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The Port Authority of New York and New Jersey

Interim Remedial Measure Report
Sites 2 (Area 2B) and 3 (Area 3A)
HHMT - Port Ivory Facility
July 2007

40 Western Avenue, Staten Island, New York

HMM 232952

THE PORT AUTHORITY OF NY & NJ

Engineering Department

July 27, 2007

Thomas Gibbons, Project Manager
NY State Dept. of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233

RE: Interim Remedial Measure Report
Howland Hook Marine Terminal –
Port Ivory Facility (40 Western Avenue)
Staten Island, New York 10303

Dear Mr. Gibbons:

Please find enclosed two copies of the Interim Remedial Measure (IRM) Report for Site 2 (Area 2A) and Site 3 (Area 3A) at the above referenced facility. The IRM Report is submitted pursuant to the Voluntary Cleanup Program (VCP) Agreement between the NYSDEC and the Port Authority of New York and New Jersey.

If you have any questions or comments, please feel free to contact Ed Aldrich at 973-565 7553.

Very truly yours,

Port Authority of New York and New Jersey

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cc: B. Callaghan (NYSDOH)
E. Aldrich (PANYNJ)
G. Clark (HMM)

Two Gateway Center
Newark, NJ 07102

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1.0 EXECUTIVE SUMMARY

The Port Authority of New York and New Jersey (Port Authority) is currently redeveloping the former Procter & Gamble (P&G) Port Ivory Facility, now known as the Howland Hook Marine Terminal (HHMT) – Port Ivory Facility. The Port Authority executed three Voluntary Cleanup Agreements with the New York State Department of Environmental Protection (NYSDEC), with each agreement addressing different portions of the 123.75-acre HHMT-Port Ivory Facility in 2002. Under the auspices of the NYSDEC Voluntary Cleanup Program (VCP), the Port Authority completed various phases of environmental investigation and conducted various remedial efforts. This report summarizes the methods and results of the most recent remedial effort, an Interim Remedial Measure (IRM) that was conducted to address light, non-aqueous phase liquid (LNAPL) at two portions (Site 2, Area 2B and Site 3, Area 3A) of the HHMT-Port Ivory Facility.

The goal of the IRM was to remove recoverable mobile LNAPL via the excavation of soil containing LNAPL and pumping of LNAPL from previously identified areas within Site 2 (Area 2A) and Site 3 (Area 3A). The designated areas (Removal Areas/Trenches) were identified based on site/remedial investigation field observations, including the following: the presence of elevated concentrations of volatile organic vapors, the presence of elevated concentrations of total petroleum hydrocarbons (TPHC), the re-accumulation of LNAPL in test pits, and/or the presence of LNAPL in monitoring wells.

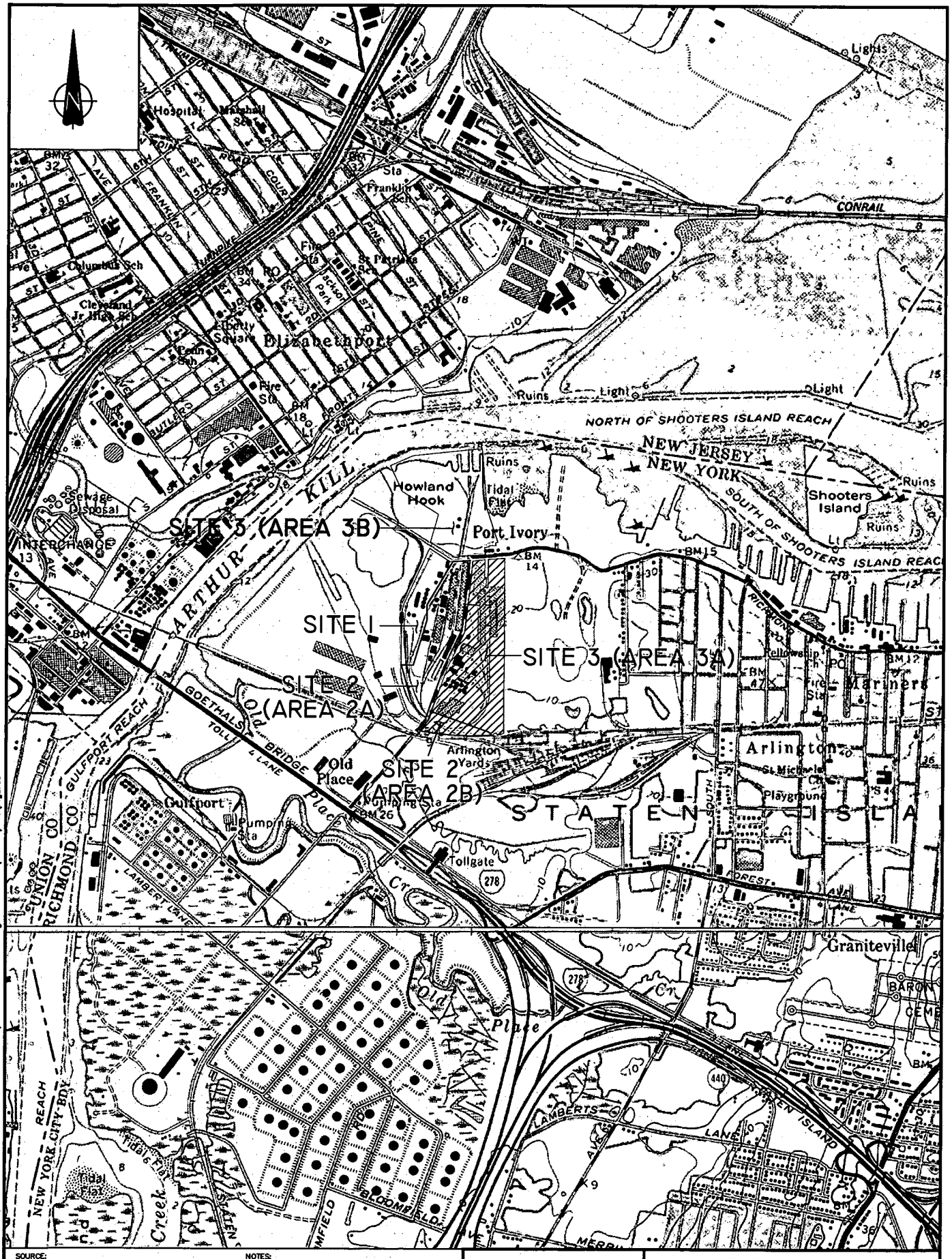
The IRM was highly successful in achieving its goal of removing mobile LNAPL. In fact, further remedial efforts will be required in the vicinity of only one of the Removal Areas/Trenches; these additional remedial efforts will be identified in the Remedial Action Work Plan (RAWP) for Site 3 (Area 3A). The IRM resulted in the removal of more than 91,000 pounds of LNAPL. With few exceptions, the LNAPL that remains seems to be sufficiently weathered that it does not impact groundwater with respect to regulated organic compounds. The exceptions are identified in this report, and recommendations for additional investigation and/or remedial actions are also offered in this report.

2.0 INTRODUCTION

The Port Authority Howland Hook Marine Terminal (HHMT)-Port Ivory Facility is located at 40 Western Avenue in Staten Island, Richmond County, New York, as presented on Figure 1, and is comprised of the following parcels: Block 1309, Lot 10; Block 1338, Lot 1; and, Block 1400, Lot 1. Public roadways separate the three parcels: Western Avenue separates Block 1400, Lot 1 from Block 1338, Lot 1 and Richmond Terrace separates Block 1309, Lot 10 from Block 1338, Lot 1 and Block 1400, Lot 1. The HHMT-Port Ivory Facility is bordered by Bridge Creek to the west, the Arthur Kill to the north, wetlands and undeveloped land to the east, and an unnamed railway to the south.

The Port Authority purchased the HHMT-Port Ivory Facility from Procter and Gamble (P&G) in 2000, and is currently redeveloping the property for a commercial end use; specifically, the Port Authority is redeveloping the HHMT-Port Ivory Facility for use as a container terminal and intermodal facility. For the purpose of this report, an intermodal facility is defined as a facility where cargo transported by ship is transferred to intermediate and final destinations via train or truck. Approximately 90% of the HHMT-Port Ivory Facility will therefore be paved or otherwise capped following final construction.

As part of the overall site redevelopment, the Port Authority entered into the NYSDEC VCP in August 2002. The Port Authority's objective for entering into the VCP program with NYSDEC was to address the presence of contamination attributable to prior site usage and activities unrelated to the Port Authority. To accommodate the Port Authority's overall redevelopment schedule, the NYSDEC agreed to expedite the review of information pertaining to certain portions of this site. Thus, the Port Authority agreed to address the HHMT-Port Ivory Facility as multiple "Sites" and present assessment, investigation, and remedial action information/documentation for each individual unit, or Site. Please note, the VCP agreement for Site 3 (VCP Agreement Site V-00675-2, VCP Index Number W2-0987-02-04), now known as Site 3 (Area 3A) has been revised to incorporate Block 1309, Lot 10 (formerly known as Site 4 and currently known as Site 3, Area 3B). The Sites presented on Figure 1 and are designated as



SOURCE:
UNITED STATES GEOLOGICAL SURVEY
7.5 MINUTE SERIES TOPOGRAPHIC QUADRANGLES
ELIZABETH AND ARTHUR KILL, NY–NJ
1967, PHOTOREVISED 1981

NOTES:
HHMT – PORT IVORY FACILITY
CONSISTS OF SITES 1 THROUGH 3

2000 0 2000 4000
SCALE IN FEET
1" = 2000'
CONTOUR INTERVAL = 10 FEET

Hatch Mott MacDonald
Certificate No. 24GA28075000

27 Bleeker Street
Millburn, New Jersey 07041

PORT AUTHORITY OF NY AND NJ
40 WESTERN AVENUE, STATEN ISLAND, NY

FIGURE 1
SITE LOCATION MAP
HHMT - PORT IVORY FACILITY

Designed	Drawn	Checked	Approved	Date
	BFJ			

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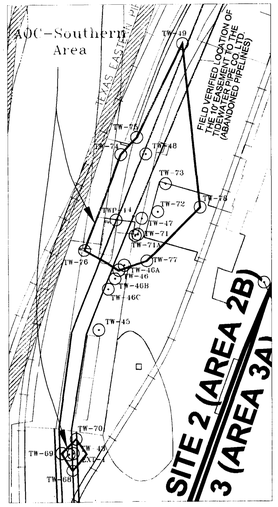
follows: Site 1 consists of the northwestern portion of Block 1400, Lot 1; Site 2, which is further subdivided into Areas 2A and 2B, consists of the eastern and southern portions of Block 1400, Lot 1 (Area 2A) and the southern portion of Block 1338, Lot 1 (Site 2, Area 2B); Site 3, which is further subdivided into Areas 3A and 3B, consists of the northern portion of Block 1338, Lot 1 and Block 1309, Lot 10.

This report addresses the methods utilized during, and the results of, an IRM conducted at Sites 2 (Area 2B) and 3 (Area 3A), hereinafter referred to as Area 2B and Area 3A, respectively, which was implemented in accordance with a NYSDEC-approved *Revised Interim Remedial Action Work Plan.* The IRM Work Plan was dated August 17, 2005 and the NYSDEC issued a comment letter regarding that document on September 26, 2005. Based on the NYSDEC comments, a document entitled *Revised Interim Remedial Action Work Plan* and dated June 1, 2006 was prepared and submitted to the NYSDEC and New York State Department of Health (NYSDOH). The NYSDEC approved this document in a letter dated June 14, 2006.

2.1 Summary of Previous Investigations of LNAPL-Impacted Soil

On behalf of the Port Authority, Hatch Mott MacDonald (HMM) has performed environmental assessment and investigative activities to characterize site conditions and delineate historic fill material and contaminants in environmental media at the HHMT-Port Ivory Facility, including at Area 2B and Area 3A. During these environmental assessment and investigative activities, HMM encountered LNAPL at three Areas of Concern (AOCs) at these two areas. For discussion purposes, these AOCs have been identified as AOC-Southern Area, AOC-Central Area, and AOC-Northern Area. AOC-Southern Area is located at Area 2B and AOC-Central Area and AOC-Northern Area are located at Area 3A (See Figure 2 for the locations of these AOCs).

The source of LNAPL-impacted soil at AOC-Southern Area, ACO-Central Area, and AOC-Northern Area is believed to be one or more buried pipelines situated within an easement believed to have been owned at one time by Tidewater Pipe Co., Ltd. (Tidewater). Since the LNAPL-impacted soil appeared to be attributable to the Tidewater pipelines, the Port Authority investigated soil quality along the entire length of the Tidewater pipelines at Area 2B and Area

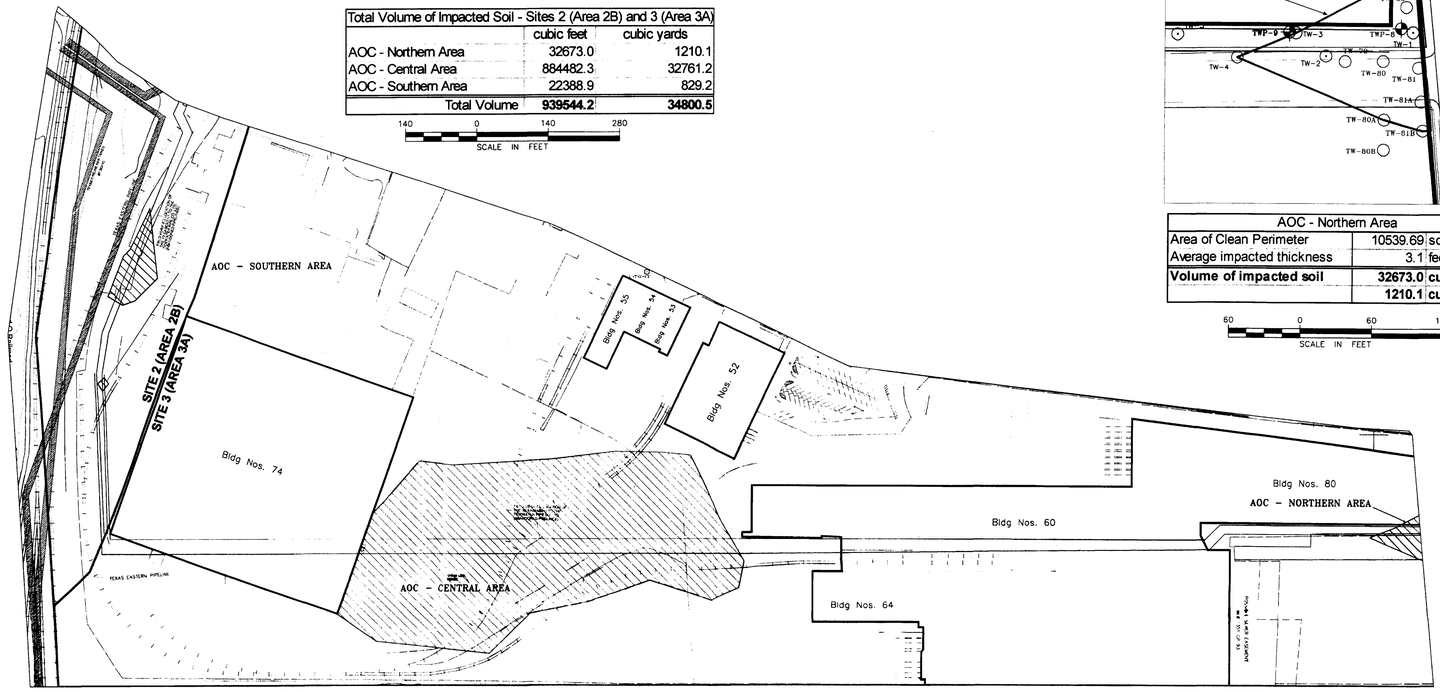


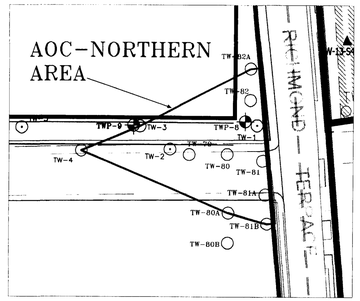
AOC - Southern Area		
Area of Clean Perimeter 1	8899.73	square feet
Average impacted thickness 1	2.5	feet
Volume of impacted soil 1	**22249.3**	**cubic feet**
	824.0	**cubic yards**
Area of Clean Perimeter 2	279.03	square feet
Average impacted thickness 2	0.5	feet
Volume of impacted soil 2	**139.5**	**cubic feet**
	5.2	**cubic yards**

60 0 60 120
SCALE IN FEET

Total Volume of Impacted Soil - Sites 2 (Area 2B) and 3 (Area 3A)		
	cubic feet	cubic yards
AOC - Northern Area	32673.0	1210.1
AOC - Central Area	884482.3	32761.2
AOC - Southern Area	22388.9	829.2
Total Volume	**939544.2**	**34800.5**

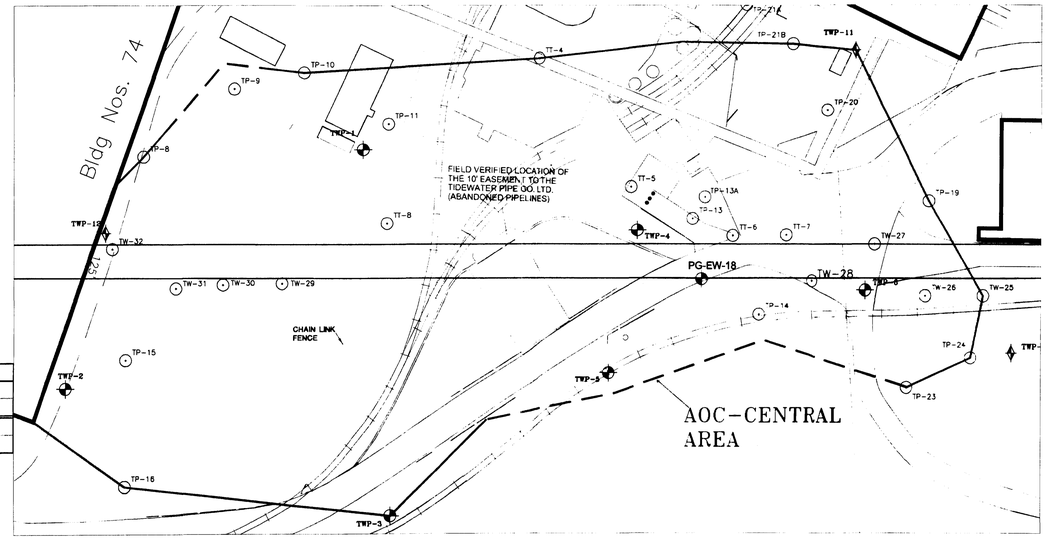
140 0 140 280
SCALE IN FEET





AOC - Northern Area		
Area of Clean Perimeter	10539.69	square feet
Average impacted thickness	3.1	feet
Volume of impacted soil	**32673.0**	**cubic feet**
	1210.1	**cubic yards**

60 0 60 120
SCALE IN FEET



AOC - Central Area		
Area of Clean Perimeter	215727.4	square feet
Average impacted thickness	4.1	feet
Volume of impacted soil	**884482.3**	**cubic feet**
	32761.2	**cubic yards**

60 0 60 120
SCALE IN FEET

Notes:
1. Full delineation has not yet been achieved at AOC-Central Area. Therefore, the volume of impacted soil calculated for AOC-Central Area is based on current data.
2. IRM = Interim Remedial Measure
3. VCP = Voluntary Cleanup Program
4. AOC = Area Of Concern

LEGEND

- AOC-TARGETED DURING IRM
- RAILROAD TRACKS
- VCP SITE BOUNDARY
- EXISTING BUILDING
- APPROXIMATE DELINEATED EXTENTS OF LNAPL-IMPACTED SOIL (DASHED WHERE INFERRED)
- TWP-4 SRI - TEMPORARY MONITORING WELL
- TW-25 SRI - TEST TRENCH
- TP-13 SRI - TEST PIT
- TT-5 SRI - SOIL BORING

Sheet of

THE PORT AUTHORITY OF NY & NJ

ENGINEERING PROGRAM MANAGER

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT

Title

(BLOCK 1338, LOT 1)
HHMT-PORT IVORY FACILITY

SITES 2 (AREA 2B) AND 3 (AREA 3A)
AREAS OF CONCERN (AOC-NORTHERN, CENTRAL, AND AOC-SOUTHERN AREAS)

Designed by	Drawn by	Checked by
	EDG	

Date 5-3-07

Contract Number

Drawing Number FIGURE 2

P:\232952.wmd\REMEDIAL ACTIONS\Remedial Petroleum Issues Block 1338\Remediation N of Bldg Nos. 74,75\IRM Report\Figures\Central and North Figures.dwg 5/3/07 4:44 pm

3A during the SRI. Sections 2.2 through 2.4 summarize the occurrence and extent of LNAPL-impacted soil at AOC-Southern Area, AOC-Central Area, and AOC-Northern Area, respectively.

2.2 Occurrence and Extent of LNAPL-Impacted Soil at AOC-Southern Area

The SRI at Area 2B included the investigation of the environmental quality of soil and groundwater along the Tidewater pipelines and concluded that LNAPL-impacted soil is present at two portions of Area 2B, which collectively comprise AOC-Southern Area (referenced as "Southern LNAPL Area" in the March 24, 2005 SI Work Plan). Specifically, LNAPL-impacted soil was encountered in the vicinity of test pit EXT-1 and in the vicinity of soil borings TW-47 and TW-48.

EXT-1

During the SRI, 0.5 feet (average thickness) of LNAPL-impacted soil was encountered between depths of two and six feet below ground surface (bgs) in the vicinity of EXT-1. The horizontal limits of LNAPL-impacted soil in this portion of AOC-Southern Area were defined by soil borings TW-68 (to the east of EXT-1), TW-69 (to the south of EXT-1), and TW-70A (to the west of EXT-1) and by temporary well location TWP-13 (to the north of EXT-1) (See Figure 2). Based on field observations, LNAPL-impacted soil exists within a 279-square foot area in the vicinity of test pit EXT-1 with a resulting volume of approximately 5.2 cubic yards of LNAPL-impacted soil in this portion of AOC-Southern Area.

Analytical results for soil samples colleted at AOC-Southern Area in the vicinity of test pit EXT-1 indicate impacts of metal and regulated organic compounds attributable to the former placement of fill at the HHMT-Port Ivory Facility by P&G, but do not indicate that the presence of LNAPL has impacted soil with respect to regulated organic compounds. Further, based on groundwater analytical results from a groundwater sample collected at TWP-13, the presence of the LNAPL-impacted soil does not appear to have impacted groundwater quality in the vicinity of test pit EXT-1. Based on field observations and soil analytical results of the SRI, free (i.e., mobile) LNAPL is not believed to be present in the vicinity of test pit EXT-1. Therefore, this

portion of AOC-Southern Area was not targeted for excavation or LNAPL removal during the IRM.

TW-47 and TW-48

During the SRI, 2.5 feet (average thickness) of LNAPL-impacted soil was encountered between two and nine feet bgs in the vicinity of TW-47 and TW-48. The horizontal limits of LNAPL-impacted soil in this portion of AOC-Southern Area were defined by soil borings TW-74 (to the south of TW-48), TW-75 (to the southwest of TW-48), TW-78 (to the northeast of TW-48 and the northwest of TW-47), TW-77 (to the east-northeast of TW-47), and TW-76 (to the southeast of TW-47) (See Figure 2). Based on field observations, LNAPL-impacted soil is present within an 8,900-square foot area in the vicinity of soil borings TW-47 and TW-48 with a resulting volume of approximately 824 cubic yards of LNAPL-impacted soil in this portion of AOC-Southern Area.

Analytical results for soil samples collected in the vicinity of soil borings TW-47 and TW-48 indicate that higher LNAPL saturation in soil, as determined by field observations, is associated with the presence of tentatively identified volatile organic compounds (VOC TICs) and TPHC. However, New York State has not established Recommended Soil Cleanup Objectives (RSCOs) for these compounds. Based on groundwater analytical results from a groundwater sample collected at TWP-14, the presence of the LNAPL-impacted soil does not appear to have impacted groundwater quality in the vicinity of soil borings TW-47 and TW-48.

As the presence of LNAPL-impacted soil at AOC-Southern Area has not impacted soil or groundwater quality with respect to regulated organic compounds, the IRM was conducted at AOC-Southern Area for the sole purpose of removing mobile LNAPL. The elevated concentrations of volatile organic vapors, VOC TICs, and/or TPHC in soil at two soil boring locations in the vicinity of TW-47 and TW-48 suggested the presence of mobile LNAPL in this portion of AOC-Southern Area. Therefore, the IRM at AOC-Southern Area targeted the area proximal to soil borings TW-47 and TW-48.

Please note, larger volumes of LNAPL-impacted soil were previously reported for AOC-Southern Area in the document entitled *Site 2 Supplemental Remedial Investigation Report* (*Site 2 SRIR*) and dated November 2006; however, these larger volumes were calculated using the maximum thicknesses of LNAPL-impacted soil rather than the average thicknesses of LNAPL-impacted soil. Therefore, the lower volumes specified in this report are considered to be more accurate than those presented in the *Site 2 SRIR*.

2.3 Occurrence and Extent of LNAPL-Impacted Soil at AOC-Central Area

The SI, RI, and SRI at Area 3A identified the presence of LNAPL and/or LNAPL-impacted soil to the north of Building Nos. 74/75 and to the south of Building No. 60. This AOC has been termed AOC-Central Area. The horizontal limits of LNAPL-impacted soil at AOC-Central Area are defined by soil borings TW-25, TW-63, TW-65A, and TW-66B; test pits TP-8, TP-10, TP-16, TP-19, TP-21B, TP-23, and TP-24; test trench TP-4; and, temporary wells TWP-3 and TWP-11. Thus, the LNAPL-impacted soil at AOC-Central Area was encountered within an area of approximately 215,725 square feet.

During the SRI, vertical delineation was completed at all locations where LNAPL-impacted soil was observed at AOC-Central Area. The LNAPL-impacted soil was encountered at depths from approximately 1 to 10 feet bgs. The thickness of LNAPL-impacted soil ranged from two to seven feet with an average thickness of 4.1 feet. Using the average thickness of LNAPL-impacted soil encountered at AOC-Central Area, approximately 32,761 cubic yards of LNAPL-impacted soil are present at AOC-Central Area.

As the presence of LNAPL in AOC-Central Area did not generally result in impacts to soil or groundwater quality with respect to regulated organic compounds, the IRM was conducted at AOC-Central Area for the purpose of removing mobile LNAPL. Based on the results of previous investigations, elevated concentrations of volatile organic vapors, elevated concentrations of TPHC, and/or the presence of mobile LNAPL were encountered at eight areas within AOC-Central Area. Therefore, the IRM at AOC-Central Area targeted these eight areas.

2.4 Occurrence and Extent of LNAPL-Impacted Soil at AOC-Northern Area

The RI and SRI at Area 3A identified the presence of LNAPL-impacted soil immediately to the south of Richmond Terrace. This AOC has been termed AOC-Northern Area. The horizontal limits of LNAPL-impacted soil at AOC-Northern Area are defined by soil boring locations TW-3, TW-4, TW-80A, TW-81B, and TW-82A and temporary well location TWP-9. In addition, well PG-GW-9, which is located to the east of soil boring location TW-2, has historically not contained LNAPL despite the observation of LNAPL at location TW-2. Complete horizontal delineation of the LNAPL-impacted soil was not achieved to the north since the LNAPL-impacted soil is believed to extend under Richmond Terrace, a public roadway; delineation to the north will be addressed during investigations at Site 3 (Area 3B). The LNAPL-impacted soil was encountered within an area of approximately 10,540 square feet.

During the SRI, vertical delineation was completed at all locations where LNAPL-impacted soil was observed at AOC-Northern Area. The LNAPL-impacted soil was encountered at depths from approximately 3.5 to 8 feet bgs. The average thickness of LNAPL-impacted soil was 3.1 feet. Using the average thickness of LNAPL-impacted soil encountered at AOC-Northern Area, approximately 1,200 cubic yards of LNAPL-impacted soil are present at AOC-Northern Area. With respect to regulated organic compounds, the presence of LNAPL in AOC-Northern Area did not result in impacts to soil quality and resulted in minor impacts to groundwater quality (four semivolatile organic compounds, or SVOCs, were detected at concentrations above their respective NYSDEC Ambient Water Quality Standards and Guidance Values, or AWQSGVs). Therefore, the IRM was conducted at AOC-Central Area and AOC-Northern Area for the sole purpose of removing mobile LNAPL, although additional groundwater investigation in AOC-Northern Area and at Site 3, Area 3A, Area 3B is recommended with respect to groundwater quality in this portion of the HHMT-Port Ivory Facility. Based on the results of previous investigations, elevated concentrations of volatile organic vapors and/or elevated concentrations of TPHC were encountered at three areas within AOC-Northern Area. Therefore, the IRM at AOC-Central Area targeted these eight areas.

2.5 LNAPL Characteristics

The results of an LNAPL Study (conducted in 2003-2004) indicated that the LNAPL was varied in nature (62.5% of the LNAPL sample fingerprinting results revealed a crude oil component, but the remainder included other petroleum products such as diesel fuel and fuel oils), significantly weathered, and between one and two decades old. The LNAPL is generally present at residual saturation (i.e., is immobile), but is present as a free (i.e., mobile) phase in only discrete areas within Area 2B and Area 3A. The results of the hot tapping portion of the LNAPL Study indicated the presence of residual petroleum in only one of the seven Tidewater pipelines.

With respect Area 3A and Area 2B, the distribution of the LNAPL and LNAPL-impacted soil suggests that the Tidewater pipelines are the source area for the petroleum that impacted soil in AOC-Central Area and AOC-Northern Area. The LNAPL and LNAPL-impacted soil at AOC-Central Area and AOC-Northern Area are present to both the east and the west of the Tidewater pipelines. The plume of LNAPL and LNAPL-impacted soils at AOC-Central Area is the shape of a "teardrop," widening in the direction of groundwater flow. The fact that there are two discrete areas of LNAPL-impacted soil along the pipelines at Area 3A also suggests that the pipelines are the source of LNAPL. Further, GC fingerprinting analysis confirmed that the ages of the LNAPL in AOC-Central Area and within the pipelines (sampled during the hot tapping effort, which was documented in the *Revised – Site Investigation and Conceptual Remedial Workplan, Site 3, Area 3A*, dated October 2004), are consistent. Therefore, the Port Authority is confident that the Tidewater Pipelines are the source area for the petroleum-type LNAPL encountered in AOC-Central and AOC-Northern Areas. The distribution of LNAPL and LNAPL-impacted soil also suggests that the Tidewater pipelines are the source of petroleum that impacted soil in AOC-Southern Area; however no LNAPL samples from AOC-Southern Area were analyzed using fingerprinting methods.

2.6 Relationship Between IRM and Area 3A Redevelopment/RAWP

The IRM is considered to be a response to the presence of free (i.e., mobile) LNAPL at Area 2B and Area 3A. Although the work completed during the IRM is anticipated to reduce the scope of

the remedial action(s) conducted at Area 2B and Area 3A, the IRM is distinct from those remedial actions that will be specified in the RAWPs for Sites 2 and 3. The IRM was successful in removing LNAPL and LNAPL-impacted soil from 11 of 12 (i.e., approximately 92%) of the Removal Areas/Trenches at the site. The only Removal Area/Trench where additional remediation is warranted is Area F located at AOC-Central Area, Area 3A. LNAPL re-accumulation continued at Area F despite repeated LNAPL removal and groundwater pumping efforts. In addition, the efforts undertaken during the IRM revealed that free (mobile) LNAPL in the vicinity of Area F extended beyond previously determined limits. Area F could not be expanded further due to the presence of railroad tracks, a soil stockpile, and underground utilities. Therefore, the Port Authority has elected to address the mobile LNAPL remaining at Area F during the final remedial action for Area 3A, which will be proposed in the RAWP for Site 3, Area 3A. Beyond the removal of mobile LNAPL at Area F, no further investigative or active remedial actions are warranted at AOC-Southern Area, AOC-Central Area, or AOC-Northern Area. However, following the IRM, residual (i.e., immobile) LNAPL will remain at all three AOCs and will be addressed through redevelopment of Area 2B and Area 3A, groundwater monitoring at Area 2B and Area 3A, surface water monitoring at Area 2B, and the establishment of an environmental easement at Area 2B and Area 3A.

As previously indicated, the Port Authority proposes to redevelop the HHMT-Port Ivory Facility into a container terminal and intermodal facility, which is defined as a facility where cargo transported by ship is temporarily staged prior to being transferred to intermediate and final destinations via train or truck. Therefore, approximately 90% of the facility will therefore be paved or otherwise capped following final construction. Where impervious, the cover and cap will limit surface water infiltration and will prevent mobilization of contaminants remaining on the site through the soil column and into groundwater. Where not impervious, the cover will limit direct contact with impacted soil. Additionally, an environmental easement will be established to preclude unauthorized disturbance of the cover, cap, and impacted soil that remains in place. An inspection of the integrity of the impervious cover will be conducted in accordance with a Site Management Plan (SMP), which will set forth a program for the monitoring/inspection of the impervious cover and cap will certify that the institutional controls

and engineering controls are in place and that nothing has occurred that would impair the ability of the controls to protect public health or the environment or would constitute a violation or failure to comply with the SMP. Post-remedial monitoring activities will include groundwater and surface water monitoring. The results of the monitoring will be summarized in a report (SMP Report) that will be submitted to the NYSDEC on an annual basis until the NYSDEC notifies the property owner in writing that this certification is no longer needed. The specifics of the post-remedial monitoring activities will be provided in the SMPs for Sites 2 and 3.

3.0 REVISED IRM WORK PLAN

The *Revised IRM Work Plan* dated June 1, 2006 was approved by the NYSDEC in cooperation with the NYSDOH in a letter dated June 14, 2006. The goal of the IRM was to remove as much of the mobile LNAPL at Area 2B and Area 3A as feasible. The objectives of the IRM were as follows: 1) to remove as much LNAPL as possible via pumping; 2) to remove soil from which LNAPL was previously observed to seep into the excavation (i.e., soil where the remaining LNAPL is approximately at its residual saturation); and, 3) to document the removal efforts and the total volumes of LNAPL and impacted soil removed from Area 2B and Area 3A. The *Revised IRM Work Plan*, provided in Appendix A, was developed to meet these objectives. The NYSDEC letter approving the *Revised IRM Work Plan* is also included in Appendix A.

HMM identified the locations at Area 2B and Area 3A where LNAPL was most likely to be free (i.e., mobile) in the *Revised IRM Work Plan.* In order to be cost-effective, HMM used surrogate parameters, as opposed to measuring LNAPL saturation directly, to identify areas where free LNAPL was likely to be present. Specifically, HMM selected areas that met as least one of the following criteria: areas where soil contained elevated levels of volatile organic vapors as determined using a photoionization detector (PID); areas where soil contained elevated concentrations TPHC; areas where LNAPL has been observed in monitoring wells; and, areas where LNAPL was observed to re-accumulate in test pits following its removal from the test pits.

The *Revised IRM Work Plan* proposed a combination of soil excavation and LNAPL removal via pumping to meet the IRM goal and objectives. The *Revised IRM Work Plan* identified the soil excavation areas as Removal Areas/Trenches. The proposed horizontal limits of the Removal Areas/Trenches were based on previous field observations. The proposed vertical limits for the Removal Areas/Trenches were to be determined based on field observations; the bottom of each Removal Area/Trench was to be the shallowest soil that appeared to be clean based on field screening.

In order to allow for accurate field measurements/observations and to increase the likelihood of LNAPL flowing into the excavation, the *Revised IRM Work Plan* proposed dewatering at each Removal Area/Trench. Groundwater pumped from the excavation was to be disposed of by Lorco Petroleum Services Inc. (LPS), located in Elizabeth, New Jersey. Any LNAPL observed to flow into any Removal Area/Trench was to be pumped from the excavation, and the approximate location where it flowed into the excavation was to be recorded. Additional soil excavation was to be conducted along the sidewall where the mobile LNAPL was observed to flow into the excavation. As per the *Revised IRM Work Plan*, the Removal Area/Trench could be backfilled when LNAPL did not flow into the Removal Area/Trench for a one-month observation period following the most recent additional excavation and dewatering efforts.

Deviations from the *Revised IRM Work Plan*, which were approved by the NYSDEC prior to their implementation, are identified in Section 4.0. Documentation of the NYSDEC approvals is included in Appendix B. Section 5.0 summarizes the scope of the excavation activities and associated field observations. Section 6.0 summarizes other activities, including the removal and management of LNAPL, groundwater, and soil, that were conducted concurrently with excavation. Section 7.0 summarizes activities conducted after the completion of the excavation task.

4.0 DEVIATIONS FROM THE REVISED IRM WORK PLAN

In general, the IRM was completed in accordance with the *Revised IRM Work Plan* summarized above and included as Appendix A. However, actual field conditions required some minor modifications of the approved actions. The deviations are described by type, as follows: groundwater removal/disposal (Section 4.1), observation period (Section 4.2), sheen (Section 4.3), and backfill soil quality (Section 4.4).

4.1 Groundwater Removal/Disposal

The *Revised IRM Work Plan* proposed to contain all water and LANPL pumped out of the Removal Areas/Trenches until such time as they could be disposed of in accordance with all applicable, local, state, and federal laws. Although it is not explicitly stated, the intent was to transport water to an off-site disposal facility.

During the excavation of Removal Areas/Trenches A through I, it was determined that the rate at which the groundwater flowed into the Removal Areas/Trenches was greater than anticipated. As a result, the Port Authority faced management and disposal of more than 100,000 gallons of water. To manage this greater-than-anticipated volume of water in a cost-efficient manner, the Port Authority proposed to treat the water at the HHMT-Port Ivory Facility and to release the treated water to a retention basin at Area 3A. The proposed system included temporary storage of groundwater in frac tanks followed by its treatment using bag filters and activated carbon units. Following treatment, the Port Authority proposed to discharge water to an on-site retention basin. To verify the success of the treatment process, the Port Authority proposed to collect daily influent and effluent samples.

Bag filters were selected to remove entrained solids from the groundwater pumped from the Removal Areas/Trenches. However, the use of carbon filtration units required more attention. Carbon filtration is generally more effective in removing non-polar organic matter than polar organic matter, in removing organic compounds with high molecular weights than those with low molecular weights, and in removing low or moderate concentrations of organic matter than

high concentrations of same. To confirm that the groundwater could be adequately treated using carbon filtration, HMM collected one groundwater sample at each Removal Area/Trench using a dedicated Teflon bailer. All samples were transported to Veritech, a New York State-certified laboratory (Certification No. 11408) under Chain of Custody documentation with instructions to be analyzed for Priority Pollutant (PP) VOCs and PP SVOCs. The analytical results are summarized on Tables 1A and 1B, respectively.

In general, the analytical results confirmed the results of groundwater sampling conducted at AOC-Southern Area, AOC-Central Area, and AOC-Northern Area during the SRI in that groundwater contained low concentrations of only a few organic compounds. The groundwater samples collected from Areas A, C, D, and E did not contain any VOCs or SVOCs at concentrations above the NYSDEC AWQSGVs. However, at least one of the following compounds was detected at a concentration above its respective AWQSGV in the samples collected at Areas B, F, G, H, and I: the VOC acetone and the SVOCs acenaphthene, anthracene, benzo(a)anthracene, fluoranthene, fluorene, phenanthrene, and pyrene.

Acetone was detected in groundwater at only Area F, and, as such, would pose no difficulties with respect to the treatment of groundwater from the other 11 Removal Areas/Trenches. Volatilization of acetone in groundwater at Area F was considered a potential issue with respect to air quality. However, as a result of the concentration of acetone in groundwater coupled with the dilution of the acetone vapors in ambient air, no air quality issues were detected during air monitoring activities conducted in accordance with the Community Air Monitoring Plan. In addition, the acetone proved not to be a problem with respect to breakthrough in the water treatment process. Acetone was not detected in the effluent because, being volatile, it likely volatilized during pumping of groundwater from Area F or while the water remained in the frac tanks.

The SVOCs detected at concentrations above their respective AWQSGVs were non-polar and of sufficiently high molecular weight to be removed using carbon filtration. The concentration of organic matter in the groundwater was also not problematic; the greatest concentration of total

TABLE 1A
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS-VOCs
REMOVAL AREAS/TRENCHES
INTERIM REMEDIAL MEASURE SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID		AREA A-W			AREA B-W			AREA B-W(2)			AREA C-W			AREA C-W2			AREA D -W			AREA E -W		
Lab ID	New York	AC24354-001			AC24256-004			AC24506-001			AC24297-003			AC25432-001			AC24256-004			AC24256-003		
Date Collected	State	06/29/06			06/27/06			7/13/06			06/28/06			08/31/06			06/26/06			06/26/06		
Material	AWQSGV	Water			Water			Water			Water			Water			Water			Water		
Units		ug/L			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L		
Volatile Organic Compounds (VOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	0.09 Total	ND		0.3	ND		0.3	ND		0.33	ND		0.3	ND		0.46	ND		0.3	ND		0.3
1,1,1-Trichloroethane	5	ND		0.53	ND		0.53	ND		0.43	ND		0.53	ND		0.33	ND		0.53	ND		0.53
1,1,2,2-Tetrachloroethane	5	ND		0.2	ND		0.2	ND		0.37	ND		0.2	ND		0.21	ND		0.2	ND		0.2
1,1,2-Trichloroethane	1	ND		0.44	ND		0.44	ND		0.25	ND		0.44	ND		0.25	ND		0.44	ND		0.44
1,1-Dichloroethane	5	ND		0.38	ND		0.38	ND		0.28	ND		0.38	ND		0.34	ND		0.38	ND		0.38
1,1-Dichloroethene	5	ND		0.29	ND		0.29	ND		0.4	ND		0.29	ND		0.53	ND		0.29	ND		0.29
1,2-Dichloroethane	0.6	ND		0.37	ND		0.37	ND		0.42	ND		0.37	ND		0.21	ND		0.37	ND		0.37
1,2-Dichloropropane	1	ND		0.56	ND		0.56	ND		0.48	ND		0.56	ND		0.46	ND		0.56	ND		0.56
2-Butanone	50	ND		0.84	ND		0.84	ND		0.92	ND		0.84	ND		0.38	ND		0.84	ND		0.84
2-Chloroethylvinylether	NS	ND		0.52	ND		0.52	ND		0.33	ND		0.52	ND		0.26	ND		0.52	ND		0.52
2-Hexanone	50	ND		0.66	ND		0.66	ND		0.58	ND		0.66	ND		0.36	ND		0.66	ND		0.66
4-Methyl-2-Pentanone	50	ND		0.24	ND		0.24	ND		0.55	ND		0.24	ND		0.17	ND		0.24	ND		0.24
Acetone	50	ND		2.8	31		2.8	ND		2.5	ND		2.8	ND		2.7	ND		2.8	ND		2.8
Acrolein	5	ND		2.1	ND		2.1	ND		5.9	ND		2.1	ND		1.5	ND		2.1	ND		2.1
Acrylonitrile	5	ND		1.1	ND		1.1	ND		0.47	ND		1.1	ND		0.54	ND		1.1	ND		1.1
Benzene	1	ND		0.2	ND		0.2	ND		0.15	ND		0.2	ND		0.25	ND		0.2	ND		0.2
Bromodichloromethane	50	ND		0.46	ND		0.46	ND		0.2	ND		0.46	ND		0.33	ND		0.46	ND		0.46
Bromoform	50	ND		0.39	ND		0.39	ND		0.36	ND		0.39	ND		0.29	ND		0.39	ND		0.39
Bromomethane	5	ND		0.43	ND		0.43	ND		0.61	ND		0.43	ND		0.23	ND		0.43	ND		0.43
Carbon disulfide	50	ND		0.18	ND		0.18	ND		0.62	ND		0.18	ND		0.23	ND		0.18	ND		0.18
Carbon tetrachloride	5	ND		0.3	ND		0.3	ND		0.44	ND		0.3	ND		0.44	ND		0.3	ND		0.3
Chlorobenzene	5	ND		0.089	ND		0.089	ND		0.29	ND		0.089	ND		0.21	ND		0.089	ND		0.089
Chloroethane	5	ND		0.66	ND		0.66	ND		0.6	ND		0.66	ND		0.22	ND		0.66	ND		0.66
Chloroform	7	ND		0.93	ND		0.93	ND		0.24	ND		0.93	ND		0.42	ND		0.93	ND		0.93
Chloromethane	NS	ND		0.74	ND		0.74	ND		0.64	ND		0.74	ND		0.51	ND		0.74	ND		0.74
Cis-1,2-Dichloroethene	5	ND		0.47	ND		0.47	ND		0.42	ND		0.47	ND		0.31	ND		0.47	ND		0.47
Cis-1,3-Dichloropropene	NS	ND		0.26	ND		0.26	ND		0.45	ND		0.26	ND		0.2	ND		0.26	ND		0.26
Dibromochloromethane	50	ND		0.34	ND		0.34	ND		0.39	ND		0.34	ND		0.2	ND		0.34	ND		0.34
Ethylbenzene	5	ND		0.53	ND		0.53	ND		0.67	ND		0.53	ND		0.4	ND		0.53	ND		0.53
M&p-Xylenes	5	ND		0.5	ND		0.5	ND		0.71	ND		0.5	ND		0.36	ND		0.5	ND		0.5
Methylene chloride	5	ND		0.97	1.4	B	0.97	ND		0.91	1.2	B	0.97	ND		0.47	ND		0.97	ND		0.97
O-Xylene	5	ND		0.11	ND		0.11	ND		0.45	ND		0.11	ND		0.16	ND		0.11	ND		0.11
Styrene	5	ND		0.27	ND		0.27	ND		0.37	ND		0.27	ND		0.18	ND		0.27	ND		0.27
Tetrachloroethene	5	ND		0.5	ND		0.5	ND		0.35	ND		0.5	ND		0.24	ND		0.5	ND		0.5
Toluene	5	ND		0.32	1.2		0.32	ND		0.31	ND		0.32	ND		0.18	1.4		0.32	1.1		0.32
Trans-1,2-Dichloroethene	5	ND		0.38	ND		0.38	ND		0.44	ND		0.38	ND		0.4	ND		0.38	ND		0.38
Trans-1,3-Dichloropropene	NS	ND		0.24	ND		0.24	ND		0.22	ND		0.24	ND		0.15	ND		0.24	ND		0.24
Trichloroethene	5	ND		0.38	ND		0.38	ND		0.31	ND		0.38	ND		0.28	ND		0.38	ND		0.38
Vinyl chloride	2	ND		0.54	ND		0.54	ND		0.71	ND		0.54	ND		0.65	ND		0.54	ND		0.54
Total VOC TICs	NS	NA			NA			0			NA			ND			NA			NA		

Notes and Abbreviations:
AWQSGV = Ambient Groundwater Standards and Guidance Values
UG/L = Micrograms per Liter
TICs= Tenatively identified compounds
ND = Not Detected
NS = No Standard
NA= Not analyzed
Qual = Laboratory Qualifer
Conc = Concentration
B = Analyte was detected in the associated method blank.
J = The estimated concentrartion was detected below the MDL, but above the laboratory's reporting limits.
MDL = Method Detection Limit
1) Two groundwater samples were collected at Removal Areas/Trenches B,C,E,I,K and L. The second grounwater sample collected at these Removal Areas/Trenches was collected either because the Removal Area/Trench was bacfilled sooner than planned or to ensure that the on-site treatment system would be effective.
2) Concentration exceeding the AGWSGV are shown in bold font and are in highlighted cells.

E 1A

SUMMARY OF GROUND ANALYTICAL RESULTS-VOCs

REMOVAL EAS/TRENCHES

INTERIM REMEDIAL MEASURE SITES 2 (AREA 2B) AND 3 (AREA 3A)

HHMT-PORT IVORY FACILITY

Sample ID		AREA E-W(2)			AREA F-W			AREA G-W			AREA H-W			AREA I-W			AREA I-W(2)			AREA J -W		
Lab ID	New York	AC24506-002			AC24256-001			AC24190-005			AC24190-006			AC24190-002			AC24506-003			AC24830-001		
Date Collected	State	07/13/06			06/26/06			06/23/06			06/23/06			06/23/06			07/13/06			8/2/2006		
Material	AWQSGV	Water			Water			Water			Water			Water			Water			Water		
Units		ug/L			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L		
Volatile Organic Compounds (VOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	0.09 Total	ND		0.33	ND		0.3	ND		0.33	ND		0.33	ND		0.33	ND		0.33	ND		0.46
1,1,1-Trichloroethane	5	ND		0.43	ND		0.53	ND		0.43	ND		0.43	ND		0.43	ND		0.43	ND		0.33
1,1,2,2-Tetrachloroethane	5	ND		0.37	ND		0.2	ND		0.37	ND		0.37	ND		0.37	ND		0.37	ND		0.21
1,1,2-Trichloroethane	1	ND		0.25	ND		0.44	ND		0.25	ND		0.25	ND		0.25	ND		0.25	ND		0.25
1,1-Dichloroethane	5	ND		0.28	ND		0.38	ND		0.28	ND		0.28	ND		0.28	ND		0.28	ND		0.34
1,1-Dichloroethene	5	ND		0.4	ND		0.29	ND		0.4	ND		0.4	ND		0.4	ND		0.4	ND		0.53
1,2-Dichloroethane	0.6	ND		0.42	ND		0.37	ND		0.42	ND		0.42	ND		0.42	ND		0.42	ND		0.21
1,2-Dichloropropane	1	ND		0.48	ND		0.56	ND		0.48	ND		0.48	ND		0.48	ND		0.48	ND		0.46
2-Butanone	50	ND		0.92	20		0.84	ND		0.92	ND		0.92	ND		0.92	ND		0.92	ND		0.38
2-Chloroethylvinylether	NS	ND		0.33	ND		0.52	ND		0.33	ND		0.33	ND		0.33	ND		0.33	ND		0.26
2-Hexanone	50	ND		0.58	ND		0.66	ND		0.58	ND		0.58	ND		0.58	ND		0.58	ND		0.36
4-Methyl-2-Pentanone	50	ND		0.55	ND		0.24	ND		0.55	ND		0.55	ND		0.55	ND		0.55	ND		0.17
Acetone	50	ND		2.5	**64**		2.8	18		2.5	ND		2.5	ND		2.5	ND		2.5	ND		2.7
Acrolein	5	ND		5.9	ND		2.1	ND		5.9	ND		5.9	ND		5.9	ND		5.9	ND		1.5
Acrylonitrile	5	ND		0.47	ND		1.1	ND		0.47	ND		0.47	ND		0.47	ND		0.47	ND		0.54
Benzene	1	ND		0.15	ND		0.2	ND		0.15	ND		0.15	ND		0.15	ND		0.15	ND		0.25
Bromodichloromethane	50	ND		0.2	ND		0.46	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.33
Bromoform	50	ND		0.36	ND		0.39	ND		0.36	ND		0.36	ND		0.36	ND		0.36	ND		0.29
Bromomethane	5	ND		0.61	ND		0.43	ND		0.61	ND		0.61	ND		0.61	ND		0.61	ND		0.23
Carbon disulfide	50	ND		0.62	ND		0.18	ND		0.62	ND		0.62	ND		0.62	ND		0.62	ND		0.23
Carbon tetrachloride	5	ND		0.44	ND		0.3	ND		0.44	ND		0.44	ND		0.44	ND		0.44	ND		0.44
Chlorobenzene	5	ND		0.29	ND		0.089	ND		0.29	ND		0.29	ND		0.29	ND		0.29	ND		0.21
Chloroethane	5	ND		0.6	ND		0.66	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.22
Chloroform	7	ND		0.24	ND		0.93	ND		0.24	ND		0.24	ND		0.24	ND		0.24	ND		0.42
Chloromethane	NS	ND		0.64	ND		0.74	ND		0.64	ND		0.64	ND		0.64	ND		0.64	ND		0.51
Cis-1,2-Dichloroethene	5	ND		0.42	ND		0.47	ND		0.42	ND		0.42	ND		0.42	ND		0.42	ND		0.31
Cis-1,3-Dichloropropene	NS	ND		0.45	ND		0.26	ND		0.45	ND		0.45	ND		0.45	ND		0.45	ND		0.2
Dibromochloromethane	50	ND		0.39	ND		0.34	ND		0.39	ND		0.39	ND		0.39	ND		0.39	ND		0.2
Ethylbenzene	5	ND		0.67	ND		0.53	ND		0.67	ND		0.67	ND		0.67	ND		0.67	ND		0.4
M&p-Xylenes	5	ND		0.71	ND		0.5	ND		0.71	ND		0.71	ND		0.71	ND		0.71	ND		0.36
Methylene chloride	5	ND		0.91	ND		0.97	ND		0.91	ND		0.91	ND		0.91	ND		0.91	ND		0.47
O-Xylene	5	ND		0.45	ND		0.11	ND		0.45	ND		0.45	ND		0.45	ND		0.45	ND		0.16
Styrene	5	ND		0.37	ND		0.27	ND		0.37	ND		0.37	ND		0.37	ND		0.37	ND		0.18
Tetrachloroethene	5	ND		0.35	ND		0.5	ND		0.35	ND		0.35	ND		0.35	ND		0.35	ND		0.24
Toluene	5	ND		0.31	1		0.32	ND		0.31	ND		0.31	ND		0.31	ND		0.31	ND		0.18
Trans-1,2-Dichloroethene	5	ND		0.44	ND		0.38	ND		0.44	ND		0.44	ND		0.44	ND		0.44	ND		0.4
Trans-1,3-Dichloropropene	NS	ND		0.22	ND		0.24	ND		0.22	ND		0.22	ND		0.22	ND		0.22	ND		0.15
Trichloroethene	5	ND		0.31	ND		0.38	ND		0.31	ND		0.31	ND		0.31	ND		0.31	ND		0.28
Vinyl chloride	2	ND		0.71	ND		0.54	ND		0.71	ND		0.71	ND		0.71	ND		0.71	ND		0.65
Total VOC TICs	NS	ND			NA			NA			NA			NA			ND			NA		

Notes and Abbreviations:

AWQSGV = Ambient Groundwater Standards and Guidance Values

UG/L = Micrograms per Liter

TICs= Tenatively identified compounds

ND = Not Detected

NS = No Standard

NA= Not analyzed

Qual = Laboratory Qualifer

Conc = Concentration

B = Analyte was detected in the associated method blank.

J = The estimated concentrartion was detected below the MDL, but above the laboratory's reporting limits.

MDL = Method Detection Limit

1) Two groundwater samples were collected at Removal Areas/Trenches B,C,E,I,K and L. The second grounwater sample collected at these Removal Areas/Trenches was collected either because the Removal Area/Trench was bacfilled sooner than planned or to ensure that the on-site treatment system would be effective.

2) Concentration exceeding the AGWSGV are shown in bold font and are in highlighted cells.

