	<20	<23
1,2-Dichloroethene (total)	--	<0.63 J	<0.63	<0.63	<0.63	<0.63	590	910	830	79 [ <i>87</i> ]	290	<16	<19
1,3,5,- Trimethylbenzene	2.7	<0.79 J	<0.79	<0.79	<0.79	1.6	<98	<110	<130	<88 [ <i>&lt;88</i> ]	<160	<20	<23
1,3-Butadiene	3.4	<0.88 J	<0.88	<0.88	<0.88	<0.88	<110	<130	<150	<100 [ <i>&lt;100</i> ]	<180	<22	<27
2,2,4-Trimethylpentane	--	<0.75 J	0.89	12	<0.75	34	<93	<110	<120	<84 [ <i>&lt;84</i> ]	<150	<19	<22
4-Ethyltoluene	3	<0.79 J	<0.79	2.8	<0.79	<b>4.9</b>	<98	<110	<130	<88 [ <i>&lt;88</i> ]	<160	<20	<23
Cyclohexane	--	<0.55 J	<0.55	0.62	<0.55	1.3	<69	<79	1,400	<62 [ <i>&lt;62</i> ]	<110	<14	<16
Dichlorodifluoromethane	8.1	2.4 J	2.8	2.7	<2.0	2.2	<240	<290	<330	<220 [ <i>&lt;220</i> ]	<410	<49	<59
Freon 11	4.3	1.2 J	1.6	1.5	<0.90	1.1	<110	<130	<150	<100 [ <i>&lt;100</i> ]	<190	<22	<b>36</b>
n-Heptane	--	<0.66 J	<0.66	2.2	<0.66	5.7	<82	<94	1,100	<74 [ <i>&lt;74</i> ]	<140	<16	<19
n-Hexane	6.4	<1.4 J	<1.4	3.2	1.9	<b>7.0</b>	<170	<210	<b>670</b>	<160 [ <i>&lt;160</i> ]	<290	<35	<42
Xylene (m,p)	--	<1.7 J	2.0	6.9	<1.7	15	<210	<260	<290	<200 [ <i>&lt;200</i> ]	<360	<43	<52
Xylene (o)	4.6	<0.69 J	<0.69	2.6	<0.69	<b>5.2</b>	<87	<100	<110	<78 [ <i>&lt;78</i> ]	<140	<17	<20
1,1,1-Trichloroethane	2.6	<0.87 J	<0.87	<0.87	<0.87	<0.87	<110	<130	<140	<98 [ <i>&lt;98</i> ]	<180	<22	<26
2-Butanone (MEK)	11.3	<1.2 J	2.7	2.2	1.3	<1.2	<140	<170	<190	<130 [ <i>&lt;130</i> ]	<240	<29	<b>50</b>
2-Hexanone	--	<1.6 J	<1.6	<1.6	<1.6	<1.6	<200	<240	490	<180 [ <i>&lt;180</i> ]	<340	<41	<49
Acetone	43.7	<9.5 J	14	11	<9.5	<9.5	<1,200	<1,400	<1,600	<1,100 [ <i>&lt;1,100</i> ]	<2,000	<240	<290
Benzene	6.6	<0.51 J	0.64	1.5	<0.51	2.7	<64	<73	<b>140</b>	<58 [ <i>&lt;58</i> ]	<110	<13	<15
Carbon disulfide	3.7	<1.2 J	<1.2	<1.2	<1.2	<1.2	<150	<180	<210	<140 [ <i>&lt;140</i> ]	<260	<31	<37
Chlorobenzene	0.8	<0.74 J	<0.74	<0.74	<0.74	<0.74	<92	<110	<b>460</b>	<83 [ <i>&lt;83</i> ]	<150	<18	<22
Chloroform	0.6	<0.78 J	<0.78	<0.78	<0.78	<0.78	<98	<110	<130	<88 [ <i>&lt;88</i> ]	<160	<20	<23
Chloromethane	3.7	0.95 J	1.3	1.2	0.83	0.91	<100	<120	<140	<93 [ <i>&lt;93</i> ]	<170	<21	<25
cis-1,2-Dichloroethene	1.8	<0.63 J	<0.63	<0.63	<0.63	<0.63	<b>590</b>	<b>910</b>	<b>320</b>	<b>79 [<i>87</i>]</b>	<b>290</b>	<16	<19
Ethylbenzene	3.5	<0.69 J	<0.69	2.5	<0.69	<b>4.8</b>	<87	<100	<b>330</b>	<78 [ <i>&lt;78</i> ]	<140	<17	<20
Tetrachloroethene	6.5	<1.1 J	<1.1	<1.1	<1.1	<1.1	<b>20,000</b>	<b>22,000</b>	<180	<b>16,000 [<i>15,000</i>]</b>	<b>35,000</b>	<b>4,600</b>	<b>5,800</b>
Methylene chloride	6.1	<1.4 J	<1.4	<1.4	<1.4	<1.4	<170	<200	<230	<160 [ <i>&lt;160</i> ]	<290	<35	<42
Toluene	33.7	0.68 J	4.1	15	1.2	<b>37</b>	<75	<87	<b>720</b>	<68 [ <i>&lt;68</i> ]	<120	<15	<18
trans-1,2-Dichloroethene	--	<0.63 J	<0.63	<0.63	<0.63	<0.63	<79	<91	520	<71 [ <i>&lt;71</i> ]	<130	<16	<19
Trichloroethene	1.3	<0.86 J	<0.86	<0.86	<0.86	<0.86	<b>2,500</b>	<b>2,900</b>	<140	<b>390 [<i>380</i>]</b>	<b>1,100</b>	<b>91</b>	<b>150</b>
Vinyl chloride	1.8	<0.41 J	<0.41	<0.41	<0.41	<0.41	<51	<59	<b>10,000</b>	<46 [ <i>&lt;46</i> ]	<84	<10	<12
Xylenes (total)	12.8	<0.69 J	2.0	10	<0.69	<b>21</b>	<87	<100	<110	<78 [ <i>&lt;78</i> ]	<140	<17	<20

**TABLE 6**  
**SOIL VAPOR AND AMBIENT AIR ANALYTICAL RESULTS FOR DETECTED VOCs (µg/m<sup>3</sup>)**

**SOIL VAPOR INVESTIGATION SUMMARY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	USEPA 90th Percentile Background Levels	Soil Vapor Analytical Results											
	Outdoor Air (Exceedences Shown via Italics)	SG-5 5 - 5.5		SG-6 5 - 5.5		SG-7 5 - 5.5		SG-8 5 - 5.5		SG-9 15 - 15.5    5 - 5.5		SG-10 5 - 5.5	SG-11 5 - 5.5
		09/21/07	08/19/09	09/18/07	08/18/09	09/18/07	09/24/07	08/18/09	09/25/07	08/19/09	09/21/07	09/21/07	08/18/09
Isopropyl Alcohol	--	<120	<210	<32	<110 [ <i>&lt;140</i> ]	<9.8	<340	<130	<12,000	<1,700	<12	<120	<170
1,2,4-Trimethylbenzene	5.8	<9.8	<17	5.4	<8.8 [ <i>&lt;11</i> ]	4.9	<27	<10	<980	<130	<b>6.9</b>	<b>11</b>	<14
1,2-Dichloroethene (total)	--	<7.9	<13	<2.0	<7.1 [ <i>&lt;9.1</i> ]	<0.63	<21	<8.3	140,000	16,000	<0.79	<7.9	<11
1,3,5- Trimethylbenzene	2.7	<9.8	<17	<2.5	<8.8 [ <i>&lt;11</i> ]	1.6	<27	<10	<980	<130	1.9	<9.8	<14
1,3-Butadiene	3.4	<11	<19	<2.9	<10 [ <i>&lt;13</i> ]	<0.88	<31	<b>12</b>	<1,100	<150	<b>4.2</b>	<11	<15
2,2,4-Trimethylpentane	--	21	<16	7.5	<8.4 [ <i>&lt;11</i> ]	8.9	<25	<9.8	<930	<130	7.5	26	<13
4-Ethyltoluene	3	<9.8	<17	<b>4.6</b>	<8.8 [ <i>&lt;11</i> ]	<b>4.1</b>	<27	<10	<980	<130	<b>6.4</b>	<b>11</b>	<14
Cyclohexane	--	<6.9	<12	<1.7	<6.2 [ <i>&lt;7.9</i> ]	<0.55	<19	<7.2	<690	<93	<0.69	<6.9	<9.6
Dichlorodifluoromethane	8.1	<25	<43	<6.4	<22 [ <i>&lt;28</i> ]	<2.0	<69	<26	<2,500	<340	<2.5	<25	<34
Freon 11	4.3	<b>52</b>	<b>140</b>	<b>28</b>	<b>34 [43]</b>	1.1	<30	<12	<1,100	<150	1.5	<b>22</b>	<b>16</b>
n-Heptane	--	<8.2	<14	<2.0	<7.4 [ <i>&lt;9.4</i> ]	1.8	<22	<8.6	<820	<110	3.7	9.8	<11
n-Hexane	6.4	<18	<30	<4.6	<16 [ <i>&lt;20</i> ]	1.6	<49	<18	<1,800	<240	4.2	<18	<24
Xylene (m,p)	--	<22	<37	7.8	<20 [ <i>&lt;25</i> ]	7.8	<61	<23	<2,200	<300	14	29	<30
Xylene (o)	4.6	<8.7	<15	3.4	<7.8 [ <i>&lt;10</i> ]	3.2	<23	<9.1	<870	<120	<b>5.6</b>	<b>11</b>	<12
1,1,1-Trichloroethane	2.6	<11	<19	<b>18</b>	<b>33 [39]</b>	<0.87	<29	<11	<1,100	<150	<1.1	<11	<15
2-Butanone (MEK)	11.3	<15	<b>56</b>	<b>18</b>	<b>&lt;13 [17]</b>	3.5	<41	<b>29</b>	<1,500	<200	<b>15</b>	<b>17</b>	<b>26</b>
2-Hexanone	--	<20	<35	<5.3	<18 [ <i>&lt;23</i> ]	<1.6	<57	<21	<2,000	<280	3.1	<20	<28
Acetone	43.7	<120	<b>260</b>	<b>110</b>	<110 [ <i>&lt;140</i> ]	16	<330	<b>130</b>	<12,000	<1,600	<b>88</b>	<120	<160
Benzene	6.6	<6.4	<b>11</b>	1.7	<5.8 [ <i>&lt;7.3</i> ]	0.86	<17	<b>8.0</b>	<640	<86	2.1	<6.4	<8.9
Carbon disulfide	3.7	<16	<27	<4.0	<14 [ <i>&lt;18</i> ]	<1.2	<44	<16	<1,600	<210	3.0	<16	<21
Chlorobenzene	0.8	<9.2	<16	<2.3	<8.3 [ <i>&lt;11</i> ]	<0.74	<25	<9.7	<920	<120	<0.92	<9.2	<13
Chloroform	0.6	<9.8	<17	<2.4	<8.8 [ <i>&lt;11</i> ]	<0.78	<26	<10	<980	<130	<0.98	<9.8	<14
Chloromethane	3.7	<10	<18	<2.7	<9.3 [ <i>&lt;12</i> ]	<0.83	<29	<11	<1,000	<140	<1.0	<10	<14
cis-1,2-Dichloroethene	1.8	<7.9	<13	<2.0	<7.1 [ <i>&lt;9.1</i> ]	<0.63	<21	<8.3	<b>140,000</b>	<b>15,000</b>	<0.79	<7.9	<11
Ethylbenzene	3.5	<8.7	<15	2.6	<7.8 [ <i>&lt;10</i> ]	2.3	<23	<9.1	<870	<120	<b>4.8</b>	<b>10</b>	<12
Tetrachloroethene	6.5	<b>2,200</b>	<b>4,000</b>	<b>430</b>	<b>600 [680]</b>	<b>130</b>	<b>4,500</b>	<b>2,200</b>	<b>150,000</b>	<b>9,500</b>	<b>8.1</b>	<b>2,400</b>	<b>3,000</b>
Methylene chloride	6.1	<17	<30	<4.5	<16 [ <i>&lt;20</i> ]	<1.4	<49	<18	<1,700	<240	<1.7	<17	<24
Toluene	33.7	<b>41</b>	24	12	<6.8 [ <i>&lt;8.7</i> ]	11	<b>83</b>	11	<750	<100	22	<b>53</b>	<11
trans-1,2-Dichloroethene	--	<7.9	<13	<2.0	<7.1 [ <i>&lt;9.1</i> ]	<0.63	<21	<8.3	2,900	710	<0.79	<7.9	<11
Trichloroethene	1.3	<b>1,100</b>	<b>1,300</b>	<b>470</b>	<b>1,700 [2,000]</b>	<b>3.0</b>	<b>48</b>	<b>36</b>	<b>36,000</b>	<b>7,500</b>	<1.1	<b>24</b>	<b>32</b>
Vinyl chloride	1.8	<5.1	<8.7	<1.3	<4.6 [ <i>&lt;5.9</i> ]	<0.41	<14	<5.4	<510	<69	<0.51	<5.1	<7.2
Xylenes (total)	12.8	<8.7	<15	12	<7.8 [ <i>&lt;10</i> ]	11	<23	<9.1	<870	<120	<b>20</b>	<b>40</b>	<12

**TABLE 6**  
**SOIL VAPOR AND AMBIENT AIR ANALYTICAL RESULTS FOR DETECTED VOCs (µg/m<sup>3</sup>)**

**SOIL VAPOR INVESTIGATION SUMMARY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	USEPA 90th Percentile Background Levels	Soil Vapor Analytical Results											
	Outdoor Air (Exceedences Shown via Italics)	SG-12 5 - 5.5	SG-13 5 - 5.5	SG-14 5 - 5.5	SG-14A 5 - 5.5	SG-15 5 - 5.5	SG-16 5 - 5.5	SG-17 5 - 5.5	SG-18 5 - 5.5	SG-19 29.5 - 30	SG-20 29.5 - 30		
		09/20/07	09/20/07	08/19/09	09/20/07	08/19/09	09/19/07	08/19/09	09/19/07	09/18/07	09/24/07	06/13/08	06/13/08
Isopropyl Alcohol	--	<15	<190	<270	<470	<49	<86	<74	<9.8 [ <i>&lt;9.8</i> ]	<12	<37	<790	<320
1,2,4-Trimethylbenzene	5.8	<b>5.9</b>	<15	<21	<37	<b>8.4</b>	<6.9	<5.9	<b>13 [16]</b>	3.7	<b>23</b>	<64	<25
1,2-Dichloroethene (total)	--	<0.99	<12	<17	<30	<3.2	<5.6	<4.8	<0.63 [ <i>&lt;0.63</i> ]	<0.79	<2.3	1,000	2,400
1,3,5- Trimethylbenzene	2.7	1.8	<15	<21	<37	<4.0	<6.9	<5.9	<b>3.9 [4.9]</b>	1.2	<b>6.4</b>	<64	<25
1,3-Butadiene	3.4	<b>12</b>	<17	<24	<42	<4.4	<7.7	<6.6	1.3 [1.4]	1.9	<3.3	<71	<29
2,2,4-Trimethylpentane	--	4.6	75	<20	<35	18	8.9	<5.6	19 [39]	1.6	3.8	<61	<23
4-Ethyltoluene	3	<b>5.4</b>	<15	<21	<37	<4.0	<6.9	<5.9	<b>11 [13]</b>	<b>3.3</b>	<b>18</b>	<64	<25
Cyclohexane	--	1.1	<11	<15	<26	8.3	<4.8	<4.1	0.96 [1.8]	<0.69	<2.0	<45	<17
Dichlorodifluoromethane	8.1	<3.1	<38	<54	<94	<9.9	<17	<15	<2.0 [ <i>&lt;2.0</i> ]	<2.5	<7.4	<160	<64
Freon 11	4.3	3.6	<17	<24	<42	<b>28</b>	<7.9	<b>11</b>	2.2 [2.3]	1.6	<3.3	<73	<28
n-Heptane	--	6.1	16	<18	<31	11	<5.7	<4.9	6.6 [10]	3.4	4.9	<53	<20
n-Hexane	6.4	<b>8.1</b>	<27	<39	<67	<b>17</b>	<12	<11	<b>5.3 [8.8]</b>	3.3	<5.3	<110	<46
Xylene (m,p)	--	13	41	<48	<83	30	<15	<13	23 [34]	6.1	23	<140	<56
Xylene (o)	4.6	<b>4.8</b>	<b>16</b>	<19	<33	<b>11</b>	<6.1	<5.2	<b>8.7 [12]</b>	2.6	<b>9.6</b>	<56	<22
1,1,1-Trichloroethane	2.6	<b>14</b>	<17	<23	<41	<4.4	<7.6	<6.5	<0.87 [ <i>&lt;0.87</i> ]	<1.1	<3.2	<71	<27
2-Butanone (MEK)	11.3	<b>27</b>	<23	<32	<56	<b>17</b>	<10	<b>25</b>	8.3 [7.4]	<b>13</b>	<b>15</b>	<94	<38
2-Hexanone	--	<2.6	<32	<45	<78	<8.2	<14	<12	<1.6 [ <i>&lt;1.6</i> ]	<2.0	<6.1	<130	<53
Acetone	43.7	<b>110</b>	<180	<260	<450	<b>74</b>	<83	<b>100</b>	40 [33]	<b>74</b>	<b>81</b>	<760	<310
Benzene	6.6	3.2	<9.9	<14	<24	<b>8.6</b>	<4.5	4.5	2.1 [3.5]	1.3	<1.9	<42	<16
Carbon disulfide	3.7	<b>4.4</b>	<24	<34	<59	<b>8.1</b>	<11	<9.3	2.0 [2.1]	<b>5.3</b>	<4.7	<100	<40
Chlorobenzene	0.8	<1.2	<14	<20	<35	<3.7	<6.4	<5.5	<0.74 [ <i>&lt;0.74</i> ]	<0.92	<2.7	<60	<23
Chloroform	0.6	<1.2	<15	<21	<37	<4.0	<6.8	<5.9	<0.78 [ <i>&lt;0.78</i> ]	<b>4.9</b>	<2.9	<63	<24
Chloromethane	3.7	<1.3	<16	<23	<39	<4.1	<7.2	<6.2	<0.83 [ <i>&lt;0.83</i> ]	<1.0	<3.1	<66	<27
cis-1,2-Dichloroethene	1.8	<0.99	<12	<17	<30	<3.2	<5.6	<4.8	<0.63 [ <i>&lt;0.63</i> ]	<0.79	<2.3	<b>1,000</b>	<b>2,400</b>
Ethylbenzene	3.5	<b>4.3</b>	<b>15</b>	<19	<33	<b>15</b>	<6.1	<5.2	<b>6.9 [10]</b>	1.9	<b>7.4</b>	<56	<22
Tetrachloroethene	6.5	<b>64</b>	<b>2,700</b>	<b>3,700</b>	<b>8,100</b>	<b>880</b>	<b>1,200</b>	<b>1,600</b>	2.5 [3.1]	4.5	4.5	<b>16,000</b>	<b>600</b>
Methylene chloride	6.1	<2.2	<27	<38	<66	<6.9	<12	<b>14</b>	<1.4 [ <i>&lt;1.4</i> ]	<1.7	<5.2	<110	<45
Toluene	33.7	17	<b>110</b>	<16	<b>49</b>	<b>45</b>	27	4.9	<b>35 [60]</b>	7.2	21	<49	<19
trans-1,2-Dichloroethene	--	<0.99	<12	<17	<30	<3.2	<5.6	<4.8	<0.63 [ <i>&lt;0.63</i> ]	<0.79	<2.3	<52	<20
Trichloroethene	1.3	<b>1.4</b>	<17	<23	<b>160</b>	<b>22</b>	<b>120</b>	<b>190</b>	<b>1.2 [1.6]</b>	<1.1	<3.2	<b>2,600</b>	<b>75</b>
Vinyl chloride	1.8	<0.64	<7.9	<11	<19	<2.1	<3.6	<3.1	<0.41 [ <i>&lt;0.41</i> ]	<0.51	<1.5	<33	<13
Xylenes (total)	12.8	<b>17</b>	<b>56</b>	<19	<33	<b>40</b>	<6.1	<5.2	<b>33 [48]</b>	9.1	<b>33</b>	<56	<22

