

**Updates on Remedial Programs
at the
GE Hudson Falls Plant Site and
GE Fort Edward Plant Site**

USEPA Community Advisory Group Meeting
March 24, 2009

Division of Environmental Remediation
New York State Department of
Environmental Conservation

GE Hudson Falls

GE Fort Edward



GE Hudson Falls Plant Site

Tunnel Drain Collection System
Construction Status Update

Remedial Program

GE Hudson Falls Plant Site

- Record of Decision (ROD) - issued March 16, 2004
- Ongoing work includes construction of the Tunnel Drain Collection System to prevent migration of PCB oil and contaminated groundwater from the bedrock beneath the site to the river

Tunnel Drain Collection System

- Construction began in August 2007
- Four phases – shaft excavation, tunnel excavation, drain installation, tunnel fit-out

TDCS Status

- Vertical shaft completed in March 2008
- Tunnel excavation completed in October 2008
- Concrete floors and sumps completed on January 30, 2009
- Phase 3 (piezometer and drain installation) currently underway

Photographs of Tunnels at the end of Phase 2 Construction









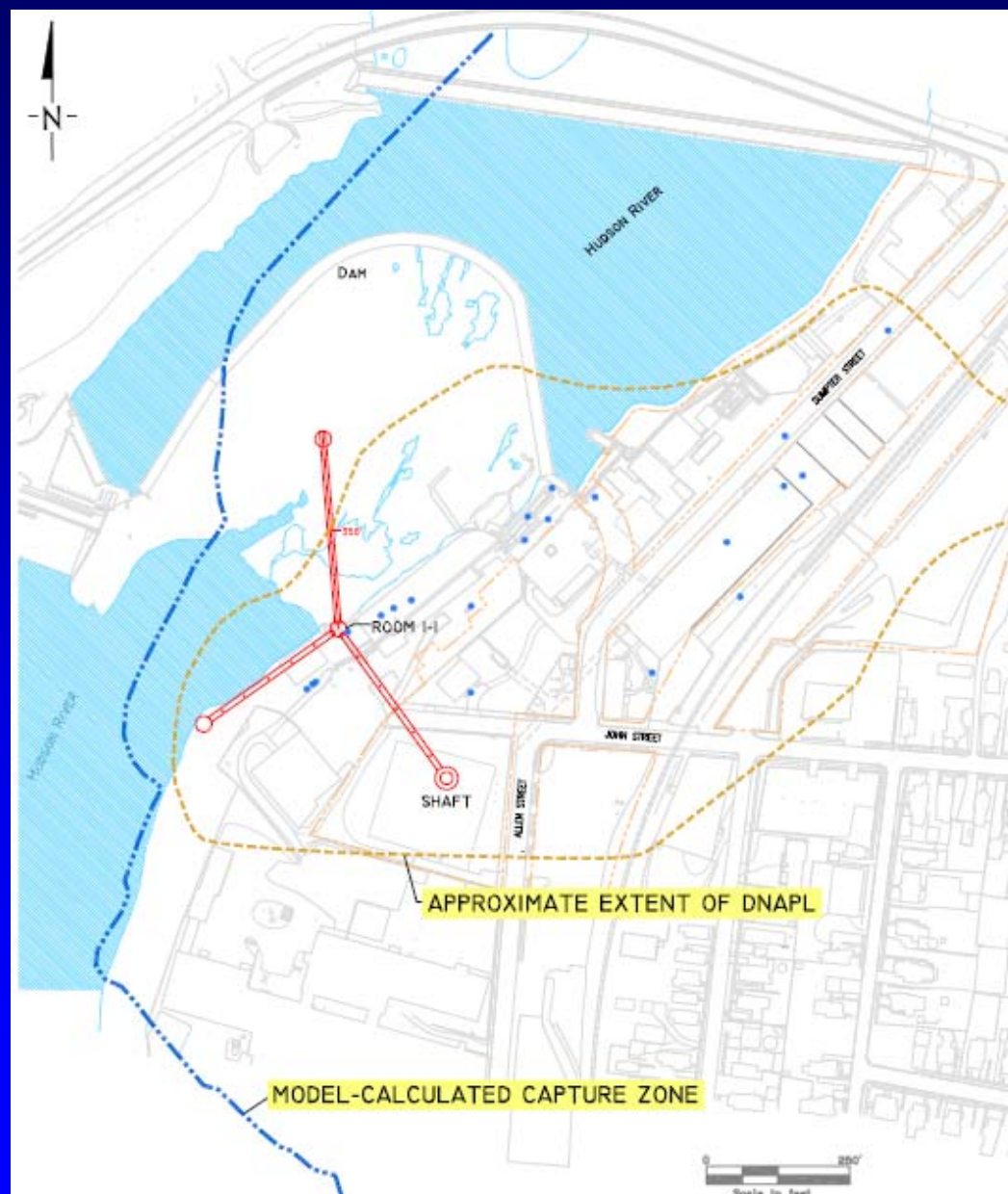
Phase 3 - Piezometers

- Piezometers (instruments to measure hydraulic pressure) are being installed from within the TDCS
- Piezometer installation is anticipated to be complete by April 2009