E 1A

SUMMARY OF GROUND[redacted] ANALYTICAL RESULTS-VOCs

REMOVAL AREAS/TRENCHES

INTERIM REMEDIAL MEASURE SITES 2 (AREA 2B) AND 3 (AREA 3A)

HHMT-PORT IVORY FACILITY

Sample ID Lab ID Date Collected Material Units	New York State AWQSGV	AREA K -W AC24830-003 8/2/2006 Water ug/L			AREA K-W2 AC25169-001 8/22/2006 Water ug/L			AREA L-W AC24830-006 8/2/2006 Water ug/L			AREA L-W2 AC25169-002 8/22/2006 Water ug/L		
Volatile Organic Compounds (VOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	0.09 Total	ND		0.38	ND		0.33	ND		0.46	ND		0.33
1,1,1-Trichloroethane	5	ND		0.4	ND		0.43	ND		0.33	ND		0.43
1,1,2,2-Tetrachloroethane	5	ND		0.25	ND		0.37	ND		0.21	ND		0.37
1,1,2-Trichloroethane	1	ND		0.34	ND		0.25	ND		0.25	ND		0.25
1,1-Dichloroethane	5	ND		0.39	ND		0.28	ND		0.34	ND		0.28
1,1-Dichloroethene	5	ND		0.39	ND		0.4	ND		0.53	ND		0.4
1,2-Dichloroethane	0.6	ND		0.49	ND		0.42	ND		0.21	ND		0.42
1,2-Dichloropropane	1	ND		0.5	ND		0.48	ND		0.46	ND		0.48
2-Butanone	50	ND		1.7	ND		0.92	ND		0.38	ND		0.92
2-Chloroethylvinylether	NS	ND		0.44	ND		0.33	ND		0.26	ND		0.33
2-Hexanone	50	ND		1.4	ND		0.58	ND		0.36	ND		0.58
4-Methyl-2-Pentanone	50	ND		0.21	ND		0.55	ND		0.17	ND		0.55
Acetone	50	ND		5.6	ND		2.5	ND		2.7	ND		2.5
Acrolein	5	ND		6	ND		5.9	ND		1.5	ND		5.9
Acrylonitrile	5	ND		1.6	ND		0.47	ND		0.54	ND		0.47
Benzene	1	ND		0.14	ND		0.15	ND		0.25	ND		0.15
Bromodichloromethane	50	ND		0.33	ND		0.2	ND		0.33	ND		0.2
Bromoform	50	ND		0.62	ND		0.36	ND		0.29	ND		0.36
Bromomethane	5	ND		0.87	ND		0.61	ND		0.23	ND		0.61
Carbon disulfide	50	ND		0.2	ND		0.62	ND		0.23	ND		0.62
Carbon tetrachloride	5	ND		0.53	ND		0.44	ND		0.44	ND		0.44
Chlorobenzene	5	ND		0.17	ND		0.29	ND		0.21	ND		0.29
Chloroethane	5	ND		0.42	ND		0.6	ND		0.22	ND		0.6
Chloroform	7	ND		0.4	ND		0.24	ND		0.42	ND		0.24
Chloromethane	NS	ND		0.65	ND		0.64	ND		0.51	ND		0.64
Cis-1,2-Dichloroethene	5	ND		0.34	ND		0.42	ND		0.31	ND		0.42
Cis-1,3-Dichloropropene	NS	ND		0.34	ND		0.45	ND		0.2	ND		0.45
Dibromochloromethane	50	ND		0.49	ND		0.39	ND		0.2	ND		0.39
Ethylbenzene	5	ND		0.31	ND		0.67	ND		0.4	ND		0.67
M&p-Xylenes	5	ND		0.49	ND		0.71	ND		0.36	ND		0.71
Methylene chloride	5	ND		1.2	1.7	B	0.91	ND		0.47	ND		0.91
O-Xylene	5	ND		0.21	ND		0.45	ND		0.16	ND		0.45
Styrene	5	ND		0.21	ND		0.37	ND		0.18	ND		0.37
Tetrachloroethene	5	ND		0.46	ND		0.35	ND		0.24	ND		0.35
Toluene	5	ND		0.21	ND		0.31	ND		0.18	ND		0.31
Trans-1,2-Dichloroethene	5	ND		1.4	ND		0.44	ND		0.4	ND		0.44
Trans-1,3-Dichloropropene	NS	ND		0.51	ND		0.22	ND		0.15	ND		0.22
Trichloroethene	5	ND		0.76	ND		0.31	ND		0.28	ND		0.31
Vinyl chloride	2	ND		0.48	ND		0.71	ND		0.65	ND		0.71
Total VOC TICs	NS	NA			148.7	J		NA			ND		

Notes and Abbreviations:

AWQSGV = Ambient Groundwater Standards and Guidance Values
UG/L = Micrograms per Liter
TICs= Tenatively identified compounds
ND = Not Detected
NS = No Standard
NA= Not analyzed
Qual = Laboratory Qualifer
Conc = Concentration
B = Analyte was detected in the associated method blank.
J = The estimated concentrartion was detected below the MDL, but above the laboratory's reporting limits.
MDL = Method Detection Limit
1) Two groundwater samples were collected at Removal Areas/Trenches B,C,E,I,K and L. The second grounwater sample collected at these Removal Areas/Trenches was collected either because the Removal Area/Trench was bacfilled sooner than planned or to ensure that the on-site treatment system would be effective.
2) Concentration exceeding the AGWSGV are shown in bold font and are in highlighted cells.

TABLE 1B
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
REMOVAL AREAS/TRENCHES
INTERIM REMEDIAL MEASURE SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID		AREA A-W			AREA B-W			AREA B-W(2)			AREA C-W		
Lab ID	New York	AC24354-001			AC24256-004			AC24506-001			AC24297-003		
Date Collected	State	06/29/06			06/27/06			7/13/06			06/28/06		
Material	AWQSGV	Water			Water			Water			Water		
Units		ug/L			ug/L			ug/L			ug/L		
SemiVolatile Organic Compounds		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	5	ND		0.48	ND		0.48	ND		0.46	ND		0.48
1,2-Dichlorobenzene	3	ND		0.57	ND		0.57	ND		0.57	ND		0.57
1,2-Diphenylhydrazine	NS	ND		0.14	ND		0.14	ND		0.14	ND		0.14
1,3-Dichlorobenzene	3	ND		0.7	ND		0.7	ND		0.7	ND		0.7
1,4-Dichlorobenzene	3	ND		0.75	ND		0.75	ND		0.75	ND		0.75
2,4,5-Trichlorophenol	1*	ND		1.9	ND		1.9	ND		1.9	ND		1.9
2,4,6-Trichlorophenol	1*	ND		0.88	ND		0.88	ND		0.88	ND		0.88
2,4-Dichlorophenol	1**	ND		1.3	ND		1.3	ND		1.3	ND		1.3
2,4-Dimethylphenol	1**	ND		2	ND		2	ND		2	ND		2
2,4-Dinitrophenol	1*	ND		0.63	ND		0.63	ND		0.63	ND		0.63
2,4-Dinitrotoluene	5	ND		0.36	ND		0.36	ND		0.36	ND		0.36
2,6-Dinitrotoluene	5	ND		0.33	ND		0.33	ND		0.33	ND		0.33
2-Chloronaphthalene	10	ND		0.41	ND		0.41	ND		0.41	ND		0.41
2-Chlorophenol	1	ND		1.5	ND		1.5	ND		1.5	ND		1.5
2-Methylnaphthalene	NS	ND		3.5	**780**		3.5	ND		3.5	ND		3.5
2-Methylphenol	1*	ND		3.9	ND		3.9	ND		3.9	ND		3.9
2-Nitroaniline	5	ND		1.7	ND		1.7	ND		1.7	ND		1.7
2-Nitrophenol	1*	ND		0.81	ND		0.81	ND		0.81	ND		0.81
3&4-Methylphenol	1*	ND		4.1	ND		4.1	ND		4.1	ND		4.1
3,3'-Dichlorobenzidine	5	ND		0.8	ND		0.8	ND		0.8	ND		0.8
3-Nitroaniline	5	ND		2.6	ND		2.6	ND		2.6	ND		2.6
4,6-Dinitro-2-methylphenol	1	ND		0.81	ND		0.81	ND		0.81	ND		0.81
4-Bromophenyl-phenylether	NS	ND		0.53	ND		0.53	ND		0.53	ND		0.53
4-Chloro-3-methylphenol	1*	ND		1.1	ND		1.1	ND		1.1	ND		1.1
4-Chloroaniline	5	ND		3	ND		3	ND		3	ND		3
4-Chlorophenyl-phenylether	1*	ND		0.38	ND		0.38	ND		0.38	ND		0.38
4-Nitroaniline	5	ND		1.6	ND		1.6	ND		1.6	ND		1.6
4-Nitrophenol	1*	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Acenaphthene	20	ND		0.25	**210**		0.25	ND		0.25	ND		0.25
Acenaphthylene	20	ND		0.24	ND		0.24	ND		0.24	ND		0.24
Anthracene	50	ND		0.19	**130**		0.19	ND		0.19	ND		0.19
Benzidine	5	ND		8.6	ND		8.6	ND		8.6	ND		8.6
Benzo[a]anthracene	0.002	ND		0.22	ND		0.22	ND		0.22	ND		0.22
Benzo[a]pyrene	0.002	ND		0.16	ND		0.16	ND		0.16	ND		0.16
Benzo[b]fluoranthene	0.002	ND		0.21	ND		0.21	ND		0.21	ND		0.21
Benzo[g,h,i]perylene	5	ND		0.29	ND		0.29	ND		0.29	ND		0.29
Benzo[k]fluoranthene	0.002	ND		0.31	ND		0.31	ND		0.31	ND		0.31
Bis(2-Chloroethoxy)methane	5	ND		0.19	ND		0.19	ND		0.19	ND		0.19
Bis(2-Chloroethyl)Ether	1	ND		0.43	ND		0.43	ND		0.43	ND		0.43
Bis(2-Chloroisopropyl)ether	NS	ND		0.23	ND		0.23	ND		0.23	ND		0.23
Bis(2-Ethylhexyl)phthalate	5	ND		0.37	ND		0.37	1.5		0.37	ND		0.37
Butylbenzylphthalate	50	ND		0.23	ND		0.23	ND		0.23	ND		0.23
Carbazole	NS	ND		0.16	ND		0.16	ND		0.16	ND		0.16
Chrysene	0.002	ND		0.19	ND		0.19	ND		0.19	ND		0.19
Dibenzo[a,h]Anthracene	50	ND		0.25	ND		0.25	ND		0.32	ND		0.25
Dibenzofuran	5	ND		1.6	ND		1.6	ND		0.19	ND		1.6
Diethylphthalate	50	ND		0.28	ND		0.28	ND		0.25	ND		0.28
Dimethylphthalate	50	ND		0.18	ND		0.18	ND		1.6	ND		0.18
Di-n-butylphthalate	50	ND		0.32	ND		0.32	ND		0.28	ND		0.32
Di-n-octylphthalate	50	ND		0.19	ND		0.19	ND		0.18	ND		0.19
Fluoranthene	50	ND		0.15	**130**		0.15	ND		0.15	ND		0.15
Fluorene	50	ND		0.15	**320**		0.15	ND		0.15	ND		0.15
Hexachlorobenzene	0.04	ND		0.27	ND		0.27	ND		0.27	ND		0.27
Hexachlorobutadiene	0.5	ND		0.62	ND		0.62	ND		0.62	ND		0.62
Hexachlorocyclopentadiene	5	ND		4.6	ND		4.6	ND		4.6	ND		4.6
Hexachloroethane	5	ND		0.68	ND		0.68	ND		0.68	ND		0.68
Indeno[1,2,3-cd]pyrene	0.002	ND		0.18	ND		0.18	ND		0.18	ND		0.18
Isophorone	50	ND		0.14	ND		0.14	ND		0.14	ND		0.14
Naphthalene	10	ND		0.44	ND		0.44	ND		0.26	ND		0.44
Nitrobenzene	0.4	ND		0.24	ND		0.24	ND		8.8	ND		0.24
N-Nitrosodimethylamine	NS	ND		8.8	ND		8.8	ND		0.15	ND		8.8
N-Nitroso-Di-N-Propylamine	NS	ND		0.26	ND		0.26	ND		0.44	ND		0.26
N-Nitrosodiphenylamine	50	ND		0.15	ND		0.15	ND		0.24	ND		0.15
Pentachlorophenol	1*	ND		0.76	ND		0.76	ND		0.76	ND		0.76
Phenanthrene	50	ND		0.23	**160**		0.23	ND		0.23	ND		0.23
Phenol	1*	ND		1.5	ND		1.5	ND		1.5	ND		1.5
Pyrene	50	ND		0.15	**260**		0.15	ND		0.15	ND		0.15
Total TICs	NS	NA			NA			7.8	J		NA		

Notes and Abbreviations:
AWQSGV = Ambient Water Quality Standards and Guidance Values
UG/L = Micrograms per Liter
ND = Not Detected
J = The estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.
TICs = Tentatively Identified Compounds
NA = Not analyzed
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Qual = Laboratory Qualifier
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MDL = Method Detection Limit
1) Concentrations exceeding the AGWSGV are provided in bold font and are in highlighted cells.
2) Two groundwater samples were collected at Removal Areas/Trenches C,E,I,K, and L. The second sample collected at the Removal Areas Trenches was collected either because the Removal Area/Trench was bacfilled sooner than planned or to ensure that the on-site treatment system would be effective.
3) Higher SVOC concentrations detected in sample Area B-W collected on 6/27/06 was potentially associated with LNAPL present on groundwater.

TABLE 1B
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
REMOVAL AREAS/TRENCHES
INTERIM REMEDIAL MEASURE SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID		AREA C-W2			AREA D-W			AREA E -W			AREA E-W(2)		
Lab ID	New York	AC25432-001			AC24256-004			AC24256-003			AC24506-002		
Date Collected	State	08/31/06			06/23/06			06/26/06			07/13/06		
Material	AWQSGV	Water			Water			Water			Water		
Units		ug/L			ug/L			ug/L			ug/L		
SemiVolatile Organic Compounds		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	5	ND		0.48	ND		0.48	ND		0.48	ND		0.48
1,2-Dichlorobenzene	3	ND		0.57	ND		0.57	ND		0.57	ND		0.57
1,2-Diphenylhydrazine	NS	ND		0.14	ND		0.14	ND		0.14	ND		0.14
1,3-Dichlorobenzene	3	ND		0.7	ND		0.7	ND		0.7	ND		0.7
1,4-Dichlorobenzene	3	ND		0.75	ND		0.75	ND		0.75	ND		0.75
2,4,5-Trichlorophenol	1*	ND		1.9	ND		1.9	ND		1.9	ND		1.9
2,4,6-Trichlorophenol	1*	ND		0.88	ND		0.88	ND		0.88	ND		0.88
2,4-Dichlorophenol	1**	ND		1.3	ND		1.3	ND		1.3	ND		1.3
2,4-Dimethylphenol	1**	ND		2	ND		2	ND		2	ND		2
2,4-Dinitrophenol	1*	ND		0.63	ND		0.63	ND		0.63	ND		0.63
2,4-Dinitrotoluene	5	ND		0.36	ND		0.36	ND		0.36	ND		0.36
2,6-Dinitrotoluene	5	ND		0.33	ND		0.33	ND		0.33	ND		0.33
2-Chloronaphthalene	10	ND		0.41	ND		0.41	ND		0.41	ND		0.41
2-Chlorophenol	1	ND		1.5	ND		1.5	ND		1.5	ND		1.5
2-Methylnaphthalene	NS	ND		3.5	1.3	J	3.5	ND		3.5	ND		3.5
2-Methylphenol	1*	ND		3.9	ND		3.9	ND		3.9	ND		3.9
2-Nitroaniline	5	ND		1.7	ND		1.7	ND		1.7	ND		1.7
2-Nitrophenol	1*	ND		0.81	ND		0.81	ND		0.81	ND		0.81
3&4-Methylphenol	1*	ND		4.1	ND		4.1	ND		4.1	ND		4.1
3,3'-Dichlorobenzidine	5	ND		0.8	ND		0.8	ND		0.8	ND		0.8
3-Nitroaniline	5	ND		2.6	ND		2.6	ND		2.6	ND		2.6
4,6-Dinitro-2-methylphenol	1	ND		0.81	ND		0.81	ND		0.81	ND		0.81
4-Bromophenyl-phenylether	NS	ND		0.53	ND		0.53	ND		0.53	ND		0.53
4-Chloro-3-methylphenol	1*	ND		1.1	ND		1.1	ND		1.1	ND		1.1
4-Chloroaniline	5	ND		3	ND		3	ND		3	ND		3
4-Chlorophenyl-phenylether	1*	ND		0.38	ND		0.38	ND		0.38	ND		0.38
4-Nitroaniline	5	ND		1.6	ND		1.6	ND		1.6	ND		1.6
4-Nitrophenol	1*	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Acenaphthene	20	ND		0.25	ND		0.25	ND		0.25	ND		0.25
Acenaphthylene	20	ND		0.24	ND		0.24	ND		0.24	ND		0.24
Anthracene	50	ND		0.19	ND		0.19	ND		0.19	ND		0.19
Benzidine	5	ND		8.6	ND		8.6	ND		8.6	ND		8.6
Benzo[a]anthracene	0.002	ND		0.22	ND		0.22	ND		0.22	ND		0.22
Benzo[a]pyrene	0.002	ND		0.16	ND		0.16	ND		0.16	ND		0.16
Benzo[b]fluoranthene	0.002	ND		0.21	ND		0.21	ND		0.21	ND		0.21
Benzo[g,h,i]perylene	5	ND		0.29	ND		0.29	ND		0.29	ND		0.29
Benzo[k]fluoranthene	0.002	ND		0.31	ND		0.31	ND		0.31	ND		0.31
Bis(2-Chloroethoxy)methane	5	ND		0.19	ND		0.19	ND		0.19	ND		0.19
Bis(2-Chloroethyl)Ether	1	ND		0.43	ND		0.43	ND		0.43	ND		0.43
Bis(2-Chloroisopropyl)ether	NS	ND		0.23	ND		0.23	ND		0.23	ND		0.23
Bis(2-Ethylhexyl)phthalate	5	ND		0.37	ND		0.37	ND		0.37	1.4		0.37
Butylbenzylphthalate	50	ND		0.23	ND		0.23	ND		0.23	ND		0.23
Carbazole	NS	ND		0.16	ND		0.16	ND		0.16	ND		0.16
Chrysene	0.002	ND		0.19	ND		0.19	ND		0.19	ND		0.19
Dibenzo[a,h]Anthracene	50	ND		0.25	ND		0.25	ND		0.25	ND		0.32
Dibenzofuran	5	ND		1.6	ND		1.6	ND		1.6	ND		0.19
Diethylphthalate	50	ND		0.28	ND		0.28	ND		0.28	ND		0.25
Dimethylphthalate	50	ND		0.18	ND		0.18	ND		0.18	ND		1.6
Di-n-butylphthalate	50	ND		0.32	ND		0.32	ND		0.32	ND		0.28
Di-n-octylphthalate	50	ND		0.19	ND		0.19	ND		0.19	ND		0.18
Fluoranthene	50	ND		0.15	ND		0.15	ND		0.15	ND		0.15
Fluorene	50	ND		0.15	ND		0.15	ND		0.15	ND		0.15
Hexachlorobenzene	0.04	ND		0.27	ND		0.27	ND		0.27	ND		0.27
Hexachlorobutadiene	0.5	ND		0.62	ND		0.62	ND		0.62	ND		0.62
Hexachlorocyclopentadiene	5	ND		4.6	ND		4.6	ND		4.6	ND		4.6
Hexachloroethane	5	ND		0.68	ND		0.68	ND		0.68	ND		0.68
Indeno[1,2,3-cd]pyrene	0.002	ND		0.18	ND		0.18	ND		0.18	ND		0.18
Isophorone	50	ND		0.14	ND		0.14	ND		0.14	ND		0.14
Naphthalene	10	ND		0.44	ND		0.44	ND		0.44	ND		0.26
Nitrobenzene	0.4	ND		0.24	ND		0.24	ND		0.24	ND		8.8
N-Nitrosodimethylamine	NS	ND		8.8	ND		8.8	ND		8.8	ND		0.15
N-Nitroso-Di-N-Propylamine	NS	ND		0.26	ND		0.26	ND		0.26	ND		0.44
N-Nitrosodiphenylamine	50	ND		0.15	ND		0.15	ND		0.15	ND		0.24
Pentachlorophenol	1*	ND		0.76	ND		0.76	ND		0.76	ND		0.76
Phenanthrene	50	ND		0.23	ND		0.23	ND		0.23	ND		0.23
Phenol	1*	ND		1.5	ND		1.5	ND		1.5	ND		1.5
Pyrene	50	ND		0.15	ND		0.15	ND		0.15	ND		0.15
Total TICs	NS	274.6	J		NA			NA			17.6	J	

Notes and Abbreviations:
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TABLE 1B
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REMOVAL AREAS/TRENCHES
INTERIM REMEDIAL MEASURE SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID		AREA F W			AREA G-W			AREA H-W			AREA I-W		
Lab ID	New York	AC24256-001			AC24190-005			AC24190-006			AC24190-002		
Date Collected	State	06/26/06			06/23/06			06/23/06			06/23/06		
Material	AWQSGV	Water			Water			Water			Water		
Units		ug/L			ug/L			ug/L			ug/L		
SemiVolatile Organic Compounds		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	5	ND		0.48	ND		4.8	ND		2.4	ND		3.2
1,2-Dichlorobenzene	3	ND		0.57	ND		5.7	ND		2.9	ND		3.8
1,2-Diphenylhydrazine	NS	ND		0.14	ND		1.4	ND		0.68	ND		0.9
1,3-Dichlorobenzene	3	ND		0.7	ND		7	ND		3.5	ND		4.7
1,4-Dichlorobenzene	3	ND		0.75	ND		7.5	ND		3.8	ND		5
2,4,5-Trichlorophenol	1*	ND		1.9	ND		19	ND		9.5	ND		13
2,4,6-Trichlorophenol	1*	ND		0.88	ND		8.8	ND		4.4	ND		5.8
2,4-Dichlorophenol	1**	ND		1.3	ND		13	ND		6.3	ND		8.3
2,4-Dimethylphenol	1**	ND		2	ND		20	ND		9.9	ND		13
2,4-Dinitrophenol	1*	ND		0.63	ND		6.3	ND		3.2	ND		4.2
2,4-Dinitrotoluene	5	ND		0.36	ND		3.6	ND		1.8	ND		2.4
2,6-Dinitrotoluene	5	ND		0.33	ND		3.3	ND		1.7	ND		2.2
2-Chloronaphthalene	10	ND		0.41	ND		4.1	ND		2	ND		2.7
2-Chlorophenol	1	ND		1.5	ND		15	ND		7.3	ND		9.8
2-Methylnaphthalene	NS	20		3.5	ND		35	500		17	99		23
2-Methylphenol	1*	ND		3.9	ND		39	ND		19	ND		26
2-Nitroaniline	5	ND		1.7	ND		17	ND		8.3	ND		11
2-Nitrophenol	1*	ND		0.81	ND		8.1	ND		4	ND		5.4
3&4-Methylphenol	1*	ND		4.1	ND		41	ND		20	ND		27
3,3'-Dichlorobenzidine	5	ND		0.8	ND		8	ND		4	ND		5.3
3-Nitroaniline	5	ND		2.6	ND		26	ND		13	ND		17
4,6-Dinitro-2-methylphenol	1	ND		0.81	ND		8.1	ND		4.1	ND		5.4
4-Bromophenyl-phenylether	NS	ND		0.53	ND		5.3	ND		2.6	ND		3.5
4-Chloro-3-methylphenol	1*	ND		1.1	ND		11	ND		5.5	ND		7.3
4-Chloroaniline	5	ND		3	ND		30	ND		15	ND		20
4-Chlorophenyl-phenylether	1*	ND		0.38	ND		3.8	ND		1.9	ND		2.5
4-Nitroaniline	5	ND		1.6	ND		16	ND		7.8	ND		10
4-Nitrophenol	1*	ND		1.1	ND		11	ND		5.4	ND		7.2
Acenaphthene	20	3.4		0.25	**27**		2.5	**33**		1.3	**46**		1.7
Acenaphthylene	20	ND		0.24	ND		2.4	ND		1.2	ND		1.6
Anthracene	50	ND		0.19	14		1.9	21		0.93	25		1.2
Benzidine	5	ND		8.6	ND		86	ND		43	ND		57
Benzo[a]anthracene	0.002	ND		0.22	ND		2.2	ND		1.1	ND		1.5
Benzo[a]pyrene	0.002	ND		0.16	ND		1.6	ND		0.81	ND		1.1
Benzo[b]fluoranthene	0.002	ND		0.21	ND		2.1	ND		1.1	ND		1.4
Benzo[g,h,i]perylene	5	ND		0.29	ND		2.9	ND		1.4	ND		1.9
Benzo[k]fluoranthene	0.002	ND		0.31	ND		3.1	ND		1.6	ND		2.1
Bis(2-Chloroethoxy)methane	5	ND		0.19	ND		1.9	ND		0.94	ND		1.3
Bis(2-Chloroethyl)Ether	1	ND		0.43	ND		4.3	ND		2.1	ND		2.9
Bis(2-Chloroisopropyl)ether	NS	ND		0.23	ND		2.3	ND		1.1	ND		1.5
Bis(2-Ethylhexyl)phthalate	5	ND		0.37	ND		3.7	ND		1.9	ND		2.5
Butylbenzylphthalate	50	ND		0.23	ND		2.3	ND		1.2	ND		1.5
Carbazole	NS	ND		0.16	ND		1.6	ND		0.82	ND		1.1
Chrysene	0.002	ND		0.19	ND		1.9	ND		0.94	ND		1.3
Dibenzo[a,h]Anthracene	50	ND		0.25	ND		2.5	ND		1.2	ND		1.7
Dibenzofuran	5	3.5		1.6	ND		16	ND		7.8	ND		10
Diethylphthalate	50	ND		0.28	ND		2.8	ND		1.4	ND		1.9
Dimethylphthalate	50	ND		0.18	ND		1.8	ND		0.88	ND		1.2
Di-n-butylphthalate	50	ND		0.32	ND		3.2	ND		1.6	ND		2.1
Di-n-octylphthalate	50	ND		0.19	ND		1.9	ND		0.95	ND		1.3
Fluoranthene	50	ND		0.15	ND		1.5	ND		0.77	ND		1
Fluorene	50	7.9		0.15	45		1.5	**66**		0.75	**90**		0.99
Hexachlorobenzene	0.04	ND		0.27	ND		2.7	ND		1.4	ND		1.8
Hexachlorobutadiene	0.5	ND		0.62	ND		6.2	ND		3.1	ND		4.2
Hexachlorocyclopentadiene	5	ND		4.6	ND		46	ND		23	ND		31
Hexachloroethane	5	ND		0.68	ND		6.8	ND		3.4	ND		4.5
Indeno[1,2,3-cd]pyrene	0.002	ND		0.18	ND		1.8	ND		0.9	ND		1.2
Isophorone	50	ND		0.14	ND		1.4	ND		0.71	ND		0.94
Naphthalene	10	ND		0.44	ND		4.4	ND		2.2	ND		3
Nitrobenzene	0.4	ND		0.24	ND		2.4	ND		1.2	ND		1.6
N-Nitrosodimethylamine	NS	ND		8.8	ND		88	ND		44	ND		58
N-Nitroso-Di-N-Propylamine	NS	ND		0.26	ND		2.6	ND		1.3	ND		1.7
N-Nitrosodiphenylamine	50	ND		0.15	ND		1.5	ND		0.77	ND		1
Pentachlorophenol	1*	ND		0.76	ND		7.6	ND		3.8	ND		5.1
Phenanthrene	50	11		0.23	**58**		2.3	**94**		1.1	**150**		1.5
Phenol	1*	ND		1.5	ND		15	ND		7.3	ND		9.7
Pyrene	50	2.8		0.15	ND		1.5	5.3		0.73	7.4		0.98
Total TICs	NS	NA			NA			NA			NA		

Notes and Abbreviations:
AWQSGV = Ambient Water Quality Standards and Guidance Values
UG/L = Micrograms per Liter
ND = Not Detected
J = The estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.
TICs = Tentatively Identified Compounds
NA = Not analyzed
NS = No standard or guidance value
Qual = Laboratory Qualifier
Conc = Concentration
MDL = Method Detection Limit
1) Concentrations exceeding the AGWSGV are provided in bold font and are in highlighted cells.
2)Two groundwater samples were collected at Removal Areas/Trenches B,C,E,I,K, and L. The second sample collected at the Removal Areas Trenches was collected either because the Removal Area/Trench was bacfilled sooner than planned or to ensure that the on-site treatment system would be effective.
3) Higher SVOC concentrations detected in sample Area B-W collected on 6/27/06 was potentially associated with LNAPL present on groundwater.

TABLE 1B
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
REMOVAL AREAS/TRENCHES
INTERIM REMEDIAL MEASURE SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID		AREA I-W(2)			AREA J-W			AREA K-W			AREA K-W2		
Lab ID	New York	AC24506-003			AC24830-001			AC24830-003			AC25169-001		
Date Collected	State	07/13/06			8/2/2006			8/2/2006			8/22/2006		
Material	AWQSGV	Water			Water			Water			Water		
Units		ug/L			ug/L			ug/L			ug/L		
SemiVolatile Organic Compounds		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	5	ND		0.53	ND		0.51	ND		0.53	ND		0.3
1,2-Dichlorobenzene	3	ND		0.64	ND		0.61	ND		0.64	ND		0.36
1,2-Diphenylhydrazine	NS	ND		0.15	ND		0.14	ND		0.15	ND		0.085
1,3-Dichlorobenzene	3	ND		0.78	ND		0.74	ND		0.78	ND		0.44
1,4-Dichlorobenzene	3	ND		0.84	ND		0.8	ND		0.84	ND		0.47
2,4,5-Trichlorophenol	1*	ND		2.1	ND		2	ND		2.1	ND		1.2
2,4,6-Trichlorophenol	1*	ND		0.97	ND		0.93	ND		0.97	ND		0.55
2,4-Dichlorophenol	1**	ND		1.4	ND		1.3	ND		1.4	ND		0.78
2,4-Dimethylphenol	1**	ND		2.2	ND		2.1	ND		2.2	ND		1.2
2,4-Dinitrophenol	1*	ND		0.7	ND		0.67	ND		0.7	ND		0.4
2,4-Dinitrotoluene	5	ND		0.4	ND		0.39	ND		0.4	ND		0.23
2,6-Dinitrotoluene	5	ND		0.37	ND		0.35	ND		0.37	ND		0.21
2-Chloronaphthalene	10	ND		0.45	ND		0.43	ND		0.45	ND		0.25
2-Chlorophenol	1	ND		1.6	ND		1.6	ND		1.6	ND		0.92
2-Methylnaphthalene	NS	ND		3.9	17		3.7	3.1	J	3.9	27		2.2
2-Methylphenol	1*	ND		4.3	ND		4.1	ND		4.3	ND		2.4
2-Nitroaniline	5	ND		1.8	ND		1.8	ND		1.8	ND		1
2-Nitrophenol	1*	ND		0.9	ND		0.86	ND		0.9	ND		0.51
3&4-Methylphenol	1*	ND		4.6	ND		4.4	ND		4.6	ND		2.6
3,3'-Dichlorobenzidine	5	ND		0.89	ND		0.85	ND		0.89	ND		0.5
3-Nitroaniline	5	ND		2.9	ND		2.8	ND		2.9	ND		1.6
4,6-Dinitro-2-methylphenol	1	ND		0.9	ND		0.86	ND		0.9	ND		0.51
4-Bromophenyl-phenylether	NS	ND		0.58	ND		0.56	ND		0.58	ND		0.33
4-Chloro-3-methylphenol	1*	ND		1.2	ND		1.2	ND		1.2	ND		0.69
4-Chloroaniline	5	ND		3.4	ND		3.2	ND		3.4	ND		1.9
4-Chlorophenyl-phenylether	1*	ND		0.42	ND		0.4	ND		0.42	ND		0.24
4-Nitroaniline	5	ND		1.7	ND		1.7	ND		1.7	ND		0.97
4-Nitrophenol	1*	ND		1.2	ND		1.2	ND		1.2	ND		0.68
Acenaphthene	20	ND		0.28	1.4		0.27	ND		0.28	2.6		0.16
Acenaphthylene	20	ND		0.27	ND		0.26	ND		0.27	ND		0.15
Anthracene	50	2		0.21	ND		0.2	ND		0.21	1		0.12
Benzidine	5	ND		9.6	ND		9.2	ND		9.6	ND		5.4
Benzo[a]anthracene	0.002	ND		0.25	ND		0.24	ND		0.25	ND		0.14
Benzo[a]pyrene	0.002	ND		0.18	ND		0.17	ND		0.18	ND		0.1
Benzo[b]fluoranthene	0.002	ND		0.24	ND		0.23	ND		0.24	ND		0.13
Benzo[g,h,i]perylene	5	ND		0.32	ND		0.31	ND		0.32	ND		0.18
Benzo[k]fluoranthene	0.002	ND		0.35	ND		0.34	ND		0.35	ND		0.2
Bis(2-Chloroethoxy)methane	5	ND		0.21	ND		0.2	ND		0.21	ND		0.12
Bis(2-Chloroethyl)Ether	1	ND		0.48	ND		0.46	ND		0.48	ND		0.27
Bis(2-Chloroisopropyl)ether	NS	ND		0.25	ND		0.24	ND		0.25	ND		0.14
Bis(2-Ethylhexyl)phthalate	5	1.8		0.42	ND		0.4	ND		0.42	ND		0.23
Butylbenzylphthalate	50	ND		0.26	ND		0.25	ND		0.26	ND		0.14
Carbazole	NS	ND		0.18	ND		0.17	ND		0.18	ND		0.1
Chrysene	0.002	ND		0.21	ND		0.2	ND		0.21	ND		0.12
Dibenzo[a,h]Anthracene	50	ND		0.36	ND		0.26	ND		0.28	ND		0.16
Dibenzofuran	5	ND		0.21	1.9		1.7	ND		1.7	ND		0.98
Diethylphthalate	50	ND		0.28	ND		0.3	ND		0.32	ND		0.18
Dimethylphthalate	50	ND		1.7	ND		0.19	ND		0.2	ND		0.11
Di-n-butylphthalate	50	ND		0.32	ND		0.34	ND		0.36	ND		0.2
Di-n-octylphthalate	50	ND		0.2	ND		0.2	ND		0.21	ND		0.12
Fluoranthene	50	ND		0.17	ND		0.16	ND		0.17	ND		0.097
Fluorene	50	ND		0.17	2.9		0.16	ND		0.17	4.1		0.093
Hexachlorobenzene	0.04	ND		0.3	ND		0.29	ND		0.3	ND		0.17
Hexachlorobutadiene	0.5	ND		0.69	ND		0.66	ND		0.69	ND		0.39
Hexachlorocyclopentadiene	5	ND		5.1	ND		4.9	ND		5.1	ND		2.9
Hexachloroethane	5	ND		0.76	ND		0.72	ND		0.76	ND		0.43
Indeno[1,2,3-cd]pyrene	0.002	ND		0.2	ND		0.19	ND		0.2	ND		0.11
Isophorone	50	ND		0.16	ND		0.15	ND		0.16	ND		0.088
Naphthalene	10	ND		0.28	ND		0.47	ND		0.49	ND		0.28
Nitrobenzene	0.4	ND		9.7	ND		0.25	ND		0.26	ND		0.15
N-Nitrosodimethylamine	NS	ND		0.17	ND		9.3	ND		9.7	ND		5.5
N-Nitroso-Di-N-Propylamine	NS	ND		0.49	ND		0.27	ND		0.28	ND		0.16
N-Nitrosodiphenylamine	50	ND		0.26	ND		0.16	ND		0.17	ND		0.097
Pentachlorophenol	1*	ND		0.85	ND		0.81	ND		0.85	ND		0.48
Phenanthrene	50	7.3		0.25	5.3		0.24	ND		0.25	7.5		0.14
Phenol	1*	ND		1.6	ND		1.6	ND		1.6	ND		0.91
Pyrene	50	ND		0.16	ND		0.16	ND		0.16	ND		0.092
Total TICs	NS	791	J		NA			NA			773	J	

Notes and Abbreviations:
AWQSGV = Ambient Water Quality Standards and Guidance Values
UG/L = Micrograms per Liter
ND = Not Detected
J = The estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.
TICs = Tentatively Identified Compounds
NA = Not analyzed
NS = No standard or guidance value
Qual = Laboratory Qualifier
Conc = Concentration
MDL = Methc J Detection Limit
1) Concentrations exceeding the AGWSGV are provided in bold font and are in highlighted cells.
Two groundwater samples were collected at Removal Areas/Trenches C,E,I,K, and L. The second sample collected at the Removal Areas Trenches was collected either because the Removal Area/Trench was bacfilled sooner than planned or to ensure that the on-site treatment system would be effective.
3) Higher SVOC concentrations detected in sample Area B-W collected on 6/27/06 was potentially associated with LNAPL present on groundwater.

TABLE 1B
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
REMOVAL AREAS/TRENCHES
INTERIM REMEDIAL MEASURE SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID		AREA L-W			AREA L-W2		
Lab ID	New York	AC24830-006			AC25169-002		
Date Collected	State	8/2/2006			8/22/2006		
Material	AWQSGV	Water			Water		
Units		ug/L			ug/L		
SemiVolatile Organic Compounds		Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	5	ND		0.53	ND		0.48
1,2-Dichlorobenzene	3	ND		0.64	ND		0.57
1,2-Diphenylhydrazine	NS	ND		0.15	ND		0.14
1,3-Dichlorobenzene	3	ND		0.78	ND		0.7
1,4-Dichlorobenzene	3	ND		0.84	ND		0.75
2,4,5-Trichlorophenol	1*	ND		2.1	ND		1.9
2,4,6-Trichlorophenol	1*	ND		0.97	ND		0.88
2,4-Dichlorophenol	1**	ND		1.4	ND		1.3
2,4-Dimethylphenol	1**	ND		2.2	ND		2
2,4-Dinitrophenol	1*	ND		0.7	ND		0.63
2,4-Dinitrotoluene	5	ND		0.4	ND		0.36
2,6-Dinitrotoluene	5	ND		0.37	ND		0.33
2-Chloronaphthalene	10	ND		0.45	ND		0.41
2-Chlorophenol	1	ND		1.6	ND		1.5
2-Methylnaphthalene	NS	ND		3.9	ND		3.5
2-Methylphenol	1*	ND		4.3	ND		3.9
2-Nitroaniline	5	ND		1.8	ND		1.7
2-Nitrophenol	1*	ND		0.9	ND		0.81
3&4-Methylphenol	1*	ND		4.6	ND		4.1
3,3'-Dichlorobenzidine	5	ND		0.89	ND		0.8
3-Nitroaniline	5	ND		2.9	ND		2.6
4,6-Dinitro-2-methylphenol	1	ND		0.9	ND		0.81
4-Bromophenyl-phenylether	NS	ND		0.58	ND		0.53
4-Chloro-3-methylphenol	1*	ND		1.2	ND		1.1
4-Chloroaniline	5	ND		3.4	ND		3
4-Chlorophenyl-phenylether	1*	ND		0.42	ND		0.38
4-Nitroaniline	5	ND		1.7	ND		1.6
4-Nitrophenol	1*	ND		1.2	ND		1.1
Acenaphthene	20	1.7		0.28	ND		0.25
Acenaphthylene	20	ND		0.27	ND		0.24
Anthracene	50	ND		0.21	ND		0.19
Benzidine	5	ND		9.6	ND		8.6
Benzo[a]anthracene	0.002	1.3		0.25	ND		0.22
Benzo[a]pyrene	0.002	ND		0.18	ND		0.16
Benzo[b]fluoranthene	0.002	ND		0.24	ND		0.21
Benzo[g,h,i]perylene	5	ND		0.32	ND		0.29
Benzo[k]fluoranthene	0.002	ND		0.35	ND		0.31
Bis(2-Chloroethoxy)methane	5	ND		0.21	ND		0.19
Bis(2-Chloroethyl)Ether	1	ND		0.48	ND		0.43
Bis(2-Chloroisopropyl)ether	NS	ND		0.25	ND		0.23
Bis(2-Ethylhexyl)phthalate	5	ND		0.42	ND		0.37
Butylbenzylphthalate	50	ND		0.26	ND		0.23
Carbazole	NS	ND		0.18	ND		0.16
Chrysene	0.002	ND		0.21	ND		0.19
Dibenzo[a,h]Anthracene	50	ND		0.28	ND		0.25
Dibenzofuran	5	ND		1.7	ND		1.6
Diethylphthalate	50	ND		0.32	ND		0.28
Dimethylphthalate	50	ND		0.2	ND		0.18
Di-n-butylphthalate	50	ND		0.36	ND		0.32
Di-n-octylphthalate	50	ND		0.21	ND		0.19
Fluoranthene	50	ND		0.17	ND		0.15
Fluorene	50	1.8		0.17	ND		0.15
Hexachlorobenzene	0.04	ND		0.3	ND		0.27
Hexachlorobutadiene	0.5	ND		0.69	ND		0.62
Hexachlorocyclopentadiene	5	ND		5.1	ND		4.6
Hexachloroethane	5	ND		0.76	ND		0.68
Indeno[1,2,3-cd]pyrene	0.002	ND		0.2	ND		0.18
Isophorone	50	ND		0.16	ND		0.14
Naphthalene	10	ND		0.49	ND		0.44
Nitrobenzene	0.4	ND		0.26	ND		0.24
N-Nitrosodimethylamine	NS	ND		9.7	ND		8.8
N-Nitroso-Di-N-Propylamine	NS	ND		0.28	ND		0.26
N-Nitrosodiphenylamine	50	ND		0.17	ND		0.15
Pentachlorophenol	1*	ND		0.85	ND		0.76
Phenanthrene	50	1.9		0.25	ND		0.23
Phenol	1*	ND		1.6	ND		1.5
Pyrene	50	1.2		0.16	1.2		0.15
Total TICs	NS	NA			4.5	J	

Notes and Abbreviations:
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Conc = Concentration
MDL = Method Detection Limit
1) Concentrations exceeding the AGWSGV are provided in bold font and are in highlighted cells.
2) Two groundwater samples were collected at Removal Areas/Trenches C,E,I,K, and L. The second sample collected at the Removal Areas Trenches was collected either because the Removal Area/Trench was backfilled sooner than planned or to ensure that the on-site treatment system would be effective.
3) Higher SVOC concentrations detected in sample Area B-W collected on 6/27/06 was potentially associated with LNAPL present on groundwater.

SVOCs and VOCs detected in any groundwater sample was only slightly more than 2 milligrams per liter (i.e., 2 parts per million, or approximately 0.0002%). For comparison, activated carbon filtration is generally effective for between 1 and 5% organic matter.

The groundwater treatment methods summarized above were proposed in a July 18, 2006 letter to the NYSDEC. The NYSDEC response letter dated July 20, 2006 approved the proposed treatment and on-site discharge. The equipment and methods used to treat groundwater were in accordance with those proposed and are summarized in Section 6.2, below.

4.2 Observation Period

The observation period specified in the *Revised IRM Work Plan* was one month following the most recent removal of LNAPL from the Removal Area/Trench. However, the excavations were expanded based on the extent of free (mobile) LNAPL. Areas B, C, J, K, and L were located adjacent to facility buildings, facility roadways, or public streets and sidewalks. The Port Authority Resident Engineer required the backfilling of these excavations in order to protect the structures. During verbal communication on August 3, 2006 (see the Record of Telephone Conversation in Appendix B) with the NYSDEC regarding this issue, the NYSDEC gave permission to backfill Removal Areas/Trenches after a reduced waiting period if the backfilling was necessary to protect existing structures. As shown in Table 2, the excavations at Areas B, C, J, K, and L were therefore backfilled sooner than specified in the *Revised IRM Work Plan.* Please note, the excavations at the other seven Areas remained open for the specified observation period.

Table 2: Summary of Reduced-duration Observation Periods

Removal Area/Trench	Amount of Days Open Prior to Backfilling	Reason For Early Closure
B	14 days	To protect access road for Building 74/75.
C	7 days	To protect access road for Building 74/75.
J	14 days	To protect the foundation for Building #80.
K	12 days	To protect the foundation for Building #80.
L	5 days	To protect the public sidewalk

		adjacent to Richmond Terrace.

4.3 Sheen

As per the *Revised IRM Work Plan*, sheen as well as product, was to be considered mobile LNAPL. During the IRM, LNAPL was encountered at varying thickness on the groundwater surface in each Removal Area/Trench. Initially after excavation, LNAPL thickness ranged from immeasurable (i.e., less than 0.01 feet) in Areas A though E and G through L to approximately 0.1-foot at Area F. As of the completion of the IRM, LNAPL was not observed to re-accumulate within any Removal Area/Trench except Area F and sheen was observed on the groundwater surface only at Areas A, D, E, and I. However, unlike LNAPL, sheen was never observed to flow into the Removal Areas/Trenches through any of the sidewalls, and, despite significant overexcavation at Areas A, D, E, and I, spots of sheen were observed on the water surface throughout the observation period. At all Removal Areas/Trenches except Area F, mobile LNAPL was successfully removed from the water surface and from the adjacent soil. Further, additional excavation did not appear to effectively remove the sheen at these four Removal Areas/Trenches and removing sheen is considered to be an inefficient method for remediating both free and residual LNAPL. Therefore, it was determined that the IRM was successful in remediating mobile LNAPL at all Removal Areas/Trenches except Area F, despite discontinuous spots of sheen observed on the water surface at Areas A, D, E, and I.

4.4 Backfill Materials

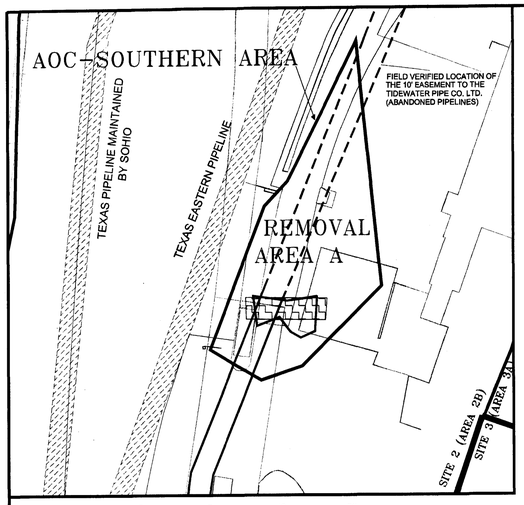
The *Revised IRM Work Plan* indicated that soil excavated during the IRM could be reused as backfill so long as it met three conditions: 1) it appears to be clean (i.e., does not contain LNAPL, is not stained, etc.), 2) it does not exhibit concentrations of volatile organic vapors of more than 5 parts per million (ppm), and 3) it does not contain any organic compounds at concentrations more than an order of magnitude greater than the RSCOs. Soil that was targeted for use as backfill met conditions 1 and 2, but some PAH compounds (benzo(a)anthracene and benzo(a)pyrene) that have relatively low RSCOs were detected at concentrations more than an order of magnitude above their RSCOs. However, the soil sampling analytical results were consistent with previous analytical results from fill materials placed throughout the HHMT-Port

Ivory Facility by P&G. Since the proposed backfill materials were of similar or better environmental quality to the surrounding soil, with the significant difference that the proposed backfill material was not visually impacted by LNAPL, the Port Authority requested that this material be considered acceptable for reuse as backfill. The NYSDEC approved this proposal in an email (see Appendix B) dated September 20, 2007. Section 7.4 summarizes backfill quality.

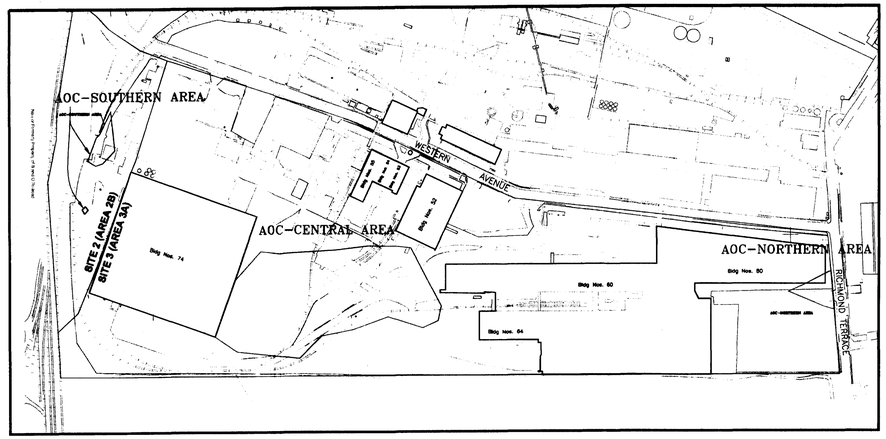
5.0 IRM EXCAVATION ACTIVITIES

Railroad Construction Company Inc. (RCC) excavated soil at all 12 Areas, designated Area A through Area L, between June 29, 2006 and August 17, 2006. Area A was located at AOC-Southern Area (Area 2B); Areas B, C, D, E, F, G, H, and I were located at AOC-Central Area (Area 3A); and, Areas J, K, and L were located at AOC-Northern Area (Area 3A). As previously indicated, LNAPL was expected to be present at the greatest saturation levels (i.e., was deemed most likely to be mobile) in these areas due to the presence of at least one of the following: elevated levels of volatile organic vapors as determined using a PID; elevated concentrations of total petroleum hydrocarbons (TPHC); LNAPL in monitoring wells; and/or, LNAPL re-accumulation in test pits. Two of the Removal Areas/Trenches, Areas B and C, were offset from their proposed locations. Areas B and C were offset approximately 25 feet north of their proposed locations in order to protect the foundation of Building Nos. 74/75 and an adjacent access road.

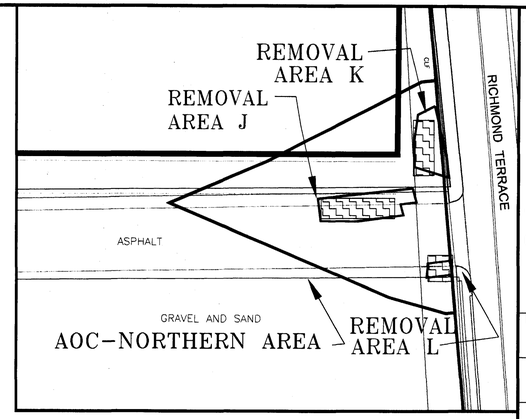
RCC excavated each Removal Area/Trench using either a track-mounted or rubber tire excavator (see Section 6.3 for a discussion of the management of excavated soil). As per the *Revised IRM Work Plan*, additional excavation was conducted at each Removal Area/Trench where mobile LNAPL was encountered. In addition, the sidewalls of some Removal Areas/Trenches collapsed, which enlarged the Removal Area/Trench footprints. Therefore, the actual limits of the Removal Areas/Trenches were larger than the final extents of the Removal Area/Trenches (See Figure 3).



ENLARGEMENT OF THE NORTHERN PORTION OF AOC-SOUTHERN AREA

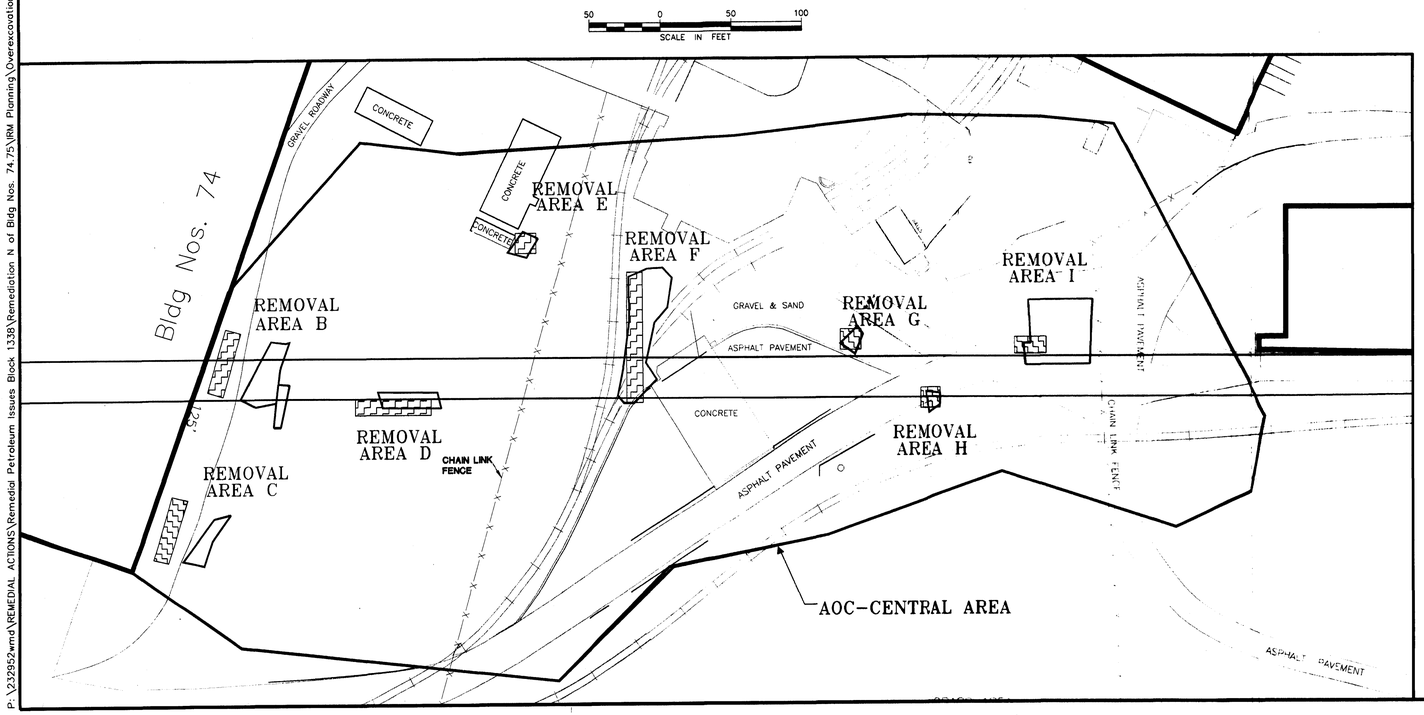


MAP KEY



ENLARGEMENT OF AOC-NORTHERN AREA

ENLARGEMENT OF AOC-CENTRAL AREA



NOTES:

1. Except for Area F, the extents of all Removal Areas/Trenches are final; additional excavation in the vicinity of Area F will be proposed in the Remedial Action Work Plan for Site 3.
2. Areas A, B, C, D, E, G, H, I, J, K, and L have been backfilled. Area F remains open.
3. VCP – Voluntary Cleanup Program
4. Areas B and C were offset approximately 25 feet north of their proposed location to protect the foundation of Building 74/75 and a facility road.
5. Existing buildings are shown in bold.

LEGEND

- RAILROAD TRACKS
- VCP SITE BOUNDARY
- EXISTING BUILDINGS
- ACTUAL LOCATION AND EXTENTS OF EXCAVATION AREA
- PROPOSED LOCATION AND EXTENTS OF EXCAVATION AREA

Sheet of

THE PORT AUTHORITY OF NY & NJ

ENGINEERING PROGRAM MANAGER

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT

Title

SITES 2 (AREA 2B) AND 3 (AREA 3A) (BLOCK 1338, LOT 1) HHMT-PORT IVORY FACILITY

MAP OF REMOVAL AREAS/ TRENCHES (PROPOSED VS ACTUAL EXTENTS)

Designed by	Drawn by	Checked by
	BFJ	GKC

Date 5-3-07

Contract Number

Drawing Number FIGURE 3

P:\23952wmd\REMEDIAL ACTIONS\Remedial Petroleum Issues Block 1338\Remediation N of Bldg Nos. 74.75\RM Planning\Overexcavation B_F.dwg 5/7/07 8:54 am

The depth of each Removal Area/Trench was based on field observations. Each excavation was deepened until either a silty clay, clay, or sand substratum that appeared to be clean was encountered. A substratum was considered to be clean based on the absence of the following: odor, elevated concentrations of volatile organic vapors (as detected using a PID meter) sheen, stained soil, LNAPL, and other visual indications of impacted soil.

The following summarizes the field observations made during excavation. Groundwater was generally encountered between 3 and 6 feet bgs. Two types of LNAPL, identified as Type I and Type II, were encountered during the IRM. Type I LNAPL consisted of brown to dark brown weathered petroleum distillates encountered in a "smear zone" that straddled the water table. Type II LNAPL consisted of a dark brown to black, highly viscous (tar-like) material that was encountered at depths above the water table. Please note, for the purposes of this report, the term LNAPL will correspond to Type I LNAPL unless otherwise specified.