**TABLE 6**  
**SOIL VAPOR AND AMBIENT AIR ANALYTICAL RESULTS FOR DETECTED VOCs (µg/m<sup>3</sup>)**

**SOIL VAPOR INVESTIGATION SUMMARY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Location ID: Sample Depth(Feet): Date Collected:	USEPA 90th Percentile Background Levels	Soil Vapor Analytical Results							
	Outdoor Air (Exceedences Shown via Italics)	SG-21 5 - 5.5	SG-22 5 - 5.5	SG-23 5 - 5.5	SG-24 5 - 5.5	SG-25 5 - 5.5	SG-26 5 - 5.5	SG-27 5 - 5.5	SG-28 5 - 5.5
		06/13/08	02/10/09	02/11/09	02/11/09	02/10/09	02/10/09	02/11/09	08/19/09
Isopropyl Alcohol	--	<37	14 [ <i>&lt;9.8</i> ]	<9.8 J	14	<9.8	81	<190 J	<270
1,2,4-Trimethylbenzene	5.8	<2.9	<0.79 [ <i>&lt;0.79</i> ]	<0.79 J	<0.79	<0.79	<3.4	<15 J	<21
1,2-Dichloroethene (total)	--	<2.4	<0.63 [ <i>&lt;0.63</i> ]	<0.63 J	<0.63	<0.63	<2.8	<12 J	<17
1,3,5,- Trimethylbenzene	2.7	<2.9	<0.79 [ <i>&lt;0.79</i> ]	<0.79 J	<0.79	<0.79	<3.4	<15 J	<21
1,3-Butadiene	3.4	<3.3	1.8 [ <i>1.3</i> ]	3.1 J	1.1	<b>4.4</b>	<b>12</b>	<b>77 J</b>	<24
2,2,4-Trimethylpentane	--	<2.8	<0.75 [ <i>&lt;0.75</i> ]	<0.75 J	<0.75	<0.75	<3.3	<14 J	<20
4-Ethyltoluene	3	<2.9	<0.79 [ <i>&lt;0.79</i> ]	<0.79 J	<0.79	<0.79	<3.4	<15 J	<21
Cyclohexane	--	<2.1	<0.55 [ <i>&lt;0.55</i> ]	<0.55 J	<0.55	<0.55	<2.4	<11 J	<15
Dichlorodifluoromethane	8.1	<7.4	<2.0 [ <i>&lt;2.0</i> ]	2.6 J	2.2	<2.0	<8.9	<38 J	<54
Freon 11	4.3	<3.4	1.6 [ <i>1.5</i> ]	1.9 J	1.7	1.7	<3.9	<17 J	<24
n-Heptane	--	<2.5	<0.66 [ <i>&lt;0.66</i> ]	1.8 J	1.1	1.7	4.5	<13 J	<18
n-Hexane	6.4	<5.3	3.2 [ <i>&lt;1.4</i> ]	4.6 J	1.8	3.9	<b>7.4</b>	<27 J	<39
Xylene (m,p)	--	<6.5	<1.7 [ <i>&lt;1.7</i> ]	<1.7 J	<1.7	<1.7	<7.8	<33 J	<48
Xylene (o)	4.6	<2.6	<0.69 [ <i>&lt;0.69</i> ]	<0.69 J	<0.69	<0.69	<3.0	<13 J	<19
1,1,1-Trichloroethane	2.6	<3.3	<0.87 [ <i>&lt;0.87</i> ]	<0.87 J	<0.87	<0.87	<3.8	<17 J	<23
2-Butanone (MEK)	11.3	<4.4	5.0 [ <i>2.6</i> ]	8.3 J	3.8	6.5	<b>13</b>	<b>26 J</b>	<32
2-Hexanone	--	<6.1	<1.6 [ <i>&lt;1.6</i> ]	<1.6 J	<1.6	<1.6	<7.4	<32 J	<45
Acetone	43.7	38	29 [ <i>15</i> ]	38 J	16	36	<b>52</b>	<180 J	<260
Benzene	6.6	<1.9	0.70 [ <i>0.58</i> ]	2.1 J	0.73	1.6	4.2	<b>80 J</b>	<14
Carbon disulfide	3.7	<4.7	<1.2 [ <i>&lt;1.2</i> ]	<1.2 J	<1.2	<1.2	<5.6	<24 J	<34
Chlorobenzene	0.8	<2.8	<0.74 [ <i>&lt;0.74</i> ]	<0.74 J	<0.74	<0.74	<3.2	<14 J	<20
Chloroform	0.6	<2.9	<0.78 [ <i>&lt;0.78</i> ]	<0.78 J	<0.78	<0.78	<3.4	<15 J	<21
Chloromethane	3.7	<3.1	<0.83 [ <i>&lt;0.83</i> ]	<0.83 J	<0.83	<0.83	<3.7	<16 J	<23
cis-1,2-Dichloroethene	1.8	<2.4	<0.63 [ <i>&lt;0.63</i> ]	<0.63 J	<0.63	<0.63	<2.8	<12 J	<17
Ethylbenzene	3.5	<2.6	<0.69 [ <i>&lt;0.69</i> ]	<0.69 J	<0.69	<0.69	<3.0	<13 J	<19
Tetrachloroethene	6.5	<b>430</b>	<b>10 [<i>9.5</i>]</b>	<1.1 J	<b>13</b>	<b>38</b>	<b>630</b>	<b>1,800 J</b>	<b>4,500</b>
Methylene chloride	6.1	<5.2	<1.4 [ <i>&lt;1.4</i> ]	<1.4 J	<1.4	<1.4	<6.3	<27 J	<38
Toluene	33.7	<2.3	0.87 [ <i>0.75</i> ]	1.8 J	1.6	2.0	4.5	<b>36 J</b>	<16
trans-1,2-Dichloroethene	--	<2.4	<0.63 [ <i>&lt;0.63</i> ]	<0.63 J	<0.63	<0.63	<2.8	<12 J	<17
Trichloroethene	1.3	<b>170</b>	<0.86 [ <i>&lt;0.86</i> ]	<0.86 J	<0.86	<0.86	<b>4.6</b>	<17 J	<b>86</b>
Vinyl chloride	1.8	<1.5	<0.41 [ <i>&lt;0.41</i> ]	<0.41 J	<0.41	<0.41	<1.8	<7.9 J	<11
Xylenes (total)	12.8	<2.6	<0.69 [ <i>&lt;0.69</i> ]	<0.69 J	<0.69	<0.69	<3.0	<13 J	<19

**TABLE 6**  
**SOIL VAPOR AND AMBIENT AIR ANALYTICAL RESULTS FOR DETECTED VOCs ( $\mu\text{g}/\text{m}^3$ )**

**SOIL VAPOR INVESTIGATION SUMMARY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

**Notes:**

1. Samples were collected by ARCADIS on the dates indicated.
2. Samples were analyzed for volatile organic compounds (VOCs) by TestAmerica, Inc. of Burlington, Vermont using United States Environmental Protection Agency (USEPA) Compendium Method T1
3. USEPA Indoor Air and Outdoor Air Background Levels are the 90th percentile of background air values observed by the USEPA in a study of public and commercial office buildings, per USEPA database information referenced in Section 3.2.4 of the "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (NYSDOH, October 2006).
4. Concentrations reported in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ).
5. < = Not detected at or above the associated reporting limit.
6. -- = Comparison value not available.
7. Field duplicate sample results are presented in brackets.
8. Bold Italic font indicates an exceedence of the USEPA 90th Percentile Background Outdoor Air Value.
9. Results for samples collected through February 2009 have been validated. Results for samples collected in August 2009 have not been validated.



**TABLE 7  
PRELIMINARY REMEDIAL TECHNOLOGY SCREENING EVALUATION FOR SOIL**

**CORRECTIVE MEASURES STUDY REPORT  
BAYER MATERIALSCIENCE LLC  
125 NEW SOUTH ROAD  
HICKSVILLE, NEW YORK**

General Response Action	Remedial Technology	Technology Process	Description	Screening Comments
No Action	No Action	No Action	Alternative would not include any remedial action.	Technically feasible.
Institutional Controls	Access Restrictions	Deed Restrictions	Deeds for the property would include restrictions on future site use and excavation of subsurface soils.	Potentially applicable.
In-Situ Containment/Control	Capping	Clay/Soil Cap	Placing and compacting clay material or soil material over areas containing constituents of concern.	Technically feasible.
		Asphalt/Concrete Cap	Application of a layer of asphalt or concrete over areas containing constituents of concern.	Technically feasible.
		Multi-Media Cap	Application of clay material and a synthetic membrane over areas containing constituents of concern.	Technically feasible.
	Physical Containment	Slurry Walls	Involves excavating a trench to the depth of a confining base layer while adding a slurry (e.g., soil/cement-bentonite mixture) to limit down gradient migration of constituents of interest.	Not retained. Excavation to confining base layer (located more than 50 feet below grade) is not technically practical.
		Steel Sheet Piles	Steel sheet piles are driven to the depth of a confining layer to limit down gradient migration of constituents of interest.	Not retained. Installation of sheet piling to confining base layer (located more than 50 feet below grade) is not practical considering horizontal extent.
In-Situ Treatment	Extraction	Soil Flushing	Groundwater is extracted via extraction wells, passed through a treatment system (if required), extraction media is introduced into the water, and the water is then reinjected into the source areas to flush constituents from soil.	Not retained. This process is difficult to control and not applicable to media impacted with PCBs.
		Steam Stripping	Steam is used to remove VOCs from the media. The removed constituents are collected, recondensed, and treated.	Not retained. Process is not effective on PCBs.
		Soil Vapor Extraction	A vacuum is created to extract volatile constituents from vadose zone soils for treatment.	Technically implementable. Would address management of soil vapors and off-site migration.
	Biodegradation	Enhanced In-Situ Aerobic Biodegradation	Degradation of constituents by utilizing micro-organisms in an aerobic environment with the addition of amendments and controls to enhance the process performance and decrease duration.	Not retained. Process has not been demonstrated at full scale PCBs.
		In-Situ Anaerobic Biodegradation	Degradation of constituents by utilizing micro-organisms in an anaerobic environment.	Not retained. Process is not effective on PCBs.
	Chemical Oxidation	In-Site Chemical Oxidation	Addition of oxidizing agents (e.g., ozone, hydrogen peroxide, potassium permanganate, etc.) to degrade organic constituents to less toxic byproducts (e.g., carbon dioxide, water, etc.)	Technically feasible. Delivery of oxidizing agents to vadose zone soil could be accomplished by use of an infiltration gallery consisting of a series of horizontal, slotted or perforated pipes buried approximately 2 feet below the ground

**TABLE 7  
PRELIMINARY REMEDIAL TECHNOLOGY SCREENING EVALUATION FOR SOIL**

**CORRECTIVE MEASURES STUDY REPORT  
BAYER MATERIALSCIENCE LLC  
125 NEW SOUTH ROAD  
HICKSVILLE, NEW YORK**

General Response Action	Remedial Technology	Technology Process	Description	Screening Comments
In-Situ Treatment (continued)	Immobilization	Stabilization/Solidification	Treatment process which immobilizes constituents of concern within a solid mass (monolith). A solid monolith is formed by injecting and mixing an immobilization agent into the media. A variety of agents (e.g., portland cement, lime, polymerics, proprietary agents, etc.) have been utilized and could be effective for immobilizing various constituents and media.	Technically feasible. Requires bench scale testing to identify optimal mixture of immobilization components to match size conditions.
		Vitrification	Immobilizes or destroys constituents by melting the media utilizing electrical currents. The melted media then solidifies to form a glass-like monolith.	Not retained. This process is not technically practical for surface and shallow sub-surface impacts. Limited data on long term effectiveness.
Removal	Excavation	Excavation	Physical removal of media containing constituents of concern to prevent future migration and exposure. Typical excavation equipment includes backhoes, loaders, and/or dozers.	Technically feasible.
Ex-Situ On-Site Disposal	Extraction	Solvent Extraction	Organic constituents (typically oils) are chemically extracted from the media using various solvents. Constituents are typically separated from the solvent and concentrated in the oil phase (which may require additional management). Typically the solvent is recycled and reused.	Not retained. Process is used to remove oil present in high percentages from sludges. Extensive pretreatment may be required. Solvent could remain in the treated soil and may add to subsurface issues.
		On-Site Low-Temperature Thermal Desorption (LTTD)	Process by which soils containing organics with boiling point temperatures less than 800 degrees Fahrenheit are heated in a mobile thermal desorption unit and the organic compounds are desorbed from the soils into an induced air flow. The resulting gas is treated either by condensation and filtration or by thermal destruction.	Not retained. Process is used for soils containing organics with boiling point temperatures less than 800 degrees Fahrenheit. Higher temperatures are required to treat PCBs.
		Steam Stripping	Steam is used to remove VOCs from the media. The removed constituents are collected, recondensed, and treated.	Not retained. Process is not effective on PCBs.
	Recycle/Reuse	On-Site Asphalt Batching (Cold-Mix/Hot-Mix)	Impacted soil is excavated and mixed at the site with a heated asphalt emulsion and Portland cement to stabilize the VOCs in the soil. The end product material may be used as structural fill above the groundwater table.	Technically feasible.
	Thermal Destruction	On-Site Incineration	Use of a mobile incineration unit installed on-site for high-temperature thermal destruction of the organic compounds present in the media.	Technically feasible.
	Ex-Situ Biodegradation	Biopile	Air and amendments are circulated throughout an engineered pile of covered soil to enhance biodegradation.	Not retained. PCBs do not regularly biodegrade.
		Bioreactor	Amendments are mixed in a reactor to enhance the degradation of organic compounds through the use of micro-organisms in an aerobic or anaerobic environment.	Not retained. PCBs do not regularly biodegrade.
		Land Farming	Media is typically mixed with moisture, nutrients, and oxygen to enhance aerobic biodegradation of organic compounds.	Not retained. PCBs do not regularly biodegrade.
Ex-Situ On-Site Disposal (continued)		Composting	Piles of media are created to enable oxygen, moisture, and nutrient amendments to be added in order to enhance degradation by aerobic micro-organisms.	Not retained. PCBs do not regularly biodegrade.

**TABLE 7  
PRELIMINARY REMEDIAL TECHNOLOGY SCREENING EVALUATION FOR SOIL**

**CORRECTIVE MEASURES STUDY REPORT  
BAYER MATERIALSCIENCE LLC  
125 NEW SOUTH ROAD  
HICKSVILLE, NEW YORK**

General Response Action	Remedial Technology	Technology Process	Description	Screening Comments
	Chemical Treatment	Oxidation	Addition of oxidation agents to degrade organic constituents to less toxic byproducts.	Not retained. Process is not applicable for site media impacted with PCBs.
	On-Site Disposal	RCRA Landfill	Construction of a landfill that would meet RCRA	Not retained. Space at the site is limited.
		Solid Waste Landfill	Construction of a landfill that would meet NYSDEC solid	Not retained. Space at the site is limited.
Off-Site Disposal	Recycle/Reuse	Off-Site Asphalt Batching (Cold-Mix/Hot-Mix)	Impacted soil is excavated and mixed at an off-site facility with a heated asphalt emulsion and Portland cement to stabilize the VOCs in the soil. The end product material may be used as structural fill above the groundwater table.	Not retained. Process is not applicable for site media impacted with PCBs.
		Brick/Concrete Manufacture	Soil is used as a raw material in manufacture of bricks or concrete. Heating in ovens during manufacture volatilizes organics and some inorganics. Other inorganics are bound into the product.	Not retained. Process is not applicable for site media impacted with PCBs.
		Fuel Blending/Co-Burn in Utility Boiler	Soil is blended with feed coal to fire a utility boiler used to generate steam. Organics are destroyed.	Not retained. Process is not applicable for site media impacted with PCBs.
	Extraction	Low-Temperature Thermal Desorption (LTTD)	Process by which soils containing organics with boiling point temperatures less than 800 degrees Fahrenheit are heated and the organic compounds are desorbed from the soils into an induced air flow. The resulting gas is treated by either condensation and filtration or by thermal destruction.	Not retained. Process is used for soils containing organics with boiling point temperatures less than 800 degrees Fahrenheit. This does not include PCBs.
	Incineration	Incineration	Process which uses high temperatures to thermally destruct organic compounds present in media.	Technically feasible.
	Chemical Treatment	Chemical Oxidation	Addition of oxidation agents to degrade organic constituents to less toxic byproducts.	Not retained. Process is not applicable for site media impacted with PCBs.
	Disposal	Subtitle D Solid Waste Landfill	Disposal of media in an existing permitted non-hazardous landfill.	Technically feasible.

