

REPORT

Interim Corrective Measure Certification Report

**Bayer MaterialScience LLC
125 New South Road
Hicksville, New York
USEPA ID No. NYD002920312**

November 2005

BBL[®]
BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

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Certification Statement

I, Joseph Molina III, as a licensed Professional Engineer in the State of New York, to the best of my knowledge, certify that interim corrective measure (ICM) activities performed at the Bayer MaterialScience LLC facility in Hicksville, New York between June 2005 and August 2005 were completed in general accordance with the following:

- the New York State Department of Environmental Conservation- (NYSDEC-) approved *Interim Corrective Measure Work Plan* (BBL, April 2005);
- an April 26, 2005 letter detailing proposed work plan modifications, as approved in a May 17, 2005 letter from the NYSDEC; and
- supplemental correspondence referenced throughout this certification report, which is included in Appendix A.

I also certify that, to the best of my knowledge, this ICM Certification Report accurately summarizes the work activities performed and the analytical results obtained for the ICM.



Joseph Molina III, P.E.
Vice President
NY P.E. License No. 072644

Blasland, Bouck & Lee, Inc.
295 Woodcliff Drive, Third Floor, Suite 301
Fairport, New York 14450

1. Introduction

1.1 General

This report summarizes interim corrective measure (ICM) activities implemented at the Bayer MaterialScience LLC (Bayer) facility located at 125 New South Road in Hicksville, New York (the "Site"). The ICM activities were implemented to address conditions identified during the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) completed between February and October 2004. Work activities performed as part of the ICM included:

- removing a former gasoline underground storage tank (UST) located northeast of the former Plant 1 building in Area of Concern (AOC) 50;
- removing standing water from the foundation sump at the southeast end of Plant 1 (AOC 44);
- removing accumulated debris from the manholes/catch basins, sumps, and floor trenches at the Site that are associated with the following AOCs: 11, 21B, 38, 40, 42 through 46, and 49;
- excavating soils from the former Plant 1 Electrical Transformer Area (AOC 39) that exhibited polychlorinated biphenyls (PCBs) at concentrations above 50 parts per million (ppm); and
- delineating the extent of soils beneath the sump in the northwest corner of the former Pilot Plant (AOC 45) that exhibit PCBs at concentrations above 50 ppm.

The ICM activities were conducted between June 2005 and August 2005 by BBL Environmental Services, Inc. (BBLES) of Syracuse, New York. ICM activities were conducted in general conformance with:

- the New York State Department of Environmental Conservation- (NYSDEC-) approved *Interim Corrective Measure Work Plan* (BBL, April 2005) [referred to herein as the "ICM Work Plan"];
- the ICM Work Plan Modification contained in an April 26, 2005 letter from BBL to the NYSDEC; and
- supplemental correspondence referenced throughout this certification report, which is included in Appendix A.

Conditional approval of the ICM Work Plan and ICM Work Plan Modification was provided in a letter from the NYSDEC dated May 17, 2005.

The organization of this Report is presented below, followed by a summary of relevant background information.

1.2 Report Organization

This Report is organized into the following sections:

Section	Purpose
Section 1 – Introduction	Provides an overview of the ICM activities, site background information, and relevant results from the RFI.
Section 2 – ICM Activities Summary	Presents a detailed description of the ICM activities.
Section 3 – Chronology of Significant Milestone Dates	Presents a chronology of significant milestone dates for the ICM activities.
Section 4 – Modifications to ICM Work Plan	Summarizes modifications made to the ICM Work Plan based on field conditions encountered.
Section 5 – Summary and Conclusions	Provides a brief summary and conclusions based on the results of the ICM activities.

1.3 Background Information

The Site consists of a 14-acre triangular-shaped parcel located just southeast of the intersection of New South Road and Commerce Road 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 and commercial/industrial properties, and to the east by warehouses and the Northrop Grumman Corporation (Northrop Grumman) complex. 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 location of the Administration Building and the concrete slabs from former buildings are shown on the site layout plan included on Figure 2. As shown on Figure 2, 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 splits into two separate lines, including one that continues southward between a former building (Plant 1) and warehouse and a second that extends eastward toward another former building (Plant 2). Access to the Site is limited by a chain-link fence and locking gates.

Non-masonry building materials generated by the demolition activities were transported for offsite reclamation/disposal. Brick and mortar wall materials generated by demolition activities were crushed and remain stockpiled onsite for future use as hard fill material.

The building floor slabs remaining onsite are constructed of concrete and are generally elevated approximately 2 to 4 feet above the surrounding grade. The ground surface in the vicinity of the floor slabs is generally covered with asphalt or concrete. Varying amounts of construction and demolition debris are scattered on the ground surface in the vicinity of the slabs. Remaining areas of the Site are covered with crushed stone/gravel or vegetation (grass or brush).

Further detailed site background information, including the site history, topography and drainage, and geologic and hydrogeologic setting, are presented in the ICM Work Plan.

1.4 Summary of Relevant RFI Activities

The RFI was implemented by Blasland, Bouck & Lee, Inc. (BBL) in two phases, the first in February 2004 and the second in October 2004. The first phase was conducted in accordance with the approach presented in the *RCRA Facility Assessment/RCRA Facility Investigation Work Plan* prepared by ENSR Corporation (ENSR,

December 2003) [the "RFA/RFI Work Plan"] and e-mail correspondence from BBL to the NYSDEC dated February 18, 2004 and February 23, 2004. The Phase II RFI activities were performed in accordance with the Phase II RFI Work Plan developed in a September 7, 2004 letter from BBL that responds to NYSDEC comments on the *RCRA Facility Investigation Report* (BBL, June 2004) ["the RFI Report"] and in accordance with e-mail correspondence from BBL to the NYSDEC dated September 30, 2004 and October 1, 2004. In general, the RFI included the following efforts:

- geophysical survey activities to identify the location of underground structures within the septic tank/leachate pit AOCs at the Site (AOCs 35A through 35G during Phase I, and AOCs 35F and 35H through 35M during Phase II) and to identify the location of the suspected gasoline UST in AOC 50;
- debris sampling at 19 locations during Phase I and at one location during Phase II;
- concrete sampling at 19 locations during Phase I and at six locations during Phase II;
- soil sampling at 96 locations within 48 designated AOCs during Phase I and at 17 locations within 13 designated AOCs during Phase II; and
- water sampling at one location (a foundation sump located at the southeast end of Plant 1) during Phase I.

Details of the Phase I RFI field investigation activities and results are presented in the RFI Report. Details of the Phase II RFI field investigation activities and results are presented in the Phase II RFI Report. Findings of the Phase I and Phase II RFI that relate to the ICM work activities are summarized in the subsections below.

1.4.1 Geophysical Survey Results

A suspected UST was identified in AOC 50 (northeast of the former Plant 1 building) by electromagnetic (EM) survey activities during the Phase II RFI. The location of the suspected UST was confirmed by ground-penetrating radar (GPR) survey activities (refer to Figure 2 for the UST location).

1.4.2 Debris Analytical Results

RFI debris analytical results relevant to this ICM are summarized below.

- PCBs were detected at debris sampling location 11-1A (within a catch basin located in the Plant 1 Boiler Condensate Runoff Area) at a concentration of 20 ppm. PCBs were detected at the remaining debris sampling locations at concentrations between an estimated 1.6 ppm and 4.3 ppm.
- One or more semi-volatile organic compounds (SVOCs) were detected at each debris sampling location. The SVOC concentrations detected at several debris sampling locations, particularly locations AOC 21B-1, AOC 38-1, AOC 40-1, AOC 40-2, AOC 40-3, AOC 42-1, AOC 42-2, AOC 43-1, AOC 44-1, AOC 45-1, AOC 45-2, AOC 46-2, AOC 49-1, and AOC 49-2, appeared to be elevated.
- Excluding typical mineral constituents, concentrations of selected inorganic constituents, including barium, cadmium, chromium, copper, lead, mercury, nickel, and zinc, detected in the Phase I debris samples exceeded typical background values. Concentrations of inorganic constituents identified at several debris

sampling locations, particularly locations AOC 40-1, AOC 42-1, AOC 42-2, AOC 44-1, AOC 45-1, AOC 45-2, and AOC 49-2, appeared to be elevated.

No directly-applicable NYSDEC cleanup standards/guidance values were identified for accumulated debris identified within the manholes/catch basins, sumps, floor trenches, and onsite rainwater runoff sump. However, as summarized above, debris encountered at several sampling locations exhibited PCBs, SVOCs, and/or select inorganic constituents at concentrations that appeared to be elevated.

1.4.3 Soil Analytical Results

RFI soil analytical results relevant to this ICM are summarized below.

- PCBs were identified in soils within two areas of the site, including the Former Plant 1 Electrical Transformer Area (AOC 39) and the sump in the northwest corner of the Pilot Plant (AOC 45), at concentrations exceeding the 50 ppm threshold for a Toxic Substances Control Act- (TSCA-) regulated/New York State hazardous waste, as detailed below:
 - Soil samples collected from the 0- to 1-foot and 1- to 2-foot depth intervals at sampling location AOC 39-2/AOC 39-5 (in the western portion of AOC 39) exhibited PCBs at concentrations of 160 ppm and 190 ppm, respectively. Soil samples collected more than 2 feet below ground surface (bgs) at sampling location AOC 39-2/AOC 39-5 and soil samples collected at adjacent sampling locations AOC 39-3/AOC 39-6 and AOC 39-12 (east and south of AOC 39-2/AOC 39-5, respectively) exhibited PCBs at concentrations well-below 50 ppm. Based on the RFI results and the configuration of the former outdoor electrical transformer area, the extent of soil within AOC 39 that exhibited PCBs at concentrations above 50 ppm was delineated for purposes of ICM soil removal activities; and
 - Soil samples collected from the 0- to 0.2-foot and 0.5- to 1.5-foot depth intervals below the bottom of the concrete-lined sump at sampling location AOC 45-4 exhibited PCBs at concentrations of 2,300 ppm and 1,700 ppm, respectively. Samples were not collected greater than 1.5-feet beneath the bottom of the sump due to refusal of the macro-core sampler, which was advanced via a jack-hammer instead of a direct-push (PowerProbe™) sampling device due to access considerations. The bottom of the sump is approximately 3 to 4 feet below the surrounding grade (approximately 6 to 7 feet below the top of the floor slab for the former Pilot Building). The extent of soil beneath and around the bottom of the sump that exhibits PCBs at concentrations above 50 ppm was not delineated prior to this ICM.
- Volatile organic compounds (VOCs) were not identified in soil samples collected from the 10- to 12-foot depth interval of sampling locations AOC 50-1 and 50-2 (which were immediately adjacent to the suspected former gasoline UST location as identified using EM/GPR survey techniques) at concentrations exceeding the soil guidance values presented in the NYSDEC Technical and Administrative Guidance Memorandum titled "Determination of Soil Cleanup Levels and Cleanup Objectives," HWR-94-4046, dated January 24, 1994 (TAGM 4046). Aside from benzo(a)pyrene, which was identified at an estimated concentration of 0.063 ppm at sampling location AOC 50-2 (10-12'), no SVOCs were identified in the soil samples collected from AOC 50 at concentrations above the TAGM 4046 soil guidance values. The estimated 0.063 ppm benzo(a)pyrene concentration identified at sampling location AOC 50-2 (10-12') only slightly exceeded the 0.060 ppm TAGM 4046 soil guidance value. Headspace screening results for all soil samples collected continuously from grade to the bottom of the soil borings at sampling locations AOC 50-1 and 50-2 (which extended 12 feet bgs) were 0.0 ppm. No visible staining or obvious odors were encountered in any of the soil samples recovered from the AOC 50 soil borings.

2. ICM Activities Summary

2.1 General

This section presents a description of ICM activities conducted to remove the former gasoline UST, remove standing water and debris from subsurface structures, delineate and verify the extent of PCB-impacted soils in the vicinity of AOCs 39 and 45, and excavate PCB-impacted soils from AOC 39. This section also describes the activities completed to characterize, transport, and dispose of wastes generated by the ICM activities. A discussion of the ICM activities is presented in the following subsections:

Subsection Number	Work Task
2.2	Mobilization/Site Preparation
2.3	Underground Storage Tank Removal
2.4	Subsurface Structure Cleaning
2.5	Pre-Excavation Delineation/Verification Soil Sampling
2.6	Soil Excavation
2.7	Air Monitoring
2.8	Site Restoration/Demobilization

Copies of daily field reports prepared by BBLES's onsite construction project manager during the ICM activities are included in Appendix B. Copies of waste manifests and certificates of disposal for wastes generated by the ICM activities are included in Appendix C.

Samples collected as part of the ICM were submitted to Severn Trent Laboratories, Inc. (STL) of Shelton, Connecticut for laboratory analysis. Analytical results were reported using NYSDEC Analytical Services Protocol (ASP) Category B deliverables. An analytical sample summary that identifies the samples collected and corresponding analyses performed is included as Table 1. Results of headspace screening and visual characterization of pre-excavation delineation soil samples and verification soil samples collected during the ICM are presented in Tables 2 and 3. Laboratory analytical results for the delineation/verification soil samples and waste characterization samples collected as part of the ICM are presented in Tables 4 through 7. Laboratory analytical data packages and validation reports are included on the compact disc (CD) included with this report. Data validation was performed for each sample delivery group (SDG) where one or more PCB soil analytical results were less than the 50 ppm ICM soil cleanup objective.

A detailed description of each work task associated with the ICM activities is presented below.

2.2 Mobilization/Site Preparation

BBLES mobilized to the Site to initiate the ICM activities on June 7, 2005. Equipment mobilized to the site and used for the ICM activities included a backhoe, PowerProbe™ direct-push sampling rig, conventional hollow-stem auger drill rig, rolloff waste containers, portable water storage tank, and air monitoring equipment for upwind, downwind, and work-zone VOC and particulate monitoring. A site walkover was performed to field-locate structures to be cleaned, identify proposed delineation/verification soil sampling locations in AOCs 39 and 45, and the approximate suspected location of the former gasoline UST. Sampling locations were marked with spray paint/stakes. Selected sampling locations were adjusted slightly based on the presence of an underground waterline south of the former Pilot Plant.

2.3 Underground Storage Tank Removal

On June 8, 2005, BBLES used an excavator to remove soils at the suspected location of the former gasoline UST in AOC 50. Based on a facility design drawing titled "Site Plan" prepared by Rubber Corporation of America (Job No. 5309, Drawing 1), dated December 2, 1953, the top of the tank was reported to be approximately 2.5 feet bgs, and the tank was reported to be 4 feet in diameter and 11 feet long. Based on the tank dimensions shown on the design drawing, the tank capacity was calculated to be approximately 1,000 gallons. Consistent with the design drawing, the top of the tank was encountered approximately 2.5 feet bgs in the field. Soils excavated to uncover and expose the top of the tank were staged on polyethylene sheeting for potential reuse as backfill material. A sample of the soils (sample "UST-AOC-50") was collected on June 8, 2005 for headspace screening using a photoionization detector (PID) and for laboratory analysis for PCBs. Field personnel removed a threaded cap from the top of the tank and determined, by probing and using a glass thief, that the tank was nearly full of liquid (water) and debris (sand). A faint, gasoline-type odor was noticed emanating from the tank.

After the tank's existence was confirmed, BBLES prepared a Petroleum Bulk Storage Application to register the tank for closure. The application was submitted to the Nassau County Fire Marshal, who has been delegated authority by the NYSDEC to implement bulk storage regulations in Nassau County, New York. A copy of the UST registration for closure is included in Appendix D. Following receipt of a tank remover's license from the Nassau County Fire Commission and verbal approval by the Fire Marshal, BBLES performed actual tank removal activities from June 15, 2005 through June 17, 2005. The activities were performed in accordance with the ICM Work Plan and Article XI Nassau County Public Health Ordinance, Section 12.2 and included the following:

- testing the atmosphere inside and outside the tank (for volatile organic vapors, percent oxygen, combustible gas levels) to determine if a potentially hazardous atmosphere existed. Based on the results of air monitoring, a hazardous atmosphere did not exist;
- pumping liquids encountered in the tank (water with a slight sheen on the surface) to a temporary onsite 1,100 gallon polyethylene storage tank. The volume of water removed from the tank was approximately 742 gallons (as determined based on later measurements by the treatment/disposal facility). A representative sample of the liquids removed from the tank (sample "AOC-50 UST Water") was collected and submitted for laboratory analysis for PCBs, Toxicity Characteristic Leaching Procedure (TCLP) VOCs, TCLP SVOCs, TCLP metals, ignitability, corrosivity, and reactivity;
- using manual methods to remove sand encountered in the bottom of the tank. The sand was containerized in eight steel 55-gallon drums. A representative sample of the sand (sample "WC 50-UST Contents") was collected and submitted for laboratory analysis for PCBs, TCLP VOCs, TCLP SVOCs, TCLP metals, ignitability, corrosivity, and reactivity;
- cutting piping associated with the tank to facilitate the removal of the tank from the ground. Additional soils around the tank were excavated to facilitate removal of the tank;
- excavating the tank, which was observed to be constructed of steel and had painted exterior surfaces. The dimensions of the tank were consistent with those shown on the engineering design drawing (approximately 4 feet in diameter by 11 feet long). The tank was transferred to a staging area to facilitate cleaning of its interior and exterior surfaces. Soils that adhered to the tank surfaces were removed using brooms and

cloths/ pads. Some minor rust was observed on the exterior surfaces of the tank, but no corrosion holes or perforations were noticed anywhere on the tank surfaces. The absence of corrosion holes was supported by observations that the tank was full of water until it was pumped to the temporary storage tank in preparation for the tank removal. In addition, soils surrounding the tank were observed to be dry and did not exhibit visible staining, discoloration, or obvious odors. Soils at the excavation limits were observed to be orange/brown sands and gravel. There was no apparent imported bedding material at the bottom of the tank excavation;

- cutting and rendering the tank unfit for further liquid storage. The tank shell was transported offsite to Roth Steel in Syracuse, New York for recycling of the steel. A letter from Roth Steel acknowledging the tank destruction is included in Appendix C; and
- collecting verification soil samples from the UST excavation limits for headspace screening using a PID (to identify the presence/absence of volatile organic vapors) and jar testing (to identify the presence/absence of a petroleum-type sheen or droplets of separate-phase materials). The resulting excavation was approximately 7.5 feet wide, 18 feet long, and 6.5 feet deep. In accordance with the ICM Work Plan Modification, a total of 8 grab sidewall samples (one for approximately every five feet around the excavation perimeter) and 3 discrete grab bottom samples (one for approximately every 5 feet across the excavation floor, taking the larger dimension across the floor) were collected. In addition, one discrete grab sample was collected near a dispenser pipe from the UST. Sidewall samples were collected approximately 4 feet bgs, which was equivalent to a distance of approximately one-third to one-half up the height of the tank. Bottom samples were collected approximately 6.5 feet bgs, and the sample at the dispenser pipe was collected approximately 2.5 feet bgs. No obvious odors were noticed in any of the samples. The PID headspace reading for each sample was 0.0 ppm. Jar tests performed following headspace screening involved filling a jar approximately 90% full with equal parts of soil and tap water, capping and shaking the jar, and visually determining whether any sheens or oil droplets are present on the surface of the soil/water mixture in the jar. No sheens or non-aqueous phase liquid (NAPL) were identified in the jar tests.