LNAPL and/or LNAPL-impacted soil were encountered in the depth interval between 3 feet to 9 feet bgs in the Removal Areas/Trenches. The LNAPL-impacted soil consisted of fill materials, including slag, cinders, construction and demolition debris, sand, silt, and/or clay. The clean substratum consisted of similar fill materials. The Tidewater pipelines were present at Areas A, B, F, J, K, and I. ~ put Trace of Pipeline on figure 3

Following initial excavation at each Removal Area/Trench, LNAPL removal and groundwater pumping were performed in accordance with the *Revised IRM Work Plan* and as summarized in Sections 6.1 and 6.2. Additional excavation was conducted at each Removal Area/Trench where LNAPL was observed to re-accumulate. Additional LNAPL removal and groundwater pumping was performed following each round of additional excavation. This iterative process continued until LNAPL was not observed to re-accumulate in the Removal Area/Trench during the NYSDEC-approved observation period (See Section 4.2 and Table 2 for more information about the length of the observation period). Tables 3 and 4, below, summarize the schedule for excavating and backfilling the Removal Areas/Trenches and summarize the additional excavation efforts, respectively.

Type II LNAPL was observed approximately 2 to 3 feet bgs above groundwater at both Area B and Area J. At Area B, the Type II LNAPL was observed to slowly flow into the excavation from the north, east, and south sidewalls. Additional excavation was completed to remove the Type II LNAPL to the north and east of Area B. Type II LNAPL was not completely removed to the south of Area B in order to protect the facility roadway located to the south of Area B. At Area J, Type II LNAPL was encountered below and adjacent to the Tidewater pipelines. Type II LNAPL at Area J was removed to the extent that the excavation at Area J could be expanded without jeopardizing the pipelines and Building No. 80, which is located immediately to the west of Area J. Some Type II LNAPL remains along the western sidewall of Area J, which is now backfilled.

Table 3: Summary of Removal Areas/Trenches

Removal Area	Date Initially Excavated	Last Date of Additional Excavation, LNAPL Removal, and Groundwater Pumping	Type(s) of LNAPL Present	End of Observation Period	Backfill Date
A	6/29&30/2006	8/8/2006	1	9/7/2006	9/22/2006
B	6/27/2006	8/17&29/2006 **(Note 1)**	1,2	8/31/2006	8/31/2006
C	6/27/2006	8/24/2006	1	9/7/2006	8/31/2006
D	6/26/2006	7/31/2006	1	8/30/2006	9/1/2006
E	6/26/2006	7/31/2006	1	8/30/2006	9/1/2006
F	6/23&8/4 2006	9/18/2006	1	**Note 3**	**Note 3**
G	6/22/2006	8/4/2006	1	9/4/2006	9/22/2006
H	6/22/2006	8/4/2006	1	9/4/2006	9/22/2006
I	6/21/2006	10/24/2006	1	11/23/2006	12/18/2006 **(Note 2)**
J	8/1/2006	9/7/2006	1, 2	9/21/2006	9/22/2006
K	8/1/2006	8/10/2006	1	8/24/2006	8/22/2006
L	8/1/2006	8/17/2006	1	8/31/2006	8/22/2006

Notes:

1.Groundwater removal on 8/29/2006 was performed not because LNAPL was re-accumulating, but to confirm that all mobile LNAPL was removed from the vicinity of Area B.

2.A portion of Area I was backfilled on October 16, 2006 to protect a facility roadway, while the remainder of Area I was backfilled on December 18, 2006.

3.Although IRM activities have been suspended at Area F, the Port Authority recognizes that additional excavation (anticipated in an area of up to 11,600 square feet) is necessary in the vicinity of Area F. Free LNAPL remaining at Area F is proposed to be removed as part of the Remedial Action for Site 3, Area 3A, which will be specified in the Site 3, Area 3A RAWP.

LNAPL Type I: Various degraded, weathered petroleum distillates.

LNAPL Type II: Viscous "tar like" LNAPL.

Table 4: Summary of Additional Excavation Activities

Removal Area	Date(s) of Additional Excavation	Amount of Overexcavation
B	8/4 and 9/25/2006	Excavated (Type I) LNAPL-impacted soil in a 30-square foot area to the west of Area B and Type II LNAPL in a 227 square-foot area to the north and east of Area B.
F	8/22/2006	Area F was enlarged from approximately 1,400 square feet to approximately 2,037 square feet because LNAPL was observed to flow into the excavation through all sidewalls.
I	8/4,9/15, and 9/27/2006	Area I was enlarged from approximately 550 square feet to approximately 1,990 square feet because LNAPL was observed to flow into the excavation through all sidewalls.
J	9/1/2006	Excavated Type II LNAPL encountered below and adjacent to the Tidewater pipelines in an 80 square-foot area to the north of Area J.

Notes:
1. Table 4 includes only those areas that required additional excavation beyond that proposed in the *Revised IRM Work Plan.*
2. The actual excavation limits of the other eight Removal Areas/Trenches vary slightly from the proposed extents due to field conditions and surface obstructions (i.e., proximity to buildings, roadways, buried pipelines and underground utilities). However, the footprints of these excavations are approximately the same as those proposed in the *Revised IRM Work Plan* (See Figure 3).

The combination of additional excavation and subsequent LNAPL removal/groundwater pumping was successful to the extent practical at all Removal Areas/Trenches except for Area F. LNAPL has been observed to re-accumulate from the north, south, and west sidewalls of Area F since September 18, 2006, the last day of groundwater pumping. The amount of LNAPL and LNAPL-impacted soil encountered at Area F was greater than originally anticipated. To estimate the extent of free (mobile) LNAPL remaining in the vicinity of Area F, the Port Authority excavated additional test pits. Based on field observations at these test pits, as much as 2,160 cubic yards of soil remaining in the vicinity of Area F may contain free (i.e., mobile) LNAPL. The footprint of the area where free LNAPL may be present encompasses as much as 11,600 square feet. Completion of the IRM activities at Area F will be completed as part of the remedial action for Site 3, Area 3A.

6.0 IRM ACTIVITIES CONDUCTED DURING EXCAVATION

This section summarizes activities conducted concurrently with the soil excavation activities described in Section 5.0. These activities, which are summarized in Sections 6.1 through 6.3,

respectively, include the removal and disposal of LNAPL; the pumping and treatment of groundwater; and, the stockpiling of soil pending its reuse or disposal.

6.1 LNAPL

Lorco Petroleum Services (LPS) removed LNAPL from the surface of the Removal Areas/Trenches using a vactor truck. LNAPL removal was conducted immediately following each iteration of excavation at all Removal Areas/Trenches to remove LNAPL from the water's surface. Once LNAPL was removed from the water's surface, groundwater was pumped out of the Removal Area/Trench to temporarily lower the water level and induce LNAPL to re-accumulate within the Removal Area/Trench. LNAPL removal using this process continued until no LNAPL re-accumulated in the corresponding Removal Area/Trench for the NYSDEC-approved observation period (see Section 4.2).

LPS disposed of approximately 24,976 gallons of LNAPL/water mixture from the Removal Areas/Trenches. This total does not include the LNAPL removed on October 17 and 18, 2006, when the frac tanks were being cleaned by Applied Earth Solutions Inc. (AES).

6.2 On-site Groundwater Treatment and Release

AES pumped groundwater out of the Removal Areas/Trenches following LNAPL removal and during backfilling activities. As discussed in Section 4.0, the Port Authority initially proposed to dispose of groundwater offsite. However, the proposed disposal methodology was changed to improve cost-efficiency and time-efficiency. Therefore, the Port Authority proposed, and the NYSDEC approved, the on-site treatment and release of groundwater (see Section 4.3). The process is further described below.

Groundwater was pumped into three interconnected frac tanks prior to treatment. Treatment consisted of allowing solids to settle out of suspension in the frac tanks and pumping the water through two bag filters and two activated carbon filtration units. The complete treatment system consisted of (from upstream to downstream) the interconnected frac tanks, two pressure gauges, two bag filters, two 2,000-pound activated carbon units, and a totalizing flow meter. A

centrifugal pump was utilized at the Removal Areas/Trenches to lift the water from the excavations to the frac tanks, and a submersible transfer pump was used to convey the water from the frac tanks through the treatment system and ultimately to an on-site retention basin located along Western Avenue. Pipes, hoses, valves, and connection fittings were used as necessary. The treatment system and frac tanks were staged to the southwest of Area E.

The volume of water in each of the three frac tanks was measured on a daily basis, and the cumulative volume of water treated was recorded on a daily basis. A total of 415,721 gallons of groundwater was treated and discharged to the retention basin throughout the 7-week duration of the IRM.

To ensure the effectiveness of the treatment system and to confirm that water discharged to the retention basin did not contain any VOCs or SVOCs above the New York AWQSGV, the Port Authority collected influent and effluent samples on a daily basis when groundwater was being discharged. Each influent sample was collected from the top of the water column in the frac tank, closest in series to the treatment system, using a disposable polyethylene bailer. Each effluent sample was collected by transferring water directly into laboratory-prepared sampling jars via a valve located downstream of the bag filters and activated carbon units. Because the contaminants of concern were organic compounds from an LNAPL source, all influent and effluent samples were analyzed for PP VOC+15 and PP SVOC+25. The analytical results are summarized on Table 5A and 5B, respectively. Both the influent and effluent samples were analyzed on an expedited (24-hour turnaround time) basis by Severn Trent Laboratories Inc. (STL-Edison, certification number NYS #11452) under chain-of-custody documentation.

The retention basin itself discharges to a marsh area located to the east of Area 3A, which in turn discharges to an unnamed tributary to Bridge Creek, in turn to bridge Creek itself, and ultimately to the Arthur Kill. Therefore, the influent and effluent analytical results were compared to the AWQSGV for both surface water (Class SD with protection for human consumption of fish in saline waters) and groundwater (Class GA for use as potable water). Class SD was selected because the Arthur Kill adjacent to the HHMT-Port Ivory facility is assigned that classification. Class GA

LE 5A
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS- VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT- PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Dilution Factor Units	New York Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	I-1 Influent 757433 08/01/06 WATER 1 ug/L			E-1 Effluent 757434 08/01/06 WATER 1 ug/L			I-2 Influent 758041 08/03/06 WATER 1 ug/L		
VOLATILE ORGANIC COMPOUNDS (VOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Chloromethane	NS	NS	ND		0.3	ND		0.3	ND		0.3
Bromomethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Vinyl Chloride	2	NS	ND		0.3	ND		0.3	ND		0.3
Chloroethane	5	NS	ND		0.2	ND		0.2	ND		0.2
Methylene Chloride	5	NS	ND		0.5	ND		0.5	ND		0.5
Trichlorofluoromethane	5	NS	ND		0.2	ND		0.2	ND		0.2
1,1-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
1,1-Dichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
trans-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
cis-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
Chloroform	7	NS	ND		0.5	ND		0.5	ND		0.5
1,2-Dichloroethane	0.6	NS	ND		0.3	ND		0.3	ND		0.3
1,1,1-Trichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Carbon Tetrachloride	5	NS	ND		0.3	ND		0.3	ND		0.3
Bromodichloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,2-Dichloropropane	1	NS	ND		0.3	ND		0.3	ND		0.3
cis-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
Trichloroethene	5	40	ND		0.4	ND		0.4	ND		0.4
Dibromochloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,1,2-Trichloroethane	1	NS	ND		0.3	ND		0.3	ND		0.3
Benzene	1	10	ND		0.3	ND		0.3	ND		0.3
trans-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
2-Chloroethyl Vinyl Ether	NS	NS	ND		0.4	ND		0.4	ND		0.4
Bromoform	50	NS	ND		0.2	ND		0.2	ND		0.2
Tetrachloroethene	50	1	ND		0.4	ND		0.4	ND		0.4
1,1,2,2-Tetrachloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Toluene	5	430	2.4		0.4	ND		0.4	ND		0.4
Chlorobenzene	5	400	ND		0.4	ND		0.4	ND		0.4
Ethylbenzene	5	41	ND		0.5	ND		0.5	ND		0.5
Xylene (Total)	5	170	0.4		0.4	ND		0.4	ND		0.4
Total Confident Conc.	NA	NA	2.8			0			0		
VOC TICs (Total Estimated Conc.)	NS	NS	0			0			0		

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

ND= Not detected

Conc= Concentration

MDL= Method Detection Limit

NS= No standard or guidance value

TICs= Tentatively identified compounds

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was collected at a point downstream of the treatment system on each day that treated water was discharged at the HHMT-Port Ivory Facility.

TABLE 5A
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS- VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT- PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Dilution Factor Units	New York Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	E-2 Effluent 758042 08/03/06 WATER 1 ug/L			I-3 Influent 758425 08/04/06 WATER 1 ug/L			E-3 Effluent 758426 08/04/06 WATER 1 ug/L		
VOLATILE ORGANIC COMPOUNDS (VOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Chloromethane	NS	NS	ND		0.3	ND		0.3	ND		0.3
Bromomethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Vinyl Chloride	2	NS	ND		0.3	ND		0.3	ND		0.3
Chloroethane	5	NS	ND		0.2	ND		0.2	ND		0.2
Methylene Chloride	5	NS	ND		0.5	ND		0.5	ND		0.5
Trichlorofluoromethane	5	NS	ND		0.2	ND		0.2	ND		0.2
1,1-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
1,1-Dichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
trans-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
cis-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
Chloroform	7	NS	ND		0.5	ND		0.5	ND		0.5
1,2-Dichloroethane	0.6	NS	ND		0.3	ND		0.3	ND		0.3
1,1,1-Trichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Carbon Tetrachloride	5	NS	ND		0.3	ND		0.3	ND		0.3
Bromodichloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,2-Dichloropropane	1	NS	ND		0.3	ND		0.3	ND		0.3
cis-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
Trichloroethene	5	40	ND		0.4	ND		0.4	ND		0.4
Dibromochloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,1,2-Trichloroethane	1	NS	ND		0.3	ND		0.3	ND		0.3
Benzene	1	10	ND		0.3	ND		0.3	ND		0.3
trans-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
2-Chloroethyl Vinyl Ether	NS	NS	ND		0.4	ND		0.4	ND		0.4
Bromoform	50	NS	ND		0.2	ND		0.2	ND		0.2
Tetrachloroethene	50	1	ND		0.4	ND		0.4	ND		0.4
1,1,2,2-Tetrachloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Toluene	5	430	ND		0.4	ND		0.4	ND		0.4
Chlorobenzene	5	400	ND		0.4	ND		0.4	ND		0.4
Ethylbenzene	5	41	ND		0.5	ND		0.5	ND		0.5
Xylene (Total)	5	170	ND		0.4	ND		0.4	ND		0.4
Total Confident Conc.	NA	NA	0			0			0		
VOC TICs (Total Estimated Conc.)	NS	NS	0			0			0		

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

ND= Not detected

Conc= Concentration

MDL= Method Detection Limit

NS= No standard or guidance value

TICs= Tentatively identified compounds

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was collected at a point downstream of the treatment system on each day that treated water was discharged at the HHMT-Port Ivory Facility.

TABLE 5A
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS- VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT- PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Dilution Factor Units	New York Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	I-4 Influent 759139 08/08/06 WATER 1 ug/L			E-4 Effluent 759140 08/08/06 WATER 1 ug/L			I-5 Influent 761489 08/15/06 WATER 1 ug/L		
VOLATILE ORGANIC COMPOUNDS (VOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Chloromethane	NS	NS	ND		0.3	ND		0.3	ND		0.3
Bromomethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Vinyl Chloride	2	NS	ND		0.3	ND		0.3	ND		0.3
Chloroethane	5	NS	ND		0.2	ND		0.2	ND		0.2
Methylene Chloride	5	NS	ND		0.5	ND		0.5	ND		0.5
Trichlorofluoromethane	5	NS	ND		0.2	ND		0.2	ND		0.2
1,1-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
1,1-Dichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
trans-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
cis-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
Chloroform	7	NS	ND		0.5	ND		0.5	ND		0.5
1,2-Dichloroethane	0.6	NS	ND		0.3	ND		0.3	ND		0.3
1,1,1-Trichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Carbon Tetrachloride	5	NS	ND		0.3	ND		0.3	ND		0.3
Bromodichloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,2-Dichloropropane	1	NS	ND		0.3	ND		0.3	ND		0.3
cis-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
Trichloroethene	5	40	ND		0.4	ND		0.4	ND		0.4
Dibromochloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,1,2-Trichloroethane	1	NS	ND		0.3	ND		0.3	ND		0.3
Benzene	1	10	ND		0.3	ND		0.3	ND		0.3
trans-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
2-Chloroethyl Vinyl Ether	NS	NS	ND		0.4	ND		0.4	ND		0.4
Bromoform	50	NS	ND		0.2	ND		0.2	ND		0.2
Tetrachloroethene	50	1	ND		0.4	ND		0.4	ND		0.4
1,1,2,2-Tetrachloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Toluene	5	430	ND		0.4	ND		0.4	ND		0.4
Chlorobenzene	5	400	ND		0.4	ND		0.4	ND		0.4
Ethylbenzene	5	41	ND		0.5	ND		0.5	ND		0.5
Xylene (Total)	5	170	ND		0.4	ND		0.4	ND		0.4
Total Confident Conc.	NA	NA	0			0			0		
VOC TICs (Total Estimated Conc.)	NS	NS	0			0			19.8	J	

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

ND= Not detected

Conc= Concentration

MDL= Method Detection Limit

NS= No standard or guidance value

TICs= Tentatively identified compounds

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was collected at a point downstream of the treatment system on each day that treated water was discharged at the HHMT-Port Ivory Facility.

TABLE 5A
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS- VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT- PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Dilution Factor Units	New York Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	E-5 Effluent 761490 08/15/06 WATER 1 ug/L			I-6 Influent 762183 08/17/06 WATER 1 ug/L			E-6 Effluent 762184 08/17/06 WATER 1 ug/L		
VOLATILE ORGANIC COMPOUNDS (VOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Chloromethane	NS	NS	ND		0.3	ND		0.3	ND		0.3
Bromomethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Vinyl Chloride	2	NS	ND		0.3	ND		0.3	ND		0.3
Chloroethane	5	NS	ND		0.2	ND		0.2	ND		0.2
Methylene Chloride	5	NS	ND		0.5	ND		0.5	ND		0.5
Trichlorofluoromethane	5	NS	ND		0.2	ND		0.2	ND		0.2
1,1-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
1,1-Dichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
trans-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
cis-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
Chloroform	7	NS	ND		0.5	ND		0.5	ND		0.5
1,2-Dichloroethane	0.6	NS	ND		0.3	ND		0.3	ND		0.3
1,1,1-Trichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Carbon Tetrachloride	5	NS	ND		0.3	ND		0.3	ND		0.3
Bromodichloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,2-Dichloropropane	1	NS	ND		0.3	ND		0.3	ND		0.3
cis-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
Trichloroethene	5	40	ND		0.4	ND		0.4	ND		0.4
Dibromochloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,1,2-Trichloroethane	1	NS	ND		0.3	ND		0.3	ND		0.3
Benzene	1	10	ND		0.3	ND		0.3	ND		0.3
trans-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
2-Chloroethyl Vinyl Ether	NS	NS	ND		0.4	ND		0.4	ND		0.4
Bromoform	50	NS	ND		0.2	ND		0.2	ND		0.2
Tetrachloroethene	50	1	ND		0.4	ND		0.4	ND		0.4
1,1,2,2-Tetrachloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Toluene	5	430	ND		0.4	1.4		1.4	ND		0.4
Chlorobenzene	5	400	ND		0.4	ND		0.4	ND		0.4
Ethylbenzene	5	41	ND		0.5	ND		0.5	ND		0.5
Xylene (Total)	5	170	ND		0.4	ND		0.4	ND		0.4
Total Confident Conc.	NA	NA	0			1.4			0		
VOC TICs (Total Estimated Conc.)	NS	NS	0			25	J		0		

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

ND= Not detected

Conc= Concentration

MDL= Method Detection Limit

NS= No standard or guidance value

TICs= Tentatively identified compounds

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was collected at a point downstream of the treatment system on each day that treated water was discharged at the HHMT-Port Ivory Facility.

TABLE 5A
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS- VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT- PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Dilution Factor Units	New York Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	I-7 Influent 764575 08/24/06 WATER 1 ug/L			E-7 Effluent 764576 08/24/06 WATER 1 ug/L			I-8 Influent 765516 08/29/06 WATER 1 ug/L		
VOLATILE ORGANIC COMPOUNDS (VOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Chloromethane	NS	NS	ND		0.3	ND		0.3	ND		0.3
Bromomethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Vinyl Chloride	2	NS	ND		0.3	ND		0.3	ND		0.3
Chloroethane	5	NS	ND		0.2	ND		0.2	ND		0.2
Methylene Chloride	5	NS	ND		0.5	ND		0.5	ND		0.5
Trichlorofluoromethane	5	NS	ND		0.2	ND		0.2	ND		0.2
1,1-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
1,1-Dichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
trans-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
cis-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
Chloroform	7	NS	ND		0.5	ND		0.5	ND		0.5
1,2-Dichloroethane	0.6	NS	ND		0.3	ND		0.3	ND		0.3
1,1,1-Trichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Carbon Tetrachloride	5	NS	ND		0.3	ND		0.3	ND		0.3
Bromodichloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,2-Dichloropropane	1	NS	ND		0.3	ND		0.3	ND		0.3
cis-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
Trichloroethene	5	40	ND		0.4	ND		0.4	ND		0.4
Dibromochloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,1,2-Trichloroethane	1	NS	ND		0.3	ND		0.3	ND		0.3
Benzene	1	10	ND		0.3	ND		0.3	ND		0.3
trans-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
2-Chloroethyl Vinyl Ether	NS	NS	ND		0.4	ND		0.4	ND		0.4
Bromoform	50	NS	ND		0.2	ND		0.2	ND		0.2
Tetrachloroethene	50	1	ND		0.4	ND		0.4	ND		0.4
1,1,2,2-Tetrachloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Toluene	5	430	2		0.4	ND		0.4	1.1		0.4
Chlorobenzene	5	400	ND		0.4	ND		0.4	ND		0.4
Ethylbenzene	5	41	ND		0.5	ND		0.5	ND		0.5
Xylene (Total)	5	170	4.5		0.4	ND		0.4	1.3		0.4
Total Confident Conc.	NA	NA	6.5			0			2.4		
VOC TICs (Total Estimated Conc.)	NS	NS	3.5	J		0			128.8	J	

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

ND= Not detected

Conc= Concentration

MDL= Method Detection Limit

NS= No standard or guidance value

TICs= Tentatively identified compounds

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was collected at a point downstream of the treatment system on each day that treated water was discharged at the HHMT-Port Ivory Facility.

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TABLE 5A
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS- VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT- PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Dilution Factor Units	New York Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	E-8 Effluent 765517 08/29/06 WATER 1 ug/L			I-9 Influent 766153 08/31/06 WATER 1 ug/L			E-9 Effluent 766154 08/31/06 WATER 1 ug/L		
VOLATILE ORGANIC COMPOUNDS (VOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Chloromethane	NS	NS	ND		0.3	ND		0.3	ND		0.3
Bromomethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Vinyl Chloride	2	NS	ND		0.3	ND		0.3	ND		0.3
Chloroethane	5	NS	ND		0.2	ND		0.2	ND		0.2
Methylene Chloride	5	NS	ND		0.5	ND		0.5	ND		0.5
Trichlorofluoromethane	5	NS	ND		0.2	ND		0.2	ND		0.2
1,1-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
1,1-Dichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
trans-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
cis-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
Chloroform	7	NS	ND		0.5	ND		0.5	ND		0.5
1,2-Dichloroethane	0.6	NS	ND		0.3	ND		0.3	ND		0.3
1,1,1-Trichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Carbon Tetrachloride	5	NS	ND		0.3	ND		0.3	ND		0.3
Bromodichloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,2-Dichloropropane	1	NS	ND		0.3	ND		0.3	ND		0.3
cis-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
Trichloroethene	5	40	ND		0.4	ND		0.4	ND		0.4
Dibromochloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,1,2-Trichloroethane	1	NS	ND		0.3	ND		0.3	ND		0.3
Benzene	1	10	ND		0.3	ND		0.3	ND		0.3
trans-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
2-Chloroethyl Vinyl Ether	NS	NS	ND		0.4	ND		0.4	ND		0.4
Bromoform	50	NS	ND		0.2	ND		0.2	ND		0.2
Tetrachloroethene	50	1	ND		0.4	ND		0.4	ND		0.4
1,1,2,2-Tetrachloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Toluene	5	430	ND		0.4	ND		0.4	ND		0.4
Chlorobenzene	5	400	ND		0.4	ND		0.4	ND		0.4
Ethylbenzene	5	41	ND		0.5	ND		0.5	ND		0.5
Xylene (Total)	5	170	ND		0.4	ND		0.4	ND		0.4
Total Confident Conc.	NA	NA	ND			0			0		
VOC TICs (Total Estimated Conc.)	NS	NS	0			50.1	J		0		

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

ND= Not detected

Conc= Concentration

MDL= Method Detection Limit

NS= No standard or guidance value

TICs= Tentatively identified compounds

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was collected at a point downstream of the treatment system on each day that treated water was discharged at the HHMT-Port Ivory Facility.

TABLE 5A
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS- VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT- PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Dilution Factor Units	New York Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	I-10 Influent 766651 09/01/06 WATER 1 ug/L			E-10 Effluent 766652 09/01/06 WATER 1 ug/L			I-11 Influent 766983 09/05/06 WATER 1 ug/L		
VOLATILE ORGANIC COMPOUNDS (VOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Chloromethane	NS	NS	ND		0.3	ND		0.3	ND		0.3
Bromomethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Vinyl Chloride	2	NS	ND		0.3	ND		0.3	ND		0.3
Chloroethane	5	NS	ND		0.2	ND		0.2	ND		0.2
Methylene Chloride	5	NS	ND		0.5	ND		0.5	ND		0.5
Trichlorofluoromethane	5	NS	ND		0.2	ND		0.2	ND		0.2
1,1-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
1,1-Dichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
trans-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
cis-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
Chloroform	7	NS	ND		0.5	ND		0.5	ND		0.5
1,2-Dichloroethane	0.6	NS	ND		0.3	ND		0.3	ND		0.3
1,1,1-Trichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Carbon Tetrachloride	5	NS	ND		0.3	ND		0.3	ND		0.3
Bromodichloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,2-Dichloropropane	1	NS	ND		0.3	ND		0.3	ND		0.3
cis-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
Trichloroethene	5	40	ND		0.4	ND		0.4	ND		0.4
Dibromochloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,1,2-Trichloroethane	1	NS	ND		0.3	ND		0.3	ND		0.3
Benzene	1	10	ND		0.3	ND		0.3	ND		0.3
trans-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
2-Chloroethyl Vinyl Ether	NS	NS	ND		0.4	ND		0.4	ND		0.4
Bromoform	50	NS	ND		0.2	ND		0.2	ND		0.2
Tetrachloroethene	50	1	ND		0.4	ND		0.4	ND		0.4
1,1,2,2-Tetrachloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Toluene	5	430	ND		0.4	ND		0.4	ND		0.4
Chlorobenzene	5	400	ND		0.4	ND		0.4	ND		0.4
Ethylbenzene	5	41	ND		0.5	ND		0.5	ND		0.5
Xylene (Total)	5	170	2.4		0.4	ND		0.4	ND		0.4
Total Confident Conc.	NA	NA	2.4			0			0		
VOC TICs (Total Estimated Conc.)	NS	NS	26.7	J		0			3.2	J	

Notes:

* Using GA water classification with protection for drinking water.(groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

ND= Not detected

Conc= Concentration

MDL= Method Detection Limit

NS= No standard or guidance value

TICs= Tentatively identified compounds

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was collected at a point downstream of the treatment system on each day that treated water was discharged at the HHMT-Port Ivory Facility.

TABLE 5A

SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS- VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT- PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Dilution Factor Units	New York Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	E-11 Effluent 766984 09/05/06 WATER 1 ug/L			I-12 Influent 767616 09/07/06 WATER 1 ug/L			E-12 Effluent 767617 09/07/06 WATER 1 ug/L		
VOLATILE ORGANIC COMPOUNDS (VOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Chloromethane	NS	NS	ND		0.3	ND		0.3	ND		0.3
Bromomethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Vinyl Chloride	2	NS	ND		0.3	ND		0.3	ND		0.3
Chloroethane	5	NS	ND		0.2	ND		0.2	ND		0.2
Methylene Chloride	5	NS	ND		0.5	ND		0.5	ND		0.5
Trichlorofluoromethane	5	NS	ND		0.2	ND		0.2	ND		0.2
1,1-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
1,1-Dichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
trans-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
cis-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
Chloroform	7	NS	ND		0.5	ND		0.5	ND		0.5
1,2-Dichloroethane	0.6	NS	ND		0.3	ND		0.3	ND		0.3
1,1,1-Trichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Carbon Tetrachloride	5	NS	ND		0.3	ND		0.3	ND		0.3
Bromodichloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,2-Dichloropropane	1	NS	ND		0.3	ND		0.3	ND		0.3
cis-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
Trichloroethene	5	40	ND		0.4	ND		0.4	ND		0.4
Dibromochloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,1,2-Trichloroethane	1	NS	ND		0.3	ND		0.3	ND		0.3
Benzene	1	10	ND		0.3	ND		0.3	ND		0.3
trans-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
2-Chloroethyl Vinyl Ether	NS	NS	ND		0.4	ND		0.4	ND		0.4
Bromoform	50	NS	ND		0.2	ND		0.2	ND		0.2
Tetrachloroethene	50	1	ND		0.4	ND		0.4	ND		0.4
1,1,2,2-Tetrachloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Toluene	5	430	ND		0.4	ND		0.4	ND		0.4
Chlorobenzene	5	400	ND		0.4	ND		0.4	ND		0.4
Ethylbenzene	5	41	ND		0.5	ND		0.5	ND		0.5
Xylene (Total)	5	170	ND		0.4	ND		0.4	ND		0.4
Total Confident Conc.	NA	NA	0			0			0		
VOC TICs (Total Estimated Conc.)	NS	NS	0			14.5	J		0		

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

ND= Not detected

Conc= Concentration

MDL= Method Detection Limit

NS= No standard or guidance value

TICs= Tentatively identified compounds

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was collected at a point downstream of the treatment system on each day that treated water was discharged at the HHMT-Port Ivory Facility.

TABLE 5A
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS- VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT- PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Dilution Factor Units	New York Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	I-13 Influent 769934 09/15/06 WATER 1 ug/L			E-13 Effluent 769935 09/15/06 WATER 1 ug/L			I-14 Influent 770359 09/18/06 WATER 1 ug/L		
VOLATILE ORGANIC COMPOUNDS (VOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Chloromethane	NS	NS	ND		0.3	ND		0.3	ND		0.3
Bromomethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Vinyl Chloride	2	NS	ND		0.3	ND		0.3	ND		0.3
Chloroethane	5	NS	ND		0.2	ND		0.2	ND		0.2
Methylene Chloride	5	NS	ND		0.5	ND		0.5	ND		0.5
Trichlorofluoromethane	5	NS	ND		0.2	ND		0.2	ND		0.2
1,1-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
1,1-Dichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
trans-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
cis-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
Chloroform	7	NS	ND		0.5	ND		0.5	ND		0.5
1,2-Dichloroethane	0.6	NS	ND		0.3	ND		0.3	ND		0.3
1,1,1-Trichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Carbon Tetrachloride	5	NS	ND		0.3	ND		0.3	ND		0.3
Bromodichloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,2-Dichloropropane	1	NS	ND		0.3	ND		0.3	ND		0.3
cis-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
Trichloroethene	5	40	ND		0.4	ND		0.4	ND		0.4
Dibromochloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,1,2-Trichloroethane	1	NS	ND		0.3	ND		0.3	ND		0.3
Benzene	1	10	ND		0.3	ND		0.3	ND		0.3
trans-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
2-Chloroethyl Vinyl Ether	NS	NS	ND		0.4	ND		0.4	ND		0.4
Bromoform	50	NS	ND		0.2	ND		0.2	ND		0.2
Tetrachloroethene	50	1	ND		0.4	ND		0.4	ND		0.4
1,1,2,2-Tetrachloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Toluene	5	430	ND		0.4	ND		0.4	ND		0.4
Chlorobenzene	5	400	ND		0.4	ND		0.4	ND		0.4
Ethylbenzene	5	41	ND		0.5	ND		0.5	ND		0.5
Xylene (Total)	5	170	ND		0.4	ND		0.4	ND		0.4
Total Confident Conc.	NA	NA	0			0			0		
VOC TICs (Total Estimated Conc.)	NS	NS	138.1	J		0			76.6	J	

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

ND= Not detected

Conc= Concentration

MDL= Method Detection Limit

NS= No standard or guidance value

TICs= Tentatively identified compounds

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was collected at a point downstream of the treatment system on each day that treated water was discharged at the HHMT-Port Ivory Facility.

TABLE 5A
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS- VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT- PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Dilution Factor Units	New York Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	E-14 Effluent 770360 09/18/06 WATER 1 ug/L			I-15 Influent 770599 09/19/06 WATER 1 ug/L			E-15 Effluent 770598 09/19/06 WATER 1 ug/L		
VOLATILE ORGANIC COMPOUNDS (VOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Chloromethane	NS	NS	ND		0.3	ND		0.3	ND		0.3
Bromomethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Vinyl Chloride	2	NS	ND		0.3	ND		0.3	ND		0.3
Chloroethane	5	NS	ND		0.2	ND		0.2	ND		0.2
Methylene Chloride	5	NS	ND		0.5	ND		0.5	ND		0.5
Trichlorofluoromethane	5	NS	ND		0.2	ND		0.2	ND		0.2
1,1-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
1,1-Dichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
trans-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
cis-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
Chloroform	7	NS	ND		0.5	ND		0.5	ND		0.5
1,2-Dichloroethane	0.6	NS	ND		0.3	ND		0.3	ND		0.3
1,1,1-Trichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Carbon Tetrachloride	5	NS	ND		0.3	ND		0.3	ND		0.3
Bromodichloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,2-Dichloropropane	1	NS	ND		0.3	ND		0.3	ND		0.3
cis-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
Trichloroethene	5	40	ND		0.4	ND		0.4	ND		0.4
Dibromochloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,1,2-Trichloroethane	1	NS	ND		0.3	ND		0.3	ND		0.3
Benzene	1	10	ND		0.3	ND		0.3	ND		0.3
trans-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
2-Chloroethyl Vinyl Ether	NS	NS	ND		0.4	ND		0.4	ND		0.4
Bromoform	50	NS	ND		0.2	ND		0.2	ND		0.2
Tetrachloroethene	50	1	ND		0.4	ND		0.4	ND		0.4
1,1,2,2-Tetrachloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Toluene	5	430	ND		0.4	ND		0.4	ND		0.4
Chlorobenzene	5	400	ND		0.4	ND		0.4	ND		0.4
Ethylbenzene	5	41	ND		0.5	ND		0.5	ND		0.5
Xylene (Total)	5	170	ND		0.4	ND		0.4	ND		0.4
Total Confident Conc.	NA	NA	0			0			0		
VOC TICs (Total Estimated Conc.)	NS	NS	0			84.7	J		0		

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

ND= Not detected

Conc= Concentration

MDL= Method Detection Limit

NS= No standard or guidance value

TICs= Tentatively identified compounds

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was collected at a point downstream of the treatment system on each day that treated water was discharged at the HHMT-Port Ivory Facility.

E 5A
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS- VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT- PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Dilution Factor Units	New York Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	I-16 Influent 772761 09/26/06 WATER 1 ug/L			E-16 Effluent 772762 09/26/06 WATER 1 ug/L			I-17 Influent 775240 10/04/06 WATER 1 ug/L		
VOLATILE ORGANIC COMPOUNDS (VOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Chloromethane	NS	NS	ND		0.3	ND		0.3	ND		0.3
Bromomethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Vinyl Chloride	2	NS	ND		0.3	ND		0.3	ND		0.3
Chloroethane	5	NS	ND		0.2	ND		0.2	ND		0.2
Methylene Chloride	5	NS	ND		0.5	ND		0.5	ND		0.5
Trichlorofluoromethane	5	NS	ND		0.2	ND		0.2	ND		0.2
1,1-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
1,1-Dichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
trans-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
cis-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
Chloroform	7	NS	ND		0.5	ND		0.5	ND		0.5
1,2-Dichloroethane	0.6	NS	ND		0.3	ND		0.3	ND		0.3
1,1,1-Trichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Carbon Tetrachloride	5	NS	ND		0.3	ND		0.3	ND		0.3
Bromodichloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,2-Dichloropropane	1	NS	ND		0.3	ND		0.3	ND		0.3
cis-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
Trichloroethene	5	40	ND		0.4	ND		0.4	ND		0.4
Dibromochloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,1,2-Trichloroethane	1	NS	ND		0.3	ND		0.3	ND		0.3
Benzene	1	10	ND		0.3	ND		0.3	ND		0.3
trans-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
2-Chloroethyl Vinyl Ether	NS	NS	ND		0.4	ND		0.4	ND		0.4
Bromoform	50	NS	ND		0.2	ND		0.2	ND		0.2
Tetrachloroethene	50	1	ND		0.4	ND		0.4	ND		0.4
1,1,2,2-Tetrachloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Toluene	5	430	ND		0.4	ND		0.4	ND		0.4
Chlorobenzene	5	400	ND		0.4	ND		0.4	ND		0.4
Ethylbenzene	5	41	ND		0.5	ND		0.5	ND		0.5
Xylene (Total)	5	170	ND		0.4	ND		0.4	ND		0.4
Total Confident Conc.	NA	NA	0			0			0		
VOC TICs (Total Estimated Conc.)	NS	NS	150	J		0			293.4	J	

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

ND= Not detected

Conc= Concentration

MDL= Method Detection Limit

NS= No standard or guidance value

TICs= Tentatively identified compounds

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was collected at a point downstream of the treatment system on each day that treated water was discharged at the HHMT-Port Ivory Facility.

TABLE 5A
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS- VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT- PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Dilution Factor Units	New York Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	E-17 Effluent 775241 10/04/06 WATER 1 ug/L			I-18 Influent 777150 10/12/06 WATER 1 ug/L			E-18 Effluent 777151 10/12/06 WATER 1 ug/L		
VOLATILE ORGANIC COMPOUNDS (VOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Chloromethane	NS	NS	ND		0.3	ND		0.3	ND		0.3
Bromomethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Vinyl Chloride	2	NS	ND		0.3	ND		0.3	ND		0.3
Chloroethane	5	NS	ND		0.2	ND		0.2	ND		0.2
Methylene Chloride	5	NS	ND		0.5	ND		0.5	ND		0.5
Trichlorofluoromethane	5	NS	ND		0.2	ND		0.2	ND		0.2
1,1-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
1,1-Dichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
trans-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
cis-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
Chloroform	7	NS	ND		0.5	ND		0.5	ND		0.5
1,2-Dichloroethane	0.6	NS	ND		0.3	ND		0.3	ND		0.3
1,1,1-Trichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Carbon Tetrachloride	5	NS	ND		0.3	ND		0.3	ND		0.3
Bromodichloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,2-Dichloropropane	1	NS	ND		0.3	ND		0.3	ND		0.3
cis-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
Trichloroethene	5	40	ND		0.4	ND		0.4	ND		0.4
Dibromochloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,1,2-Trichloroethane	1	NS	ND		0.3	ND		0.3	ND		0.3
Benzene	1	10	ND		0.3	ND		0.3	ND		0.3
trans-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
2-Chloroethyl Vinyl Ether	NS	NS	ND		0.4	ND		0.4	ND		0.4
Bromoform	50	NS	ND		0.2	ND		0.2	ND		0.2
Tetrachloroethene	50	1	ND		0.4	ND		0.4	ND		0.4
1,1,2,2-Tetrachloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
Toluene	5	430	ND		0.4	ND		0.4	ND		0.4
Chlorobenzene	5	400	ND		0.4	ND		0.4	ND		0.4
Ethylbenzene	5	41	ND		0.5	ND		0.5	ND		0.5
Xylene (Total)	5	170	ND		0.4	1		0.4	ND		0.4
Total Confident Conc.	NA	NA	0		NA	1			0		
VOC TICs (Total Estimated Conc.)	NS	NS	0		NA	298.3	J		0		

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

ND= Not detected

Conc= Concentration

MDL= Method Detection Limit

NS= No standard or guidance value

TICs= Tentatively identified compounds

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was collected at a point downstream of the treatment system on each day that treated water was discharged at the HHMT-Port Ivory Facility.

TABLE 5A
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS- VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT- PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Dilution Factor Units	New York Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	I-19 Influent 778005 10/16/06 WATER 1 ug/L			E-19 Effluent 778006 10/16/06 WATER 1 ug/L			I-20 Influent 778365 10/17/06 WATER 1 ug/L		
VOLATILE ORGANIC COMPOUNDS (VOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Chloromethane	NS	NS	ND		0.4	ND		0.4	ND		0.4
Bromomethane	5	NS	ND		0.4	ND		0.4	ND		0.4
Vinyl Chloride	2	NS	ND		0.2	ND		0.2	ND		0.2
Chloroethane	5	NS	ND		0.4	ND		0.4	ND		0.4
Methylene Chloride	5	NS	ND		0.4	ND		0.4	ND		0.4
Trichlorofluoromethane	5	NS	ND		0.4	ND		0.4	ND		0.4
1,1-Dichloroethene	5	NS	ND		0.5	ND		0.5	ND		0.5
1,1-Dichloroethane	5	NS	ND		0.3	ND		0.3	ND		0.3
trans-1,2-Dichloroethene	5	NS	ND		0.4	ND		0.4	ND		0.4
cis-1,2-Dichloroethene	5	NS	ND		0.3	ND		0.3	ND		0.3
Chloroform	7	NS	ND		0.2	ND		0.2	ND		0.2
1,2-Dichloroethane	0.6	NS	ND		0.3	ND		0.3	ND		0.3
1,1,1-Trichloroethane	5	NS	ND		0.4	ND		0.4	ND		0.4
Carbon Tetrachloride	5	NS	ND		0.3	ND		0.3	ND		0.3
Bromodichloromethane	50	NS	ND		0.2	ND		0.2	ND		0.2
1,2-Dichloropropane	1	NS	ND		0.5	ND		0.5	ND		0.5
cis-1,3-Dichloropropene	NS	NS	ND		0.1	ND		0.1	ND		0.1
Trichloroethene	5	40	ND		0.4	ND		0.4	ND		0.4
Dibromochloromethane	50	NS	ND		0.3	ND		0.3	ND		0.3
1,1,2-Trichloroethane	1	NS	ND		0.2	ND		0.2	ND		0.2
Benzene	1	10	ND		0.2	ND		0.2	ND		0.2
trans-1,3-Dichloropropene	NS	NS	ND		0.2	ND		0.2	ND		0.2
2-Chloroethyl Vinyl Ether	NS	NS	ND		0.2	ND		0.2	ND		0.2
Bromoform	50	NS	ND		0.2	ND		0.2	ND		0.2
Tetrachloroethene	50	1	ND		0.4	ND		0.4	ND		0.4
1,1,2,2-Tetrachloroethane	5	NS	ND		0.4	ND		0.4	ND		0.4
Toluene	5	430	ND		0.3	ND		0.3	ND		0.3
Chlorobenzene	5	400	ND		0.2	ND		0.2	ND		0.2
Ethylbenzene	5	41	ND		0.4	ND		0.4	ND		0.4
Xylene (Total)	5	170	1		0.4	ND		0.4	1		0.4
Total Confident Conc.	NA	NA	0			0			0		
VOC TICs (Total Estimated Conc.)	NS	NS	102.1	J		0			283.8	J	

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

ND= Not detected

Conc= Concentration

MDL= Method Detection Limit

NS= No standard or guidance value

TICs= Tentatively identified compounds

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was collected at a point downstream of the treatment system on each day that treated water was discharged at the HHMT-Port Ivory Facility.

TABLE 5A
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS- VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT- PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Dilution Factor Units	New York Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	E-20 Effluent 777151 10/17/06 WATER 1 ug/L		
VOLATILE ORGANIC COMPOUNDS (VOCs)			Conc	Qual	MDL
Chloromethane	NS	NS	ND		0.4
Bromomethane	5	NS	ND		0.4
Vinyl Chloride	2	NS	ND		0.2
Chloroethane	5	NS	ND		0.4
Methylene Chloride	5	NS	ND		0.4
Trichlorofluoromethane	5	NS	ND		0.4
1,1-Dichloroethene	5	NS	ND		0.5
1,1-Dichloroethane	5	NS	ND		0.3
trans-1,2-Dichloroethene	5	NS	ND		0.4
cis-1,2-Dichloroethene	5	NS	ND		0.3
Chloroform	7	NS	ND		0.2
1,2-Dichloroethane	0.6	NS	ND		0.3
1,1,1-Trichloroethane	5	NS	ND		0.4
Carbon Tetrachloride	5	NS	ND		0.3
Bromodichloromethane	50	NS	ND		0.2
1,2-Dichloropropane	1	NS	ND		0.5
cis-1,3-Dichloropropene	NS	NS	ND		0.1
Trichloroethene	5	40	ND		0.4
Dibromochloromethane	50	NS	ND		0.3
1,1,2-Trichloroethane	1	NS	ND		0.2
Benzene	1	10	ND		0.2
trans-1,3-Dichloropropene	NS	NS	ND		0.2
2-Chloroethyl Vinyl Ether	NS	NS	ND		0.2
Bromoform	50	NS	ND		0.2
Tetrachloroethene	50	1	ND		0.4
1,1,2,2-Tetrachloroethane	5	NS	ND		0.4
Toluene	5	430	ND		0.3
Chlorobenzene	5	400	ND		0.2
Ethylbenzene	5	41	ND		0.4
Xylene (Total)	5	170	ND		0.4
Total Confident Conc.	NA	NA	0		
VOC TICs (Total Estimated Conc.)	NS	NS	0		

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

ND= Not detected

Conc= Concentration

MDL= Method Detection Limit

NS= No standard or guidance value

TICs= Tentatively identified compounds

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was collected at a point downstream of the treatment system on each day that treated water was discharged at the HHMT-Port Ivory Facility.

TABLE 5B

SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS-SVOCs

IRM - SITES 2 (AREA 2B) AND 3 (AREA 3A)

HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York State Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	I-1 Influent 757433 08/01/06 WATER ug/L			E-1 Effluent 757434 08/01/06 WATER ug/L			I-2 Influent 758041 08/03/06 WATER ug/L			E-2 Effluent 758042 08/03/06 WATER ug/L			I-3 Influent 758425 08/04/06 WATER ug/L			E-3 Effluent 758426 08/04/06 WATER ug/L		
SEMIVOLATILE VOLATILE ORGANIC COMPOUNDS (SVOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Phenol	1	NS	ND		0.7	ND		0.7	ND		0.6	ND		0.6	ND		0.6	ND		0.6
2-Chlorophenol	1	NS	ND		1.2	ND		1.2	ND		1.1	ND		1.1	ND		1.1	ND		1.1
2-Nitrophenol	1	NS	ND		1.7	ND		1.8	ND		1.6	ND		1.6	ND		1.6	ND		1.6
2,4-Dimethylphenol	1	1,000	ND		2.2	ND		2.3	ND		2.1	ND		2.1	ND		2	ND		2
2,4-Dichlorophenol	1	NS	ND		1.6	ND		1.6	ND		1.5	ND		1.5	ND		1.4	ND		1.4
4-Chloro-3-methylphenol	1	NS	ND		1.8	ND		1.9	ND		1.7	ND		1.7	ND		1.6	ND		1.6
2,4,6-Trichlorophenol	1	NS	ND		2.4	ND		2.5	ND		2.2	ND		2.2	ND		2.2	ND		2.2
2,4-Dinitrophenol	1	400	ND		1	ND		1	ND		0.9	ND		0.9	ND		0.9	ND		0.9
4-Nitrophenol	1	NS	ND		1	ND		1	ND		0.9	ND		0.9	ND		0.9	ND		0.9
4,6-Dinitro-2-methylphenol	NS	NS	ND		1.4	ND		1.4	ND		1.2	ND		1.2	ND		1.2	ND		1.2
Pentachlorophenol	1	NS	ND		2.3	ND		2.4	ND		2.1	ND		2.1	ND		2.1	ND		2.1
N-Nitrosodimethylamine	50	NS	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.7	ND		0.7
bis(2-Chloroethyl)ether	1	NS	ND		1	ND		1	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,3-Dichlorobenzene	3	50	ND		1.1	ND		1.1	ND		1	ND		1	ND		1	ND		1
1,4-Dichlorobenzene	3	50	ND		1	ND		1	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,2-Dichlorobenzene	3	50	ND		1.2	ND		1.2	ND		1.1	ND		1.1	ND		1.1	ND		1.1
bis(2-chloroisopropyl)ether	NS	NS	ND		0.9	ND		1	ND		0.9	ND		0.9	ND		0.8	ND		0.8
N-Nitroso-di-n-propylamine	NS	NS	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.7	ND		0.7
Hexachloroethane	5	0.6	ND		1	ND		1	ND		0.9	ND		0.9	ND		0.9	ND		0.9
Nitrobenzene	0.4	NS	ND		1.1	ND		1.1	ND		1	ND		1	ND		1	ND		1
Isophorone	50	NS	ND		1	ND		1.1	ND		1	ND		1	ND		0.9	ND		0.9
bis(2-Chloroethoxy)methane	5	NS	ND		1	ND		1	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,2,4-Trichlorobenzene	5	50	ND		1	ND		1	ND		0.9	ND		0.9	ND		0.9	ND		0.9
Naphthalene	10	140	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
Hexachlorobutadiene	0.5	0.01	ND		0.7	ND		0.7	ND		0.6	ND		0.6	ND		0.6	ND		0.6
Hexachlorocyclopentadiene	5	0.7	ND		0.7	ND		0.7	ND		0.6	ND		0.6	ND		0.6	ND		0.6
2-Chloronaphthalene	10	NS	ND		1.2	ND		1.2	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Dimethylphthalate	50	NS	ND		1.2	ND		1.2	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Acenaphthylene	20	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
2,6-Dinitrotoluene	5	NS	ND		1.4	ND		1.5	ND		1.3	ND		1.3	ND		1.3	ND		1.3
Acenaphthene	20	60	ND		0.1	ND		0.2	ND		0.1	ND		0.1	ND		0.1	ND		0.1
2,4-Dinitrotoluene	5	NS	ND		1.3	ND		1.3	ND		1.2	ND		1.2	ND		1.1	ND		1.1
Diethylphthalate	50	NS	ND		0.9	ND		0.9	ND		0.8	ND		0.8	ND		0.8	ND		0.8
4-Chlorophenyl-phenylether	1	NS	ND		1.2	ND		1.2	ND		1.1	ND		1.1	ND		1	ND		1
Fluorene	50	23	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
N-Nitrosodiphenylamine	NS	NS	ND		1.2	ND		1.2	ND		1.1	ND		1.1	ND		1.1	ND		1.1
4-Bromophenyl-phenylether	NS	NS	ND		1.3	ND		1.4	ND		1.2	ND		1.2	ND		1.2	ND		1.2
Hexachlorobenzene	0.04	0.00003	ND		0.4	ND		0.4	ND		0.3	ND		0.3	ND		0.3	ND		0.3
Phenanthrene	50	14	ND		0.089	ND		0.092	ND		0.082	ND		0.082	ND		0.082	ND		0.082
Anthracene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Di-n-butylphthalate	50	NS	ND		1.1	ND		1.2	ND		1	ND		1	ND		1	ND		1
Fluoranthene	50	NS	ND		0.1	ND		0.2	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Pyrene	50	NS	ND		0.1	ND		0.2	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzidine	5	NS	ND		8	ND		8.3	ND		7.4	ND		7.4	ND		7.2	ND		7.2
Butylbenzylphthalate	50	NS	ND		1.2	ND		1.2	ND		1.1	ND		1.1	ND		1	ND		1
3,3'-Dichlorobenzidine	5	NS	ND		5.5	ND		5.6	ND		5	ND		5	ND		4.9	ND		4.9
Benzo(a)anthracene	0.002	NS	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
Chrysene	0.002	NS	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
bis(2-Ethylhexyl)phthalate	5	NS	3.8		1.2	ND		1.2	2.1		1.2	ND		1.1	1.5		1.1	ND		1
Di-n-octylphthalate	50	NS	ND		1.1	ND		1.1	ND		1	ND		1	ND		1	ND		1
Benzo(b)fluoranthene	0.002	NS	ND		0.1	ND		0.2	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzo(k)fluoranthene	0.002	NS	ND		0.1	ND		0.1	ND		0.092	ND		0.092	ND		0.09	ND		0.09
Benzo(a)pyrene	0.002	0.0006	ND		0.067	ND		0.069	ND		0.061	ND		0.061	ND		0.06	ND		0.06
Indeno(1,2,3-cd)pyrene	0.002	NS	ND		0.089	ND		0.092	ND		0.082	ND		0.082	ND		0.08	ND		0.08
Dibenz(a,h)anthracene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzo(g,h,i)perylene	5	NS	ND		0.1	ND		0.1	ND		0.092	ND		0.092	ND		0.09	ND		0.09
Total Confident Conc.	NA	NA	3.8			0			2.1			0			1.5			0		
Total SVOC TICs (Estimated Conc.)	NS	NS	25	J		0			8.8	J		0			0			0		

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

conc.= concentration

MDL= Method detection limit

J= Thes estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.

NS= No standard or guidance value

TICs= Tentatively identified compounds (estimated)

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was at a point downstream of the treatment system on each day the treated water was discharged at the HHMT-Port Ivory Facility.

2) Concentrations highlighted and in bold exceed the New York AWQSGV for either groundwater or surface water.