**Note:**

1 Shaded technologies have not been retained for further evaluation.

**TABLE 8**  
**SECONDARY REMEDIAL TECHNOLOGY SCREENING EVALUATION FOR SOIL**

**CORRECTIVE MEASURES STUDY**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

General Response Action	Remedial Technology	Technology Process	Effectiveness	Implementability
No Action	No Action	No Action	Does not achieve the corrective measure objectives for soil.	Not applicable.
Institutional Controls	Access Restrictions	Deed Restrictions	This option alone would not meet the corrective measure objectives. However, institutional controls could be used in conjunction with other remedial technologies to achieve the corrective measure objectives.	Readily implementable.
In-Situ Containment/ Control	Capping	Clay/Soil Cap	Effective for reducing infiltration of precipitation/surface water. Effective for reducing potential exposure to impacted surface soils. Long-term effectiveness requires ongoing maintenance and monitoring. Not suitable for high-traffic areas.	Equipment and materials to construct a new low-permeability clay/soil cap are readily available.
		Asphalt/Concrete Cap	Effective for reducing infiltration of precipitation/surface water. Effective for reducing potential exposure to impacted surface soils. Long-term effectiveness requires ongoing maintenance and monitoring. Suitable for high-traffic areas.	Equipment and materials to construct a new low-permeability asphalt/concrete cap are readily available.
		Multi-Media Cap	Effective for reducing infiltration of precipitation/surface water. Effective for reducing potential exposure to impacted surface soils. Long-term effectiveness requires ongoing maintenance and monitoring. Not suitable for high-traffic areas.	Equipment and materials to construct a new low-permeability asphalt/concrete cap are readily available.
In-Situ Treatment	Extraction	Soil Vapor Extraction	Effective for reducing VOC concentrations in soil.	Technically implementable. However, the 2009 ICM resulted in removal of VOC-containing soil that was a potential source for soil vapor impacts at the site.
In-Situ Treatment (continued)	Immobilization	Stabilization/Solidification	Proven process for effectively reducing mobility and toxicity of inorganic and select organic constituents. Overall effectiveness of this process would need to be evaluated through a treatability study.	Not Retained. Not typically used to address PCBs. PCB mobility through surface is not a primary concern. PCBs still would remain in stabilized site media.
Removal	Excavation	Excavation	Proven process for effectively removing unsaturated soil above the water table.	Technically implementable. Equipment capable of excavating the soil is readily available.
Off-Site Treatment/Disposal	Incineration	Incineration	Proven process for effectively addressing organic constituents.	Not Retained. Limited number of treatment facilities, but vendors indicate availability. Process would require bench- and pilot-scale testing. Public concerns associated with emissions.
	Disposal	Subtitle D Solid Waste Landfill	Proven process that can effectively disposal of non-hazardous solid waste.	Easily implemented.

**Note:**

1. Shaded technologies have not been retained for further evaluation.

**TABLE 9  
COST ESTIMATES FOR ALTERNATIVE 2: SITE CONTROLS AND MONITORING**

**CORRECTIVE MEASURES STUDY REPORT  
BAYER MATERIALSCIENCE LLC  
125 NEW SOUTH ROAD  
HICKSVILLE, NEW YORK**

Item #	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
CAPITAL COSTS					
1	Legal/Administrative/Institutional Controls	1	LS	\$50,000	\$50,000
2	Site Management Plan	1	LS	\$25,000	\$25,000
Subtotal Capital Cost					\$75,000
Administration and Engineering (10%)					\$11,250
Contingency (25%)					\$18,750
Subtotal Cost					\$105,000
OPERATION AND MAINTENANCE COSTS					
3	Quarterly Inspection and Maintenance of Existing Fencing and Cover Materials	1	LS	\$5,000	\$5,000
4	Annual Inspection Report	1	LS	\$3,000	\$3,000
5	Verification of Institutional Controls and Notifications to NYSDEC	1	LS	\$5,000	\$5,000
Total O&M Cost					\$13,000
Contingency (25%)					\$3,250
Subtotal Cost					\$16,250
6	30-Year Total Present Worth Cost of O&M				\$250,000
Total Estimated Cost					\$355,000
Rounded to					\$360,000

**General Notes:**

1. All costs include labor, equipment, and materials, unless otherwise noted.
2. Costs do not include legal fees, negotiations, or oversight by the New York State Department of Environmental Conservation (NYSDEC).
3. Cost estimate is based on ARCADIS past experience and vendor estimates using 2010 dollars.
4. This estimate has been prepared for the purpose of comparing potential remedial alternatives. The information in this cost estimate is based on the available information regarding the site investigation and the anticipated scope of the remedial alternative. Changes in cost elements are likely to occur as a result of new information and data collected during the engineering design of the remedial alternative. This cost estimate is expected to be within -30% to +50% of the actual projected cost. Utilization of this cost estimate information beyond the stated purpose is not recommended. ARCADIS is not licensed to provide financial or legal consulting services; as such, this cost estimate information is not intended to be utilized for complying with financial reporting requirements associated with liability services.

**Assumptions:**

1. Legal/administrative/institutional controls cost estimate includes costs a deed restriction to notify future property owners of the presence of chemical constituents in soil at the Site, the need to maintain fencing, and the need for health and safety provisions in the event that excavation activities were to occur.
2. Site management plan cost estimate includes costs to prepare a site management plan for the site. Site management plan will detail long-term maintenance of the fencing and provide required activities should site workers be required to perform intrusive activities that may potentially result in worker exposure to remaining impacted material.
3. Quarterly inspection and maintenance of existing fencing and cover materials cost estimate include costs for visually inspecting the perimeter fence and ground cover materials quarterly and performing minor repairs that may be needed.
4. Annual inspection report includes costs to prepare a letter report summarizing the results of the quarterly inspections and maintenance activities performed.
5. Annual costs associated with institutional controls include verifying the status of institutional controls and preparing/submitting notification to the NYSDEC to demonstrate that the institutional controls are being maintained and remain effective.
6. Present worth is estimated based on a 7% beginning-of-year discount rate (adjusted for inflation). It is assumed that "year zero" is 2010.

**TABLE 10**  
**COST ESTIMATES FOR ALTERNATIVE 3: EXCAVATION OF PCB-IMPACTED SOIL GREATER THAN 50 PPM,**  
**OFFSITE DISPOSAL, CAPPING FOR INDUSTRIAL USE SCOs, SITE CONTROLS, AND MONITORING**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Item #	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
CAPITAL COSTS					
1	Engineering Design	1	LS	\$30,000	\$30,000
2	Site Management Plan	1	LS	\$25,000	\$25,000
3	Health and Safety Program	1	LS	\$5,000	\$5,000
4	Mobilization/Demobilization	1	LS	\$50,000	\$50,000
5	Onsite Observation	1	LS	\$15,000	\$15,000
6	Dust/Vapor/Odor Control	6	Week	\$3,000	\$18,000
7	Erosion/Sedimentation Control	1	LS	\$10,000	\$10,000
8	Silt Fence	2,200	LF	\$5	\$11,000
9	Utility Clearance	1	LS	\$10,000	\$10,000
10	Soil Excavation and Handling	1,115	CY	\$40	\$44,600
11	Run-of-Bank Fill Importation, Placement, and Compaction	1,058	CY	\$32	\$33,856
12	Solid Waste Characterization	3	Each	\$750	\$2,250
13	Offsite Solid Waste Transportation and Disposal - Solid Waste Landfill	1,814	Ton	\$75	\$136,050
14	Topsoil Placement	1,244	CY	\$40	\$49,760
15	Site Restoration	57,153	SF	\$1	\$57,153
16	Reporting	1	LS	\$150,000	\$150,000
				Subtotal Capital Cost	\$647,669
				Administration and Engineering (10%)	\$64,767
				Contingency (25%)	\$161,917
				Subtotal Cost	\$874,353
OPERATION AND MAINTENANCE COSTS					
17	Quarterly Inspection and Maintenance of Cover Materials	1	LS	\$5,000	\$5,000
18	Annual Inspection Report	1	LS	\$20,000	\$20,000
				Subtotal O&M Cost	\$25,000
				Contingency (25%)	\$6,250
				Subtotal Cost	\$31,250
19	30-Year Total Present Worth Cost of O&M				\$481,000
				Total Estimated Cost	\$1,355,353
				Rounded to	\$1,360,000

**General Notes:**

1. All costs include labor, equipment, and materials, unless otherwise noted.
2. Costs do not include legal fees, negotiations, or oversight by the New York State Department of Conservation (NYSDEC).
3. Cost estimate is based on ARCADIS past experience and vendor estimates using 2010 dollars.
4. This estimate has been prepared for the purpose of comparing potential remedial alternatives. The information in this cost estimate is based on the available information regarding the site investigation and the anticipated scope of the remedial alternative. Changes in cost elements are likely to occur as a result of new information and data collected during the engineering design of the remedial alternative. This cost estimate is expected to be within -30% to +50% of the actual projected cost. Utilization of this cost estimate information beyond the stated purpose is not recommended. ARCADIS is not licensed to provide financial or legal consulting services; as such, this cost estimate information is not intended to be utilized for complying with financial reporting requirements associated with liability services.

**Assumptions:**

1. Engineering design cost estimate includes costs for all labor and materials necessary to design and prepare contract documents for the remedial elements of this alternative.
2. Site management plan cost estimate includes costs to prepare a site management plan for the site. Site management plan will provide required activities should site workers perform intrusive activities that may potentially result in worker exposure to remaining impacted material.
3. Health and safety program cost estimate includes labor for the development of a site-specific health and safety plan.
4. Mobilization/demobilization cost estimate includes costs for the mobilization and demobilization of all equipment, materials, and labor necessary to implement this corrective measures alternative.

**TABLE 10**  
**COST ESTIMATES FOR ALTERNATIVE 3: EXCAVATION OF PCB-IMPACTED SOIL GREATER THAN 50 PPM,**  
**OFFSITE DISPOSAL, CAPPING FOR INDUSTRIAL USE SCOs, SITE CONTROLS, AND MONITORING**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

5. Onsite observation cost estimate includes costs for an onsite observer to monitor the progress of field activities, and perform air monitoring. Cost estimate is based on providing a representative for up to 10 hours per day, 5-days per week, for a period of up to 6 weeks at an hourly rate of \$100/hour.
6. Dust/vapor/odor control cost estimate includes all equipment, labor, and materials necessary to monitor dust/vapor/odor emission during construction activities. Cost estimate includes application of vapor/odor suppressing foam to excavated materials staged on-site.
7. Erosion/sedimentation control cost estimate includes costs necessary to install and maintain erosion and sedimentation control measures anticipated to include approximately 2,200 linear feet of a three-foot-high silt fence equipped with wooden stakes placed 10-foot on-center.
8. Silt fence cost estimate includes installation of silt fence for erosion control along the perimeter of the construction areas.
9. Utility clearance cost estimate includes the identification of both aboveground and underground utilities that may potentially be affected by the remedial construction activities.
10. Soil excavation and handling cost estimate includes costs necessary to excavate soil of the proposed mound area (approximately 1,115 CY) and direct-load the material to dump trailers for off-site disposal. Cost estimate is based on in-place soil volume.
11. Run-of-bank fill importation, placement, compaction, and grading cost estimate includes costs to purchase, place, compact, and grade general fill approximately 6 inches above ground surface for cap areas.
12. Solid waste characterization cost estimate includes the analysis of soil samples (including, but not limited to, PCBs, VOCs, SVOCs, and RCRA Metals). Cost assumes that waste characterization samples would be collected at a frequency of one sample per every 500 CY of material destined for off-site disposal. The estimated weight of material was based on an assumed 1.6 tons per cubic-yard of material.
13. Offsite solid waste transportation and disposal - solid waste landfill cost estimate includes costs necessary to transport excavated material off-site for disposal at an appropriate landfill. Cost estimate assumes that all of impacted material excavated as part of the remedial construction activities will not be suitable for reuse at the site and will be disposed at a solid waste landfill (approximately 1,115 cubic yards). Cost estimate assumes a soil weight of 1.6 tons per cubic-yard.
14. Topsoil importation, placement, compaction, and grading cost estimate includes costs to purchase, place, compact, and grade general fill approximately 6 inches from the ground surface for cap areas.
15. Site Restoration cost estimate includes costs for general site cleanup following completion of construction activities.
16. Reporting cost estimate includes costs for a certification report to summarize the construction activities.
17. Quarterly inspection and maintenance of cover materials cost estimate include costs for visually inspecting the ground cover materials quarterly and performing minor repairs that may be needed.
18. Annual inspection report includes costs to prepare a letter report summarizing the results of the quarterly inspections and maintenance activities performed.
19. Present worth is estimated based on a 7% beginning-of-year discount rate (adjusted for inflation). It is assumed that "year zero" is 2010.

**TABLE 11**  
**COST ESTIMATES FOR ALTERNATIVE 4: EXCAVATION OF PCB-IMPACTED SOIL GREATER THAN 25 PPM,**  
**OFFSITE DISPOSAL, CAPPING FOR INDUSTRIAL USE SCOs, SITE CONTROLS, AND MONITORING**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Item #	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
CAPITAL COSTS					
1	Pre-Design Investigation and Pre-/Post-Excavation Verification Sampling	1	LS	\$150,000	\$150,000
2	Engineering Design	1	LS	\$30,000	\$30,000
3	Site Management Plan	1	LS	\$25,000	\$25,000
4	Health and Safety Program	1	LS	\$5,000	\$5,000
5	Mobilization/Demobilization	1	LS	\$200,000	\$200,000
6	Construct and Remove Equipment Decontamination Pad	1	LS	\$15,000	\$15,000
7	Onsite Observation	1	LS	\$60,000	\$60,000
8	Dust/Vapor/Odor Control	12	Week	\$3,000	\$36,000
9	Construction and Maintenance of Material Staging Area	1	LS	\$20,000	\$20,000
10	Erosion/Sedimentation Control	1	LS	\$10,000	\$10,000
11	Silt Fence	2,600	LF	\$5	\$13,000
12	Utility Clearance	1	LS	\$10,000	\$10,000
13	Soil Excavation Area Dewatering	10	Day	\$300	\$3,000
14	Soil Excavation and Handling	3,928	CY	\$40	\$157,120
15	Run-of-Bank Fill Importation, Placement, and Compaction	2,904	CY	\$32	\$92,928
16	Topsoil Placement	1,316	CY	\$40	\$52,640
17	Solid Waste Characterization	7	Each	\$750	\$5,250
18	Liquid Waste Characterization	1	Each	\$1,000	\$1,000
19	Offsite Solid Waste Transportation and Disposal - Solid Waste Landfill	5,645	Ton	\$75	\$423,375
20	Liquid Waste Disposal	20,000	Gal	\$0.05	\$1,000
21	Miscellaneous Waste Disposal	1	LS	\$100,000	\$100,000
22	Site Restoration	61,053	SF	\$1	\$61,053
23	Reporting	1	LS	\$150,000	\$150,000
Subtotal Capital Cost					\$1,621,366
Administration and Engineering (10%)					\$162,137
Contingency (25%)					\$405,342
Subtotal Cost					\$2,188,844
OPERATION AND MAINTENANCE COSTS					
24	Quarterly Inspection and Maintenance of Cover Materials	1	LS	\$5,000	\$5,000
25	Annual Inspection Report	1	LS	\$20,000	\$20,000
Subtotal O&M Cost					\$25,000
Contingency (25%)					\$6,250
Subtotal Cost					\$31,250
26	30-Year Total Present Worth Cost of O&M				\$481,000
Total Estimated Cost					\$2,669,844
Rounded to					\$2,700,000

**General Notes:**

1. All costs include labor, equipment, and materials, unless otherwise noted.
2. Costs do not include legal fees, negotiations, or oversight by the New York State Department of Environmental Conservation (NYSDEC).
3. Cost estimate is based on ARCADIS past experience and vendor estimates using 2010 dollars.
4. This estimate has been prepared for the purpose of comparing potential remedial alternatives. The information in this cost estimate is based on the available information regarding the site investigation and the anticipated scope of the remedial alternative. Changes in cost elements are likely to occur as a result of new information and data collected during the engineering design of the remedial alternative. This cost estimate is expected to be within -30% to +50% of the actual projected cost. Utilization of this cost estimate information beyond the stated purpose is not recommended. ARCADIS is not licensed to provide financial or legal consulting services; as such, this cost estimate information is not intended to be utilized for complying with financial reporting requirements associated with liability services.

**Assumptions:**

1. Pre-design investigation and pre-/post-excavation verification sampling cost estimate includes costs to collect additional information to facilitate completion of the remedial design for this alternative. Cost estimate also includes collection of verification soil samples and laboratory analysis for polychlorinated biphenyls (PCBs)



**TABLE 11**  
**COST ESTIMATES FOR ALTERNATIVE 4: EXCAVATION OF PCB-IMPACTED SOIL GREATER THAN 25 PPM,**  
**OFFSITE DISPOSAL, CAPPING FOR INDUSTRIAL USE SCOs, SITE CONTROLS, AND MONITORING**

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**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

from excavation sidewall and bottom locations. The sampling frequency for bottom samples is approximately one per every 100 feet by 100 feet area (10 samples). The sampling frequency for sidewall samples is approximately every 100 feet along the perimeter of each side of the excavation where soils are left in place (40 samples).