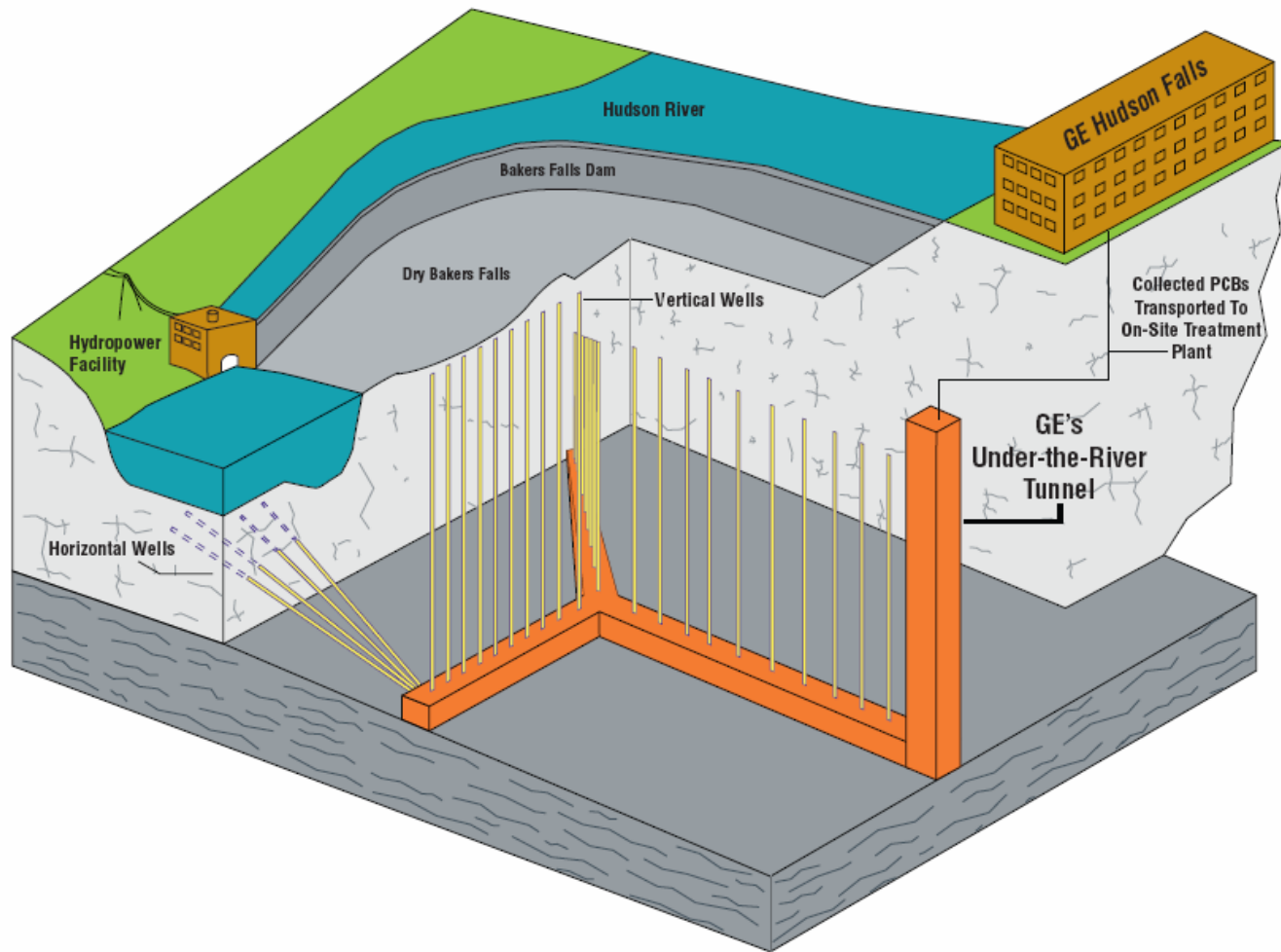
Phase 3 – Drain Wells

- The drain wells will also be installed from within the TDCS
- Drain well construction is anticipated to begin in April 2009, and take approximately two months
- Drain wells will be constructed on a spacing of approximately 50 feet, and extend up into the overlying fractured bedrock

Final Tunnel Layout



Final Tunnel Layout



Community Protection

- Air monitoring is being performed during all intrusive activities
- Dust monitoring during all operations
- PCB monitoring during operations when contractor is working in portions of the rock which could contain PCB DNAPL

Next Steps

- Phase 3 (Drain Installation) – start in April 2009, take approximately two to three months
- Phase 4 (Tunnel Fit Out) Work Plan – early summer 2009
- Phase 4 Implementation – 2009, six months duration scheduled