Based on the conditions encountered during the UST removal (no corrosion holes in the tank, no visible staining or odors at the excavation limits, no elevated PID headspace screening results, and no sheens/NAPL observed during jar testing) and results of soil samples collected adjacent to the UST during the Phase II RFI, the collection of additional soil samples from the UST excavation for laboratory analysis did not appear to be needed. Based on these findings, BBL sent e-mail correspondence to the NYSDEC dated June 16, 2005 requesting approval to backfill. NYSDEC approval to backfill the UST excavation was provided on June 17, 2005.

Soils that were excavated to uncover and expose the top of the tank were placed (first) as subsurface fill material within the UST excavation. Based on laboratory analytical results for sample "UST-AOC-50", these soils exhibited PCBs at a concentration of 1.1 ppm, which was slightly above the 1 ppm TAGM 4046 surface soil guidance value, but below the 10 ppm TAGM 4046 subsurface soil guidance value. Results of PID headspace screening performed on the soils were 0.0 ppm. Soils from around the tank were placed in the excavation next, and then visually clean soils remaining around the excavation were graded to remove deep depressions and generally meet the surrounding lines and grades. Backfilling of the UST excavation was completed on June 17, 2005.

Following receipt of the laboratory analytical results for samples "AOC-50 UST Water" and "WC 50-UST Contents", the water and sand removed from the UST were transported for proper offsite disposal. Analytical results obtained for these samples and the subsequent handling and offsite transportation/disposal of the water and sand are discussed below:

- Laboratory analytical results for the water sample from the UST are presented in Table 6. As indicated by the results, 1,2-dichloroethane (1,2-DCA) was detected in the sample at a concentration of 0.85 ppm, which exceeds the 0.5 ppm limit for a RCRA characteristic hazardous waste as presented in 40 CFR 261.24 and 6 NYCRR Part 371.3. Based on the results, the 742 gallons of water removed from the UST was transported to the Chemical Waste Management (CWM) Chemical Services LLC facility located in Model City, New York (the "CWM Model City facility") on August 3, 2005 for offsite treatment/disposal as a RCRA hazardous waste (Waste Code D028) [refer to Appendix C for the waste manifest and certificate of disposal].
- Laboratory analytical results for the sample of sand from the UST are presented in Table 7. As indicated by the results, the sand did not exhibit any characteristics of a RCRA hazardous waste and the PCB concentration in the sand (0.87 ppm) was well-below the 50 ppm disposal criterion for a TSCA-regulated/NYS hazardous waste for PCBs as presented in 6 NYCRR Part 371.4(e). Based on the results, the 8 drums of sand were transported to the CWM Model City facility on August 10, 2005 for offsite disposal as a non-hazardous waste [refer to Appendix C for the waste manifest and certificate of disposal].

2.4 Subsurface Structure Cleaning

Subsurface structure cleaning activities were performed between June 7, 2005 and June 17, 2005 to remove standing water (where encountered) and debris from the manholes/catch basins, sumps, and floor trenches associated with the following AOCs: 11, 21B, 38, 40, 42 through 46, and 49. The location of each AOC where structure cleaning was performed is shown on Figure 3. Prior to cleaning each structure, covers (where encountered) were removed to provide access. Accumulated debris was then removed from the structures via manual methods (shovels, brooms, etc.). The debris removed from the structures was placed in the bucket of the onsite backhoe, and then transferred into a lined rolloff waste container for characterization prior to offsite disposal. Debris encountered within the initial few feet of the discharge piping from the catch basins in AOC 11 (Former Plant 1 Boiler Condensate Runoff Area) and AOC 21B (Former Plant 3 Transfer Station Adipic Acid Silos) was also removed.

Standing water was encountered only in two structures, including a catch basin in AOC 21B and a foundation sump at the southeast end of Plant 1 (AOC 44). The water was removed using a submersible pump and transferred into a 55-gallon drum. Based on the small amount of water generated (estimated at 5 to 10 gallons), the water was mixed in and stabilized with the debris in the rolloff waste container.

After the water and debris removal was completed, visual inspections were performed at each structure to look for any debris remaining in the structures and look for any heavy staining or large cracks in the walls/bottom that might suggest impacts to underlying soils. As indicated in the table below, which summarizes results of the visual inspections, the structures appeared to be in generally good condition, with some residual staining on surfaces in selected structures.

AOC #	Description	Type of Structure & Conditions Observed Following Cleaning
11	Former Plant 1 Boiler Condensate Runoff Area	Catch basin with concrete sides and concrete bottom. No cracks or gaps, except minor gap around discharge pipe that conveys flow from the structure to the east. Some residual staining was noticed on the concrete surfaces. A minor amount of debris was observed remaining in the discharge piping after the debris within the structure and the initial few feet of piping had been removed.

AOC #	Description	Type of Structure & Conditions Observed Following Cleaning
21B	Former Plant 3 Transfer Station Adipic Acid Silos	Catch basin with concrete sides and earthen bottom. PID headspace screening measurement for soils at bottom of structure was 0.0 ppm. No residual staining was noticed on concrete or bottom soils. No significant accumulation of debris was noticed in the discharge pipe that conveys flow from the structure to the north. Debris contained within the structure had blocked flow to the discharge pipe and appeared to be the reason for the standing water that was initially encountered at and around the structure. Water drained from the discharge pipe after the debris removal was completed. Based on available site mapping, the ultimate discharge location for the catch basin appears to be the leachate pit in AOC 35-J. Based on the RFI sampling results, soils in the vicinity of the leachate pit are not impacted.
38	Former Plant 2 Exterior Trench	Recessed concrete slab area. Concrete appeared to be in good condition with no apparent voids or significant cracks. No residual staining was noticed on the concrete.
40	Former Plant 3 Trench System	Western section of trench has concrete sides and bottom. Eastern section of trench has concrete sides and earthen bottom. Concrete appeared to be in good condition with no cracks or residual staining. PID headspace screening measurement for soils at bottom of trench was 0.0 ppm. Visibly-stained debris was encountered below concrete that appeared to have been previously installed to cover/ fill a continuing section of the western trench. The stained debris extending beneath the first few feet of the concrete was removed.
42	Former Plant 1 Center Trench	Shallow trench with concrete sides and bottom. Cracks were observed in various locations. No residual staining was noticed on the concrete.
43	Foundation Sump – Northeast End of Former Plant 1	Sump with concrete sides and concrete bottom, except for an interior 18-inch square sump with an earthen bottom. Concrete appeared to be in good condition with no cracks. No residual staining noticed on concrete or bottom soils.
44	Foundation Sump – Southeast End of Former Plant 1	Sump with concrete sides and concrete bottom. Concrete appeared to be in good condition with no significant cracks. No residual staining was noticed on the concrete.
45	Sump in Northwest Corner of Former Pilot Plant	Both upper and lower (interior and exterior) sumps have concrete sides. Concrete was missing from approximately 65% of the interior sump bottom. Concrete sides appeared to be in generally good condition, except for a few minor cracks in the exterior sump. Heavy residual staining was noticed on the sides/bottom of both the interior and exterior sumps. Debris within the initial few feet of pipe chase entering the exterior sump from the south was removed. Additional debris removal from the utility chase could not be performed due to the depth and configuration of the chase.
46	Former Scale Area and Circular Plate Area in the former Plant 2 Foundation	Shallow pit with concrete sides and bottom. Some cracks and voids were noticed around a 3-inch diameter PVC conduit extending vertically into pit. No residual staining (other than rust stains) was noticed on the concrete.

AOC #	Description	Type of Structure & Conditions Observed Following Cleaning
49	Trench Around East Wall of the Former Pilot Plant	Trench with concrete sides and bottom. Concrete appeared to be in good condition, aside from some voids and cracks observed at the east and west ends. No residual staining was noticed on the concrete.

A total of 9 tons of debris were generated by the subsurface structure cleaning activities. After the debris was consolidated in one rolloff waste container, a sample was collected to characterize the debris for disposal purposes. The debris sample (sample "Structure Cleaning Debris") was submitted for laboratory analysis for PCBs, TCLP VOCs, TCLP SVOCs, TCLP metals, ignitability, corrosivity, and reactivity. Laboratory analytical results for the debris sample are presented in Table 7. Based on the analytical results, the debris did not exhibit characteristics of a RCRA hazardous waste. PCBs were identified in the debris at a concentration of 31 ppm, which is below the 50 ppm disposal criterion for a TSCA-regulated/NYS hazardous waste for PCBs as presented in 6 NYCRR Part 371.4(e). However, because the PCB concentration in the waste characterization sample was higher than any of the concentrations identified in the individual RFI debris samples and because the disposal facility preferred not to accept non-hazardous PCB-containing wastes with PCB concentrations above 30 ppm, as a conservative measure, the debris was transported to the CWM Model City facility for offsite disposal as a TSCA-regulated/New York State hazardous waste (Waste Code B007).

The heavily-stained concrete encountered in the interior and exterior Pilot Plant sump (AOC 45) and the debris remaining in the utility chase entering the south side of the AOC 45 sump will be removed and managed accordingly in connection with upcoming slab demolition activities to be performed in accordance with the NYSDEC-approved *Demolition Work Plan* (BBL, July 2005) and Work Plan Modification dated August 15, 2005. As indicated above, debris encountered beneath the concrete in AOC 40 (Former Plant 3 Trench System) will also be removed and properly managed as part of the upcoming slab demolition activities. No further action is proposed for any of the other subsurface structures, unless heavily-stained materials are encountered during the demolition activities.

2.5 Pre-Excavation Delineation/Verification Soil Sampling

An initial round of pre-excavation delineation/verification soil boring and sampling activities was performed on June 8 and 9, 2005 in an effort to determine the horizontal and vertical extent of soils in AOCs 39 and 45 exhibiting PCBs at concentrations above 50 ppm. Soil samples collected during the initial round underwent PID headspace screening and were submitted to the laboratory and then either analyzed for PCBs or archived for potential future analysis, if needed. Based on elevated PID headspace screening results at selected sampling intervals in both AOCs 39 and 45 and preliminary laboratory analytical results which indicated that the extent of PCB-impacted soils in AOC 45 had not yet been delineated, selected archived samples were released for analysis, and a second round of sampling activities was subsequently performed on June 15, 2005. Laboratory analytical results obtained for the second round indicated that additional sampling was needed to further delineate the horizontal and vertical extent of PCB-impacted soils in AOC 45. A third round of soil boring and sampling was performed on June 29 and 30, 2005. The horizontal extent of PCB-impacted soils in AOC 45 was determined by the third round of sampling activities, but the vertical remained unknown. A final round of sampling was performed between August 4 and 9, 2005 to complete the vertical delineation and to refine the horizontal delineation of the PCB-impacted soils in AOC 45. Each round of sampling is discussed in greater detail in the subsections that follow.

2.5.1 First Round of Pre-Excavation Delineation/Verification Soil Sampling

BBLES implemented the first round of delineation/pre-excavation verification soil sampling on June 8 and 9, 2005. In accordance with the ICM Work Plan and ICM Work Plan Modification, soil borings were completed at five locations in AOC 39 (locations VS-39-1 through VS-39-4) and ten locations in AOC 45 (locations VS-45-1 through VS-45-10). The sampling locations are shown on Figures 4 and 5. In addition, as a conservative measure, a soil boring was completed at one additional location (location VS-39-5) approximately 10 feet east of sampling location VS-39-1. Soil borings at locations VS-39-4, VS-45-1, VS-45-2, and VS-45-7 were completed after coring through the concrete slab present at each location. The soil borings were advanced using a direct-push sampling rig to depths ranging from approximately 4 to 8 feet relative to the surrounding grade. Soil samples were continuously collected from each boring using a 4-foot long macro-core sampling device. The soil recovered at each boring was visually characterized for color, texture, and moisture content. In addition, the recovered soil samples were sectioned into two-foot intervals and placed in containers for headspace screening using a PID. Headspace screening was also performed on the upper 2-inches of soil encountered in AOC 39. Headspace screening results are summarized in Table 2. Subsurface conditions encountered at each soil boring location are summarized in Table 3.

Elevated PID headspace screening results were obtained for soil samples collected from two sampling locations in AOC 39 [locations VS-39-1 (2-4') and VS-39-2 (2-4')] and three sampling locations in AOC 45 [locations VS-45-2 (6-8'), VS-45-8 (6-8'), and VS-45-9 (6-8')]. The depth intervals reported herein, unless otherwise noted, are relative to the surrounding grade. No staining or odors were noticed in any of the AOC 39 delineation/verification soil sampling locations, except for a possible slight sheen and faint odor at location VS-39-2 (2-4'). With the following exceptions, no staining or odors were noticed in any of the AOC 45 delineation/verification soil sampling locations:

- *Location VS-45-2 (Immediately East of the Sump in AOC 45):* Visible staining was observed in soils encountered directly below the former Pilot Plant floor slab and approximately 8.0 to 9.8 feet below the slab (equivalent to 5.7 to 7.5 feet below the surrounding grade) at this location. A strong odor was also noticed in the soils recovered from 8.0 to 9.8' below the slab.
- *Location VS-45-9 (Southwest of the Staircase to the Former Pilot Plant):* Possible slight staining was observed in soils encountered approximately 4.7 to 6.0 feet below the ground surface at this location.

Pursuant to the ICM Work Plan, the following delineation/verification soil samples collected from AOCs 39 and 45 were submitted for laboratory analysis for PCBs:

- *AOC 39:* The soil samples from both the 0- to 0.2-foot depth interval and 0.5- to 1.5-foot depth interval at sampling locations VS-39-1, VS-39-4, and VS-39-5, and the soil samples from the 2.5- to 3.5-foot depth interval at locations VS-39-2, VS-39-3, and VS-39-4 were submitted for laboratory analysis for PCBs.
- *AOC 45:* Two samples each from sampling locations VS-45-1 through VS-45-4 (one sample from the 0.5 foot depth interval below the sump and one sample from the 1-foot long interval beginning 2-feet below the bottom of the sump, which is equivalent to approximately 4.5- to 5.0-feet and 6.5- to 7.5-feet below the surrounding grade) were submitted for laboratory analysis for PCBs. Two samples each from the same intervals at locations VS-45-5 through VS-45-10 were submitted to the laboratory and archived for potential future analysis if needed, pending the results for adjacent or overlying/underlying samples.

An analytical sample summary identifying each delineation/verification soil sample collected and corresponding analyses performed is included as Table 1. PCB laboratory analytical results for the delineation/verification soil samples are presented in Table 4 and shown on Figures 4 and 5.

Based on the laboratory analytical results, PCBs were identified in the delineation/verification soil samples collected from AOC 39 at concentrations well-below the 50 ppm ICM soil cleanup objective. In accordance with the ICM Work Plan, soil was later removed from AOC 39 (as described in Subsection 2.6) to a depth of approximately 2 to 2.5 feet below the surrounding grade. The laboratory analytical results indicate that soils remaining at the excavation limits do not exhibit PCBs at concentrations above the 1 ppm TAGM 4046 surface soil guidance value.

PCBs were identified at concentrations above 50 ppm in samples collected from locations VS-45-1 and VS-45-2, within the footprint of the Pilot Plant floor slab. Accordingly, each of the archived samples from locations VS-45-5 through VS-45-10 were analyzed. PCBs were also identified at concentrations above 50 ppm in the two samples collected from location VS-45-7 (also within the footprint of the Pilot Plant floor slab). The PCB concentrations identified at sampling locations VS-45-3, VS-45-5, VS-45-6, VS-45-8, VS-45-9, and VS-45-10 are all less than the 10 ppm TAGM 4046 subsurface soil guidance value.