2. Engineering design cost estimate includes costs for all labor and materials necessary to design and prepare contract documents for the remedial elements of this alternative.
3. Site management plan cost estimate includes costs to prepare a site management plan for the site. Site management plan will provide required activities should site workers perform intrusive activities that may potentially result in worker exposure to remaining impacted material.
4. Health and safety program cost estimate includes labor for the development of a site-specific health and safety plan.
5. Mobilization/demobilization cost estimate includes costs for the mobilization and demobilization of all equipment, materials, and labor necessary to implement this corrective measures alternative.
6. Construct and remove equipment decontamination pad cost estimate includes costs to construct and remove a 60-foot by 30-foot decontamination pad and appurtenances. The decontamination pad would consist of 40-mil high-density polyethylene (HDPE) with a 6-inch gravel drainage layer placed over the HDPE liner, surrounded by a one-foot high berm and sloped to a collection sump for the collection of decontamination water.
7. Onsite observation cost estimate includes costs for an onsite observer to monitor the progress of field activities, and perform air monitoring. Cost estimate is based on providing a representative for up to 10 hours per day, 5-days per week, for a period of up to 12 weeks at an hourly rate of \$100/hour.
8. Dust/vapor/odor control cost estimate includes all equipment, labor, and materials necessary to monitor dust/vapor/odor emission during intrusive site activities. Cost estimate includes application of vapor/odor suppressing foam to excavated materials staged on-site.
9. Construction and maintenance of material staging area cost estimate includes labor, equipment, and materials to construct an approximate 150-foot by 150-foot material staging area consisting of a 12-inch gravel fill layer bermed and sloped to a sump and covered with a 40-mil HDPE liner. Maintenance costs include inspecting and repairing staging area as necessary and covering staged soil with polyethylene sheeting. Cost assumes construction cost of approximately \$4 per square foot of pad.
10. Erosion/sedimentation control cost estimate includes costs necessary to install and maintain erosion and sedimentation control measures anticipated to include approximately 2,600 linear feet of a three-foot-high silt fence equipped with wooden stakes placed 10-foot on-center.
11. Silt fence cost estimate includes installation of silt fence for erosion control along the perimeter of the remediation areas.
12. Utility clearance cost estimate includes the identification of both aboveground and underground utilities that may potentially be affected by the remedial construction activities.
13. Soil excavation dewatering cost estimate includes rental of temporary water treatment system. Cost estimate assumes water treatment system includes pumps, influent piping and hoses, frac tanks, carbon filters, bag filters, discharge piping and hoses, and flow meter. Frac tanks to be used to store untreated groundwater removed from soil excavation areas and material staging areas prior to on-site treatment and discharge to the POTW via local sanitary sewer lines.
14. Soil excavation and handling cost estimate includes costs necessary to excavate soil containing PCBs at concentrations greater than 25 ppm and transfer excavated material to a staging area or direct-load material to dump trailers for off-site disposal. Cost estimate is based on in-place soil volume. Cost estimate includes approximately 400 cubic-yards of material removed and reused for excavation side slopes (assumed excavation side walls sloped at 45 degrees). Cost estimate also includes proposed mound area (approximately 1,115 CY) excavation and handling.
15. Run-of-bank fill importation, placement, compaction, and grading cost estimate includes costs to purchase, place, compact, and grade general fill approximately 6 inches from the ground surface for excavation areas and approximately 6 inches above ground surface for cap areas.
16. Topsoil importation, placement, compaction, and grading cost estimate includes costs to purchase, place, compact, and grade general fill approximately 6 inches from the ground surface.

**TABLE 11**  
**COST ESTIMATES FOR ALTERNATIVE 4: EXCAVATION OF PCB-IMPACTED SOIL GREATER THAN 25 PPM,**  
**OFFSITE DISPOSAL, CAPPING FOR INDUSTRIAL USE SCOs, SITE CONTROLS, AND MONITORING**

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17. Solid waste characterization cost estimate includes the analysis of soil samples (including, but not limited to, PCBs, VOCs, SVOCs, and RCRA Metals). Cost assumes that waste characterization samples would be collected at a frequency of one sample per every 500 CY of material destined for off-site disposal. The estimated weight of material was based on an assumed 1.6 tons per cubic-yard of material.
18. Liquid waste characterization cost estimate includes the analysis of water samples (including, but not limited to PCBs, VOCs, SVOCs, metals, and pesticides). Liquid waste characterization sampling to be conducted in accordance with requirements to be provided by the POTW. Cost estimate assumes water samples will be collected at a frequency of one sample per every 100,000 gallons discharged to the POTW.
19. Offsite solid waste transportation and disposal - solid waste landfill cost estimate includes costs necessary to transport excavated material off-site for disposal at an appropriate landfill. Cost estimate assumes that all of impacted material excavated as part of the remedial construction activities will not be suitable for reuse at the site and will be disposed at a solid waste landfill (approximately 3,528 cubic yards). Cost estimate assumes a soil weight of 1.6 tons per cubic-yard.
20. Liquid waste disposal cost estimate includes the disposal fee for discharging 20,000 gallons of water collected in the excavation areas, the material staging areas, and the equipment decontamination area to the POTW. Cost estimate assumes that liquid will be discharged via local sanitary sewer lines.
21. Miscellaneous waste disposal cost estimate includes disposal of PPE, disposable equipment, and miscellaneous materials at a facility permitted to accept the waste.
22. Site Restoration cost estimate includes costs for general site cleanup following completion of excavation/backfilling activities.
23. Reporting cost estimate includes costs for a certification report to summarize the soil removal activities and waste handling activities.
24. Quarterly inspection and maintenance of cover materials cost estimate include costs for visually inspecting the ground cover materials quarterly and performing minor repairs that may be needed.
25. Annual inspection report includes costs to prepare a letter report summarizing the results of the quarterly inspections and maintenance activities performed.
26. Present worth is estimated based on a 7% beginning-of-year discount rate (adjusted for inflation). It is assumed that "year zero" is 2010.

**TABLE 12**  
**COST ESTIMATES FOR ALTERNATIVE 5: EXCAVATION OF PCB-IMPACTED SOIL GREATER THAN 25 PPM,**  
**OFFSITE DISPOSAL, CAPPING FOR COMMERCIAL USE SCOs, SITE CONTROLS, AND MONITORING**

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**HICKSVILLE, NEW YORK**

Item #	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
CAPITAL COSTS					
1	Pre-Design Investigation and Pre/Post Excavation Verification Sampling	1	LS	\$150,000	\$150,000
2	Engineering Design	1	LS	\$30,000	\$30,000
3	Site Management Plan	1	LS	\$25,000	\$25,000
4	Health and Safety Program	1	LS	\$5,000	\$5,000
5	Mobilization/Demobilization	1	LS	\$200,000	\$200,000
6	Construct and Remove Equipment Decontamination Pad	1	LS	\$15,000	\$15,000
7	Onsite Observation	1	LS	\$100,000	\$100,000
8	Dust/Vapor/Odor Control	20	Week	\$3,000	\$60,000
9	Construction and Maintenance of Material Staging Area	1	LS	\$20,000	\$20,000
10	Erosion/Sedimentation Control	1	LS	\$10,000	\$10,000
11	Silt Fence	2,600	LF	\$5	\$13,000
12	Utility Clearance	1	LS	\$10,000	\$10,000
13	Soil Excavation Area Dewatering	10	Day	\$300	\$3,000
14	Soil Excavation and Handling	3,987	CY	\$40	\$159,480
15	Run-of-Bank Fill Importation, Placement, and Compaction	5,606	CY	\$32	\$179,392
16	Topsoil Placement	3,989	CY	\$40	\$159,560
17	Solid Waste Characterization	7	Each	\$750	\$5,250
18	Liquid Waste Characterization	1	Each	\$1,000	\$1,000
19	Offsite Solid Waste Transportation and Disposal - Solid Waste Landfill	5,739	Ton	\$75	\$430,425
20	Liquid Waste Disposal	20,000	Gal	\$0.05	\$1,000
21	Miscellaneous Waste Disposal	1	LS	\$100,000	\$100,000
22	Site Restoration	205,385	SF	\$1	\$205,385
23	Reporting	1	LS	\$150,000	\$150,000
Subtotal Capital Cost					\$2,032,492
Administration and Engineering (10%)					\$203,249
Contingency (25%)					\$508,123
Subtotal Cost					\$2,743,864
OPERATION AND MAINTENANCE COSTS					
24	Quarterly Inspection and Maintenance of Cover Materials	1	LS	\$5,000	\$5,000
25	Annual Inspection Report	1	LS	\$20,000	\$20,000
Subtotal O&M Cost					\$25,000
Contingency (25%)					\$6,250
Subtotal Cost					\$31,250
26	30-Year Total Present Worth Cost of O&M				\$481,000
Total Estimated Cost					\$3,224,864
Rounded to					\$3,200,000

**General Notes:**

- All costs include labor, equipment, and materials, unless otherwise noted.
- Costs do not include legal fees, negotiations, or oversight by the New York State Department of Environmental Conservation (NYSDEC).
- Cost estimate is based on ARCADIS past experience and vendor estimates using 2010 dollars.
- This estimate has been prepared for the purpose of comparing potential remedial alternatives. The information in this cost estimate is based on the available information regarding the site investigation and the anticipated scope of the remedial alternative. Changes in cost elements are likely to occur as a result of new information and data collected during the engineering design of the remedial alternative. This cost estimate is expected to be within -30% to +50% of the actual projected cost. Utilization of this cost estimate information beyond the stated purpose is not recommended. ARCADIS is not licensed to provide financial or legal consulting services; as such, this cost estimate information is not intended to be utilized for complying with financial reporting requirements associated with liability services.

**Assumptions:**

- Pre-design investigation and pre-/post-excavation verification sampling cost estimate includes costs to collect additional information to facilitate completion of the remedial design for this alternative. Cost estimate also

**TABLE 12**  
**COST ESTIMATES FOR ALTERNATIVE 5: EXCAVATION OF PCB-IMPACTED SOIL GREATER THAN 25 PPM,**  
**OFFSITE DISPOSAL, CAPPING FOR COMMERCIAL USE SCOs, SITE CONTROLS, AND MONITORING**

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**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

includes collection of verification soil samples and laboratory analysis for polychlorinated biphenyls (PCBs) from excavation sidewall and bottom locations. The sampling frequency for bottom samples is approximately one per every 100 feet by 100 feet area (10 samples). The sampling frequency for sidewall samples is approximately every 100 feet along the perimeter of each side of the excavation where soils are left in place (40 samples).

2. Engineering design cost estimate includes costs for all labor and materials necessary to design and prepare contract documents for the remedial elements of this alternative.
3. Site management plan cost estimate includes costs to prepare a site management plan for the site. Site management plan will provide required activities should site workers perform intrusive activities that may potentially result in worker exposure to remaining impacted material.
4. Health and safety program cost estimate includes labor for the development of a site-specific health and safety plan.
5. Mobilization/demobilization cost estimate includes costs for the mobilization and demobilization of all equipment, materials, and labor necessary to implement this corrective measures alternative.
6. Construct and remove equipment decontamination pad cost estimate includes costs to construct and remove a 60-foot by 30-foot decontamination pad and appurtenances. The decontamination pad would consist of 40-mil high-density polyethylene (HDPE) with a 6-inch gravel drainage layer placed over the HDPE liner, surrounded by a one-foot high berm and sloped to a collection sump for the collection of decontamination water.
7. Onsite observation cost estimate includes costs for an onsite observer to monitor the progress of field activities, and perform air monitoring. Cost estimate is based on providing a representative for up to 10 hours per day, 5-days per week, for a period of up to 20 weeks at an hourly rate of \$100/hour.
8. Dust/vapor/odor control cost estimate includes all equipment, labor, and materials necessary to monitor dust/vapor/odor emission during intrusive site activities. Cost estimate includes application of vapor/odor suppressing foam to excavated materials staged on-site.
9. Construction and maintenance of material staging area cost estimate includes labor, equipment, and materials to construct an approximate 150-foot by 150-foot material staging area consisting of a 12-inch gravel fill layer bermed and sloped to a sump and covered with a 40-mil HDPE liner. Maintenance costs include inspecting and repairing staging area as necessary and covering staged soil with polyethylene sheeting. Cost assumes construction cost of approximately \$4 per square foot of pad.
10. Erosion/sedimentation control cost estimate includes costs necessary to install and maintain erosion and sedimentation control measures anticipated to include approximately 2,600 linear feet of a three-foot-high silt fence equipped with wooden stakes placed 10-foot on-center.
11. Silt fence cost estimate includes installation of silt fence for erosion control along the perimeter of the remediation areas.
12. Utility clearance cost estimate includes the identification of both aboveground and underground utilities that may potentially be affected by the remedial construction activities.
13. Soil excavation dewatering cost estimate includes rental of temporary water treatment system. Cost estimate assumes water treatment system includes pumps, influent piping and hoses, frac tanks, carbon filters, bag filters, discharge piping and hoses, and flow meter. Frac tanks to be used to store untreated groundwater removed from soil excavation areas and material staging areas prior to on-site treatment and discharge to the POTW via local sanitary sewer lines.
14. Soil excavation and handling cost estimate includes costs necessary to excavate soil containing PCBs at concentrations greater than 25 ppm and transfer excavated material to a staging area or direct-load material to dump trailers for off-site disposal. Cost estimate is based on in-place soil volume. Cost estimate includes approximately 400 cubic-yards of material removed and reused for excavation side slopes (assumed excavation side walls sloped at 45 degrees). Cost estimate also includes proposed mound area (approximately 1,115 CY) excavation and handling.
15. Run-of-bank fill importation, placement, compaction, and grading cost estimate includes costs to purchase, place, compact, and grade general fill approximately 6 inches from the ground surface.
16. Topsoil importation, placement, compaction, and grading cost estimate includes costs to purchase, place, compact, and grade general fill approximately 6 inches from the ground surface.

**TABLE 12**  
**COST ESTIMATES FOR ALTERNATIVE 5: EXCAVATION OF PCB-IMPACTED SOIL GREATER THAN 25 PPM,**  
**OFFSITE DISPOSAL, CAPPING FOR COMMERCIAL USE SCOs, SITE CONTROLS, AND MONITORING**

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**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

17. Solid waste characterization cost estimate includes the analysis of soil samples (including, but not limited to, PCBs, VOCs, SVOCs, and RCRA Metals). Cost assumes that waste characterization samples would be collected at a frequency of one sample per every 500 CY of material destined for off-site disposal. The estimated weight of material was based on an assumed 1.6 tons per cubic-yard of material.
18. Liquid waste characterization cost estimate includes the analysis of water samples (including, but not limited to PCBs, VOCs, SVOCs, metals, and pesticides). Liquid waste characterization sampling to be conducted in accordance with requirements to be provided by the POTW. Cost estimate assumes water samples will be collected at a frequency of one sample per every 100,000 gallons discharged to the POTW.
19. Offsite solid waste transportation and disposal - solid waste landfill cost estimate includes costs necessary to transport excavated material off-site for disposal at an appropriate landfill. Cost estimate assumes that all of impacted material excavated as part of the remedial construction activities will not be suitable for reuse at the site and will be disposed at a solid waste landfill (approximately 3,587 cubic yards).
20. Liquid waste disposal cost estimate includes the disposal fee for discharging 20,000 gallons of water collected in the excavation areas, the material staging areas, and the equipment decontamination area to the POTW. Cost estimate assumes that liquid will be discharged via local sanitary sewer lines.
21. Miscellaneous waste disposal cost estimate includes disposal of PPE, disposable equipment, and miscellaneous materials at a facility permitted to accept the waste.
22. Site Restoration cost estimate includes costs for general site cleanup following completion of excavation/backfilling activities.
23. Reporting cost estimate includes costs for a certification report to summarize the soil removal activities and waste handling activities.
24. Quarterly inspection and maintenance of cover materials cost estimate include costs for visually inspecting the ground cover materials quarterly and performing minor repairs that may be needed.
25. Annual inspection report includes costs to prepare a letter report summarizing the results of the quarterly inspections and maintenance activities performed.
26. Present worth is estimated based on a 7% beginning-of-year discount rate (adjusted for inflation). It is assumed that "year zero" is 2010.

**TABLE 13**  
**COST FOR ALTERNATIVE 6: EXCAVATION OF PCB-IMPACTED SOIL GREATER THAN 10 PPM AND OFFSITE DISPOSAL, CAPPING OF PCBs GREATER THAN 1 PPM, EXCAVATION OF METALS AND CAPPING OF SVOCs FOR COMMERCIAL USE, SITE CONTROLS, AND MONITORING**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Item #	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
CAPITAL COSTS					
1	Pre-Design Investigation and Pre/Post Excavation Verification Sampling	1	LS	\$200,000	\$200,000
2	Engineering Design	1	LS	\$30,000	\$30,000
3	Site Management Plan	1	LS	\$25,000	\$25,000
4	Health and Safety Program	1	LS	\$5,000	\$5,000
5	Mobilization/Demobilization	1	LS	\$200,000	\$200,000
6	Construct and Remove Equipment Decontamination Pad	1	LS	\$15,000	\$15,000
7	Onsite Observation	1	LS	\$140,000	\$140,000
8	Dust/Vapor/Odor Control	28	Week	\$3,000	\$84,000
9	Construction and Maintenance of Material Staging Area	1	LS	\$30,000	\$30,000
10	Erosion/Sedimentation Control	1	LS	\$10,000	\$10,000
11	Silt Fence	2,400	LF	\$5	\$12,000
12	Utility Clearance	1	LS	\$10,000	\$10,000
13	Below-Grade Footer Removal	1	LS	\$30,000	\$30,000
14	Soil Excavation Area Dewatering	10	Day	\$300	\$3,000
15	Soil Excavation and Handling	14,034	CY	\$40	\$561,360
16	Run-of-Bank Fill Importation, Placement, and Compaction	10,831	CY	\$32	\$346,592
17	Topsoil Placement	3,561	CY	\$40	\$142,440
18	Solid Waste Characterization	23	Each	\$750	\$17,250
19	Liquid Waste Characterization	1	Each	\$1,000	\$1,000
20	Offsite Solid Waste Transportation and Disposal - Solid Waste Landfill	18,254	Ton	\$75	\$1,369,050
21	Liquid Waste Disposal	20,000	Gal	\$0.05	\$1,000
22	Miscellaneous Waste Disposal	1	LS	\$100,000	\$100,000
23	Site Restoration	182,232	SF	\$1	\$182,232
24	Reporting	1	LS	\$150,000	\$150,000
				Subtotal Capital Cost	\$3,664,924
				Administration and Engineering (10%)	\$366,492
				Contingency (25%)	\$916,231
				Subtotal Cost	\$4,947,647
OPERATION AND MAINTENANCE COSTS					
25	Quarterly Inspection and Maintenance of Cover Materials	1	LS	\$5,000	\$5,000
26	Annual Inspection Report	1	LS	\$20,000	\$20,000
				Subtotal O&M Cost	\$25,000
				Contingency (25%)	\$6,250
				Subtotal Cost	\$31,250
27	30-Year Total Present Worth Cost of O&M				\$481,000
				Total Estimated Cost	\$5,428,647
				Rounded to	\$5,400,000

**General Notes:**

- All costs include labor, equipment, and materials, unless otherwise noted.
- Costs do not include legal fees, negotiations, or oversight by the New York State Department of Environmental Conservation (NYSDEC).
- Cost estimate is based on ARCADIS past experience and vendor estimates using 2010 dollars.
- This estimate has been prepared for the purpose of comparing potential remedial alternatives. The information in this cost estimate is based on the available information regarding the site investigation and the anticipated scope of the remedial alternative. Changes in cost elements are likely to occur as a result of new information and data collected during the engineering design of the remedial alternative. This cost estimate is expected to be within -30% to +50% of the actual projected cost. Utilization of this cost estimate information beyond the stated purpose is not recommended. ARCADIS is not licensed to provide financial or legal consulting services; as such, this cost estimate information is not intended to be utilized for complying with financial reporting requirements associated with liability services.

