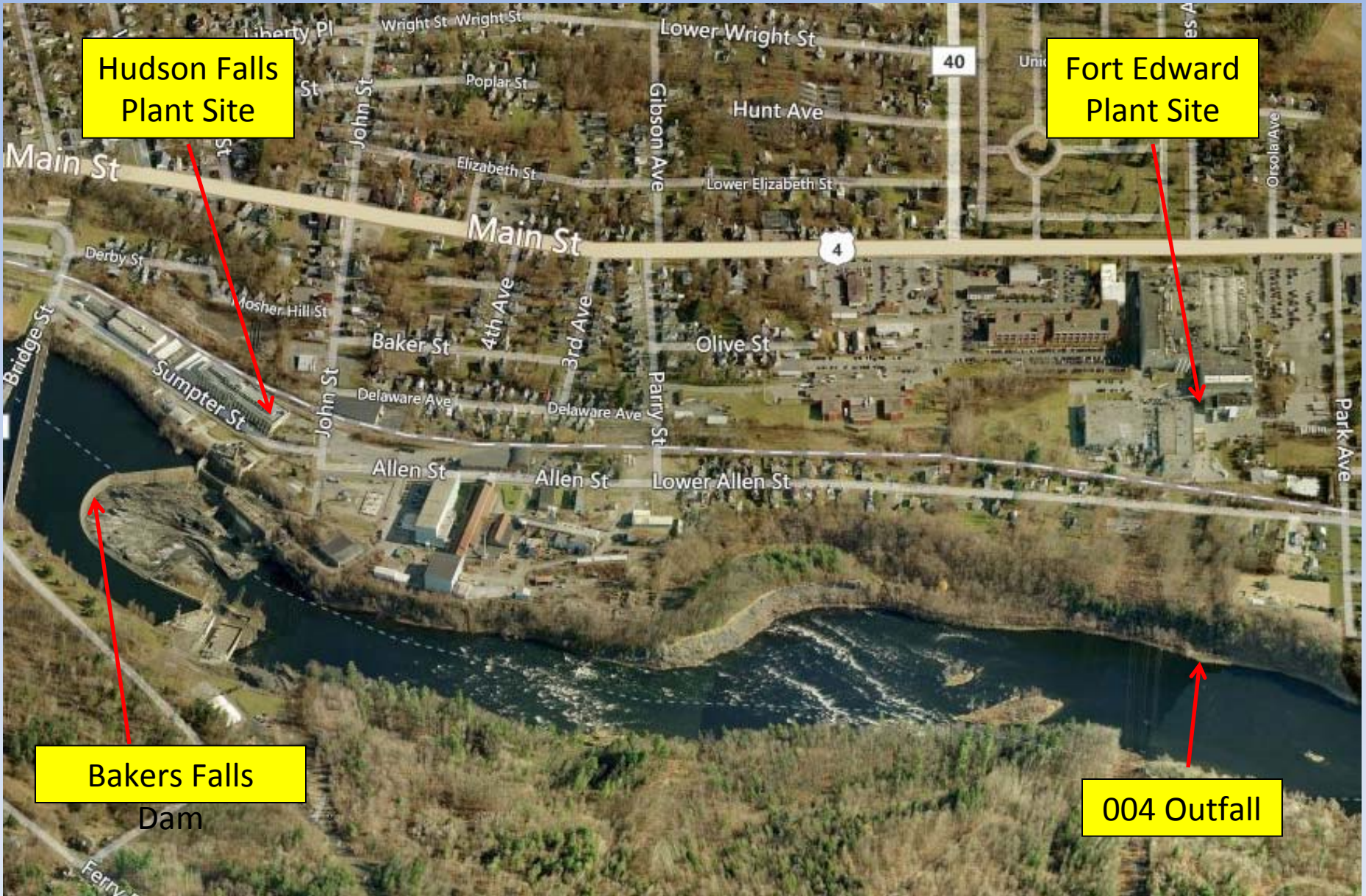


# ***Remedial Program Status Updates***

## **GE Plant Sites in Hudson Falls and Fort Edward**

Hudson River  
Community Advisory Group  
June 27, 2013

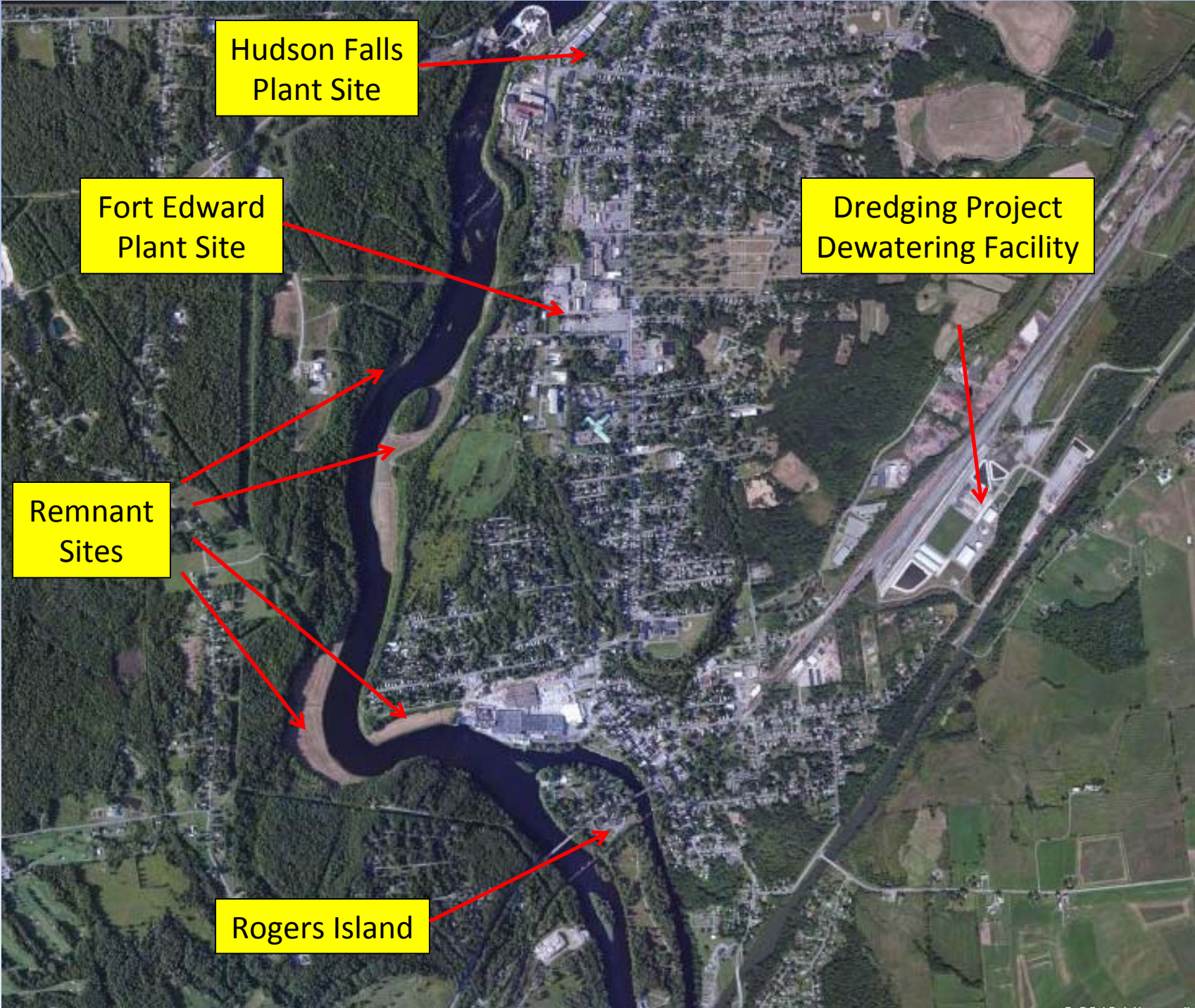


Hudson Falls  
Plant Site

Fort Edward  
Plant Site

Bakers Falls  
Dam

004 Outfall



Hudson Falls  
Plant Site

Fort Edward  
Plant Site

Remnant  
Sites

Rogers Island

Dredging Project  
Dewatering Facility

# GE Plant Sites – Brief Background

- PCBs were used by GE in capacitor production as a dielectric fluid starting in 1947 at Fort Edward and in 1952 at Hudson Falls.
- PCBs (Aroclors 1254, 1242, 1016) were used in an undiluted or "neat" form after on-site refining had been done to achieve a higher degree of purity.
- Wastewater containing PCBs was discharged directly to the Hudson River via outfalls at each Plant until 1977, when the use of PCBs was discontinued by GE at these locations.

# GE Plant Sites – Brief Background

- Contaminant releases to soil, bedrock, groundwater, and the Hudson River at both Plants are being addressed by State-lead Remedial Programs.
- Site-related contaminants include volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and PCBs.



# Response History – Fort Edward Plant

- 1977 – Direct untreated discharges to the Hudson River ceased and a new water treatment plant was constructed and operated.
- 1983 – Start of GE response actions under a series of Consent Orders issued by New York State.