2.5.2 Second Round of Pre-Excavation Delineation/Verification Soil Sampling

BBLES implemented the second round of pre-excavation delineation/verification soil sampling activities on June 15, 2005 to further evaluate the horizontal and vertical extent of soils in AOC 45 exhibiting PCBs at concentrations exceeding 50 ppm and to evaluate whether VOCs were an actual constituent of interest in AOCs 39 and 45. The additional sampling activities were performed as described in e-mail correspondence to the NYSDEC dated June 16, 2005. Soil borings were completed using direct-push sampling techniques at five locations, including one in AOC 39 and four in AOC 45, as summarized below:

- *AOC 39:* A soil boring was completed at one revisited location in AOC 39 (location VS-39-1) to a depth of approximately 8 feet bgs. No odors were encountered in soil samples recovered from the new boring, and PID headspace screening results for all sampling intervals were 0.0 ppm. Headspace screening was performed using two separate PIDs. The soil sample collected from the 2- to 4-foot interval of the boring (where elevated PID readings were noted during the initial round of sampling) was submitted for laboratory analysis for VOCs, including tentatively-identified compounds (TICs).
- *AOC 45:* Soil borings were completed at three revisited locations in AOC 45 (locations VS-45-2, VS-45-8, and VS-45-9) and at a new location (location VS-45-11) approximately 10 feet east of location VS-45-2. The additional soil borings in AOC 45 were each completed to a depth of approximately 14 to 16 feet bgs. PID headspace screening results for samples collected from the borings ranged from 0.0 ppm to 2.9 ppm, with the maximum at location VS-45-9 (8-10'). Two PIDs were used for the headspace screening. No visible staining or obvious odors were encountered in soil samples recovered from any of the borings. The soil sample collected from location VS-45-9 (8-10') was submitted for laboratory analysis for VOCs, including TICs. This sampling interval/location was selected for VOC analysis because it coincided with the area where elevated PID readings were previously obtained in AOC 45. Soil samples from five depth intervals at both sampling locations VS-45-2 and VS-45-11 (0-0.5', 6.8-7.3', 8.8-9.8', 10.3-12.3', and 12.3-14.3' below the concrete floor slab) were submitted for laboratory analysis for PCBs. Samples from four depth intervals at both locations (0.5-2', 2-4', 4-6', and 14.3-16.3' below the slab) were submitted for laboratory archive. Each of the archived samples, except those from the 2- to 4-foot interval, were later analyzed based on analytical results for the initial sample analyses.

Laboratory analytical results for the soil samples collected during the second round of ICM delineation/verification soil sampling activities for PCBs and detected VOCs are presented in Tables 4 and 5, respectively, and summarized below.

- Only two VOCs (acetone and methylene chloride) were identified in the soil samples, and the concentrations reported were less than the TAGM 4046 soil guidance values. Based on the results, it is suspected that the elevated headspace screening results obtained during the initial delineation/verification sampling may be due to a PID instrument error.
- PCBs were identified at concentrations above 50 ppm in samples collected between 4 feet and 16.3 feet below the concrete slab at location VS-45-2 and in all samples collected at location VS-45-11.

2.5.3 Third Round of Pre-Excavation Delineation/Verification Soil Sampling

BBLES implemented the third round of pre-excavation delineation/verification soil sampling activities on June 29 and 30, 2005 to further evaluate the horizontal and vertical extent of soils in AOC 45 exhibiting PCBs at concentrations exceeding 50 ppm. The additional sampling activities were performed in accordance with e-mail correspondence to the NYSDEC dated June 27, 2005. Soil borings were completed using direct-push sampling techniques at eleven sampling locations, including three previous sampling locations (locations VS-45-2, VS-45-7, and VS-45-11) and eight new sampling locations (locations VS-45-12 through VS-45-19). The soil boring at each location was completed to a depth of approximately 24 feet below the concrete floor slab after creating a corehole through the slab. PID headspace screening results for samples collected from the borings were 0.0 ppm. Aside from possible slight odors at locations VS-45-18 (4.0-4.9' below the slab) and VS-45-19 (0-2.4' below the slab), no visible staining or obvious odors were encountered in soil samples recovered from any of the borings.

Soil samples collected from one to four selected intervals at locations VS-45-2, VS-45-7, and VS-45-11 and from the same four intervals at locations VS-45-12 through VS-45-14 (0-0.5', 6.8-7.3', 10.3-12.3', and 16-18' below the concrete slab) were submitted for laboratory analysis for PCBs. All samples collected from sampling locations VS-45-15 through VS-45-19 and selected samples from the remaining locations were archived for potential future analysis, if needed. Selected archived samples from locations VS-45-2, VS-45-7, and VS-45-11 were analyzed later based on analytical results for the initial sample analyses.

PCB laboratory analytical results for the soil samples collected during the third round of ICM delineation/verification soil sampling activities are presented in Table 4 and shown on Figure 5. Findings of the third round of sampling activities are summarized below.

- PCBs were not detected at concentrations above the 50 ppm ICM soil cleanup objective in any of the samples collected from sampling locations VS-45-12, VS-45-13, and VS-45-14. The PCB concentrations identified at these locations were, in fact, less than the 10 ppm TAGM 4046 subsurface soil guidance value. Based on these results, the horizontal extent of soils in AOC 45 exhibiting PCBs at concentrations above 50 ppm had been determined.
- The vertical extent of soils exhibiting PCBs at concentrations above 50 ppm at sampling locations VS-45-7 and VS-45-11 was determined to be no more than 22 feet below the concrete floor slab. The vertical extent of soils exhibiting PCBs at concentrations above 50 ppm at sampling location VS-45-2 was not established.

2.5.4 Fourth Round of Pre-Excavation Delineation/Verification Soil Sampling

BBLES implemented the fourth (final) round of pre-excavation delineation/verification soil sampling activities in AOC 45 between August 4 and 9, 2005. The activities were implemented to complete the vertical delineation of PCB-impacted soils at sampling location VS-45-2 and to refine the horizontal delineation of PCB-impacted soils in the area. The fourth round of sampling was performed in accordance with e-mail correspondence to the NYSDEC dated July 28, 2005 and August 2, 2005. NYSDEC approval of the proposed additional sampling activities was provided in e-mail correspondence dated August 2, 2005.

Soil borings were completed at four locations within the footprint of the former Pilot Plant building (at revisited sampling location VS-45-2 and new locations VS-45-20 through VS-45-22) and at one location southeast of the staircase along the south side of the former Pilot Plant (new location VS-45-23). Drilling at the additional sampling locations was completed using a conventional drill rig (Failing F10) equipped with 3-inch inside-diameter hollow-stem augers. The soil boring at location VS-45-2 was completed to a depth of approximately 60 feet bgs (the approximate depth of the groundwater table in the area), and the soil borings at locations VS-45-20 through VS-45-23 were completed to a depth of approximately 20 feet bgs. Soil samples were collected continuously (beginning 24 feet below the bottom of the concrete floor slab at location VS-45-2 where continuous sampling was previously performed, and beginning immediately below the concrete floor slab/ground surface at the remaining locations) and continuing to the depth of completion. PID headspace screening results for samples collected between 46 and 60 feet below the concrete slab at location VS-45-2 ranged from 24 ppm to 115 ppm. PID headspace screening results for all other samples collected during the fourth round of sampling activities were 0.0 ppm. Visibly-stained soils exhibiting an obvious odor were encountered from approximately 50 to 56 feet below the slab at location VS-45-2 (above and within a clay layer). Soils encountered below 56 feet at location VS-45-2 and soils encountered at each of the other sampling locations did not exhibit visible staining or obvious odors.

Based on the laboratory analytical results obtained for the fourth round of ICM delineation/verification soil sampling, the horizontal and vertical extent of soils in AOC 45 exhibiting PCBs at concentrations above 50 ppm was delineated. The approximate horizontal limits of the impacted soils are shown on Figure 5, and the approximate vertical limits of the impacted soils are shown on the two cross-sections included as Figure 6.

2.6 Soil Excavation

Following completion of the pre-excavation delineation/verification soil sampling in AOC 39, the former concrete transformer pad in AOC 39 was demolished and removed using a backhoe on June 8, 2005. Based on the previous detection of PCBs at concentrations above 50 ppm in soils around the pad (suspected to have originated from electrical transformers formerly on the pad), the resulting concrete debris was assumed to contain PCBs at concentrations above 50 ppm and was loaded into a rolloff waste container for temporary staging prior to offsite transportation and disposal. After the concrete pad had been removed, BBL used the backhoe to excavate PCB-impacted soils from the area. The excavation was expanded a few feet to the west and south (from the limits shown in the ICM Work Plan) to coincide with the concrete foundation walls of the former Plant 1 building.

Upon reaching the anticipated limits of the soil removal activities (as defined by the pre-excavation delineation/verification soil sampling), BBLES observed the condition of the excavation. No staining was observed along the excavation sidewalls or flooring, and no obvious odors were noticed emanating from the excavation. Based on BBLES' observations, post-excavation verification soil samples were not needed. Limits of the final excavation are shown on Figure 4. As shown on Figure 4, the final excavation was approximately

19 feet long by 20 feet wide and 2 feet (minimum) deep. Based on these dimensions, the volume of soil removed from the excavation was approximately 30 cubic yards (CY). Based on the shallow depth of the excavation, sloping/benching of the excavation sidewalls was not needed. Air monitoring was performed in connection with excavation activities, as summarized in Subsection 2.7.

Soils removed from the excavation were transferred into three lined rolloff waste containers, one of which contained concrete debris from demolition of the former transformer pad. BBLES collected a sample to characterize the soils removed from AOC 39 for disposal purposes. The characterization sample (sample "AOC-39 Staged Soil") was submitted for laboratory analysis for PCBs, TCLP VOCs, TCLP SVOCs, TCLP metals, ignitability, corrosivity, and reactivity. Laboratory analytical results for the characterization sample are presented in Table 7.

Based on the analytical results, the soils removed from AOC 39 did not exhibit characteristics of a RCRA hazardous waste. PCBs were identified in the characterization sample at a concentration of 0.94 ppm, which is well-below the 50 ppm disposal criterion for a TSCA-regulated/NYS hazardous waste for PCBs as presented in 6 NYCRR Part 371.4(e). However, because PCBs were previously identified in RFI soil samples collected from AOC 39 at concentrations above 50 ppm, the soils and concrete debris were transported for offsite disposal as a TSCA-regulated/New York State hazardous waste (Waste Code B007) in accordance with the 'As-Found Rule'. Based on weight tickets provided by the disposal facility (CWM Model City), approximately 62.4 tons of soils and concrete debris were generated by the removal activities in AOC 39 and received by CWM for disposal [refer to Appendix C for the waste manifests and certificates of disposal].

Based on the low concentrations of PCBs in soils remaining at the excavation limits (less than the 1 ppm TAGM 4046 surface soil guidance value), the shallow depth of the excavation (2 feet), and existing chain-link fence and locked gates that prevent unrestricted access to the Site, backfilling of the excavation in AOC 39 was deferred until slab demolition activities are performed in accordance with the NYSDEC-approved *Demolition Work Plan* (BBL, July 2005). Exempt (non-impacted) construction and demolition debris generated by the slab demolition activities will be used to backfill the excavation.

2.7 Air Monitoring

Airborne monitoring for particulate (dust) and volatile organic vapors was conducted during the ICM removal activities in accordance with the New York State Department of Health's (NYSDOH's) Community Air Monitoring Plan, dated June 2000. Dust monitoring was conducted using a Real-Time Aerosol Monitor (mini-RAM). Volatile organic vapor monitoring was conducted using a PID. Air monitoring equipment was calibrated daily, prior to the start of work activities.

Air monitoring results were recorded by the onsite health and safety supervisor at a minimum frequency of once per hour, unless site conditions and work activities did not cause the generation of dust. Hourly monitoring readings are summarized on the air monitoring logs included in Appendix E.

The ICM Work Plan specified that if particulate monitoring indicated ambient dust levels in the worker breathing zone exceeded the action level of 100 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) above background, the level of particulates was to be manually recorded at the downwind perimeter of the work area at 15-minute intervals. The worker breathing zone action level was not exceeded during the ICM activities, and manual 15-minute readings were not needed. The ICM Work Plan also specified that if the level of particulates at the downwind perimeter of the work area was $150 \mu\text{g}/\text{m}^3$ (above site background) or greater, or if visible airborne dust was observed leaving the work area, then work activities were to cease and additional dust control

techniques employed to maintain particulate levels below $150 \mu\text{g}/\text{m}^3$ and to prevent visible dust migration. Because visible dust was not observed leaving the work area and the $150 \mu\text{g}/\text{m}^3$ action level was not exceeded during the ICM activities, there were no dust-related work stoppages.

In accordance with the ICM Work Plan, a PID was used to monitor the worker breathing zone for total organic vapor (TOV) levels during the removal activities. PID monitoring was performed continuously during the implementation of the work activities, and the results were recorded at a minimum frequency of once per hour. The ICM Work Plan specified that if the sustained level of TOV in the worker breathing zone exceeded 5 ppm above background, then the TOV levels were to be manually recorded at the downwind perimeter of the work area (i.e., the exclusion zone) at 15-minute intervals. This action level was not exceeded during the ICM activities.

2.8 Site Restoration/Demobilization

Equipment used during the ICM activities (including the backhoe and miscellaneous hand tools) were decontaminated prior to demobilization. The demobilization of equipment, materials, and personnel related to the soil excavation, UST removal, and structure cleaning activities was completed on June 17, 2004. The demobilization of drilling equipment used for the delineation/verification soil sampling activities was completed on August 11, 2005. Prior to the demobilization, general site cleanup activities were conducted to remove miscellaneous materials utilized during the ICM activities.

3. Chronology of Significant Milestone Dates

A chronology of significant milestone dates for the ICM activities is presented in the table below.

Activity	Dates
ICM Delineation/Pre-Excavation Verification Soil Sampling Activities:	
• Initial round of delineation/pre-excavation verification soil sampling	6/7/05
• Second round of delineation/pre-excavation verification soil sampling (conducted to evaluate the potential presence of VOCs and to further delineate the extent of PCB-impacted soils in AOC 45)	6/15/05
• Third round of delineation/pre-excavation verification soil sampling (conducted to further delineate the extent of PCB-impacted soils in AOC 45)	6/29/05 – 6/30/05
• Final round of delineation/pre-excavation verification soil sampling (conducted to refine the delineation of PCB-impacted soils in AOC 45)	8/4/05 – 8/10/05
Subsurface Structure Cleaning Activities	6/7/05 – 6/17/05
AOC 39 Excavation Activities	6/7/05 – 6/17/05
UST Removal Activities	6/15/05 – 6/17/05

4. Modifications to ICM Work Plan

The NYSDEC-approved *Interim Corrective Measures Work Plan* (BBL, April 2005) was modified slightly based on field conditions encountered during the ICM activities, as detailed below.

- The ICM Work Plan called for the collection of soil samples from the 0.0- to 0.2-foot and 0.5- to 1.5-foot depth intervals at sampling locations VS-39-2 and VS-39-3 along the west and south sidewalls of the soil excavation in AOC 39. However, the excavation in AOC 39 was expanded a few feet to the west and south (from the limits shown in the ICM Work Plan) to coincide with the concrete foundation walls of the former Plant 1 building. Soils within the excavation limits were removed to depths of approximately 2 to 2.5 feet relative to the surrounding grade. As a result, no soil remained at the previously proposed sampling intervals along the south and west sidewalls of the excavation. Accordingly, samples were instead collected from the 2.5- to 3.5-foot depth intervals.
- Based^{on} PID headspace screening results for samples collected during the initial round of delineation/verification soil sampling, the scope of the ICM activities was expanded to include the collection of soil samples from AOCs 39 and 45 for laboratory analysis for VOCs. As discussed in Subsection 2.5, soil samples from two sampling locations (locations VS-39-1 and VS-45-9) were submitted for laboratory analysis for VOCs. Results indicated that VOCs were not actual constituents of interest in AOCs 39 or 45.
- Based on the PCB analytical results for the soil samples collected during the initial round of delineation and verification soil sampling activities, the scope of the ICM activities was expanded to include additional PCB soil sampling in AOC 45. Three additional rounds of pre-excavation delineation/verification soil sampling were performed to further delineate the extent of PCB-impacted soils in AOC 45. The additional sampling was performed as set forth in e-mail correspondence to the NYSDEC dated June 16, 2005; June 27, 2005; July 28, 2005; and August 2, 2005 (refer to Appendix A for copies of the correspondence).
- The PCB-impacted soils and concrete debris removed from AOC 39 were loaded into rolloff waste containers instead of being direct-loaded for offsite disposal or placed in lined material staging areas for temporary staging prior to offsite disposal. The rolloff waste containers were lined with polyethylene sheeting prior to use and covered with tarps at the end of each workday and prior to offsite transportation and disposal.

5. Summary and Conclusions

The ICM activities have been completed, resulting in the removal of the following:

- the former 1,000 gallon gasoline UST located northeast of the former Plant 1 building in AOC 50;
- standing water from the 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; and
- 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 sampling performed adjacent to the former gasoline UST as part of the RFI and ICM, there was no evidence of a release from the former tank. No further action is proposed for AOC 50.

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 is proposed for the subsurface structures, except for the structures associated with AOCs 40 and 45, which will be further addressed during upcoming slab demolition activities to be implemented in accordance with the NYSDEC-approved *Demolition Work Plan* (BBL, July 2005) and Work Plan Modification dated August 15, 2005, as follows:

- Debris encountered beneath the concrete previously used to fill a portion of the former Plant 3 trench system (AOC 40) will be removed when the concrete floor slab in the area is removed. The debris will be collected, characterized, and transported for proper offsite disposal.
- The heavily-stained concrete encountered in the interior and exterior Pilot Plant sump (AOC 45) and the debris remaining in the utility chase entering the south side of the sump will be removed and transported for proper offsite disposal. In addition, soils within and around AOC 45 exhibiting PCBs at concentrations above 50 ppm (as delineated by the ICM) will be addressed via removal. A work plan detailing the proposed soil removal activities in the Pilot Plant area will be submitted to the NYSDEC under separate cover.

Based on the verification soil sampling results for AOC 39, no further action is proposed for that AOC.

Following completion of the proposed additional removal activities described above and completion of the slab demolition activities, Bayer will propose final corrective measures (where needed) to address remaining environmental conditions, as identified in the NYSDEC-approved RFI Report. These final measures, anticipated to include institutional controls (Declaration of Covenants and Restrictions and a Site Management Plan), will be implemented to attain site closure and allow for property transfer to a new owner for economic redevelopment. The AOCs anticipated to be included in the Site Management Plan are identified in Table 8 (an updated version of Table 15 from the Phase II RFI Report).