**TABLE 13**  
**COST FOR ALTERNATIVE 6: EXCAVATION OF PCB-IMPACTED SOIL GREATER THAN 10 PPM AND OFFSITE DISPOSAL, CAPPING OF PCBs GREATER THAN 1 PPM, EXCAVATION OF METALS AND CAPPING OF SVOCS FOR COMMERCIAL USE, SITE CONTROLS, AND MONITORING**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

**Assumptions:**

1. Pre-design investigation and pre-/post-excavation verification sampling cost estimate includes costs to collect additional information to facilitate completion of the remedial design for this alternative. Cost estimate also includes collection of verification soil samples and laboratory analysis for polychlorinated biphenyls (PCBs) from excavation sidewall and bottom locations. The sampling frequency for bottom samples is approximately one per every 100 feet by 100 feet area (31 samples). The sampling frequency for sidewall samples is approximately every 100 feet along the perimeter of each side of the excavation where soils are left in place (96 samples).
2. Engineering design cost estimate includes costs for all labor and materials necessary to design and prepare contract documents for the remedial elements of this alternative.
3. Site management plan cost estimate includes costs to prepare a site management plan for the site. Site management plan will provide required activities should site workers perform intrusive activities that may potentially result in worker exposure to remaining impacted material.
4. Health and safety program cost estimate includes labor for the development of a site-specific health and safety plan.
5. Mobilization/demobilization cost estimate includes costs for the mobilization and demobilization of all equipment, materials, and labor necessary to implement this corrective measures alternative.
6. Construct and remove equipment decontamination pad cost estimate includes costs to construct and remove a 60-foot by 30-foot decontamination pad and appurtenances. The decontamination pad would consist of 40-mil high-density polyethylene (HDPE) with a 6-inch gravel drainage layer placed over the HDPE liner, surrounded by a one-foot high berm and sloped to a collection sump for the collection of decontamination water.
7. Onsite observation cost estimate includes costs for an onsite observer to monitor the progress of field activities, and perform air monitoring. Cost estimate is based on providing a representative for up to 10 hours per day, 5-days per week, for a period of up to 28 weeks at an hourly rate of \$100/hour.
8. Dust/vapor/odor control cost estimate includes all equipment, labor, and materials necessary to monitor dust/vapor/odor emission during intrusive site activities. Cost estimate includes application of vapor/odor suppressing foam to excavated materials staged on-site.
9. Construction and maintenance of material staging area cost estimate includes labor, equipment, and materials to construct an approximate 150-foot by 150-foot material staging area consisting of a 12-inch gravel fill layer bermed and sloped to a sump and covered with a 40-mil HDPE liner. Maintenance costs include inspecting and repairing staging area as necessary and covering staged soil with polyethylene sheeting. Cost assumes construction cost of approximately \$4 per square foot of pad.
10. Erosion/sedimentation control cost estimate includes costs necessary to install and maintain erosion and sedimentation control measures anticipated to include approximately 2,400 linear feet of a three-foot-high silt fence equipped with wooden stakes placed 10-foot on-center.
11. Silt fence cost estimate includes installation of silt fence for erosion control along the perimeter of the remediation areas.
12. Utility clearance cost estimate includes the identification of both aboveground and underground utilities that may potentially be affected by the remedial construction activities.
13. Below-grade footer removal cost estimate includes costs to remove remaining footers, foundation walls, and subsurface structures within the excavation areas.
14. Soil excavation dewatering cost estimate includes rental of temporary water treatment system. Cost estimate assumes water treatment system includes pumps, influent piping and hoses, frac tanks, carbon filters, bag filters, discharge piping and hoses, and flow meter. Frac tanks to be used to store untreated groundwater removed from soil excavation areas and material staging areas prior to on-site treatment and discharge to the POTW via local sanitary sewer lines.
15. Soil and debris excavation and handling cost estimate includes costs necessary to excavate soil containing PCBs at concentrations greater than 10 ppm and transfer excavated material to a staging area or direct-load material to dump trailers for off-site disposal. Cost estimate is based on in-place soil volume. Cost estimate includes approximately 1,900 cubic-yards of material removed and reused for excavation side slopes (assumed excavation side walls sloped at 45 degrees). Cost estimate also includes proposed mound area (approximately 1,115 CY) excavation and handling.

**TABLE 13**  
**COST FOR ALTERNATIVE 6: EXCAVATION OF PCB-IMPACTED SOIL GREATER THAN 10 PPM AND OFFSITE DISPOSAL, CAPPING OF PCBs GREATER THAN 1 PPM, EXCAVATION OF METALS AND CAPPING OF SVOCS FOR COMMERCIAL USE, SITE CONTROLS, AND MONITORING**

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**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

16. Run-of-bank fill importation, placement, compaction, and grading cost estimate includes costs to purchase, place, compact, and grade general fill approximately 6 inches from the ground surface. Cost estimate also includes approximately 6 inches of material for construction of the engineered cap.
17. Topsoil importation, placement, compaction, and grading cost estimate includes costs to purchase, place, compact, and grade general fill approximately 6 inches from the ground surface. Cost estimate also includes approximately 6 inches of material for construction of the engineered cap.
18. Solid waste characterization cost estimate includes the analysis of soil samples (including, but not limited to, PCBs, VOCs, SVOCs, and RCRA Metals). Cost assumes that waste characterization samples would be collected at a frequency of one sample per every 500 CY of material destined for off-site disposal. The estimated weight of material was based on an assumed 1.6 tons per cubic-yard of material.
19. Liquid waste characterization cost estimate includes the analysis of water samples (including, but not limited to PCBs, VOCs, SVOCs, metals, and pesticides). Liquid waste characterization sampling to be conducted in accordance with requirements to be provided by the POTW. Cost estimate assumes water samples will be collected at a frequency of one sample per every 100,000 gallons discharged to the POTW.
20. Offsite solid waste transportation and disposal - solid waste landfill cost estimate includes costs necessary to transport excavated material off-site for disposal at an appropriate landfill. Cost estimate assumes that all of impacted material excavated as part of the remedial construction activities will not be suitable for reuse at the site and will be disposed at a solid waste landfill (approximately 11,409 cubic yards). Cost estimate assumes a debris weight of 1.6 tons per cubic-yard. Cost estimate also includes approximately 10% of impacted material excavated as part of the remedial construction activities will consist of structural fill and building foundations (approximately 1,141 cubic yards). Cost estimate also includes offsite transportation and disposal of proposed mound area (approximately 1,115 CY).
21. Liquid waste disposal cost estimate includes the disposal fee for discharging 20,000 gallons of water collected in the excavation areas, the material staging areas, and the equipment decontamination area to the POTW. Cost estimate assumes that liquid will be discharged via local sanitary sewer lines.
22. Miscellaneous waste disposal cost estimate includes disposal of PPE, disposable equipment, and miscellaneous materials at a facility permitted to accept the waste.
23. Site Restoration cost estimate includes costs for general site cleanup following completion of excavation/backfilling activities.
24. Reporting cost estimate includes costs for a certification report to summarize the soil removal activities and waste handling activities.
25. Quarterly inspection and maintenance of cover materials cost estimate include costs for visually inspecting the ground cover materials quarterly and performing minor repairs that may be needed.
26. Annual inspection report includes costs to prepare a letter report summarizing the results of the quarterly inspections and maintenance activities performed.
27. Present worth is estimated based on a 7% beginning-of-year discount rate (adjusted for inflation). It is assumed that "year zero" is 2010.



**TABLE 14**  
**COST FOR ALTERNATIVE 7: EXCAVATION OF PCB-IMPACTED SOIL GREATER THAN 1 PPM AND OFFSITE DISPOSAL, AND SOILS CONTAINING SVOCs AND METALS FOR COMMERCIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

Item #	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
CAPITAL COSTS					
1	Pre-Design Investigation and Post Excavation Verification Sampling	1	LS	\$300,000	\$300,000
2	Engineering Design	1	LS	\$30,000	\$30,000
3	Site Management Plan	1	LS	\$25,000	\$25,000
4	Health and Safety Program	1	LS	\$5,000	\$5,000
5	Mobilization/Demobilization	1	LS	\$200,000	\$200,000
6	Construct and Remove Equipment Decontamination Pad	1	LS	\$15,000	\$15,000
7	Onsite Observation	1	LS	\$300,000	\$300,000
8	Dust/Vapor/Odor Control	60	Week	\$3,000	\$180,000
9	Construction and Maintenance of Material Staging Area	1	LS	\$60,000	\$60,000
10	Erosion/Sedimentation Control	1	LS	\$10,000	\$10,000
11	Silt Fence	3,100	LF	\$5	\$15,500
12	Utility Clearance	1	LS	\$10,000	\$10,000
13	Below-Grade Footer Removal	1	LS	\$60,000	\$60,000
14	Soil Excavation Area Dewatering	30	Day	\$300	\$9,000
15	Soil and Debris Excavation and Handling	54,429	CY	\$40	\$2,177,160
16	Run-of-Bank Fill Importation, Placement, and Compaction	49,187	CY	\$32	\$1,573,984
17	Topsoil Placement	4,617	CY	\$40	\$184,680
18	Solid Waste Characterization	99	Each	\$750	\$74,250
19	Liquid Waste Characterization	1	Each	\$1,000	\$1,000
20	Offsite Solid Waste Transportation and Disposal - Solid Waste Landfill	78,902	Ton	\$75	\$5,917,650
21	Liquid Waste Disposal	20,000	Gal	\$0.05	\$1,000
22	Miscellaneous Waste Disposal	1	LS	\$100,000	\$100,000
23	Site Restoration	253,419	SF	\$1	\$253,419
24	Reporting	1	LS	\$150,000	\$150,000
Subtotal Capital Cost					\$11,652,643
Administration and Engineering (10%)					\$1,165,264
Contingency (25%)					\$2,913,161
Subtotal Cost					\$15,731,068
OPERATION AND MAINTENANCE COSTS					
25	Annual Inspection Report	1	LS	\$10,000	\$10,000
Subtotal O&M Cost					\$10,000
Contingency (25%)					\$2,500
Subtotal Cost					\$12,500
26	30-Year Total Present Worth Cost of O&M				\$193,000
Total Estimated Cost					\$15,924,068
Rounded to					\$15,900,000

**General Notes:**

- All costs include labor, equipment, and materials, unless otherwise noted.
- Costs do not include legal fees, negotiations, or oversight by the New York State Department of Environmental Conservation (NYSDEC).
- Cost estimate is based on ARCADIS past experience and vendor estimates using 2010 dollars.
- This estimate has been prepared for the purpose of comparing potential remedial alternatives. The information in this cost estimate is based on the available information regarding the site investigation and the anticipated scope of the remedial alternative. Changes in cost elements are likely to occur as a result of new information and data collected during the engineering design of the remedial alternative. This cost estimate is expected to be within -30% to +50% of the actual projected cost. Utilization of this cost estimate information beyond the stated purpose is not recommended. ARCADIS is not licensed to provide financial or legal consulting services; as such, this cost estimate information is not intended to be utilized for complying with financial reporting requirements associated with liability services.

**Assumptions:**

- Pre-design investigation and pre-/post-excavation verification sampling cost estimate includes costs to collect additional information to facilitate completion of the remedial design for this alternative. Cost estimate also includes collection of verification soil samples and laboratory analysis for polychlorinated biphenyls (PCBs) from excavation sidewall and bottom locations. The sampling frequency for bottom samples is approximately

**TABLE 14**  
**COST FOR ALTERNATIVE 7: EXCAVATION OF PCB-IMPACTED SOIL GREATER THAN 1 PPM AND OFFSITE DISPOSAL, AND SOILS CONTAINING SVOCs AND METALS FOR COMMERCIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

one per every 100 feet by 100 feet area (52 samples). The sampling frequency for sidewall samples is approximately every 100 feet along the perimeter of each side of the excavation where soils are left in place (208 samples).

2. Engineering design cost estimate includes costs for all labor and materials necessary to design and prepare contract documents for the remedial elements of this alternative.
3. Site management plan cost estimate includes costs to prepare a site management plan for the site. Site management plan will provide required activities should site workers perform intrusive activities that may potentially result in worker exposure to remaining impacted material.
4. Health and safety program cost estimate includes labor for the development of a site-specific health and safety plan.
5. Mobilization/demobilization cost estimate includes costs for the mobilization and demobilization of all equipment, materials, and labor necessary to implement this corrective measures alternative.
6. Construct and remove equipment decontamination pad cost estimate includes costs to construct and remove a 60-foot by 30-foot decontamination pad and appurtenances. The decontamination pad would consist of 40-mil high-density polyethylene (HDPE) with a 6-inch gravel drainage layer placed over the HDPE liner, surrounded by a one-foot high berm and sloped to a collection sump for the collection of decontamination water.
7. Onsite observation cost estimate includes costs for an onsite observer to monitor the progress of field activities, and perform air monitoring. Cost estimate is based on providing a representative for up to 10 hours per day, 5-days per week, for a period of up to 60 weeks at an hourly rate of \$100/hour.
8. Dust/vapor/odor control cost estimate includes all equipment, labor, and materials necessary to monitor dust/vapor/odor emission during intrusive site activities. Cost estimate includes application of vapor/odor suppressing foam to excavated materials staged on-site.
9. Construction and maintenance of material staging area cost estimate includes labor, equipment, and materials to construct an approximate 150-foot by 150-foot material staging area consisting of a 12-inch gravel fill layer bermed and sloped to a sump and covered with a 40-mil HDPE liner. Maintenance costs include inspecting and repairing staging area as necessary and covering staged soil with polyethylene sheeting. Cost assumes construction cost of approximately \$4 per square foot of pad.
10. Erosion/sedimentation control cost estimate includes costs necessary to install and maintain erosion and sedimentation control measures anticipated to include approximately 3,100 linear feet of a three-foot-high silt fence equipped with wooden stakes placed 10-foot on-center.
11. Silt fence cost estimate includes installation of silt fence for erosion control areas.
12. Utility clearance cost estimate includes the identification of both aboveground and underground utilities that may potentially be affected by the remedial construction activities.
13. Below-grade footer removal cost estimate includes costs to remove remaining footers, foundation walls, and subsurface structures within the excavation areas.
14. Soil excavation dewatering cost estimate includes rental of temporary water treatment system. Cost estimate assumes water treatment system includes pumps, influent piping and hoses, frac tanks, carbon filters, bag filters, discharge piping and hoses, and flow meter. Frac tanks to be used to store untreated groundwater removed from soil excavation areas and material staging areas prior to on-site treatment and discharge to the POTW via local sanitary sewer lines.
15. Soil and debris excavation and handling cost estimate includes costs necessary to excavate soil containing constituents at concentrations greater than 6 NYCRR Part 375 commercial soil cleanup objectives and transfer excavated material to a staging area or direct-load material to dump trailers for off-site disposal. Cost estimate is based on in-place soil volume. Cost estimate assumes approximately 4,000 cubic-yards of material removed for excavation side slopes (assumed excavation side walls sloped at 45 degrees) and re-used onsite. Cost estimate also includes what remains of the proposed mound area (approximately 1,115 CY) excavation and handling after the other excavatio activities are completed.
16. Run-of-bank fill importation, placement, compaction, and grading cost estimate includes costs to purchase, place, compact, and grade general fill approximately 6 inches from the ground surface.

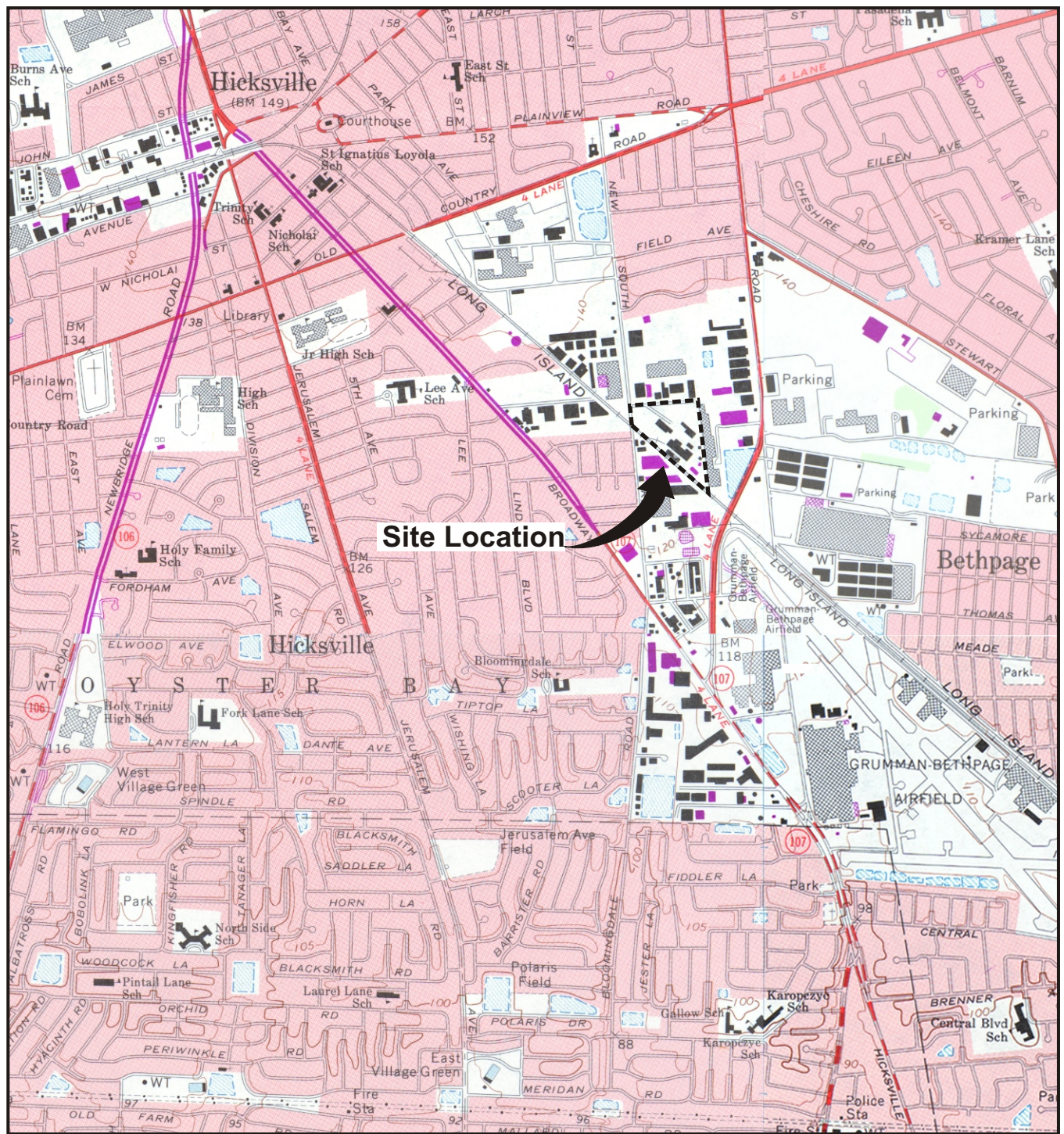
**TABLE 14**  
**COST FOR ALTERNATIVE 7: EXCAVATION OF PCB-IMPACTED SOIL GREATER THAN 1 PPM AND OFFSITE DISPOSAL, AND SOILS CONTAINING SVOCs AND METALS FOR COMMERCIAL USE SCOs**

