Figure II-4.1-1
Percent of Cores Requiring Redredging Out of All Locations by Dredge Pass

Notes:
- Average Percentage of All CUs (except CU-1) Required Re-dredging
- * indicates CU-1 only

CU-1
CU-2
CU-3
CU-4
CU-5
CU-6
CU-7
CU-8
CU-17
CU-18
Figure II-4.1-2

Percentage of Inventory Locations Requiring Redredging Out of All Locations

Node percentages of 0 were observed in the following CUs:
- Third Pass: CU-17
- Second to Fourth Pass: CU-8
Figure II-4.1-3

Percentage of Inventory Cores Out of Redredged Locations by Dredge Pass

Notes:
- Average Percentage of Inventory Cores of all CUs (except CU-1) Collected After Each Dredging Pass.
- * indicates CU-1 only.

EPA Phase 1 Evaluation Report - Hudson River PCBs Site
March 2010
Figure II-4.1-4

Percentage of Inventory + Non-Compliant Nodes with > 6ppm Tri+ PCB Out of all Redredged Locations by Dredge Pass

Notes:
- average percentage of all CUs (except CU-1).
- * indicates CU-1 only

EPA Phase 1 Evaluation Report - Hudson River PCBs Site

March 2010
Figure II-4.1-5

Percent of Total Area Requiring Redredging by Dredge Pass

Notes:
- Average Percentage of Total Area (except CU-1) Required Re-dredging
- * indicates CU-1 only

CU-1
CU-2
CU-3
CU-4
CU-5
CU-6
CU-7
CU-8
CU-17
CU-18

Percent of Total Area

Post-Dredge Coring Survey

<table>
<thead>
<tr>
<th>Dredge Pass</th>
<th>Average Percentage of Total Area Requiring Re-dredging</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50%</td>
</tr>
<tr>
<td>2</td>
<td>25%</td>
</tr>
<tr>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>4</td>
<td>25%</td>
</tr>
<tr>
<td>5*</td>
<td>90%</td>
</tr>
</tbody>
</table>

EPA Phase 1 Evaluation Report - Hudson River PCBs Site
March 2010
Percent of Total Area Requiring Redredging by Dredge Pass

Notes:
- Average Percentage of Area (except CU-1) Required Re-dredging
- * indicates CU-1 only

<table>
<thead>
<tr>
<th>Dredge Pass</th>
<th>Average Percentage of Total Area Requiring Re-dredging</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50%</td>
</tr>
<tr>
<td>2</td>
<td>35%</td>
</tr>
<tr>
<td>3</td>
<td>30%</td>
</tr>
<tr>
<td>4</td>
<td>10%</td>
</tr>
<tr>
<td>5*</td>
<td>70%</td>
</tr>
</tbody>
</table>

Figure II-4.1-6

EPA Phase 1 Evaluation Report - Hudson River PCBs Site

March 2010
Percent of Inventory Cores + Non-Compliant Nodes with > 6ppm Tri+ PCB Area Out of Area Requiring Redredging by Dredge Pass

Notes:
- --- Average Percentage of Inventory Area and Areas with Surface Tri+PCB > 6ppm (except CU-1) Required Re-dredging
- * indicates CU-1 only

EPA Phase 1 Evaluation Report - Hudson River PCBs Site
March 2010
1. Average concentration for dredge pass 1 was taken from 2009-07-15 Resuspension Engineering Evaluation Report from GE to EPA.
2. The subsequent post-dredge core collection event average concentration was based on residual core data for non-compliant nodes obtained after the prior dredge pass. For example, the post-dredge collection event 2 average concentration is based on the residual cores data collected after dredge pass 2.
3. For each CU, the concentration for the last post-dredge core collection event represents the average Tri+ PCB concentration of the nodes that were capped.
4. For CU-17, all nodes collected in the 3rd post-dredge core collection event were compliant and thus not shown.

