U.S. Army

Corps of Engineers
New England District
Concord, Massachusetts
U.S. Environmental

Protection Agency

FINAL DRAFT

# PHASE 1 HUMAN HEALTH RISK ASSESSMENT FOR REST OF RIVER 

## Volume II - Figures

DCN: GE-110101-AASO

1 November 2001

# Environmental Remediation Contract General Electric (GE)/Housatonic River Project Pittsfield, Massachusetts 

Contract No. DACW33-00-D-0006
Task Order No. 0003


# PHASE 1 HUMAN HEALTH RISK ASSESSMENT FOR REST OF RIVER 

VOLUME II-FIGURES

ENVIRONMENTAL REMEDIATION CONTRACT GENERAL ELECTRIC (GE)/HOUSATONIC RIVER PROJECT PITTSFIELD, MASSACHUSETTS

Contract No. DACW33-00-D-0006
Task Order No. 0003
DCN: GE-110101-AASO

Prepared for

## U.S. ARMY CORPS OF ENGINEERS NEW ENGLAND DISTRICT CONCORD, MASSACHUSETTS <br> AND

U.S. ENVIRONMENTAL PROTECTION AGENCY

REGION I
BOSTON, MASSACHUSETTS

Prepared by
ROY F. WESTON, INC.
West Chester, Pennsylvania 19380
and

## AVATAR ENVIRONMENTAL, LLC

Exton, Pennsylvania 19341

1 November 2001
W.O. No. 20123.001.096.0721

# VOLUME II <br> LIST OF FIGURES 

## Title

Figure 1-1 Phase 1 Site Screening Approach

Figure 2-1 Phase 1 Site Screening Approach for Residential Exposure
Figure 2-2 Phase 1 Site Screening Approach for Recreational Exposure
Figure 2-3 Phase 1 Site Screening Approach for Agricultural Exposure
Figure 2-4 Phase 1 Site Screening Approach for Commercial/Industrial Exposure

Figure 3-1 Index of Floodplain Tax Parcel Maps for Reaches 5 and 6

Figure 3-2 PCB Results for Tax Parcels H6-4-13 and H6-4-5

Figure 3-3 PCB Results for Tax Parcels I6-1-41, I6-1-27, I6-1-42, I6-1-3, I6-1-2, and I6-1-1

Figure 3-4 PCB Results for Tax Parcels I5-11
Figure 3-5 PCB Results for Tax Parcels I6-3-1, I6-3-13, I6-2-6, and I6-2-1

Figure 3-6 PCB Results for Tax Parcels J6-2-2, J6-2-11, J6-2-3, J6-2-1, J6-3-1, and J6-3-2
Figure 3-7 PCB Results for Tax Parcels J5-2-110, J5-2-10, J5-2-9, J5-2-8, J5-2-7, and J5-2-6

Figure 3-8 PCB Results for Tax Parcel J6-4-2
Figure 3-9 PCB Results for Tax Parcels J5-2-5, J5-5-105, J5-2-11, and J5-2-4

Figure 3-10 PCB Results for Tax Parcel K4-6-28

Figure 3-11 PCB Results for Tax Parcels J4-8-5, J4-3-13, J4-8-8, J4-8-2, and J4-8-10

## VOLUME II LIST OF FIGURES (Continued)

## Title

Figure 3-12 PCB Results for Tax Parcels J4-3-7, J4-3-12, J4-3-8, J4-3-9, J4-3-10, J4-3-11, J3-1-14, and J3-1-13

Figure 3-13 PCB Results for Tax Parcel J3-2-1

Figure 3-14 PCB Results for Tax Parcels J3-1-12, J3-1-11, J3-1-7, J3-1-10, J3-1-9, J3-1-6, and J3-1-8

Figure 3-15

Figure 3-16 PCB Results for Tax Parcel J2-2-2

Figure 3-17 PCB Results for Tax Parcels K3-1-19, K3-1-2, and K3-1-1

Figure 3-18 PCB Results for Tax Parcels K2-1-10, K2-1-5, K2-1-4, K2-1-3, and K2-1-2