**CORRECTIVE MEASURES STUDY REPORT**  
**BAYER MATERIALSCIENCE LLC**  
**125 NEW SOUTH ROAD**  
**HICKSVILLE, NEW YORK**

17. Topsoil cost estimate includes transportation cost to site of which will cover approximately 6-inches in depth over the fill layer, so that vegetative cover may be established.
18. Solid waste characterization cost estimate includes the analysis of soil samples (including, but not limited to, PCBs, VOCs, SVOCs, and RCRA Metals). Cost assumes that waste characterization samples would be collected at a frequency of one sample per every 500 CY of material destined for off-site disposal. The estimated weight of material was based on an assumed 1.6 tons per cubic-yard of material.
19. Liquid waste characterization cost estimate includes the analysis of water samples (including, but not limited to PCBs, VOCs, SVOCs, metals, pesticides). Liquid waste characterization sampling to be conducted in accordance with requirements to be provided by the POTW. Cost estimate assumes water samples will be collected at a frequency of one sample per every 100,000 gallons discharged to the POTW.
20. Offsite Solid waste transportation and disposal - solid waste landfill cost estimate includes costs necessary to transport excavated material off-site for disposal at an appropriate landfill. Cost estimate assumes that most of the impacted material excavated as part of the remedial construction activities will not be suitable for reuse at the site and will be disposed at a solid waste landfill (approximately 49,314 cubic yards). Cost estimate assumes a material weight of 1.6 tons per cubic-yard. Cost estimate assumes that approximately 10% of impacted material excavated as part of the remedial construction activities will consist of structural fill and building foundations (approximately 4,931 cubic yards). Cost estimate also includes offsite transportation and disposal of proposed mound area (approximately 1,115 CY).
21. Liquid waste disposal cost estimate includes the disposal fee for discharging 20,000 gallons of water collected in the excavation areas, the material staging areas, and the equipment decontamination area to the POTW. Cost estimate assumes that liquid will be discharged via local sanitary sewer lines.
22. Miscellaneous waste disposal cost estimate includes disposal of PPE, disposable equipment, and miscellaneous materials at a facility permitted to accept the waste.
23. Site Restoration cost estimate includes costs for general site cleanup following completion of excavation/backfilling activities.
24. Reporting cost estimate includes costs for a certification report to summarize the soil removal activities and waste handling activities.
25. Annual inspection report includes costs to prepare a letter report summarizing the Site use and condition of cover material.
26. Present worth is estimated based on a 7% beginning-of-year discount rate (adjusted for inflation). It is assumed that "year zero" is 2010.

## Figures

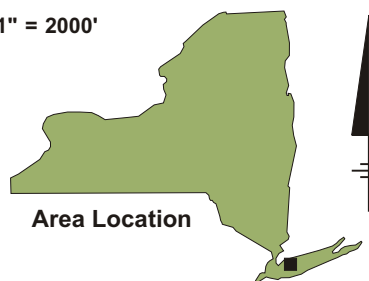




REFERENCE: BASE MAP USGS 7.5 MIN. QUAD., HICKSVILLE, N.Y. 1967, PHOTOREVISED 1979.



Approximate Scale: 1" = 2000'



Area Location

BAYER MATERIALSCIENCE LLC  
125 NEW SOUTH ROAD  
HICKSVILLE, NEW YORK

## SITE LOCATION MAP

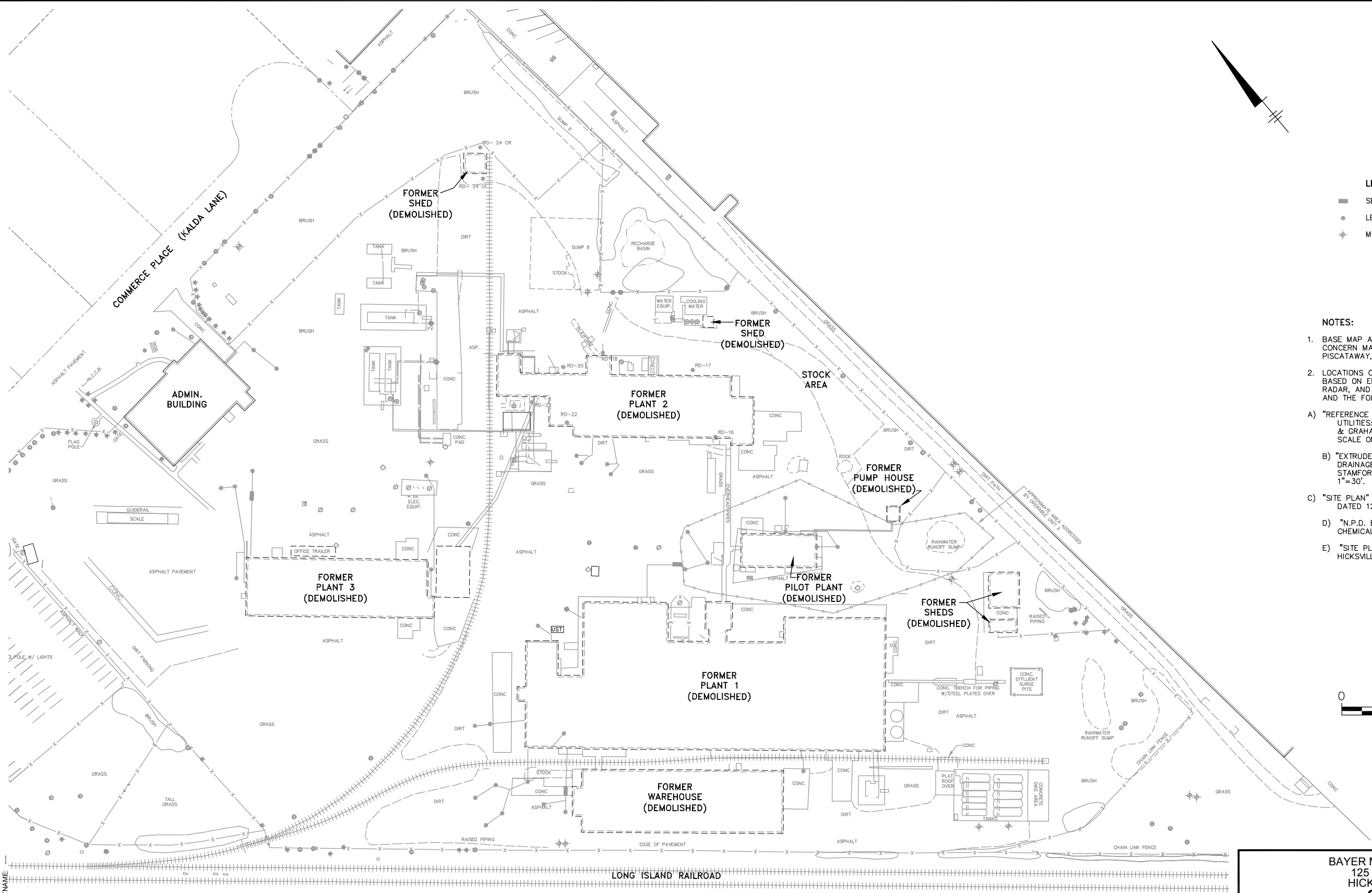


FIGURE

1

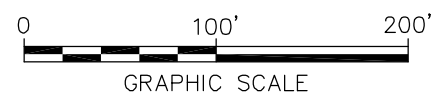


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XREFS: 32305X03  
IMAGES: PROJECTNAME:



- LEGEND:**
- SEPTIC TANK
  - LEACHATE PIT
  - MONITORING WELL LOCATION

- NOTES:**
- BASE MAP ADAPTED FROM A DRAWING ENTITLED "AREA OF CONCERN MAP", FIGURE 1-2, BY ENSR CORPORATION, PISCATAWAY, NJ, AT A SCALE OF 1"=60', DATED 2/14/03.
  - LOCATIONS OF SEPTIC TANKS AND LEACHATE PITS ARE BASED ON ELECTROMAGNETIC, GROUND-PENETRATING RADAR, AND FIELD SURVEY ACTIVITIES PERFORMED BY BBL, AND THE FOLLOWING FIGURES:
    - "REFERENCE DRAWING OF THE HOOKIER/RUCO SITE PLANT UTILITIES: OUTDOOR PIPING" BY LEGGETTE, BRASHEARS & GRAHAM, INC. OF WILTON, CT DATED 3/20/91, AT A SCALE OF 1"=30'.
    - "EXTRUDER BUILDING & PARKING AREA PILOT PLAN & DRAINAGE DET." BY CRAWFORD & RUSSELL, INC. OF STAMFORD, CT, LAST REVISION 5/9/61, AT A SCALE OF 1"=30'.
    - "SITE PLAN" BY CARL V. LINN, ENGINEER OF NEW YORK, NY, DATED 12/2/53, AT A SCALE OF 1"=50'.
    - "N.P.D. BUILDING DRAINAGE WATER" BY HOOKER CHEMICAL CORPORATION OF HICKSVILLE, NY.
    - "SITE PLAN" BY RUCO POLYMERS CORPORATION OF HICKSVILLE, NY, DATED 9/21/82.



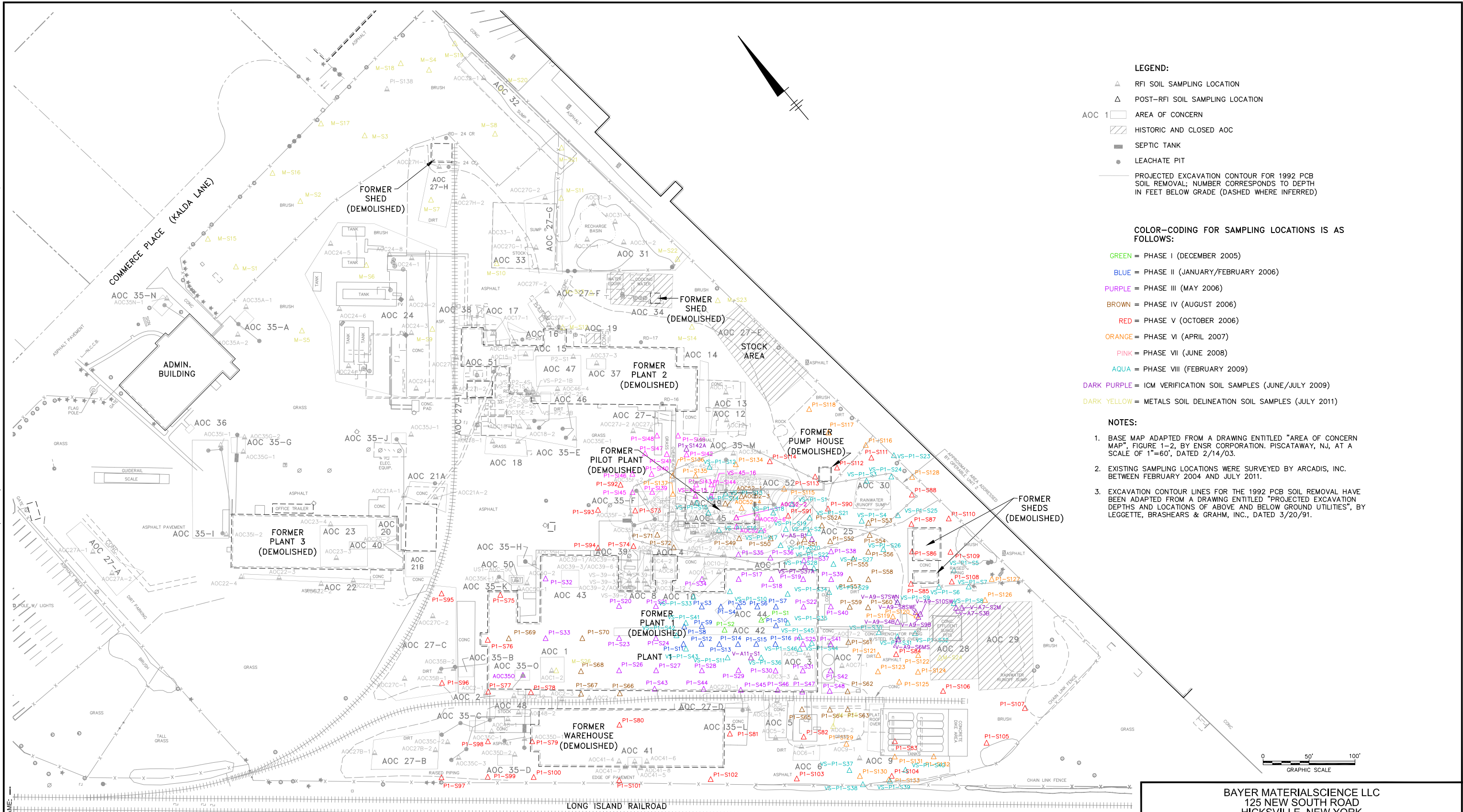
BAYER MATERIALSCIENCE LLC  
125 NEW SOUTH ROAD  
HICKSVILLE, NEW YORK  
**CMS REPORT**

**SITE LAYOUT**





CITY: SYRACUSE, NY DIV: GROUP: ENV/CADD DB: R. BASSETT, A. SCHILLING, P. LISTER PM: J. BRUSSEL TR: A. ENIGK LYR: ON\*OFF-REF (FRZ)  
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XREFS: 32305X01  
PROJECTNAME: 32305X01



BAYER MATERIALSCIENCE LLC  
125 NEW SOUTH ROAD  
HICKSVILLE, NEW YORK  
**CMS REPORT**

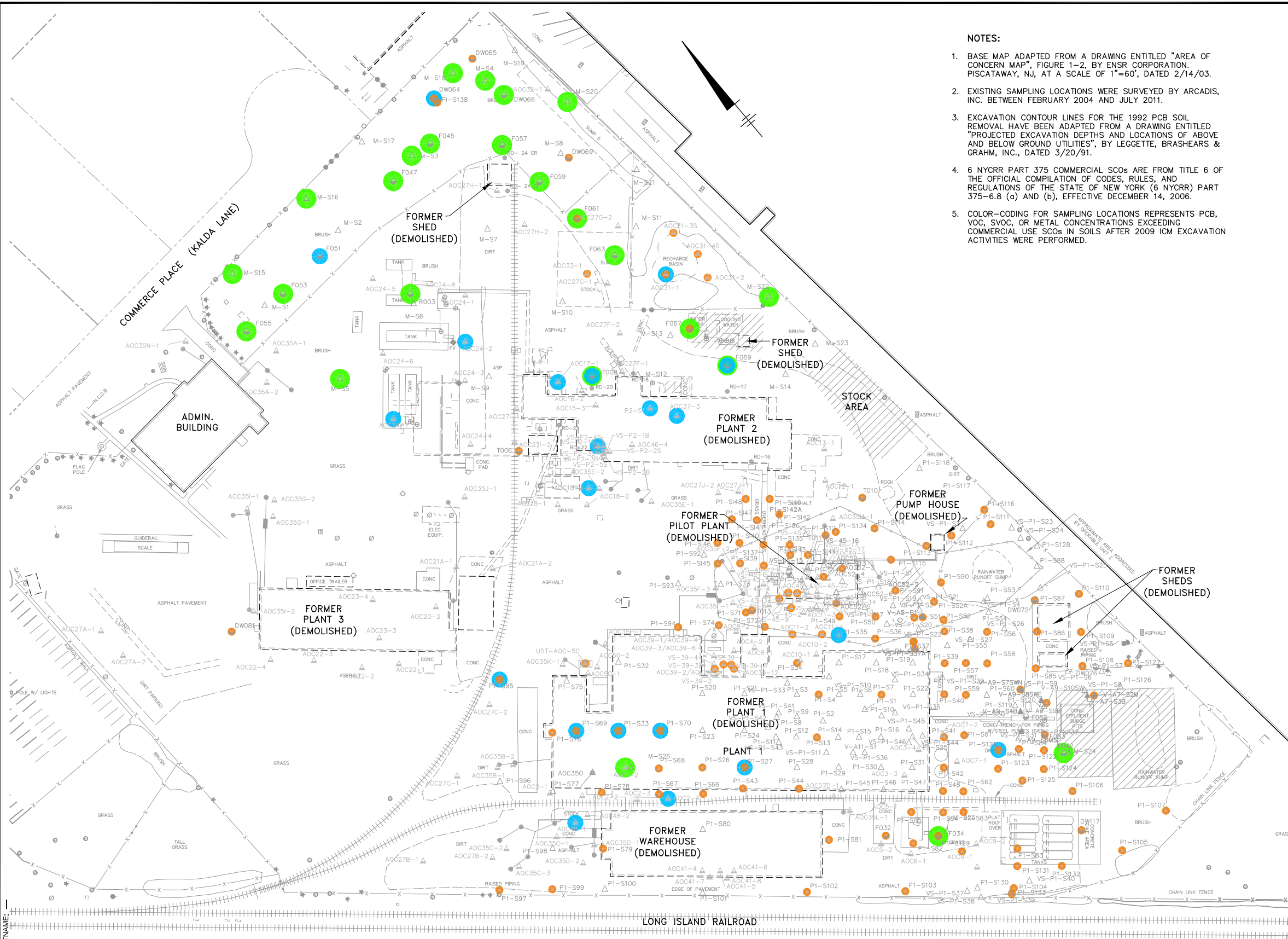
## RFI AND POST-RFI SOIL SAMPLING LOCATIONS







CITY: SYRACUSE, NY DIV/GROUP: ENV/CADD DB: R. BASSETT, A. SCHILLING, P. LISTER PM: J. BRUSSEL TR: A. ENIGK LYR: ON\*OFF-REF (FRZ)  
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XREFS: 32305X01  
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- NOTES:
1. BASE MAP ADAPTED FROM A DRAWING ENTITLED "AREA OF CONCERN MAP", FIGURE 1-2, BY ENSR CORPORATION, PISCATAWAY, NJ, AT A SCALE OF 1"=60', DATED 2/14/03.
  2. EXISTING SAMPLING LOCATIONS WERE SURVEYED BY ARCADIS, INC. BETWEEN FEBRUARY 2004 AND JULY 2011.
  3. EXCAVATION CONTOUR LINES FOR THE 1992 PCB SOIL REMOVAL HAVE BEEN ADAPTED FROM A DRAWING ENTITLED "PROJECTED EXCAVATION DEPTHS AND LOCATIONS OF ABOVE AND BELOW GROUND UTILITIES", BY LEGGETTE, BRASHEARS & GRAHM, INC., DATED 3/20/91.
  4. 6 NYCRR PART 375 COMMERCIAL SCOs ARE FROM TITLE 6 OF THE OFFICIAL COMPILATION OF CODES, RULES, AND REGULATIONS OF THE STATE OF NEW YORK (6 NYCRR) PART 375-6.8 (a) AND (b), EFFECTIVE DECEMBER 14, 2006.
  5. COLOR-CODING FOR SAMPLING LOCATIONS REPRESENTS PCB, VOC, SVOC, OR METAL CONCENTRATIONS EXCEEDING COMMERCIAL USE SCOs IN SOILS AFTER 2009 ICM EXCAVATION ACTIVITIES WERE PERFORMED.