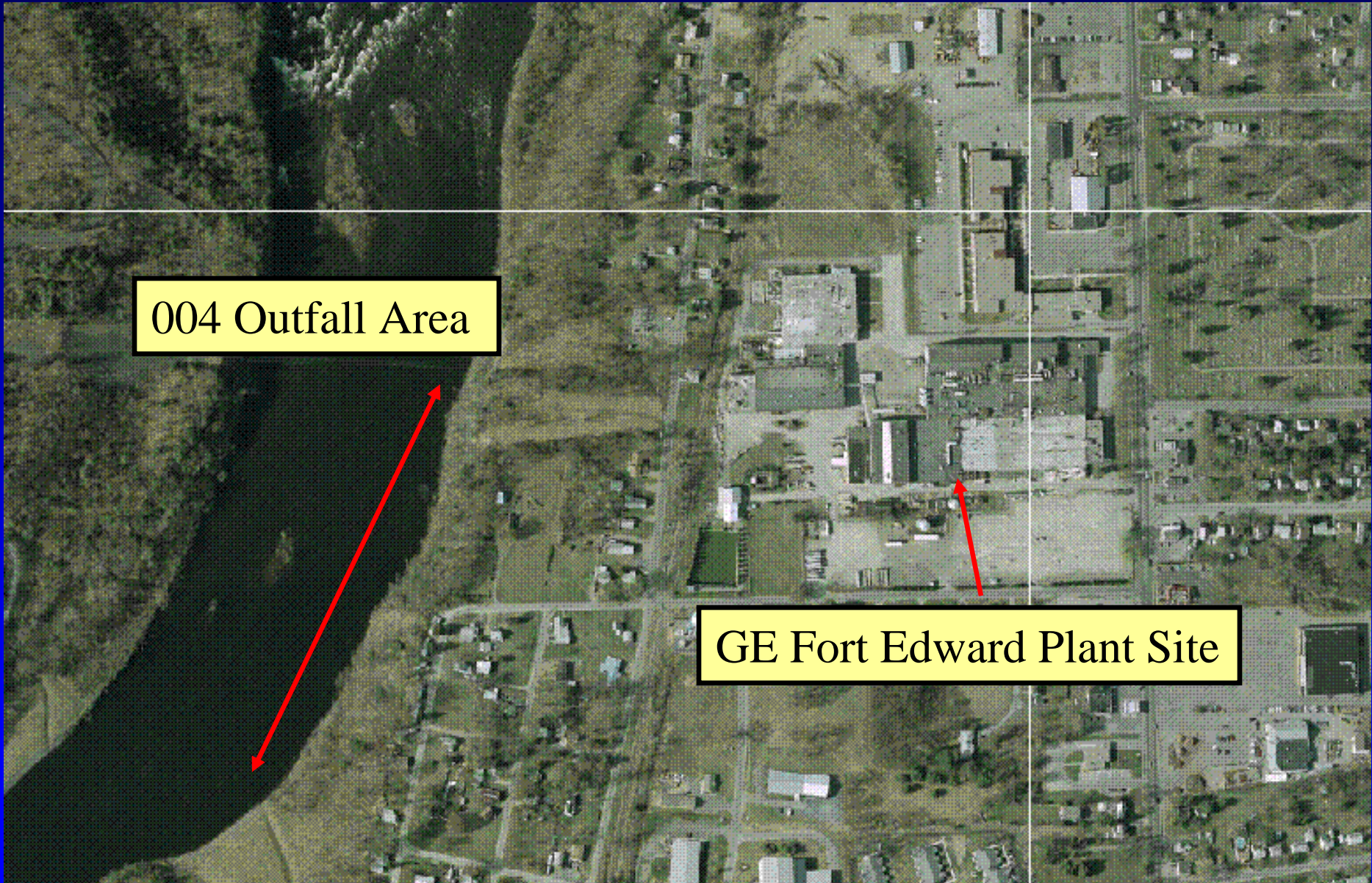
GE Fort Edward Plant Site

Investigation of PCB oil in bedrock
associated with the former 004 outfall
area

GE Hudson Falls

GE Fort Edward





004 Outfall Area

GE Fort Edward Plant Site

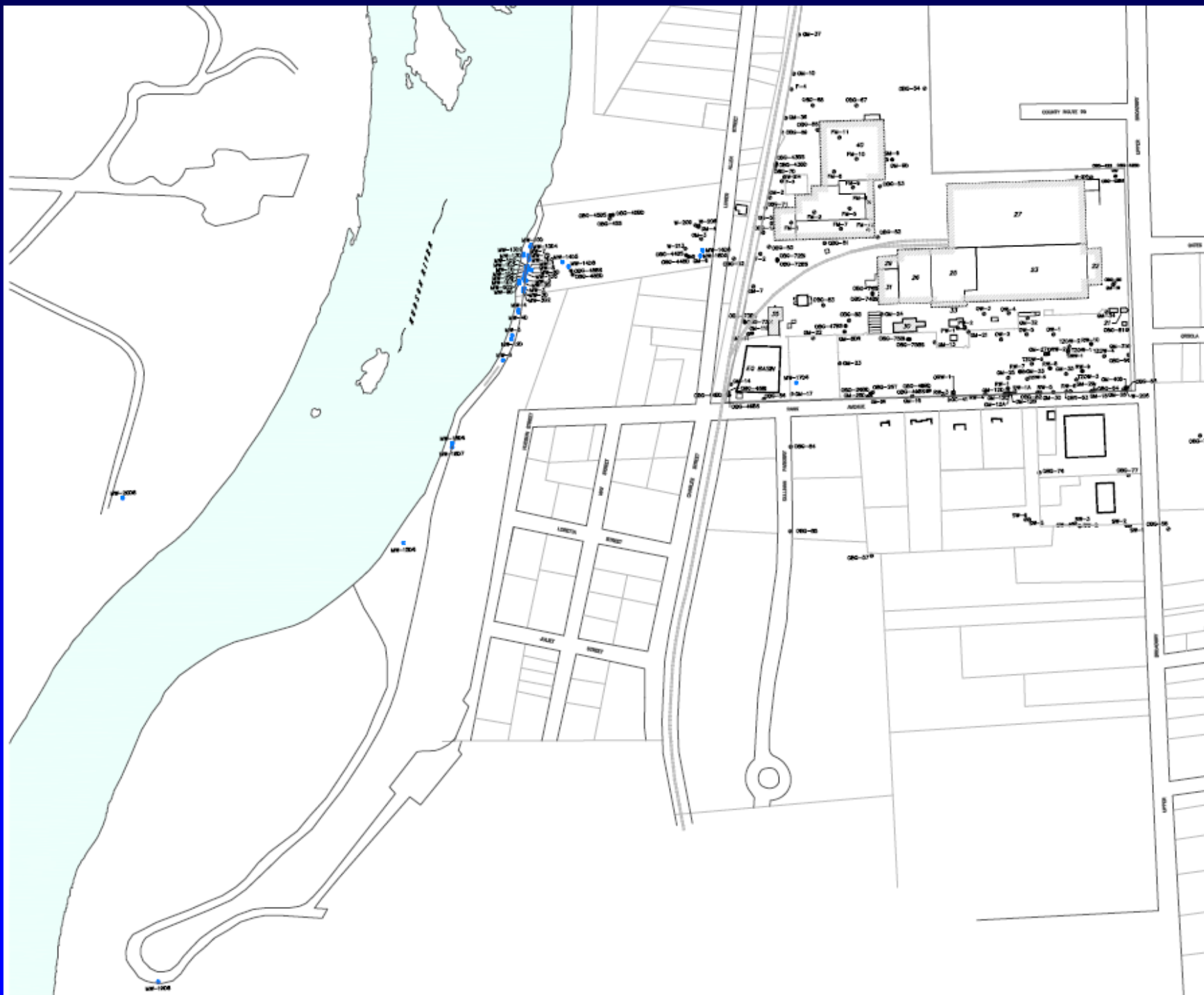


Bedrock Investigation 004 Outfall Area

- Initial Bedrock Investigations – 2003, during implementation of Operable Unit 4 remedy
- Preliminary Investigations – 2005
- Remedial Investigation – starting in 2007

Ongoing Remedial Investigation (RI)

- GE currently implementing the RI with State oversight
- The objective of the investigation is to delineate the extent of PCB oil in bedrock



Investigation Work

- Monitoring wells have been installed at a number of locations in the vicinity of the former outfall structure, and to the south, east, and west
- All wells are being cored; each identified discrete open horizon was evaluated for well completion
- Rock core samples are sent to lab for rapid turn around PCB analyses

Investigation Work

- Wells bailed / developed to check for DNAPL presence
- Groundwater samples collected for rapid turn around PCB and VOC analyses
- Some well locations adjusted in the field in response to initial investigation results
- Additional well locations / depths continue to be added

Findings To Date

- PCB DNAPL identified at depth (~ 300 feet) in vicinity of former outfall structure and to the south
- Well on west side of river has relatively high (~ 20-25% of saturation) PCB in groundwater; however, DNAPL was not observed
- PCB DNAPL vertical or horizontal extent not yet delineated

Next Steps

- The next monitoring location is to the southeast of the outfall area
- DNAPL bail-down tests will also continue to be performed (once access is safely available to the shoreline area) to evaluate the potential for oil recovery from existing wells