Figure 3-19 PCB Results for Tax Parcel J2-2-1
Figure 3-20 PCB Results for Tax Parcel K2-1-1

Figure 3-21 PCB Results for Tax Parcel K1-1-10
Figure 3-22 PCB Results for Tax Parcel 33-40

Figure 3-23 PCB Results for Tax Parcel 34-1

Figure 3-24 PCB Results for Tax Parcel 29-3

Figure 3-25 PCB Results for Tax Parcels 29-9 and 29-5

Figure 3-26 PCB Results for Tax Parcel 29-2

Figure 3-27 PCB Results for Tax Parcel 29-1

Figure 3-28 PCB Results for Tax Parcel 23-37

# VOLUME II <br> LIST OF FIGURES (Continued) 

## Title

Figure 3-29 PCB Results for Tax Parcels 24-7, 24-6, 24-5, 24-4, 24-3, and 24-1

Figure 3-30 PCB Results for Tax Parcels 19-3 and 19-2

Figure 3-31 PCB Results for Tax Parcels 18-84 and 19-5

Figure 3-32 PCB Results for Tax Parcel 18-85

Figure 3-33 PCB Results for Tax Parcel 19-1

Figure 3-34 PCB Results for Tax Parcels 18-86 and 13-1

Figure 3-35 PCB Results for Tax Parcel 13-2

Figure 3-36 PCB Results for Tax Parcels 14-4 and 1-4

Figure 3-37 PCB Results for Tax Parcels 1-3, 1-1, and 2-8

Figure 3-38 PCB Results for Tax Parcels 9-14, 9-16, 9-17, 9-18, and 2-4

Figure 3-39 Index of Utility Easement Maps for Reaches 5 and 6

Figure 3-40 PCB Results for Utility Easements 1, 2, 3, and 4
Figure 3-41 PCB Results for Utility Easements 5, 6, and 7

Figure 3-42 PCB Results for Utility Easements 8, 9, and 10

Figure 3-43 PCB Results for Utility Easements 11 and 12

Figure 3-44 PCB Results for Utility Easement 13

Figure 3-45 Index of Riverbank and Sediment Exposure Area Maps for Reaches 5 and 6

## VOLUME II LIST OF FIGURES (Continued)

## Title

Figure 3-46 PCB Results for Exposure Area 1

Figure 3-47 PCB Results for Exposure Area 2
Figure 3-48 PCB Results for Exposure Area 3

Figure 3-49 PCB Results for Exposure Area 4

Figure 3-50 PCB Results for Exposure Area 5

Figure 3-51 PCB Results for Exposure Area 6

Figure 3-52 PCB Results for Exposure Area 7

Figure 3-53 PCB Results for Exposure Area 8

Figure 3-54 PCB Results for Exposure Area 9

Figure 3-55 PCB Results for Exposure Area 10

Figure 3-56 PCB Results for Exposure Area 11

Figure 3-57 PCB Results for Exposure Area 12
Figure 3-58 PCB Results for Exposure Area 13