- LEGEND:
- RFI SOIL SAMPLING LOCATION
  - POST-RFI SOIL SAMPLING LOCATION
  - HISTORIC AND CLOSED AOC
  - SEPTIC TANK
  - LEACHATE PIT
  - COMPOSITE SOIL SAMPLING LOCATION (BY IMPACT ENVIRONMENTAL)
  - ICM INTERIM CORRECTIVE MEASURE
  - CMS CORRECTIVE MEASURES STUDY
  - VOC VOLATILE ORGANIC COMPOUNDS
  - SVOC SEMI-VOLATILE ORGANIC COMPOUNDS
  - PCB POLYCHLORINATED BIPHENYLS
  - SCOs SOIL CLEANUP OBJECTIVES

- COLOR-CODING FOR SAMPLING LOCATIONS PRIOR TO PERFORMING ICM SOIL REMOVAL ACTIVITIES ARE AS FOLLOWS:
- SAMPLING LOCATION WHERE PCB SOIL CONCENTRATION IS GREATER THAN 6 NYCRR PART 375 COMMERCIAL SCOs
  - SAMPLING LOCATION WHERE SVOC SOIL CONCENTRATION IS GREATER THAN 6 NYCRR PART 375 COMMERCIAL SCOs
  - SAMPLING LOCATION WHERE METALS SOIL CONCENTRATION IS GREATER THAN 6 NYCRR PART 375 COMMERCIAL SCOs

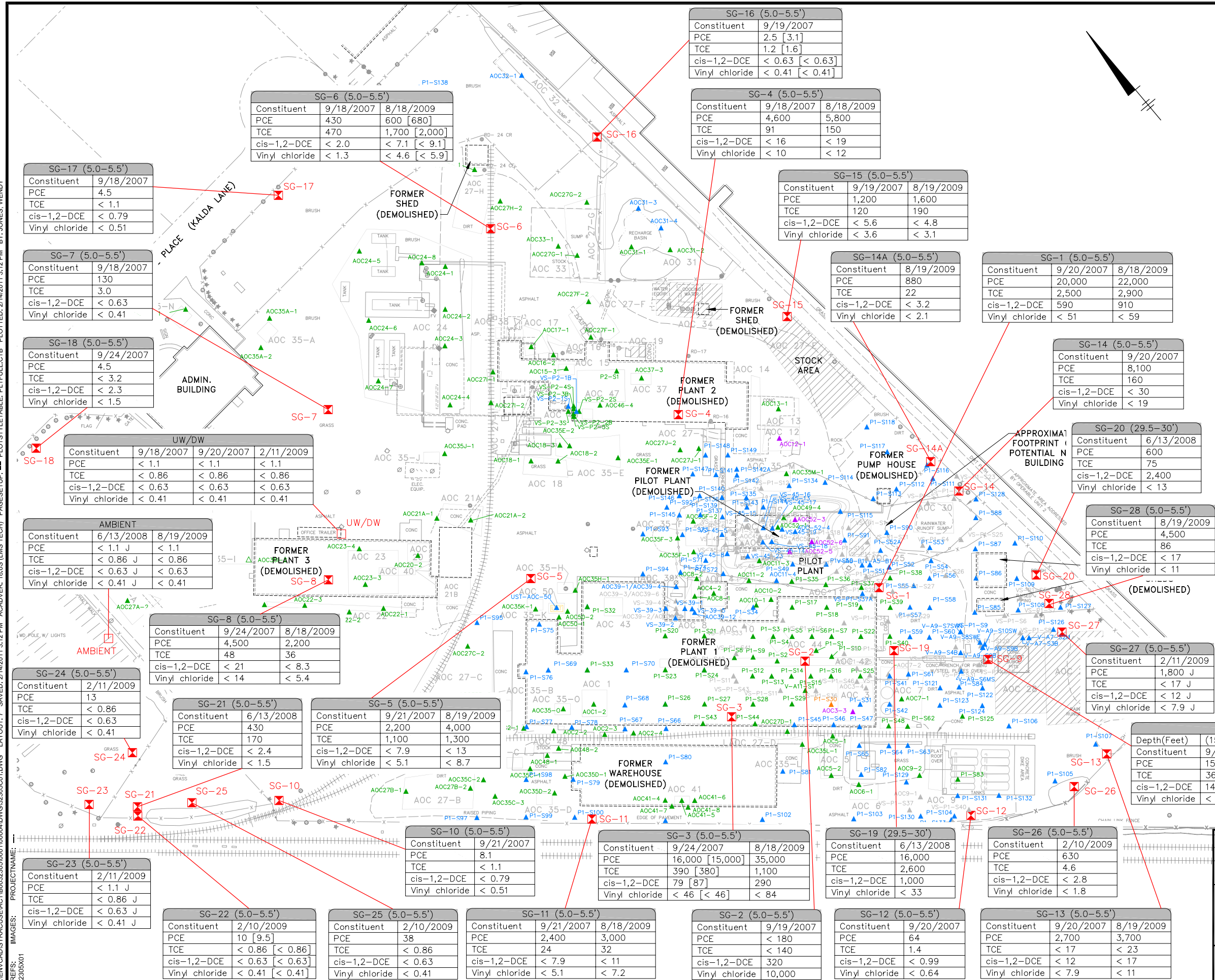
BAYER MATERIALSCIENCE LLC  
125 NEW SOUTH ROAD  
HICKSVILLE, NEW YORK  
CMS REPORT

SOIL SAMPLING LOCATIONS EXHIBITING  
PCBs, SVOCs, OR METALS AT  
CONCENTRATIONS EXCEEDING  
COMMERCIAL USE SCOs

FIGURE  
6



CITY: SYRACUSE, NY GROUP: ENVCAD DR: R. BASSETT, P. LISTER, W. JONES PW: J. BRUSSEL TR: J. HEALY LYR: ONV OFF-REF: FRZ  
G:\ENVCAD\SYRACUSE\ACT18003235000\100004\DWG\3235001.DWG LAYOUT: 7 SAVED: 2/14/2011 3:12 PM ACADVER: 18.05 (LMS TECH) PAGES: 10 PAGES: 10  
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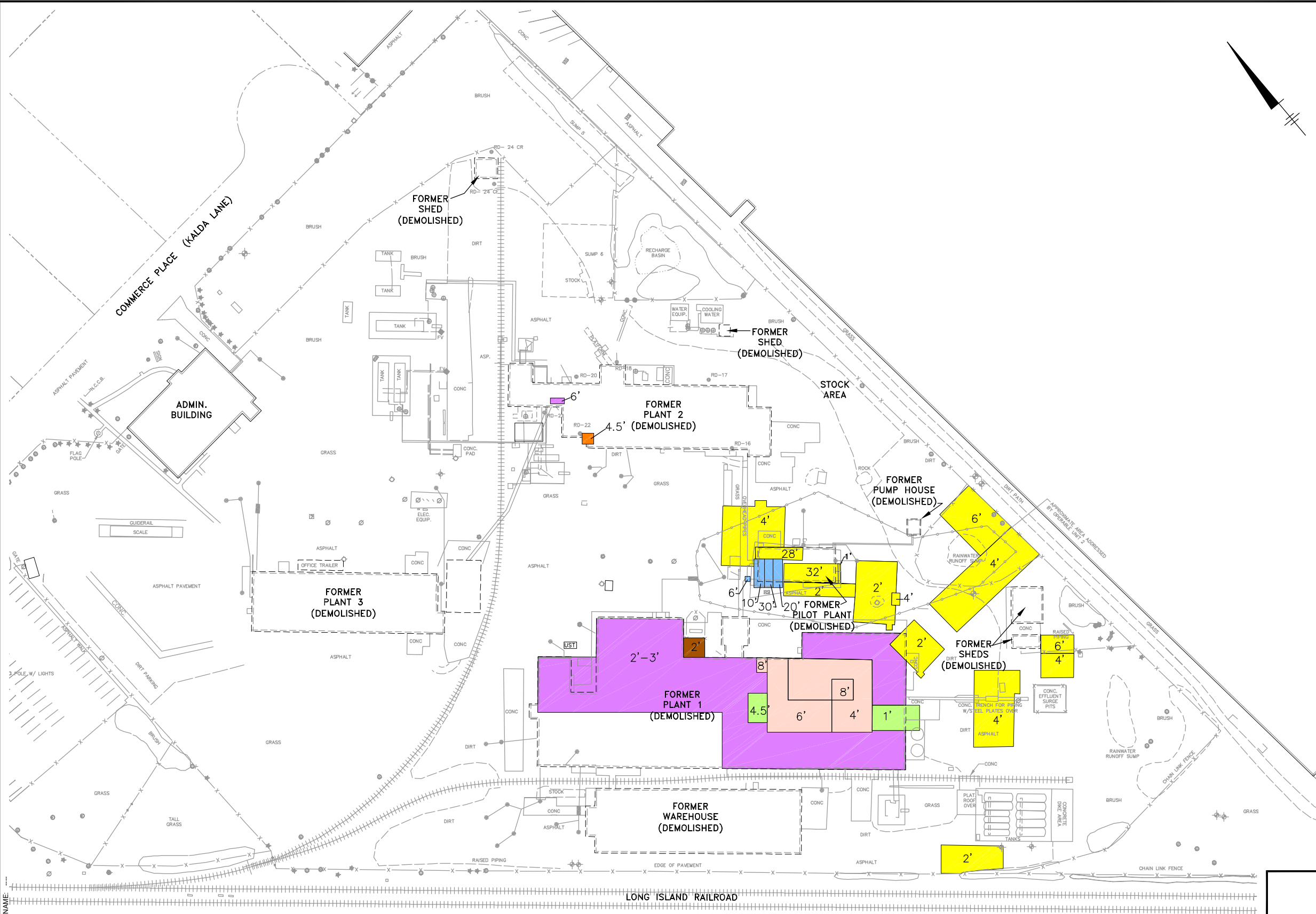
- LEGEND:**
- PREVIOUS TEMPORARY SOIL VAPOR SAMPLING LOCATION
  - PREVIOUS AMBIENT AIR SAMPLING LOCATION
  - COLOR - CODED VOC SOIL ANALYTICAL RESULTS:
  - VOC(s) AT A CONCENTRATION >TAGM 4046 SOIL GUIDANCE VALUE
  - VOCs AT A CONCENTRATION <TAGM 4046 SOIL GUIDANCE VALUE
  - ONLY ACETONE AT A CONCENTRATION >TAGM 4046 SOIL GUIDANCE VALUE
  - SAMPLING LOCATION WHERE SOIL WAS REMOVED BY ICM EXCAVATION ACTIVITIES
  - SAMPLE NOT SUBMITTED FOR VOC ANALYSIS
  - AOC 1 AREA OF CONCERN
  - HISTORIC AND CLOSED AOC
- NOTES:**
- BASE MAP ADAPTED FROM A DRAWING ENTITLED "AREA OF CONCERN MAP", FIGURE 1-2, BY ENSR CORPORATION, PISCATAWAY, NJ, AT A SCALE OF 1"=60', DATED 2/14/03.
  - EXISTING SAMPLING LOCATIONS WERE SURVEYED BY ARCADIS BETWEEN FEBRUARY 2004 AND JULY 2009.
  - EXISTING SAMPLING LOCATIONS SG-20, SG-21, SG-27 AND AMBIENT AIR SAMPLING LOCATIONS ARE APPROXIMATE BASED ON FIELD MEASUREMENTS.
  - VOC = VOLATILE ORGANIC COMPOUND.
  - TAGM 4046 = NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION TECHNICAL AND ADMINISTRATIVE GUIDANCE MEMORANDUM (TAGM) TITLED "DETERMINATION OF SOIL CLEANUP OBJECTIVES AND CLEANUP LEVELS", HWR-94-4046 DATED 1994.
  - APPROXIMATE FOOTPRINT OF POTENTIAL BUILDING IS FROM A DRAWING TITLED "PLATE 3: DETECTED PCE IN SOIL", BY IMPACT ENVIRONMENTAL OF BOHEMIA, NEW YORK AT A SCALE OF 1" = 133', DATED 10/19/06.
  - RESULTS ARE PRESENTED IN MICROGRAMS PER CUBIC METER (ug/m3).
  - VOC = VOLATILE ORGANIC COMPOUND.
  - PCE = TETRACHLOROETHENE.
  - TCE = TRICHLOROETHENE.
  - DCE = DICHLOROETHENE.
  - J = INDICATES AN ESTIMATED CONCENTRATION.
  - < = CONSTITUENT WAS NOT DETECTED AT A CONCENTRATION EXCEEDING THE REPORTED DETECTION LIMIT.
  - SOIL VAPOR ANALYTICAL RESULTS FOR SAMPLES COLLECTED IN SEPTEMBER 2007, JUNE 2008, AND FEBRUARY 2009 HAVE BEEN VALIDATED. SOIL VAPOR ANALYTICAL RESULTS FOR SAMPLES COLLECTED IN AUGUST 2009 HAVE NOT BEEN VALIDATED.
  - COORDINATES ARE BASED ON THE NORTH AMERICAN DATUM OF 1983, NEW YORK LONG ISLAND ZONE, US SURVEY FOOT.

BAYER MATERIALSCIENCE LLC  
125 NEW SOUTH ROAD  
HICKSVILLE, NEW YORK  
**CMS REPORT**

## SOIL GAS SAMPLING LOCATIONS

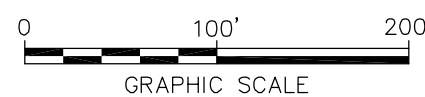


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- LEGEND:
- AOC-39 EXCAVATION (JUNE 2005)
  - AOC-51 UST REMOVAL (JANUARY 2006)
  - NAPL EXCAVATION (FEBRUARY 2006)
  - AOC-45 EXCAVATION (JULY 2006)
  - >50 ppm PCB - IMPACTED SOIL REMOVAL (MARCH 2009)
  - >50 ppm PCB IMPACTED SOIL AND VOC/SVOC IMPACTED SOIL REMOVAL (MARCH 2009)
  - VOC/SVOC IMPACTED SOIL REMOVAL (MARCH 2009)
  - SOIL SCRAPER (JULY 2009) FOR USE AS SUBSURFACE BACKFILL
  - 4' DEPTH OF REMOVAL
  - SEPTIC TANK
  - LEACHATE PIT
  - MONITORING WELL LOCATION

- NOTES:
- BASE MAP ADAPTED FROM A DRAWING ENTITLED "AREA OF CONCERN MAP", FIGURE 1-2, BY ENSR CORPORATION. PISCATAWAY, NJ, AT A SCALE OF 1"=60', DATED 2/14/03.
  - LOCATIONS OF SEPTIC TANKS AND LEACHATE PITS ARE BASED ON ELECTROMAGNETIC, GROUND-PENETRATING RADAR, AND FIELD SURVEY ACTIVITIES PERFORMED BY BBL AND THE FOLLOWING FIGURES:
    - "REFERENCE DRAWING OF THE HOOKIER/RUCO SITE PLANT UTILITIES: OUTDOOR PIPING" BY LEGGETTE, BRASHEARS & GRAHAM, INC. OF WILTON, CT DATED 3/20/91, AT A SCALE OF 1"=30'.
    - "EXTRUDER BUILDING & PARKING AREA PILOT PLAN & DRAINAGE DET." BY CRAWFORD & RUSSELL, INC. OF STAMFORD, CT, LAST REVISION 5/9/61, AT A SCALE OF 1"=30'.
    - "SITE PLAN" BY CARL V. LINN, ENGINEER OF NEW YORK, NY, DATED 12/2/53, AT A SCALE OF 1"=50'.
    - "N.P.D. BUILDING DRAINAGE WATER" BY HOOKER CHEMICAL CORPORATION OF HICKSVILLE, NY.
    - "SITE PLAN" BY RUCO POLYMERS CORPORATION OF HICKSVILLE, NY, DATED 9/21/82.
  - PCB=POLYCHLORINATED BIPHENYL.
  - VOC = VOLATILE ORGANIC COMPOUND.
  - SVOC = SEMI-VOLATILE ORGANIC COMPOUND.
  - NAPL = NONAQUEOUS PHASE LIQUID.
  - ICM = INTERIM CORRECTIVE MEASURE.
  - AOC = AREA OF CONCERN.