TABLE 5B
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS-SVOCs
IRM - SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York State Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	I-4 Influent 759139 08/08/06 WATER ug/L			E-4 Effluent 759140 08/08/06 WATER ug/L			I-5 Influent 761489 08/15/06 WATER ug/L			E-5 Effluent 761490 08/15/06 WATER ug/L			I-6 Influent 762183 08/17/06 WATER ug/L			E-6 Effluent 762184 08/17/06 WATER ug/L		
SEMIVOLATILE VOLATILE ORGANIC COMPOUNDS (SVOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Phenol	1	NS	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6
2-Chlorophenol	1	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
2-Nitrophenol	1	NS	ND		1.6	ND		1.6	ND		1.6	ND		1.6	ND		1.6	ND		1.6
2,4-Dimethylphenol	1	1,000	ND		2.1	ND		2.1	ND		2	ND		2.1	ND		2	ND		2
2,4-Dichlorophenol	1	NS	ND		1.5	ND		1.5	ND		1.4	ND		1.5	ND		1.4	ND		1.4
4-Chloro-3-methylphenol	1	NS	ND		1.7	ND		1.7	ND		1.6	ND		1.7	ND		1.6	ND		1.6
2,4,6-Trichlorophenol	1	NS	ND		2.2	ND		2.3	ND		2.2	ND		2.3	ND		2.2	ND		2.2
2,4-Dinitrophenol	1	400	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
4-Nitrophenol	1	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
4,6-Dinitro-2-methylphenol	NS	NS	ND		1.2	ND		1.3	ND		1.2	ND		1.3	ND		1.2	ND		1.2
Pentachlorophenol	1	NS	ND		2.1	ND		2.2	ND		2.1	ND		2.2	ND		2.1	ND		2.1
N-Nitrosodimethylamine	50	NS	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.7	ND		0.7
bis(2-Chloroethyl)ether	1	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,3-Dichlorobenzene	3	50	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
1,4-Dichlorobenzene	3	50	ND		0.9	ND		1	ND		0.9	ND		1	ND		0.9	ND		0.9
1,2-Dichlorobenzene	3	50	ND		1.1	ND		1.1	ND		1.1	ND		1.2	ND		1.1	ND		1.1
bis(2-chloroisopropyl)ether	NS	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.8	ND		0.8
N-Nitroso-di-n-propylamine	NS	NS	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.7	ND		0.7
Hexachloroethane	5	0.6	ND		0.9	ND		1	ND		0.9	ND		1	ND		0.9	ND		0.9
Nitrobenzene	0.4	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Isophorone	50	NS	ND		1	ND		1	ND		1	ND		1	ND		0.9	ND		0.9
bis(2-Chloroethoxy)methane	5	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,2,4-Trichlorobenzene	5	50	ND		0.9	ND		1	ND		0.9	ND		1	ND		0.9	ND		0.9
Naphthalene	10	140	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
Hexachlorobutadiene	0.5	0.01	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6
Hexachlorocyclopentadiene	5	0.7	ND		0.6	ND		0.7	ND		0.6	ND		0.7	ND		0.6	ND		0.6
2-Chloronaphthalene	10	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Dimethylphthalate	50	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.2	ND		1.1	ND		1.1
Acenaphthylene	20	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
2,6-Dinitrotoluene	5	NS	ND		1.3	ND		1.3	ND		1.3	ND		1.4	ND		1.3	ND		1.3
Acenaphthene	20	60	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
2,4-Dinitrotoluene	5	NS	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.1	ND		1.1
Diethylphthalate	50	NS	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8
4-Chlorophenyl-phenylether	1	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1	ND		1
Fluorene	50	23	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
N-Nitrosodiphenylamine	NS	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
4-Bromophenyl-phenylether	NS	NS	ND		1.2	ND		1.3	ND		1.2	ND		1.3	ND		1.2	ND		1.2
Hexachlorobenzene	0.04	0.00003	ND		0.3	ND		0.3	ND		0.3	ND		0.3	ND		0.3	ND		0.3
Phenanthrene	50	14	1		0.082	ND		0.084	ND		0.081	ND		0.085	ND		0.082	ND		0.08
Anthracene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Di-n-butylphthalate	50	NS	ND		1	ND		1.1	ND		1	ND		1.1	ND		1	ND		1
Fluoranthene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Pyrene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzidine	5	NS	ND		7.4	ND		7.6	ND		7.3	ND		7.7	ND		7.2	ND		7.2
Butylbenzylphthalate	50	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1	ND		1
3,3'-Dichlorobenzidine	5	NS	ND		5	ND		5.2	ND		5	ND		5.2	ND		4.9	ND		4.9
Benzo(a)anthracene	0.002	NS	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
Chrysene	0.002	NS	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
bis(2-Ethylhexyl)phthalate	5	NS	1.5		1.1	ND		1.1	2.6		1.1	ND		1.1	1.4		1.1	ND		1
Di-n-octylphthalate	50	NS	ND		1	ND		1	ND		1	ND		1.1	ND		1	ND		1
Benzo(b)fluoranthene	0.002	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzo(k)fluoranthene	0.002	NS	ND		0.092	ND		0.095	ND		0.091	ND		0.096	ND		0.09	ND		0.09
Benzo(a)pyrene	0.002	0.0006	ND		0.061	ND		0.063	ND		0.061	ND		0.064	ND		0.06	ND		0.06
Indeno(1,2,3-cd)pyrene	0.002	NS	ND		0.082	ND		0.084	ND		0.081	ND		0.085	ND		0.08	ND		0.08
Dibenz(a,h)anthracene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzo(g,h,i)perylene	5	NS	ND		0.092	ND		0.095	ND		0.091	ND		0.096	ND		0.09	ND		0.09
Total Confident Conc.	NA	NA	2.5			0			2.6			0			1.4			0		
Total SVOC TICs (Estimated Conc.)	NS	NS	9.2	J		0			36.5	J		0			40.2	J		0		

Notes:

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J= Thes estimated value wa.. detected at a concentration below the MDL, but above the laboratory's reporting limits.

NS= No standard or guidance value

TICs= Tentatively identified compounds (estimated)

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1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was at a point downstream of the treatment system on each day the treated water was discharged at the HHMT-Port Ivory Facility.

2) Concentrations highlighted and in bold exceed the New York AWQSGV for either groundwater or surface water.

TABLE 5B
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS-SVOCs
IRM - SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York State Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	I-7 Influent 764575 08/24/06 WATER ug/L			E-7 Effluent 764576 08/24/06 WATER ug/L			I-8 Influent 765516 08/29/06 WATER ug/L			E-8 Effluent 765517 08/29/06 WATER ug/L			I-9 Influent 766153 08/31/06 WATER ug/L			E-9 Effluent 766154 08/31/06 WATER ug/L		
SEMIVOLATILE VOLATILE ORGANIC COMPOUNDS (SVOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Phenol	1	NS	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6
2-Chlorophenol	1	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
2-Nitrophenol	1	NS	ND		1.6	ND		1.6	ND		1.6	ND		1.6	ND		1.6	ND		1.6
2,4-Dimethylphenol	1	1,000	ND		2	ND		2	ND		2	ND		2	ND		2	ND		2
2,4-Dichlorophenol	1	NS	ND		1.4	ND		1.4	ND		1.4	ND		1.4	ND		1.4	ND		1.4
4-Chloro-3-methylphenol	1	NS	ND		1.6	ND		1.6	ND		1.6	ND		1.6	ND		1.6	ND		1.6
2,4,6-Trichlorophenol	1	NS	ND		2.2	ND		2.2	ND		2.2	ND		2.2	ND		2.2	ND		2.2
2,4-Dinitrophenol	1	400	0.9		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
4-Nitrophenol	1	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
4,6-Dinitro-2-methylphenol	NS	NS	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2
Pentachlorophenol	1	NS	ND		2.1	ND		2.1	ND		2.1	ND		2.1	ND		2.1	ND		2.1
N-Nitrosodimethylamine	50	NS	ND		0.7	ND		0.7	ND		0.7	ND		0.7	ND		0.7	ND		0.7
bis(2-Chloroethyl)ether	1	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,3-Dichlorobenzene	3	50	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
1,4-Dichlorobenzene	3	50	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,2-Dichlorobenzene	3	50	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
bis(2-chloroisopropyl)ether	NS	NS	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8
N-Nitroso-di-n-propylamine	NS	NS	ND		0.7	ND		0.7	ND		0.7	ND		0.7	ND		0.7	ND		0.7
Hexachloroethane	5	0.6	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
Nitrobenzene	0.4	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Isophorone	50	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
bis(2-Chloroethoxy)methane	5	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,2,4-Trichlorobenzene	5	50	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
Naphthalene	10	140	0.3		0.2	ND		0.2	0.2		0.2	ND		0.2	0.2		0.2	ND		0.2
Hexachlorobutadiene	0.5	0.01	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6
Hexachlorocyclopentadiene	5	0.7	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6
2-Chloronaphthalene	10	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Dimethylphthalate	50	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Acenaphthylene	20	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
2,6-Dinitrotoluene	5	NS	ND		1.3	ND		1.3	ND		1.3	ND		1.3	ND		1.3	ND		1.3
Acenaphthene	20	60	0.3		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
2,4-Dinitrotoluene	5	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Diethylphthalate	50	NS	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8
4-Chlorophenyl-phenylether	1	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Fluorene	50	23	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
N-Nitrosodiphenylamine	NS	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
4-Bromophenyl-phenylether	NS	NS	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2
Hexachlorobenzene	0.04	0.00003	ND		0.3	ND		0.3	ND		0.3	ND		0.3	ND		0.3	ND		0.3
Phenanthrene	50	14	0.3		0.08	ND		0.08	ND		0.08	ND		0.08	ND		0.08	ND		0.08
Anthracene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Di-n-butylphthalate	50	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Fluoranthene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Pyrene	50	NS	0.3		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzidine	5	NS	ND		7.2	ND		7.2	ND		7.2	ND		7.2	ND		7.2	ND		7.2
Butylbenzylphthalate	50	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
3,3'-Dichlorobenzidine	5	NS	ND		4.9	ND		4.9	ND		4.9	ND		4.9	ND		4.9	ND		4.9
Benzo(a)anthracene	0.002	NS	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
Chrysene	0.002	NS	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
bis(2-Ethylhexyl)phthalate	5	NS	44		1.1	ND		1	ND		1.1	ND		1	1.1		1.1	ND		1.1
Di-n-octylphthalate	50	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Benzo(b)fluoranthene	0.002	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzo(k)fluoranthene	0.002	NS	ND		0.09	ND		0.09	ND		0.09	ND		0.09	ND		0.09	ND		0.09
Benzo(a)pyrene	0.002	0.0006	ND		0.06	ND		0.06	ND		0.06	ND		0.06	ND		0.06	ND		0.06
Indeno(1,2,3-cd)pyrene	0.002	NS	ND		0.08	ND		0.08	ND		0.08	ND		0.08	ND		0.08	ND		0.08
Dibenz(a,h)anthracene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzo(g,h,i)perylene	5	NS	ND		0.09	ND		0.09	ND		0.09	ND		0.09	ND		0.09	ND		0.09
Total Confident Conc.	NA	NA	46.1			0			0.3			0			1.3			0		
Total SVOC TICs (Estimated Conc.)	NS	NS	154.5	J		0			192	J		0			119.3	J		0		

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

conc.= concentration

MDL= Method detection limit

J= Thes estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.

NS= No standard or guidance value

TICs= Tentatively identified compounds (estimated)

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was at a point downstream of the treatment system on each day the treated water was discharged at the HHMT-Port Ivory Facility.

2) Concentrations highlighted and in bold exceed the New York AWQSGV for either groundwater or surface water.

TABLE 5B
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS-SVOCs
IRM - SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York State Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	I-10 Influent 766651 09/01/06 WATER ug/L			E-10 Effluent 766652 09/01/06 WATER ug/L			I-11 Influent 766983 09/05/06 WATER ug/L			E-11 Effluent 7666984 09/05/06 WATER ug/L			I-12 Influent 767616 09/07/06 WATER ug/L			E-12 Effluent 767617 09/07/06 WATER ug/L		
SEMIVOLATILE VOLATILE ORGANIC COMPOUNDS (SVOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Phenol	1	NS	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6
2-Chlorophenol	1	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
2-Nitrophenol	1	NS	ND		1.6	ND		1.6	ND		1.6	ND		1.6	ND		1.6	ND		1.6
2,4-Dimethylphenol	1	1,000	ND		2	ND		2	ND		2	ND		2	ND		2	ND		2
2,4-Dichlorophenol	1	NS	ND		1.4	ND		1.4	ND		1.4	ND		1.4	ND		1.4	ND		1.4
4-Chloro-3-methylphenol	1	NS	ND		1.6	ND		1.6	ND		1.6	ND		1.6	ND		1.6	ND		1.6
2,4,6-Trichlorophenol	1	NS	ND		2.2	ND		2.2	ND		2.2	ND		2.2	ND		2.2	ND		2.2
2,4-Dinitrophenol	1	400	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
4-Nitrophenol	1	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
4,6-Dinitro-2-methylphenol	NS	NS	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2
Pentachlorophenol	1	NS	ND		2.1	ND		2.1	ND		2.1	ND		2.1	ND		2.1	ND		2.1
N-Nitrosodimethylamine	50	NS	ND		0.7	ND		0.7	ND		0.7	ND		0.7	ND		0.7	ND		0.7
bis(2-Chloroethyl)ether	1	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,3-Dichlorobenzene	3	50	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
1,4-Dichlorobenzene	3	50	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,2-Dichlorobenzene	3	50	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
bis(2-chloroisopropyl)ether	NS	NS	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8
N-Nitroso-di-n-propylamine	NS	NS	ND		0.7	ND		0.7	ND		0.7	ND		0.7	ND		0.7	ND		0.7
Hexachloroethane	5	0.6	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
Nitrobenzene	0.4	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Isophorone	50	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
bis(2-Chloroethoxy)methane	5	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,2,4-Trichlorobenzene	5	50	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
Naphthalene	10	140	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
Hexachlorobutadiene	0.5	0.01	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6
Hexachlorocyclopentadiene	5	0.7	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6
2-Chloronaphthalene	10	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Dimethylphthalate	50	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Acenaphthylene	20	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
2,6-Dinitrotoluene	5	NS	ND		1.3	ND		1.3	ND		1.3	ND		1.3	ND		1.3	ND		1.3
Acenaphthene	20	60	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
2,4-Dinitrotoluene	5	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Diethylphthalate	50	NS	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8
4-Chlorophenyl-phenylether	1	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Fluorene	50	23	2.4		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
N-Nitrosodiphenylamine	NS	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
4-Bromophenyl-phenylether	NS	NS	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2
Hexachlorobenzene	0.04	0.00003	ND		0.3	ND		0.3	ND		0.3	ND		0.3	ND		0.3	ND		0.3
Phenanthrene	50	14	4.4		0.08	ND		0.08	ND		0.08	ND		0.08	ND		0.08	ND		0.08
Anthracene	50	NS	ND		0.1	ND		0.1	0.2		0.1	ND		0.1	ND		0.1	ND		0.1
Di-n-butylphthalate	50	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Fluoranthene	50	NS	1.9		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Pyrene	50	NS	3.1		0.1	ND		0.1	0.2		0.1	ND		0.1	ND		0.1	ND		0.1
Benzidine	5	NS	ND		7.2	ND		7.2	ND		7.2	ND		7.2	ND		7.2	ND		7.2
Butylbenzylphthalate	50	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
3,3'-Dichlorobenzidine	5	NS	ND		4.9	ND		4.9	ND		4.9	ND		4.9	ND		4.9	ND		4.9
Benzo(a)anthracene	0.002	NS	**0.9**		0.2	ND		0.2	**0.059**		0.051	ND		0.2	ND		0.2	ND		0.2
Chrysene	0.002	NS	**1.9**		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
bis(2-Ethylhexyl)phthalate	5	NS	**15**		1	ND		1	ND		1.1	ND		1	1.4		1.1	ND		1
Di-n-octylphthalate	50	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Benzo(b)fluoranthene	0.002	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzo(k)fluoranthene	0.002	NS	ND		0.09	ND		0.09	ND		0.09	ND		0.09	ND		0.09	ND		0.09
Benzo(a)pyrene	0.002	0.0006	ND		0.06	ND		0.06	ND		0.06	ND		0.06	ND		0.06	ND		0.06
Indeno(1,2,3-cd)pyrene	0.002	NS	**0.5**		0.08	ND		0.08	ND		0.08	ND		0.08	ND		0.08	ND		0.08
Dibenz(a,h)anthracene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzo(g,h,i)perylene	5	NS	ND		0.09	ND		0.09	ND		0.09	ND		0.09	ND		0.09	ND		0.09
Total Confident Conc.	NA	NA	30.1			0		NA	0.459			0			1.4			0		
Total SVOC TICs (Estimated Conc.)	NS	NS	1441	J		0		NA	10	J		0			0			0		

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

conc.= concentration

MDL= Method detection limit

J= Thes estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.

NS= No standard or guidance value

TICs= Tentatively identified compounds (estimated)

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was at a point downstream of the treatment system on each day the treated water was discharged at the HHMT-Port Ivory Facility.

2) Concentrations highlighted and in bold exceed the New York AWQSGV for either groundwater or surface water.

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TABLE 5B
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS-SVOCs
IRM - SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID	New York State Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York State Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	I-13 Influent 769934 09/15/06 WATER ug/L			E-13 Effluent 769935 09/15/06 WATER ug/L			I-14 Influent 770359 09/18/06 WATER ug/L			E-14 Effluent 770360 09/18/06 WATER ug/L			I-15 Influent 770599 09/19/06 WATER ug/L			E-15 Effluent 770598 09/19/06 WATER ug/L		
Lab Sample No.																				
Sampling Date																				
Matrix																				
Units																				
SEMIVOLATILE VOLATILE ORGANIC COMPOUNDS (SVOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Phenol	1	NS	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6
2-Chlorophenol	1	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
2-Nitrophenol	1	NS	ND		1.6	ND		1.6	ND		1.6	ND		1.6	ND		1.6	ND		1.6
2,4-Dimethylphenol	1	1,000	ND		2	ND		2	ND		2	ND		2	ND		2	ND		2.1
2,4-Dichlorophenol	1	NS	ND		1.4	ND		1.4	ND		1.4	ND		1.4	ND		1.4	ND		1.5
4-Chloro-3-methylphenol	1	NS	ND		1.6	ND		1.6	ND		1.6	ND		1.6	ND		1.6	ND		1.7
2,4,6-Trichlorophenol	1	NS	ND		2.2	ND		2.2	ND		2.2	ND		2.2	ND		2.2	ND		2.2
2,4-Dinitrophenol	1	400	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
4-Nitrophenol	1	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
4,6-Dinitro-2-methylphenol	NS	NS	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.3
Pentachlorophenol	1	NS	ND		2.1	ND		2.1	ND		2.1	ND		2.1	ND		2.1	ND		2.1
N-Nitrosodimethylamine	50	NS	ND		0.7	ND		0.7	ND		0.7	ND		0.7	ND		0.8	ND		0.8
bis(2-Chloroethyl)ether	1	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,3-Dichlorobenzene	3	50	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
1,4-Dichlorobenzene	3	50	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,2-Dichlorobenzene	3	50	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
bis(2-chloroisopropyl)ether	NS	NS	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.9	ND		0.9
N-Nitroso-di-n-propylamine	NS	NS	ND		0.7	ND		0.7	ND		0.7	ND		0.7	ND		0.8	ND		0.8
Hexachloroethane	5	0.6	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
Nitrobenzene	0.4	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Isophorone	50	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		1	ND		1
bis(2-Chloroethoxy)methane	5	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,2,4-Trichlorobenzene	5	50	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
Naphthalene	10	140	ND		0.2	ND		0.2	ND		0.2	ND		0.2	0.3		0.2	ND		0.2
Hexachlorobutadiene	0.5	0.01	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6
Hexachlorocyclopentadiene	5	0.7	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6
2-Chloronaphthalene	10	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Dimethylphthalate	50	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Acenaphthylene	20	NS	ND		0.1	ND		0.1	0.2		0.1	ND		0.1	ND		0.1	ND		0.1
2,6-Dinitrotoluene	5	NS	ND		1.3	ND		1.3	ND		1.3	ND		1.3	ND		1.3	ND		1.3
Acenaphthene	20	60	1.8		0.1	ND		0.1	1.4		0.1	ND		0.1	1.1		0.1	ND		0.1
2,4-Dinitrotoluene	5	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.2	ND		1.2
Diethylphthalate	50	NS	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8
4-Chlorophenyl-phenylether	1	NS	ND		1	ND		1	ND		1	ND		1	ND		1.1	ND		1.1
Fluorene	50	23	2.7		0.2	ND		0.2	1		0.2	ND		0.2	ND		0.2	ND		0.2
N-Nitrosodiphenylamine	NS	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
4-Bromophenyl-phenylether	NS	NS	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2
Hexachlorobenzene	0.04	0.00003	ND		0.3	ND		0.3	ND		0.3	ND		0.3	ND		0.3	ND		0.3
Phenanthrene	50	14	3.2		0.08	ND		0.08	0.6		0.08	ND		0.08	0.2		0.08	ND		0.082
Anthracene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Di-n-butylphthalate	50	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Fluoranthene	50	NS	ND		0.1	ND		0.1	0.3		0.1	ND		0.1	0.2		0.1	ND		0.1
Pyrene	50	NS	ND		0.1	ND		0.1	0.2		0.1	ND		0.1	0.2		0.1	ND		0.1
Benzidine	5	NS	ND		7.2	ND		7.2	ND		7.2	ND		7.2	ND		7.3	ND		7.4
Butylbenzylphthalate	50	NS	ND		1	ND		1	ND		1	ND		1	ND		1.1	ND		1.1
3,3'-Dichlorobenzidine	5	NS	ND		4.9	ND		4.9	ND		4.9	ND		4.9	ND		5	ND		5.1
Benzo(a)anthracene	0.002	NS	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
Chrysene	0.002	NS	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
bis(2-Ethylhexyl)phthalate	5	NS	ND		1	ND		1	ND		1.1	ND		1	ND		1	ND		1.1
Di-n-octylphthalate	50	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Benzo(b)fluoranthene	0.002	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzo(k)fluoranthene	0.002	NS	ND		0.09	ND		0.09	ND		0.09	ND		0.09	ND		0.091	ND		0.093
Benzo(a)pyrene	0.002	0.0006	ND		0.06	ND		0.06	ND		0.06	ND		0.06	ND		0.061	ND		0.062
Indeno(1,2,3-cd)pyrene	0.002	NS	ND		0.08	ND		0.08	ND		0.08	ND		0.08	ND		0.081	ND		0.082
Dibenz(a,h)anthracene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzo(g,h,i)perylene	5	NS	NO		0.09	ND		0.09	ND		0.09	ND		0.09	ND		0.091	ND		0.093
Total Confident Conc.	NA	NA	7.7			0			3.7			0			2			0		
Total SVOC TICs (Estimated Conc.)	NS	NS	210.9	J		12	J		52.8	J		195	J		84.7	J		0		

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

conc.= concentration

MDL= Method detection limit

J= Thes estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.

NS= No standard or guidance value

TICs= Tentatively identified compounds (estimated)

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was collected at a point downstream of the treatment system on each day the treated water was discharged at the HHMT-Port Ivory facility.

2) Concentrations highlighted and in bold exceed the New York AWQSGV for either groundwater or surface water.

TABLE 5B
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS-SVOCs
IRM - SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID	New York State Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York State Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	I-16 Influent 772761 09/26/06 WATER ug/L			E-16 Effluent 772762 09/26/06 WATER ug/L			I-17 Influent 775240 10/04/06 WATER ug/L			E-17 Effluent 775241 10/04/06 WATER ug/L			I-18 Influent 777150 10/12/06 WATER ug/L			E-18 Effluent 777151 10/12/06 WATER ug/L		
Lab Sample No.																				
Sampling Date																				
Matrix																				
Units																				
SEMIVOLATILE VOLATILE ORGANIC COMPOUNDS (SVOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Phenol	1	NS	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6
2-Chlorophenol	1	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
2-Nitrophenol	1	NS	ND		1.6	ND		1.6	ND		1.6	ND		1.6	ND		1.6	ND		1.6
2,4-Dimethylphenol	1	1,000	ND		2	ND		2.1	ND		2	ND		2.1	ND		2	ND		2.1
2,4-Dichlorophenol	1	NS	ND		1.4	ND		1.5	ND		1.4	ND		1.5	ND		1.4	ND		1.5
4-Chloro-3-methylphenol	1	NS	ND		1.6	ND		1.7	ND		1.6	ND		1.7	ND		1.6	ND		1.7
2,4,6-Trichlorophenol	1	NS	ND		2.2	ND		2.2	ND		2.2	ND		2.2	ND		2.2	ND		2.2
2,4-Dinitrophenol	1	400	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
4-Nitrophenol	1	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
4,6-Dinitro-2-methylphenol	NS	NS	ND		1.2	ND		1.3	ND		1.2	ND		1.3	ND		1.2	ND		1.3
Pentachlorophenol	1	NS	ND		2.1	ND		2.1	ND		2.1	ND		2.1	ND		2.1	ND		2.1
N-Nitrosodimethylamine	50	NS	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8
bis(2-Chloroethyl)ether	1	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,3-Dichlorobenzene	3	50	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
1,4-Dichlorobenzene	3	50	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,2-Dichlorobenzene	3	50	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
bis(2-chloroisopropyl)ether	NS	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
N-Nitroso-di-n-propylamine	NS	NS	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8
Hexachloroethane	5	0.6	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
Nitrobenzene	0.4	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Isophorone	50	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
bis(2-Chloroethoxy)methane	5	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,2,4-Trichlorobenzene	5	50	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9	ND		0.9
Naphthalene	10	140	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
Hexachlorobutadiene	0.5	0.01	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6
Hexachlorocyclopentadiene	5	0.7	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6	ND		0.6
2-Chloronaphthalene	10	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Dimethylphthalate	50	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Acenaphthylene	20	NS	0.1		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
2,6-Dinitrotoluene	5	NS	ND		1.3	ND		1.3	ND		1.3	ND		1.3	ND		1.3	ND		1.3
Acenaphthene	20	60	0.7		0.1	ND		0.1	ND		0.1	ND		0.1	1.6		0.1	ND		0.1
2,4-Dinitrotoluene	5	NS	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2
Diethylphthalate	50	NS	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8	ND		0.8
4-Chlorophenyl-phenylether	1	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Fluorene	50	23	0.8		0.2	ND		0.2	ND		0.2	ND		0.2	3.4		0.2	ND		0.2
N-Nitrosodiphenylamine	NS	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
4-Bromophenyl-phenylether	NS	NS	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2
Hexachlorobenzene	0.04	0.00003	ND		0.3	ND		0.3	ND		0.3	ND		0.3	ND		0.3	ND		0.3
Phenanthrene	50	14	0.5		0.08	ND		0.082	ND		0.082	ND		0.082	4.6		0.081	ND		0.081
Anthracene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	2.1		0.1	ND		0.1
Di-n-butylphthalate	50	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Fluoranthene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	0.7		0.1	ND		0.1
Pyrene	50	NS	0.2		0.1	ND		0.1	ND		0.1	ND		0.1	1.2		0.1	ND		0.1
Benzidine	5	NS	ND		7.3	ND		7.4	ND		7.3	ND		7.4	ND		7.3	ND		7.4
Butylbenzylphthalate	50	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1	ND		1.1
3,3'-Dichlorobenzidine	5	NS	ND		5	ND		5.1	ND		5	ND		5.1	ND		5	ND		5.1
Benzo(a)anthracene	0.002	NS	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2
Chrysene	0.002	NS	ND		0.2	ND		0.2	ND		0.2	ND		0.2	0.7		0.2	ND		0.2
bis(2-Ethylhexyl)phthalate	5	NS	3.1		1.1	ND		1.1	1.4		1.1	ND		1.1	25		1.1	ND		1.1
Di-n-octylphthalate	50	NS	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
Benzo(b)fluoranthene	0.002	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzo(k)fluoranthene	0.002	NS	ND		0.091	ND		0.093	ND		0.091	ND		0.093	ND		0.091	ND		0.091
Benzo(a)pyrene	0.002	0.0006	ND		0.061	ND		0.062	ND		0.061	ND		0.062	ND		0.061	ND		0.061
Indeno(1,2,3-cd)pyrene	0.002	NS	ND		0.081	ND		0.082	ND		0.081	ND		0.082	ND		0.081	ND		0.081
Dibenz(a,h)anthracene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzo(g,h,i)perylene	5	NS	ND		0.091	ND		0.093	ND		0.091	ND		0.093	ND		0.091	ND		0.091
Total Confident Conc.	NA	NA	5.4			0			1.4			0			39.3			0		
Total SVOC TICs (Estimated Conc.)	NS	NS	76.1	J		0			30.4	J		0			1337	J		0		

Notes:

* Using GA water classification with protection for drinking water (groundwater).

** Using SD water classification with protection for human consumption of fish (saline water).

ug/L= micrograms per liter

conc.= concentration

MDL= Method detection limit

J= Thes estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.

NS= No standard or guidance value

TICs= Tentatively identified compounds (estimated)

NA=Not applicable

1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was at a point downstream of the treatment system on each day the treated water was discharged at the HHMT-Port Ivory Facility.

2) Concentrations highlighted and in bold exceed the New York AWQSGV for either groundwater or surface water.

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TABLE 5B
SUMMARY OF INFLUENT/EFFLUENT ANALYTICAL RESULTS-SVOCs
IRM - SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Ambient Water Quality Standards and Guidance Values (Groundwater*) ug/L	New York State Ambient Water Quality Standards and Guidance Values (Surface Water**) ug/L	I-19 Influent 778005 10/16/06 WATER ug/L			E-19 Effluent 778006 10/16/06 WATER ug/L			I-20 Influent 778365 10/17/06 WATER ug/L			E-20 Effluent 778366 10/17/06 WATER ug/L		
SEMIVOLATILE VOLATILE ORGANIC COMPOUNDS (SVOCs)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Phenol	1	NS	ND		0.6	ND		0.6	ND		0.6	ND		0.6
2-Chlorophenol	1	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1
2-Nitrophenol	1	NS	ND		1.6	ND		1.6	ND		1.6	ND		1.6
2,4-Dimethylphenol	1	1,000	ND		2	ND		2.1	ND		2	ND		2.1
2,4-Dichlorophenol	1	NS	ND		1.4	ND		1.5	ND		1.4	ND		1.5
4-Chloro-3-methylphenol	1	NS	ND		1.6	ND		1.7	ND		1.6	ND		1.7
2,4,6-Trichlorophenol	1	NS	ND		2.2	ND		2.2	ND		2.2	ND		2.2
2,4-Dinitrophenol	1	400	ND		0.9	ND		0.9	ND		0.9	ND		0.9
4-Nitrophenol	1	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9
4,6-Dinitro-2-methylphenol	NS	NS	ND		1.2	ND		1.3	ND		1.2	ND		1.3
Pentachlorophenol	1	NS	ND		2.1	ND		2.1	ND		2.1	ND		2.1
N-Nitrosodimethylamine	50	NS	ND		0.8	ND		0.8	ND		0.8	ND		0.8
bis(2-Chloroethyl)ether	1	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,3-Dichlorobenzene	3	50	ND		1	ND		1	ND		1	ND		1
1,4-Dichlorobenzene	3	50	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,2-Dichlorobenzene	3	50	ND		1.1	ND		1.1	ND		1.1	ND		1.1
bis(2-chloroisopropyl)ether	NS	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9
N-Nitroso-di-n-propylamine	NS	NS	ND		0.8	ND		0.8	ND		0.8	ND		0.8
Hexachloroethane	5	0.6	ND		0.9	ND		0.9	ND		0.9	ND		0.9
Nitrobenzene	0.4	NS	ND		1	ND		1	ND		1	ND		1
Isophorone	50	NS	ND		1	ND		1	ND		1	ND		1
bis(2-Chloroethoxy)methane	5	NS	ND		0.9	ND		0.9	ND		0.9	ND		0.9
1,2,4-Trichlorobenzene	5	50	ND		0.9	ND		0.9	ND		0.9	ND		0.9
Naphthalene	10	140	ND		0.2	ND		0.2	ND		0.2	ND		0.2
Hexachlorobutadiene	0.5	0.01	ND		0.6	ND		0.6	ND		0.6	ND		0.6
Hexachlorocyclopentadiene	5	0.7	ND		0.6	ND		0.6	ND		0.6	ND		0.6
2-Chloronaphthalene	10	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Dimethylphthalate	50	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Acenaphthylene	20	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1
2,6-Dinitrotoluene	5	NS	ND		1.3	ND		1.3	ND		1.3	ND		1.3
Acenaphthene	20	60	0.8		1.2	ND		0.1	2.5		0.1	ND		0.1
2,4-Dinitrotoluene	5	NS	ND		1.2	ND		1.2	ND		1.2	ND		1.2
Diethylphthalate	50	NS	ND		0.8	ND		0.8	ND		0.8	ND		0.8
4-Chlorophenyl-phenylether	1	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Fluorene	50	23	0.5		0.2	ND		0.2	2.8			ND		0.2
N-Nitrosodiphenylamine	NS	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1
4-Bromophenyl-phenylether	NS	NS	ND		1.2	ND		1.2	ND		1.2	ND		1.2
Hexachlorobenzene	0.04	0.00003	ND		0.3	ND		0.3	ND		0.3	ND		0.3
Phenanthrene	50	14	ND		0.08	ND		0.08	1.4		0.08	ND		0.08
Anthracene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Di-n-butylphthalate	50	NS	ND		1	ND		1	ND		1	ND		1
Fluoranthene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Pyrene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzidine	5	NS	ND		7.3	ND		7.4	ND		7.3	ND		7.4
Butylbenzylphthalate	50	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1
3,3'-Dichlorobenzidine	5	NS	ND		5	ND		5.1	ND		5	ND		5.1
Benzo(a)anthracene	0.002	NS	ND		0.2	ND		0.2	ND		0.2	ND		0.2
Chrysene	0.002	NS	ND		0.2	ND		0.2	ND		0.2	ND		0.2
bis(2-Ethylhexyl)phthalate	5	NS	ND		1.1	ND		1.1	ND		1.1	ND		1.1
Di-n-octylphthalate	50	NS	ND		1	ND		1	ND		1	ND		1
Benzo(b)fluoranthene	0.002	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzo(k)fluoranthene	0.002	NS	ND		0.09	ND		0.09	ND		0.09	ND		0.09
Benzo(a)pyrene	0.002	0.0006	ND		0.06	ND		0.06	ND		0.06	ND		0.06
Indeno(1,2,3-cd)pyrene	0.002	NS	ND		0.08	ND		0.08	ND		0.08	ND		0.08
Dibenz(a,h)anthracene	50	NS	ND		0.1	ND		0.1	ND		0.1	ND		0.1
Benzo(g,h,i)perylene	5	NS	ND		0.09	ND		0.09	ND		0.09	ND		0.09
Total Confident Conc.	NA	NA	1.3			0			6.7			0		
Total SVOC TICs (Estimated Conc.)	NS	NS	30.1	J		0			222.8	J		0		

Notes:
* Using GA water classification with protection for drinking water (groundwater).
** Using SD water classification with protection for human consumption of fish (saline water).
ug/L= micrograms per liter
conc.= concentration
MDL= Method detection limit
J= Thes estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.
NS= No standard or guidance value
TICs= Tentatively identified compounds (estimated)
NA=Not applicable
1) One influent sample was collected at a point upstream of the treatment system and one effluent sample was at a point downstream of the treatment system on each day the treated water was discharged at the HHMT-Port Ivory Facility.
2) Concentrations highlighted and in bold exceed the New York AWQSGV for either groundwater or surface water.

groundwater standards were selected because, at this time, these represent the only guidance available for ambient groundwater. However, given the location of the HHMT-Port Ivory Facility and the potential for the groundwater to be saline, the published Class GA AWQSGVs are not appropriate for use at this site.

The analytical data demonstrate the effectiveness of the groundwater treatment system. All organic compounds detected at concentrations above their respective AWQSGVs in the influent samples were either not detected or were detected at concentrations below Class SD (surface water) or Class GA (groundwater) AWQSGVs in the corresponding effluent samples. The only targeted organic compounds detected at concentrations above their respective AWQSGVs in any influent sample were the SVOCs nitrobenzene, 4-chlorophenyl-phenylether, and benzo(a)anthracene; as noted above, these compounds were effectively treated before the water was discharged to the retention basin. The total concentrations of VOC TICs in influent samples ranged from non-detect to 298.3 ug/L, while that for the SVOC TICs ranged from non-detect to 1,441 ug/L. Except for the effluent samples collected on September 15 and 18, 2006, no VOC or SVOC TICs were detected in any effluent sample. AWQSGVs have not been established for the TICs in the September 15th and 18th effluent samples, and the TICs do not meet the definition of Principal Organic Contaminants (POCs). Based on the data, the treatment and on-site discharge of groundwater continued throughout the IRM without interruption.

6.3 Management of Excavated Soil

As per the NYSDEC-approved *Revised IRM Work Plan*, impacted and clean soil were stockpiled separately. Soil was deemed to be impacted if it exhibited one or more of the following characteristics: sheen, LNAPL, stained soil, or elevated PID measurements. Impacted soil was stockpiled on plastic and staged near its corresponding Removal Area/Trench. The stockpiled soil was elevated at least one foot at the edges and covered with plastic secured using concrete block or brick. Please note that impacted soil from Areas J, K and L was stockpiled at one location so as to prevent impacting facility operations in the limited space to the east of Bldg. No. 80. Following the completion of all excavation activities and the waste characterization sampling described below, the stockpiles of impacted soil were combined into one larger

stockpile, located in the vicinity of Area G. Stockpiled soil that appeared to be clean based on the absence of the characteristics listed above was sampled and reused during backfilling (see Section 7).

Soil samples were collected from the stockpiles of impacted soil for waste characterization purposes. Prior to soil excavation activities, one discrete soil sample was collected at each of Area B and Area I; these soil samples were analyzed for total petroleum hydrocarbons (TPHC). The analytical results indicated a wide variation in the concentration of TPHC at these two Removal Areas/Trenches. Based on the analytical results, disposal of the soil at Area B carried a greater unit cost than the soil excavated from Area I. In order to complete the IRM in a cost-efficient manner, the Port Authority collected waste characterization samples from all Removal Areas to characterize the soil for disposal purposes. One composite soil sample was collected from the stockpile at each Removal Area except that soil excavated from Area B was not sampled, a second sample was collected at the Area I stockpile to confirm the previous results, and only one composite soil sample was collected from soil excavated at Areas J, K, and L. Soil excavated at Area B had already been characterized.

One composite soil sample was collected from soil excavated at Areas J, K, and L because soil from these Removal Areas/Trenches was staged as a single stockpile. Each composite sample consisted of five discrete samples that were composited by the laboratory. Soil samples were not collected from stockpiles generated during the additional excavation activities conducted at certain Removal Areas/Trenches (see Section 5). All grab and composite samples were transported to Veritech (Certification No. 11408) under standard Chain of Custody procedures for analysis of TPHC concentration. The analytical results are summarized in Table 6.

Table 6: Summary of Total Petroleum Hydrocarbons (TPH) Analytical Results

Removal Area/Trench	TPH Results (mg/kg)
Area A	5,800
Area B	52,000*
Area C	18,000

Area D	3,800
Area E	360
Area F	15,000
Area G	9,500
Area H	21,000
Area I	12,000*/18,000
Area J	11,000**
Area K	11,000**
Area L	11,000**

Notes: *Results for a discrete ("grab") soil sample.
**One composite soil sample was collected from the stockpile of impacted soil excavated from Areas J, K, and L.

7.0 POST-EXCAVATION IRM ACTIVITIES

Activities conducted after excavation included the following:

- Collection and analysis of post-excavation soil samples;
- Collection, preparation, and analysis of LNAPL leachate samples;
- Collection and analysis of groundwater samples; and,
- Completion of demobilization and site restoration activities.

These activities are summarized below in Sections 7.1 through 7. 4, respectively.

For discussion purposes, the analytical results from soil sampling have been compared to current NYSDEC RSCOs set forth in the January 1994 NYSDEC Division of Environmental Remediation Technical and Administrative Guidance Memorandum (TAGM) #4046. Please note, reference to the RSCOs in this report does not represent any agreement or concurrence that the same are appropriate for usage at the HHMT-Port Ivory Facility.

Start comparing to PART 375

he LNAPL leachate and groundwater sampling analytical results have been compared to rrent NYSDEC AWQSGVs for groundwater classified as GA, a potential drinking water urce. As previously stated, given the location of the site and the potential for the groundwater e saline, the published AWQSGVs are not appropriate for use at this site. However, at this

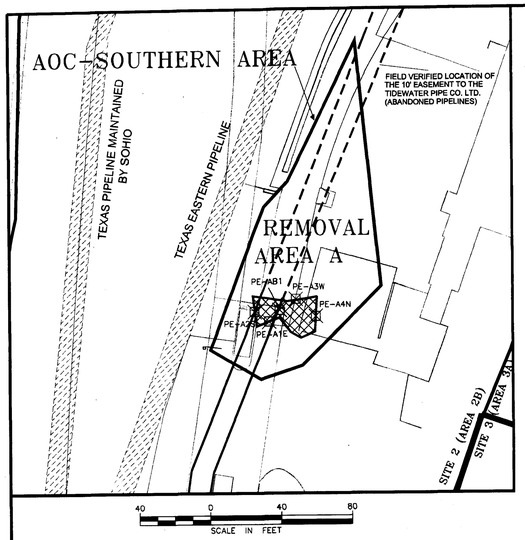
time, these represent the only guidance available for ambient groundwater. Please note, the reference of these cleanup objectives in this report does not represent any agreement or concurrence that the same are appropriate for usage at this site.

7.1 Collection of Post-Excavation Soil Samples

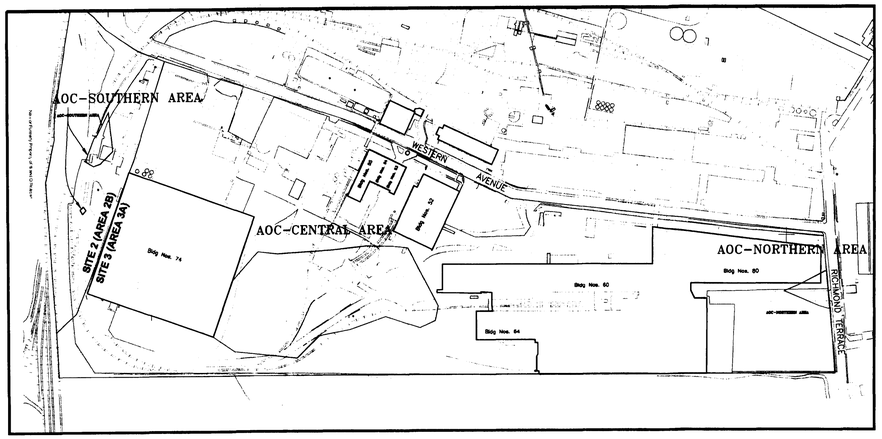
Prior to backfilling, HMM, at the direction of the Port Authority collected post-excavation soil samples from the sidewalls and bottom of each Removal Area/Trench to document the environmental quality of the soil that would remain at the HHMT-Port Ivory Facility. The samples were transferred directly from the bucket of an excavator provided by RCC into the laboratory-provided sampling jars using a dedicated stainless steel trowel or scoop. All samples were transported to Veritech (Certification No. 11408) under Chain of Custody documentation for analysis of target compound list (TCL) VOC+10 and TCL SVOC+20. The post-excavation soil samples were collected at the frequency specified in DER-10 and the *Revised IRM Work Plan*; specifically, one sample was collected from each 30 linear feet of sidewall and one sample was collected from each 900 feet of bottom area (see Table 7). Soil sample locations and depth intervals were biased towards the most significantly impacted soil, as determined by volatile organic vapor concentrations or field observations of stained soil or petroleum odors. In the absence of visual indications of impacted soil in a thirty-foot section of sidewall, the sample was collected at the 0.5-foot depth interval immediately above the water table thirty feet from the prior sampling location at that Removal Area/Trench perimeter. The locations of the post-excavation soil samples are shown on Figure 4.

Table 7: Summary of Post-Excavation Soil Sample Collection

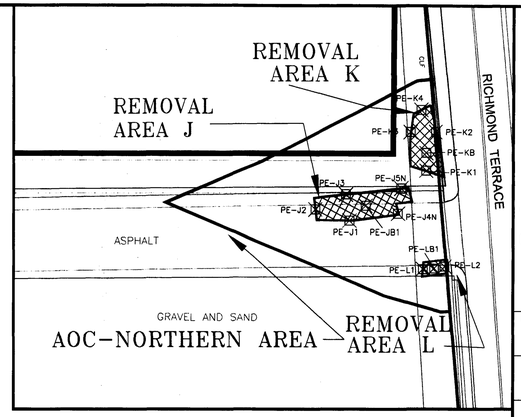
Excavation Area	Perimeter (ft.)	Bottom Area (sq. ft)	Number of Sidewall Samples Collected	Number of Bottom Samples Collected
A	98	558	4	1
B	119	550	4	1
B (over-ex.)*	73	550	3	1
C	93	477	4	1
D	119	531	4	1
E	57	199	2	1
F	168	2037	Note 3	Note 3



ENLARGEMENT OF THE NORTHERN PORTION OF AOC-SOUTHERN AREA

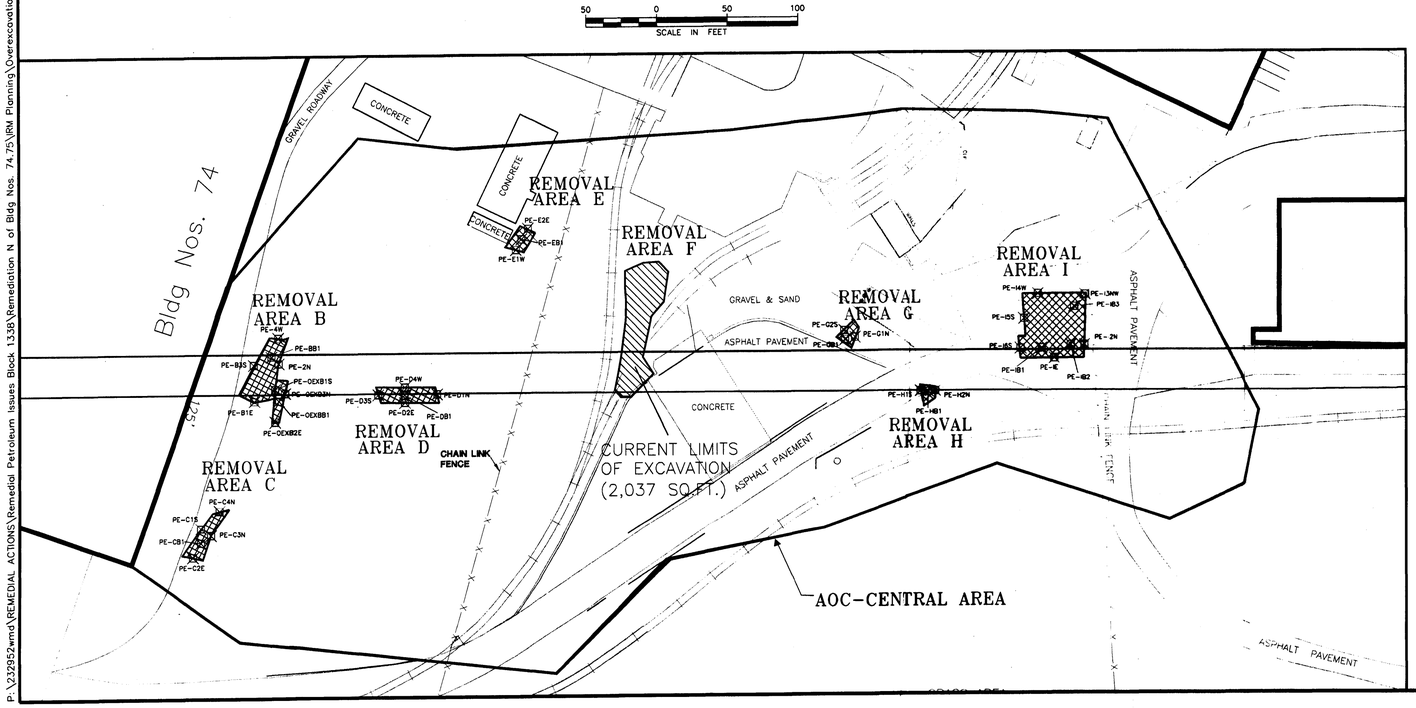


MAP KEY



ENLARGEMENT OF AOC-NORTHERN AREA

ENLARGEMENT OF AOC-CENTRAL AREA



NOTES:

1. Removal Areas A, B, C, D, E, G, H, I, J, K, and L have been backfilled. Post-excavation soil samples have been collected at these Removal Areas. Only Removal Area F remains open. Since the final extent of Area F is unknown, post-excavation soil samples have not yet been collected.

2. Two excavation are shown at Area B. The southern area was excavated to a depth of 7 feet below ground surface (bgs) while the northern area was excavated to 5.5 feet bgs. The northern area was excavated subsequent to the southern area because of LNAPL reaccumulation.

3. Existing buildings are shown in bold.

4. VCP = Voluntary Cleanup Agreement

LEGEND

- RAILROAD TRACKS
- VCP SITE BOUNDARY
- EXISTING BUILDINGS
- PE-K3 POST EXCAVATION SAMPLING LOCATION
- REMOVAL AREA EXCAVATION LIMITS (COMPLETED AND BACKFILLED)
- REMOVAL AREA EXCAVATION LIMITS (OPEN AND IN PROGRESS)

Sheet of

THE PORT AUTHORITY OF NY & NJ

ENGINEERING PROGRAM MANAGER

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT

Title

SITES 2 (AREA 2B) AND 3 (AREA 3A) (BLOCK 1338, LOT 1) HHMT-PORT IVORY FACILITY

POST EXCAVATION SOIL SAMPLE LOCATION PLAN (REMOVAL AREAS/ TRENCHES)

Designed by	Drawn by	Checked by
	BFJ	GKC

Date 5-3-07

Contract Number

Drawing Number FIGURE 4

P:\22952wmd\REMEDIAL ACTIONS\Remedial Petroleum Issues Block 1338\Remediation N of Bldg Nos. 74,75\RM Planning\Overexcavation B_F.dwg 5/7/07 8:54 am

G	57	202	2	1
H	43	116	2	1
I	176	1990	6	3
J	116	631	5	1
K	97	467	4	1
L	46	118	2	1

Notes and Abbreviations:
1. The dimensions of the Removal Areas/Trenches are considered approximate and are based upon GPS measurements of each excavation.
2. Post-excavation sample frequency is in accordance with the NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation dated December 2002 and the *Revised IRM Work Plan.*
3. Post-excavation samples were not collected at Area F because the IRM is incomplete at that Removal Area/Trench.

*B (over-ex.) = Additional excavation was performed subsequent to the backfill of Removal Area/Trench B for the purpose of removing viscous tar-like (Type II) LNAPL encountered above groundwater.
ft. – feet
sq. ft. – square feet

Post-excavation soil analytical results are summarized in Tables 8A and 8B, respectively. In general, the concentrations of regulated organic compounds detected in the post-excavation soil samples are similar to those detected at other portions of the HHMT-Port Ivory Facility and are attributable to the fill materials placed by P&G. Acetone, benzene, methylene chloride, and total xylenes were the only VOCs detected above their respective RSCOs in the post-excavation soil samples. Acetone, a commonly-used laboratory solvent, was detected above its RSCO only in post-excavation soil samples collected at Areas C, D, G, H, and I. Only slightly more than half (14 of 23) of the post-excavation soil samples collected at those areas contained acetone at a concentration above its RSCO; acetone was not detected in several of the post-excavation samples from these Removal Areas. Benzene and total xylenes were detected at concentrations slightly above their RSCOs only in one sidewall sample, sample PE-D3, collected at Area D. Benzene was detected at a concentration of 0.33 mg/kg, slightly above its RSCO of 0.06 mg/kg, and total xylenes was detected at a concentration of 1.4 mg/kg, slightly above the RSCO of 1.2 mg/kg for total xylenes. Methylene chloride was also detected in the method blanks prepared and analyzed by the laboratory; therefore, the concentration of methylene chloride in the post-excavation samples is considered to be attributable to laboratory contamination.

TABLE 8A

SUMMARY OF POST EXCAVATION SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Recommended Soil Cleanup Objectives (mg/kg)	PE-A1E(5-5.5') AC25828-003 9/22/2006 SOIL mg/Kg			PE-AB1(6.5-7') AC25828-004 9/22/2006 SOIL mg/Kg			PE-A2S(5-5.5') AC25828-005 9/22/2006 SOIL mg/Kg			PE-A3W(5-5.5') AC25828-006 9/22/2006 SOIL mg/Kg			PE-A4N(3.5-4') AC25828-007 9/22/2006 SOIL mg/Kg		
VOLATILE ORGANIC COMPOUNDS (GC/MS)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
1,1,1-Trichloroethane	0.8	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
1,1,2,2-Tetrachloroethane	0.6	ND		0.89	ND		0.0063	ND		0.0072	ND		0.0077	ND		0.0065
1,1,2-Trichloroethane	NS	ND		0.89	ND		0.0063	ND		0.0072	ND		0.0077	ND		0.0065
1,1-Dichloroethane	0.2	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
1,1-Dichloroethene	0.4	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
1,2-Dichloroethane	0.1	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
1,2-Dichloropropane	NS	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
2-Butanone	0.3	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
2-Chloroethylvinylether	NS	ND		0.89	ND		0.0013	ND		0.0072	ND		0.015	ND		0.013
2-Hexanone	NS	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
4-Methyl-2-Pentanone	1	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
Acetone	0.2	ND		4.5	ND		0.032	0.14		0.036	0.093		0.038	0.029	J	0.032
Acrolein	NS	ND		4.5	ND		0.0063	ND		0.036	ND		0.038	ND		0.032
Acrylonitrile	NS	ND		0.89	ND		0.0063	ND		0.0072	ND		0.0077	ND		0.0065
Benzene	0.06	ND		0.18	ND		0.0013	ND		0.0014	ND		0.0015	ND		0.0013
Bromodichloromethane	NS	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
Bromoform	NS	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
Bromomethane	NS	ND		0.89	ND		0.0013	ND		0.0072	ND		0.015	ND		0.013
Carbon disulfide	2.7	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
Carbon tetrachloride	0.6	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
Chlorobenzene	1.7	ND		0.89	ND		0.0063	ND		0.0072	ND		0.0077	ND		0.0065
Chloroethane	NS	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
Chloroform	0.3	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
Chloromethane	NS	ND		0.89	ND		0.0063	ND		0.0072	ND		0.0077	ND		0.0065
Cis-1,2-Dichloroethene	NS	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
Cis-1,3-Dichloropropene	NS	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
Dibromochloromethane	NS	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
Ethylbenzene	5.5	ND		0.18	ND		0.0013	ND		0.0014	ND		0.0015	ND		0.0013
M&p-Xylenes	1.2 (Total)	ND		0.36	ND		0.0025	ND		0.0029	ND		0.0031	ND		0.0026
Methylene chloride	0.1	0.44	B	0.89	0.036	B	0.0063	0.028	B	0.0072	0.047	B	0.0077	0.04	B	0.0065
O-Xylene	1.2 (Total)	ND		0.18	ND		0.0013	ND		0.0014	ND		0.0015	ND		0.0013
Styrene	NS	ND		0.89	ND		0.0063	ND		0.0072	ND		0.0077	ND		0.0065
Tetrachloroethene	1.4	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
Toluene	1.5	ND		0.18	ND		0.0013	ND		0.0014	ND		0.0015	ND		0.0013
Trans-1,2-Dichloroethene	0.3	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
Trans-1,3-Dichloropropene	NS	ND		0.89	ND		0.0063	ND		0.0072	ND		0.0077	ND		0.0065
Trichloroethene	0.7	ND		0.89	ND		0.0063	ND		0.0072	ND		0.0077	ND		0.0065
Vinyl chloride	0.2	ND		0.89	ND		0.0013	ND		0.0072	ND		0.0077	ND		0.0065
Total VOCs Conc.	10	0.44			0.036			0.168			0.14			0.033		
VOC TICs	NS	97.8	J		0.0169	J		0.1723	J		0.0224	J		ND		

Notes:
Concentrations in blold in highlighted cells exceed the New YorkTAGM Recommended Soil Cleanup Objectives (RSCOs)
TAGM=Technical and Administrative Guidance Memorandum #4046
NS= No standard has been established for this compound
Conc.= Detected concentration
ND=Not detected above the laboratory's reporting limits
MDL=Method detection limit
B= Analyte was detected in the laboratory analyzed blank
J- The estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.
TICs=Tentatively Identified compounds
mg/kg= miligrams per kilogram
1) The numbers at the end of the sample ID indicate the depth interval the sample was collected. For example, PE-A1E (5-5.5') was collected from 5-5.5 feet bgs depth interval at Removal Area/Trench A.