Tables

**TABLE 1
ANALYTICAL SAMPLE SUMMARY**

**INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK**

Sample Type/Area/ Sample ID	Reported Sample Depth	Sample Depth Relative to Surrounding Grade	Date Sampled	SDG#	Validation	Laboratory Analyses						Ignitability, Corrosivity, Reactivity
						PCBs	VOCs	TCLP VOCs	TCLP SVOCs	TCLP Metals		
DELINEATION/VERIFICATION SOIL SAMPLES												
AOC 39 - Former Plant 1 Electrical Transformer Area												
VS-39-1/VS-39-1R	(0.0-0.2')	(0.0-0.2')	6/8/2005	209769	✓	✓						
	(0.5-1.5')	(0.5-1.5')	6/8/2005	209769	✓	✓						
	(2.5-4.0')	(2.5-4.0')	6/15/2005	209867			✓					
VS-39-2	(2.5-3.5')	(2.5-3.5')	6/8/2005	209769	✓	✓						
VS-39-3	(2.5-3.5')	(2.5-3.5')	6/8/2005	209769	✓	✓						
VS-39-4	(0.0-0.2')	(0.0-0.2')	6/8/2005	209769	✓	✓						
	(0.5-1.5')	(0.5-1.5')	6/8/2005	209769	✓	✓						
	(2.5-3.5')	(2.5-3.5')	6/8/2005	209769	✓	✓						
VS-DUP-1 [VS-39-4]	(0.5-1.5')	(0.5-1.5')	6/8/2005	209769	✓	✓						
VS-39-5	(0.0-0.2')	(0.0-0.2')	6/8/2005	209769	✓	✓						
	(0.5-1.5')	(0.5-1.5')	6/8/2005	209769	✓	✓						
AOC 45 - Sump in Northwest Corner of Pilot Plant												
VS-45-1	(6.8-7.3')	(4.5-5.0')	6/9/2005	209797	✓	✓						
	(8.8-9.8')	(6.5-7.5')	6/9/2005	209797	✓	✓						
VS-DUP-2 [VS-45-1]	(8.8-9.8')	(6.5-7.5')	6/9/2005	209797	✓	✓						
VS-45-2/VS-45-2R	(0.0-0.5)*	(2.3-1.8' Above)	6/15/2005	209867		✓						
	(0.5-2.0)*	(1.8-0.3' Above)	6/15/2005	209867		✓						
	(4.0-6.0)*	(1.7-3.7')	6/15/2005	209867		✓						
	(6.8-7.3')	(4.5-5.0')	6/9/2005	209797	✓	✓						
	(6.8-7.3)*	(4.5-5.0')	6/15/2005	209867		✓						
	(8.8-9.8')	(6.5-7.5')	6/9/2005	209797	✓	✓						
	(8.8-9.8)*	(6.5-7.5')	6/15/2005	209867		✓						
	(10.3-12.3)*	(8.0-10.0')	6/15/2005	209867		✓						
	(12.3-14.3)*	(10.0-12.0')	6/15/2005	209867		✓						
	(14.3-16.0)*	(12.0-13.7')	6/15/2005	209867		✓						
	(16.0-18.0)*	(13.7-15.7')	6/29/2005	210028	✓	✓						
	(22.0-24.0)*	(19.7-21.7')	6/29/2005	210028	✓	✓						
	(26.0-28.0')	(23.7-25.7')	8/4/2005	210596		✓						
	(30.0-32.0')	(27.7-29.7')	8/4/2005	210407	✓	✓						
	(34.0-36.0')	(31.7-33.7')	8/4/2005	210407	✓	✓						
	(40.0-42.0')	(37.7-39.7')	8/4/2005	210407	✓	✓						
	(44.0-46.0')	(41.7-43.7')	8/4/2005	210407	✓	✓						
(50.0-52.0')	(47.7-49.7')	8/4/2005	210407	✓	✓							
VS-DUP-4 [VS-45-2]	(16.0-18.0')	(13.7-15.7')	6/29/2005	210028	✓	✓						
VS-45-DUP-1 [VS-45-2]	(34.0-36.0')	(31.7-33.7')	8/4/2005	210407	✓	✓						
VS-45-3	(4.5-5.0')	(4.5-5.0')	6/9/2005	209797	✓	✓						
	(6.5-7.5')	(6.5-7.5')	6/9/2005	209797	✓	✓						
VS-45-4	(4.5-5.0')	(4.5-5.0')	6/9/2005	209797	✓	✓						
	(6.5-7.5')	(6.5-7.5')	6/9/2005	209797	✓	✓						
VS-45-5	(4.5-5.0')	(4.5-5.0')	6/8/2005	209797	✓	✓						
	(6.5-7.5')	(6.5-7.5')	6/8/2005	209797	✓	✓						
VS-45-6	(4.5-5.0')	(4.5-5.0')	6/8/2005	209797	✓	✓						
	(6.5-7.5')	(6.5-7.5')	6/8/2005	209797	✓	✓						
VS-45-7/VS-45-7R	(0.0-0.5)*	(2.3-2.8' Above)	6/29/2005	210028	✓	✓						
	(6.8-7.3')	(4.5-5.0')	6/9/2005	209797	✓	✓						
	(8.8-9.8')	(6.5-7.5')	6/9/2005	209797	✓	✓						
	(10.3-12.3)*	(8.0-10.0')	6/29/2005	210028	✓	✓						
	(12.3-14.3)*	(10.0-12.0')	6/29/2005	210028	✓	✓						
	(14.3-16.0)*	(12.0-13.7')	6/29/2005	210028	✓	✓						
VS-45-8	(22.0-24.0)*	(19.7-21.7')	6/29/2005	210028	✓	✓						
	(4.5-5.0')	(4.5-5.0')	6/8/2005	209769	✓	✓						
VS-45-9/VS-45-9R	(6.5-7.5')	(6.5-7.5')	6/8/2005	209769	✓	✓						
	(4.5-5.0')	(4.5-5.0')	6/8/2005	209769	✓	✓						
VS-45-10	(8.0-10.0')	(8.0-10.0')	6/15/2005	209867		✓						
	(4.5-5.0')	(4.5-5.0')	6/9/2005	209797	✓	✓						
VS-45-11/VS-45-11R	(6.5-7.5')	(6.5-7.5')	6/9/2005	209797	✓	✓						
	(0.0-0.5')	(2.3-1.8' Above)	6/15/2005	209867		✓						
	(2.0-4.0')	(0.3 Above-1.7' Below)	6/15/2005	209867		✓						
VS-45-11/VS-45-11R	(6.8-7.3')	(4.5-5.0')	6/15/2005	209867		✓						
	(8.8-9.8')	(6.5-7.5')	6/15/2005	209867		✓						

**TABLE 1
ANALYTICAL SAMPLE SUMMARY**

**INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK**

Sample Type/Area/ Sample ID	Reported Sample Depth	Sample Depth Relative to Surrounding Grade	Date Sampled	SDG#	Validation	Laboratory Analyses						
						PCBs	VOCs	TCLP VOCs	TCLP SVOCs	TCLP Metals	Ignitability, Corrosivity, Reactivity	
VS-45-11/VS-45-11R	(10.3-12.3')	(8.0-10.0')	6/15/2005	209867		✓						
	(12.3-14.3')	(10.0-12.0')	6/15/2005	209867		✓						
	(14.3-16.0')	(12.0-13.7')	6/15/2005	209867		✓						
	(16.0-18.0')*	(13.7-15.7')	6/29/2005	210028	✓	✓						
	(22.0-24.0')*	(29.7-21.7')	6/29/2005	210028	✓	✓						
VS-DUP-3 [VS-45-11]	(10.3-12.3')	(8.0-10.0')	6/15/2005	209869		✓						
VS-45-12	(0.0-0.5')	(2.3-1.8' Above)	6/29/2005	210028	✓	✓						
	(6.8-7.3')	(4.5-5.0')	6/29/2005	210028	✓	✓						
	(10.3-12.3')	(8.0-10.0')	6/29/2005	210028	✓	✓						
	(16.0-18.0')	(13.7-15.7')	6/29/2005	210028	✓	✓						
VS-45-13	(0.0-0.5')	(2.3-1.8' Above)	6/29/2005	210048	✓	✓						
	(6.8-7.3')	(4.5-5.0')	6/29/2005	210048	✓	✓						
	(10.3-12.3')	(8.0-10.0')	6/29/2005	210048	✓	✓						
	(16.0-18.0')	(13.7-15.7')	6/29/2005	210048	✓	✓						
VS-45-14	(0.0-0.5')	(2.3-1.8' Above)	6/30/2005	210048	✓	✓						
	(6.8-7.3')	(4.5-5.0')	6/30/2005	210048	✓	✓						
	(10.3-12.3')	(8.0-10.0')	6/30/2005	210048	✓	✓						
	(16.0-18.0')	(13.7-15.7')	6/30/2005	210048	✓	✓						
VS-DUP-5 [VS-45-14]	(0.0-0.5')	(2.3-1.8' Above)	6/30/2005	210048	✓	✓						
VS-45-20	(0.0-0.5')	(2.3-1.8' Above)	8/9/2005	210452	✓	✓						
	(6.8-7.3')	(4.5-5.0')	8/9/2005	210452	✓	✓						
	(10.0-12.0')	(7.7-9.7')	8/9/2005	210452	✓	✓						
	(16.0-18.0')	(13.7-15.7')	8/9/2005	210452	✓	✓						
VS-45-21	(0.0-0.5')	(2.3-1.8' Above)	8/9/2005	210452	✓	✓						
	(6.8-7.3')	(4.5-5.0')	8/9/2005	210452	✓	✓						
	(10.0-12.0')	(7.7-9.7')	8/9/2005	210452	✓	✓						
	(16.0-18.0')	(13.7-15.7')	8/9/2005	210452	✓	✓						
VS-45-22	(0.0-0.5')	(2.3-1.8' Above)	8/8/2005	210454	✓	✓						
	(6.8-7.3')	(4.5-5.0')	8/8/2005	210454	✓	✓						
	(10.0-12.0')	(7.7-9.7')	8/8/2005	210454	✓	✓						
	(16.0-18.0')	(13.7-15.7')	8/8/2005	210454	✓	✓						
VS-45-DUP-2 [VS-45-22]	(6.8-7.3')	(4.5-5.0')	8/8/2005	210452	✓	✓						
VS-45-23	(4.5-5.0')	(4.5-5.0')	8/9/2005	210454	✓	✓						
	(6.5-7.5')	(6.5-7.5')	8/9/2005	210454	✓	✓						
VS-45-DUP-3 [VS-45-23]	(4.5-5.0')	(4.5-5.0')	8/9/2005	210452	✓	✓						
UST-AOC-50	(0.0-2.5')	(0.0-2.5')	6/8/2005	209769	✓	✓						
WASTE CHARACTERIZATION SAMPLES												
Soil/Debris Samples												
AOC 39 - Staged Soil	--	--	6/9/2005	209798		✓		✓	✓	✓	✓	✓
Structure Cleaning Debris	--	--	6/9/2005	209798		✓		✓	✓	✓	✓	✓
WC 50 - UST Contents	--	--	6/16/2005	209869		✓		✓	✓	✓	✓	✓
Wastewater Sample												
AOC-50 UST Water	--	--	6/9/2005	209798		✓		✓	✓	✓	✓	✓

Notes:

- Samples were collected by Blasland, Bouck & Lee, Inc. (BBL) on the dates indicated above.
- Samples were analyzed by Severn Trent Laboratories, Inc. (STL) of Shelton, Connecticut.
- Samples were analyzed for the following constituents:
 - Polychlorinated biphenyls (PCBs) using United States Environmental Protection Agency (USEPA) SW-846 Method 8082;
 - Toxicity Characteristic Leaching Procedure (TCLP) volatile organic compounds (VOCs) using USEPA SW-846 Methods 1311 for extraction and 8260B for analysis;
 - TCLP semi-volatile organic compounds (SVOCs) using USEPA SW-846 Methods 1311 for extraction and 8270C for analysis;
 - TCLP metals using USEPA SW-846 Methods 1311 for extraction and 6010 for analysis;
 - Corrosivity using USEPA SW-846 Method 9045C;
 - Ignitability using USEPA SW-846 Method 1010;
 - Reactive Cyanide using USEPA SW-846 Method 7.3.3; and
 - Reactive Sulfide using USEPA SW-846 Method 7.3.4.
- DUP = Blind Duplicate [corresponding sampling location is identified in brackets].
- = Samples were composite characterization samples; sample depth is not applicable.
- Sample depths marked by an asterisk (*) indicate that an 'R' was included in the sample ID identified on the chain-of-custody form. The 'R' designates a sample from a re-visited sampling location.
- Reported sample depths are as listed on the chain-of-custody forms submitted to the laboratory and are relative to the bottom of the concrete slab (for sampling locations within the former Pilot Plant footprint) and the surrounding grade (for all other sampling locations).

**TABLE 2
HEADSPACE SCREENING SUMMARY**

**INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK**

Sample ID	Reported Sample Depth	PID Measurement (ppm)
VS-39-1	(0.0-1.5')	0.0
	(2.0-4.0')	--
VS-39-1R	(2.5-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
VS-39-2	(0.0-0.2')	0.0
	(0.2-0.5')	0.0
	(0.5-1.5')	0.0
	(2.0-4.0')	--
VS-39-3	(0.0-0.2')	0.0
	(0.2-0.5')	0.0
	(0.5-1.5')	0.0
	(1.5-2.5')	0.0
	(2.5-3.5')	0.0
VS-39-4	(0.0-0.2')	0.0
	(0.2-0.5')	0.0
	(0.5-1.5')	0.0
	(1.5-2.5')	0.0
	(2.5-3.5')	0.0
VS-39-5	(0.0-0.2')	0.0
	(0.2-0.5')	0.0
	(0.5-1.5')	0.0
	(1.5-2.5')	0.0
	(2.5-3.5')	0.0
VS-45-1	(0.0-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
	(8.0-10.0')	0.0
VS-45-2	(0.0-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
	(8.0-10.0')	--
VS-45-2R	(0.0-0.5')	0.0
	(0.5-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
	(8.0-10.0')	0.4
	(10.0-12.0')	0.0
	(12.0-14.0')	0.0
	(14.0-16.0')	1.7

**TABLE 2
HEADSPACE SCREENING SUMMARY**

**INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK**

Sample ID	Reported Sample Depth	PID Measurement (ppm)
VS-45-2R	(16.0-18.0')	0.0
	(18.0-20.0')	0.0
	(20.0-22.0')	0.0
	(22.0-24.0')	0.0
	(24.0-26.0')	0.7
	(26.0-28.0')	0.0
	(28.0-30.0')	0.3
	(30.0-32.0')	0.0
	(32.0-34.0')	0.0
	(34.0-36.0')	0.0
	(36.0-38.0')	0.0
	(38.0-40.0')	0.0
	(40.0-42.0')	0.0
	(42.0-44.0')	0.0
	(44.0-46.0')	0.0
	(46.0-48.0')	73.4
	(48.0-50.0')	61.2
	(50.0-52.0')	105.0
	(52.0-54.0')	115.0
	(54.0-56.0')	100.0
	(56.0-58.0')	54.0
	(58.0-60.0')	24.0
VS-45-3	(0.0-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
VS-45-4	(0.0-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
VS-45-5	(0.0-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
VS-45-6	(0.0-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
VS-45-7	(0.0-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
	(8.0-10.0')	0.0

**TABLE 2
HEADSPACE SCREENING SUMMARY**

INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT

BAYER MATERIALSCIENCE LLC

125 NEW SOUTH ROAD

HICKSVILLE, NEW YORK

Sample ID	Reported Sample Depth	PID Measurement (ppm)
VS-45-7R	(0.0-0.5')	0.0
	(0.5-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
	(8.0-10.0')	0.0
	(10.0-12.0')	0.0
	(12.0-14.0')	0.0
	(14.0-16.0')	0.0
	(16.0-18.0')	0.0
	(18.0-20.0')	0.0
	(20.0-22.0')	0.0
	(22.0-24.0')	0.0
VS-45-8	(0.0-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	--
VS-45-8R	(6.0-8.0')	0.0
	(8.0-10.0')	0.0
	(10.0-12.0')	0.0
	(12.0-14.0')	1.0
VS-45-9	(0.0-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	--
VS-45-9R	(8.0-10.0')	2.9
	(10.0-12.0')	0.0
	(12.0-14.0')	1.2
	(14.0-16.0')	0.0
VS-45-10	(0.0-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
VS-45-11	(0.0-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
	(8.0-10.0')	0.0
	(10.0-12.0')	0.0
	(12.0-14.0')	0.0
	(14.0-16.0')	2.2

**TABLE 2
HEADSPACE SCREENING SUMMARY**

**INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK**

Sample ID	Reported Sample Depth	PID Measurement (ppm)
VS-45-11R	(16.0-18.0')	0.0
	(18.0-20.0')	0.0
	(20.0-22.0')	0.0
	(22.0-24.0')	0.0
VS-45-12	(0.0-0.5')	0.0
	(0.5-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
	(8.0-10.0')	0.0
	(10.0-12.0')	0.0
	(12.0-14.0')	0.0
	(14.0-16.0')	0.0
	(16.0-18.0')	0.0
	(18.0-20.0')	0.0
	(20.0-22.0')	0.0
	(22.0-24.0')	0.0
VS-45-13	(0.0-0.5')	0.0
	(0.5-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
	(8.0-10.0')	0.0
	(10.0-12.0')	0.0
	(12.0-14.0')	0.0
	(14.0-16.0')	0.0
	(16.0-18.0')	0.0
	(18.0-20.0')	0.0
	(20.0-22.0')	0.0
	(22.0-24.0')	0.0
VS-45-14	(0.0-0.5')	0.0
	(0.5-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
	(8.0-10.0')	0.0
	(10.0-12.0')	0.0
	(12.0-14.0')	0.0
	(14.0-16.0')	0.0
	(16.0-18.0')	0.0
	(18.0-20.0')	0.0
	(20.0-22.0')	0.0
	(22.0-24.0')	0.0