Figure 3-59 PCB Results for Exposure Area 14

Figure 3-60 PCB Results for Exposure Area 15

Figure 3-61 PCB Results for Exposure Area 16

Figure 3-62 PCB Results for Exposure Area 17

# VOLUME II LIST OF FIGURES (Continued) 

## Title

Figure 3-63 PCB Results for Exposure Area 18

Figure 3-64 PCB Results for Exposure Area 19

Figure 3-65 PCB Results for Exposure Area 20

Figure 3-66 PCB Results for Exposure Area 21

Figure 3-67 PCB Results for Exposure Area 22

Figure 3-68 PCB Results for Exposure Area 23

Figure 4-1 Index of High-Contact Residential Floodplain Maps for Reaches 7 and 8

Figure 4-2 PCB Results in Floodplain High-Contact Residential Areas

Figure 4-3 PCB Results in Floodplain High-Contact Residential Areas

Figure 4-4 PCB Results in Floodplain High-Contact Residential Areas

Figure 4-5 PCB Results in Floodplain High-Contact Residential Areas

Figure 4-6 PCB Results in Floodplain High-Contact Residential Areas

Figure 4-7 PCB Results in Floodplain High-Contact Residential Areas

Figure 4-8 PCB Results in Floodplain High-Contact Residential Areas

Figure 4-9 PCB Results in Floodplain High-Contact Residential Areas

Figure 4-10 PCB Results in Floodplain High-Contact Residential Areas

Figure 4-11 PCB Results in Floodplain High-Contact Residential Areas

# VOLUME II LIST OF FIGURES (Continued) 

## Title

Figure 4-12 PCB Results in Floodplain High-Contact Residential Areas

Figure 4-13 PCB Results in Floodplain High-Contact Residential Areas

Figure 4-14 PCB Results in Floodplain High-Contact Residential Areas

Figure 4-15 PCB Results in Floodplain High-Contact Residential Areas

Figure 4-16 Index of Floodplain Maps (Non-HCRA) for Reaches 7 and 8

Figure 4-17 PCB Results of Floodplain Soils in Exposure Areas

Figure 4-18 PCB Results of Floodplain Soils in Exposure Areas

Figure 4-19 PCB Results of Floodplain Soils in Exposure Areas

Figure 4-20 PCB Results of Floodplain Soils in Exposure Areas

Figure 4-21 PCB Results of Floodplain Soils in Exposure Areas

Figure 4-22 PCB Results of Floodplain Soils in Exposure Areas

Figure 4-23 PCB Results of Floodplain Soils in Exposure Areas

Figure 4-24 PCB Results of Floodplain Soils in Exposure Areas

Figure 4-25 PCB Results of Floodplain Soils in Exposure Areas

Figure 4-26 PCB Results of Floodplain Soils in Exposure Areas

Figure 4-27 PCB Results of Floodplain Soils in Exposure Areas

Figure 4-28 PCB Results of Floodplain Soils in Exposure Areas

# VOLUME II LIST OF FIGURES (Continued) 

## Title

Figure 4-29 PCB Results of Floodplain Soils in Exposure Areas

Figure 4-30 PCB Results of Floodplain Soils in Exposure Areas
Figure 4-31 PCB Results of Floodplain Soils in Exposure Areas

Figure 4-32 PCB Results of Floodplain Soils in Exposure Areas

Figure 4-33 PCB Results of Floodplain Soils in Exposure Areas

Figure 4-34 PCB Results of Floodplain Soils in Exposure Areas

Figure 4-35 PCB Results of Floodplain Soils in Exposure Areas

Figure 4-36 Index of Sediment Maps For Reaches 7 and 8

Figure 4-37 PCB Results for the Area Between the Woods Pond Dam and Golden Hill Road

Figure 4-38 PCB Results for the Columbia Mill Dam Impoundment Area

Figure 4-39 PCB Results for the Eagle Mill Dam Impoundment Area

Figure 4-40 PCB Results for the Area Between Route 20 and Meadow Street

Figure 4-41 PCB Results for the Willow Mill Dam Impoundment Area

Figure 4-42 PCB Results for the Area Between the Willow Mill Dam Impoundment Area and Glendale Middle Road

Figure 4-43 PCB Results for the Glendale Dam Impoundment Area

Figure 4-44 PCB Results for the Area Between the Glendale Impoundment Area and the Route 183 Bridge

Figure 4-45 PCB Results for the Rising Pond Impoundment Area

## VOLUME II <br> LIST OF FIGURES (Continued)

## Title

Figure 5-1 Index of Figures for Section 5

Figure 5-2 PCB Results for Reach 9 Agricultural Area
Figure 5-3 PCB Results for Bartholomew's Cobble Recreation Area






LEGEND:

- Floodplain Sample,
Surface ( $0-0.5$ feet $)$

Floodplain Sample,
Sub-surface (0.5-1 feet)

PCB Results
Key (ppm)



Exposure Area Boundary

Parcel Boundaries
Housatonic River
100-year Floodplain

Phase 1 - Human Health Risk Assessment E Housatonic River Project Pittsfield, Massachusetts

FIGURE 4-30 PCB RESULTS OF LOODPLAIN SOILS IN EXPOSURE AREAS