TABLE 8A
SUMMARY OF POST EXCAVATION SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID		PE-BB1 (6.5-7')			PE-B1E (4.5-5')			PE-B2N (4.5-5')			PE-B3S (4.5-5')			PE-B4W (4.5-5')			PE-0EXBB1(5-5.5')		
Lab Sample No.	New York State	AC25433-006			AC25433-007			AC25433-008			AC25433-009			AC25433-010			AC25847-002		
Sampling Date	Recommended Soil Cleanup	8/31/2006			8/31/2006			8/31/2006			8/31/2006			8/31/2006			9/25/2006		
Matrix	Objectives (mg/kg)	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL		
Units		mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
VOLATILE ORGANIC COMPOUNDS (GC/MS)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
1,1,1-Trichloroethane	0.8	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
1,1,2,2-Tetrachloroethane	0.6	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
1,1,2-Trichloroethane	NS	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
1,1-Dichloroethane	0.2	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
1,1-Dichloroethene	0.4	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
1,2-Dichloroethane	0.1	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
1,2-Dichloropropane	NS	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
2-Butanone	0.3	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	0.033		0.017
2-Chloroethylvinylether	NS	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
2-Hexanone	NS	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
4-Methyl-2-Pentanone	1	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Acetone	0.2	ND		0.19	ND		0.18	ND		0.034	ND		0.2	ND		0.16	0.15		0.042
Acrolein	NS	ND		0.19	ND		0.18	ND		0.034	ND		0.2	ND		0.16	ND		0.042
Acrylonitrile	NS	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Benzene	0.06	ND		0.0077	ND		0.0071	ND		0.0014	ND		0.0081	ND		0.0066	ND		0.0017
Bromodichloromethane	NS	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Bromoform	NS	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Bromomethane	NS	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Carbon disulfide	2.7	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.017
Carbon tetrachloride	0.6	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	0.0017	J	0.0083
Chlorobenzene	1.7	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Chloroethane	NS	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Chloroform	0.3	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Chloromethane	NS	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Cis-1,2-Dichloroethene	NS	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Cis-1,3-Dichloropropene	NS	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Dibromochloromethane	NS	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Ethylbenzene	5.5	ND		0.0077	ND		0.0071	ND		0.0014	ND		0.0081	ND		0.0066	ND		0.0017
M&p-Xylenes	1.2 (Total)	ND		0.015	ND		0.014	ND		0.0027	ND		0.016	ND		0.013	ND		0.0033
Methylene chloride	0.1	0.092	B	0.038	0.051	B	0.036	0.013	B	0.0068	**0.11**	B	0.04	0.052	B	0.033	0.024	B	0.0083
O-Xylene	1.2 (Total)	ND		0.0077	ND		0.0071	ND		0.0014	ND		0.0081	ND		0.0066	ND		0.0017
Styrene	NS	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Tetrachloroethene	1.4	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Toluene	1.5	ND		0.0077	ND		0.0071	ND		0.0014	ND		0.0081	ND		0.0066	ND		0.0017
Trans-1,2-Dichloroethene	0.3	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Trans-1,3-Dichloropropene	NS	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Trichloroethene	0.7	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Vinyl chloride	0.2	ND		0.038	ND		0.036	ND		0.0068	ND		0.04	ND		0.033	ND		0.0083
Total VOCs Conc.	10	0.092			0.051			0.013			0.11			0.052			0.2087		
VOC TICs	NS	43.5	J		4.24	J		0.369	J		69.3	J		22.1	J		0.013	J	

Notes:
Concentrations in blold in highlighted cells exceed the New YorkTAGM Recommended Soil Cleanup Objectives (RSCOs)
TAGM=Technical and Administrative Guidance Memorandum #4046
NS= No standard has been established for this compound
Conc.= Detected concentration
ND=Not detected above the laboratory's reporting limits
MDL=Method detection limit
B= Analyte was detected in the laboratory analyzed blank
J- The estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.
TICs=Tentatively Identified compounds
mg/kg= miligrams per kilogram
1) The numbers at the end of the sample ID indicate the depth interv the sample was collected. For example, PE-A1E (5-5.5') was collecte from 5-5.5 feet bgs depth interval at Removal Area/Trench A.

TABLE 8A
SUMMARY OF POST EXCAVATION SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Recommended Soil Cleanup Objectives (mg/kg)	PE-0EXB1S(2-2.5) AC25847-001 9/25/2006 SOIL mg/Kg			PE-0EXB2E(2-2.5') AC25847-003 9/25/2006 SOIL mg/Kg			PE-0EXB3N(2.5-3') AC25847-004 9/25/2006 SOIL mg/Kg			PE-C1S (5.5-6') AC25433-001 8/31/2006 SOIL mg/Kg			PE-CB1 (5.5-6') AC25433-005 8/31/2006 SOIL mg/Kg			PE-C2E (5.5-6') AC25433-002 8/31/2006 SOIL mg/Kg		
VOLATILE ORGANIC COMPOUNDS (GC/MS)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
1,1,1-Trichloroethane	0.8	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
1,1,2,2-Tetrachloroethane	0.6	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
1,1,2-Trichloroethane	NS	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
1,1-Dichloroethane	0.2	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
1,1-Dichloroethene	0.4	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
1,2-Dichloroethane	0.1	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
1,2-Dichloropropane	NS	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
2-Butanone	0.3	ND		0.0056	ND		0.0058	ND		0.0062	0.086		0.013	ND		0.0067	ND		0.01
2-Chloroethylvinylether	NS	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
2-Hexanone	NS	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
4-Methyl-2-Pentanone	1	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Acetone	0.2	ND		0.028	0.026	J	0.029	0.036		0.031	0.18		0.066	ND		0.033	ND		0.052
Acrolein	NS	ND		0.028	ND		0.029	ND		0.031	ND		0.066	ND		0.033	ND		0.052
Acrylonitrile	NS	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Benzene	0.06	ND		0.0011	ND		0.0012	ND		0.0012	ND		0.0026	ND		0.0013	ND		0.0021
Bromodichloromethane	NS	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Bromoform	NS	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Bromomethane	NS	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Carbon disulfide	2.7	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Carbon tetrachloride	0.6	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Chlorobenzene	1.7	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Chloroethane	NS	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Chloroform	0.3	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Chloromethane	NS	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Cis-1,2-Dichloroethene	NS	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Cis-1,3-Dichloropropene	NS	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Dibromochloromethane	NS	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Ethylbenzene	5.5	ND		0.0011	ND		0.0012	ND		0.0012	ND		0.0026	ND		0.0013	ND		0.0021
M&p-Xylenes	1.2 (Total)	ND		0.0022	ND		0.0023	ND		0.0025	ND		0.0053	ND		0.0027	ND		0.0042
Methylene chloride	0.1	0.013	B	0.0056	0.013	B	0.0058	0.011	B	0.0062	0.02	B	0.013	0.011	B	0.0067	0.019	B	0.01
O-Xylene	1.2 (Total)	ND		0.0011	ND		0.0012	ND		0.0012	ND		0.0026	ND		0.0013	ND		0.0021
Styrene	NS	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Tetrachloroethene	1.4	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Toluene	1.5	ND		0.0011	0.0014		0.0012	ND		0.0012	ND		0.0026	ND		0.0013	ND		0.0021
Trans-1,2-Dichloroethene	0.3	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Trans-1,3-Dichloropropene	NS	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Trichloroethene	0.7	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Vinyl chloride	0.2	ND		0.0056	ND		0.0058	ND		0.0062	ND		0.013	ND		0.0067	ND		0.01
Total VOCs Conc.	10	0.013			0.0404			0.047			0.286			0.011			0.019		
VOC TICs	NS	0.0378	J		0.221	J		0.228	J		1.27	J		0.411	J		1.212	J	

Notes:
Concentrations in bold in highlighted cells exceed the New YorkTAGM Recommended Soil Cleanup Objectives (RSCOs)
TAGM=Technical and Administrative Guidance Memorandum #4046
NS= No standard has been established for this compound
Conc.= Detected concentration
ND=Not detected above the laboratory's reporting limits
MDL=Method detection limit
B= Analyte was detected in the laboratory analyzed blank
J- The estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.
TICs=Tentatively Identified compounds
mg/kg= miligrams per kilogram
1) The numbers at the end of the sample ID indicate the depth interv the sample was collected. For example, PE-A1E (5-5.5') was collect from 5-5.5 feet bgs depth interval at Removal Area/Trench A.

TABLE 8A
SUMMARY OF POST EXCAVATION SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Recommended Soil Cleanup Objectives (mg/kg)	PE-C3N (5.5-6') AC25433-003 8/31/2006 SOIL mg/Kg			PE-C4N (5.5-6') AC25433-004 8/31/2006 SOIL mg/Kg			PE-D1N (3.5-4') AC25440-004 9/1/2006 SOIL mg/Kg			PE-D2E (3.5-4') AC25440-005 9/1/2006 SOIL mg/Kg			PE-D3S (3.5-4') AC25440-006 9/1/2006 SOIL mg/Kg			PE-D4W (3.5-4') AC25440-007 9/1/2006 SOIL mg/Kg		
VOLATILE ORGANIC COMPOUNDS (GC/MS)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
1,1,1-Trichloroethane	0.8	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
1,1,2,2-Tetrachloroethane	0.6	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
1,1,2-Trichloroethane	NS	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
1,1-Dichloroethane	0.2	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
1,1-Dichloroethene	0.4	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
1,2-Dichloroethane	0.1	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
1,2-Dichloropropane	NS	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
2-Butanone	0.3	ND		0.046	0.2		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
2-Chloroethylvinylether	NS	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
2-Hexanone	NS	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
4-Methyl-2-Pentanone	1	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Acetone	0.2	ND		0.23	**0.52**		0.089	ND		4.3	**0.32**		0.21	ND		4.2	**0.3**		0.16
Acrolein	NS	ND		0.23	ND		0.089	ND		4.3	ND		0.21	ND		4.2	ND		0.16
Acrylonitrile	NS	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Benzene	0.06	ND		0.0093	ND		0.0036	ND		0.17	ND		0.0083	**0.33**		0.17	ND		0.0063
Bromodichloromethane	NS	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Bromoform	NS	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Bromomethane	NS	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Carbon disulfide	2.7	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Carbon tetrachloride	0.6	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Chlorobenzene	1.7	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Chloroethane	NS	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Chloroform	0.3	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Chloromethane	NS	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Cis-1,2-Dichloroethene	NS	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Cis-1,3-Dichloropropene	NS	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Dibromochloromethane	NS	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Ethylbenzene	5.5	ND		0.0093	ND		0.0036	ND		0.17	ND		0.0083	0.76		0.17	ND		0.0063
M&p-Xylenes	1.2 (Total)	ND		0.019	ND		0.0071	ND		0.35	ND		0.017	**1.4**		0.33	ND		0.013
Methylene chloride	0.1	0.089	B	0.046	0.027	B	0.018	ND		0.87	**0.14**	B	0.042	ND		0.83	0.1	B	0.032
O-Xylene	1.2 (Total)	ND		0.0093	ND		0.0036	ND		0.17	ND		0.0083	ND		0.17	ND		0.0063
Styrene	NS	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Tetrachloroethene	1.4	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Toluene	1.5	ND		0.0093	ND		0.0036	ND		0.17	ND		0.0083	ND		0.17	ND		0.0063
Trans-1,2-Dichloroethene	0.3	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Trans-1,3-Dichloropropene	NS	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Trichloroethene	0.7	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Vinyl chloride	0.2	ND		0.046	ND		0.018	ND		0.87	ND		0.042	ND		0.83	ND		0.032
Total VOCs Conc.	10	0.089			0.747			ND			0.46			1.73			0.4		
VOC TICs	NS	13.33	J		3.05	J		240	J		28.37	J		207.9	J		42.5	J	

Notes:
Concentrations in blold in highlighted cells exceed the New YorkTAGM Recommended Soil Cleanup Objectives (RSCOs)
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Conc.= Detected concentration
ND=Not detected above the laboratory's reporting limits
MDL=Method detection limit
B= Analyte was detected in the laboratory analyzed blank
J- The estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.
TICs=Tentatively Identified compounds
mg/kg= miligrams per kilogram
1) The numbers at the end of the sample ID indicate the depth interv the sample was collected. For example, PE-A1E (5-5.5') was collect from 5-5.5 feet bgs depth interval at Removal Area/Trench A.

TABLE 8A
SUMMARY OF POST EXCAVATION SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Recommended Soil Cleanup Objectives (mg/kg)	PE-DB1 (6-6.5') AC25440-008 9/1/2006 SOIL mg/Kg			PE-E1W (4.5-5') AC25440-001 9/1/2006 SOIL mg/Kg			PE-E2E (4.5-5') AC25440-002 9/1/2006 SOIL mg/Kg			PE-EB1 (6.5-7') AC25440-003 9/1/2006 SOIL mg/Kg			PE-GB1(7-7.5') AC25828-010 9/22/2006 SOIL mg/Kg			PE-G2S(5.5-6') AC25828-009 9/22/2006 SOIL mg/Kg		
VOLATILE ORGANIC COMPOUNDS (GC/MS)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
1,1,1-Trichloroethane	0.8	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
1,1,2,2-Tetrachloroethane	0.6	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
1,1,2-Trichloroethane	NS	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
1,1-Dichloroethane	0.2	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
1,1-Dichloroethene	0.4	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
1,2-Dichloroethane	0.1	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
1,2-Dichloropropane	NS	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
2-Butanone	0.3	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	0.09		0.0079
2-Chloroethylvinylether	NS	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
2-Hexanone	NS	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
4-Methyl-2-Pentanone	1	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Acetone	0.2	0.056		0.032	0.097		0.038	0.19		0.17	0.054		0.03	ND		0.03	**0.25**		0.04
Acrolein	NS	ND		0.032	ND		0.038	ND		0.17	ND		0.03	ND		0.03	ND		0.04
Acrylonitrile	NS	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Benzene	0.06	ND		0.0013	ND		0.0015	ND		0.0069	ND		0.0012	ND		0.0012	ND		0.0016
Bromodichloromethane	NS	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Bromoform	NS	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Bromomethane	NS	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Carbon disulfide	2.7	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Carbon tetrachloride	0.6	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Chlorobenzene	1.7	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Chloroethane	NS	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Chloroform	0.3	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Chloromethane	NS	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Cis-1,2-Dichloroethene	NS	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Cis-1,3-Dichloropropene	NS	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Dibromochloromethane	NS	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Ethylbenzene	5.5	ND		0.0013	ND		0.0015	ND		0.0069	ND		0.0012	ND		0.0012	ND		0.0016
M&p-Xylenes	1.2 (Total)	ND		0.0025	ND		0.003	ND		0.014	ND		0.0024	ND		0.0024	ND		0.0032
Methylene chloride	0.1	0.021	B	0.0063	0.017	B	0.0076	0.094	B	0.035	0.019	B	0.0061	0.014B	B	0.0061	0.016	B	0.0079
O-Xylene	1.2 (Total)	ND		0.0013	ND		0.0015	ND		0.0069	ND		0.0012	ND		0.0012	ND		0.0016
Styrene	NS	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Tetrachloroethene	1.4	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Toluene	1.5	ND		0.0013	ND		0.0015	ND		0.0069	ND		0.0012	ND		0.0012	0.0017		0.0016
Trans-1,2-Dichloroethene	0.3	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Trans-1,3-Dichloropropene	NS	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Trichloroethene	0.7	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Vinyl chloride	0.2	ND		0.0063	ND		0.0076	ND		0.035	ND		0.0061	ND		0.0061	ND		0.0079
Total VOCs Conc.	10	0.077			0.116			0.284			0.073			0.014			0.3577		
VOC TICs	NS	0.1599	J		1.04	J		8.53	J		0.0589	J		2.29	J		3	J	

Notes:
Concentrations in blold in highlighted cells exceed the New YorkTAGM Recommended Soil Cleanup Objectives (RSCOs)
TAGM=Technical and Administrative Guidance Memorandum #4046
NS= No standard has been established for this compound
Conc.= Detected concentration
ND=Not detected above the laboratory's reporting limits
MDL=Method detection limit
B= Analyte was detected in the laboratory analyzed blank
J- The estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.
TICs=Tentatively Identified compounds
mg/kg= miligrams per kilogram
1) The numbers at the end of the sample ID indicate the depth interv the sample was collected. For example, PE-A1E (5-5.5') was collect from 5-5.5 feet bgs depth interval at Removal Area/Trench A.

BLE 8A

SUMMARY OF POST EXCAVATION SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Recommended Soil Cleanup Objectives (mg/kg)	PE-G1N(5.5-6') AC25828-008 9/22/2006 SOIL mg/Kg			PE-HB1(9-9.5') AC25828-011 9/22/2006 SOIL mg/Kg			PE-H1S(6.5-7') AC25828-012 9/22/2006 SOIL mg/Kg			PE-H2N(6.5-7') AC25828-013 9/22/2006 SOIL mg/Kg			PE-I1E(6.5-7') AC26282-001 10/16/2006 SOIL mg/Kg			PE-I2N(6.5-7') AC26282-002 10/16/2006 SOIL mg/Kg		
VOLATILE ORGANIC COMPOUNDS (GC/MS)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
1,1,1-Trichloroethane	0.8	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
1,1,2,2-Tetrachloroethane	0.6	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
1,1,2-Trichloroethane	NS	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
1,1-Dichloroethane	0.2	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
1,1-Dichloroethene	0.4	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
1,2-Dichloroethane	0.1	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
1,2-Dichloropropane	NS	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
2-Butanone	0.3	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.061
2-Chloroethylvinylether	NS	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
2-Hexanone	NS	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
4-Methyl-2-Pentanone	1	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
Acetone	0.2	**1.9**		0.17	**0.37**		0.034	**5.1**		4	**1.1**		4	**0.3**		0.16	**2.7**		0.15
Acrolein	NS	ND		0.17	ND		0.034	ND		4	ND		4	ND		0.16	ND		0.15
Acrylonitrile	NS	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
Benzene	0.06	ND		0.0068	ND		0.0014	ND		0.16	ND		0.16	ND		0.0063	ND		0.0061
Bromodichloromethane	NS	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
Bromoform	NS	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.006	ND		0.03
Bromomethane	NS	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.006	ND		0.061
Carbon disulfide	2.7	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.006	ND		0.03
Carbon tetrachloride	0.6	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.006	ND		0.03
Chlorobenzene	1.7	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.006	ND		0.03
Chloroethane	NS	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.006	ND		0.03
Chloroform	0.3	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.006	ND		0.03
Chloromethane	NS	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.006	ND		0.03
Cis-1,2-Dichloroethene	NS	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.006	ND		0.03
Cis-1,3-Dichloropropene	NS	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.006	ND		0.03
Dibromochloromethane	NS	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.006	ND		0.03
Ethylbenzene	5.5	ND		0.0068	ND		0.0014	ND		0.16	ND		0.16	ND		0.0063	ND		0.0061
M&p-Xylenes	1.2 (Total)	ND		0.014	ND		0.0027	ND		0.32	ND		0.32	ND		0.032	ND		0.012
Methylene chloride	0.1	**0.12**	B	0.034	0.017	B	0.0068	**0.38**	J, B	0.8	**0.54**	B	0.8	0.15	B	0.032	0.14	B	0.03
O-Xylene	1.2 (Total)	ND		0.0068	ND		0.0014	ND		0.16	ND		0.16	ND		0.0063	ND		0.0061
Styrene	NS	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
Tetrachloroethene	1.4	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
Toluene	1.5	ND		0.0068	ND		0.0014	ND		0.16	ND		0.16	ND		0.032	ND		0.0061
Trans-1,2-Dichloroethene	0.3	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
Trans-1,3-Dichloropropene	NS	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
Trichloroethene	0.7	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
Vinyl chloride	0.2	ND		0.034	ND		0.0068	ND		0.8	ND		0.8	ND		0.032	ND		0.03
Total VOCs Conc.	10	2.02			0.387			5.48			1.64			0.045			2.84		
VOC TICs	NS	52.5	J		14.2	J		312	J		4.46	J		13.7	J		68.5	J	

Notes:
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mg/kg= miligrams per kilogram
1) The numbers at the end of the sample ID indicate the depth interv the sample was collected. For example, PE-A1E (5-5.5') was collect from 5-5.5 feet bgs depth interval at Removal Area/Trench A.

LE 8A
SUMMARY OF POST EXCAVATION SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Recommended Soil Cleanup Objectives (mg/kg)	PE-I3NW(6.5-7') AC26282-003 10/16/2006 SOIL mg/Kg			PE-I4W(6.5-7') AC26282-004 10/16/2006 SOIL mg/Kg			PE-I5S(6.5-7') AC26282-005 10/16/2006 SOIL mg/Kg			PE-I6S(6.5-7') AC26282-006 10/16/2006 SOIL mg/Kg			PE-IB1(7.5-8') AC26282-007 10/16/2006 SOIL mg/Kg			PE-IB2(9-9.5') AC26282-008 10/16/2006 SOIL mg/Kg		
VOLATILE ORGANIC COMPOUNDS (GC/MS)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
1,1,1-Trichloroethane	0.8	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
1,1,2,2-Tetrachloroethane	0.6	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
1,1,2-Trichloroethane	NS	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
1,1-Dichloroethane	0.2	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
1,1-Dichloroethene	0.4	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
1,2-Dichloroethane	0.1	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
1,2-Dichloropropane	NS	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
2-Butanone	0.3	ND		0.016	ND		0.088	ND		0.06	ND		0.075	ND		0.06	ND		0.062
2-Chloroethylvinylether	NS	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
2-Hexanone	NS	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
4-Methyl-2-Pentanone	1	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Acetone	0.2	0.053		0.039	**0.23**		0.22	**0.3**		0.15	**1.3**		0.19	ND		0.15	**0.21**		0.15
Acrolein	NS	ND		0.039	ND		0.22	ND		0.15	ND		0.19	ND		0.15	ND		0.15
Acrylonitrile	NS	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Benzene	0.06	ND		0.0016	ND		0.0088	ND		0.006	ND		0.0075	ND		0.006	ND		0.0062
Bromodichloromethane	NS	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Bromoform	NS	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Bromomethane	NS	ND		0.016	ND		0.088	ND		0.06	ND		0.075	ND		0.06	ND		0.062
Carbon disulfide	2.7	0.0016	J	0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Carbon tetrachloride	0.6	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Chlorobenzene	1.7	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Chloroethane	NS	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Chloroform	0.3	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Chloromethane	NS	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Cis-1,2-Dichloroethene	NS	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Cis-1,3-Dichloropropene	NS	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Dibromochloromethane	NS	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Ethylbenzene	5.5	ND		0.0016	ND		0.0088	ND		0.006	ND		0.0075	ND		0.006	ND		0.0062
M&p-Xylenes	1.2 (Total)	ND		0.0031	ND		0.018	ND		0.012	ND		0.015	ND		0.012	ND		0.012
Methylene chloride	0.1	0.026	B	0.0078	0.25	B	0.044	0.2	B	0.03	0.22	B	0.037	ND		0.03	0.19	B	0.031
O-Xylene	1.2 (Total)	ND		0.0016	ND		0.0088	ND		0.006	ND		0.0075	ND		0.006	ND		0.0062
Styrene	NS	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Tetrachloroethene	1.4	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Toluene	1.5	ND		0.0016	ND		0.0088	ND		0.006	ND		0.0075	ND		0.006	ND		0.0062
Trans-1,2-Dichloroethene	0.3	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Trans-1,3-Dichloropropene	NS	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Trichloroethene	0.7	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Vinyl chloride	0.2	ND		0.0078	ND		0.044	ND		0.03	ND		0.037	ND		0.03	ND		0.031
Total VOCs Conc.	10	0.0806			0.48			0.5			1.52			ND			0.4		
VOC TICs	NS	5.47	J		17.4	J		47.1	J		50.7	J		229	J		15.18	J	

Notes:
Concentrations in bold in highlighted cells exceed the New YorkTAGM Recommended Soil Cleanup Objectives (RSCOs)
TAGM=Technical and Administrative Guidance Memorandum #4046
NS= No standard has been established for this compound
Conc.= Detected concentration
ND=Not detected above the laboratory's reporting limits
MDL=Method detection limit
B= Analyte was detected in the laboratory analyzed blank
J- The estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.
TICs=Tentatively Identified compounds
mg/kg= miligrams per kilogram
1) The numbers at the end of the sample ID indicate the depth interv the sample was collected. For example, PE-A1E (5-5.5') was collecte from 5-5.5 feet bgs depth interval at Removal Area/Trench A.

TABLE 8A
SUMMARY OF POST EXCAVATION SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Recommended Soil Cleanup Objectives (mg/kg)	PE-IB3(9-9.5') AC26282-009 10/16/2006 SOIL mg/Kg			PE-J1 (6.5-7') AC25252-002 8/24/2006 SOIL mg/Kg			PE-J2 (6-6.5') AC25252-003 8/24/2006 SOIL mg/Kg			PE-J3 (6-6.5') AC25252-004 8/24/2006 SOIL mg/Kg			PE-J4N(5.5-6') AC25828-001 9/22/2006 SOIL mg/Kg			PE-J5N(5.5-6') AC25828-002 9/22/2006 SOIL mg/Kg		
VOLATILE ORGANIC COMPOUNDS (GC/MS)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.0063	NA		0.006	NA		0.026	NA		0.0051	ND		0.74	ND		0.77
1,1,1-Trichloroethane	0.8	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
1,1,2,2-Tetrachloroethane	0.6	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
1,1,2-Trichloroethane	NS	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
1,1-Dichloroethane	0.2	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
1,1-Dichloroethene	0.4	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
1,2-Dichloroethane	0.1	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
1,2-Dichloropropane	NS	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
2-Butanone	0.3	ND		0.013	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
2-Chloroethylvinylether	NS	ND		0.0063	NA		0.006	NA		0.026	NA		0.0051	ND		0.74	ND		0.77
2-Hexanone	NS	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
4-Methyl-2-Pentanone	1	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Acetone	0.2	ND		0.032	0.033		0.03	0.13		0.13	0.018	J	0.026	ND		3.7	ND		3.9
Acrolein	NS	ND		0.032	NA		0.03	NA		0.13	NA		0.026	ND		3.7	ND		3.9
Acrylonitrile	NS	ND		0.0063	NA		0.006	NA		0.026	NA		0.0051	ND		0.74	ND		0.77
Benzene	0.06	ND		0.0013	ND		0.0012	ND		0.0052	ND		0.001	ND		0.15	ND		0.15
Bromodichloromethane	NS	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Bromoform	NS	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Bromomethane	NS	ND		0.013	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Carbon disulfide	2.7	ND		0.0063	ND		0.006	0.0094	J	0.026	0.0011	J	0.0051	ND		0.74	ND		0.77
Carbon tetrachloride	0.6	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Chlorobenzene	1.7	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Chloroethane	NS	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Chloroform	0.3	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Chloromethane	NS	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Cis-1,2-Dichloroethene	NS	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Cis-1,3-Dichloropropene	NS	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Dibromochloromethane	NS	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Ethylbenzene	5.5	ND		0.0013	ND		0.0012	ND		0.0052	0.0012		0.001	ND		0.15	ND		0.15
M&p-Xylenes	1.2 (Total)	ND		0.0025	ND		0.0024	0.011		0.01	0.004		0.002	ND		0.3	ND		0.31
Methylene chloride	0.1	0.043	B	0.0063	0.02	B	0.006	**0.11**	B	0.026	0.018	B	0.0051	**0.38**	J, B	0.74	**0.42**	J, B	0.77
O-Xylene	1.2 (Total)	ND		0.0013	ND		0.0012	ND		0.0052	0.002		0.001	ND		0.15	ND		0.15
Styrene	NS	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Tetrachloroethene	1.4	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Toluene	1.5	ND		0.0013	ND		0.0012	0.015		0.0052	0.0034		0.001	ND		0.15	ND		0.15
Trans-1,2-Dichloroethene	0.3	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Trans-1,3-Dichloropropene	NS	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Trichloroethene	0.7	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Vinyl chloride	0.2	ND		0.0063	ND		0.006	ND		0.026	ND		0.0051	ND		0.74	ND		0.77
Total VOCs Conc.	10	0.043			0.053			0.2754			0.0477			0.38			0.42		
VOC TICs	NS	0.164	J		0.0041	J		5.74	J		1	J		125	J		118.3	J	

Notes:
Concentrations in bold in highlighted cells exceed the New YorkTAGM Recommended Soil Cleanup Objectives (RSCOs)
TAGM=Technical and Administrative Guidance Memorandum #4046
NS= No standard has been established for this compound
Conc.= Detected concentration
ND=Not detected above the laboratory's reporting limits
MDL=Method detection limit
B= Analyte was detected in the laboratory analyzed blank
J- The estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.
TICs=Tentatively Identified compounds
mg/kg= miligrams per kilogram
1) The numbers at the end of the sample ID indicate the depth interv the sample was collected. For example, PE-A1E (5-5.5') was collecte from 5-5.5 feet bgs depth interval at Removal Area/Trench A.

TABLE 8A
SUMMARY OF POST EXCAVATION SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Recommended Soil Cleanup Objectives (mg/kg)	PE-JB1 (8-8.5') AC25828-002 9/1/2006 SOIL mg/Kg			PE-K1 (5.5-6') AC25169-007 8/22/2006 SOIL mg/Kg			PE-K2 (5.5-6') AC25169-008 8/22/2006 SOIL mg/Kg			PE-K3 (5.5-6') AC25169-009 9/22/2006 SOIL mg/Kg			PE-K4 (5.5-6') AC25252-001 9/22/2006 SOIL mg/Kg			PE-KB1 (7-7.5') AC25169-007 8/22/2006 SOIL mg/Kg		
VOLATILE ORGANIC COMPOUNDS (GC/MS)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
1,1,1-Trichloroethane	0.8	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
1,1,2,2-Tetrachloroethane	0.6	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
1,1,2-Trichloroethane	NS	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
1,1-Dichloroethane	0.2	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
1,1-Dichloroethene	0.4	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
1,2-Dichloroethane	0.1	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
1,2-Dichloropropane	NS	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
2-Butanone	0.3	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
2-Chloroethylvinylether	NS	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
2-Hexanone	NS	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
4-Methyl-2-Pentanone	1	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Acetone	0.2	ND		0.029	0.12	J	0.16	0.11	J	0.14	ND		0.14	ND		0.03	ND		0.14
Acrolein	NS	ND		0.029	ND		0.16	ND		0.14	ND		0.14	ND		0.03	ND		0.14
Acrylonitrile	NS	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Benzene	0.06	ND		0.0012	ND		0.0063	ND		0.0057	ND		0.0056	ND		0.0012	ND		0.0057
Bromodichloromethane	NS	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Bromoform	NS	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Bromomethane	NS	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Carbon disulfide	2.7	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Carbon tetrachloride	0.6	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Chlorobenzene	1.7	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Chloroethane	NS	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Chloroform	0.3	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Chloromethane	NS	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Cis-1,2-Dichloroethene	NS	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Cis-1,3-Dichloropropene	NS	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Dibromochloromethane	NS	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Ethylbenzene	5.5	ND		0.0012	ND		0.0063	ND		0.0057	ND		0.0056	ND		0.0012	ND		0.006
M&p-Xylenes	1.2 (Total)	ND		0.0024	ND		0.013	ND		0.011	ND		0.011	ND		0.0024	ND		0.011
Methylene chloride	0.1	ND		0.0059	**0.11**	B	0.032	0.067	B	0.028	0.053	B	0.028	0.019	B	0.006	0.06	B	0.029
O-Xylene	1.2 (Total)	ND		0.0012	ND		0.0063	ND		0.0057	ND		0.0056	ND		0.0012	ND		0.0057
Styrene	NS	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Tetrachloroethene	1.4	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Toluene	1.5	ND		0.0012	ND		0.0063	ND		0.0057	ND		0.0056	ND		0.0012	ND		0.006
Trans-1,2-Dichloroethene	0.3	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Trans-1,3-Dichloropropene	NS	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Trichloroethene	0.7	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Vinyl chloride	0.2	ND		0.0059	ND		0.032	ND		0.028	ND		0.028	ND		0.006	ND		0.029
Total VOCs Conc.	10				0.23			0.177			0.053			0.019			0.06		
VOC TICs	NS	0.01	J		33.2	J		38.05	J		11.21	J		0.434	J		22.98	J	

Notes:
Concentrations in blold in highlighted cells exceed the New YorkTAGM Recommended Soil Cleanup Objectives (RSCOs)
TAGM=Technical and Administrative Guidance Memorandum #4046
NS= No standard has been established for this compound
Conc.= Detected concentration
ND=Not detected above the laboratory's reporting limits
MDL=Method detection limit
B= Analyte was detected in the laboratory analyzed blank
J- The estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.
TICs=Tentatively Identified compounds
mg/kg= miligrams per kilogram
1) The numbers at the end of the sample ID indicate the depth interv the sample was collected. For example, PE-A1E (5-5.5') was collect from 5-5.5 feet bgs depth interval at Removal Area/Trench A.

TABLE 8A
SUMMARY OF POST EXCAVATION SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Recommended Soil Cleanup Objectives (mg/kg)	PE-L1 (5.5-6') AC25169-003 8/22/2006 SOIL mg/Kg			PE-L2 (5.5-6') AC25169-004 8/22/2006 SOIL mg/Kg			PE-LB1 (7.5-8') AC25169-005 8/22/2006 SOIL mg/Kg		
VOLATILE ORGANIC COMPOUNDS (GC/MS)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.032	ND		0.0062	ND		0.0067
1,1,1-Trichloroethane	0.8	ND		0.032	ND		0.0062	ND		0.0067
1,1,2,2-Tetrachloroethane	0.6	ND		0.032	ND		0.0062	ND		0.0067
1,1,2-Trichloroethane	NS	ND		0.032	ND		0.0062	ND		0.0067
1,1-Dichloroethane	0.2	ND		0.032	ND		0.0062	ND		0.0067
1,1-Dichloroethene	0.4	ND		0.032	ND		0.0062	ND		0.0067
1,2-Dichloroethane	0.1	ND		0.032	ND		0.0062	ND		0.0067
1,2-Dichloropropane	NS	ND		0.032	ND		0.0062	ND		0.0067
2-Butanone	0.3	ND		0.032	ND		0.0062	ND		0.0067
2-Chloroethylvinylether	NS	ND		0.032	ND		0.0062	ND		0.0067
2-Hexanone	NS	ND		0.032	ND		0.0062	ND		0.0067
4-Methyl-2-Pentanone	1	ND		0.032	ND		0.0062	ND		0.0067
Acetone	0.2	ND		0.16	0.018	J	0.031	0.025	J	0.033
Acrolein	NS	ND		0.16	ND		0.031	ND		0.033
Acrylonitrile	NS	ND		0.032	ND		0.0062	ND		0.0067
Benzene	0.06	ND		0.0064	ND		0.0012	ND		0.0013
Bromodichloromethane	NS	ND		0.032	ND		0.0062	ND		0.0067
Bromoform	NS	ND		0.032	ND		0.0062	ND		0.0067
Bromomethane	NS	ND		0.032	ND		0.0062	ND		0.0067
Carbon disulfide	2.7	0.0089	J	0.032	ND		0.0062	ND		0.0067
Carbon tetrachloride	0.6	ND		0.032	ND		0.0062	ND		0.0067
Chlorobenzene	1.7	ND		0.032	ND		0.0062	ND		0.0067
Chloroethane	NS	ND		0.032	ND		0.0062	ND		0.0067
Chloroform	0.3	ND		0.032	ND		0.0062	ND		0.0067
Chloromethane	NS	ND		0.032	ND		0.0062	ND		0.0067
Cis-1,2-Dichloroethene	NS	ND		0.032	ND		0.0062	ND		0.0067
Cis-1,3-Dichloropropene	NS	ND		0.032	ND		0.0062	ND		0.0067
Dibromochloromethane	NS	ND		0.032	ND		0.0062	ND		0.0067
Ethylbenzene	5.5	ND		0.0064	ND		0.0012	ND		0.0013
M&p-Xylenes	1.2 (Total)	ND		0.013	ND		0.0025	ND		0.0027
Methylene chloride	0.1	0.08	B	0.032	0.016	B	0.0062	0.042	B	0.0067
O-Xylene	1.2 (Total)	ND		0.0064	ND		0.0012	ND		0.0013
Styrene	NS	ND		0.032	ND		0.0062	ND		0.0067
Tetrachloroethene	1.4	ND		0.032	ND		0.0062	ND		0.0067
Toluene	1.5	ND		0.0064	ND		0.0012	ND		0.0013
Trans-1,2-Dichloroethene	0.3	ND		0.032	ND		0.0062	ND		0.0067
Trans-1,3-Dichloropropene	NS	ND		0.032	ND		0.0062	ND		0.0067
Trichloroethene	0.7	ND		0.032	ND		0.0062	ND		0.0067
Vinyl chloride	0.2	ND		0.032	ND		0.0062	ND		0.0067
Total VOCs Conc.	10	0.0889			0.034			0.067		
VOC TICs	NS	51.4	J		0.0093	J		0.0102	J	

Notes:
Concentrations in bold in highlighted cells exceed the New YorkTAGM Recommended Soil Cleanup Objectives (RSCOs)
TAGM=Technical and Administrative Guidance Memorandum #4046
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Conc.= Detected concentration
ND=Not detected above the laboratory's reporting limits
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B= Analyte was detected in the laboratory analyzed blank
J- The estimated value was detected at a concentration below the MDL, but above the laboratory's reporting limits.
TICs=Tentatively Identified compounds
mg/kg= milligrams per kilogram
1) The numbers at the end of the sample ID indicate the depth interv the sample was collected. For example, PE-A1E (5-5.5') was collect from 5-5.5 [illegible] bgs depth interval at Removal Area/Trench A.

TABLE 8B

SUMMARY OF POST EXCAVATION SOIL ANALYTICAL RESULTS-SVOCS

IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)

HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Recommended Soil Cleanup Objectives (mg/kg)	PE-AB1(6.5-7') AC25828-004 9/22/2006 SOIL mg/Kg			PE-A4N(3.5-4') AC25828-007 9/22/2006 SOIL mg/Kg			PE-A3W(5-5.5') AC25828-006 9/22/2006 SOIL mg/Kg			PE-A2S(5-5.5') AC25828-005 9/22/2006 SOIL mg/Kg			PE-A1E(5-5.5') AC25828-003 9/22/2006 SOIL mg/Kg			PE-BB1 (6.5-7') AC25433-006 8/31/2006 SOIL mg/Kg			PE-B1E (4.5-5') AC25433-007 8/31/2006 SOIL mg/Kg			PE-B2N (4.5-5') AC25433-008 8/31/2006 SOIL mg/Kg			PE-B3S (4.5-5') AC25433-009 8/31/2006 SOIL mg/Kg		
SEMIVOLATILE COMPOUNDS (GC/MS)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	3.4	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		0.45	ND		5.4
1,2-Dichlorobenzene	7.9	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		0.45	ND		5.4
1,2-Diphenylhydrazine	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		0.45	ND		5.4
1,3-Dichlorobenzene	1.6	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		0.45	ND		5.4
1,4-Dichlorobenzene	8.5	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		0.45	ND		5.4
2,4,5-Trichlorophenol	0.1	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		0.45	ND		5.4
2,4,6-Trichlorophenol	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		0.45	ND		5.4
2,4-Dichlorophenol	0.4	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		0.45	ND		5.4
2,4-Dimethylphenol	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		0.45	ND		5.4
2,4-Dinitrophenol	0.2	ND		1.1	ND		2.2	ND		2.6	ND		2.4	ND		2.4	ND		1.3	ND		1.2	ND		1.1	ND		1.3	ND		5.4
2,4-Dinitrotoluene	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		0.45	ND		5.4
2,6-Dinitrotoluene	1	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		0.45	ND		5.4
2-Chloronaphthalene	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		0.45	ND		5.4
2-Chlorophenol	0.8	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		0.45	ND		5.4
2-Methylnaphthalene	36.4	ND		0.42	ND		0.43	ND		0.51	ND		0.48	0.2	J	0.48	1.3		0.51	0.73		0.48	0.42	J	0.45	2.7	J	5.4
2-Methylphenol	0.1	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
2-Nitroaniline	0.43	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
2-Nitrophenol	0.33	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
3&4-Methylphenol	0.9	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
3,3'-Dichlorobenzidine	NS	ND		0.42	ND		1.1	ND		1.3	ND		1.2	ND		1.2	ND		0.51	ND		0.48	ND		0.45	ND		5.4
3-Nitroaniline	0.5	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
4,6-Dinitro-2-methylphenol	NS	ND		0.42	ND		1.1	ND		1.3	ND		1.2	ND		1.2	ND		0.51	ND		0.48	ND		0.45	ND		5.4
4-Bromophenyl-phenylether	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
4-Chloro-3-methylphenol	0.24	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
4-Chloroaniline	0.22	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
4-Chlorophenyl-phenylether	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
4-Nitroaniline	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
4-Nitrophenol	0.1	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
Acenaphthene	50	ND		0.42	ND		0.43	0.072	J	0.51	ND		0.48	ND		0.48	1		0.51	1.3		0.48	0.15	J	0.45	4.8	J	5.4
Acenaphthylene	41	ND		0.42	ND		0.43	0.063	J	0.51	ND		0.48	ND		0.48	ND		0.51	0.11	J	0.48	0.13	J	0.45	ND		5.4
Anthracene	50	ND		0.42	0.048	J	0.43	0.077	J	0.51	ND		0.48	0.28	J	0.48	1.2		0.51	1.9		0.48	0.4	J	0.45	3.5	J	5.4
Benzidine	NS	ND		2.1	ND		1.1	ND		1.3	ND		1.2	ND		1.2	ND		2.6	ND		2.4	ND		2.3	ND		27
Benzo[a]anthracene	0.224	ND		0.42	0.18	J	0.43	**0.51**	J	0.51	ND		0.48	0.19	J	0.48	**1.2**		0.51	**5.3**		0.48	**1.2**		0.45	**1.7**	J	5.4
Benzo[a]pyrene	0.061	ND		0.42	0.15	J	0.43	**0.43**	J	0.51	ND		0.48	**0.078**	J	0.48	**1.3**		0.51	**5.4**		0.48	**1.1**		0.45	**0.62**	J	5.4
Benzo[b]fluoranthene	1.1	ND		0.42	0.3	J	0.43	0.86		0.51	ND		0.48	0.052	J	0.48	**2.1**		0.51	**7.7**		0.48	**2**		0.45	ND		5.4
Benzo[g,h,i]perylene	50	ND		0.42	0.17	J	0.43	0.32	J	0.51	ND		0.48	0.062	J	0.48	0.93		0.51	3.1		0.48	0.74		0.45	0.58	J	5.4
Benzo[k]fluoranthene	1.1	ND		0.42	0.094	J	0.43	0.23	J	0.51	ND		0.48	ND		0.48	0.5	J	0.51	**1.8**		0.48	0.56		0.45	ND		5.4
Benzyl alcohol	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
Bis(2-Chloroethoxy)methane	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
Bis(2-Chloroethyl)Ether	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
Bis(2-Chloroisopropyl)ether	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
Bis(2-Ethylhexyl)phthalate	50	0.048	J	0.42	0.096	JB	0.43	0.11	JB	0.51	0.11	JB	0.48	ND		0.48	ND		0.51	0.31J	J	0.48	0.37	JB	0.45	ND		5.4
Butylbenzylphthalate	50	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
Carbazole	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	0.18	J	0.51	1.1		0.48	0.17	J	0.45	ND		5.4
Chrysene	0.4	ND		0.42	0.23	J	0.43	**0.48**	J	0.51	ND		0.48	0.086	J	0.48	**1.9**		0.51	**5.5**		0.48	**1.4**		0.45	**2.8**	J	5.4
Dibenz[a,h]Anthracene	0.014	ND		0.42	**0.052**	J	0.43	**0.093**	J	0.51	ND		0.48	ND		0.48	**0.32**	J	0.51	1.1		0.48	**0.25**	J	0.45	ND		5.4
Dibenzofuran	6.2	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	0.47	J	0.51	0.78		0.48	0.19	J	0.45	0.95	J	5.4
Diethylphthalate	7.1	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
Dimethylphthalate	2	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
Di-n-butylphthalate	8.1	ND		0.42	0.11	JB	0.43	ND		0.51	0.05	JB	0.48	ND		0.48	0.16	JB	0.51	0.18	JB	0.48	0.069	J	0.45	ND		5.4
Di-n-octylphthalate	50	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
Fluoranthene	50	ND		0.42	0.32	J	0.43	0.56		0.51	ND		0.48	0.074	J	0.48	1.8		0.51	8.6		0.48	1.8		0.45	1.7	J	5.4
Fluorene	50	ND		0.42	ND		0.43	0.053	J	0.51	ND		0.48	0.37	J	0.48	1.5		0.51	1.2		0.48	0.19	J	0.45	6.1		5.4
Hexachlorobenzene	0.41	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
Hexachlorobutadiene	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
Hexachlorocyclopentadiene	NS	ND		2.1	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		1.3	ND		1.2	ND		1.1	ND		13
Hexachloroethane	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
Indeno(1,2,3-cd)pyrene	3.2	ND		0.42	0.1	J	0.43	0.28	J	0.51	ND		0.48	ND		0.48	0.78		0.51	3		0.48	0.72		0.45	ND		5.4
Isophorone	4.4	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
N-Nitroso-Di-N-Propylamine	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
N-Nitrosodimethylamine	NS	ND		1.1	ND		1.1	ND		1.3	ND		1.2	ND		1.2	ND		0.51	ND		0.48	ND		0.45	ND		5.4
N-Nitrosodiphenylamine	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
Naphthalene	13	ND		0.42	0.17	J	0.43	0.062	J	0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
Nitrobenzene	NS	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	1.2		0.51	0.93		0.48	0.29	J	0.45	2.4	J	5.4
Pentachlorophenol	1	ND		1.1	ND		1.1	ND		1.3	ND		1.2	ND		1.2	ND		1.3	ND		1.2	ND		1.1	ND		13
Phenanthrene	50	ND		0.42	0.16	J	0.43	0.14	J	0.51	ND		0.48	0.72		0.48	1.2		0.51	7.1		0.48	1.2		0.45	4.4	J	5.4
Phenol	0.03	ND		0.42	ND		0.43	ND		0.51	ND		0.48	ND		0.48	ND		0.51	ND		0.48	ND		0.45	ND		5.4
Pyrene	50	ND		0.42	0.3	J	0.43	0.6		0.51	ND		0.48	0.19	J	0.48	2.7		0.51	8		0.48	1.8		0.45	6.5		5.4
Total SVOC Conc.	500	0.048			2.48			4.94			0.05			2.302			21.74			64.83			15.149			38.95		
Total SVOC TICs	NS	6.49	J		13.57	J		23.01	J		23.54	J		66.4	J		158.3	J		91.63	J		136.88	J		847	J	

Notes:

Concentrations in bold and shaded cells exceed the New York State TAGM Recommended Soil Cleanup Objectives (RSCOs).

NS= No standard has been established for this compound

Conc.= Detected concentration

mg/kg= miligrams per kilograms

NS=No standard has been established.

ND=Not detected above the laboratory's reporting limits

MDL=Method detection limit

B= Analyte was detected in the laboratory analyzed blank

J- The estimated concentration was below the MDL, but above the laboratory's reporting limits.

TICs=Tentatively identified compounds

1) Sample depth intervals are indicated at the end of the sample ID

TABLE 8B
SUMMARY OF POST EXCAVATION SOIL ANALYTICAL RESULTS-SVOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Recommended Soil Cleanup Objectives (mg/kg)	PE-B4W (4.5-5') AC25433-010 8/31/2006 SOIL mg/Kg			PE-0EXBB1(5-5.5') AC25847-002 9/25/2006 SOIL mg/Kg			PE-0EXB3N(2.5-3') AC25847-004 9/25/2006 SOIL mg/Kg			PE-0EXB2E(2-2.5') AC25847-003 9/25/2006 SOIL mg/Kg			PE-0EXB1S(2-2.5) AC25847-001 9/25/2006 SOIL mg/Kg			PE-C1S (5.5-6') AC25433-001 8/31/2006 SOIL mg/Kg			PE-C2E (5.5-6') AC25433-002 8/31/2006 SOIL mg/Kg			PE-C3N (5.5-6') AC25433-003 8/31/2006 SOIL mg/Kg			PE-C4N (5.5-6') AC25433-004 8/31/2006 SOIL mg/Kg		
SEMIVOLATILE COMPOUNDS (GC/MS)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	3.4	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
1,2-Dichlorobenzene	7.9	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
1,2-Diphenylhydrazine	NS	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
1,3-Dichlorobenzene	1.6	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
1,4-Dichlorobenzene	8.5	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
2,4,5-Trichlorophenol	0.1	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
2,4,6-Trichlorophenol	NS	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
2,4-Dichlorophenol	0.4	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
2,4-Dimethylphenol	NS	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
2,4-Dinitrophenol	0.2	ND		1.1	ND		1.4	ND		2.1	ND		5.8	ND		1.9	ND		2.2	ND		1.7	ND		1.5	ND		3			
2,4-Dinitrotoluene	NS	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
2,6-Dinitrotoluene	1	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
2-Chloronaphthalene	NS	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
2-Chlorophenol	0.8	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
2-Methylnaphthalene	36.4	0.72		0.44	ND		0.56	ND		0.41	0.56	J	1.2	ND		0.37	0.71	J	0.88	0.29	J	0.69	ND		0.62	0.59	J	1.2			
2-Methylphenol	0.1	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
2-Nitroaniline	0.43	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
2-Nitrophenol	0.33	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
3&4-Methylphenol	0.9	ND		0.44	ND		1.4	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
3,3'-Dichlorobenzidine	NS	ND		0.44	ND		1.4	ND		1	ND		2.9	ND		0.93	ND		0.88	ND		0.69	ND		0.62	0.6	J	1.2			
3-Nitroaniline	0.5	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
4,6-Dinitro-2-methylphenol	NS	ND		0.44	ND		1.4	ND		1	ND		2.9	ND		0.93	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
4-Bromophenyl-phenylether	NS	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
4-Chloro-3-methylphenol	0.24	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
4-Chloroaniline	0.22	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
4-Chlorophenyl-phenylether	NS	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
4-Nitroaniline	NS	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
4-Nitrophenol	0.1	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Acenaphthene	50	0.7		0.44	ND		0.56	0.047	J	0.41	0.31	J	1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Acenaphthylene	41	0.22	J	0.44	ND		0.56	0.071	J	0.41	0.15	J	1.2	0.086	J	0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Anthracene	50	0.81		0.44	ND		0.56	0.11	J	0.41	0.7	J	1.2	0.083	J	0.37	0.11	J	0.88	ND		0.69	ND		0.62	0.14	J	1.2			
Benzidine	NS	ND		2.2	ND		0.56	ND		1	ND		2.9	ND		0.93	ND		4.4	ND		3.5	ND		3.1	ND		6			
Benzo[a]anthracene	0.224	1		0.44	ND		0.56	0.34	J	0.41	2.5		1.2	0.31	J	0.37	0.25	J	0.88	0.079	J	0.69	ND		0.62	0.54	J	1.2			
Benzo[a]pyrene	0.061	0.9		0.44	ND		0.56	0.4	J	0.41	2.4		1.2	0.34	J	0.37	0.19	J	0.88	ND		0.69	ND		0.62	0.54	J	1.2			
Benzo[b]fluoranthene	1.1	1.4		0.44	ND		0.56	0.76		0.41	3.5		1.2	0.46		0.37	0.27	J	0.88	0.074	J	0.69	ND		0.62	0.79	J	1.2			
Benzo[g,h,i]perylene	50	0.64		0.44	ND		0.56	0.38	J	0.41	1.7		1.2	0.27	J	0.37	0.15	J	0.88	ND		0.69	ND		0.62	0.48	J	1.2			
Benzo[k]fluoranthene	1.1	0.35	J	0.44	ND		0.56	0.18	J	0.41	1.1	J	1.2	0.18	J	0.37	ND		0.88	ND		0.69	ND		0.62	0.3	J	1.2			
Benzyl alcohol	NS	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Bis(2-Chloroethoxy)methane	NS	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Bis(2-Chloroethyl)Ether	NS	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Bis(2-Chloroisopropyl)ether	NS	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Bis(2-Ethylhexyl)phthalate	50	0.24	JB	0.44	0.15	J	0.56	0.091	JB	0.41	ND		1.2	0.12	JB	0.37	0.14	J	0.88	0.074	J	0.69	0.065	J	0.62	0.12	J	1.2			
Butylbenzylphthalate	50	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Carbazole	NS	0.19	J	0.44	ND		0.56	ND		0.41	0.34	J	1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Chrysene	0.4	1.5		0.44	ND		0.56	0.47		0.41	2.8		1.2	0.31	J	0.37	0.26	J	0.88	0.1	J	0.69	ND		0.62	0.75	J	1.2			
Dibenzo[a,h]Anthracene	0.014	0.24	J	0.44	ND		0.56	0.12	J	0.41	0.61	J	1.2	0.08	J	0.37	ND		0.88	ND		0.69	ND		0.62	0.15	J	1.2			
Dibenzofuran	6.2	0.5		0.44	ND		1.4	ND		0.41	0.34	J	1.2	ND		0.37	0.16	J	0.88	ND		0.69	ND		0.62	ND		1.2			
Diethylphthalate	7.1	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND	J	0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Dimethylphthalate	2	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Di-n-butylphthalate	8.1	0.11	J	0.44	ND		0.56	0.078	JB	0.41	ND		1.2	ND		0.37	0.27	JB	0.88	0.19	JB	0.69	0.23	JB	0.62	0.49	JB	1.2			
DI-n-octylphthalate	50	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Fluoranthene	50	2.2		0.44	0.088	J	0.56	0.43		0.41	4.2		1.2	0.56		0.37	0.41	J	0.88	0.17	J	0.69	ND		0.62	1.3		1.2			
Fluorene	50	0.81		0.44	ND		0.56	ND		0.41	0.31	J	1.2	0.043	J	0.37	0.12	J	0.88	0.078	J	0.69	ND		0.62	0.16	J	1.2			
Hexachlorobenzene	0.41	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Hexachlorobutadiene	NS	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Hexachlorocyclopentadiene	NS	ND		1.1	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Hexachloroethane	NS	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		2.2	ND		1.7	ND		1.5	ND		3			
Indeno(1,2,3-cd)pyrene	3.2	0.53		0.44	ND		0.56	0.32	J	0.41	1.6		1.2	0.24	J	0.37	0.13	J	0.88	ND		0.69	ND		0.62	ND		1.2			
Isophorone	4.4	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	0.4	J	1.2			
N-Nitroso-Di-N-Propylamine	NS	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
N-Nitrosodimethylamine	NS	ND		0.44	ND		1.4	ND		1	ND		2.9	ND		0.93	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
N-Nitrosodiphenylamine	NS	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Naphthalene	13	0.58		0.44	ND		0.56	0.14	J	0.41	0.43	J	1.2	0.042	J	0.37	0.47	J	0.88	0.16	J	0.69	ND		0.62	0.47	J	1.2			
Nitrobenzene	NS	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Pentachlorophenol	1	ND		1.1	ND		1.4	ND		1	ND		2.9	ND		0.93	ND		2.2	ND		1.7	ND		1.5	ND		3			
Phenanthrene	50	1.4		0.44	ND		0.56	0.34	J	0.41	1.8		1.2	0.22	J	0.37	0.48	J	0.88	0.3	J	0.69	ND		0.62	0.82	J	1.2			
Phenol	0.03	ND		0.44	ND		0.56	ND		0.41	ND		1.2	ND		0.37	ND		0.88	ND		0.69	ND		0.62	ND		1.2			
Pyrene	50	2.9		0.44	0.10J		0.56	0.51		0.41	4.7		1.2	0.63		0.37	0.41	J	0.88	0.2	J	0.69	ND		0.62	1.2	J	1.2			
Total SVOC Conc.	500	17.94			0.238			4.787			30.07			3.974			4.53			1.715			1.715			10.05					
Total SVOC TICs	NS	108.36	J		41.06	J		9.84	J		41.98	J		7.82	J		125.5	J		264.89	J		398.2	J		947.3	J				

Notes:
Concentrations in bold and shaded cells exceed the New York State TAGM Recommended Soil Cleanup Objectives (RSCOs).
NS= No standard has been established for this compound
Conc.= Detected concentration
mg/kg= miligrams per kilograms
NS=No standard has been established.
ND=Not detected above the laboratory's reporting limits
MDL=Method detection limit
B= Analyte was detected in the laboratory analyzed blank
J- The estimated concentration was below the MDL, but above the laboratory's reporting limits.
TICs=Tentatively identified compounds
1) Sample depth intervals are indicated at the end of the sample ID.