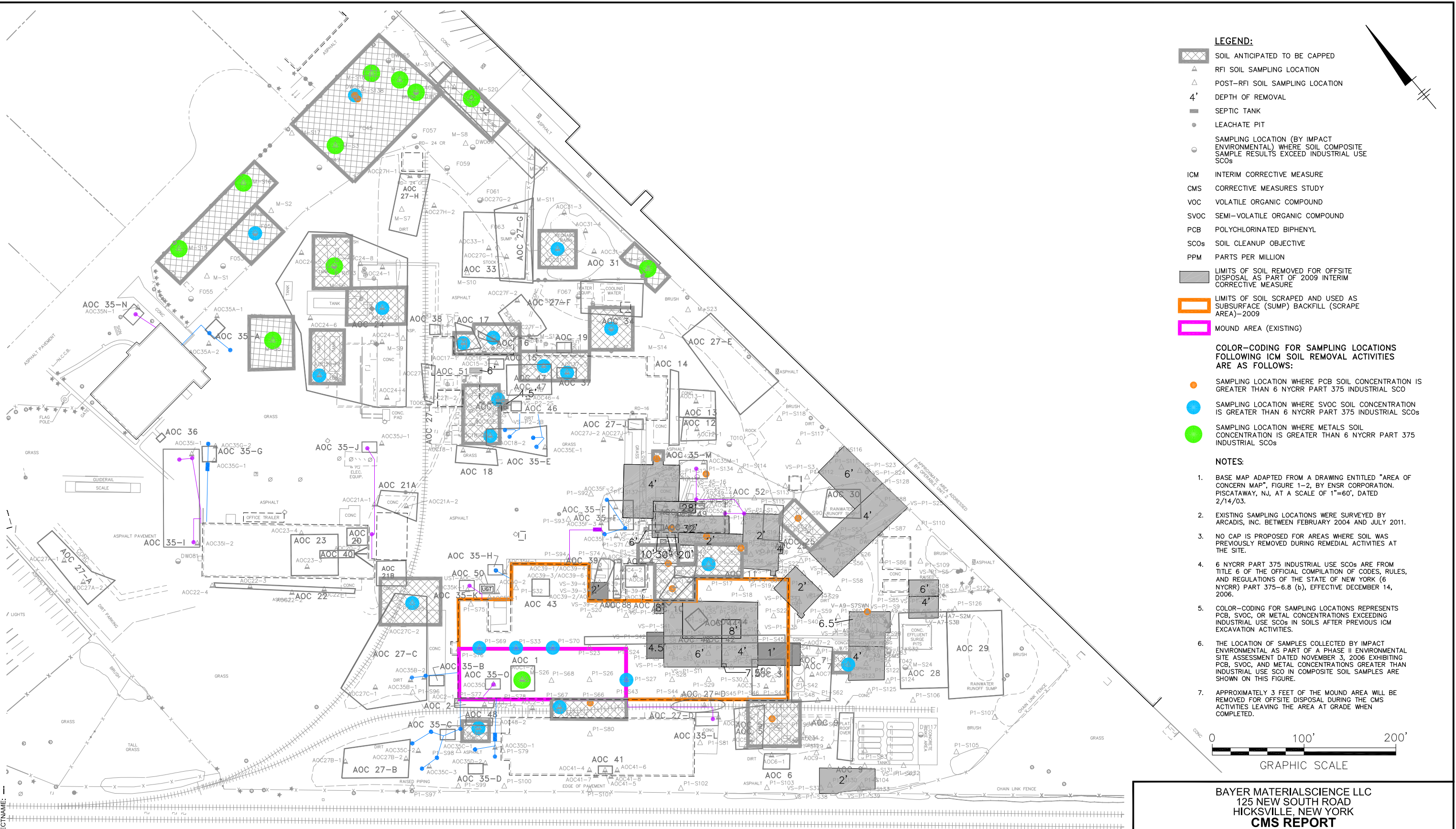
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**CMS REPORT**

**LIMITS OF PREVIOUS  
REMEDIAL ACTIVITIES**





CITY: SYRACUSE, NY DIV: GROUP: ENV/CADD DB: R. BASSETT, A. SCHILLING, P. LISTER PM: J. BRUSSEL TM: J. KORIK LYR: ON=OFF-REF (FRZ)  
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PROJECT NAME: BAYER MATERIALSCIENCE LLC 125 NEW SOUTH ROAD HICKSVILLE, NEW YORK  
XREFS: 32035001



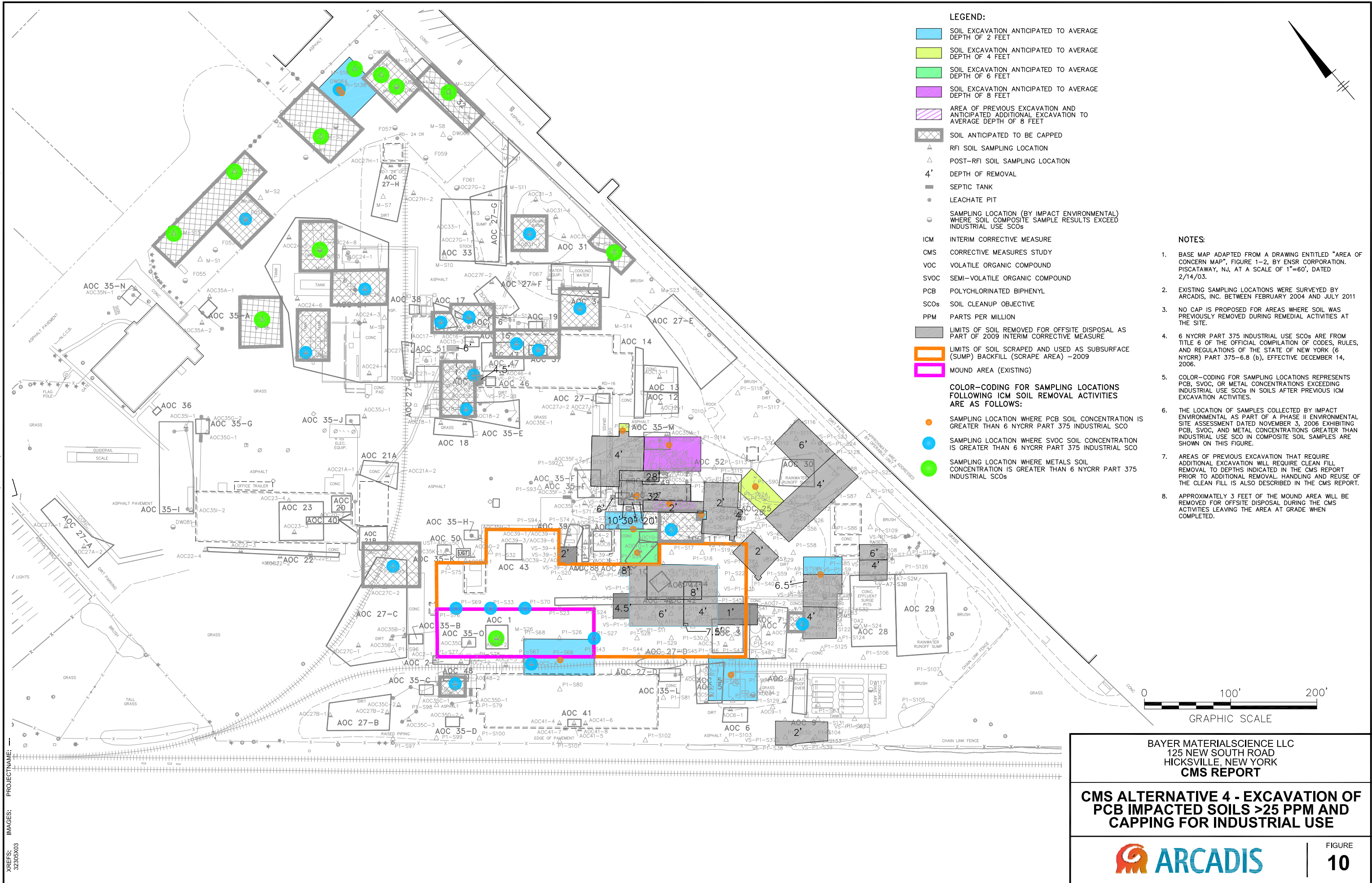
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**CMS REPORT**

**CMS ALTERNATIVE 3 - EXCAVATION OF  
PCB IMPACTED SOILS >50PPM AND  
CAPPING FOR INDUSTRIAL USE**



FIGURE  
**9**

CITY: SYRACUSE, NY DIV: GROUP: ENV/CADD DB: R. BASSETT, A. SCHILLING, P. LISTER PM: J. BRUSSEL TR: A. ENIGK LYR: ON\*OFF-REF (FRZ)  
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XREFS: 3205X03  
PROJECT NAME: BAYER MATERIALSCIENCE LLC 125 NEW SOUTH ROAD HICKSVILLE, NEW YORK CMS REPORT  
FIGURE 10

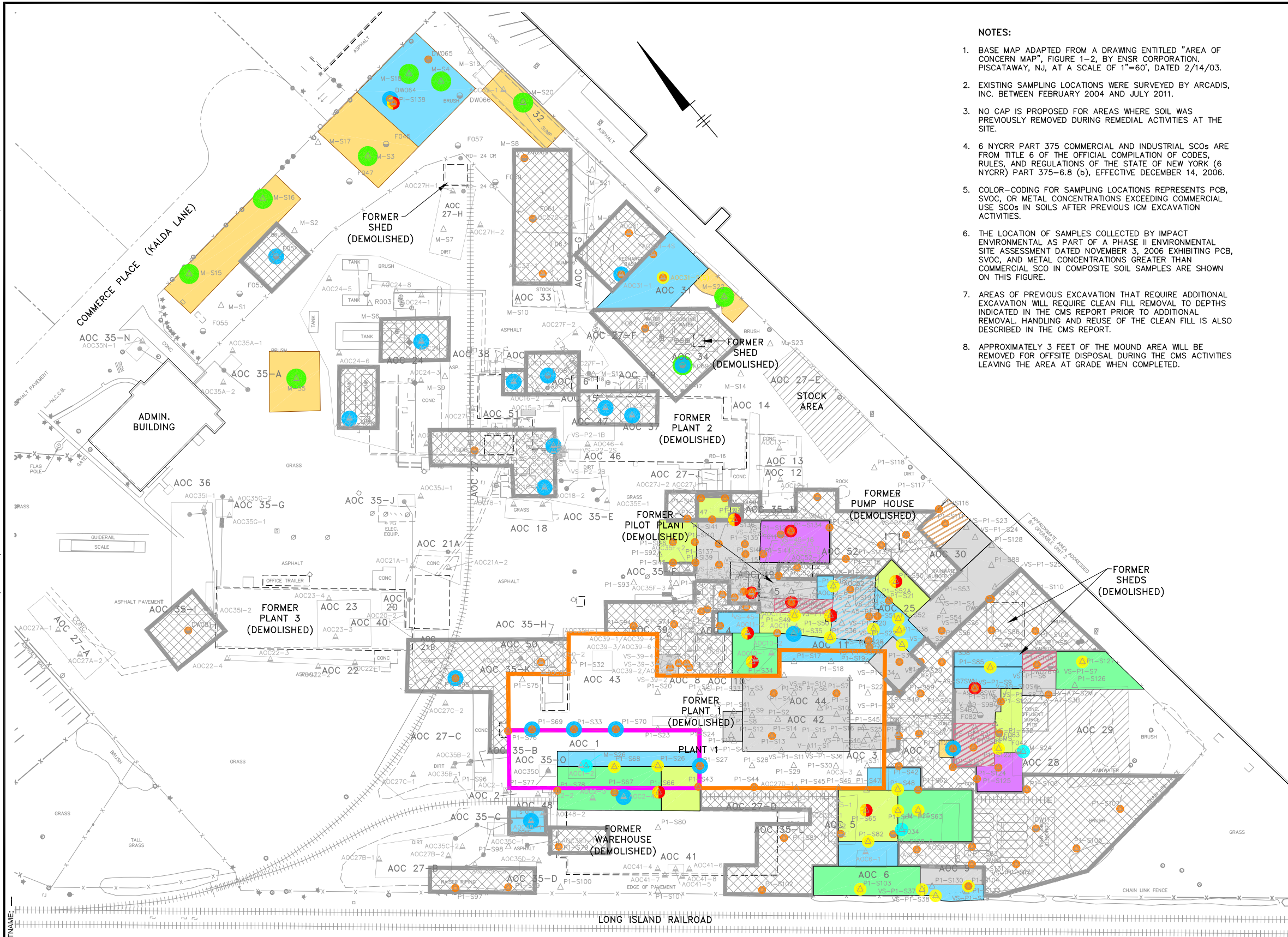








CITY: SYRACUSE, NY DIV: GROUP: ENV/CADD DB: R. BASSETT, A. SCHILLING, P. LISTER PM: J. BRUSSEL TR: A. ENIGK LYR: ON\*OFF-REF (FRZ)  
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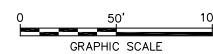


NOTES:

1. BASE MAP ADAPTED FROM A DRAWING ENTITLED "AREA OF CONCERN MAP", FIGURE 1-2, BY ENSR CORPORATION, PISCATAWAY, NJ, AT A SCALE OF 1"=60', DATED 2/14/03.
2. EXISTING SAMPLING LOCATIONS WERE SURVEYED BY ARCADIS, INC. BETWEEN FEBRUARY 2004 AND JULY 2011.
3. NO CAP IS PROPOSED FOR AREAS WHERE SOIL WAS PREVIOUSLY REMOVED DURING REMEDIAL ACTIVITIES AT THE SITE.
4. 6 NYCRR PART 375 COMMERCIAL AND INDUSTRIAL SCOs ARE FROM TITLE 6 OF THE OFFICIAL COMPILATION OF CODES, RULES, AND REGULATIONS OF THE STATE OF NEW YORK (6 NYCRR) PART 375-6.8 (b), EFFECTIVE DECEMBER 14, 2006.
5. COLOR-CODING FOR SAMPLING LOCATIONS REPRESENTS PCB, SVOC, OR METAL CONCENTRATIONS EXCEEDING COMMERCIAL USE SCOs IN SOILS AFTER PREVIOUS ICM EXCAVATION ACTIVITIES.
6. THE LOCATION OF SAMPLES COLLECTED BY IMPACT ENVIRONMENTAL AS PART OF A PHASE II ENVIRONMENTAL SITE ASSESSMENT DATED NOVEMBER 3, 2006 EXHIBITING PCB, SVOC, AND METAL CONCENTRATIONS GREATER THAN COMMERCIAL SCO IN COMPOSITE SOIL SAMPLES ARE SHOWN ON THIS FIGURE.
7. AREAS OF PREVIOUS EXCAVATION THAT REQUIRE ADDITIONAL EXCAVATION WILL REQUIRE CLEAN FILL REMOVAL TO DEPTHS INDICATED IN THE CMS REPORT PRIOR TO ADDITIONAL REMOVAL. HANDLING AND REUSE OF THE CLEAN FILL IS ALSO DESCRIBED IN THE CMS REPORT.
8. APPROXIMATELY 3 FEET OF THE MOUND AREA WILL BE REMOVED FOR OFFSITE DISPOSAL DURING THE CMS ACTIVITIES LEAVING THE AREA AT GRADE WHEN COMPLETED.

LEGEND:

- AREA OF PREVIOUS EXCAVATION
  - SOIL EXCAVATION ANTICIPATED TO AVERAGE DEPTH OF 1 FOOT
  - SOIL EXCAVATION ANTICIPATED TO AVERAGE DEPTH OF 2 FEET
  - SOIL EXCAVATION ANTICIPATED TO AVERAGE DEPTH OF 4 FEET
  - SOIL EXCAVATION ANTICIPATED TO AVERAGE DEPTH OF 6 FEET
  - SOIL EXCAVATION ANTICIPATED TO AVERAGE DEPTH OF 8 FEET
  - SOIL EXCAVATION ANTICIPATED TO AVERAGE DEPTH OF 10 FEET
- AREA OF PREVIOUS EXCAVATION:
  - ANTICIPATED ADDITIONAL EXCAVATION TO AVERAGE DEPTH TO 2.5 FEET
  - ANTICIPATED ADDITIONAL EXCAVATION TO AVERAGE DEPTH TO 8.5 FEET
  - ANTICIPATED ADDITIONAL EXCAVATION TO AVERAGE DEPTH TO 10.0 FEET
- ANTICIPATED AREA OF CAP LAYER
- ANTICIPATED LIMITS OF CAP LAYER
- RFI SOIL SAMPLING LOCATION
- POST-RFI SOIL SAMPLING LOCATION
- AREA OF CONCERN
- HISTORIC AND CLOSED AOC
- SEPTIC TANK
- LEACHATE PIT
- SAMPLING LOCATION (BY IMPACT ENVIRONMENTAL) WHERE SOIL COMPOSITE SAMPLE RESULTS EXCEED COMMERCIAL USE SCOs
- ICM INTERIM CORRECTIVE MEASURE
- CMS CORRECTIVE MEASURE STUDY
- VOC VOLATILE ORGANIC COMPOUNDS
- SVOC SEMI-VOLATILE ORGANIC COMPOUNDS
- PCB POLYCHLORINATED BIPHENYLS
- SCOs SOIL CLEANUP OBJECTIVES
- PPM PARTS PER MILLION
- LIMITS OF SOIL REMOVED FOR OFFSITE DISPOSAL AS PART OF 2009 INTERIM CORRECTIVE MEASURE
- LIMITS OF SOIL SCRAPPED AND USED AS SUBSURFACE (SUMP) BACKFILL (SCRAPE AREA)-2009
- MOUND AREA (EXISTING)
- COLOR-CODING FOR SAMPLING LOCATIONS FOLLOWING ICM SOIL REMOVAL ACTIVITIES ARE AS FOLLOWS:
  - SAMPLING LOCATION WHERE PCB SOIL CONCENTRATION IS GREATER THAN 6 NYCRR PART 375 COMMERCIAL SCO
  - SAMPLING LOCATION WHERE PCB SURFACE SOIL (0-1' bgs) CONCENTRATION IS >10 ppm
  - SAMPLING LOCATION WHERE PCB SOIL CONCENTRATION IS GREATER THAN 6 NYCRR PART 375 INDUSTRIAL SCO
  - SAMPLING LOCATION WHERE SVOC SOIL CONCENTRATION IS GREATER THAN 6 NYCRR PART 375 COMMERCIAL SCOs
  - SAMPLING LOCATION WHERE METALS SOIL CONCENTRATION IS GREATER THAN 6 NYCRR PART 375 COMMERCIAL SCOs

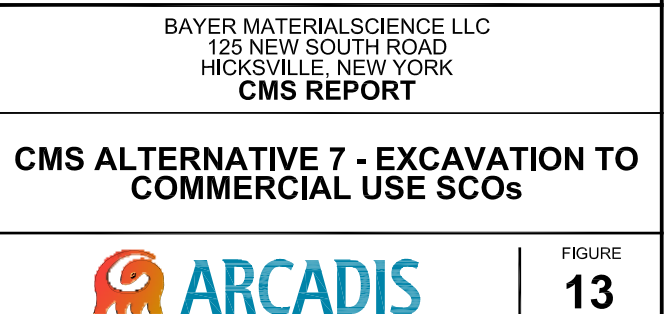


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**CMS REPORT**

**CMS ALTERNATIVE 6 -EXCAVATION OF PCB-IMPACTED SOIL >10 PPM, CAPPING OF PCBs >1 PPM, EXCAVATION OF METALS AND CAPPING OF SVOCs FOR COMMERCIAL USE**







Phase II Environmental Site  
Assessment (Impact Environmental,  
November 2006)

(Provided On Enclosed CD)