**TABLE 2
HEADSPACE SCREENING SUMMARY**

**INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK**

Sample ID	Reported Sample Depth	PID Measurement (ppm)
VS-45-15	(0.0-0.5')	0.0
	(0.5-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
	(8.0-10.0')	0.0
	(10.0-12.0')	0.0
	(12.0-14.0')	0.0
	(14.0-16.0')	0.0
	(16.0-18.0')	0.0
	(18.0-20.0')	0.0
	(20.0-22.0')	0.0
VS-45-16	(22.0-24.0')	0.0
	(0.0-0.5')	0.0
	(0.5-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
	(8.0-10.0')	0.0
	(10.0-12.0')	0.0
	(12.0-14.0')	0.0
	(14.0-16.0')	0.0
	(16.0-18.0')	0.0
	(18.0-20.0')	0.0
VS-45-17	(20.0-22.0')	0.0
	(22.0-24.0')	0.0
	(0.0-0.5')	0.0
	(0.5-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
	(8.0-10.0')	0.0
	(10.0-12.0')	0.0
	(12.0-14.0')	0.0
	(14.0-16.0')	0.0
	(16.0-18.0')	0.0
VS-45-18	(18.0-20.0')	0.0
	(20.0-22.0')	0.0
	(22.0-24.0')	0.0
	(0.0-0.5')	0.0
VS-45-18	(0.5-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(0.0-0.5')	0.0

**TABLE 2
HEADSPACE SCREENING SUMMARY**

**INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK**

Sample ID	Reported Sample Depth	PID Measurement (ppm)
VS-45-18	(6.0-8.0')	0.0
	(8.0-10.0')	0.0
	(10.0-12.0')	0.0
	(12.0-14.0')	0.0
	(14.0-16.0')	0.0
	(16.0-18.0')	0.0
	(18.0-20.0')	0.0
	(20.0-22.0')	0.0
VS-45-19	(22.0-24.0')	0.0
	(0.0-0.5')	0.0
	(0.5-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
	(8.0-10.0')	0.0
	(10.0-12.0')	0.0
	(12.0-14.0')	0.0
	(14.0-16.0')	0.0
	(16.0-18.0')	0.0
	(18.0-20.0')	0.0
VS-45-20	(20.0-22.0')	0.0
	(22.0-24.0')	0.0
	(0.0-0.5')	0.0
	(0.5-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
	(8.0-10.0')	0.0
	(10.0-12.0')	0.0
	(12.0-14.0')	0.0
	(14.0-16.0')	0.0
	(16.0-18.0')	0.0
VS-45-21	(18.0-20.0')	0.0
	(20.0-22.0')	0.0
	(0.0-0.5')	0.0
	(0.5-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
	(8.0-10.0')	0.0
	(10.0-12.0')	0.0
	(12.0-14.0')	0.0
	(14.0-16.0')	0.0

**TABLE 2
HEADSPACE SCREENING SUMMARY**

**INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK**

Sample ID	Reported Sample Depth	PID Measurement (ppm)
VS-45-21	(16.0-18.0')	0.0
	(18.0-20.0')	0.0
	(20.0-22.0')	0.0
VS-45-22	(0.0-0.5')	0.0
	(0.5-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
	(8.0-10.0')	0.0
	(10.0-12.0')	0.0
	(12.0-14.0')	0.0
	(14.0-16.0')	0.0
	(16.0-18.0')	0.0
	(18.0-20.0')	0.0
	(20.0-22.0')	0.0
VS-45-23	(0.0-0.5')	0.0
	(0.5-2.0')	0.0
	(2.0-4.0')	0.0
	(4.0-6.0')	0.0
	(6.0-8.0')	0.0
	(8.0-10.0')	0.0
	(10.0-12.0')	0.0
	(12.0-14.0')	0.0
	(14.0-16.0')	0.0
	(16.0-18.0')	0.0
	(18.0-20.0')	0.0
UST-AOC-50	(0.0-2.5')	0.0

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc. (BBL) during June and August 2005.
2. Headspace screening measurements were obtained using a photoionization detector (PID).
3. Concentrations reported in parts per million (ppm), which is equivalent to milligrams per kilogram (mg/kg).
4. The 'R' included in selected sample IDs indicates the sample was collected from a revisited sampling location.
5. -- indicates the original reading is believed to be the result of instrument error. Follow-up sampling and screening/laboratory analysis supports this conclusion.

TABLE 3
SOIL SAMPLE VISUAL CHARACTERIZATION RESULTS

INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Sample ID/ Depth Interval	Description
VS-39-1	
0.0-0.5'	Dark brown, fine-to-medium sand, trace fine-to-medium gravel, trace clay
0.5-1.3'	Brown, fine-to-medium sand, fine-to-medium gravel, trace clay
2.0-4.0'	Orange/brown, fine-to-medium sand, little fine-to-medium gravel, faint odor, slight stain
VS-39-1R	
2.5-4.0'	Orange, fine-to-medium sand, some fine-to-medium gravel
4.0-6.6'	Orange/Light brown, coarse-to-fine sand, little fine-to-medium gravel, moist
VS-39-2	
0.0-0.3'	Dark brown, fine-to-medium sand, little fine-to-medium gravel, trace organic material, moist
0.3-1.2'	Orange/brown, fine-to-medium sand, some fine-to-medium gravel, moist
2.0-4.0'	Orange/brown, fine-to-medium sand, some fine-to-medium gravel, moist
VS-39-3	
0.0-0.7'	Light brown, fine-to-medium sand, some fine-to-coarse gravel, moist
0.7-2.3'	Brown, fine-to-coarse sand, little fine-to-medium gravel, moist
VS-39-4	
0.0-1.8'	Brown, fine-to-medium sand, some fine-to-medium gravel, trace silt, moist
1.8-2.7'	Orange/brown, fine-to-medium sand, little fine-to-medium gravel, moist
VS-39-5	
0.0-0.8'	Light brown, fine-to-medium sand, some fine-to-coarse gravel, trace silt, moist
0.8-2.4'	Dark brown, fine-to-medium sand, little fine-to-medium gravel, moist
VS-45-1	
0.0-2.0'	Dark brown, fine sand, some fine-to-medium gravel, little silt, moist
4.0-4.7'	SAA
4.7-6.5'	Brown, fine-to-coarse sand, some fine-to-medium gravel, moist
8.0-9.2'	Orange/brown, fine-to-medium sand, trace fine-to-medium gravel, moist
VS-45-2	
0.0-2.0'	Dark brown, fine-to-medium sand, some fine-to-medium gravel, trace silt, moist
4.0-4.7'	SAA
4.7-7.1'	Light brown, fine-to-medium sand, little fine-to-medium gravel, moist
8.0-9.8'	Brown, fine-to-medium sand, little fine-to-medium gravel, visible product stain, strong odor (sweet smell)
VS-45-2R	
10-16'	Not available
VS-45-2R	
16.0-16.4'	Brown, fine-to-medium sand, little fine-to-medium gravel, moist, slight petroleum odor, non-aqueous liquid
16.4-18.6'	Orange/brown, fine-to-medium sand, trace coarse sand/fine gravel, dry
20.0-24.7'	SAA
VS-45-2R	
24.0-42.0'	Reddish brown, fine-to-medium sand, some fine gravel, moist
42.0-43.0'	Light brown, fine-to-medium sand, some fine gravel, moist
43.0-44.0'	Reddish brown, fine-to-medium sand, some fine gravel, moist
44.0-47.3'	Light to Reddish brown, fine-to-medium sand, some fine gravel, moist
47.3-48.6'	Black, fine sand, no gravel, very wet, odor
48.6-48.7'	Grey, 1-inch thick zone of dense clay (hard)
48.7-50.0'	Reddish brown, fine sand, no gravel, moist
50.0-55.5'	Black, clayey silt, with zones of 1-inch thick layers of hard, dense clay, moist
55.5-58.0'	Light brown, fine silt, some sand, moist
58.0-60.0'	Very light brown to tan, fine silt, moist
VS-45-3	
0.0-2.0'	Brown, fine-to-medium sand, trace fine-to-medium gravel/silt, moist
4.0-5.2'	Light brown, fine-to-medium sand, trace fine-to-medium gravel, moist
5.2-5.4'	Pulverized wood, moist
5.4-6.4'	Orange/brown, fine-to-coarse sand, trace fine-to-medium gravel, moist

TABLE 3
SOIL SAMPLE VISUAL CHARACTERIZATION RESULTS

INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Sample ID/ Depth Interval	Description
VS-45-4	
0.0-0.5'	Dark brown, fine sand, moist
0.5-2.0'	Brown, fine sand, trace fine gravel, moist
4.0-4.9'	Brown/orange, fine-to-medium sand, some fine-to-medium gravel, trace silt, moist
4.9-6.0'	Orange/brown, fine-to-medium sand, some fine-to-medium gravel, trace silt, moist
VS-45-5	
0.0-1.2'	Dark brown, fine-to-coarse sand, little fine-to-medium gravel, trace silt, moist
1.2-2.9'	Light brown, fine-to-medium sand, some fine-to-medium gravel, moist
4.0-7.2'	Orange/brown, fine-to-medium sand, trace fine-to-medium gravel, moist
VS-45-6	
0.0-1.0'	Dark brown, fine-to-coarse sand, some fine-to-medium gravel, trace silt, moist
1.0-2.1'	Light brown, fine-to-medium sand, little fine-to-medium gravel, moist
4.0-6.7'	Orange/brown, fine-to-coarse sand, some fine-to-medium gravel, moist
VS-45-7	
0.0-2.1'	Dark brown, fine sand, some fine-to-medium gravel, little silt, moist
4.0-4.3'	SAA
4.3-7.0'	Light brown, fine-to-medium sand, some fine-to-medium gravel, moist
8.0-9.9'	Orange/brown, fine-to-medium sand, trace fine-to-medium gravel, moist
VS-45-7R	
0.0-2.0'	Brown, fine-to-medium sand, some fine-to-medium gravel, trace silt, moist
4.0-4.8'	SAA
4.8-6.6'	Orange/brown, fine-to-medium sand, little fine-to-medium gravel, trace silt, moist
8.0-11.0'	Orange/brown, fine-to-medium sand, trace fine-to-medium gravel, moist
12.0-15.0'	SAA
16.0-19.1'	Orange fine-to-coarse sand, little fine-to-medium gravel, moist
20.0-24.0'	SAA
VS-45-8	
0.0-1.7'	Brown/tan, fine-to-medium sand, trace fine gravel, moist
4.0-6.4'	SAA, slight stain from 6.1-6.4'
VS-45-8R	
6.0-8.8'	Light brown/orange, medium-to-coarse sand, some fine-to-medium gravel, moist
10.0-12.6'	Orange/light tan, medium-to-coarse sand, some fine-to-medium gravel, moist
VS-45-9	
0.0-1.8'	Orange/brown, fine-to-medium sand, trace fine gravel, moist
4.0-4.3'	SAA
4.3-4.7'	Grey, fine-to-coarse sand, some fine-to-coarse gravel, moist
4.7-6.0'	Orange/brown, fine-to-medium sand, little fine gravel, moist, faint odor (stain from 5.8-6.0')
VS-45-9R	
8.0-10.4'	Orange, medium-to-coarse sand, some medium-to-fine gravel, moist
12.0-14.8'	SAA
VS-45-10	
0.0-3.1'	Light brown, fine sand, trace medium sand & fine gravel, moist
4.0-6.9'	Brown fine sand, trace medium sand & fine gravel, wet at 5.2'
VS-45-11	
0.0-1.7'	Dark brown, fine-to-medium sand, little fine-to-medium gravel, trace silt, moist
4.0-5.0'	Grey/brown, medium-to-fine sand, some fine-to-medium gravel, trace wood debris throughout
5.0-6.9'	Light brown, fine-to-coarse sand, little fine-to-medium gravel, moist
8.0-9.4'	Light brown, fine-to-medium sand, little fine-to-medium gravel, moist
9.4-10.9'	SAA, but orange in color
12.0-13.3'	SAA
13.3'-14.6'	Light brown, fine-to-coarse sand, some fine-to-medium gravel, moist

TABLE 3
SOIL SAMPLE VISUAL CHARACTERIZATION RESULTS

INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Sample ID/ Depth Interval	Description
VS-45-11R	
16.0-19.2'	Light brown, fine-to-medium sand, little fine-to-medium gravel, moist
20.0-21.2'	SAA
21.2-23.1'	Orange, fine-to-coarse sand, little fine-to-medium gravel, moist
VS-45-12	
0.0-1.7'	Brown, fine-to-medium sand, some silt, little fine-to-medium gravel, moist
4.0-4.2'	SAA
4.2-6.6'	Orange/brown, fine-to-medium sand, little fine-to-medium gravel, trace coarse sand, moist
8.0-8.6'	Light brown, fine sand, trace fine gravel, dry
8.6-10.0'	Orange/brown, fine-to-medium sand, little fine-to-medium gravel, dry
12.0-14.4'	SAA
16.0-19.0'	SAA
20.0-22.0'	Orange/Light brown, coarse-to-fine sand, little fine-to-medium gravel, moist
VS-45-13	
0.0-2.3'	Dark brown, fine-to-medium sand, little fine-to-medium gravel, trace silt, moist
4.0-4.9'	SAA
4.9-6.4'	Orange/brown, fine-to-coarse sand, little fine-to-medium gravel, dry
8.0-11.1'	SAA
12.0-15.0'	Orange/brown, fine-to-medium sand, little fine-to-medium gravel, trace coarse sand, moist
16.0-16.6'	SAA
20.0-22.0'	SAA
VS-45-14	
0.0-0.9'	Brown, fine-to-medium sand, little fine-to-medium gravel, trace silt, moist
4.0-4.7'	SAA
4.7-6.4'	Light brown/orange, fine-to-medium sand, little fine-to-medium gravel, trace coarse sand, dry
8.0-10.0'	SAA
12.0-14.7'	SAA
16.0-19.0'	Orange, fine-to-medium sand, little fine-to-medium gravel, dry
20.0-20.5'	SAA
20.5-23.2'	Orange, fine-to-medium sand, little fine-to-medium gravel, trace coarse sand, dry
VS-45-15	
0.0-1.0'	Brown, fine-to-medium sand, little fine-to-medium gravel, trace silt, moist
4.0-4.7'	SAA
4.7-6.4'	Light brown/orange, fine-to-medium sand, little fine-to-medium gravel, trace coarse sand, dry
8.0-11.8'	Light brown, fine-to-medium sand, trace fine gravel, moist
12.0-14.3'	Orange/brown, fine-to-medium sand, trace fine gravel, moist
16.0-18.8'	Light brown/orange, fine-to-coarse sand, trace fine-to-medium gravel, dry
20.0-22.5'	Orange, fine-to-medium sand, trace coarse sand & fine gravel, dry
VS-45-16	
0.0-1.0'	Brown, fine-to-medium sand, little silt & fine-to-medium gravel, moist
4.0-5.9'	SAA, strong odor
5.9-6.7'	Orange, fine-to-coarse sand, little fine-to-medium gravel, dry
8.0-10.5'	SAA
12.0-14.6'	Orange, fine-to-medium sand, some fine-to-medium gravel, trace coarse sand, dry
16.0-19.0'	SAA
20.0-22.0'	Orange, fine-to-coarse sand, some fine-to-coarse gravel, dry
VS-45-17	
0.0-2.0'	Brown, fine-to-medium sand, some silt, little fine-to-medium gravel, moist
4.0-6.0'	SAA, strong odor
6.0-6.7'	Orange, fine-to-coarse sand, little fine-to-medium gravel, dry
8.0-10.4'	SAA
12.0-14.4'	Orange/light brown, fine-to-medium sand, little fine-to-medium gravel, trace coarse sand, dry
16.0-18.7'	SAA
20.0-21.0'	SAA, moist

TABLE 3
SOIL SAMPLE VISUAL CHARACTERIZATION RESULTS

INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Sample ID/ Depth Interval	Description
VS-45-18	
0.0-2.4'	Dark brown, fine-to-medium sand, some silt & fine-to-medium gravel, moist
4.0-4.9'	SAA, slight odor
4.9-6.2'	Orange/light brown, fine-to-coarse sand, trace fine-to-medium gravel, dry
8.0-9.0'	Light brown, fine-to-medium sand, little fine-to-medium gravel, moist
9.0-10.0'	Orange/brown, fine-to-medium sand, little fine-to-medium gravel, moist
12.0-13.4'	SAA
16.0-19.0'	Light brown/orange, fine-to-medium sand, little fine-to-medium gravel, dry
20.0-22.0'	SAA
VS-45-19	
0.0-2.4'	Brown, fine-to-medium sand, little silt & fine-to-medium gravel, moist, slight odor
4.0-4.8'	SAA, strong odor
4.8-7.0'	Orange/light brown, fine-to-coarse sand, some fine-to-medium gravel, dry
8.0-11.4'	SAA
12.0-15.1'	Orange/light brown, fine-to-medium sand, little fine-to-medium gravel, trace coarse sand, dry
16.0-18.6'	SAA
20.0-21.0'	SAA
VS-45-20	
0.0-7.0'	Dark brown, fine-to-medium sand, some coarse gravel, little fine gravel, moist
7.0-8.0'	Light brown, fine-to-medium sand, some fine gravel, trace coarse sand, moist
8.0-22.0'	Reddish brown, fine-to-medium sand, some fine gravel, trace coarse gravel, moist
VS-45-21	
0.0-7.0'	Dark brown, fine-to-medium sand, some coarse gravel, little fine gravel, moist
7.0-8.0'	Light brown, fine-to-medium sand, some fine gravel, trace coarse gravel
8.0-22.0'	Reddish brown, fine-to-medium sand, some fine gravel, trace coarse gravel, moist
VS-45-22	
0.0-3.0'	Dark brown, fine-to-medium sand, some coarse-to-fine gravel, moist
3.0-3.5'	Dark to Grey, clayey silt, little coarse gravel, trace fine gravel, moist
3.5-7.0'	Dark brown, clayey silt, some fine gravel, wet
7.0-8.0'	Light brown, fine-to-medium sand, some coarse gravel, little fine gravel, moist
8.0-9.0'	Dark brown, clayey silt, some fine gravel, moist
9.0-12.0'	Light brown, fine-to-medium sand, some coarse gravel, little fine gravel, moist
12.0-22.0'	Light brown, fine-to-medium sand, some fine gravel, trace coarse gravel, moist
VS-45-23	
0.0-11.0'	Light brown, fine-to-medium sand, trace fine gravel, trace coarse gravel, moist
11.0-14.0'	Reddish brown, fine-to-medium sand, some fine gravel, trace coarse sand, moist
14.0-20.0'	Reddish brown, fine-to-medium sand, trace fine gravel, trace coarse gravel, moist
UST-AOC-50	
0.0-2.5'	Dark brown, fine-to-medium sand, little fine-to-medium gravel, moist

Notes:

- Interim Corrective Measure (ICM) soil samples were collected by Blasland, Bouck & Lee, Inc. (BBL) during June and August 2005.
- SAA = Same as above.
- Characterization activities were conducted by James J. Boland and/or Andrew S. Amell of BBL.
- The 'R' included in selected sample IDs indicates the sample was collected from a revisited sampling location.
- Depths reported above are relative to the bottom of the concrete slab (for sampling locations within the former Pilot Plant footprint) and the surrounding grade (for all other sampling locations).

