CHAPTER IV FIGURES
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 dredge pass average conc. was based on residual core data after the dredge pass (for example, dredge pass 2 ave conc. is based on the residual cores data collected after dredge pass 1.)
3. For every CU, the concentration for the last post-dredge core collection event represents the average Tri+ PCB concentration of the nodes that are capped.
4. For CU-17, all the nodes collected in the 3rd post-dredge core collection event are compliance.
Lost Dredging Time

Available Dredge Hours

Total Available Hours
18,125

Lost Dredge Hours

March 2010
EPA Phase 1 Evaluation Report - Hudson River PCBs Site
Notes:
a) Shaded figures represent primary certification path.
b) Areas can be dredged more than 4 passes if no delay to the project schedule will be incurred.
c) Subaqueous caps will not be placed in areas of shallow bedrock located in the navigation channel.
d) Placement of additional backfill is contingent on sufficient water depth.
e) All concentration criteria represent concentration for Tri+PCBs unless otherwise noted.
f) Redredging at shoreline to remove areas with Total PCB greater than 50 mg/kg do not count in the tally of dredging passes.

Review sediment sample Tri PCB results and calculates arithmetic average Tri PCB concentration for certification unit.

Does certification unit extend to the river bank where it is subject to 2 ft cut and stable slope limitations OR is the shoreline elevation < 117 ft?

Go To B Residual Flow Chart for CU with Shoreline Inventory Below 2 ft (Fig. 3a-B)

Are individual sample concentrations < 27 mg/kg and no more than one sample > 3 mg/kg?

Has petition EPA to redredge or to cap identified non-compliant nodes such that CU avg. < 1 mg/kg. Place backfill in uncapitalized area?

Has 2 or more dredging passes been made for CU with these concentrations?

Select the nodes of concern contributing to an average > 1.0, including nodes with concentrations > 15 mg/kg, and/or DoC > 6 inches.

Select the area for capping, such that the mean of the uncapped area alone is < 1 mg/kg, and no sample > 15 mg/kg.

Redredge and collect and analyze post-dredging cores.

Does certification unit extend to the river bank where it is subject to 2 ft cut and stable slope limitations OR is the shoreline elevation < 117 ft?

Backfill the remaining area.\textsuperscript{a} (Additional dredging attempts may be made at the contractor’s discretion.)

Proposed Residual Flow Chart for All Certification Units

Figure IV-3a

EPA Phase 1 Evaluation Report - Hudson River PCBs Site

March 2010
All shoreline samples less than 50 mg/kg Total PCBs

Is there any shoreline area node to be capped? (PCB > 15 mg/kg)

Identify shoreline nodes with concentrations > 15 mg/kg to be capped.

Is the depth of contamination (DoC) < 6 inches? (i.e. all inventory removed)

Any individual sample concentration < 27 mg/kg and no more than one sample > 15 mg/kg?

0-6” Cu, arithmetic avg. < 3 mg/kg?

5-6” Cu, arithmetic avg. < 1.5 mg/kg?

Cap shoreline nodes and Backfill the area.

Redredge Option 2 Cap

Choose Option 2

Have 4 or more dredging passes been conducted?

Yes

No

Reduced

Select the area for capping, such that the mean of the uncapped area alone is ≤ 1 mg/kg, and no sample > 15 mg/kg.

Cap

Redredge

Collect and analyze post-dredging samples.

Redredge Option 1 Cap

Choose Option 1

Redredge

Select the nodes of concern contributing to an average > 1.0, including nodes with concentrations ≥ 15 mg/kg, and/or DoC ≥ 6 inches.

Have 2 or more dredging passes been conducted for 0-6” inch bed?

Yes

No

Redredge Option 1 Cap

Have 0 or more dredging passes been conducted?

Redredge

Yes

No

Option 1

Redredge

Option 2

Cap

Notes:

a) Shaded figures represent primary certification path.

b) Areas can be dredged more than 4 passes if no delay to the project schedule will be incurred.

c) Subsequent caps will not be placed in areas of shallow bedrock located in the navigation channel.

d) Excavation of the shoreline nodes to be capped.

e) All concentration criteria represent are for Triv+PCBs unless otherwise noted.

f) Redredging at shoreline to remove areas with Total PCBs greater than 50 mg/kg do not count in the tally of dredging passes.