TABLE 6B
SUMMARY OF POST EXCAVATION SOIL ANALYTICAL RESULTS-SVOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Recommended Soil Cleanup Objectives (mg/kg)	PE-CB1 (6.5-7') AC25433-005 8/31/2006 SOIL mg/Kg			PE-D1N (3.5-4') AC25440-004 9/1/2006 SOIL mg/Kg			PE-D2E (3.4-4') AC25440-005 9/1/2006 SOIL mg/Kg			PE-D3S (3.5-4') AC25440-006 9/1/2006 SOIL mg/Kg			PE-D4W (3.5-4') AC25440-007 9/1/2006 SOIL mg/Kg			PE-DB1 (6-6.5') AC25440-008 9/1/2006 SOIL mg/Kg			PE-E1W (4.5-5') AC25440-001 9/1/2006 SOIL mg/Kg			PE-E2E (4.5-5') AC25440-002 9/1/2006 SOIL mg/Kg			PE-EB1 (6.5-7) AC25440-003 9/1/2006 SOIL mg/Kg		
SEMIVOLATILE COMPOUNDS (GC/MS)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	3.4	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
1,2-Dichlorobenzene	7.9	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
1,2-Diphenylhydrazine	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
1,3-Dichlorobenzene	1.6	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
1,4-Dichlorobenzene	8.5	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
2,4,5-Trichlorophenol	0.1	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
2,4,6-Trichlorophenol	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
2,4-Dichlorophenol	0.4	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
2,4-Dimethylphenol	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
2,4-Dinitrophenol	0.2	ND		1.1	ND		2.3	ND		2.8	ND		2.2	ND		2.1	ND		1.1	ND		2.5	ND		2.3	ND		2
2,4-Dinitrotoluene	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
2,6-Dinitrotoluene	1	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
2-Chloronaphthalene	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
2-Chlorophenol	0.8	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
2-Methylnaphthalene	36.4	0.3	J	0.44	0.28	J	0.46	1.9		0.56	0.9		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
2-Methylphenol	0.1	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
2-Nitroaniline	0.43	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
2-Nitrophenol	0.33	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
3&4-Methylphenol	0.9	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
3,3'-Dichlorobenzidine	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		2.1	ND		0.51	ND		0.46	ND		0.41
3-Nitroaniline	0.5	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
4,6-Dinitro-2-methylphenol	NS	ND		0.44	ND		2.3	ND		2.8	ND		2.2	ND		2.1	ND		1.1	ND		2.5	ND		2.3	ND		2
4-Bromophenyl-phenylether	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
4-Chloro-3-methylphenol	0.24	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
4-Chloroaniline	0.22	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
4-Chlorophenyl-phenylether	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		1.1	ND		0.51	ND		0.46	ND		0.41
4-Nitroaniline	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
4-Nitrophenol	0.1	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
Acenaphthene	50	0.24	J	0.44	0.13	J	0.46	1.9		0.56	1.1		0.44	0.43		0.42	ND		0.42	ND		0.51	0.054	J	0.46	ND		0.41
Acenaphthylene	41	0.045	J	0.44	0.12	J	0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
Anthracene	50	0.35	J	0.44	0.13	J	0.46	1.6		0.56	1.1		0.44	0.38	J	0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
Benzidine	NS	ND		2.2	ND		2.3	ND		2.8	ND		2.2	ND		2.1	ND		0.42	ND		2.5	ND		2.3	ND		2
Benzo[a]anthracene	0.224	**0.76**		0.44	**0.29**	J	0.46	**1.1**		0.56	**0.63**		0.44	0.21	J	0.42	ND		0.42	ND		0.51	0.062	J	0.46	ND		0.41
Benzo[a]pyrene	0.061	**0.66**		0.44	**0.26**	J	0.46	**0.68**		0.56	**0.33**	J	0.44	**0.12**	J	0.42	ND		0.42	ND		0.51	0.055	J	0.46	ND		0.41
Benzo[b]fluoranthene	1.1	0.87		0.44	0.38	J	0.46	0.56		0.56	0.29	J	0.44	ND		0.42	ND		0.42	ND		0.51	0.077	J	0.46	ND		0.41
Benzo[g,h,i]perylene	50	0.38	J	0.44	0.15	J	0.46	0.4	J	0.56	0.24	J	0.44	0.072	J	0.42	ND		1.1	ND		0.51	0.056	J	0.46	ND		0.41
Benzo[k]fluoranthene	1.1	0.34	J	0.44	0.13	J	0.46	0.11	J	0.56	0.068	J	0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
Benzyl alcohol	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
Bis(2-Chloroethoxy)methane	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
Bis(2-Chloroethyl)Ether	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
Bis(2-Chloroisopropyl)ether	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
Bis(2-Ethylhexyl)phthalate	50	0.059	J	0.44	0.27	J	0.46	ND		0.56	ND		0.44	0.26		0.42	0.097	J	0.42	0.072	J	0.51	0.14	J	0.46	0.08	J	0.41
Butylbenzylphthalate	50	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	0.075	J	0.51	ND		0.46	ND		0.41
Carbazole	NS	0.19	J	0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
Chrysene	0.4	**0.77**		0.44	0.27	J	0.46	**1.7**		0.56	**1.1**		0.44	0.39	J	0.42	ND		0.42	ND		0.51	0.1	J	0.46	ND		0.41
Dibenzo[a,h]Anthracene	0.014	**0.13**	J	0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		1.1	ND		0.51	ND		0.46	ND		0.41
Dibenzofuran	6.2	0.21	J	0.44	ND		0.46	0.73		0.56	0.22	J	0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
Diethylphthalate	7.1	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		1.1	ND		0.51	ND		0.46	ND		0.41
Dimethylphthalate	2	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
Di-n-butylphthalate	8.1	0.14	JB	0.44	0.28	J	0.46	0.29	J	0.56	0.27	J	0.44	0.18	J	0.42	0.3	J	0.42	0.28	J	0.51	0.34	J	0.46	0.26	J	0.41
Di-n-octylphthalate	50	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
Fluoranthene	50	1.4		0.44	0.56		0.46	1.1		0.56	0.76		0.44	0.3	J	0.42	ND		0.42	ND		0.51	0.063	J	0.46	ND		0.41
Fluorene	50	0.23	J	0.44	0.18	J	0.46	2.8		0.56	2.1		0.44	0.47		0.42	ND		0.42	ND		0.51	0.067	J	0.46	ND		0.41
Hexachlorobenzene	0.41	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
Hexachlorobutadiene	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
Hexachlorocyclopentadiene	NS	ND		1.1	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		1.1	ND		0.51	ND		0.46	ND		0.41
Hexachloroethane	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		2.1	ND		0.51	ND		0.46	ND		0.41
Indeno(1,2,3-cd)pyrene	3.2	0.35	J	0.44	0.15	J	0.46	0.17	J	0.56	0.097J		0.44	ND		0.42	ND		1.1	ND		0.51	ND		0.46	ND		0.41
Isophorone	4.4	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
N-Nitroso-Di-N-Propylamine	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
N-Nitrosodimethylamine	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		2.1	ND		0.51	ND		0.46	ND		0.41
N-Nitrosodiphenylamine	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
Naphthalene	13	0.3	J	0.44	ND		0.46	2		0.56	0.7		0.44	ND		0.42	ND		0.42	0.09	J	0.51	0.098	J	0.46	ND		0.41
Nitrobenzene	NS	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
Pentachlorophenol	1	ND		1.1	ND		1.2	ND		1.4	ND		1.1	ND		1.1	ND		1.1	ND		1.3	ND		1.2	ND		1
Phenanthrene	50	1.4		0.44	0.41	J	0.46	1.3		0.56	0.37	J	0.44	ND		0.42	ND		0.42	0.099	J	0.51	0.1	J	0.46	ND		0.41
Phenol	0.03	ND		0.44	ND		0.46	ND		0.56	ND		0.44	ND		0.42	ND		0.42	ND		0.51	ND		0.46	ND		0.41
Pyrene	50	1.3		0.44	0.55		0.46	5.5		0.56	4.4		0.44	1.5		0.42	ND		0.42	0.051	J	0.51	0.17	J	0.46	ND		0.41
Total SVOC Conc.	500	10.424			4.54			23.84			14.578			4.312			0.397			0.667			1.382			0.34		
Total SVOC TICs	NS	224.07	J		51.5	J		117.5	J		50.16	J		68	J		269.55	J		185.66	J		193.43	J		147.99	J	

Notes:
Concentrations in bold and shaded cells exceed the New York State TAGM Recommended Soil Cleanup Objectives (RSCOs).
NS= No standard has been established for this compound
Conc.= Detected concentration
mg/kg= miligrams per kilograms
NS=No standard has been established.
ND=Not detected above the laboratory's reporting limits
MDL=Method detection limit
B= Analyte was detected in the laboratory analyzed blank
J- The estimated concentration was below the MDL, but above the laboratory's reporting limits.
TICs=Tentatively identified compounds
1) Sample depth intervals are indicated at the end of the sample ID.

TABLE 8B

SUMMARY OF POST EXCAVATION SOIL ANALYTICAL RESULTS-SVOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Recommended Soil Cleanup Objectives (mg/kg)	PE-GB1(7-7.5') AC25828-010 9/22/2006 SOIL mg/Kg			PE-G2S(5.5-6') AC25828-009 9/22/2006 SOIL mg/Kg			PE-G1N(5.5-6') AC25828-008 9/22/2006 SOIL mg/Kg			PE-HB1(9-9.5') AC25828-011 9/22/2006 SOIL mg/Kg			PE-H1S(6.5-7') AC25828-012 9/22/2006 SOIL mg/Kg			PE-H2N(6.5-7') AC25828-013 9/22/2006 SOIL mg/Kg			PE-I1E(6.5-7') AC26282-001 10/16/2006 SOIL mg/Kg			PE-I2N(6.5-7') AC26282-002 10/16/2006 SOIL mg/Kg			PE-I3NW(6.5-7') AC26282-003 10/16/2006 SOIL mg/Kg		
SEMIVOLATILE COMPOUNDS (GC/MS)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	3.4	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
1,2-Dichlorobenzene	7.9	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
1,2-Diphenylhydrazine	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
1,3-Dichlorobenzene	1.6	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
1,4-Dichlorobenzene	8.5	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
2,4,5-Trichlorophenol	0.1	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
2,4,6-Trichlorophenol	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
2,4-Dichlorophenol	0.4	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
2,4-Dimethylphenol	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
2,4-Dinitrophenol	0.2	ND		2	ND		2.6	ND		2.3	ND		2.3	ND		11	ND		11	ND		1.1	ND		2	ND		1.3
2,4-Dinitrotoluene	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
2,6-Dinitrotoluene	1	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
2-Chloronaphthalene	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
2-Chlorophenol	0.8	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
2-Methylnaphthalene	36.4	ND		0.41	0.61		0.53	2.4		0.46	6.2		0.45	26		2.1	2.1		2.1	6.3		0.42	3.8		0.41	6		0.52
2-Methylphenol	0.1	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
2-Nitroaniline	0.43	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
2-Nitrophenol	0.33	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
3&4-Methylphenol	0.9	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
3,3'-Dichlorobenzidine	NS	ND		1	ND		1.3	ND		1.1	ND		1.1	ND		5.3	ND		5.3	ND		0.42	ND		0.41	ND		0.52
3-Nitroaniline	0.5	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
4,6-Dinitro-2-methylphenol	NS	ND		1	ND		1.3	ND		1.1	ND		1.1	ND		5.3	ND		5.3	ND		0.42	ND		0.41	ND		0.52
4-Bromophenyl-phenylether	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
4-Chloro-3-methylphenol	0.24	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
4-Chloroaniline	0.22	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
4-Chlorophenyl-phenylether	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
4-Nitroaniline	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
4-Nitrophenol	0.1	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Acenaphthene	50	ND		0.41	0.75		0.53	ND		0.46	1.8		0.45	2.5		2.1	ND		2.1	1		0.42	ND		0.41	2.4		0.52
Acenaphthylene	41	0.041	J	0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Anthracene	50	0.061	J	0.41	0.42	J	0.53	0.28	J	0.46	1.2		0.45	0.86	J	2.1	ND		2.1	0.35	J	0.42	0.17	J	0.41	0.33	J	0.52
Benzidine	NS	ND		1	ND		1.3	ND		1.1	ND		1.1	ND		5.3	ND		5.3	ND		2.1	ND		0.41	ND		2.6
Benzo[a]anthracene	0.224	**0.24**	J	0.41	**0.2**	J	0.53	0.22	J	0.46	**0.31**	J	0.45	ND		2.1	ND		2.1	0.055	J	0.42	0.081	J	0.41	0.077	J	0.52
Benzo[a]pyrene	0.061	**0.24**	J	0.41	**0.2**	J	0.53	ND		0.46	**0.36**	J	0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Benzo[b]fluoranthene	1.1	0.31	J	0.41	0.42	J	0.53	ND		0.46	0.72		0.45	ND		2.1	0.26	J	2.1	ND		0.42	ND		0.41	ND		0.52
Benzo[g,h,i]perylene	50	0.18	J	0.41	0.22	J	0.53	ND		0.46	0.29	J	0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Benzo[k]fluoranthene	1.1	0.12	J	0.41	0.14	J	0.53	ND		0.46	0.24	J	0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Benzyl alcohol	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Bis(2-Chloroethoxy)methane	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Bis(2-Chloroethyl)Ether	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Bis(2-Chloroisopropyl)ether	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Bis(2-Ethylhexyl)phthalate	50	1.1	B	0.41	0.15	JB	0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	0.097	J	0.42	ND		0.41	ND		0.52
Butylbenzylphthalate	50	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Carbazole	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	0.3	J	0.42	ND		0.41	ND		0.52
Chrysene	0.4	0.26	J	0.41	0.39	J	0.53	0.062	J	0.46	**0.6**		0.45	ND		2.1	0.52	J	2.1	0.09	J	0.42	0.33	J	0.41	ND		0.52
Dibenzo[a,h]Anthracene	0.014	**0.045**	J	0.41	**0.08**	J	0.53	ND		0.46	0.1	J	0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Dibenzofuran	6.2	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Diethylphthalate	7.1	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Dimethylphthalate	2	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Di-n-butylphthalate	8.1	0.11	JB	0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Di-n-octylphthalate	50	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Fluoranthene	50	0.36	J	0.41	0.43	J	0.53	0.058	J	0.46	0.45		0.45	ND		2.1	0.27	J	2.1	0.069	J	0.42	ND		0.41	0.1	J	0.52
Fluorene	50	0.046	J	0.41	1		0.53	0.89		0.46	3.1		0.45	3.2		2.1	0.67	J	2.1	1.3		0.42	0.65		0.41	3		0.52
Hexachlorobenzene	0.41	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Hexachlorobutadiene	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Hexachlorocyclopentadiene	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Hexachloroethane	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		1	ND		0.52
Indeno[1,2,3-cd]pyrene	3.2	0.13	J	0.41	0.18	J	0.53	ND		0.46	0.26	J	0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Isophorone	4.4	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
N-Nitroso-Di-N-Propylamine	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
N-Nitrosodimethylamine	NS	ND		1	ND		1.3	ND		1.1	ND		1.1	ND		5.3	ND		5.3	ND		0.42	ND		0.41	ND		0.52
N-Nitrosodiphenylamine	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Naphthalene	13	0.12	J	0.41	0.52	J	0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		1.1	ND		1	ND		1.3
Nitrobenzene	NS	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Pentachlorophenol	1	ND		1	ND		1.3	ND		1.1	ND		1.1	ND		5.3	ND		5.3	ND		1.1	ND		1	ND		1.3
Phenanthrene	50	0.22	J	0.41	1.7		0.53	1.2		0.46	3		0.45	6.5		2.1	1.3J	J	2.1	3.2		0.42	1.2		0.41	3.8		0.52
Phenol	0.03	ND		0.41	ND		0.53	ND		0.46	ND		0.45	ND		2.1	ND		2.1	ND		0.42	ND		0.41	ND		0.52
Pyrene	50	0.38	J	0.41	0.48	J	0.53	0.18	J	0.46	0.75		0.45	0.28	J	2.1	0.26	J	2.1	0.13	J	0.42	ND		0.41	0.19	J	0.52
Total SVOC Conc.	500	3.963			7.89			5.28			19.38			39.34			4.08			12.891			6.231			15.897		
Total SVOC TICs	NS	41.41	J		72.1	J		70.6	J		73.9	J		306.7	J		233	J		62.8	J		32.45	J		78.7	J	

Notes:
Concentrations in bloid and shaded cells exceed the New York State TAGM Recommended Soil Cleanup Objectives (RSCOs).
NS= No standard has been established for this compoun
Conc.= Detected concentration
mg/kg= miligrams per kilograms
NS=No standard has been established.
ND=Not detected above the laboratory's reporting limits
MDL=Method detection limit
B= Analyte was detected in the laboratory analyzed blank
J- The estimated concentration was below the MDL, but above the laboratory's reporting limits.
TICs=Tentatively identified compounds
1) Sample depth intervals are indicated at the end of the sample ID.

TABLE 8B
SUMMARY OF POST EXCAVATION SOIL ANALYTICAL RESULTS-SVOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Recommended Soil Cleanup Objectives (mg/kg)	PE-I4W(6.5-7') AC26282-004 10/16/2006 SOIL mg/Kg			PE-I5S(6.5-7') AC26282-006 10/16/2006 SOIL mg/Kg			PE-I6S(6.5-7') AC26282-007 10/16/2006 SOIL mg/Kg			PE-IB1(7.5-8') AC26282-008 10/16/2006 SOIL mg/Kg			PE-IB2(9-9.5') AC26282-008 10/16/2006 SOIL mg/Kg			PE-IB3(9-9.5') AC26282-009 10/16/2006 SOIL mg/Kg			PE-J1 (6.5-7') AC25252-002 8/24/2006 SOIL mg/Kg			PE-J2 (6-6.5') AC25252-003 8/24/2006 SOIL mg/Kg			PE-J3 (6-6.5') AC25252-004 8/24/2006 SOIL mg/Kg		
SEMIVOLATILE COMPOUNDS (GC/MS)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	3.4	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
1,2-Dichlorobenzene	7.9	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
1,2-Diphenylhydrazine	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
1,3-Dichlorobenzene	1.6	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
1,4-Dichlorobenzene	8.5	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
2,4,5-Trichlorophenol	0.1	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
2,4,6-Trichlorophenol	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
2,4-Dichlorophenol	0.4	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
2,4-Dimethylphenol	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
2,4-Dinitrophenol	0.2	ND		15	ND		10	ND		2.5	ND		9.9	ND		21	ND		1.1	ND		2	ND		4.3	ND		4.3			
2,4-Dinitrotoluene	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		1	ND		1.7	ND		1.7			
2,6-Dinitrotoluene	1	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		1	ND		1.7	ND		1.7			
2-Chloronaphthalene	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
2-Chlorophenol	0.8	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
2-Methylnaphthalene	36.4	30		2.9	15		2	ND		0.5	12		2	67		4.1	ND		0.42	ND		0.4	1.1	J	1.7	4.4		1.7			
2-Methylphenol	0.1	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
2-Nitroaniline	0.43	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
2-Nitrophenol	0.33	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
3&4-Methylphenol	0.9	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
3,3'-Dichlorobenzidine	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
3-Nitroaniline	0.5	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
4,6-Dinitro-2-methylphenol	NS	ND		15	ND		10	ND		2.5	ND		9.9	ND		21	ND		1.1	ND		1	ND		4.3	ND		4.3			
4-Bromophenyl-phenylether	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
4-Chloro-3-methylphenol	0.24	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
4-Chloroaniline	0.22	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
4-Chlorophenyl-phenylether	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
4-Nitroaniline	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
4-Nitrophenol	0.1	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		1	ND		1.7	ND		1.7			
Acenaphthene	50	7.2		2.9	2.1		2	ND		0.5	2.1		2	17		4.1	0.068	J	0.42	ND		0.4	ND		1.7	ND		1.7			
Acenaphthylene	41	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Anthracene	50	1.6	J	2.9	0.42	J	2	ND		0.5	0.67	J	2	4.3		4.1	0.045	J	0.42	ND		0.4	1.3	J	1.7	0.54	J	1.7			
Benzidine	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		2.1	ND		0.4	ND		1.7	ND		1.7			
Benzo[a]anthracene	0.224	ND		2.9	0.4	J	2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	**0.26**	J	1.7	**0.3**	J	1.7			
Benzo[a]pyrene	0.061	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	**0.27**	J	1.7	ND		1.7			
Benzo[b]fluoranthene	1.1	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Benzo[g,h,i]perylene	50	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Benzo[k]fluoranthene	1.1	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Benzyl alcohol	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Bis(2-Chloroethoxy)methane	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	NA		1.7			
Bis(2-Chloroethyl)Ether	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Bis(2-Chlorosopropyl)ether	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Bis(2-Ethylhexyl)phthalate	50	ND		2.9	ND		2	0.43J		0.5	ND		2	ND	J	4.1	0.048	J	0.42	0.048	J	0.4	ND		1.7	ND		1.7			
Butylbenzylphthalate	50	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Carbazole	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Chrysene	0.4	0.61	J	2.9	ND		2	0.24	J	0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	**0.88**	J	1.7	**0.9**	J	1.7			
Dibenzo[a,h]Anthracene	0.014	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Dibenzofuran	6.2	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		1	ND		1.7	ND		1.7			
Diethylphthalate	7.1	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Dimethylphthalate	2	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Di-n-butylphthalate	8.1	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Di-n-octylphthalate	50	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Fluoranthene	50	0.32J		2.9	ND		2	ND		0.5	ND		2	0.48J		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Fluorene	50	7.3		2.9	2.4		2	1.1		0.5	2.6		2	18		4.1	0.095	J	0.42	ND		0.4	ND		1.7	1.9		1.7			
Hexachlorobenzene	0.41	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Hexachlorobutadiene	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Hexachlorocyclopentadiene	NS	ND		7.3	ND		5	ND		1.2	ND		5	ND		10	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Hexachloroethane	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		4.3	ND		4.3			
Indeno[1,2,3-cd]pyrene	3.2	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Isophorone	4.4	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
N-Nitroso-Di-N-Propylamine	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
N-Nitrosodimethylamine	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
N-Nitrosodiphenylamine	NS	ND		7.3	ND		5	ND		1.2	ND		5	ND		10	ND		1.1	ND		0.4	ND		1.7	ND		1.7			
Naphthalene	13	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Nitrobenzene	NS	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Pentachlorophenol	1	ND		7.3	ND		5	ND		1.2	ND		5	ND		10	ND		1.1	ND		1	ND		4.3	ND		4.3			
Phenanthrene	50	16		2.9	4.8		2	0.83		0.5	5.4		2	40		4.1	0.23	J	0.42	ND		0.4	5.3		1.7	6.3		1.7			
Phenol	0.03	ND		2.9	ND		2	ND		0.5	ND		2	ND		4.1	ND		0.42	ND		0.4	ND		1.7	ND		1.7			
Pyrene	50	1.1	J	2.9	0.59	J	2	0.35	J	0.5	0.27	J	2	1.3J		4.1	ND		0.42	ND		0.4	0.65	J	1.7	0.65	J	1.7			
Total SVOC Conc.	500	63.81			25.71			2.52			23.04			146.3			0.486			0.048			9.78			14.99					
Total SVOC TICs	NS	287	J		242.9	J		50.3	J		256.4	J		449	J		26.1	J		252.06	J		396	J		386.5	J				

Notes:
Concentrations in bold and shaded cells exceed the New York State TAGM Recommended Soil Cleanup Objectives (RSCOs).
NS= No standard has been established for this compoun
Conc.= Detected concentration
mg/kg= milligrams per kilograms
NS=No standard has been established.
ND=Not detected above the laboratory's reporting limits
MDL=Method detection limit
B= Analyte was detected in the laboratory analyzed blank
J- The estimated concentration was below the MDL, but above the laboratory's reporting limits.
TICs=Tentatively identified compounds
1) Sample depth intervals are indicated at the end of the sample ID.

TABLE 8B

SUMMARY OF POST EXCA[illegible]N SOIL ANALYTICAL RESULTS-SVOCS

IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)

HHMT-PORT IVORY FACILITY

Sample ID		New York State	PE-J4N(5.5-6')			PE-J5N(5.5-6')			PE-JB1 (6-8.5')			PE-KB1 (7-7.5')			PE-K1 (5.5-6')			PE-K2 (5.5-6')			PE-K3 (5.5-6')			PE-K4 (5.5-6')		
Lab Sample No.		Recommended Soil	AC25828-001			AC25828-002			AC25440-009			AC25169-006			AC25169-007			AC25169-008			AC25169-009			AC25252-001		
Sampling Date		Cleanup Objectives	9/22/2006			9/22/2006			9/1/2006			8/22/2006			8/22/2006			8/22/2006			9/22/2006			9/22/2006		
Matrix		(mg/kg)	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL		
Units			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
SEMIVOLATILE COMPOUNDS (GC/MS)			Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene		3.4	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
1,2-Dichlorobenzene		7.9	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
1,2-Diphenylhydrazine		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
1,3-Dichlorobenzene		1.6	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
1,4-Dichlorobenzene		8.5	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
2,4,5-Trichlorophenol		0.1	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
2,4,6-Trichlorophenol		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
2,4-Dichlorophenol		0.4	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
2,4-Dimethylphenol		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
2,4-Dinitrophenol		0.2	ND		9.9	ND		10	ND		2	ND		1.9	ND		21	ND		2.8	ND		2.8	ND		1
2,4-Dinitrotoluene		NS	ND		2	ND		2.1	ND		0.39	ND		0.96	ND		8.4	ND		1.1	ND		1.1	ND		0.4
2,6-Dinitrotoluene		1	ND		2	ND		2.1	ND		0.39	ND		0.96	ND		8.4	ND		1.1	ND		1.1	ND		0.4
2-Chloronaphthalene		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
2-Chlorophenol		0.8	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
2-Methylnaphthalene		36.4	13		2	4.5		2.1	ND		0.39	5.8		0.38	99		8.4	ND		1.1	0.64	J	1.1	ND		0.4
2-Methylphenol		0.1	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
2-Nitroaniline		0.43	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
2-Nitrophenol		0.33	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
3&4-Methylphenol		0.9	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
3,3'-Dichlorobenzidine		NS	ND		5	ND		5.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
3-Nitroaniline		0.5	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
4,6-Dinitro-2-methylphenol		NS	ND		5	ND		5.1	ND		2	ND		0.96	ND		21	ND		2.8	ND		2.8	ND		1
4-Bromophenyl-phenylether		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
4-Chloro-3-methylphenol		0.24	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
4-Chloroaniline		0.22	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
4-Chlorophenyl-phenylether		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
4-Nitroaniline		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
4-Nitrophenol		0.1	ND		2	ND		2.1	ND		0.39	ND		0.96	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Acenaphthene		50	1.2	J	2	1.6	J	2.1	ND		0.39	0.4		0.38	7.7	J	8.4	0.59	J	1.1	0.13	J	1.1	ND		0.4
Acenaphthylene		41	ND		2	ND		2.1	ND		0.39	0.18	J	0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Anthracene		50	0.48	J	2	0.42	J	2.1	ND		0.39	0.24	J	0.38	2.9	J	8.4	0.31	J	1.1	ND		1.1	ND		0.4
Benzidine		NS	ND		5	ND		5.1	ND		2	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Benzo[a]anthracene		0.224	**0.24**	J	2	**0.28**	J	2.1	ND		0.39	0.12	J	0.38	**0.89**	J	8.4	0.15	J	1.1	ND		1.1	ND		0.4
Benzo[a]pyrene		0.061	ND		2	ND		2.1	ND		0.39	0.061	J	0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Benzo[b]fluoranthene		1.1	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Benzo[g,h,i]perylene		50	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Benzo[k]fluoranthene		1.1	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Benzyl alcohol		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Bis(2-Chloroethoxy)methane		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Bis(2-Chloroethyl)Ether		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Bis(2-Chloroisopropyl)ether		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Bis(2-Ethylhexyl)phthalate		50	ND		2	ND		2.1	ND		0.39	0.38	J	0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Butylbenzylphthalate		50	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	0.42		0.4
Carbazole		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	0.074	J	0.4
Chrysene		0.4	**0.43**	J	2	ND		2.1	ND		0.39	0.19	J	0.38	ND		8.4	0.29	J	1.1	ND		1.1	ND		0.4
Dibenzo[a,h]Anthracene		0.014	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Dibenzofuran		6.2	1.4	J	2	1.3	J	2.1	ND		0.39	ND		0.96	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Diethylphthalate		7.1	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Dimethylphthalate		2	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Di-n-butylphthalate		8.1	ND		2	ND		2.1	0.2	J	0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	0.056	J	0.4
Di-n-octylphthalate		50	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Fluoranthene		50	ND		2	ND		2.1	ND		0.39	ND		0.38	2.7	J	8.4	0.36	J	1.1	ND		1.1	ND		0.4
Fluorene		50	2	J	2	2	J	2.1	ND		0.39	ND		0.38	8.5	J	8.4	0.65	J	1.1	0.19	J	1.1	ND		0.4
Hexachlorobenzene		0.41	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Hexachlorobutadiene		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Hexachlorocyclopentadiene		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		21	ND		2.8	ND		2.8	ND		1
Hexachloroethane		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Indeno[1,2,3-cd]pyrene		3.2	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Isophorone		4.4	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
N-Nitroso-Di-N-Propylamine		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
N-Nitrosodimethylamine		NS	ND		5	ND		5.1	ND		0.39	ND		0.96	ND		21	ND		2.8	ND		2.8	ND		0.4
N-Nitrosodiphenylamine		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Naphthalene		13	2.5		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Nitrobenzene		NS	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Pentachlorophenol		1	ND		5	ND		5.1	ND		0.98	ND		0.96	ND		21	ND		2.8	ND		2.8	ND		1
Phenanthrene		50	3.7		2	3.1		2.1	ND		0.39	1.8		0.38	19		8.4	0.36	J	1.1	0.33	J	1.1	ND		0.4
Phenol		0.03	ND		2	ND		2.1	ND		0.39	ND		0.38	ND		8.4	ND		1.1	ND		1.1	ND		0.4
Pyrene		50	0.63	J	2	0.35	J	2.1	ND		0.39	0.3	J	0.38	2.6	J	8.4	0.36	J	1.1	ND		1.1	ND		0.4
Total SVOC Conc.		500	25.58			13.55			0.2			9.471			143.29			3.27			1.29			0.55		
Total SVOC TICs		NS	336.5	J		182.6	J		223.5	J		112.6	J		1404	J		262.5	J		367.4	J		113.42	J	

Notes:

Concentrations in bold and shaded cells exceed the New York State TAGM Recommended Soil Cleanup Objectives (RSCOs).

NS= No standard has been established for this compoun

Conc.= Detected concentration

mg/kg= miligrams per kilograms

NS=No standard has been established.

ND=Not detected above the laboratory's reporting limits

MDL=Method detection limit

B= Analyte was detected in the laboratory analyzed blank

J= The estimated concentration was below the MDL, but above the laboratory's reporting limits.

TICs=Tentatively identified compounds

1) Sample depth intervals are indicated at the end of the sample ID.

TABLE 6B
SUMMARY OF POST EXCAVATION SOIL ANALYTICAL RESULTS-SVOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York State Recommended Soil Cleanup Objectives (mg/kg)	PE-L1 (5.5-6') AC25169-003 8/22/2006 SOIL mg/Kg			PE-L2 (5.5-6') AC25169-004 8/22/2006 SOIL mg/Kg			PE-LB1 (7.5-8') AC25169-005 8/22/2006 SOIL mg/Kg		
SEMIVOLATILE COMPOUNDS (GC/MS)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	3.4	ND		2.1	ND		0.41	ND		0.44
1,2-Dichlorobenzene	7.9	ND		2.1	ND		0.41	ND		0.44
1,2-Diphenylhydrazine	NS	ND		2.1	ND		0.41	ND		0.44
1,3-Dichlorobenzene	1.6	ND		2.1	ND		0.41	ND		0.44
1,4-Dichlorobenzene	8.5	ND		2.1	ND		0.41	ND		0.44
2,4,5-Trichlorophenol	0.1	ND		2.1	ND		0.41	ND		0.44
2,4,6-Trichlorophenol	NS	ND		2.1	ND		0.41	ND		0.44
2,4-Dichlorophenol	0.4	ND		2.1	ND		0.41	ND		0.44
2,4-Dimethylphenol	NS	ND		2.1	ND		0.41	ND		0.44
2,4-Dinitrophenol	0.2	ND		5.3	ND		1	ND		1.1
2,4-Dinitrotoluene	NS	ND		2.1	ND		0.41	ND		0.44
2,6-Dinitrotoluene	1	ND		2.1	ND		0.41	ND		0.44
2-Chloronaphthalene	NS	ND		2.1	ND		0.41	ND		0.44
2-Chlorophenol	0.8	ND		2.1	ND		0.41	ND		0.44
2-Methylnaphthalene	36.4	6.6		2.1	ND		0.41	ND		0.44
2-Methylphenol	0.1	ND		2.1	ND		0.41	ND		0.44
2-Nitroaniline	0.43	ND		2.1	ND		0.41	ND		0.44
2-Nitrophenol	0.33	ND		2.1	ND		0.41	ND		0.44
3&4-Methylphenol	0.9	ND		2.1	ND		0.41	ND		0.44
3,3'-Dichlorobenzidine	NS	ND		2.1	ND		0.41	ND		0.44
3-Nitroaniline	0.5	ND		2.1	ND		0.41	ND		0.44
4,6-Dinitro-2-methylphenol	NS	ND		5.3	ND		1	ND		1.1
4-Bromophenyl-phenylether	NS	ND		2.1	ND		0.41	ND		0.44
4-Chloro-3-methylphenol	0.24	ND		2.1	ND		0.41	ND		0.44
4-Chloroaniline	0.22	ND		2.1	ND		0.41	ND		0.44
4-Chlorophenyl-phenylether	NS	ND		2.1	ND		0.41	ND		0.44
4-Nitroaniline	NS	ND		2.1	ND		0.41	ND		0.44
4-Nitrophenol	0.1	ND		2.1	ND		0.41	ND		0.44
Acenaphthene	50	1.5	J	2.1	ND		0.41	ND		0.44
Acenaphthylene	41	ND		2.1	ND		0.41	ND		0.44
Anthracene	50	0.77	J	2.1	ND		0.41	ND		0.44
Benzidine	NS	ND		2.1	ND		0.41	ND		0.44
Benzo[a]anthracene	0.224	0.3	J	2.1	ND		0.41	ND		0.44
Benzo[a]pyrene	0.061	ND		2.1	ND		0.41	ND		0.44
Benzo[b]fluoranthene	1.1	ND		2.1	ND		0.41	ND		0.44
Benzo[g,h,i]perylene	50	ND		2.1	ND		0.41	ND		0.44
Benzo[k]fluoranthene	1.1	ND		2.1	ND		0.41	ND		0.44
Benzyl alcohol	NS	ND		2.1	ND		0.41	ND		0.44
Bis(2-Chloroethoxy)methane	NS	ND		2.1	ND		0.41	ND		0.44
Bis(2-Chloroethyl)Ether	NS	ND		2.1	ND		0.41	ND		0.44
Bis(2-Chloroisopropyl)ether	NS	ND		2.1	ND		0.41	ND		0.44
Bis(2-Ethylhexyl)phthalate	50	ND		2.1	0.042	J	0.41	ND		0.44
Butylbenzylphthalate	50	ND		2.1	ND		0.41	ND		0.44
Carbazole	NS	ND		2.1	ND		0.41	ND		0.44
Chrysene	0.4	0.7	J	2.1	ND		0.41	ND		0.44
Dibenzo[a,h]Anthracene	0.014	ND		2.1	ND		0.41	ND		0.44
Dibenzofuran	6.2	ND		2.1	ND		0.41	ND		0.44
Diethylphthalate	7.1	ND		2.1	ND		0.41	ND		0.44
Dimethylphthalate	2	ND		2.1	ND		0.41	ND		0.44
Di-n-butylphthalate	8.1	ND		2.1	0.06	JB	0.41	0.082	JB	0.44
Di-n-octylphthalate	50	ND		2.1	ND		0.41	ND		0.44
Fluoranthene	50	ND		2.1	ND		0.41	ND		0.44
Fluorene	50	2.6		2.1	ND		0.41	ND		0.44
Hexachlorobenzene	0.41	ND		2.1	ND		0.41	ND		0.44
Hexachlorobutadiene	NS	ND		2.1	ND		0.41	ND		0.44
Hexachlorocyclopentadiene	NS	ND		5.3	ND		1	ND		1.1
Hexachloroethane	NS	ND		2.1	ND		0.41	ND		0.44
Indeno[1,2,3-cd]pyrene	3.2	ND		2.1	ND		0.41	ND		0.44
Isophorone	4.4	ND		2.1	ND		0.41	ND		0.44
N-Nitroso-Di-N-Propylamine	NS	ND		2.1	ND		0.41	ND		0.44
N-Nitrosodimethylamine	NS	ND		5.3	ND		1	ND		1.1
N-Nitrosodiphenylamine	NS	ND		2.1	ND		0.41	ND		0.44
Naphthalene	13	ND		2.1	ND		0.41	ND		0.44
Nitrobenzene	NS	ND		2.1	ND		0.41	ND		0.44
Pentachlorophenol	1	ND		5.3	ND		1	ND		1.1
Phenanthrene	50	3.9		2.1	ND		0.41	ND		0.44
Phenol	0.03	ND		2.1	ND		0.41	ND		0.44
Pyrene	50	0.9	J	2.1	ND		0.41	ND		0.44
Total SVOC Conc.	500	17.27			0.102			0.082		
Total SVOC TICs	NS	384.5	J		309.8	J		200.89	J	

Notes:
Concentrations in bloid and shaded cells exceed the New York State TAGM Recommended Soil Cleanup Objectives (RSCOs).
NS= No standard has been established for this compound
Conc.= Detected concentration
mg/kg= miligrams per kilograms
NS=No standard has been established.
ND=Not detected above the laboratory's reporting limits
MDL=Method detection limit
B= Analyte was detected in the laboratory analyzed blank
J- The estimated concentration was below the MDL, but above the laboratory's reporting limits.
TICs=Tentatively identified compounds
1) Sample depth intervals are indicated at the end of the sample ID.

The following SVOCs were detected at concentrations that exceeded their RSCOs in at least one post-excavation soil sample: 2-methylnaphthalene, acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)flouoranthene, chrysene, and dibenzo(a,h)antracene. Prior soil sampling analytical results at Area 3A have contained total PAH compounds at concentrations up to 127.42 mg/kg; only two of the 54 (i.e., less than 4%) IRM post-excavation soil samples contained higher concentrations of total PAH compounds. These two samples, a bottom sample collected at Area I and a sidewall sample collected at Area K, contained concentrations of total PAH compounds of 146.3 and 143.29 mg/kg, respectively. The concentrations of total PAH compounds in the remaining soil samples were similar to those detected throughout the HHMT-Port Ivory Facility. Please note, the sidewall sample collected at Area K was collected from the east sidewall and, due to the presence of nearby structures, overexcavation of Area K to the east was and is not feasible.

7.2 Collection, Preparation, and Analysis of LNAPL Leachate Samples

Type II LNAPL was observed at Area B and Area J. During IRM activities, the Type II LNAPL was removed to the extent practical; however some of the Type II LNAPL could not be removed due to the presence of facility and public roadways, the Tidewater pipelines, and facility buildings. The Type II LNAPL located to the north and east of Area B was excavated, but the Type II LNAPL located south of Area B could not be excavated due to the presence of a facility road to the south of Area B. Type II LNAPL located beneath and adjacent to the Tidewater pipelines was removed to the north of Area J, but some Type II LNAPL remained below the Tidewater pipelines in this Removal Area/Trench because at least one of the Tidewater pipelines was located within five feet of Building No. 80. As a result, excavation of the Tidewater pipelines and adjacent soil could potentially have impacted the structural stability of the foundation of Building No. 80. In order to determine whether the Type II LNAPL could potentially impact groundwater, the Port Authority retained Meta Environmental, Inc. (META) to conduct a solubility/leachability study. The purpose of this study was to evaluate the potential for the remaining Type II LNAPL to impact groundwater at the site. The study consisted of the following tasks:

- Collection of Type II LNAPL samples;
- Collection of groundwater samples;
- Analysis of organic compounds in the groundwater samples;
- Confirmation of the suitability of the groundwater for generating the leachate;
- Preparation of leachate samples; and
- Analysis of leachate samples and associated quality assurance/quality control (QA/QC) samples.

The Type II LNAPL samples were collected from the sidewalls where the Type II LNAPL was present at Areas B and J using a plastic pond-sampling device or shovel. Samples of the groundwater at Area B and Area J were collected using dedicated Teflon bailers.

Following sample collection, the first step in the solubility study was to confirm that groundwater samples collected at Area B and Area J contained minimal concentrations of targeted organic compounds. If samples contained relatively significant concentrations of organic compounds, it would be unsuitable for the leachability analysis because the concentrations of organic compounds in the groundwater would "mask" the additional concentrations of those compounds leached from the LNAPL.

The second step in the study was the preparation of a leachate sample from Type II LNAPL samples collected at Area B and Area J. The leachate samples were prepared by contacting the LNAPL sample from each area (Areas B and J) with groundwater collected from that area, which was maintained at low pH and under zero oxygen conditions to limit microbial activity. For both leachate samples, the groundwater was maintained in contact with the LNAPL for 72 hours at 15 degrees Celsius.

The third step in the study was the analysis of the leachate samples and associated QA/QC samples. The QA/QC samples included an extraction blank, which was comprised of site-specific groundwater, and a laboratory blank, which was an analysis of DI water to confirm

whether or not the instruments were contaminated by organic compounds. Both leachate samples and the method blank were analyzed for VOCs and SVOCs. Analytical results are presented on Tables 9A and 9B, respectively. The META laboratory analytical report is included in Appendix D.

Acetone, methylene chloride, and benzene were the only compounds detected at concentrations greater than their respective AWQSGVs in either leachate sample. Methylene chloride and acetone, common laboratory solvents, were also detected in the method blank prepared and analyzed by the laboratory; therefore, the concentration of methylene chloride and acetone in the samples is considered to be attributable to laboratory contamination. Other than the laboratory contaminants identified above, no targeted VOCs were detected in the leachate sample associated with Type II LNAPL at Area B. Benzene was detected at 5 ug/L, slightly above its AWQSGV of 1 ug/L, in the leachate sample associated with Type II LNAPL at Area J. VOC TICs were detected in the leachate samples associated with the Type II LNAPL at Area B (7 ug/L) and at Area J (at 62 ug/L). Please note, the extraction blank, which consisted of site-specific groundwater, contained VOC TICs at a concentration of 15 ug/L.

Phenol and Di-n-butylphthalate were the only SVOCs detected at a concentration greater than their respective AWQSGVs in either leachate sample. These compounds were also detected in the extraction blank and the laboratory blank and therefore are suspected to be attributable to laboratory contamination. SVOC TICs were detected at 380 ug/L in the sample from Area B, 375 ug/L in the sample from Area J, and 400 ug/L in the extraction blank (site groundwater).

Based on the analytical results, Type II LNAPL is unlikely to be a source area for significant groundwater imapcts. The leachate generated using Type II LNAPL from Area B did not contain any targeted organic compounds, and the presence of Type II LNAPL at Area B is not anticipated to impact groundwater. However, the Type II LNAPL remaining at Area J could potentially result in minor impacts to groundwater quality. Therefore, additional investigation of groundwater quality downgradient of Area J is warranted.

TABLE 9A
SUMMARY OF LNAPL LEACHATE ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID		AREA B-O			AREA J-O Composite			Extraction Blank (Site GW)		
Lab ID	New York	HM060822-01			HM060919-01			HM060919-EB		
Date Collected	State	08/03/06			08/02/06			8/2/06		
Mate[redacted]	AWQSGV	Water			Water			Water		
Uni[redacted]		ug/L			ug/L			ug/L		
Volatile Organic Compounds (VOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Dichlorodifluoromethane	5	ND		5	ND		5	ND		5
Chloromethane	NS	ND		5	ND		5	ND		5
Vinyl Chloride	2	ND		5	ND		5	ND		5
Bromomethane	5	ND		5	ND		5	ND		5
Chloroethane	5	ND		5	ND		5	ND		5
Trichlorofluoromethane	5	ND		5	ND		5	ND		5
1,1-Dichloroethene	5	ND		5	ND		5	ND		5
Acetone	50	**250**	B	5	**15**	B	5	**32**	B	5
Iodomethane	NS	ND		5	ND		5	ND		5
Carbon Disulfide	50	ND		5	ND		5	ND		5
Methylene Chloride	5	**1900**	B	5	**6700**	B	5	**4800**	B	5
trans-1,2-Dichloroethene	5	ND		5	ND		5	ND		5
Methyl tert-butyl ether	NS	ND		5	ND		5	ND		5
1,1-Dichloroethane	5	ND		5	ND		5	ND		5
Vinyl acetate	NS	ND		5	ND		5	ND		5
2-Butanone	50	ND		5	ND		5	ND		5
cis-1,2-Dichloroethene	5	ND		5	ND		5	ND		5
2,2-Dichloropropane	5	ND		5	ND		5	ND		5
Bromochloromethane	50	ND		5	ND		5	ND		5
Chloroform	7	ND		5	ND		5	ND		5
1,1,1-Trichloroethane	5	ND		5	ND		5	ND		5
1,1-Dichloropropene	5	ND		5	ND		5	ND		5
Carbon Tetrachloride	5	ND		5	ND		5	ND		5
1,2-Dichloroethane	0.6	ND		5	ND		5	ND		5
Benzene	1	ND		5	**8**		5	ND		5
Trichloroethene	5	ND		5	ND		5	ND		5
1,2-Dichloropropane	1	ND		5	ND		5	ND		5
Dibromomethane	5	ND		5	ND		5	ND		5
Bromodichloromethane	50	ND		5	ND		5	ND		5
cis-1,3-Dichloropropene	NS	ND		5	ND		5	ND		5
4-Methyl-2-pentanone	50	ND		5	ND		5	ND		5
Toluene	5	ND		5	ND		5	ND		5
trans-1,3-Dichloropropene	NS	ND		5	ND		5	ND		5
1,1,2-Trichloroethane	1	ND		5	ND		5	ND		5
1,3-Dichloropropane	NS	ND		5	ND		5	ND		5
Tetrachloroethene	5	ND		5	ND		5	ND		5
2-Hexanone	NS	ND		5	ND		5	ND		5
Dibromochloromethane	50	ND		5	ND		5	ND		5
1,2-Dibromoethane	2	ND		5	ND		5	ND		5
Chlorobenzene	5	ND		5	ND		5	ND		5
1,1,1,2-[redacted]hloroethane	0.9 total	ND		5	ND		5	ND		5
Ethyl[redacted]	5	ND		5	3	J	5	ND		5
m,p-X[redacted]	5	ND		5	ND		5	ND		5
o-Xylene	5	ND		5	ND		5	ND		5
Xylene (Total)	NS	ND		5	ND		5	ND		5
Styrene	5	ND		5	ND		5	ND		5
Bromoform	50	ND		5	ND		5	ND		5
Isopropylbenzene	5	ND		5	ND		5	ND		5
1,1,2,2-Tetrachloroethane	5	ND		5	ND		5	ND		5
Bromobenzene	5	ND		5	ND		5	ND		5
1,2,3-Trichloropropane	0.04	ND		5	ND		5	ND		5
n-Propylbenzene	5	ND		5	ND		5	ND		5
2-Chlorotoluene	5	ND		5	ND		5	ND		5
1,3,5-Trimethylbenzene	5	ND		5	2	J	5	ND		5
4-Chlorotoluene	5	ND		5	ND		5	ND		5
tert-Butylbenzene	5	ND		5	ND		5	ND		5
1,2,4-Trimethylbenzene	5	ND		5	ND		5	ND		5
sec-Butylbenzene	NS	ND		5	ND		5	ND		5
4-Isopropyltoluene	5	ND		5	3	J	5	ND		5
1,3-Dichlorobenzene	3	ND		5	ND		5	ND		5
1,4-Dichlorobenzene	3	ND		5	ND		5	ND		5
n-Butylbenzene	5	ND		5	ND		5	ND		5
1,2-Dichlorobenzene	3	ND		5	ND		5	ND		5
1,2-Dibromo-3-chloropropane	NS	ND		5	ND		5	ND		5
1,2,4-Trichlorobenzene	5	ND		5	ND		5	ND		5
Hexachlorobutadiene	0.5	ND		5	ND		5	ND		5
Naphthalene	10	ND		5	ND		5	ND		5
1,2,3-Trichlorobenzene	5	ND		5	ND		5	ND		5
Dibromofluoromethane	50	ND		5	ND		5	ND		5
1,2-Dichloroethane-d4	NS	ND		5	ND		5	ND		5
Toluene-d8	NS	ND		5	ND		5	ND		5
Bromofluorobenzene	NS	ND		5	ND		5	ND		5
VOC TICs	NS	7	J		62	J		15	J	

Notes and Abbreviations:

AWQSGV = Ambient Water Quality Standards and Guidance Values
Conc.= concentration
MDL= Method detection limit
UG/L = Micrograms per Liter
TICs=Tentatively Identified Compounds
GW=groundwater
NS= No standard
NA= Not analyzed
B= Analyte was also detected in laboratory analyzed blank
ND = Not Detected
J = The estimated concentration was below the MDL, but is above the laboratory's reporting limits.
1) Conc[redacted]s exceeding the AWQSGV are provided in bold font a[redacted] cells highlighted in yellow.

TABLE 9B
SUMMARY OF LNAPL LEACHATE ANALYTICAL RESULTS-SVOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID		AREA B-O			AREA J-O Composite			Extraction Blank (Site GW)		
Lab ID	New York State	HM060822-01			HM060919-01			HM060919-EB		
Date Collected	AWQSGV	08/03/06			08/02/06			8/2/06		
Material		Water			Water			Water		
Units		ug/L			ug/L			ug/L		
SemiVolatile Organic Compounds		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
Bromobenzene	5	ND		0.200	ND		0.200	ND		0.200
2-Chlorotoluene	5	ND		0.200	ND		0.200	ND		0.200
Propylbenzene	NS	ND		0.200	ND		0.200	ND		0.200
4-Chlorotoluene	5	ND		0.200	ND		0.200	ND		0.200
1,3,5-Trimethylbenzene	5	ND		0.200	ND		0.200	ND		0.200
tert-Butylbenzene	5	ND		0.200	ND		0.200	ND		0.200
1,2,4-Trimethylbenzene	5	ND		0.200	ND		0.200	ND		0.200
sec-Butylbenzene	5	ND		0.200	ND		0.200	ND		0.200
Phenol	1	**1.43**	B	0.200	**0.946**	B	0.200	**0.902**	B	0.200
bis(2-Chloroethyl)ether	1	ND		0.200	ND		0.200	ND		0.200
Aniline	5	ND		0.200	ND		0.200	ND		0.200
2-Chlorophenol	5	ND		0.200	ND		0.200	ND		0.200
1,3-Dichlorobenzene	3	ND		0.200	ND		0.200	ND		0.200
1,4-Dichlorobenzene	3	ND		0.200	ND		0.200	ND		0.200
p-Isopropyltoluene	NS	ND		0.200	1.7		0.200	ND		0.200
Benzyl Alcohol	NS	1.08		0.200	ND		0.200	ND		0.200
2-Methylphenol (m-cresol)	1*	0.76		0.200	ND		0.200	ND		0.200
1,2-Dichlorobenzene	3	ND		0.200	ND		0.200	ND		0.200
3,4-Methylphenol (o,p-cresol)	1*	0.752		0.200	ND		0.200	ND		0.200
bis(2-chloroisopropyl)ether	NS	ND		0.200	ND		0.200	ND		0.200
n-Butylbenzene	NS	ND		0.200	ND		0.200	ND		0.200
N-nitroso-di-n-propylamine	NS	ND		0.200	ND		0.200	ND		0.200
Hexachloroethane	5	ND		0.200	ND		0.200	ND		0.200
1,2-Dibromo-3-Chloropropane	NS	ND		0.200	ND		0.200	ND		0.200
2-Nitrophenol	1*	ND		0.200	ND		0.200	ND		0.200
2,4-Dimethylphenol	1*	0.421		0.200	ND		0.200	ND		0.200
bis(2-Chloroethoxy)methane	5	ND		0.200	ND		0.200	ND		0.200
2,6-Dichlorophenol	NS	ND		0.200	ND		0.200	ND		0.200
1,2,4-Trichlorobenzene	5	ND		0.200	ND		0.200	ND		0.200
Naphthalene	10	ND		0.200	ND		0.200	ND		0.200
2,4-Dichlorophenol	1*	ND		0.200	ND		0.200	ND		0.200
4-Chloroaniline	5	ND		0.200	ND		0.200	ND		0.200
Hexachlorobutadiene	0.5	ND		0.200	ND		0.200	ND		0.200
1,2,3-Trichlorobenzene	5	ND		0.200	ND		0.200	ND		0.200
4-Chloro-3-methylphenol	NS	ND		0.200	ND		0.200	ND		0.200
2-Methylnaphthalene	NS	ND		0.200	ND		0.200	ND		0.200
1-Methylnaphthalene	NS	ND		0.200	ND		0.200	ND		0.200
Hexachlorocyclopentadiene	5	ND		20.0	ND		20.0	ND		20.0
2,4,6-Trichlorophenol	1*	ND		0.200	ND		0.200	ND		0.200
2,4,5-Trichlorophenol	1*	ND		0.200	ND		0.200	ND		0.200
2-Chloronaphthalene	10	ND		0.200	ND		0.200	ND		0.200
2-Nitroaniline	5	ND		0.200	ND		0.200	ND		0.200
Dimethylphthalate	50	ND		0.200	ND		0.200	ND		0.200
Acenaphthylene	20	ND		0.200	ND		0.200	ND		0.200
3-Nitroaniline	5	ND		0.200	ND		0.200	ND		0.200
Acenaphthene	20	ND		0.200	0.784		0.200	ND		0.200
2,4-Dinitrophenol	1*	ND		10.0	ND		10.0	ND		10.0
4-Nitrophenol	1*	ND		1.0	ND		1.0	ND		1.0
Dibenzofuran	5	ND		0.200	0.29		0.200	ND		0.200
2,3,4,6-Tetrachlorophenol	NS	ND		0.200	ND		0.200	ND		0.200
Diethylphthalate	50	1.3	B	0.200	1.25	B	0.200	1.3	B	0.200
4-Chlorophenyl-phenylether	1*	ND		0.200	ND		0.200	ND		0.200
Fluorene	50	ND		0.200	ND		0.200	ND		0.200
4-Nitroaniline	5	ND		0.200	ND		0.200	ND		0.200
4,6-Dinitro-2-methylphenol	NS	ND		2.0	ND		2.0	ND		2.0
n-Nitrosodiphenylamine	50	ND		0.200	ND		0.200	ND		0.200
Hexachlorobenzene	0.04	ND		0.200	ND		0.200	ND		0.200
Pentachlorophenol	1*	ND		10.0	ND		10.0	ND		10.0
Phenanthrene	50	ND		0.200	ND		0.200	ND		0.200
Anthracene	50	ND		0.200	ND		0.200	ND		0.200
Carbazole	NS	ND		0.200	ND		0.200	ND		0.200
Di-n-butylphthalate	50	**120**	B	0.200	**94**	B	0.200	**100**	B	0.200
Fluoranthene	50	ND		0.200	0.118	J	0.200	ND		0.200
Pyrene	50	ND		0.200	0.137	J	0.200	ND		0.200
Butylbenzylphthalate	50	6.31	B	0.200	5.07	B	0.200	5.52	B	0.200
Benz[a]anthracene	0.002	ND		0.200	ND		0.200	ND		0.200
Chrysene	0.002	ND		0.200	ND		0.200	ND		0.200
bis(2-Ethylhexyl)phthalate	5	3.7	B	0.200	2.6	B	0.200	2.47	B	0.200
Di-n-octylphthalate	50	ND		0.200	ND		0.200	ND		0.200
Benzo[b]fluoranthene	0.002	ND		0.200	ND		0.200	ND		0.200
Benzo[k]fluoranthene	0.002	ND		0.200	ND		0.200	ND		0.200
Benzo[a]pyrene	detection limit	ND		0.200	ND		0.200	ND		0.200
Indeno[1,2,3-cd]pyrene	0.002	ND		0.200	ND		0.200	ND		0.200
Dibenz[a,h]anthracene	50	ND		0.200	ND		0.200	ND		0.200
Benzo[g,h,i]perylene	5	ND		0.200	ND		0.200	ND		0.200
SVOC TICs	NS	380	J		375	J		400	J	

Notes and Abbreviations:

AWQSGV = Ambient Water Quality Standards and Guidance Values

* refers to phenolic compounds (total phenols)

MDL = Method Detection Limit

UG/L = Micrograms per Liter

B=compound was detected in the laboratory analyzed blank.