Average Total PCB Concentration in SSAP Cores and in Samples Collected in Areas to be Re-dredged (East Rogers Island Area)
Notes:
1. Average concentration for dredge pass 1 was
taken from 2009-07-15 Resuspension
Engineering Evaluation Report from GE to
EPA
2. The subsequent post-dredge core collection
event average concentration was based on
residual core data for non-compliant nodes
obtained after the prior dredge pass. For
example, the post-dredge collection event 2
average concentration is based on the residual
cores data collected after dredge pass 2.
3. For each CU, the concentration for the last
post-dredge core collection event represents the
average Tri+ PCB concentration of the nodes
that were capped.
4. For CU-17, all nodes collected in the 3rd
post-dredge core collection event were
compliant and thus not shown.
Average Total PCB Concentration in SSAP Cores and in Samples Collected in Areas to be Re-dredged (Griffin Island Area)

Notes:
1. Average concentration for dredge pass 1 was taken from 2009-07-15 Resuspension Engineering Evaluation Report from GE to EPA.
2. The subsequent post-dredge core collection event average concentration was based on residual core data for non-compliant nodes obtained after the prior dredge pass. For example, the post-dredge collection event 2 average concentration is based on the residual cores data collected after dredge pass 2.
3. For each CU, the concentration for the last post-dredge core collection event represents the average Tri+ PCB concentration of the nodes that were capped.
4. For CU-17, all nodes collected in the 3rd post-dredge core collection event were compliant and thus not shown.
Average Tri+ PCB Concentration in SSAP Cores and in Samples Collected in Areas to be Re-dredged (East Rogers Island Area)

Notes:
1. Average concentration for dredge pass 1 was taken from 2009-07-15 Resuspension Engineering Evaluation Report from GE to EPA.
2. The subsequent post-dredge core collection event average concentration was based on residual core data for non-compliant nodes obtained after the prior dredge pass. For example, the post-dredge collection event 2 average concentration is based on the residual cores data collected after dredge pass 2.
3. For each CU, the concentration for the last post-dredge core collection event represents the average Tri+ PCB concentration of the nodes that were capped.
4. For CU-17, all nodes collected in the 3rd post-dredge core collection event were compliant and thus not shown.
Notes:
1. Average concentration for dredge pass 1 was taken from 2009-07-15 Resuspension Engineering Evaluation Report from GE to EPA.
2. The subsequent post-dredge core collection event average concentration was based on residual core data for non-compliant nodes obtained after the prior dredge pass. For example, the post-dredge collection event 2 average concentration is based on the residual cores data collected after dredge pass 2.
3. For each CU, the concentration for the last post-dredge core collection event represents the average Tri+ PCB concentration of the nodes that were capped.
4. For CU-17, all nodes collected in the 3rd post-dredge core collection event were compliant and thus not shown.
Average Tri+ PCB Concentration in SSAP Cores and in Samples Collected in Areas to be Re-dredged (Griffin Island Area)

Notes:
1. Average concentration for dredge pass 1 was taken from 2009-07-15 Resuspension Engineering Evaluation Report from GE to EPA.
2. The subsequent post-dredge core collection event average concentration was based on residual core data for non-compliant nodes obtained after the prior dredge pass. For example, the post-dredge collection event 2 average concentration is based on the residual cores data collected after dredge pass 2.
3. For each CU, the concentration for the last post-dredge core collection event represents the average Tri+ PCB concentration of the nodes that were capped.
4. For CU-17, all nodes collected in the 3rd post-dredge core collection event were compliant and thus not shown.
Figure II-4.2-1: Percent of Inventory Cores + Non-Compliant Nodes with > 6ppm Tri+ PCB Area Out of Area Requiring Redredging by Dredge Pass

Node percentages of 0 were observed in the following CUs:
- Third Pass: 17
- Fourth Pass: 8
Figure II-4.2-2: Percentage of Inventory and Non-Compliant Post-Dredged > 6mg/L Tri+ PCB Area Requiring Redredging by CU

For CU-8, there was no inventory nodes beyond the first re-dredged pass.
Figure II-4.3-1

Percentage of Total Volume Removed as a Function of Dredging Pass

CU

Percentage Range of Complete Cores (%)

- Highest 0 – 25
- Middle 25 – 56
- Lowest 56 - 100

Dredging Pass

March 2010
EPA Phase 1 Evaluation Report – Hudson River PCBs Site
Figure II-4.3-2a

Volume Increase (Actual over Design) Compared to SSAP Core Completeness (Without “-999” Confidence Level Cores)