TABLE 4
DELINEATION/VERIFICATION SOIL ANALYTICAL RESULTS FOR PCBs (ppm)

INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Sample ID	Sample Depth Relative to Surrounding Grade	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
AOC 39 - Former Plant 1 Electrical Transformer Area									
VS-39-1 (0.0-0.2")*	(0.0-0.2")	<0.38	<0.73	<0.38	<0.38	0.58	<0.38	1.9	2.5
VS-39-1 (0.5-1.5")*	(0.5-1.5")	<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")*	(2.5-3.5")	<0.018	<0.035	<0.018	<0.018	0.012 J	<0.018	0.078	0.09 J
VS-39-3 (2.5-3.5")*	(2.5-3.5")	<0.017	<0.034	<0.017	<0.017	0.03	<0.017	0.18	0.21
VS-39-4 (0.0-0.2")*	(0.0-0.2")	<0.37	<0.72	<0.37	<0.37	<0.37	<0.37	3.9	3.9
VS-39-4 (0.5-1.5")*	(0.5-1.5")	<0.02	<0.039	<0.02	<0.02	<0.02	<0.02	0.26	0.26 J
VS-DUP-1 [VS-39-4 (0.5-1.5")]*	(0.5-1.5")	<0.019	<0.038	<0.019	<0.019	0.015 J	<0.019	0.26	0.28 J
VS-39-4 (2.5-3.5")*	(2.5-3.5")	<0.017	<0.034	<0.017	<0.017	<0.017	<0.017	0.054	0.054
VS-39-5 (0.0-0.2")*	(0.0-0.2")	<0.18	<0.35	<0.18	<0.18	0.19	<0.18	0.87	1.1
VS-39-5 (0.5-1.5")*	(0.5-1.5")	<0.02	<0.039	<0.02	<0.02	0.0058 J	<0.02	0.026	0.032 J
AOC 45 - Sump in Northwest Corner of Pilot Plant									
VS-45-1 (6.8-7.3")*	(4.5-5.0")	<3.5	<6.7	<3.5	<3.5	46	25 J	<3.5	71 J
VS-45-1 (8.8-9.8")*	(6.5-7.5")	<0.87	<1.7	<0.87	<0.87	4.6	2.7	<0.87	7.3
VS-DUP-2 [VS-45-1 (8.8-9.8")]*	(6.5-7.5")	<0.87	<1.7	<0.87	<0.87	7.3	4.5	<0.87	11.8
VS-45-2R (0.0-0.5")	(2.3-1.8" Above)	<0.36	<0.71	<0.36	<0.36	5.3	<0.36	<0.36	5.3
VS-45-2R (0.5-2.0")	(1.8-0.3" Above)	<3.8	<7.4	<3.8	<3.8	28	<3.8	<3.8	28
VS-45-2R (4.0-6.0")	(1.7-3.7")	<99	<190	<99	<99	830	<99	<99	830
VS-45-2 (6.8-7.3")*	(4.5-5.0")	<170	<340	<170	<170	2,000	<170	<170	2,000
VS-45-2R (6.8-7.3")	(4.5-5.0")	<170	<330	<170	<170	660	<170	<170	660
VS-45-2 (8.8-9.8")*	(6.5-7.5")	<350	<680	<350	<350	5,500	<350	<350	5,500
VS-45-2R (8.8-9.8")	(6.5-7.5")	<180	<340	<180	<180	1,800	<180	<180	1,800
VS-45-2R (10.3-12.3")	(8.0-10.0")	<360	<690	<360	<360	4,100	<360	<360	4,100
VS-45 2R (12.3-14.3")	(10.0-12.0")	<170	<330	<170	<170	2,300	<170	<170	2,300
VS-45-2R (14.3-16.0")	(12.0-13.7")	<700	<1,400	<700	<700	2,400	<700	<700	2,400
VS-45-2R (16.0-18.0")*	(13.7-15.7")	<360	<700	<360	<360	3,700	<360	<360	3,700
VS-DUP-4 [VS-45-2R (16.0-18.0")]*	(13.7-15.7")	<880	<1,700	<880	<880	5,400	<880	<880	5,400
VS-45-2R (22.0-24.0")*	(19.7-21.7")	<170	<340	<170	<170	590	<170	<170	590
VS-45-2 (26.0-28.0")	(23.7-25.7")	<8.8	<17	<8.8	<8.8	91	<8.8	<8.8	91
VS-45-2 (30.0-32.0")*	(27.7-29.7")	<0.17	<0.34	<0.17	<0.17	1.0	<0.17	<0.17	1.0
VS-45-2 (34.0-36.0")*	(31.7-33.7")	<3.4	<6.7	<3.4	<3.4	26	<3.4	<3.4	26
VS-45-DUP-1 [VS-45-2 (34.0-36.0")]*	(31.7-33.7")	<3.5	<6.8	<3.5	<3.5	48	<3.5	<3.5	48
VS-45-2 (40.0-42.0")*	(37.7-39.7")	<1.8	<3.5	<1.8	<1.8	7.4	<1.8	<1.8	7.4
VS-45-2 (44.0-46.0")*	(41.7-43.7")	<0.9	<1.8	<0.9	<0.9	6.0	<0.9	<0.9	6.0
VS-45-2 (50.0-52.0")*	(47.7-49.7")	<0.019	<0.036	<0.019	<0.019	0.028 J	<0.019	<0.019	0.028 J
VS-45-3 (4.5-5.0")*	(4.5-5.0")	<0.036	<0.069	<0.036	<0.036	0.31	0.2 J	<0.036	0.51 J
VS-45-3 (6.5-7.5")*	(6.5-7.5")	<0.017	<0.034	<0.017	<0.017	0.061 NJ	0.14 J	<0.017	0.20 J
VS-45-4 (4.5-5.0")*	(4.5-5.0")	<1.9	<3.6	<1.9	<1.9	28	17	<1.9	45
VS-45-4 (6.5-7.5")*	(6.5-7.5")	<0.87	<1.7	<0.87	<0.87	7.9	3.6 J	<0.87	12 J
VS-45-5 (4.5-5.0")*	(4.5-5.0")	<0.88	<1.7	<0.88	<0.88	3.7	2	<0.88	5.7
VS-45-5 (6.5-7.5")*	(6.5-7.5")	<0.035	<0.068	<0.035	<0.035	0.28	0.22	<0.035	0.50
VS-45-6 (4.5-5.0")*	(4.5-5.0")	<0.017	<0.034	<0.017	<0.017	0.08	0.077	<0.017	0.16
VS-45-6 (6.5-7.5")*	(6.5-7.5")	<0.018	<0.034	<0.018	<0.018	0.057	0.038	<0.018	0.095
VS-45-7R (0.0-0.5")*	(2.3-1.8" Above)	<3.9	<7.6	<3.9	<3.9	22 J	<3.9	<3.9	22 J
VS-45-7 (6.8-7.3")*	(4.5-5.0")	<870	<1,700	<870	<870	6,000	3,300 J	<870	9,300 J
VS-45-7 (8.8-9.8")*	(6.5-7.5")	<860	<1,700	<860	<860	8,800	5,200 J	<860	14,000 J
VS-45-7R (10.3-12.3")*	(8.0-10.0")	<350	<670	<350	<350	3,600	<350	<350	3,600
VS-45-7R (12.3-14.3")*	(10.0-12.0")	<870	<1,700	<870	<870	8,500	<870	<870	8,500
VS-45-7R (14.3-16.0")*	(12.0-13.7")	<870	<1,700	<870	<870	7,200	<870	<870	7,200
VS-45-7R (22.0-24.0")*	(19.7-21.7")	<0.88	<1.7	<0.88	<0.88	4.1	<0.88	<0.88	4.1
VS-45-8 (4.5-5.0")*	(4.5-5.0")	<0.018	<0.034	<0.018	<0.018	0.031	0.022	<0.018	0.053
VS-45-8 (6.5-7.5")*	(6.5-7.5")	<0.35	<0.68	<0.35	<0.35	1.0	<0.35	<0.35	1.0
VS-45-9 (4.5-5.0")*	(4.5-5.0")	<0.018	<0.034	<0.018	<0.018	0.23	0.2	<0.018	0.43
VS-45-9 (6.5-7.5")*	(6.5-7.5")	<0.018	<0.034	<0.018	<0.018	<0.036	0.07	<0.018	0.07
VS-45-10 (4.5-5.0")*	(4.5-5.0")	<0.87	<1.7	<0.87	<0.87	2.6	0.89 J	<0.87	3.5 J
VS-45-10 (6.5-7.5")*	(6.5-7.5")	<0.35	<0.67	<0.35	<0.35	1.3	0.58 J	<0.35	1.9 J
VS-45-11 (0.0-0.5")	(2.3-1.8" Above)	<96	<190	<96	<96	290	<96	<96	290
VS-45-11 (2.0-4.0")	(0.3 Above-1.7" Below)	<9.8	<19	<9.8	<9.8	58	<9.8	<9.8	58
VS-45-11 (6.8-7.3")	(4.5-5.0")	<180	<350	<180	<180	2,200	<180	<180	2,200
VS-45-11 (8.8-9.8")	(6.5-7.5")	<170	<330	<170	<170	1,100	<170	<170	1,100
VS-45-11 (10.3-12.3")	(8.0-10.0")	<170	<340	<170	<170	700	<170	<170	700
VS-DUP-3 [VS-45-11 (10.3-12.3")]	(8.0-10.0")	<170	<340	<170	<170	830.00	<170	<170	830
VS-45-11 (12.3-14.3")	(10.0-12.0")	<170	<330	<170	<170	680	<170	<170	680
VS-45-11 (14.3-16.0")	(12.0-13.7")	<680	<1,300	<680	<680	4,000	<680	<680	4,000
VS-45-11R (16.0-18.0")*	(13.7-15.7")	<170	<330	<170	<170	1,500	<170	<170	1,500
VS-45-11R (22.0-24.0")*	(29.7-21.7")	<3.5	<6.8	<3.5	<3.5	23	<3.5	<3.5	23
VS-45-12 (0.0-0.5")*	(2.3-1.8" Above)	<0.93	<1.8	<0.93	<0.93	4.4	<0.93	<0.93	4.4
VS-45-12 (6.8-7.3")*	(4.5-5.0")	<0.089	<0.17	<0.089	<0.089	0.56	<0.089	<0.089	0.56
VS-45-12 (10.3-12.3")*	(8.0-10.0")	<0.017	<0.034	<0.017	<0.017	0.14	<0.017	<0.017	0.14
VS-45-12 (16.0-18.0")*	(13.7-15.7")	<0.017	<0.034	<0.017	<0.017	0.16	0.071 JN	<0.017	0.23 J
VS-45-13 (0.0-0.5")*	(2.3-1.8" Above)	<0.019	<0.037	<0.019	<0.019	0.16	0.16	<0.019	0.32
VS-45-13 (6.8-7.3")*	(4.5-5.0")	<0.017	<0.033	<0.017	<0.017	0.048	<0.017	<0.017	0.048
VS-45-13 (10.3-12.3")*	(8.0-10.0")	<0.017	<0.033	<0.017	<0.017	0.042	<0.017	<0.017	0.042
VS-45-13 (16.0-18.0")*	(13.7-15.7")	<0.034	<0.066	<0.034	<0.034	0.44	0.23 J	<0.034	0.67 J

TABLE 4
DELINEATION/VERIFICATION SOIL ANALYTICAL RESULTS FOR PCBs (ppm)

INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Sample ID	Sample Depth Relative to Surrounding Grade	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
AOC 45 - Sump in Northwest Corner of Pilot Plant (Continued)									
VS-45-14 (0.0-0.5')*	(2.3-1.8' Above)	<0.019	<0.036	<0.019	<0.019	0.14	0.16	<0.019	0.30
VS-DUP-5 [VS-45-14 (0.0-0.5')]*	(2.3-1.8' Above)	<0.019	<0.037	<0.019	<0.019	0.20	0.14 J	<0.019	0.34 J
VS-45-14 (6.8-7.3')*	(4.5-5.0')	<0.017	<0.033	<0.017	<0.017	0.024	<0.017	<0.017	0.024
VS-45-14 (10.3-12.3')*	(8.0-10.0')	<0.017	<0.033	<0.017	<0.017	0.11	0.071 J	<0.017	0.18 J
VS-45-14 (16.0-18.0')*	(13.7-15.7')	<0.017	<0.033	<0.017	<0.017	0.035	<0.017	<0.017	0.035
VS-45-20 (0.0-0.5')*	(2.3-1.8' Above)	<0.019	<0.037	<0.019	<0.019	0.079	0.097 J	<0.019	0.18 J
VS-45-20 (6.8-7.3')*	(4.5-5.0')	<0.88	<1.7	<0.88	<0.88	2.4	1.9 JN	<0.88	4.3 J
VS-45-20 (10.0-12.0')*	(7.7-9.7')	<34	<66	<34	<34	110	<34	<34	110
VS-45-20 (16.0-18.0')*	(13.7-15.7')	<340	<660	<340	<340	1,100	<340	<340	1,100
VS-45-20 (20.0-22.0')*	(17.7-19.7')	<35	<68	<35	<35	320	<35	<35	320
VS-45-21 (0.0-0.5')*	(2.3-1.8' Above)	<0.19	<0.36	<0.19	<0.19	0.57	0.72	<0.19	1.3
VS-45-21 (6.8-7.3')*	(4.5-5.0')	<0.18	<0.36	<0.18	<0.18	0.99	1.3	<0.18	2.3
VS-45-21 (10.0-12.0')*	(7.7-9.7')	<0.36	<0.69	<0.36	<0.36	1.3	1.6	<0.36	2.9
VS-45-21 (16.0-18.0')*	(13.7-15.7')	<0.017	<0.034	<0.017	<0.017	0.095	<0.017	<0.017	0.095
VS-45-22 (0.0-0.5')*	(2.3-1.8' Above)	<0.095	<0.18	<0.095	<0.095	0.22	0.31	<0.095	0.53
VS-45-22 (6.8-7.3')*	(4.5-5.0')	<0.37	<0.71	<0.37	<0.37	1.6	2.2	<0.37	3.8
VS-45-DUP-2 [VS-45-22 (6.8-7.3')]*	(4.5-5.0')	<0.38	<0.74	<0.38	<0.38	1.9	2.5	<0.38	4.4
VS-45-22 (10.0-12.0')*	(7.7-9.7')	<0.017	<0.034	<0.017	<0.017	0.094	0.12	<0.017	0.21
VS-45-22 (16.0-18.0')*	(13.7-15.7')	<0.087	<0.17	<0.087	<0.087	0.36	0.58	<0.087	0.94
VS-45-23 (4.5-5.0')*	(4.5-5.0')	<0.17	<0.34	<0.17	<0.17	0.74	0.71 J	<0.17	1.5 J
VS-45-DUP-3 [VS-45-23 (4.5-5.0')]*	(4.5-5.0')	<0.17	<0.33	<0.17	<0.17	1.0	1.1	<0.17	2.1
VS-45-23 (6.5-7.5')*	(6.5-7.5')	<0.086	<0.17	<0.086	<0.086	0.49	0.5 J	<0.086	0.99 J
AOC 50 - Former 1,000-Gallon Gasoline Underground Storage Tank									
UST-AOC-50*	(0.0-2.5')	<0.089	<0.17	<0.089	<0.089	0.37	0.7	<0.089	1.1

Notes:

- Samples were collected by Blasland, Bouck & Lee, Inc. (BBL) during June and August 2005.
- Samples were analyzed for polychlorinated biphenyls (PCBs) by Severn Trent Laboratories, Inc. (STL) of Shelton, Connecticut using United States Environmental Protection Agency (USEPA) SW-846 Method 8082, as referenced in the New York State Department of Environmental Conservation (NYSDEC) 2000 Analytical Service Protocol (ASP).
- Depths identified in the sample ID for samples collected outside the former Pilot Plant footprint (at sampling locations VS-45-3, VS-45-4, VS-45-5, VS-45-6, VS-45-8, VS-45-9, and VS-45-10) are relative to the surrounding ground surface. Depths identified in the sample ID for samples collected within the former Pilot Plant footprint (at 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.
- The 'R' included in selected sample IDs indicates the sample was collected from a revisited sampling location.
- Concentrations presented in parts per million (ppm), which is equivalent to milligrams per kilogram (mg/kg).
- Data qualifiers indicate the following:
< = Aroclors were not detected at a concentration exceeding the presented laboratory detection limit.
J = Estimated result. Result is less than the laboratory detection limit.
- DUP = Blind Duplicate [corresponding sampling location is indicated in brackets].
- Shaded values indicate that the total PCB concentration exceeds the 50 ppm action level established for the interim corrective measure.
- An asterisk (*) following the sample ID indicates that analytical results for the sample have been validated by BBL.