GW= groundwater

ND = Not Detected

B=compound was detected in the laboratory analyzed blank.

J = The estimated concentration was below the MDL, but above the laboratory's reporting limits.

TICs = Tentatively Identified Compounds

NA = Not analyzed

NS = No standard or guidance value

1) Concentrations exceeding the AGWSGV are provided in bold font and are in cells highlighted in yellow.

7.3 Collection of Groundwater Samples

As noted above, the observation period for several Removal Areas/Trenches was shorter than proposed in the *Revised IRM Work Plan* in order to protect structures adjacent to those Removal Areas/Trenches. As such, the Port Authority collected groundwater samples from the Removal Areas/Trenches that were backfilled following an observation period of less than one month. This sampling effort confirmed that the LNAPL potentially present adjacent to these Removal Areas/Trenches backfilled early would not impact groundwater quality with respect to regulated organic compounds. Specifically, groundwater samples were collected at Areas C, K, and L. The groundwater samples were designated as Area-C-W2, Area K-W2, and Area L-W2.

The groundwater samples were collected by transferring groundwater directly from a dedicated Teflon bailer into the laboratory-provided sampling jars. All samples were transported to Veritech (Certification No.11408) under Chain of Custody documentation with instructions to be analyzed for TCL VOC+10 and TCL SVOC+20. The analytical results are summarized on Tables 1A and 1B, respectively. The laboratory analytical reports are included in Appendix A.

The groundwater sampling analytical results indicate that no VOCs or SVOCs were detected above the New York AWQSGV in the Removal Areas/Trenches that were closed earlier than the approved observation period (Samples Area C-W2, Area K-W2, and Area L-W2). Based on the analytical results, the potential presence of LNAPL in the vicinity of these Removal Areas/Trenches has not impacted groundwater quality.

7.4 Site Restoration

After the completion of IRM activities, the Port Authority performed site restoration activities, which included the following components: the collection of backfill soil samples; backfilling the Removal Areas/Trenches; and the removal of components of the treatment system. Backfilling activities and collection of backfill soil samples are discussed in Section 7.4.1. Dismantling of the groundwater treatment system is discussed in Section 7.4.2.

7.4.1 Backfilling and Collection of Backfill Soil Samples

The Port Authority initiated backfilling after LNAPL did not re-accumulate at a Removal Area/Trench and following the collection of post-excavation soil samples and a groundwater sample (if necessary) from that Removal Area/Trench. Each Removal Area/Trench was backfilled as these activities were completed for safety and aesthetics reasons. The Removal areas/Trenches were backfilled with either non-impacted soils originally excavated from a Removal Area/Trench or from other non-impacted on-site sources. As noted above, additional LNAPL and LNAPL-impacted soil remains in the vicinity of Area F; consequently, Area F has not yet been backfilled. Backfill materials were sampled at a frequency that is in accordance with STARS Memo #1.

In general, the sample frequency ranged from one 5-part composite and one discrete soil sample for a 50-cubic yard stockpile to six grab samples and two 5-part composite soil samples for the largest stockpile of backfill materials. Samples of the backfill material were analyzed for TCL VOC+10 and SVOC+20 in accordance with STARS Memo #1. The samples were collected directly from the loader bucket into laboratory-prepared sampling jars immediately before the backfill material was placed in the Removal Area/Trench. All backfill samples were analyzed by Veritech (Certification No. 11408). Analytical results were compared to the RSCOs (see Tables 10A and 10B).

None of the backfill samples contained any VOC at a concentration above its respective RSCO. VOC TICs ranged from not detected in samples collected from Area G and Area H to 2.33 mg/kg in a sample collected at Area B. The following SVOCs were detected at concentrations that exceeded their RSCOs in at least one backfill sample: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)flouoranthene, chrysene, dibenzo(a,h)antracene, dimethylphthalate, fluoranthene, indeno(1,2,3-cd)pyrene, and pyrene. The concentration of total PAH compounds in the backfill samples varied from 0.046 to 36.79 mg/kg with a mean of 8.85 mg/kg and a median of 7.65 mg/kg.

LE 10A
SUMMARY OF BACKFILL OIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York Recommended Soil Cleanup Objectives (RSCOs) mg/Kg	AREA A-BF1 AC25829-006 9/22/2006 Soil mg/Kg			AREA A-BF2 AC25829-007 9/22/2006 Soil mg/Kg			AREA A-BF3 AC25829-008 9/22/2006 Soil mg/Kg			AREA A-BF4 AC25900-001 9/26/2006 Soil mg/Kg		
VOLATILE ORGANIC COMPOUNDS (VOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
1,1,1-Trichloroethane	0.8	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
1,1,2,2-Tetrachloroethane	0.6	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0054
1,1,2-Trichloroethane	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0054
1,1-Dichloroethane	0.2	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
1,1-Dichloroethene	0.4	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
1,2-Dichloroethane	0.1	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
1,2-Dichloropropane	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
2-Butanone	0.3	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
2-Chloroethylvinylether	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
2-Hexanone	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
4-Methyl-2-Pentanone	1	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
Acetone	0.2	ND		0.028	ND		0.028	ND		0.028	ND		0.027
Acrolein	NS	ND		0.028	ND		0.0056	ND		0.0056	ND		0.027
Acrylonitrile	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0054
Benzene	0.06	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
Bromodichloromethane	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
Bromoform	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
Bromomethane	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
Carbon disulfide	2.7	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
Carbon tetrachloride	0.6	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
Chlorobenzene	1.7	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0054
Chloroethane	1.9	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
Chloroform	0.3	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
Chloromethane	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0054
Cis-1,2-Dichloroethene	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
Cis-1,3-Dichloropropene	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
Dibromochloromethane	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
Ethylbenzene	5.5	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
M&p-Xylenes	1.2	ND		0.0022	ND		0.0022	ND		0.0022	ND		0.0022
Methylene chloride	0.1	0.018	B	0.0056	0.024	B	0.0056	0.024	B	0.0056	0.021	B	0.0054
O-Xylene	1.2	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
Styrene	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0054
Tetrachloroethene	1.4	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
Toluene	1.5	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
Trans-1,2-Dichloroethene	0.3	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
Trans-1,3-Dichloropropene	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0054
Trichloroethene	0.7	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0054
Vinyl chloride	0.2	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0054
Total VOCs Conc.	10	0.018			0.024			0.024			ND		
VOC TICs	NS	0.0103	J	NA	0.0038	J		0.0034	J		0.0324	J	

Notes and Abbreviations:
Conc.= concentration
mg/kg= milligrams per kilogram
MDL= method detection limit
B=Analyte was detected in laboratory blank.
ND=Not detected
NS=No standard
J= The estimated concentration was detected below the MDL, but detected above the laboratory's reporting limits.
TICs= Tenatively identified compounds
TAGM=Technical and Administrative Guidance Memorandum #4046, dated January 24, 1994
RSCOs=Recommended Soil Cleanup Objectives
1) Concentrations exceeding the RSCOs are shown in bold font and are in highlighted cells.

TABLE 10A
SUMMARY OF BACKFILL SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID	New York	AREA A-BFC2			AREA B-BF1			AREA B-BF2			AREA B-BF3			AREA B-BC2		
Lab Sample No.	Recommended Soil	AC25829-001			AC25432-007			AC25432-008			AC25432-009			AC25432-011		
Sampling Date	Cleanup Objectives	9/22/2006			8/31/2006			8/31/2006			8/31/2006			8/31/2006		
Matrix	(RSCOs)	Soil			Soil			Soil			Soil			Soil		
Units	mg/Kg	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
VOLATILE ORGANIC COMPOUNDS (VOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
1,1,1-Trichloroethane	0.8	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
1,1,2,2-Tetrachloroethane	0.6	ND		0.0056	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
1,1,2-Trichloroethane	NS	ND		0.0056	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
1,1-Dichloroethane	0.2	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
1,1-Dichloroethene	0.4	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
1,2-Dichloroethane	0.1	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
1,2-Dichloropropane	NS	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
2-Butanone	0.3	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
2-Chloroethylvinylether	NS	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
2-Hexanone	NS	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
4-Methyl-2-Pentanone	1	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Acetone	0.2	ND		0.028	ND		0.029	ND		0.029	ND		0.026	ND		0.029
Acrolein	NS	ND		0.0056	ND		0.029	ND		0.029	ND		0.026	ND		0.029
Acrylonitrile	NS	ND		0.0056	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Benzene	0.06	ND		0.0011	ND		0.0012	ND		0.0011	ND		0.001	ND		0.0011
Bromodichloromethane	NS	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Bromoform	NS	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Bromomethane	NS	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Carbon disulfide	2.7	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Carbon tetrachloride	0.6	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Chlorobenzene	1.7	ND		0.0056	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Chloroethane	1.9	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Chloroform	0.3	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Chloromethane	NS	ND		0.0056	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Cis-1,2-Dichloroethene	NS	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Cis-1,3-Dichloropropene	NS	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Dibromochloromethane	NS	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Ethylbenzene	5.5	ND		0.0011	ND		0.0012	ND		0.0011	ND		0.001	ND		0.0011
M&p-Xylenes	1.2	ND		0.0022	ND		0.0023	ND		0.0023	ND		0.0021	ND		0.0023
Methylene chloride	0.1	0.034	B	0.0056	0.037	B	0.0058	0.03	B	0.0057	0.023	B	0.0052	0.028	B	0.0057
O-Xylene	1.2	ND		0.0011	ND		0.0012	ND		0.0011	ND		0.001	ND		0.0011
Styrene	NS	ND		0.0056	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Tetrachloroethene	1.4	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Toluene	1.5	ND		0.0011	ND		0.0012	ND		0.0011	ND		0.001	ND		0.0011
Trans-1,2-Dichloroethene	0.3	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Trans-1,3-Dichloropropene	NS	ND		0.0056	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Trichloroethene	0.7	ND		0.0056	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Vinyl chloride	0.2	ND		0.0011	ND		0.0058	ND		0.0057	ND		0.0052	ND		0.0057
Total VOCs Conc.	10	0.034			0.037			0.03			0.023			0.028		
VOC TICs	NS	0.0059	J		0.017	J		0.0177	J		0.0168	J		0.0199	J	

Notes and Abbreviations:
Conc.= concentration
mg/kg= milligrams per kilogram
MDL= method detection limit
B=Analyte was detected in laboratory blank.
ND=Not detected
NS=No standard
J= The estimated concentration was detected below the MDL, but detected above the laboratory's reporting limits.
TICs= Tenatively identified compounds
TAGM=Technical and Administrative Guidance Memorandum #4046, dated January 24, 1994
RSCOs=Recommended Soil Cleanup Objectives
1) Concentrations exceeding the RSCOs are shown in bold font and are in highlighted cells.

TABLE 10A
SUMMARY OF BACKFILL SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID	New York	AREA B-OEXBF 1			AREA B-OEXBFC 1			AREA C-BF1			AREA C-BF2			AREA C-BFC1		
Lab Sample No.	Recommended Soil	AC25846-001			AC25846-002			AC25432-002			AC25432-003			AC25432-005		
Sampling Date	Cleanup Objectives	9/25/2006			9/25/2006			8/31/2006			8/31/2006			8/31/2006		
Matrix	(RSCOs)	Soil			Soil			Soil			Soil			Soil		
Units	mg/Kg	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
VOLATILE ORGANIC COMPOUNDS (VOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
1,1,1-Trichloroethane	0.8	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
1,1,2,2-Tetrachloroethane	0.6	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
1,1,2-Trichloroethane	NS	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
1,1-Dichloroethane	0.2	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
1,1-Dichloroethene	0.4	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
1,2-Dichloroethane	0.1	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
1,2-Dichloropropane	NS	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
2-Butanone	0.3	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
2-Chloroethylvinylether	NS	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
2-Hexanone	NS	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
4-Methyl-2-Pentanone	1	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Acetone	0.2	0.033		0.028	0.074		0.029	ND		0.028	ND		0.029	ND		0.028
Acrolein	NS	ND		0.028	ND		0.029	ND		0.028	ND		0.029	ND		0.028
Acrylonitrile	NS	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Benzene	0.06	ND		0.0011	ND		0.0012	ND		0.0011	ND		0.0011	ND		0.0011
Bromodichloromethane	NS	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Bromoform	NS	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Bromomethane	NS	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Carbon disulfide	2.7	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Carbon tetrachloride	0.6	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Chlorobenzene	1.7	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Chloroethane	1.9	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Chloroform	0.3	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Chloromethane	NS	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Cis-1,2-Dichloroethene	NS	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Cis-1,3-Dichloropropene	NS	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Dibromochloromethane	NS	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Ethylbenzene	5.5	ND		0.0011	ND		0.0012	ND		0.0011	ND		0.0011	ND		0.0011
M&p-Xylenes	1.2	ND		0.0023	ND		0.0023	ND		0.0022	ND		0.0023	ND		0.0022
Methylene chloride	0.1	0.0094	B	0.0057	0.011	B	0.0058	0.026	B	0.0056	0.063	B	0.0057	0.039	B	0.0056
O-Xylene	1.2	ND		0.0011	ND		0.0012	ND		0.0011	ND		0.0011	ND		0.0011
Styrene	NS	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Tetrachloroethene	1.4	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Toluene	1.5	ND		0.0011	ND		0.0012	ND		0.0011	ND		0.0011	ND		0.0011
Trans-1,2-Dichloroethene	0.3	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Trans-1,3-Dichloropropene	NS	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Trichloroethene	0.7	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Vinyl chloride	0.2	ND		0.0057	ND		0.0058	ND		0.0056	ND		0.0057	ND		0.0056
Total VOCs Conc.	10	0.0424			0.085			0.026			0.063			0.039		
VOC TICs	NS	0.0658	J		2.33	J		0.0165	J		0.0129	J		0.0168	J	

Notes and Abbreviations:
Conc.= concentration
mg/kg= milligrams per kilogram
MDL= method detection limit
B=Analyte was detected in laboratory blank.
ND=Not detected
NS=No standard
J= The estimated concentration was detected below the MDL, but detected above the laboratory's reporting limits.
TICs= Tenatively identified compounds
TAGM=Technical and Administrative Guidance Memorandum #4046, dated January 24, 1994
RSCOs=Recommended Soil Cleanup Objectives
1) Concentrations exceeding the RSCOs are shown in bold font and are in highlighted cells.

TABLE 10A
SUMMARY OF BACKFILL SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York Recommended Soil Cleanup Objectives (RSCOs) mg/Kg	AREA D-BF1 AC25441-003 9/1/2006 Soil mg/Kg			AREA D-BF2 AC25441-004 9/1/2006 Soil mg/Kg			AREA D-BF3 AC25441-005 9/1/2006 Soil mg/Kg			AREA D-BFC1 AC25441-006 9/1/2006 Soil mg/Kg			AREA E-BF1 AC25441-001 9/1/2006 Soil mg/Kg		
VOLATILE ORGANIC COMPOUNDS (VOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
1,1,1-Trichloroethane	0.8	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
1,1,2,2-Tetrachloroethane	0.6	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
1,1,2-Trichloroethane	NS	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
1,1-Dichloroethane	0.2	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
1,1-Dichloroethene	0.4	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
1,2-Dichloroethane	0.1	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
1,2-Dichloropropane	NS	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
2-Butanone	0.3	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
2-Chloroethylvinylether	NS	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
2-Hexanone	NS	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
4-Methyl-2-Pentanone	1	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Acetone	0.2	ND		0.027	ND		0.029	ND		0.027	ND		0.027	ND		0.028
Acrolein	NS	ND		0.027	ND		0.029	ND		0.027	ND		0.027	ND		0.028
Acrylonitrile	NS	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Benzene	0.06	ND		0.0011	ND		0.0012	ND		0.0011	ND		0.0011	ND		0.0011
Bromodichloromethane	NS	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Bromoform	NS	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Bromomethane	NS	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Carbon disulfide	2.7	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Carbon tetrachloride	0.6	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Chlorobenzene	1.7	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Chloroethane	1.9	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Chloroform	0.3	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Chloromethane	NS	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Cis-1,2-Dichloroethene	NS	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Cis-1,3-Dichloropropene	NS	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Dibromochloromethane	NS	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Ethylbenzene	5.5	ND		0.0011	ND		0.0012	ND		0.0011	ND		0.0011	ND		0.0011
M&p-Xylenes	1.2	ND		0.0022	ND		0.0023	ND		0.0022	ND		0.0022	ND		0.0022
Methylene chloride	0.1	0.023	B	0.0054	0.014	B	0.0058	0.022	B	0.0055	0.016	B	0.0055	0.022	B	0.0056
O-Xylene	1.2	ND		0.0011	ND		0.0012	ND		0.0011	ND		0.0011	ND		0.0011
Styrene	NS	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Tetrachloroethene	1.4	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Toluene	1.5	ND		0.0011	ND		0.0012	ND		0.0011	ND		0.0011	ND		0.0011
Trans-1,2-Dichloroethene	0.3	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Trans-1,3-Dichloropropene	NS	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Trichloroethene	0.7	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Vinyl chloride	0.2	ND		0.0054	ND		0.0058	ND		0.0055	ND		0.0055	ND		0.0056
Total VOCs Conc.	10	0.023			0.014			0.022			0.016			0.022		
VOC TICs	NS	0.0038	J		0.0054	J		0.0112	J		0.0083	J		0.0088	J	

Notes and Abbreviations:
Conc.= concentration
mg/kg= milligrams per kilogram
MDL= method detection limit
B=Analyte was detected in laboratory blank.
ND=Not detected
NS=No standard
J= The estimated concentration was detected below the MDL, but detected above the laboratory's reporting limits.
TICs= Tenatively identified compounds
TAGM=Technical and Administrative Guidance Memorandum #4046, dated January 24, 1994
RSCOs=Recommended Soil Cleanup Objectives
1) Concentrations exceeding the RSCOs are shown in bold font and are in highlighted cells.

TABLE 10A
SUMMARY OF BACKFILL SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID	New York	AREA E-BFC1			AREA G-BF 1			AREA G-BFC 1			AREA H-BF 1		
Lab Sample No.	Recommended Soil	AC25441-002			AC25829-009			AC25829-010			AC25829-011		
Sampling Date	Cleanup Objectives	9/1/2006			9/22/2006			9/22/2006			9/22/2006		
Matrix	(RSCOs)	Soil			Soil			Soil			Soil		
Units	mg/Kg	mg/Kg			mg/Kg			mg/Kg			mg/Kg		
VOLATILE ORGANIC COMPOUNDS (VOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
1,1,1-Trichloroethane	0.8	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
1,1,2,2-Tetrachloroethane	0.6	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0056
1,1,2-Trichloroethane	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0056
1,1-Dichloroethane	0.2	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
1,1-Dichloroethene	0.4	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
1,2-Dichloroethane	0.1	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
1,2-Dichloropropane	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
2-Butanone	0.3	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
2-Chloroethylvinylether	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
2-Hexanone	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
4-Methyl-2-Pentanone	1	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
Acetone	0.2	ND		0.028	ND		0.028	ND		0.028	ND		0.028
Acrolein	NS	ND		0.028	ND		0.0056	ND		0.0056	ND		0.0056
Acrylonitrile	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0056
Benzene	0.06	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
Bromodichloromethane	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
Bromoform	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
Bromomethane	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
Carbon disulfide	2.7	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
Carbon tetrachloride	0.6	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
Chlorobenzene	1.7	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0056
Chloroethane	1.9	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
Chloroform	0.3	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
Chloromethane	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0056
Cis-1,2-Dichloroethene	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
Cis-1,3-Dichloropropene	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
Dibromochloromethane	NS	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
Ethylbenzene	5.5	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
M&p-Xylenes	1.2	ND		0.0022	ND		0.0022	ND		0.0022	ND		0.0022
Methylene chloride	0.1	0.019	B	0.0056	0.034	B	0.0056	0.03	B	0.0056	0.027	B	0.0056
O-Xylene	1.2	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
Styrene	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0056
Tetrachloroethene	1.4	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
Toluene	1.5	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
Trans-1,2-Dichloroethene	0.3	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
Trans-1,3-Dichloropropene	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0056
Trichloroethene	0.7	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0056
Vinyl chloride	0.2	ND		0.0056	ND		0.0011	ND		0.0011	ND		0.0011
Total VOCs Conc.	10	0.019			0.034			ND			0.027		
VOC TICs	NS	0.0103	J		ND			ND	J		ND	J	

Notes and Abbreviations:
Conc.= concentration
mg/kg= milligrams per kilogram
MDL= method detection limit
B=Analyte was detected in laboratory blank.
ND=Not detected
NS=No standard
J= The estimated concentration was detected below the MDL, but detected above the laboratory's reporting limits.
TICs= Tenatively identified compounds
TAGM=Technical and Administrative Guidance Memorandum #4046, dated January 24, 1994
RSCOs=Recommended Soil Cleanup Objectives
1) Concentrations exceeding the RSCOs are shown in bold font and are in highlighted cells.

TABLE 10A
SUMMARY OF BACKFILL SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York Recommended Soil Cleanup Objectives (RSCOs) mg/Kg	AREA H-BFC 1 AC25829-012 9/22/2006 Soil mg/Kg			AREA I-BF 1 AC26323-001 10/16/2006 Soil mg/Kg			AREA I-BF2 AC26323-002 10/16/2006 Soil mg/Kg			AREA I-BF3 AC26323-003 10/16/2006 Soil mg/Kg		
VOLATILE ORGANIC COMPOUNDS (VOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
1,1,1-Trichloroethane	0.8	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
1,1,2,2-Tetrachloroethane	0.6	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
1,1,2-Trichloroethane	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
1,1-Dichloroethane	0.2	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
1,1-Dichloroethene	0.4	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
1,2-Dichloroethane	0.1	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
1,2-Dichloropropane	NS	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
2-Butanone	0.3	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
2-Chloroethylvinylether	NS	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
2-Hexanone	NS	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
4-Methyl-2-Pentanone	1	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
Acetone	0.2	ND		0.028	ND		0.028	ND		0.028	ND		0.027
Acrolein	NS	ND		0.0056	ND		0.0056	ND		0.028	ND		0.027
Acrylonitrile	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Benzene	0.06	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
Bromodichloromethane	NS	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
Bromoform	NS	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
Bromomethane	NS	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
Carbon disulfide	2.7	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
Carbon tetrachloride	0.6	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
Chlorobenzene	1.7	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Chloroethane	1.9	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
Chloroform	0.3	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
Chloromethane	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Cis-1,2-Dichloroethene	NS	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
Cis-1,3-Dichloropropene	NS	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
Dibromochloromethane	NS	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
Ethylbenzene	5.5	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
M&p-Xylenes	1.2	ND		0.0022	ND		0.0022	ND		0.0022	ND		0.0022
Methylene chloride	0.1	0.029	B	0.0056	0.018	B	0.0056	0.023	B	0.0056	0.024	B	0.0055
O-Xylene	1.2	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
Styrene	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Tetrachloroethene	1.4	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
Toluene	1.5	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
Trans-1,2-Dichloroethene	0.3	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
Trans-1,3-Dichloropropene	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Trichloroethene	0.7	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Vinyl chloride	0.2	ND		0.0011	ND		0.0011	ND		0.0056	ND		0.0055
Total VOCs Conc.	10	0.029			0.018			0.023			0.024		
VOC TICs	NS	ND			0.0545	J		0.016	J		0.671	J	

Notes and Abbreviations:

Conc.= concentration
mg/kg= milligrams per kilogram
MDL= method detection limit
B=Analyte was detected in laboratory blank.
ND=Not detected
NS=No standard
J= The estimated concentration was detected below the MDL, but detected above the laboratory's reporting limits.
TICs= Tenatively identified compounds
TAGM=Technical and Administrative Guidance Memorandum #4046, dated January 24, 1994
RSCOs=Recommended Soil Cleanup Objectives
1) Concentrations exceeding the RSCOs are shown in bold font and are in highlighted cells.

TABLE 10A
SUMMARY OF BACKFILL SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York Recommended Soil Cleanup Objectives (RSCOs) mg/Kg	AREA I-BF4 AC26323-004 10/16/2006 Soil mg/Kg			AREA I-BF5 AC26323-005 10/17/2006 Soil mg/Kg			AREA I-BF6 AC27561-001 12/18/2006 Soil mg/Kg			AREA I-BFC2 AC26323-001 10/16/2006 Soil mg/Kg		
VOLATILE ORGANIC COMPOUNDS (VOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
1,1,1-Trichloroethane	0.8	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
1,1,2,2-Tetrachloroethane	0.6	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
1,1,2-Trichloroethane	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
1,1-Dichloroethane	0.2	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
1,1-Dichloroethene	0.4	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
1,2-Dichloroethane	0.1	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
1,2-Dichloropropane	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
2-Butanone	0.3	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
2-Chloroethylvinylether	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
2-Hexanone	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
4-Methyl-2-Pentanone	1	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Acetone	0.2	ND		0.028	ND		0.028	0.022	J	0.028	ND		0.027
Acrolein	NS	ND		0.028	ND		0.028	ND		0.028	ND		0.027
Acrylonitrile	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Benzene	0.06	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
Bromodichloromethane	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Bromoform	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Bromomethane	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Carbon disulfide	2.7	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Carbon tetrachloride	0.6	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Chlorobenzene	1.7	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Chloroethane	1.9	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Chloroform	0.3	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Chloromethane	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Cis-1,2-Dichloroethene	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Cis-1,3-Dichloropropene	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Dibromochloromethane	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Ethylbenzene	5.5	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
M&p-Xylenes	1.2	ND		0.0022	ND		0.0022	ND		0.0022	ND		0.0022
Methylene chloride	0.1	0.027	B	0.0056	0.022	B	0.0056	0.15	B	0.0056	0.02	B	0.0055
O-Xylene	1.2	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
Styrene	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Tetrachloroethene	1.4	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Toluene	1.5	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
Trans-1,2-Dichloroethene	0.3	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Trans-1,3-Dichloropropene	NS	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Trichloroethene	0.7	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Vinyl chloride	0.2	ND		0.0056	ND		0.0056	ND		0.0056	ND		0.0055
Total VOCs Conc.	10	0.027			0.022			0.172			0.02		
VOC TICs	NS	0.0092	J		0.0114	J		ND			0.0104	J	

Notes and Abbreviations:
Conc.= concentration
mg/kg= milligrams per kilogram
MDL= method detection limit
B=Analyte was detected in laboratory blank.
ND=Not detected
NS=No standard
J= The estimated concentration was detected below the MDL, but detected above the laboratory's reporting limits.
TICs= Tenatively identified compounds
TAGM=Technical and Administrative Guidance Memorandum #4046, dated January 24, 1994
RSCOs=Recommended Soil Cleanup Objectives
1) Concentrations exceeding the RSCOs are shown in bold font and are in highlighted cells.

TABLE 10A
SUMMARY OF BACKFILL SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID Lab Sample No. Sampling Date Matrix Units	New York Recommended Soil Cleanup Objectives (RSCOs) mg/Kg	AREA I-BFC4 AC26323-001 10/16/2006 Soil mg/Kg			AREA J-BF 1 AC25374-001 8/31/2006 Soil mg/Kg			AREA J-BF 2 AC25374-002 8/31/2006 Soil mg/Kg			AREA J-BF 3 AC25829-001 9/22/2006 Soil mg/Kg			AREA J-BFC1 AC25374-003 8/31/2006 Soil mg/Kg		
VOLATILE ORGANIC COMPOUNDS (VOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
1,1,1-Trichloroethane	0.8	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
1,1,2,2-Tetrachloroethane	0.6	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
1,1,2-Trichloroethane	NS	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
1,1-Dichloroethane	0.2	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
1,1-Dichloroethene	0.4	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
1,2-Dichloroethane	0.1	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
1,2-Dichloropropane	NS	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
2-Butanone	0.3	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
2-Chloroethylvinylether	NS	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
2-Hexanone	NS	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
4-Methyl-2-Pentanone	1	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Acetone	0.2	ND		0.028	ND		0.028	ND		0.029	ND		0.027	ND		0.029
Acrolein	NS	ND		0.028	ND		0.028	ND		0.029	ND		0.027	ND		0.029
Acrylonitrile	NS	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Benzene	0.06	ND		0.0011	ND		0.0011	ND		0.0012	ND		0.0011	ND		0.0012
Bromodichloromethane	NS	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Bromoform	NS	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Bromomethane	NS	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Carbon disulfide	2.7	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Carbon tetrachloride	0.6	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Chlorobenzene	1.7	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Chloroethane	1.9	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Chloroform	0.3	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Chloromethane	NS	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Cis-1,2-Dichloroethene	NS	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Cis-1,3-Dichloropropene	NS	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Dibromochloromethane	NS	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Ethylbenzene	5.5	ND		0.0011	ND		0.0011	ND		0.0012	ND		0.0011	ND		0.0012
M&p-Xylenes	1.2	ND		0.0022	ND		0.0023	ND		0.0023	ND		0.0022	ND		0.0023
Methylene chloride	0.1	0.022	B	0.0056	0.042	B	0.0057	0.039	B	0.0058	0.018	B	0.0054	0.041	B	0.0058
O-Xylene	1.2	ND		0.0011	ND		0.0011	ND		0.0012	ND		0.0011	ND		0.0012
Styrene	NS	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Tetrachloroethene	1.4	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Toluene	1.5	ND		0.0011	ND		0.0011	ND		0.0012	ND		0.0011	ND		0.0012
Trans-1,2-Dichloroethene	0.3	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Trans-1,3-Dichloropropene	NS	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Trichloroethene	0.7	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Vinyl chloride	0.2	ND		0.0056	ND		0.0057	ND		0.0058	ND		0.0054	ND		0.0058
Total VOCs Conc.	10	0.022			0.042			0.039			0.018			0.041		
VOC TICs	NS	0.0139	J		0.0043	J		0.0101	J		0.0033	J		0.008	J	

Notes and Abbreviations:
Conc.= concentration
mg/kg= milligrams per kilogram
MDL= method detection limit
B=Analyte was detected in laboratory blank.
ND=Not detected
NS=No standard
J= The estimated concentration was detected below the MDL, but detected above the laboratory's reporting limits.
TICs= Tenatively identified compounds
TAGM=Technical and Administrative Guidance Memorandum #4046, dated January 24, 1994
RSCOs=Recommended Soil Cleanup Objectives
1) Concentrations exceeding the RSCOs are shown in bold font and are in highlighted cells.

TABLE 10A
SUMMARY OF BACKFILL SOIL ANALYTICAL RESULTS-VOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID	New York	AREA K-BF1			AREA K-BF2			AREA K-BF3			AREA K-BFC2			AREA L-BF1			AREA L-BFC1		
Lab Sample No.	Recommended Soil	AC25501-003			AC25501-004			AC25501-005			AC25501-007			AC25501-001			AC25501-002		
Sampling Date	Cleanup Objectives	9/7/2006			9/7/2006			9/7/2006			9/7/2006			9/7/2006			9/7/2006		
Matrix	(RSCOs)	Soil			Soil			Soil			Soil			Soil			Soil		
Units	mg/Kg	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
VOLATILE ORGANIC COMPOUNDS (VOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,1,1,2-Tetrachloroethane	NS	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
1,1,1-Trichloroethane	0.8	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
1,1,2,2-Tetrachloroethane	0.6	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
1,1,2-Trichloroethane	NS	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
1,1-Dichloroethane	0.2	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
1,1-Dichloroethene	0.4	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
1,2-Dichloroethane	0.1	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
1,2-Dichloropropane	NS	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
2-Butanone	0.3	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
2-Chloroethylvinylether	NS	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
2-Hexanone	NS	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
4-Methyl-2-Pentanone	1	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Acetone	0.2	ND		0.027	ND		0.027	ND		0.027	ND		0.027	ND		0.027	ND		0.027
Acrolein	NS	ND		0.027	ND		0.027	ND		0.027	ND		0.027	ND		0.027	ND		0.027
Acrylonitrile	NS	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Benzene	0.06	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
Bromodichloromethane	NS	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Bromoform	NS	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Bromomethane	NS	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Carbon disulfide	2.7	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Carbon tetrachloride	0.6	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Chlorobenzene	1.7	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Chloroethane	1.9	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Chloroform	0.3	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Chloromethane	NS	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Cis-1,2-Dichloroethene	NS	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Cis-1,3-Dichloropropene	NS	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Dibromochloromethane	NS	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Ethylbenzene	5.5	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
M&p-Xylenes	1.2	ND		0.0022	ND		0.0022	ND		0.0022	ND		0.0022	ND		0.0022	ND		0.0022
Methylene chloride	0.1	0.052	B	0.0055	0.045	B	0.0054	0.049	B	0.0054	0.054	B	0.0054	0.058	B	0.0055	0.053	B	0.0055
O-Xylene	1.2	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
Styrene	NS	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Tetrachloroethene	1.4	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Toluene	1.5	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011	ND		0.0011
Trans-1,2-Dichloroethene	0.3	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Trans-1,3-Dichloropropene	NS	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Trichloroethene	0.7	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Vinyl chloride	0.2	ND		0.0055	ND		0.0054	ND		0.0054	ND		0.0054	ND		0.0055	ND		0.0055
Total VOCs Conc.	10	0.052			0.045			0.049			0.054			0.058			0.053		
VOC TICs	NS	0.0115	J		0.0098	J		0.0126	J		0.0119	J		0.0172	J		0.0118	J	

Notes and Abbreviations:
Conc.= concentration
mg/kg= milligrams per kilogram
MDL= method detection limit
B=Analyte was detected in laboratory blank.
ND=Not detected
NS=No standard
J= The estimated concentration was detected below the MDL, but detected above the laboratory's reporting limits.
TICs= Tenatively identified compounds
TAGM=Technical and Administrative Guidance Memorandum #4046, dated January 24, 1994
RSCOs=Recommended Soil Cleanup Objectives
1) Concentrations exceeding the RSCOs are shown in bold font and are in highlighted cells.

TABLE 10B
SUMMARY OF BACKFILL ANALYTICAL RESULTS-SVOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID	New York	AREA A-BF2			AREA A-BFC1			AREA A-BFC2			AREA A-BFC3			AREA A-BFC4			AREA B-BF1		
Lab Sample No.	Recommended Soil	AC25829-007			AC25829-003			AC25829-004			AC25829-005			AC25900-002			AC25432-007		
Sampling Date	Cleanup	9/22/2006			9/22/2006			9/22/2006			9/22/2006			9/26/2006			8/31/2006		
Matrix	Objectives (RSCOs)	Soil			Soil			Soil			Soil			Soil			Soil		
Units	mg/Kg	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
Semi-Volatile Organic Compounds (SVOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	3.4	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
1,2-Dichlorobenzene	7.9	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
1,2-Diphenylhydrazine	NS	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
1,3-Dichlorobenzene	1.6	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
1,4-Dichlorobenzene	8.5	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
2,4,5-Trichlorophenol	0.1	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
2,4,6-Trichlorophenol	NS	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
2,4-Dichlorophenol	0.4	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
2,4-Dimethylphenol	NS	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
2,4-Dinitrophenol	0.2	ND		1.9	ND		1.9	ND		1.9	ND		1.8	ND		1.8	ND		1.9
2,4-Dinitrotoluene	NS	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
2,6-Dinitrotoluene	1	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
2-Chloronaphthalene	NS	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
2-Chlorophenol	0.8	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
2-Methylnaphthalene	36.4	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
2-Methylphenol	0.1	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
2-Nitroaniline	0.43	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
2-Nitrophenol	0.33	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
3&4-Methylphenol	0.33	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
3,3'-Dichlorobenzidine	0.33	ND		0.37	ND		0.37	ND		0.37	ND		0.9	ND		0.9	ND		0.39
3-Nitroaniline	0.33	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
4,6-Dinitro-2-methylphenol	0.33	ND		1.9	ND		1.9	ND		1.9	ND		0.9	ND		0.9	ND		1.9
4-Bromophenyl-phenylether	0.33	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
4-Chloro-3-methylphenol	0.33	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
4-Chloroaniline	0.33	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
4-Chlorophenyl-phenylether	0.33	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
4-Nitroaniline	NS	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
4-Nitrophenol	0.1	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
Acenaphthene	50	0.12	J	0.37	0.057	J	0.37	0.49		0.37	ND		0.36	ND		0.36	0.089	J	0.39
Acenaphthylene	41	0.37		0.37	0.21	J	0.37	0.61		0.37	0.092	J	0.36	0.061	J	0.36	0.37	J	0.39
Anthracene	50	0.35	J	0.37	0.16	J	0.37	1.3		0.37	0.068	J	0.36	0.076	J	0.36	0.25	J	0.39
Benzidine	NA	ND		1.9	ND		1.9	ND		1.9	ND		0.9	ND		0.9	ND		1.9
Benzo[a]anthracene	0.224	**1.4**		0.37	**0.6**		0.37	**2.6**		0.37	**0.28**	J	0.36	**0.32**	J	0.36	**0.88**		0.39
Benzo[a]pyrene	0.061	**1.5**		0.37	**0.7**		0.37	**2.5**		0.37	**0.36**		0.36	**0.34**	J	0.36	**1**		0.39
Benzo[b]fluoranthene	1.1	**2.1**		0.37	0.92		0.37	**3.1**		0.37	0.5		0.36	0.48		0.36	**1.4**		0.39
Benzo[g,h,i]perylene	50	1.1		0.37	0.57		0.37	1.6		0.37	0.28	J	0.36	0.28	J	0.36	0.5		0.39
Benzo[k]fluoranthene	1.1	0.58		0.37	0.32	J	0.37	1.1		0.37	0.15	J	0.36	0.12	J	0.36	0.48		0.39
Benzyl alcohol	NS	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
Bis(2-Chloroethoxy)methane	NS	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
Bis(2-Chloroethyl)Ether	NS	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
Bis(2-Chloroisopropyl)ether	NS	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
Bis(2-Ethylhexyl)phthalate	50	0.21	J	0.37	0.074	J	0.37	0.077	J	0.37	0.067	J	0.36	0.1	J	0.36	0.075	J	0.39
Butylbenzylphthalate	50	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
Carbazole	NS	0.067	J	0.37	ND		0.37	0.12	J	0.37	ND		0.36	ND		0.36	0.055	J	0.39
Chrysene	0.4	**1.5**		0.37	**0.65**		0.37	**2.6**		0.37	0.33	J	0.36	0.32	J	0.36	**0.98**		0.39
Dibenzo[a,h]Anthracene	0.014	0.31	J	0.37	**0.16**	J	0.37	**0.46**		0.37	**0.08**	J	0.36	**0.081**	J	0.36	**0.16**	J	0.39
Dibenzofuran	6.2	ND		0.37	ND		0.37	0.32	J	0.37	ND		0.36	ND		0.36	ND		0.39
Diethylphthalate	7.1	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
Dimethylphthalate	2	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
Di-n-butylphthalate	8.1	0.047	J	0.37	0.042	J	0.37	0.039	J	0.37	ND		0.36	ND		0.36	0.12	JB	0.39
Di-n-octylphthalate	50	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
Fluoranthene	50	2.7		0.37	1.1		0.37	6		0.37	0.57		0.36	0.5		0.36	1.8		0.39
Fluorene	50	0.16	J	0.37	0.084	J	0.37	1		0.37	ND		0.36	0.037	J	0.36	0.14	J	0.39
Hexachlorobenzene	0.41	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
Hexachlorobutadiene	NS	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
Hexachlorocyclopentadiene	NS	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
Hexachloroethane	NS	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
Indeno[1,2,3-cd]pyrene	3.2	0.97		0.37	0.48		0.37	2		0.37	0.24	J	0.36	0.24	J	0.36	0.47		0.39
Isophorone	4.4	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
Naphthalene	13	0.055	J	0.37	0.064	J	0.37	0.09	J	0.37	ND		0.36	0.042	J	0.36	0.081	J	0.39
Nitrobenzene	0.2	ND		0.37	ND		0.37	ND		0.37	ND		0.9	ND		0.9	ND		0.39
N-Nitrosodimethylamine	NS	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
N-Nitroso-Di-N-Propylamine	NS	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
N-Nitrosodiphenylamine	NS	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
Pentachlorophenol	1	ND		0.94	ND		0.93	ND		0.94	ND		0.9	ND		0.9	ND		0.97
Phenanthrene	50	0.5		0.37	0.38		0.37	3.1		0.37	0.15	J	0.36	0.24	J	0.36	0.57		0.39
Phenol	0.03	ND		0.37	ND		0.37	ND		0.37	ND		0.36	ND		0.36	ND		0.39
Pyrene	50	2.7		0.37	1.3		0.37	6		0.37	0.55		0.36	0.54		0.36	2		0.39
Total SVOCs Conc.	500	16.739			7.871			34			3.717			3.777			11.42		
SVOC TICs	NS	10.9	J		8.5	J		12.92	J		8.44	J		9.05	J		207.19	J	

Notes and Abbreviations:
Conc.= concentration
mg/kg= milligrams per kilogram
MDL= method detection limit
B=Analyte was detected in laboratory blank.
ND=Not detected
NS=No standard
J= the estimated concentration was detected below MDL, but was detected above the laboratory's reporting limits
TICs=Tentatively identified compounds
TAGM=Technical and Administrative Guidance Memorandum #4046, dated January 24, 1994
RSCOs=Recommended Soil Cleanup Objectives
1. Conc. in bold and highlighted exceed the RSCOs

TABLE 10B
SUMMARY OF BACKGROUND SOIL ANALYTICAL RESULTS-SVOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID	New York	AREA B-BC1			AREA B-BC2			AREA B-BC3			AREA B-OEXBF 1			AREA B-OEXBFC 1			AREA C-BF1			AREA C-BFC1		
Lab Sample No.	Recommended Soil	AC25432-010			AC25432-011			AC25432-012			AC25846-001			AC25846-002			AC25432-002			AC25432-005		
Sampling Date	Cleanup	8/31/2006			8/31/2006			8/31/2006			9/25/2006			9/25/2006			8/31/2006			8/31/2006		
Matrix	Objectives (RSCOs)	Soil			Soil			Soil			Soil			Soil			Soil			Soil		
Units	mg/Kg	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
Semi-Volatile Organic Compounds (SVOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	3.4	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0
1,2-Dichlorobenzene	7.9	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
1,2-Diphenylhydrazine	NS	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0
1,3-Dichlorobenzene	1.6	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0
1,4-Dichlorobenzene	8.5	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
2,4,5-Trichlorophenol	0.1	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
2,4,6-Trichlorophenol	NS	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0
2,4-Dichlorophenol	0.4	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
2,4-Dimethylphenol	NS	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
2,4-Dinitrophenol	0.2	ND		1.8	ND		0.96	ND		1.9	ND		0.95	ND		9.7	ND		1.9	ND		1.9
2,4-Dinitrotoluene	NS	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
2,6-Dinitrotoluene	1	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
2-Chloronaphthalene	NS	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
2-Chlorophenol	0.8	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
2-Methylnaphthalene	36.4	ND		0.37	ND		0.38	ND		0.37	0.41		0.38	ND		3.9	0.27	J	0.37	ND		0.37
2-Methylphenol	0.1	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
2-Nitroaniline	0.43	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
2-Nitrophenol	0.33	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
3&4-Methylphenol	0.33	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
3,3'-Dichlorobenzidine	0.33	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
3-Nitroaniline	0.33	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
4,6-Dinitro-2-methylphenol	0.33	ND		1.8	ND		0.38	ND		1.9	ND		0.38	ND		9.7	ND		1.9	ND		1.9
4-Bromophenyl-phenylether	0.33	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
4-Chloro-3-methylphenol	0.33	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
4-Chloroaniline	0.33	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
4-Chlorophenyl-phenylether	0.33	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
4-Nitroaniline	NS	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
4-Nitrophenol	0.1	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
Acenaphthene	50	ND		0.37	ND		0.38	0.067	J	0.37	0.62		0.38	1.7	J	3.9	0.17	J	0.37	0.15	J	0.37
Acenaphthylene	41	0.077	J	0.37	ND		0.38	0.3	J	0.37	0.16	J	0.38	0.44	J	3.9	0.079	J	0.37	0.59		0.37
Anthracene	50	0.056	J	0.37	ND		0.38	0.21	J	0.37	0.54		0.38	1.6	J	3.9	0.2	J	0.37	0.72		0.37
Benzidine	NA	ND		1.8	ND		1.9	ND		1.9	ND		1.9	ND		3.9	ND		1.9	ND		1.9
Benzo[a]anthracene	0.224	0.21	J	0.37	0.043	J	0.38	**0.84**		0.37	**1.2**		0.38	**1.6**	J	3.9	**0.39**		0.37	**2.4**		0.37
Benzo[a]pyrene	0.061	**0.25**	J	0.37	0.048	J	0.38	**0.93**		0.37	**1.1**		0.38	**1.4**	J	3.9	**0.33**	J	0.37	**2.1**		0.37
Benzo[b]fluoranthene	1.1	0.35	J	0.37	0.086	J	0.38	**1.3**		0.37	**1.8**		0.38	**1.6**	J	3.9	0.6		0.37	**2.9**		0.37
Benzo[g,h,i]perylene	50	0.14	J	0.37	ND		0.38	0.45		0.37	0.87		0.38	1.2	J	3.9	0.23	J	0.37	0.85		0.37
Benzo[k]fluoranthene	1.1	0.096	J	0.37	ND		0.38	0.34	J	0.37	0.56		0.38	0.6	J	3.9	0.22	J	0.37	0.88		0.37
Benzyl alcohol	NS	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
Bis(2-Chloroethoxy)methane	NS	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
Bis(2-Chloroethyl)Ether	NS	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
Bis(2-Chloroisopropyl)ether	NS	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
Bis(2-Ethylhexyl)phthalate	50	0.071	J	0.37	0.37	J	0.38	0.083	J	0.37	0.15	JB	0.38	ND		3.9	1.1		0.37	0.055	J	0.37
Butylbenzylphthalate	50	ND		0.37	0.042	J	0.38	ND		0.37	ND		0.38	ND		3.9	0.057	J	0.37	ND		0.37
Carbazole	NS	ND		0.37	ND		0.38	0.042	J	0.37	0.16	J	0.38	ND		3.9	0.051	J	0.37	0.11	J	0.37
Chrysene	0.4	0.2	J	0.37	0.057	J	0.38	**0.77**		0.37	**1.4**		0.38	**2.4**	J	3.9	**0.49**		0.37	**2.2**		0.37
Dibenzo[a,h]Anthracene	0.014	**0.04**	J	0.37	ND		0.38	**0.15**	J	0.37	**0.29**	J	0.38	ND		3.9	**0.074**	J	0.37	**0.29**	J	0.37
Dibenzofuran	6.2	ND		0.37	ND		0.38	ND		0.37	0.46		0.38	0.69	J	3.9	0.2	J	0.37	0.17	J	0.37
Diethylphthalate	7.1	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
Dimethylphthalate	2	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
Di-n-butylphthalate	8.1	0.11	JB	0.37	0.12	JB	0.38	0.13	JB	0.37	ND		0.38	ND		3.9	0.14	JB	0.37	0.13	JB	0.37
Di-n-octylphthalate	50	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
Fluoranthene	50	0.38		0.37	0.069	J	0.38	1.6		0.37	2.5		0.38	3.4	J	3.9	0.81		0.37	5.7		0.37
Fluorene	50	ND		0.37	ND		0.38	0.091	J	0.37	0.5		0.38	2.4	J	3.9	0.17	J	0.37	0.32	J	0.37
Hexachlorobenzene	0.41	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
Hexachlorobutadiene	NS	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
Hexachlorocyclopentadiene	NS	ND		0.37	ND		0.96	ND		0.37	ND		0.95	ND		3.9	ND		0.37	ND		0.37
Hexachloroethane	NS	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
Indeno[1,2,3-cd]pyrene	3.2	0.12	J	0.37	0.041	J	0.38	0.44		0.37	0.73		0.38	0.72	J	3.9	0.21	J	0.37	0.83		0.37
Isophorone	4.4	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
Naphthalene	13	ND		0.37	ND		0.38	0.058	J	0.37	0.37	J	0.38	ND		3.9	0.28	J	0.37	0.08	J	0.37
Nitrobenzene	0.2	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		9.7	ND		0.37	ND		0.37
N-Nitrosodimethylamine	NS	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
N-Nitroso-Di-N-Propylamine	NS	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
N-Nitrosodiphenylamine	NS	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
Pentachlorophenol	1	ND		0.92	ND		0.96	ND		0.94	ND		0.95	ND		3.9	ND		0.93	ND		0.93
Phenanthrene	50	0.14	J	0.37	ND		0.38	0.35	J	0.37	1.4		0.38	1.9	J	3.9	0.69		0.37	2.7		0.37
Phenol	0.03	ND		0.37	ND		0.38	ND		0.37	ND		0.38	ND		3.9	ND		0.37	ND		0.37
Pyrene	50	0.42		0.37	0.09	J	0.38	1.7		0.37	2.7		0.38	4.6		3.9	0.89		0.37	5.4		0.37
Total SVOCs Conc.	500	2.66			0.966			9.851			17.92			26.25			7.651			7.651		
SVOC TICs	NS	180.22	J		200.45	J		195.15	J		22.98	J		307.3	J		209.31	J		255.94	J	

Notes and Abbreviations:
Conc.= concentration
mg/kg= milligrams per kilogram
MDL= method detection limit
B=Analyte was detected in laboratory blank.
NO=Not detected
NS=No standard
J= the estimated concentrarion was detected below MDL, but was detected above the laboratory's reporting limits
TICs=Tentatively identified compounds
TAGM=Technical and Administrative Guidance Memorandum #4046, dated January 24, 1994
RSCOs=Recommended Soil Cleanup Objectives
1. Conc. in bold and highlighted exceed the RSCOs

TABLE 10B
SUMMARY OF BACKFILL ANALYTICAL RESULTS-SVOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID	New York	AREA C-BFC2			AREA D-BF1			AREA D-BFC1			AREA D-BFC2			AREA D-BFC3			AREA E-BF1			AREA E-BFC1		
Lab Sample No.	Recommended Soil	AC25432-006			AC25441-003			AC25441-006			AC25441-007			AC25441-008			AC25441-001			AC25441-002		
Sampling Date	Cleanup	8/31/2006			9/1/2006			9/1/2006			9/1/2006			9/1/2006			9/1/2006			9/1/2006		
Matrix	Objectives (RSCOs)	Soil			Soil			Soil			Soil			Soil			Soil			Soil		
Units	mg/Kg	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
Semi-Volatile Organic Compounds (SVOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	3.4	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
1,2-Dichlorobenzene	7.9	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
1,2-Diphenylhydrazine	NS	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
1,3-Dichlorobenzene	1.6	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
1,4-Dichlorobenzene	8.5	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
2,4,5-Trichlorophenol	0.1	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
2,4,6-Trichlorophenol	NS	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
2,4-Dichlorophenol	0.4	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
2,4-Dimethylphenol	NS	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
2,4-Dinitrophenol	0.2	ND		1.8	ND		1.8	ND		1.8	ND		1.9	ND		5.5	ND		1.9	ND		1.9
2,4-Dinitrotoluene	NS	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
2,6-Dinitrotoluene	1	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
2-Chloronaphthalene	NS	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
2-Chlorophenol	0.8	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
2-Methylnaphthalene	36.4	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
2-Methylphenol	0.1	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
2-Nitroaniline	0.43	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
2-Nitrophenol	0.33	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
3&4-Methylphenol	0.33	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
3,3'-Dichlorobenzidine	0.33	ND		0.37	ND		0.91	ND		0.92	ND		0.95	ND		2.7	ND		0.37	ND		0.37
3-Nitroaniline	0.33	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
4,6-Dinitro-2-methylphenol	0.33	ND		1.8	ND		0.91	ND		0.92	ND		0.95	ND		2.7	ND		1.9	ND		1.9
4-Bromophenyl-phenylether	0.33	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
4-Chloro-3-methylphenol	0.33	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
4-Chloroaniline	0.33	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
4-Chlorophenyl-phenylether	0.33	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
4-Nitroaniline	NS	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
4-Nitrophenol	0.1	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
Acenaphthene	50	0.055	J	0.37	ND		0.36	0.045	J	0.37	0.087	J	0.38	0.24	J	1.1	0.098	J	0.37	0.086	J	0.37
Acenaphthylene	41	0.23	J	0.37	0.065	J	0.36	0.1	J	0.37	0.2	J	0.38	0.28	J	1.1	0.2	J	0.37	0.27	J	0.37
Anthracene	50	0.16	J	0.37	0.067	J	0.36	0.098	J	0.37	0.16	J	0.38	1.1		1.1	0.21	J	0.37	0.21	J	0.37
Benzidine	NA	ND		1.8	ND		0.91	ND		0.92	ND		0.95	ND		2.7	ND		1.9	ND		1.9
Benzo[a]anthracene	0.224	**0.59**		0.37	**0.32**	J	0.36	**0.39**		0.37	**0.59**		0.38	**3.2**		1.1	**0.62**		0.37	**0.81**		0.37
Benzo[a]pyrene	0.061	**0.7**		0.37	**0.32**	J	0.36	**0.45**		0.37	**0.68**		0.38	**2.9**		1.1	**0.62**		0.37	**0.87**		0.37
Benzo[b]fluoranthene	1.1	0.95		0.37	0.48		0.36	0.61		0.37	0.92		0.38	**3.7**		1.1	0.91		0.37	**1.2**		0.37
Benzo[g,h,i]perylene	50	0.35	J	0.37	0.24	J	0.36	0.33	J	0.37	0.53		0.38	1.9		1.1	0.38		0.37	0.49		0.37
Benzo[k]fluoranthene	1.1	0.33	J	0.37	0.15	J	0.36	0.19	J	0.37	0.33	J	0.38	**1.2**		1.1	0.29	J	0.37	0.39		0.37
Benzyl alcohol	NS	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
Bis(2-Chloroethoxy)methane	NS	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
Bis(2-Chloroethyl)Ether	NS	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
Bis(2-Chloroisopropyl)ether	NS	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
Bis(2-Ethylhexyl)phthalate	50	0.059	J	0.37	0.12	J	0.36	0.093	J	0.37	0.11	J	0.38	0.18	J	1.1	0.11	J	0.37	0.12	J	0.37
Butylbenzylphthalate	50	ND		0.37	ND		0.36	0.054	J	0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
Carbazole	NS	0.041	J	0.37	ND		0.36	ND		0.37	0.058	J	0.38	0.13	J	1.1	0.045	J	0.37	0.086	J	0.37
Chrysene	0.4	**0.65**		0.37	0.36	J	0.36	**0.43**		0.37	**0.68**		0.38	**3**		1.1	**0.66**		0.37	**0.8**		0.37
Dibenzo[a,h]Anthracene	0.014	**0.12**	J	0.37	**0.071**	J	0.36	**0.1**	J	0.37	**0.15**	J	0.38	**0.46**	J	1.1	**0.12**	J	0.37	**0.16**	J	0.37
Dibenzofuran	6.2	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
Diethylphthalate	7.1	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
Dimethylphthalate	2	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
Di-n-butylphthalate	8.1	0.092	JB	0.37	0.08	J	0.36	0.079	J	0.37	0.091	J	0.38	ND		1.1	0.12	J	0.37	0.1	J	0.37
Di-n-octylphthalate	50	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
Fluoranthene	50	1.3		0.37	0.53		0.36	0.73		0.37	1.1		0.38	6.4		1.1	1.5		0.37	1.6		0.37
Fluorene	50	0.085	J	0.37	ND		0.36	0.053	J	0.37	0.11	J	0.38	0.4	J	1.1	0.11	J	0.37	0.12	J	0.37
Hexachlorobenzene	0.41	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
Hexachlorobutadiene	NS	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
Hexachlorocyclopentadiene	NS	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
Hexachloroethane	NS	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
Indeno[1,2,3-cd]pyrene	3.2	0.34	J	0.37	0.22	J	0.36	0.28	J	0.37	0.43		0.38	1.6		1.1	0.35	J	0.37	0.46		0.37
Isophorone	4.4	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
Naphthalene	13	0.059	J	0.37	ND		0.36	0.044	J	0.37	0.11	J	0.38	ND		1.1	0.06	J	0.37	0.061	J	0.37
Nitrobenzene	0.2	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
N-Nitrosodimethylamine	NS	ND		0.37	ND		0.91	ND		0.92	ND		0.95	ND		2.7	ND		0.37	ND		0.37
N-Nitroso-Di-N-Propylamine	NS	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
N-Nitrosodiphenylamine	NS	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
Pentachlorophenol	1	ND		0.92	ND		0.91	ND		0.92	ND		0.95	ND		2.7	ND		0.94	ND		0.94
Phenanthrene	50	0.42		0.37	0.19	J	0.36	0.28	J	0.37	0.42		0.38	3.4		1.1	0.37		0.37	0.66		0.37
Phenol	0.03	ND		0.37	ND		0.36	ND		0.37	ND		0.38	ND		1.1	ND		0.37	ND		0.37
Pyrene	50	1.3		0.37	0.57		0.36	0.8		0.37	1.3		0.38	6.7		1.1	1.9		0.37	2.1		0.37
Total SVOCs Conc.	500	7.831			3.783			5.156			8.056			36.79			8.673			10.593		
SVOC TICs	NS	204.92	J		87.74	J		139.46	J		152.09	J		185.05	J		127.84	J		111.55	J	