EPA Phase 1 Evaluation Report – Hudson River PCBs Site

March 2010
Figure II-4.3-2b

Volume Increase (Actual over Design) Compared to SSAP Core Completeness
(Including Abandoned Location)

EPA Phase 1 Evaluation Report – Hudson River PCBs Site

March 2010
An Integrative View of SSAP Cores, Design Dredging Cut and Final Dredging Cut

EPA Phase I Evaluation Report - Hudson River PCBs Site

March 2010
An Integrative View of SSAP Cores, Design Dredging Cut and Final Dredging Cut

EPA Phase I Evaluation Report - Hudson River PCBs Site

March 2010

Figure II-4.4-1d
An Integrative View of SSAP Cores, Design Dredging Cut and Final Dredging Cut

EPA Phase I Evaluation Report - Hudson River PCBs Site

March 2010
An Integrative View of SSAP Cores, Design Dredging Cut and Final Dredging Cut

EPA Phase I Evaluation Report - Hudson River PCBs Site

March 2010
Figure II-4.4-1g

An Integrative View of SSAP Cores, Design Dredging Cut and Final Dredging Cut

EPA Phase I Evaluation Report - Hudson River PCBs Site

March 2010
**CU-18**

An Integrative View of SSAP Cores, Design Dredging Cut and Final Dredging Cut

**EPA Phase I Evaluation Report - Hudson River PCBs Site**

March 2010

**NOTE:**

Depth was measured as distance below pre-dredging sediment surface of 2005.
Figure II-4.4-2a

An Integrative View of Post-Dredging Pass Cores, Design Dredging Cut and Final Dredging Cut

EPA Phase 1 Evaluation Report - Hudson River PCBs Site

March 2010
Total PCBs (ppm)

Depth (Ft)

NOTE:
DEPTH WAS MEASURED AS DISTANCE BELOW PRE-DREDGING SEDIMENT SURFACE OF 2009.
Total PCBs (ppm)

0
-2
-4
-6
-8
-10

Depth (Ft)

NOTE:
DEPTH WAS MEASURED AS DISTANCE BELOW PRE-DREDGING SEDIMENT SURFACE OF 2009.

An Integrative View of Post-Dredging Pass Cores, Design Dredging Cut and Final Dredging Cut
EPA Phase I Evaluation Report - Hudson River PCBs Site
March 2010
An Integrative View of Post-Dredging Pass Cores, Design Dredging Cut and Final Dredging Cut

EPA Phase I Evaluation Report - Hudson River PCBs Site

March 2010
Figure II-4.4-2f

An Integrative View of Post-Dredging Pass Cores, Design Dredging Cut and Final Dredging Cut

EPA Phase 1 Evaluation Report – Hudson River PCBs Site

March 2010
Figure II-4.4-2g

CU-7

Total PC3s (ppm)

-8 -6 -4 -2 0 2 4 6 8

Depth (Ft)

CORING LOCATION ID
CAPPING LOCATION
POST-DREDGING CORES
AFTER DREDGING PASS 1 TO 5
DESIGN DREDGING CUT
(AT FIRST PASS CORE LOCATION)
FINAL DREDGING CUT
(AT FINAL PASS CORE LOCATION)

NOTE:
DEPTH WAS MEASURED AS DISTANCE BELOW PRE-DREDGING SEDIMENT SURFACE OF 2009.

An Integrative View of Post-Dredging Pass Cores, Design Dredging Cut and Final Dredging Cut
EPA Phase I Evaluation Report – Hudson River PCBs Site
March 2010
An Integrative View of Post-Dredging Pass Cores, Design Dredging Cut and Final Dredging Cut

NOTE:
Depth was measured as distance below pre-dredging sediment surface of 2009.
An Integrative View of Post-Dredging Pass Cores, Design Dredging Cut and Final Dredging Cut

EPA Phase 1 Evaluation Report - Hudson River PCBs Site

March 2010

Figure II-4.4-2i

NOTE:
DEPTH WAS MEASURED AS DISTANCE BELOW PRE-DREDGING SEDIMENT SURFACE OF 2009.
Spatial Distribution of Additional Dredging Depths
(Rogers Island)

LEGEND

CERTIFICATION UNIT
SHORELINE
INCOMPLETE SSAP CORES
ADDITIONAL DREDGING DEPTH (FT)
- < 0.0
- 0.0 - 1.0
- 1.0 - 2.0
- 2.0 - 4.0
- 4.0 - 6.0
- 6.0 - 8.0
- 8.0 - 10.0

Note: Overcut depth represents the additional dredging depth below the design cut.