TABLE 5
VERIFICATION SOIL ANALYTICAL RESULTS FOR DETECTED VOCs (ppm)

INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Constituent	TAGM 4046 Guidance Values	VS-39-1R (2.5-4.0')	VS-45-9R (8.0-10.0')
Acetone	0.2	0.0042 J	0.0065 J
Methylene Chloride	0.1	0.0051 J	0.0054 J

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc. (BBL) during June 2005.
2. Reported sample depths are relative to the surrounding ground surface.
3. Samples were analyzed for volatile organic compounds (VOCs) by Severn Trent Laboratories, Inc. (STL) of Shelton, Connecticut using United States Environmental Protection Agency (USEPA) SW-846 Method 8260B, as referenced in the New York State Department of Environmental Conservation (NYSDEC) 2000 Analytical Services Protocol (ASP).
4. Concentrations presented in parts per million (ppm), which is equivalent to milligrams per kilogram (mg/kg).
5. J = Estimated result. Result is less than the laboratory detection limit.
6. Soil Guidance Values are from the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) titled "Determination of Soil Cleanup Objectives and Cleanup Levels", HWR-94-4046 (TAGM 4046) dated January 24, 1994.
7. Analytical results have not been validated.

**TABLE 6
WASTEWATER ANALYTICAL RESULTS**

**INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK**

Constituent	Waste Characterization Regulatory Limits	AOC-50 UST WATER
PCBs (ppm)		
Aroclor 1016	NA	<0.0005
Aroclor 1221	NA	<0.001
Aroclor 1232	NA	<0.0005
Aroclor 1242	NA	<0.0005
Aroclor 1248	NA	0.0014
Aroclor 1254	NA	0.0011
Aroclor 1260	NA	<0.0005
Total PCBs	50	0.0025
TCLP VOCs (ppm)		
1,1-Dichloroethene	0.7	<0.05
1,2-Dichloroethane	0.5	0.85
2-Butanone	200	0.12
Benzene	0.5	0.24
Carbon tetrachloride	0.5	<0.05
Chlorobenzene	100	<0.05
Chloroform	6	<0.05
Tetrachloroethene	0.5	<0.05
Trichloroethene	0.5	<0.05
Vinyl chloride	0.2	<0.05
TCLP SVOCs (ppm)		
1,4-Dichlorobenzene	7.5	<0.20
2,4,5-Trichlorophenol	400	<1.0
2,4,6-Trichlorophenol	2	<0.20
2,4-Dinitrotoluene	0.13	<0.20
2-Methylphenol	200	0.47
4-Methylphenol	200	<0.20
Hexachlorobenzene	0.13	<0.20
Hexachlorobutadiene	0.5	<0.20
Hexachloroethane	3	<0.20
Nitrobenzene	2	0.017 J
Pentachlorophenol	100	<1.0
Pyridine	5	<0.40
TCLP Metals (ppm)		
Arsenic	5	0.0204 B
Barium	100	0.14
Cadmium	1	<0.050
Chromium	5	<0.050
Lead	5	<0.050
Mercury	0.2	<0.01
Selenium	1	<0.150
Silver	5	<0.030
Corrosivity, Ignitability, and Reactivity		
Corrosivity (Std. Units)	*	7.72
Ignitability (deg F)	-	-
Reactive Cyanide (ppm)	**	<0.5
Reactive Sulfide (ppm)	**	<20

**TABLE 6
WASTEWATER ANALYTICAL RESULTS**

**INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK**

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc. (BBL) during June 2005.
2. Samples were analyzed by Severn Trent Laboratories, Inc. (STL) of Shelton, Connecticut for the following constituents:
 - VOCs using United States Environmental Protection Agency (USEPA) SW-846 Method 8260B;
 - Metals using USEPA SW-846 Method 6010;
 - Corrosivity using USEPA SW-846 Method 9045C;
 - Ignitability using USEPA SW-846 Method 1010;
 - Reactive Cyanide using USEPA SW-846 Method 7.3.3; and
 - Reactive Sulfide using USEPA SW-846 Method 7.3.4.
3. deg F = Degrees Fahrenheit.
4. Std. Units = Standard Units.
5. ppm = Parts per million.
6. Data qualifiers indicate the following:
 - B = Result is less than the Contract Required Detection Limits/Reporting Limit (CRDL/RL), but greater than or equal to the Instrument Detection Limits/Method Detection Limit (IDL/MDL).
 - J = Estimated result. Result is less than the laboratory detection limit.
7. < = Constituent was not detected at a concentration exceeding the presented laboratory detection limit.
8. * = Sample is corrosive if pH is less than or equal to 2 standard units, or greater than or equal to 12.5 standard units.
9. - = Sample which does not ignite or support combustion, therefore under these conditions the sample is non-reactive.
10. ** = Sample which does not exceed the USEPA action levels of 250 mg HCN/kg waste and 500 mg H₂S/ kg waste is not reactive.
11. Regulatory limits for characteristic hazardous waste are from the following sources:
 - Corrosivity - 40 CFR 261.22;
 - Ignitability - 40 CFR 261.21;
 - Reactivity - In accordance with an April 2, 1998 memorandum from the USEPA's Office of Solid Waste and Emergency Response (OSWER), the USEPA has withdrawn the guidance levels for evaluating potentially reactive cyanide-bearing and sulfide-bearing wastes (i.e. 250 ppm and 500 ppm, respectively);
 - PCBs - Regulated by New York State in accordance with 6NYCRR Part 371.4(e); and
 - TCLP VOCs, TCLP SVOCs, and TCLP Metals - 40 CFR 261.24
12. NA = No regulatory limit is listed for this constituent.
13. Shading indicates the concentration exceeds the waste characterization regulatory limit.
14. Analytical results have not been validated.

TABLE 7
SOIL AND DEBRIS WASTE CHARACTERIZATION ANALYTICAL RESULTS

INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Constituent	Waste Characterization Regulatory Limits	WC-50-UST Contents	AOC-39 Staged Soil	Structure Cleaning Debris
PCBs (ppm)				
Aroclor 1016	NA	<0.18	<0.096	<2
Aroclor 1221	NA	<0.35	<0.19	<4
Aroclor 1232	NA	<0.18	<0.096	<2
Aroclor 1242	NA	<0.18	<0.096	<2
Aroclor 1248	NA	0.87	0.18	17
Aroclor 1254	NA	<0.18	0.24	12
Aroclor 1260	NA	<0.18	0.52	2.2
Total PCBs	50	0.87	0.94	31
TCLP VOCs (ppm)				
1,1-Dichloroethene	0.7	<0.005	<0.005	<0.005
1,2-Dichloroethane	0.5	<0.005	<0.005	<0.005
2-Butanone	200	<0.01	<0.01	<0.01
Benzene	0.5	<0.005	<0.005	<0.005
Carbon tetrachloride	0.5	<0.005	<0.005	<0.005
Chlorobenzene	100	<0.005	<0.005	<0.005
Chloroform	6	<0.005	0.001 J	0.00084 J
Tetrachloroethene	0.5	<0.005	<0.005	<0.005
Trichloroethene	0.5	<0.005	<0.005	<0.005
Vinyl chloride	0.2	<0.005	<0.005	<0.005
TCLP SVOCs (ppm)				
1,4-Dichlorobenzene	7.5	<0.02	<0.02	<0.02
2,4,5-Trichlorophenol	400	<0.1	<0.1	<0.1
2,4,6-Trichlorophenol	2	<0.02	<0.02	<0.02
2,4-Dinitrotoluene	0.13	<0.02	<0.02	<0.02
2-Methylphenol	200	<0.02	<0.02	<0.02
4-Methylphenol	200	<0.02	<0.02	<0.02
Hexachlorobenzene	0.13	<0.02	<0.02	<0.02
Hexachlorobutadiene	0.5	<0.02	<0.02	<0.02
Hexachloroethane	3	<0.02	<0.02	<0.02
Nitrobenzene	2	<0.02	<0.02	<0.02
Pentachlorophenol	100	<0.1	<0.1	<0.1
Pyridine	5	<0.04	<0.04	<0.04
TCLP Metals (ppm)				
Arsenic	5	<0.2	<0.2	<0.2
Barium	100	0.0781	0.395	0.698
Cadmium	1	<0.05	<0.05	0.0079 B
Chromium	5	<0.05	<0.05	<0.05
Lead	5	<0.05	<0.05	0.0212 B
Mercury	0.2	<0.01	<0.01	<0.01
Selenium	1	0.0261 B	<0.150	<0.150
Silver	5	<0.03	<0.03	<0.03
Corrosivity, Ignitability, and Reactivity				
Corrosivity (Std. Units)	*	7.69	6.32	7.86
Ignitability (deg F)	-	-	-	-
Reactive Cyanide (ppm)	**	<0.5	<0.5	<0.5
Reactive Sulfide (ppm)	**	<20	<20	<20

See Notes on Page 2.

TABLE 7
SOIL AND DEBRIS WASTE CHARACTERIZATION ANALYTICAL RESULTS

INTERIM CORRECTIVE MEASURE CERTIFICATION REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc. (BBL) during June 2005.
2. Samples were analyzed by Severn Trent Laboratories, Inc. (STL) of Shelton, Connecticut.
3. Samples were submitted for laboratory analysis of the following constituents:
 - Polychlorinated biphenyls (PCBs) using United States Environmental Protection Agency (USEPA) SW-846 Method 8082;
 - TCLP VOCs using USEPA SW-846 Method 8260B;
 - TCLP Semi-volatile organic compounds (SVOCs) using USEPA SW-846 Method 8270C;
 - TCLP Metals using USEPA SW-846 Method 6010;
 - Corrosivity using USEPA SW-846 Method 9045C;
 - Ignitability using USEPA SW-846 Method 1010;
 - Reactive Cyanide using USEPA SW-846 Method 7.3.3; and
 - Reactive Sulfide using USEPA SW-846 Method 7.3.4.
4. -- = Analysis was not conducted on this sample for this constituent.
5. deg F = Degrees Fahrenheit.
6. Std. Units = Standard Units.
7. ppm = Parts per million, which is equivalent to milligrams per kilogram (mg/kg).
8. Data qualifiers indicate the following:
 - B = Result is less than the Contract Required Detection Limits/Reporting Limit (CRDL/RL), but greater than or equal to the Instrument Detection Limits/Method Detection Limit (IDL/MDL).
 - J = Estimated result. Result is less than the laboratory detection limit.
9. < = Constituent was not detected at a concentration exceeding the presented laboratory detection limit.
10. * = Sample is corrosive if pH is less than or equal to 2 standard units, or greater than or equal to 12.5 standard units.
11. - = Sample which does not ignite or support combustion, therefore under these conditions the sample is non-reactive.
12. ** = Sample which does not exceed the USEPA action levels of 250 mg HCN/kg waste and 500 mg H₂S/ kg waste is not reactive.
13. Regulatory limits for characteristic hazardous waste are from the following sources:
 - Corrosivity - 40 CFR 261.22;
 - Ignitability - 40 CFR 261.21;
 - Reactivity - In accordance with an April 2, 1998 memorandum from the USEPA's Office of Solid Waste and Emergency Response (OSWER), the USEPA has withdrawn the guidance levels for evaluating potentially reactive cyanide-bearing and sulfide bearing wastes (i.e. 250 ppm and 500 ppm, respectively);
 - PCBs - Regulated by New York State in accordance with 6NYCRR Part 371.4(e); and
 - TCLP VOCs, TCLP SVOCs, and TCLP Metals - 40 CFR 261.24.
14. NA = No regulatory limit is listed for this constituent.
15. Analytical results have not been validated.

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SWMU/AOC Number	Area	Location	Findings	Proposed Action
General Note: Shading below designates Areas of Concern (AOCs) to be identified in Site Management Plan (SMP)				
1	Plant 1	Less than 90 day storage unit	Concrete at sampling location AOC 1-1 does not exhibit a toxicity characteristic for VOCs, SVOCs, or metals. Soil at sampling location AOC 1-2 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil at this location. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	Arsenic in soil to be identified in SMP.
2	Plant 1	Laboratory satellite accumulation area walkway connecting Plant 1 and Warehouse	Soil at sampling locations AOC 2-1 through AOC 2-4 does not exhibit VOCs at concentrations above TAGM 4046 soil guidance values. One or more SVOCs were identified at each sampling location at concentrations slightly above the guidance values. Glycols were not detected in soil within this AOC.	SVOCs in soil to be identified in SMP.
3	Plant 1	Wastewater Tanks 1, 11A, and 11B	Concrete at sampling locations AOC 3-1 and AOC 3-2 does not exhibit a toxicity characteristic for VOCs, SVOCs, or metals. With one minor exception, soil at sampling locations AOC 3-3 and AOC 3-4 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values: One VOC (acetone) was identified in sample AOC 3-3 at an estimated concentration of 0.38 ppm, which is slightly above the 0.2 ppm guidance value. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	Arsenic in soil (location AOC 3-3) to be identified in SMP.
4	Plant 1	Former liquid incinerator area	Concrete at sampling location AOC 4-1 does not exhibit a toxicity characteristic for VOCs, SVOCs, or metals. Ethylene glycol and propylene glycol were identified in the TCLP sample extract at concentrations of 37.5 ppm and 19 ppm, respectively. Soil at sampling location AOC 4-2 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values. Glycols were not detected in soil within this AOC.	Mercury and zinc in soil to be identified in SMP.

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SWMU/AOC Number	Area	Location	Findings	Proposed Action
5	Plant 1	Transfer station & associated piping	Soil at sampling locations AOC 5-1 and AOC 5-2 does not exhibit VOCs at concentrations above TAGM 4046 soil guidance values. SVOCs were identified at both locations at concentrations above TAGM 4046 soil guidance values, but the concentrations at location AOC 5-2 were only slightly above the guidance values.	SVOCs in soil to be identified in SMP.
6	Plant 1 Transfer Station	Glycol tanks 29 & 30	Soil at sampling location AOC 6-1 does not exhibit VOCs at concentrations above TAGM 4046 soil guidance values. Three SVOCs were identified at estimated concentrations slightly above the TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC.	SVOCs in soil to be identified in SMP.
7	Plant 1 Transfer Station	Adipic acid silos & wastewater area	Soil at sampling locations AOC 7-1 and AOC 7-2 does not exhibit VOCs at concentrations above TAGM 4046 soil guidance values. SVOCs were identified at location AOC 7-2 at concentrations slightly above the guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	SVOCs and zinc in soil (at location AOC 7-2) to be identified in SMP.
8	Plant 1	Underground storage tank (UST)	Soil at sampling locations AOC 8-1 and AOC 8-2 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values.	No further action.
9	Plant 1	UST	Soil at sampling locations AOC 9-1 and AOC 9-2 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values.	No further action.
10	Plant 2	UST	With one minor exception, soil at sampling locations AOC 10-1 and AOC 10-2 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values: One SVOC (benzo(a)pyrene) was identified in sample AOC 10-1 at an estimated concentration of 0.12 ppm, which is slightly above the 0.061 ppm guidance value.	Benzo(a)pyrene in soil (at location AOC 10-1) to be identified in SMP.

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SWMU/AOC Number	Area	Location	Findings	Proposed Action
11	Plant 1	Boiler condensate run-off	<p>Impacted debris in AOC 11 was removed as part of the interim corrective measure (ICM)</p> <p>Surface soil at sampling locations AOC 11-1, AOC 11-2, and AOC 11-4 exhibit PCBs at concentrations of 28 ppm, 47 ppm, and 1.3 ppm, which are above the 1 ppm TAGM 4046 surface soil guidance value. PCBs were identified at an estimated concentration of 0.33 ppm at sampling location AOC 11-3. VOCs were not identified in soil within this AOC at concentrations above the TAGM 4046 soil guidance values. Soil at sampling locations AOC 11-1 exhibits SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC.</p>	PCBs in soil to be identified in SMP.
12	Plant 2	Waste accumulation area	<p>With one minor exception, soil at sampling location AOC 12-1 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values: One VOC (acetone) was identified at an estimated concentration of 0.21 ppm, which is slightly above the 0.2 ppm guidance value. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.</p>	No further action.
13	Plant 2	Former RCRA greater than 90 day storage area	<p>With one minor exception, soil at sampling location AOC 13-1 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values: One SVOC (phenol) was identified at an estimated concentration of 0.2 ppm, which is slightly above the 0.03 ppm guidance value. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.</p>	Phenol in soil to be identified in SMP.
14	Plant 2	Waste compactor and scrap metal area	<p>Concrete at sampling location AOC 14-1 does not exhibit a toxicity characteristic for VOCs, SVOCs, or metals.</p>	No further action.