Notes and Abbreviations:
Conc.= concentration
mg/kg= milligrams per kilogram
MDL= method detection limit
B=Analyte was detected in laboratory blank.
ND=Not detected
NS=No standard
J= the estimated concentrarion was detected below MDL, but was detected above the laboratory's reporting limits
TICs=Tentatively identified compounds
TAGM=Technical and Administrative Guidance Memorandum #4046, dated January 24, 1994
RSCOs=Recommended Soil Cleanup Objectives
1. Conc. In bold and highlighted exceed the RSCOs

TABLE 10B
SUMMARY OF BACKFILL ANALYTICAL RESULTS-SVOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID	New York	Area G-BF1			Area G-BFC1			Area H-BF1			Area H-BFC1			Area I-BF2			Area I-BF4		
Lab Sample No.	Recommended Soil	AC25829-009			AC25829-010			AC25829-011			AC25829-012			AC25374-001			AC25374-001		
Sampling Date	Cleanup	9/22/2006			9/22/2006			9/22/2006			9/22/2006			10/16/2006			10/16/2006		
Matrix	Objectives (RSCOs)	Soil			Soil			Soil			Soil			Soil			Soil		
Units	mg/Kg	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
Semi-Volatile Organic Compounds (SVOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	3.4	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
1,2-Dichlorobenzene	7.9	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
1,2-Diphenylhydrazine	NS	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
1,3-Dichlorobenzene	1.6	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
1,4-Dichlorobenzene	8.5	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
2,4,5-Trichlorophenol	0.1	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
2,4,6-Trichlorophenol	NS	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
2,4-Dichlorophenol	0.4	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
2,4-Dimethylphenol	NS	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
2,4-Dinitrophenol	0.2	ND		5.5	ND		1.8	ND		1.8	ND		1.8	ND		1.9	ND		1.9
2,4-Dinitrotoluene	NS	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
2,6-Dinitrotoluene	1	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
2-Chloronaphthalene	NS	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
2-Chlorophenol	0.8	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
2-Methylnaphthalene	36.4	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
2-Methylphenol	0.1	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
2-Nitroaniline	0.43	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
2-Nitrophenol	0.33	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
3&4-Methylphenol	0.33	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
3,3'-Dichlorobenzidine	0.33	ND		2.7	ND		0.88	ND		0.88	ND		0.88	ND		0.37	ND		0.37
3-Nitroaniline	0.33	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
4,6-Dinitro-2-methylphenol	0.33	ND		2.7	ND		0.88	ND		0.88	ND		0.88	ND		1.9	ND		1.9
4-Bromophenyl-phenylether	0.33	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
4-Chloro-3-methylphenol	0.33	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
4-Chloroaniline	0.33	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
4-Chlorophenyl-phenylether	0.33	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
4-Nitroaniline	NS	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
4-Nitrophenol	0.1	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Acenaphthene	50	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Acenaphthylene	41	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Anthracene	50	ND		1.1	0.049	J	0.35	ND		0.35	ND		0.35	0.07	J	0.37	0.064	J	0.37
Benzidine	NA	ND		2.7	ND		0.88	ND		0.88	ND		0.88	ND		1.9	ND		1.9
Benzo[a]anthracene	0.224	ND		1.1	**0.23**	J	0.35	ND		0.35	0.12	J	0.35	0.22	J	0.37	0.18	J	0.37
Benzo[a]pyrene	0.061	ND		1.1	**0.23**	J	0.35	0.042	J	0.35	**0.12**	J	0.35	**0.26**	J	0.37	**0.22**	J	0.37
Benzo[b]fluoranthene	1.1	ND		1.1	0.29	J	0.35	0.05	J	0.35	0.13	J	0.35	0.37	J	0.37	0.28	J	0.37
Benzo[g,h,i]perylene	50	ND		1.1	0.16	J	0.35	0.053	J	0.35	0.11	J	0.35	0.2	J	0.37	0.14	J	0.37
Benzo[k]fluoranthene	1.1	ND		1.1	0.089	J	0.35	ND		0.35	0.059	J	0.35	0.12	J	0.37	0.083	J	0.37
Benzyl alcohol	NS	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Bis(2-Chloroethoxy)methane	NS	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Bis(2-Chloroethyl)Ether	NS	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Bis(2-Chloroisopropyl)ether	NS	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Bis(2-Ethylhexyl)phthalate	50	8.3		1.1	0.056	J	0.35	0.067	J	0.35	0.064	J	0.35	0.087		0.37	ND		0.37
Butylbenzylphthalate	50	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Carbazole	NS	ND		1.1	0.043	J	0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Chrysene	0.4	ND		1.1	0.24	J	0.35	0.036	J	0.35	0.095	J	0.35	0.25	J	0.37	0.19	J	0.37
Dibenzo[a,h]Anthracene	0.014	ND		1.1	**0.052**	J	0.35	ND		0.35	**0.036**	J	0.35	**0.056**	J	0.37	**0.043**	J	0.37
Dibenzofuran	6.2	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Diethylphthalate	7.1	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Dimethylphthalate	2	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND	J	0.37	ND		0.37
Di-n-butylphthalate	8.1	ND		1.1	0.049	J	0.35	ND		0.35	ND		0.35	0.13		0.37	ND		0.37
Di-n-octylphthalate	50	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Fluoranthene	50	ND		1.1	0.47		0.35	0.049	J	0.35	0.2	J	0.35	0.36	J	0.37	0.38		0.37
Fluorene	50	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Hexachlorobenzene	0.41	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Hexachlorobutadiene	NS	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Hexachlorocyclopentadiene	NS	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Hexachloroethane	NS	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Indeno[1,2,3-cd]pyrene	3.2	ND		1.1	0.13	J	0.35	ND		0.35	0.084	J	0.35	0.18	J	0.37	0.13	J	0.37
Isophorone	4.4	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Naphthalene	13	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Nitrobenzene	0.2	ND		1.1	ND		0.68	ND		0.68	ND		0.68	ND		0.37	ND		0.37
N-Nitrosodimethylamine	NS	ND		2.7	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
N-Nitroso-Di-N-Propylamine	NS	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
N-Nitrosodiphenylamine	NS	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Pentachlorophenol	1	ND		2.7	ND		0.88	ND		0.88	ND		0.88	ND		0.94	ND		0.94
Phenanthrene	50	ND		1.1	0.32	J	0.35	ND		0.35	0.087	J	0.35	0.13	J	0.37	0.14	J	0.37
Phenol	0.03	ND		1.1	ND		0.35	ND		0.35	ND		0.35	ND		0.37	ND		0.37
Pyrene	50	ND		1.1	0.46		0.35	0.052	J	0.35	0.21	J	0.35	0.42		0.37	0.35J	J	0.37
Total SVOCs Conc.	500	8.3			2.868			0.349			1.315			2.906			1.901		
SVOC TICs	NS	3.48	J		7.94	J		5.58	J		5.95	J		9.31	J		7.27	J	

Notes and Abbreviations:
Conc.= concentration
mg/kg= milligrams per kilogram
MDL= method detection limit
B=Analyte was detected in laboratory blank.
ND=Not detected
NS=No standard
J= the estimated concentrarion was detected below MDL, but was detected above the laboratory's reporting limits
TICs=Tentatively identified compounds
TAGM=Technical and Administrative Guidance Memorandum #4046, dated January 24, 1994
RSCOs=Recommended Soil Cleanup Objectives
1. Conc. In bold and highlighted exceed the RSCOs

TABLE 10B
SUMMARY OF BACKFILL ANALYTICAL RESULTS-SVOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID	New York	Area I-BFC1			Area I-BFC2			Area I-BFC3			Area I-BFC4			Area I-BFC5			Area I-BFC6		
Lab Sample No.	Recommended Soil	AC26323-006			AC26323-007			AC26323-008			AC26323-009			AC26323-010			AC27561-002		
Sampling Date	Cleanup	10/16/2006			10/16/2006			10/16/2006			10/16/2006			10/17/2006			12/18/2006		
Matrix	Objectives (RSCOs)	Soil			Soil			Soil			Soil			Soil			Soil		
Units	mg/Kg	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
Semi-Volatile Organic Compounds (SVOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	3.4	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
1,2-Dichlorobenzene	7.9	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
1,2-Diphenylhydrazine	NS	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
1,3-Dichlorobenzene	1.6	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
1,4-Dichlorobenzene	8.5	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
2,4,5-Trichlorophenol	0.1	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
2,4,6-Trichlorophenol	NS	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
2,4-Dichlorophenol	0.4	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
2,4-Dimethylphenol	NS	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
2,4-Dinitrophenol	0.2	ND		1.9	ND		1.9	ND		0.95	ND		1.9	ND		1.9	ND		0.97
2,4-Dinitrotoluene	NS	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
2,6-Dinitrotoluene	1	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
2-Chloronaphthalene	NS	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
2-Chlorophenol	0.8	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
2-Methylnaphthalene	36.4	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
2-Methylphenol	0.1	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
2-Nitroaniline	0.43	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
2-Nitrophenol	0.33	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
3&4-Methylphenol	0.33	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
3,3'-Dichlorobenzidine	0.33	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
3-Nitroaniline	0.33	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
4,6-Dinitro-2-methylphenol	0.33	ND		1.9	ND		1.9	ND		0.38	ND		1.9	ND		1.9	ND		0.97
4-Bromophenyl-phenylether	0.33	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
4-Chloro-3-methylphenol	0.33	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
4-Chloroaniline	0.33	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
4-Chlorophenyl-phenylether	0.33	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
4-Nitroaniline	NS	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
4-Nitrophenol	0.1	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
Acenaphthene	50	ND		0.37	0.049	J	0.37	0.096	J	0.38	0.095	J	0.37	0.044	J	0.37	0.067	J	0.39
Acenaphthylene	41	0.071	J	0.37	0.18	J	0.37	0.16	J	0.38	0.23	J	0.37	0.19	J	0.37	0.45		0.39
Anthracene	50	0.057	J	0.37	0.12	J	0.37	0.34	J	0.38	0.32	J	0.37	0.13	J	0.37	0.45		0.39
Benzidine	NA	ND		1.9	ND		1.9	ND		1.9	ND		1.9	ND		1.9	ND		0.39
Benzo[a]anthracene	0.224	0.19	J	0.37	**0.53**		0.37	**2.9**		0.38	**0.88**		0.37	**0.57**	J	0.37	**1.3**		0.39
Benzo[a]pyrene	0.061	**0.24**	J	0.37	**0.64**		0.37	**2.9**		0.38	**1**		0.37	**0.75**		0.37	**1.6**		0.39
Benzo[b]fluoranthene	1.1	0.27	J	0.37	**0.8**		0.37	**3.4**		0.38	**1.3**		0.37	0.85		0.37	**2.1**		0.39
Benzo[g,h,i]perylene	50	0.19	J	0.37	0.47		0.37	1.8		0.38	0.65		0.37	0.47		0.37	1.2		0.39
Benzo[k]fluoranthene	1.1	0.13	J	0.37	0.29	J	0.37	**1.5**		0.38	0.42		0.37	0.28	J	0.37	0.61		0.39
Benzyl alcohol	NS	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
Bis(2-Chloroethoxy)methane	NS	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
Bis(2-Chloroethyl)Ether	NS	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
Bis(2-Chloroisopropyl)ether	NS	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
Bis(2-Ethylhexyl)phthalate	50	0.079	J	0.37	0.09	J	0.37	0.080J		0.38	0.13	J	0.37	0.086	J	0.37	0.32	J	0.39
Butylbenzylphthalate	50	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
Carbazole	NS	ND		0.37	ND		0.37	0.039J		0.38	0.048	J	0.37	0.044	J	0.37	0.054	J	0.39
Chrysene	0.4	0.2	J	0.37	**0.54**		0.37	**2.8**		0.38	**0.94**		0.37	**0.59**		0.37	**1.3**		0.39
Dibenzo[a,h]Anthracene	0.014	**0.054**	J	0.37	**0.14**	J	0.37	**0.55**		0.38	**0.17**	J	0.37	**0.13**	J	0.37	**0.34**	J	0.39
Dibenzofuran	6.2	ND	J	0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	0.11	J	0.39
Diethylphthalate	7.1	ND	J	0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
Dimethylphthalate	2	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
Di-n-butylphthalate	8.1	0.073		0.37	0.088	J	0.37	ND		0.38	ND		0.37	0.074	J	0.37	ND		0.39
Di-n-octylphthalate	50	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
Fluoranthene	50	0.3	J	0.37	0.85		0.37	4		0.38	1.9		0.37	0.99		0.37	2.3		0.39
Fluorene	50	ND		0.37	0.061	J	0.37	0.14	J	0.38	0.18	J	0.37	0.061	J	0.37	0.11	J	0.39
Hexachlorobenzene	0.41	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
Hexachlorobutadiene	NS	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
Hexachlorocyclopentadiene	NS	ND		0.37	ND		0.37	ND		0.95	ND		0.37	ND		0.37	ND		0.39
Hexachloroethane	NS	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
Indeno[1,2,3-cd]pyrene	3.2	0.19	J	0.37	0.43		0.37	1.5		0.38	0.62		0.37	0.42		0.37	1.1		0.39
Isophorone	4.4	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
Naphthalene	13	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
Nitrobenzene	0.2	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
N-Nitrosodimethylamine	NS	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
N-Nitroso-Di-N-Propylamine	NS	ND		0.37	ND		0.37	0.039	J	0.38	0.062	J	0.37	0.039	J	0.37	0.11	J	0.39
N-Nitrosodiphenylamine	NS	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
Pentachlorophenol	1	ND		0.94	ND		0.94	ND		0.95	ND		0.94	ND		0.94	ND		0.97
Phenanthrene	50	0.12	J	0.37	0.31	J	0.37	0.98		0.38	0.98		0.37	0.34	J	0.37	0.81		0.39
Phenol	0.03	ND		0.37	ND		0.37	ND		0.38	ND		0.37	ND		0.37	ND		0.39
Pyrene	50	0.35	J	0.37	0.98		0.37	5		0.38	1.9		0.37	1.2		0.37	2.2		0.39
Total SVOCs Conc.	500	2.514			6.568			28.105			11.825			7.258			16.531		
SVOC TICs	NS	14.41	J		8.84	J		16.2	J		8.72	J		6.55	J		17.62	J	

Notes and Abbreviations:
Conc.= concentration
mg/kg= milligrams per kilogram
MDL= method detection limit
B=Analyte was detected in laboratory blank.
ND=Not detected
NS=No standard
J= the estimated concentrarion was detected below MDL, but was detected above the laboratory's reporting limits
TICs=Tentatively identified compounds
TAGM=Technical and Administrative Guidance Memorandum #4046, dated January 24, 1994
RSCOs=Recommended Soil Cleanup Objectives
1. Conc. In bold and highlighted exceed the RSCOs

TABLE 10B
SUMMARY OF BACKFILL ANALYTICAL RESULTS-SVOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID	New York	Area J-BF 1			Area J-BFC1			Area J-BFC2			Area J-BFC3			Area K-BF1			Area K-BFC1			Area K-BFC2		
Lab Sample No.	Recommended Soil	AC25374-001			AC25374-003			AC25374-004			AC25829-002			AC25501-003			AC25501-006			AC25501-007		
Sampling Date	Cleanup	8/31/2006			8/31/2006			8/31/2006			9/22/2006			9/7/2006			9/7/2006			9/7/2006		
Matrix	Objectives (RSCOs)	Soil			Soil			Soil			Soil			Soil			Soil			Soil		
Units	mg/Kg	mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg			mg/Kg		
Semi-Volatile Organic Compounds (SVOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	3.4	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
1,2-Dichlorobenzene	7.9	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
1,2-Diphenylhydrazine	NS	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
1,3-Dichlorobenzene	1.6	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
1,4-Dichlorobenzene	8.5	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
2,4,5-Trichlorophenol	0.1	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
2,4,6-Trichlorophenol	NS	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
2,4-Dichlorophenol	0.4	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
2,4-Dimethylphenol	NS	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
2,4-Dinitrophenol	0.2	ND		0.95	ND		0.97	ND		0.96	ND		1.9	ND		0.92	ND		1.9	ND		1.8
2,4-Dinitrotoluene	NS	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
2,6-Dinitrotoluene	1	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
2-Chloronaphthalene	NS	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
2-Chlorophenol	0.8	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
2-Methylnaphthalene	36.4	ND		0.38	0.058	J	0.39	0.07	J	0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
2-Methylphenol	0.1	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
2-Nitroaniline	0.43	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
2-Nitrophenol	0.33	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
3&4-Methylphenol	0.33	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		1.8	ND		0.37	ND		0.36
3,3'-Dichlorobenzidine	0.33	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.93	ND		0.91
3-Nitroaniline	0.33	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
4,6-Dinitro-2-methylphenol	0.33	ND		0.38	ND		0.39	ND		0.38	ND		1.9	ND		0.92	ND		0.93	ND		0.91
4-Bromophenyl-phenylether	0.33	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
4-Chloro-3-methylphenol	0.33	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
4-Chloroaniline	0.33	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
4-Chlorophenyl-phenylether	0.33	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
4-Nitroaniline	NS	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.92	ND		0.37	ND		0.36
4-Nitrophenol	0.1	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Acenaphthene	50	0.19	J	0.38	0.14	J	0.39	0.1	J	0.38	0.12	J	0.37	ND		0.37	ND		0.37	ND		0.36
Acenaphthylene	41	0.37	J	0.38	0.49		0.39	0.34	J	0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Anthracene	50	0.41		0.38	0.39		0.39	0.28	J	0.38	0.6		0.37	ND		0.37	ND		0.37	ND		0.36
Benzidine	NA	ND		1.9	ND		1.9	ND		1.9	ND		1.9	ND		0.37	ND		0.93	ND		0.91
Benzo[a]anthracene	0.224	**1.2**		0.38	**1.3**		0.39	**0.96**		0.38	**1.1**		0.37	ND		0.37	0.042	J	0.37	ND		0.36
Benzo[a]pyrene	0.061	**1.2**		0.38	**1.5**		0.39	**1.1**		0.38	**0.83**		0.37	ND		0.37	0.044	J	0.37	ND		0.36
Benzo[b]fluoranthene	1.1	**1.5**		0.38	**1.8**		0.39	**1.4**		0.38	1.1		0.37	ND		0.37	0.059	J	0.37	ND		0.36
Benzo[g,h,i]perylene	50	0.81		0.38	0.98		0.39	0.78		0.38	0.51		0.37	ND		0.92	ND		0.37	ND		0.36
Benzo[k]fluoranthene	1.1	0.54		0.38	0.71		0.39	0.53		0.38	0.41		0.37	ND		0.37	ND		0.37	ND		0.36
Benzyl alcohol	NS	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Bis(2-Chloroethoxy)methane	NS	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Bis(2-Chloroethyl)Ether	NS	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Bis(2-Chloroisopropyl)ether	NS	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Bis(2-Ethylhexyl)phthalate	50	0.1	J	0.38	0.086	J	0.39	0.074	J	0.38	ND		0.37	0.049	J	0.37	0.056	J	0.37	0.063	J	0.36
Butylbenzylphthalate	50	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Carbazole	NS	0.13	J	0.38	0.09	J	0.39	0.063	J	0.38	0.28	J	0.37	ND		0.37	ND		0.37	ND		0.36
Chrysene	0.4	**1.2**		0.38	**1.4**		0.39	**1.1**		0.38	**1**		0.37	ND		0.37	**0.043**	J	0.37	ND		0.36
Dibenzo[a,h]Anthracene	0.014	**0.23**	J	0.38	**0.31**	J	0.39	**0.22**	J	0.38	**0.17**	J	0.37	ND		0.92	ND		0.37	ND		0.36
Dibenzofuran	6.2	0.14	J	0.38	0.15	J	0.39	0.11	J	0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Diethylphthalate	7.1	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Dimethylphthalate	2	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Di-n-butylphthalate	8.1	0.039	JB	0.38	ND		0.39	0.071	JB	0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Di-n-octylphthalate	50	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Fluoranthene	50	2.3		0.38	2.2		0.39	1.8		0.38	2.4		0.37	ND		0.37	0.068	J	0.37	ND		0.36
Fluorene	50	0.27	J	0.38	0.24	J	0.39	ND	J	0.38	0.11	J	0.37	ND		0.37	ND		0.37	ND		0.36
Hexachlorobenzene	0.41	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Hexachlorobutadiene	NS	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Hexachlorocyclopentadiene	NS	ND		0.95	ND		0.97	ND		0.96	ND		0.37	ND		0.92	ND		0.37	ND		0.36
Hexachloroethane	NS	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		1.8	ND		0.37	ND		0.36
Indeno[1,2,3-cd]pyrene	3.2	0.73		0.38	0.92		0.39	ND		0.38	0.48		0.37	ND		0.92	ND		0.37	ND		0.36
Isophorone	4.4	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Naphthalene	13	0.068	J	0.38	0.092	J	0.39	0.093	J	0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Nitrobenzene	0.2	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
N-Nitrosodimethylamine	NS	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		1.8	ND		0.93	ND		0.91
N-Nitroso-Di-N-Propylamine	NS	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
N-Nitrosodiphenylamine	NS	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Pentachlorophenol	1	ND		0.95	ND		0.97	ND		0.96	ND		0.94	ND		0.92	ND		0.93	ND		0.91
Phenanthrene	50	1.1		0.38	1.1		0.39	0.7		0.38	1.9		0.37	ND		0.37	0.039	J	0.37	ND		0.36
Phenol	0.03	ND		0.38	ND		0.39	ND		0.38	ND		0.37	ND		0.37	ND		0.37	ND		0.36
Pyrene	50	2.6		0.38	2.7		0.39	2		0.38	2.3		0.37	ND		0.37	0.08	J	0.37	ND		0.36
Total SVOCs Conc.	500	15.127			16.656			12			13.31			0.049			0.431			0.063		
SVOC TICs	NS	135.46	J		149.1	J		125.94	J		29.72	J		202.69	J		125.53	J		172.71	J	

Notes and Abbreviations:
Conc.= concentration
mg/kg= milligrams per kilogram
MDL= method detection limit
B=Analyte was detected in laboratory blank.
ND=Not detected
NS=No standard
J= the estimated concentrarion was detected below MDL, but was detected above the laboratory's reporting limits
TICs=Tentatively identified compounds
TAGM=Technical and Administrative Guidance Memorandum #4046, dated January 24, 1994
RSCOs=Recommended Soil Cleanup Objectives
1. Conc. In bold and highlighted exceed the RSCOs

TABLE 10B
SUMMARY OF BACKFILL SOIL ANALYTICAL RESULTS-SVOCS
IRM SITES 2 (AREA 2B) AND 3 (AREA 3A)
HHMT-PORT IVORY FACILITY

Sample ID	New York	Area K-BFC3			Area L-BF1			Area L-BFC1		
Lab Sample No.	Recommended Soil	AC25501-008			AC25501-001			AC25501-002		
Sampling Date	Cleanup	9/7/2006			9/7/2006			9/7/2006		
Matrix	Objectives (RSCOs)	Soil			Soil			Soil		
Units	mg/Kg	mg/Kg			mg/Kg			mg/Kg		
Semi-Volatile Organic Compounds (SVOCs)		Conc	Qual	MDL	Conc	Qual	MDL	Conc	Qual	MDL
1,2,4-Trichlorobenzene	3.4	ND		0.36	ND		0.37	ND		0.37
1,2-Dichlorobenzene	7.9	ND		0.36	ND		0.37	ND		0.37
1,2-Diphenylhydrazine	NS	ND		0.36	ND		0.37	ND		0.37
1,3-Dichlorobenzene	1.6	ND		0.36	ND		0.37	ND		0.37
1,4-Dichlorobenzene	8.5	ND		0.36	ND		0.37	ND		0.37
2,4,5-Trichlorophenol	0.1	ND		0.36	ND		0.37	ND		0.37
2,4,6-Trichlorophenol	NS	ND		0.36	ND		0.37	ND		0.37
2,4-Dichlorophenol	0.4	ND		0.36	ND		0.37	ND		0.37
2,4-Dimethylphenol	NS	ND		0.36	ND		0.37	ND		0.37
2,4-Dinitrophenol	0.2	ND		1.8	ND		1.8	ND		1.8
2,4-Dinitrotoluene	NS	ND		0.36	ND		0.37	ND		0.37
2,6-Dinitrotoluene	1	ND		0.36	ND		0.37	ND		0.37
2-Chloronaphthalene	NS	ND		0.36	ND		0.37	ND		0.37
2-Chlorophenol	0.8	ND		0.36	ND		0.37	ND		0.37
2-Methylnaphthalene	36.4	ND		0.36	ND		0.37	ND		0.37
2-Methylphenol	0.1	ND		0.36	ND		0.37	ND		0.37
2-Nitroaniline	0.43	ND		0.36	ND		0.37	ND		0.37
2-Nitrophenol	0.33	ND		0.36	ND		0.37	ND		0.37
3&4-Methylphenol	0.33	ND		0.36	ND		0.37	ND		0.37
3,3'-Dichlorobenzidine	0.33	ND		0.91	ND		0.92	ND		0.92
3-Nitroaniline	0.33	ND		0.36	ND		0.37	ND		0.37
4,6-Dinitro-2-methylphenol	0.33	ND		0.91	ND		0.92	ND		0.92
4-Bromophenyl-phenylether	0.33	ND		0.36	ND		0.37	ND		0.37
4-Chloro-3-methylphenol	0.33	ND		0.36	ND		0.37	ND		0.37
4-Chloroaniline	0.33	ND		0.36	ND		0.37	ND		0.37
4-Chlorophenyl-phenylether	0.33	ND		0.36	ND		0.37	ND		0.37
4-Nitroaniline	NS	ND		0.36	ND		0.37	ND		0.37
4-Nitrophenol	0.1	ND		0.36	ND		0.37	ND		0.37
Acenaphthene	50	ND		0.36	ND		0.37	ND		0.37
Acenaphthylene	41	ND		0.36	ND		0.37	ND		0.37
Anthracene	50	ND		0.36	ND		0.37	ND		0.37
Benzidine	NA	ND		0.91	ND		0.92	ND		0.92
Benzo[a]anthracene	0.224	ND		0.36	ND		0.37	ND		0.37
Benzo[a]pyrene	0.061	ND		0.36	ND		0.37	ND		0.37
Benzo[b]fluoranthene	1.1	0.038	J	0.36	ND		0.37	ND		0.37
Benzo[g,h,i]perylene	50	ND		0.36	ND		0.37	ND		0.37
Benzo[k]fluoranthene	1.1	ND		0.36	ND		0.37	ND		0.37
Benzyl alcohol	NS	ND		0.36	ND		0.37	ND		0.37
Bis(2-Chloroethoxy)methane	NS	ND		0.36	ND		0.37	ND		0.37
Bis(2-Chloroethyl)Ether	NS	ND		0.36	ND		0.37	ND		0.37
Bis(2-Chloroisopropyl)ether	NS	ND		0.36	ND		0.37	ND		0.37
Bis(2-Ethylhexyl)phthalate	50	0.06	J	0.36	0.046	J	0.37	0.062	J	0.37
Butylbenzylphthalate	50	ND		0.36	ND		0.37	ND		0.37
Carbazole	NS	ND		0.36	ND		0.37	ND		0.37
Chrysene	0.4	ND		0.36	ND		0.37	ND		0.37
Dibenzo[a,h]Anthracene	0.014	ND		0.36	ND		0.37	ND		0.37
Dibenzofuran	6.2	ND		0.36	ND		0.37	ND		0.37
Diethylphthalate	7.1	ND		0.36	ND		0.37	ND		0.37
Dimethylphthalate	2	ND		0.36	ND		0.37	ND		0.37
Di-n-butylphthalate	8.1	ND		0.36	ND		0.37	ND		0.37
Di-n-octylphthalate	50	ND		0.36	ND		0.37	ND		0.37
Fluoranthene	50	0.044	J	0.36	ND		0.37	ND		0.37
Fluorene	50	ND		0.36	ND		0.37	ND		0.37
Hexachlorobenzene	0.41	ND		0.36	ND		0.37	ND		0.37
Hexachlorobutadiene	NS	ND		0.36	ND		0.37	ND		0.37
Hexachlorocyclopentadiene	NS	ND		0.36	ND		0.37	ND		0.37
Hexachloroethane	NS	ND		0.36	ND		0.37	ND		0.37
Indeno[1,2,3-cd]pyrene	3.2	ND		0.36	ND		0.37	ND		0.37
Isophorone	4.4	ND		0.36	ND		0.37	ND		0.37
Naphthalene	13	ND		0.36	ND		0.37	ND		0.37
Nitrobenzene	0.2	ND		0.36	ND		0.37	ND		0.37
N-Nitrosodimethylamine	NS	ND		0.91	ND		0.92	ND		0.92
N-Nitroso-Di-N-Propylamine	NS	ND		0.36	ND		0.37	ND		0.37
N-Nitrosodiphenylamine	NS	ND		0.36	ND		0.37	ND		0.37
Pentachlorophenol	1	ND		0.91	ND		0.92	ND		0.92
Phenanthrene	50	ND		0.36	ND		0.37	ND		0.37
Phenol	0.03	ND		0.36	ND		0.37	ND		0.37
Pyrene	50	0.048	J	0.36	ND		0.37	ND		0.37
Total SVOCs Conc.	500	0.19			0.046			0.062		
SVOC TICs	NS	172.67	J		125.85	J		159.06	J	

Notes and Abbreviations:
Conc.= concentration
mg/kg= milligrams per kilogram
MDL= method detection limit
B=Analyte was detected in laboratory blank.
ND=Not detected
NS=No standard
J= the estimated concentrarion was detected below MDL, but was detected above the laboratory's reporting limits
TICs=Tentatively identified compounds
TAGM=Technical and Administrative Guidance Memorandum #4046, dated January 24, 1994
RSCOs=Recommended Soil Cleanup Objectives
1. Conc. in bold and highlighted exceed the RSCOs

For comparison, analytical results for soil samples collected at Area 3A during the SI, RI, and SRI indicate that the concentration of total confident SVOCs, generally PAH compounds, varies from 0.041 to 11,144 mg/kg with a mean of 68.07 mg/kg. However, many of the soil samples collected during the RI and SRI were collected at locations where LNAPL-impacted soil was encountered, which could potentially bias the analytical results high. During the SI, however, soil samples were collected primarily at locations where LNAPL-impacted soil was not encountered. The range in total SVOC concentrations during the SI was 0.041 to 127.42 mg/kg with a mean of 8.5 mg/kg. The backfill material sampling analytical results indicate that the backfill contains regulated organic compounds at concentrations similar to those detected at other locations of the HHMT-Port Ivory Facility attributable to the prior placement of fill materials by P&G.

7.4.2 Removal of Components of Groundwater Treatment System

On or about October 18, 2006, the activated carbon filtration system and its associated components were demobilized from the site. Prior to demobilization, the following actions were performed: AES released all stored groundwater from the frac tanks; LPS removed a slurry of solids, water, and (possibly) LNAPL from the bottom of each frac tank; AES steam-cleaned the interior of each frac tank; and, LPS removed all residual liquids from the frac tanks. General Carbon of Paterson removed and disposed of the spent non-hazardous activated carbon stored in the carbon units. Disposal documentation is provided in Appendix C.

8.0 CONCLUSIONS AND RECOMMENDATIONS

The following summarizes the success and scope of the IRM:

- To the extent practical, all mobile Type I LNAPL was removed from Areas A through D and G through L. All mobile LNAPL encountered at Area F was removed, although additional LNAPL removal and soil excavation is warranted in the vicinity of Area F. In total, more than 91,000 pounds of LNAPL/petroleum was removed from the subsurface at Area 2B and Area 3A.

- The soil containing Type I LNAPL at the greatest saturation was removed from Areas B, F and I during the overexcavation of 1,008 tons (630 cubic yards) of soil beyond what was proposed in the *Revised IRM Work Plan.*

- All Type II LNAPL was removed at Area B except where necessary to protect structures. Based on the results of a leachability study, no regulated compounds are anticipated to leach from the LNAPL to groundwater at Area B.

- Some of the Type II LNAPL was removed at Area J. However, based on the results of a leachability study, the LNAPL remaining at Area J may release benzene to groundwater. Please see the recommendation section below.

- All groundwater pumped from the Removal Areas/Trenches was successfully treated prior to its discharge to surface water via an onsite retention basin.

- As characterized by analytical results associated with the backfill material samples and post-excavation samples, the environmental quality of soil remaining at each of the Removal Areas/Trenches where the IRM was completed (not including Area F, where additional remedial efforts are warranted) is similar to that of fill materials previously placed at the HHMT-Port Ivory Facility by P&G.

Based on these findings, HMM offers the following recommendations:

- Excavation and pumping of free LNAPL should continue in Area F as part of the Remedial Action for Area 3A. Redevelopment should be completed to limit the mobility of organic compounds in soil or groundwater at Area 2B and Area 3A.
- The groundwater downgradient from Area J (i.e., at Site 3) should be investigated for benzene impacts.

APPENDIX A

REVISED IRM WORK PLAN

June 1, 2006

Thomas Gibbons, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233

RE: Revised Interim Remedial Action Work Plan
Procedures for LNAPL Removal along Tidewater Pipelines
Howland Hook Marine Terminal – Port Ivory Facility (40 Western Avenue)
Staten Island, New York 10303

Dear Mr. Gibbons:

This letter is the Revised Interim Remedial Action Work Plan for a proposed Interim Remedial Action that will consist of the removal of mobile light, non-aqueous phase liquid (LNAPL) at the Howland Hook Marine Terminal – Port Ivory Facility. The facility is located at 40 Western Avenue, Staten Island, New York.

The initial Interim Remedial Action Work Plan was dated August 17, 2006. This document has been revised based on the New York State Department of Environmental Conservation comment letter dated September 26, 2005. The following sections include information regarding the vehicle for New York State Department of Environmental Conservation oversight, the source of the LNAPL, the known extent of the LNAPL, and the scope of work for the proposed Interim Remedial Action.

1.0 INTRODUCTION

Hatch Mott MacDonald has prepared this Revised Interim Remedial Action Work Plan (IRAWP) on behalf of the Port Authority of New York and New Jersey (Port Authority). The IRAWP was prepared under the auspices of the New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Program (VCP). The Howland Hook Marine Terminal – Port Ivory Facility (HHMT-Port Ivory Facility) is a 124.3-acre property that is currently being redeveloped by the Port Authority. As part of the overall site redevelopment, the Port Authority entered into the VCP in July 2004. The Port Authority's objective for entering into the VCP program with NYSDEC is to address the presence of contamination due to prior site activities unrelated to the Port Authority. Based on the Port Authority's schedule for redevelopment, the HHMT-Port Ivory Facility was partitioned into four Sites for the purpose of the VCP. The proposed Interim Remedial Action will be conducted on two of the Sites, Site 2B (VCP Agreement Site V-00674-2, VCP Index Number W2-0986-02-04) and Site 3 (VCP Agreement Site V-00675-2, VCP Index Number W2-0987-02-04).

On behalf of the Port Authority, Hatch Mott MacDonald (HMM) has performed environmental assessment and investigation activities to characterize site conditions and delineate historic fill material and contaminants in environmental media at the HHMT-Port Ivory Facility, including at

Sites 2B and 3. During these assessment and investigative activities, HMM encountered LNAPL at three locations at Sites 2B and 3 (see Figure 1). For discussion purposes, these locations have been identified as the AOC-Southern Area, AOC-Central Area, and AOC-Northern Area. The goal of the proposed Interim Remedial Action is to remove as much of the mobile LNAPL as possible. Please note that this Interim Remedial Action is not the final Remedial Action; additional remedial activities in the form of engineering and institutional controls will be performed in conjunction with the redevelopment of Sites 2B and 3.

According to our best information, the inactive pipelines (for most of their length at the HHMT-Port Ivory facility) are believed to be situated within an easement at one time owned by Tidewater Pipe Co., Ltd. This information is based upon a drawing prepared by Anthony LoBianco, entitled "Map of Survey of Property in Borough of Staten Island, Richmond County, New York, N.Y.," and dated August 14, 1991 as amended September 23, 1991. During an investigation of soil and groundwater quality along the pipelines, LNAPL was observed in three distinct areas. Although the soil and groundwater data collected to date do not indicate that the LNAPL has adversely impacted soil or groundwater quality with respect to organic chemicals regulated in the state of New York, the Port Authority has determined that removal of mobile LNAPL via pumping to the extent practicable is an appropriate Interim Remedial Action.

2.0 GOAL AND OBJECTIVES

As noted above, the goal of the proposed Interim Remedial Action is to remove as much of the mobile LNAPL as possible. As per discussions with the NYSDEC and for the purposes of this Interim Remedial Action, sheen will be considered to be mobile LNAPL. Based on the results of previous environmental investigation activities, the LNAPL is viscous and has most frequently been encountered at residual concentrations (i.e., is generally immobile). HMM selected the locations where LNAPL is expected to be present in the greatest saturation levels (i.e., is most likely to be mobile) as areas where LNAPL removal via pumping from excavations may be most effective. HMM selected areas that met the following criteria: elevated levels of volatile organic vapors as determined using a photoionization detector (PID); elevated concentrations of total petroleum hydrocarbons (TPHC); areas where LNAPL has been observed in monitoring wells; and, areas where LNAPL was observe to re-accumulate in test pits following its removal.

The objectives of the Interim Remedial Action are as follows: 1) to remove as much mobile LNAPL as possible via pumping; 2) to remove soil containing LNAPL at the greatest saturation levels; and, 3) to document the removal efforts and the total volumes of LNAPL and impacted soil removed from Sites 2B and 3. The Scope of Work presented below has been developed to meet these objectives.

3.0 SCOPE OF WORK

The Scope of Work for the proposed Interim Remedial Action is presented herein. All work detailed below shall be performed in a safe and professional manner so that all existing structures that are scheduled to remain are not damaged and so that the health and safety of construction workers and on-site personnel are protected. Because there is no residential neighborhood adjacent to the HHMT-Port Ivory Facility, it is not anticipated that the public will be exposed to

vapors, except potentially to nuisance odors as they drive along Western Avenue. The contractor ultimately selected to complete the work will submit a Site-specific Health and Safety Plan (HASP) that will be reviewed by the Port Authority prior to initiating the work. At a minimum, the HASP will address potential exposure of construction workers and on-site personnel to vapors that may be released during excavation.

The Port Authority will be responsible for clearing utilities at each proposed removal area/trench (see figure 1 for the locations of each removal area/trench) prior to initiation of the proposed Interim Remedial Action. Each proposed removal area/trench will be excavated and protected as per OSHA requirements. During excavation of the removal areas/trenches, the excavated soil will be screened for the concentration of volatile organic compounds using a photoionization detector (PID) with a 10.6-electronvolt lamp. Soil deemed to be impacted based on the presence of sheen, staining or other discoloration, odors, or PID measurements greater than five parts per million will be stockpiled separately from soil that does not appear to be impacted. The stockpile composed of impacted soil will be staged on plastic that is elevated at least one foot at the edges and will be covered with plastic secured using sand bags or equivalent.

The dimensions of the removal areas/trenches are shown on Figure 1. In all cases, the removal areas/trenches will be excavated to below the depth interval where impacted soil was previously encountered or where impacted soil is observed during excavation of the removal areas/trenches, whichever is deeper. Each removal area/trench shall be excavated and sloped so that it will remain open to the target depth to the extent practical. If the sidewall(s) of a removal area/trench collapse, the collapsed soil will be excavated as soon as possible. If LNAPL or sheen is observed to flow into the removal area/trench at any time, whether during excavation or while the removal area/trench remains open, the removal area/trench will be expanded. Additional excavation will be conducted along the sidewall where the LNAPL or sheen was observed to flow into the excavation, and excavation will continue until neither LNAPL nor sheen is observed to flow into the removal area/trench.

Physical and administrative controls will be used to limit access to areas where removal areas/trenches remain open. All removal areas/trenches that have been completely excavated will be surrounded by a physical barrier at all times, and all removal areas/trenches that are being excavated will be surrounded by a physical barrier at the end of each work day. The physical barrier will be fluorescent orange hurricane fencing on metal posts. The administrative control will consist of signs posted along the barrier. The signs will read "KEEP OUT – SOIL EXCAVATION AREA."

Please note that LNAPL and/or groundwater may need to be pumped out of the removal area/trench so that soil conditions below the water table can be observed. All fluids pumped out of the removal areas/trenches will be contained until such time as they can be disposed of in accordance with all applicable, local, state, and federal laws.

The depth to the top of the LNAPL and the depth to the top of water will be measured at each removal area/trench using an oil-water interface probe. A vacuum truck will be used to remove LNAPL and water from each of the ten removal areas/trenches. The vacuum truck will remove all LNAPL from the top of the water in the removal area/trench. In addition, the vacuum truck will remove a volume of water sufficient to temporarily lower the water level in the removal

area/trench in order to induce LNAPL to flow into the removal area/trench. The vacuum truck will dispose of the purged LNAPL and water in accordance with all applicable local, state, and federal laws. The disposal facility records will be evaluated to determine the cumulative total of LNAPL and water transported to the facility.

Following the initial LNAPL removal, the removal areas/trenches will remain open, and the thickness of LNAPL (if any) in each will be recorded on a weekly basis. The vacuum truck will be remobilized to the HHMT-Port Ivory facility on a biweekly basis so long as LNAPL re-accumulates in at least one removal area/trench. LNAPL and groundwater will be evacuated, in the manner described above, from those test pits where LNAPL is observed to re-accumulate. The Interim Remedial Action will be considered complete when LNAPL does not re-accumulate in any removal area/trench for a period of one month following its most recent removal. As noted above, based on discussions with the NYSDEC and for the purposes of this Interim Remedial Action, sheen will be considered to be mobile LNAPL. Therefore, sheen will be treated in the same manner as mobile LNAPL.

The impacted soil will be sampled for waste classification purposes and will be transported off the HHMT-Port Ivory Facility property. The soil that was not deemed to be impacted will be sampled at a frequency that is in accordance with STARS Memo #1. Specifically, one composite sample and one grab sample will be collected for each 50 cubic yards of stockpiled soil. The composite sample will be prepared on a 5:1 basis, and will be composited either in the field or at the analytical laboratory. All samples will be analyzed for Target Compound List (TCL) Volatile Organic Compounds (VOCs) and TCL Semivolatile Organic Compounds (SVOCs). Unless one or more compounds are detected at concentrations more than an order of magnitude greater than the Recommended Soil Cleanup Objectives (RSCOs), this soil will be used as backfill material. If no compounds are detected at such high concentrations, the soil sampling analytical results will be used only to document the quality of soil being used as fill because the entire area will most likely be subject to a Deed Restriction. If one or more compounds are detected at such high concentrations, the soil will be sampled for waste classification purposes and will be transported off the HHMT-Port Ivory Facility for disposal in accordance with all applicable local, state, and federal laws. The cumulative weight of soil accepted by the disposal facility will be recorded.

Other soils used for backfilling will be certified clean or will have been characterized prior to their reuse. Backfilling and restoration of the HHMT-Port Ivory Facility will be as directed by the Port Authority except that all excavations will be backfilled so that nuisance odors are not noticed following backfilling.

Prior to backfilling, but after it is determined that neither LNAPL nor sheen are flowing into the removal area/trench (i.e., that the excavation activities at that removal area/trench are complete), post-remediation soil samples will be collected. In accordance with DER-10, the sampling frequency will be one sidewall sample per 30 linear feet of sidewall and one bottom sample per 900 feet of bottom area. Soil sampling locations and depth intervals will be biased towards the most significantly impacted soil, as determined by field observations of stained soil, immobile LNAPL, elevated concentrations of volatile organic vapors, and petroleum odors; in the absence of such conditions, soil samples will be collected at the 0.5-foot depth interval immediately above the water table every 30 feet around the removal area/trench perimeter, beginning at either an arbitrary location or the previous sampling location. The samples will be analyzed for TCL

VOCs and TCL SVOCs. Category B deliverables will be requested for all soil sampling analytical results.

This IRAWP summarizes the Scope of Work for a proposed interim remedy that is protective of human health and the environment and will reduce the mobility and volume of LNAPL at Sites 2B and 3 of the HHMT-Port Ivory Facility. The Port Authority plans to initiate this voluntary Interim Remedial Action during June or July 2006, and would appreciate NYSDEC's review and comment.

If you have questions or require further information, please contact me.

Very truly yours,

Hatch Mott MacDonald

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cc: J. Guastella (NYSDOH)
E. Aldrich (PANYNJ)

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APPENDIX B

NYSDEC CORRESPONDENCE

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau B
625 Broadway, Albany, New York 12233-7016
Phone: (518) 402-9768 • **FAX:** (518) 402-9773
Website: www.dec.state.ny.us

Denise M. Sheehan
Commissioner

July 20, 2006

Mr. Edward Aldrich
Port Authority of New York and New Jersey
Two Gateway Center, 14th Floor
Newark, New Jersey 07102

Re: HHMT - Port Ivory Facility
Site 3, ID # V00675
LNAPL IRM Water Discharge

Dear Mr. Aldrich:

The New York State Department of Environmental Conservation (NYSDEC) has reviewed Hatch Mott MacDonald's (HMM) July 18, 2006 request to discharge treated water from excavations within Site 3 of the HHMT - Port Ivory Facility, under the Voluntary Cleanup Program. This work is being conducted as part of the LNAPL IRM Work Plan for Site 3 which was approved by NYSDEC on June 14, 2006.

The proposed approach calls for removing all LNAPL within the excavations using a "vac" truck, and subsequent pumping and treatment of water within the excavation using a bag filter and granular activated carbon adsorption system. Water will be discharged back into the excavations or to a storm sewer system, which discharges to a permitted outfall. Influent and effluent samples will be collected on a daily basis to insure the effectiveness of the treatment system.

The Department is in agreement with the approach outlined in the July 18, 2006 request and the Port Authority of New York and New Jersey (PANYNJ) may now proceed with its implementation. Please provide NYSDEC at least 5 days notice prior to the start of fieldwork to allow adequate time to arrange field oversight.

If you have any questions, don't hesitate to call me at (518) 402-9768.

Sincerely,

Thomas Gibbons
Project Manager
Remedial Bureau B, Section D
Division of Environmental Remediation

cc: R. Cozzy/File
T. Gibbons
G. Clark (HMM)

ec: J. Guastella (DOH)
D. Walsh (Reg. 2)
R. Rusinko (DEE/White Plains)

New York State Department of Environmental Conservation
Division of Environmental Remediation
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625 Broadway, Albany, New York 12233-7016
Phone: (518) 402-9768 • **FAX:** (518) 402-9773
Website: www.dec.state.ny.us

Denise M. Sheehan
Commissioner

June 14, 2006

Mr. Edward Aldrich
Port Authority of New York and New Jersey
Two Gateway Center, 14th Floor
Newark, New Jersey 07102

Re: HHMT - Port Ivory Facility
Site 3, ID # V00675
LNAPL IRM Approval

Dear Mr. Aldrich:

The New York State Department of Environmental Conservation (NYSDEC), in cooperation with the New York State Department of Health (NYSDOH), have reviewed Hatch Mott MacDonald's (HMM) Revised Work Plan titled "Revised Interim Remedial Measure Work Plan, Procedures for LNAPL Removal Along Tidewater Pipelines, Howland Hook Marine Terminal - Port Ivory Facility (40 Western Avenue), Staten Island" dated June 1, 2006. This Revised Work Plan was issued in response to comments issued by the Department in a comment letter dated September 26, 2005 based on HMM's original Work Plan submittal dated August 17, 2005.

The Department finds this Revised Work Plan acceptable and the Port Authority of New York and New Jersey (PANYNJ) may now proceed with its implementation. Please provide NYSDEC at least 5 days notice prior to the start of fieldwork to allow adequate time to arrange field oversight.

If you have any questions, don't hesitate to call me at (518) 402-9768.

Sincerely,

Thomas Gibbons
Project Manager
Remedial Bureau B, Section D
Division of Environmental Remediation

cc: R. Cozzy/File
T. Gibbons
G. Clark (HMM)

Record of Telephone Conversation

Hatch Mott MacDonald

Project Port Authority of NY&NJ - HHMT- Port Ivory - IRM at Sites 2B & 3

Project No 226355AA01 **File No.** IV.45

Between (for MMG)	Date	Time
Geoffrey Clark	8/3/2006	14:20-14:30
And (name)	**Organisation**	**Phone No.**
Tom Gibbons	NYSDEC	518-402-9768

Subject

Viscous LNAPL that cannot be excavated & Time excavations must be left open

Summary

I called Tom to updated him on the progress of the IRM. I noted that we have excavated all removal areas and that we have found at least five test pits to be clean relative to the reaccumulation of LNAPL. I also told him that, at two removal areas, we found a viscous and black LNAPL that has no odor and appears, based on where we observed it, to be related to the Tidewater Pipelines. At Area J, which is located to the south of Richmond Terrace and the fence line and sidewalk that parallel Richmond Terrace, to the east of an HHMT-Port Ivory building, and to the west of an active water line, we have observed some of the viscous LNAPL that cannot be excavated due to its proximity to these structures and to the Tidewater Pipelines themselves. Because this LNAPL is believed to be inert with respect to soluble compounds and because it is too viscous to flow any significant distance through the soil, I recommended that we collect a sample of the LNAPL and test it for VOCs and SVOCs via either the TCLP or SPLP methods. I asked Tom whether this approach is acceptable and whether he has a preference for either the TCLP or SPLP method.

Tom replied that, unless there is a demonstratable danger to human health or the environment, we need only remove the material to the extent practical. He does not have a preference as to whether the TCLP or SPLP testing method is used.

I also indicated that some removal areas, notably Areas B and C, are located in close proximity to existing structures or raodways. The danger is that the excavations could collapse, particularly if a rainstorm causes washout. I asked Tom whether we could leave those excavation areas open for a shorter period of time than one month, the duration stated in the plan. I indicated that the oil, even the viscous material encountered at Areas B and J, flows into the removal areas at a reasonable rate. Tom replied that we should keep most Areas open for the full month, but some areas may be closed in two weeks if necessary to protect structures.

Action

A - Notify Mike Wallace of dates when Areas B & C can be backfilled.

To	A	I	C	Sign	Date
JNK					
GKC					
RMT					
Return to 226355AA01.IV.45					

Trepp, Jr., Robert M

From: Clark, Geoffrey K
Sent: Tuesday, January 02, 2007 9:42 AM
To: Trepp, Jr., Robert M
Subject: FW: Backfill Quality

archiveTo: p:\232952wmd\REMEDIAL ACTIONS\Remedial Petroleum Issues Block 1338\Remediation N of Bldg Nos. 74.75\IRM Report

-----Original Message-----
From: Thomas Gibbons [mailto:tlgibbon@gw.dec.state.ny.us]
Sent: Wednesday, September 20, 2006 11:17 AM
To: Clark, Geoffrey K
Cc: Ed Aldrich
Subject: Re: Backfill Quality

Geoff - Based on my review of the subject backfill data, and as we discussed today, I am in agreement with this request to reuse this excavated soil at the site in areas where comparable contaminant levels are found. If you have any more questions, or need further clarification, feel free to contact me. Tom

Thomas Gibbons
NYS Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway - 12th Floor
Albany, NY 12233-7016

Phone: (518) 402-9768
Fax: (518) 402-9773
E-mail: tlgibbon@gw.dec.state.ny.us

>>> "Clark, Geoffrey K" <Geoffrey.Clark@hatchmott.com> 9/15/2006 1:26:43 PM >>>
Tom,

As we discussed in our telephone conversation yesterday, the following is a summary of the quality of the backfill that is intended for use during the IRM. The sampling parameters, VOC and SVOC, and frequency were specified in the approved IRM Workplan. Please confirm that it is
appropriate to use this soil for backfill.

Quality of Fill Materials - Site 3 - Site Investigation

The following is a summary of the total SVOC concentrations we detected
in fill at Site 3 during the SI (I have not yet had a chance to analyze
the RI and SRI data fully; I will send you an updated email when I do).

Concentration Range (mg/kg)	No. of Samples with

Total SVOC Concentrations in that Range

0-1

28

[redacted]5

11

5-10

5

10-20

4

20-100

4

100+

1

Total
53

For the SI Samples collected at Site 3,

Total SVOC Concentration Range = 0.041 to 127.42 mg/kg

Arithmetic Mean (Total SVOC) Concentration = 8.5 mg/kg

[redacted]

Quality of Proposed Backfill Soil

We detected SVOCs at concentrations above their respective RSCOs in 15 samples of the soil the facility intends to use as backfill. I have attached a summary table to this email; sorry about the formatting, but
we just recently received the data. The detected concentrations that exceed the RSCOs are highlighted in yellow. The range in total SVOC concentration for these samples is 0.966 to 36.79 mg/kg. The arithmetic
mean concentration of total SVOCs for these samples is approximately 12.1 mg/kg. Given the fact that the surrounding soil contains SVOCs at
similar concentrations to the proposed backfill, the fact that the IRM is not the final remedial action at Site 3, and the fact that impervious
materials will be placed over most Site 3 soil, we would appreciate your
approval to use the proposed backfill at Site 3 for completion of the IRM.

Regards,

[redacted]h Mott MacDonald

Geoffrey K. Clark, P.G.

Project Geologist

T 973-912-2472 F 973-912-2400

geoffrey.clark@hatchmott.com

APPENDIX C

SOIL AND LNAPL DISPOSAL MANIFESTS (UNDER SEPARATE COVER)

APPENDIX D

LABORATORY RESULTS
(UNDER SEPARATE COVER)

APPENDIX E

DATA USABILITY SUMMARY REPORTS (UNDER SEPARATE COVER)