Figure II-4.5-1a
EPA Phase 1 Evaluation Report – Hudson River PCBs Site
March 2010
Spatial Distribution of Additional Dredging Depths
(East Griffin Island)

Note: Overcut depth represents the additional dredging depth below the design cut.

LEGEND

- CERTIFICATION UNIT
- SHORELINE
- INCOMPLETE SSAP CORES
- ADDITIONAL DREDGING DEPTH (FT)
  - < 0.0
  - 0.0 - 1.0
  - 1.0 - 2.0
  - 2.0 - 4.0
  - 4.0 - 6.0
  - 6.0 - 8.0
  - 8.0 - 10.0

Figure II-4.5-1b
EPA Phase 1 Evaluation Report – Hudson River PCBs Site
March 2010
Figure II-4.5-2
Percentage of SSAP Cores per CU by Additional Dredging Depth
Phase 1 Evaluation Report – Hudson River PCBs Site
March 2010
Probing Depth Means Comparison for Different Sampling Site Classes

Figure II-4.6-1
Figure II-4.6-2

Probing Depth Means Comparison for Different Sampling Site Classes
CU-1

EPA Phase 1 Evaluation Report - Hudson River PCBs Site
March 2010
Probing Depth Means Comparison for Different Sampling Site Classes

CU-2

EPA Phase 1 Evaluation Report - Hudson River PCBs Site
March 2010

Figure II-4.6-3
Probing Depth Means Comparison for Different Sampling Site Classes

CU-3
Probing Depth Means Comparison for Different Sampling Site Classes

CU-4

EPA Phase 1 Evaluation Report - Hudson River PCBs Site

March 2010
Probing Depth Means Comparison for Different Sampling Site Classes

CU-5

EPA Phase 1 Evaluation Report - Hudson River PCBs Site

Figure II-4.6-6

March 2010
Probing Depth Means Comparison for Different Sampling Site Classes

**CU-6**

EPA Phase 1 Evaluation Report - Hudson River PCBs Site

March 2010
Probing Depth Means Comparison for Different Sampling Site Classes

CU-7

EPA Phase 1 Evaluation Report - Hudson River PCBs Site

March 2010
Notes:
1) The residuals core locations shown on the map indicate all the post-dredging sampling locations.
2) Abandoned core locations indicate those locations that were abandoned during all residuals sampling events.
Notes:
1) The residuals core locations shown on the map indicate all the post-dredging sampling locations.
2) Abandoned core locations indicate those locations that were abandoned during all residuals sampling events.
Notes:
1) The residuals core locations shown on the map indicate all the post-dredging sampling locations.
2) Abandoned core locations indicate those locations that were abandoned during all residuals sampling events.
Notes:
1) The residuals core locations shown on the map indicate all the post-dredging sampling locations.
2) Abandoned core locations indicate those locations that were abandoned during all residuals sampling events.
Notes:
1) The residuals core locations shown on the map indicate all the post-dredging sampling locations.
2) Abandoned core locations indicate those locations that were abandoned during all residuals sampling events.

Legend
- SSAP Core Locations
- Residuals Core Locations
- Abandoned Residuals Core Locations
- Core Locations with Subsequent Sampling Distance Greater than 10 ft
- Re-sampled Abandoned Cores
- Navigation Channel
- Shoreline (20081222)
- Revised Certification Units

Residuals Core Sampling Grid

EPA Phase 1 Evaluation Report - Hudson River PCBs Site

March 2010
Notes:
1) The residuals core locations shown on the map indicate all the post-dredging sampling locations.
2) Abandoned core locations indicate those locations that were abandoned during all residuals sampling events.

Legend
- SSAP Core Locations
- Residuals Core Locations
- Abandoned Residuals Core Locations
- Core Locations with Subsequent Sampling Distance Greater than 10 ft
- Re-sampled Abandoned Cores
- Navigation Channel
- Shoreline (20081222)
- Revised Certification Units

CU-17
CU-18