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SWMU/AOC Number	Area	Location	Findings	Proposed Action
15	Plant 2	Distillate wastewater tank 2	Concrete at sampling location AOC 15-2 does not exhibit a toxicity characteristic for VOCs, SVOCs, or metals. Soil at sampling location AOC 15-3 does not exhibit PCBs, VOCs, or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	Lead in soil to be identified in SMP.
16	Plant 2	Reactor 4 knockout pot	Concrete at sampling location AOC 16-1 does not exhibit a toxicity characteristic for VOCs, SVOCs, or metals. With two minor exceptions, soil at sampling location AOC 16-2 does not exhibit PCBs, VOCs, or SVOCs at concentrations above TAGM 4046 soil guidance values: Two SVOCs (benzo(a)pyrene and dibenzo(a,h)anthracene) were identified at estimated concentrations of 0.16 ppm and 0.074 ppm, respectively, which are slightly above the corresponding guidance values of 0.061 and 0.014 ppm respectively. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	Benzo(a)pyrene and dibenzo(a,h)anthracene in soil to be identified in SMP.
17	Plant 2	Dimethylformamide pump overflow	Soil at sampling location AOC 17-1 does not exhibit VOCs at concentrations above TAGM 4046 soil guidance values. Four SVOCs were identified at sampling location AOC 17-1 at estimated concentrations slightly above the TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC.	SVOCs in soil to be identified in SMP.
18	Plant 2 Transfer Station	Plant 2 hexandiol tank	Soil at sampling locations AOC 18-1, AOC 18-2, and AOC 18-3 does not exhibit VOCs at concentrations above TAGM 4046 soil guidance values. SVOCs were identified at concentrations above the guidance values at sampling locations AOC 18-1 and 18-3. However, the SVOC concentrations at sampling location AOC 18-3 were only slightly above the guidance values. Glycols were not detected in soil within this AOC.	SVOCs in soil (at locations AOC 18-1 and AOC 18-3) to be identified in SMP).
19	Plant 2	Fume incinerator	NYSDEC previously approved no further action for this AOC.	No further action.

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SWMU/AOC Number	Area	Location	Findings	Proposed Action
20	Plant 3 Warehouse	RCRA less than 90 day storage unit	Concrete at sampling location AOC 20-1 does not exhibit a toxicity characteristic for VOCs, SVOCs, or metals. Soil at sampling location AOC 20-2 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	No further action.
21A	Plant 3 Transfer Station	Adipic acid silos	Soil at sampling locations AOC 21A-1 and AOC 21A-2 do not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC.	No further action.
21B	Plant 3 Transfer Station	Adipic acid silos	Impacted debris in AOC 21B was removed as part of the ICM.	No further action.
22	Plant 3	Tote storage area	Soil at sampling locations AOC 22-1 through AOC 22-4 does not exhibit VOCs at concentrations above TAGM 4046 soil guidance values. SVOCs were not identified in soil at sampling locations AOC 22-3 and 22-4 at concentrations above guidance values. Two SVOCs were identified in soil at sampling locations AOC 22-1 and AOC 22-2 at estimated concentrations that are slightly above the TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC.	SVOCs in soil (at locations AOC 22-1 and 22-2) to be identified in SMP.
23	Plant 3 Warehouse	Non-hazardous waste accumulation	Concrete at sampling locations AOC 23-1 and AOC 23-2 does not exhibit a toxicity characteristic for VOCs, SVOCs, or metals. Soil at sampling locations AOC 23-3 and AOC 23-4 does not exhibit PCBs, VOCs, or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	No further action.
24	Tank Farm	Transfer station for the Tank Farm	Soil at sampling locations AOC 24-1 through 24-8 does not exhibit VOCs at concentrations above TAGM 4046 soil guidance values. SVOCs were identified at four sampling locations (AOC 24-1, AOC 24-2, AOC 24-5, and AOC 24-7) at concentrations slightly TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC.	SVOCs in soils (at locations AOC 24-1, AOC 24-2, and AOC 24-7) to be identified in SMP).
25	Pilot Plant	Former soil pile area removed from AOC 10	NYSDEC previously approved no further action for this AOC.	No further action.

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SWMU/AOC Number	Area	Location	Findings	Proposed Action
26	Misc.	Not Applicable	AOC previously deleted.	No further action.
27A			Soil at sampling locations AOC 27A-1 and AOC 27A-2 does not exhibit VOCs at concentrations above TAGM 4046 soil guidance values. Two SVOCs (benzo(a)pyrene and dibenzo(a,h)anthracene) were identified at location AOC 27A-1 at concentrations slightly above the TAGM guidance values. Bis(2-ethylhexyl)phthalate was identified at sampling location AOC 27 A-2 at a concentration of 720 ppm, which is above the 50 ppm guidance value. Glycols were not detected in soil within this AOC.	SVOCs in soil to be identified in SMP.
27B	Shipping/ Receiving/ Shipping/ Receiving	Non-hazardous, off-spec, damaged product and raw material storage Non-hazardous, off-spec, damaged product and raw material storage	Soil at sampling locations AOC 27B-1 and AOC 27B-2 does not exhibit VOCs at concentrations above TAGM 4046 soil guidance values. SVOCs were not identified at location AOC 27B-2 at concentrations above the guidance values. Three SVOCs (benzo(a)pyrene, dibenzo(a,h)anthracene, and phenol) were identified at location AOC 27B-1 at estimated concentrations slightly above the guidance values. Glycols were not detected in soil within this AOC.	SVOCs in soil (at location AOC 27B-1) to be identified in SMP.
27C			Soil at sampling locations AOC 27C-1 and AOC 27C-2 does not exhibit VOCs at concentrations above TAGM 4046 soil guidance values. SVOCs were identified in soil at both sampling locations at estimated concentrations slightly above the guidance values. Glycols were not detected in soil within this AOC.	SVOCs in soil to be identified in SMP.
27D			With one minor exception, soil at sampling location AOC 27D-1 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values: One SVOC (benzo(a)pyrene) was identified at an estimated concentration of 0.18 ppm, which is slightly above the 0.061 ppm guidance value. Glycols were not detected in soil within this AOC.	SVOCs in soil to be identified in SMP.
27E			NYSDEC previously approved no further action for this AOC.	No further action.
27F			Soil at sampling locations AOC 27F-1 and AOC 27F-2 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC.	No further action.

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SWMU/AOC Number	Area	Location	Findings	Proposed Action
27G			With a minor exception, soil at sampling locations AOC 27G-1 and AOC 27G-2 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values: Two SVOCs (benzo(a)pyrene and dibenzo(a,h)anthracene) were identified at location AOC 27G-1 at estimated concentrations of 0.22 ppm and 0.047 ppm, respectively, which are slightly above the guidance values of 0.061 and 0.014 ppm. Glycols were not detected in soil within this AOC.	SVOCs in soil (at location AOC 27G-1) to be identified in SMP.
27H	Shipping/Receiving	Non-hazardous, off-spec, damaged product and raw material storage	With a minor exception, soil at sampling locations AOC 27H-1 and AOC 27H-2 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values: Three SVOCs (benzo(a)anthracene, benzo(a)pyrene, and dibenzo(a,h)anthracene) were identified at location AOC 27H-1 at estimated concentrations slightly above the guidance values. Ethylene glycol was identified in sample AOC 27H-2 at an estimated concentration of 7.6 ppm.	SVOCs in soil (at location AOC 27H-1) to be identified in SMP.
27I			Soil at sampling locations AOC 27I-1 and AOC 27I-2 does not exhibit VOCs at concentrations above TAGM 4046 soil guidance values. SVOCs were identified at the AOC 27 soil sampling locations at concentrations slightly above the TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC.	SVOCs in soil to be identified in SMP.
27J			With a minor exception, soil at sampling locations AOC 27J-1 and AOC 27J-2 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values: four SVOCs were identified at location AOC 27J-1 at estimated concentrations slightly above the guidance values. Glycols were not detected in soil within this AOC.	SVOCs in soil (at location AOC 27J-1) to be identified in SMP.
28	Recharge Basin	Sump #1	NYSDEC previously approved no further action for this AOC.	No further action.
29		Sump #2	NYSDEC previously approved no further action for this AOC.	No further action.

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SWMU/AOC Number	Area	Location	Findings	Proposed Action
30	Recharge Basin	Sump #3 Stormwater	Debris at sampling locations AOC 30-1, AOC 30-2, and AOC 30-3 exhibits PCBs at estimated concentrations of 4.3 ppm, 2.1 ppm, and 1.6 ppm, respectively. One VOC (tetrachloroethene) was identified in the debris samples, but the concentrations were low (0.007 and 0.008 ppm). SVOC concentrations identified in the debris appear to be low (generally less than 1 ppm to 10 ppm). Selected inorganic constituents (chromium, copper, lead, nickel, and zinc) were identified in the debris at concentrations that appear slightly elevated. Glycol was not detected in debris within this AOC.	PCBs, SVOCs, and inorganic constituents in debris to be identified in SMP.
31	Recharge Basin	Sump #4 SPDES discharge	Surface soil at sampling locations AOC 31-1 through AOC 31-4 exhibits PCBs at concentrations above the 1 ppm TAGM 4046 surface soil guidance value. VOCs were not identified in soil within this AOC at concentrations above TAGM 4046 guidance values. SVOCs were identified at concentrations slightly above guidance values in the two samples, but not in the duplicate sample. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be elevated above typical background values.	PCBs, SVOCs, and inorganics in soil to be identified in SMP.
32	Recharge Basin	Sump #5	PCBs and glycols were not detected at soil sampling location AOC 32-1 at concentrations above laboratory detection limits.	No further action.
33	Recharge Basin	Sump #6	Surface soil at sampling location AOC 33-1 exhibits PCBs at an estimated concentration of 1.5 ppm, which is slightly above the 1 ppm TAGM 4046 surface soil guidance value.	PCBs in soil to be identified in SMP.
34	Cooling Tower	Cooling Tower Sump	NYSDEC previously approved no further action for this AOC.	No further action.
35A	Admin.	Septic tank/leachate pits east of Administration Building	Soil at sampling locations AOC 35A-1 and AOC 35A-2 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	No further action.
35B	Plant 1	Septic tank/leachate pits northwest of Plant 1	Soil at sampling locations AOC 35B-1 and AOC 35B-2 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	No further action.

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SWMU/AOC Number	Area	Location	Findings	Proposed Action
35C	Plant 1	Septic tank/leachate pits west of Plant 1	Soil at sampling locations AOC 35C-1, AOC 35C-2, and AOC 35C-3 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	No further action.
35D	Plant 1	Septic tank/leachate pits southwest of Plant 1	With one minor exception, soil at sampling locations AOC 35D-1 and AOC 35D-2 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. One SVOC (benzo(a)pyrene) was identified at location AOC 35D-2 at an estimated concentration of 0.065 ppm, which is slightly above the 0.062 ppm guidance value. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	Benzo(a)pyrene in soil (at location AOC 35D-2) to be identified in SMP.
35E	Plant 2	Septic tank/leachate pits southwest of Plant 2	Soil at sampling locations AOC 35E-1 and AOC 35E-2 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	No further action.
35F	Pilot Plant	Septic tank/leachate pits northwest of Pilot Plant	Soil at sampling locations AOC 35F-1, AOC 35F-2, and AOC 35F-3 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	No further action.
35G	Admin.	Septic tank/leachate pits south of Administration Building	Soil at sampling locations AOC 35G-1 and AOC 35G-2 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	No further action.
35H	Plant 1	Suspected leachate pit northeast of Plant 1	Soil at sampling location AOC 35H-1 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	No further action.

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35I	Plant 1	Suspected leachate pit northeast of Plant 1	Soil at sampling locations AOC 35I-1 and AOC 35I-2 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	No further action.
35J	Plant 3	Suspected leachate pits southeast of Plant 3	Soil at sampling location AOC 35J-1 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	No further action.
35K	Plant 1	Suspected leachate pit northeast of Plant 1	Soil at sampling location AOC 35K-1 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	No further action.
35L	Plant 1	Suspected leachate pit southwest of Plant 1	Soil at sampling location AOC 35L-1 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	No further action.
35M	Pilot Plant	Suspected leachate pits east of Pilot Plant	Soil at sampling location AOC 35M-1 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	No further action.
35N	Admin.	Suspected leachate pits north of Administration Building	Soil at sampling location AOC 35N-1 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	No further action.
35O	Plant 1	Suspected leachate pit beneath northwest end of Plant 1	Sample collection was not possible due to the presence of a construction and demolition (C&D) debris stockpile over the approximate location of the suspected leachate pit as identified using dimensions shown on the design drawings.	Sampling to be performed following slab demolition if leachate pit is found by geophysical survey activities.
36	Admin.	Administration Building closed. Lab storage area	Concrete at sampling location AOC 36-1 does not exhibit a toxicity characteristic for VOCs, SVOCs, or metals.	No further action.

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37	Plant 2	DOA Sump	Concrete at sampling location AOC 37-2 does not exhibit a toxicity characteristic for VOCs, SVOCs, or metals. Soil at sampling location AOC 37-3 does not exhibit VOCs at concentrations above TAGM 4046 soil guidance values. SVOCs were identified at concentrations slightly above TAGM 4046 soil guidance values in soil at sampling location AOC 37-3. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	SVOCs, cobalt, and lead in soil to be identified in SMP.
38	Plant 2	Exterior trench	Impacted debris in AOC 38 was removed as part of the ICM.	No further action.
39	Plant 1	Electrical transformers	Concrete pad and PCB-impacted soils in AOC 39 were removed as part of the ICM. Verification soil sample results indicate that PCB concentrations in soils at the excavation limits are less than the TAGM 4046 soil guidance values.	No further action.
40	Plant 3	Trench system	Accessible impacted debris in AOC 40 was removed as part of the ICM. Debris previously encountered beneath the concrete previously used to fill a portion of the former Plant 3 trench system will be removed when the concrete floor slab in the area is removed. The debris will be collected, characterized, and transported for proper offsite disposal.	Demolition and follow-up debris removal, then no further action.

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SWMU/AOC Number	Area	Location	Findings	Proposed Action
41	Plant 1	Stained concrete in warehouse	Concrete at sampling locations AOC 41-1, AOC 41-2, and AOC 41-3 does not exhibit a toxicity characteristic for VOCs, SVOCs, or metals. Soil at sampling locations AOC 41-4 through AOC 41-8 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	Inorganic constituents in soil (at locations AOC 41-6 through AOC 41-8) to be identified in SMP.
42	Plant 1	Center trench	Impacted debris in AOC 42 was removed as part of the ICM.	No further action.
43	Plant 1	Sump in foundation, NE end of plant	Impacted debris in AOC 43-1 was removed as part of the ICM.	No further action.
44	Plant 1	Sump in foundation, SE end of plant	Standing water and impacted debris in AOC 44 was removed as part of the ICM.	No further action.

TABLE 8
SUMMARY OF FINDINGS AND PROPOSED ACTIONS
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SWMU/AOC Number	Area	Location	Findings	Proposed Action
45	Pilot Plant	Sump in NE corner of Plant (interior and exterior)	<p>Impacted debris in AOC 45 was removed as part of the ICM.</p> <p>Concrete at sampling location AOC 45-3 does not exhibit a toxicity characteristic for VOCs, SVOCs, or metals. Additional pre-demolition concrete characterization sampling will be performed to further evaluate PCB concentrations in the concrete.</p> <p>The extent of PCB-impacted soils in the vicinity of the Pilot Plant sump was delineated as part of the ICM. Soils within and around AOC 45 exhibiting PCBs at concentrations above 50 ppm (as delineated by the ICM) will be addressed via removal. A work plan detailing the proposed soil removal activities in the Pilot Plant area will be submitted to the NYSDEC under separate cover.</p>	Soils exhibiting PCBs at concentrations above 50 ppm to be addressed via removal as a separate ICM.
46	Plant 2	Scale Area and Circular Plate Area in foundation	<p>Impacted debris in AOC 46 was removed as part of the ICM.</p> <p>Concrete at sampling location AOC 46-3 does not exhibit a toxicity characteristic for VOCs, SVOCs, or metals.</p> <p>Soil at sampling location AOC 46-4 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.</p>	No further action.
47	Plant 2	Trench system and sump leading to sump 4	Structures had been filled in with concrete. Therefore, no debris samples collected at this location.	No further action.

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SWMU/AOC Number	Area	Location	Findings	Proposed Action
48	Plant 1	Empty drum storage at NW end of Warehouse	Soil at sampling locations AOC 48-1 and AOC 48-2 does not exhibit VOCs at concentrations above TAGM 4046 soil guidance values. SVOCs were identified at concentrations above TAGM 4046 soil guidance values at both sampling locations, but the concentrations at location AOC 48-2 were only slightly above the guidance values. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	SVOCs and lead in soil (at location AOC 48-1) to be identified in SMP.
49	Pilot Plant	Trench around East wall	Impacted debris in AOC 49 was removed as part of the ICM. Concrete at sampling location AOC 45-3 does not exhibit a toxicity characteristic for VOCs, SVOCs, or metals. With one minor exception, soil at sampling location AOC 49-4 does not exhibit VOCs or SVOCs at concentrations above TAGM 4046 soil guidance values: One SVOC (benzo(a)pyrene) was identified at location AOC 49-4 at an estimated concentration of 0.067 ppm, which is slightly above the 0.061 ppm guidance value. Glycols were not detected in soil within this AOC. Inorganic constituent concentrations in soil appear to be generally consistent with typical background values.	SVOCs in soil to be identified in SMP.
50	Plant 1	Underground Storage Tank	Soil at sampling locations AOC 50-1 and AOC 50-2 does not exhibit VOCs at concentrations above TAGM 4046 soil guidance values. SVOCs were not identified at concentrations above TAGM 4046 soil guidance values, except at location AOC 50-2. Benzo(a)pyrene was identified at AOC 50-2 at an estimated concentration of 0.063 ppm, slightly above the 0.060 TAGM 4046 soil guidance value. Tank closure performed as part of ICM. PCB concentration in overburden soils removed from above the UST are less than the 10 ppm TAGM 4046 subsurface soil guidance value.	No further action.

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Notes:

1. PCBs = Polychlorinated Biphenyls.
2. VOCs = Volatile Organic Compounds.
3. SVOCs = Semi-Volatile Organic Compounds.
4. TCLP = Toxicity Characteristic Leaching Procedure.
5. TAGM 4046 Soil Guidance Values = soil guidance values presented in the New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum (TAGM) titled "Determination of Soil Cleanup Objectives and Cleanup Levels", HWR-94-4046 (TAGM 4046) dated January 24, 1994.