For More Information

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NYSDEC

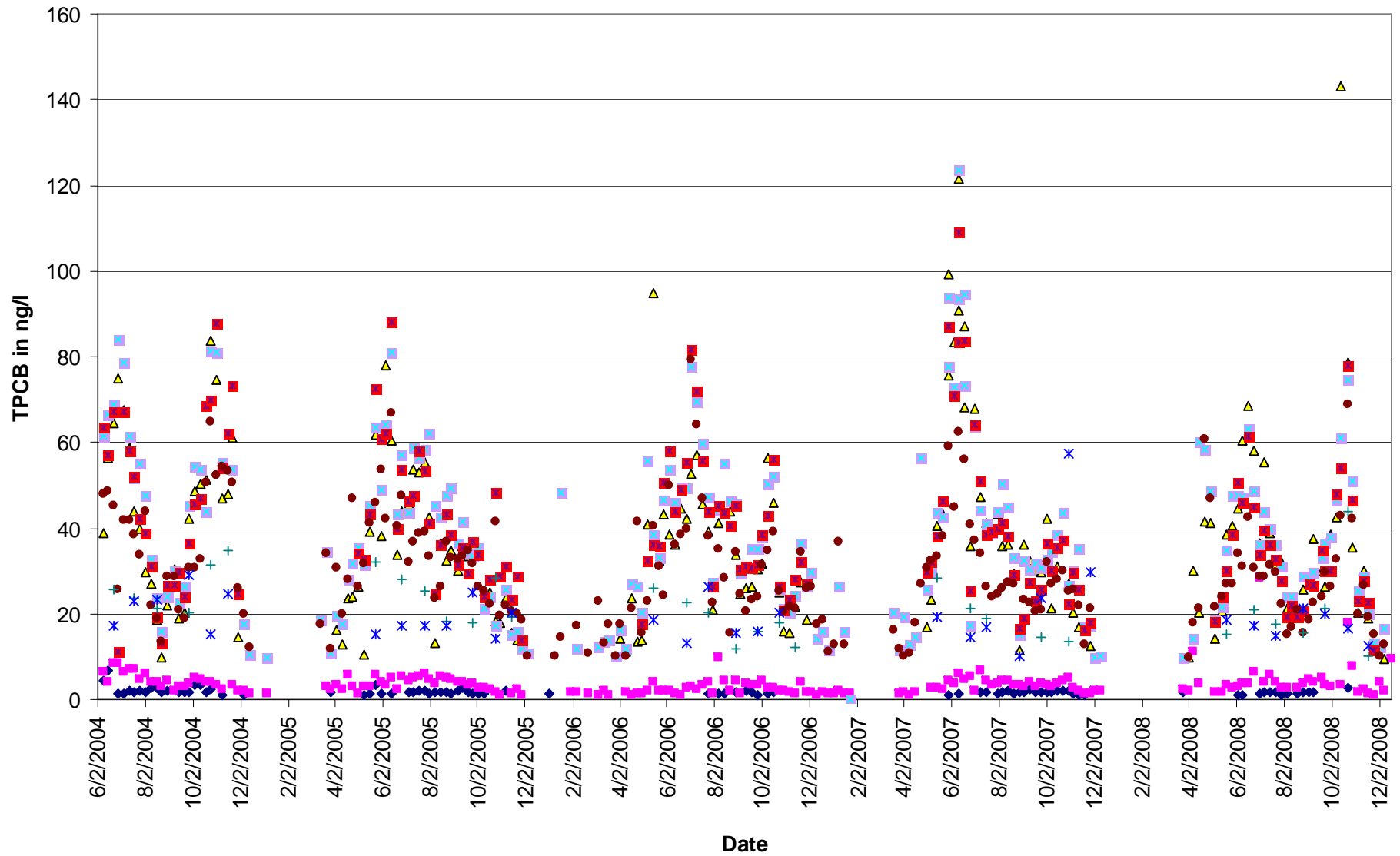
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GE BMP Surface Water Total PCB Data June 2004 to December 2008



- ◆ Bakers Falls RM 196.9
- Rogers Island RM 194.2
- ▲ Thompson Island RM 187.5
- Schuylerville RM 181.4
- Stillwater RM 168.4
- Waterford RM 156
- + Albany RM 145
- * Poughkeepsie RM 75

BMP Total PCB Concentration (Monthly) by Location 2008