- Record of Decision (ROD) documents were issued in 1989 and 2000 to address groundwater and soil contamination in the main manufacturing area, areas south of the Plant, and along the riverbank near the 004 outfall.

# Response History – Fort Edward Plant

- On-site recovery and treatment of groundwater from the overburden and bedrock at the site started in 1983 along with the direct recovery of PCB oil. These on-site groundwater and PCB oil recovery systems were in full scale operation by 1990.
- Soil removals were done in the railway off-loading area in 1990.
- Expansion/refinement of the on-site groundwater and PCB oil recovery systems were done 2002 to 2005.
- Soil vapor intrusion evaluation and mitigation in the area south of the Plant started in 2005 and continues.



# Remaining Work - Fort Edward Plant

- Completion of the Remedial Investigation (RI) for the outfall area bedrock – revised report received June 19 and under review; remedy selection likely over the winter of 2013-2014. (Scope of the remedy not yet determined).
- Continued operation of existing groundwater and PCB oil recovery systems at and south of the site.



# Response History – Hudson Falls Plant

- In 1977, direct discharges to the Hudson River ceased and wastewater was trucked to the Fort Edward Plant for treatment.
- Preliminary assessments were done in mid 1980s and a significant groundwater and PCB oil bedrock plume was discovered in the early 1990s.
- A series of Interim Remedial Measures were done by GE between 1993 and 1997 to address releases to the River and included the construction of the on-site wastewater treatment plant.

# Response History – Hudson Falls Plant

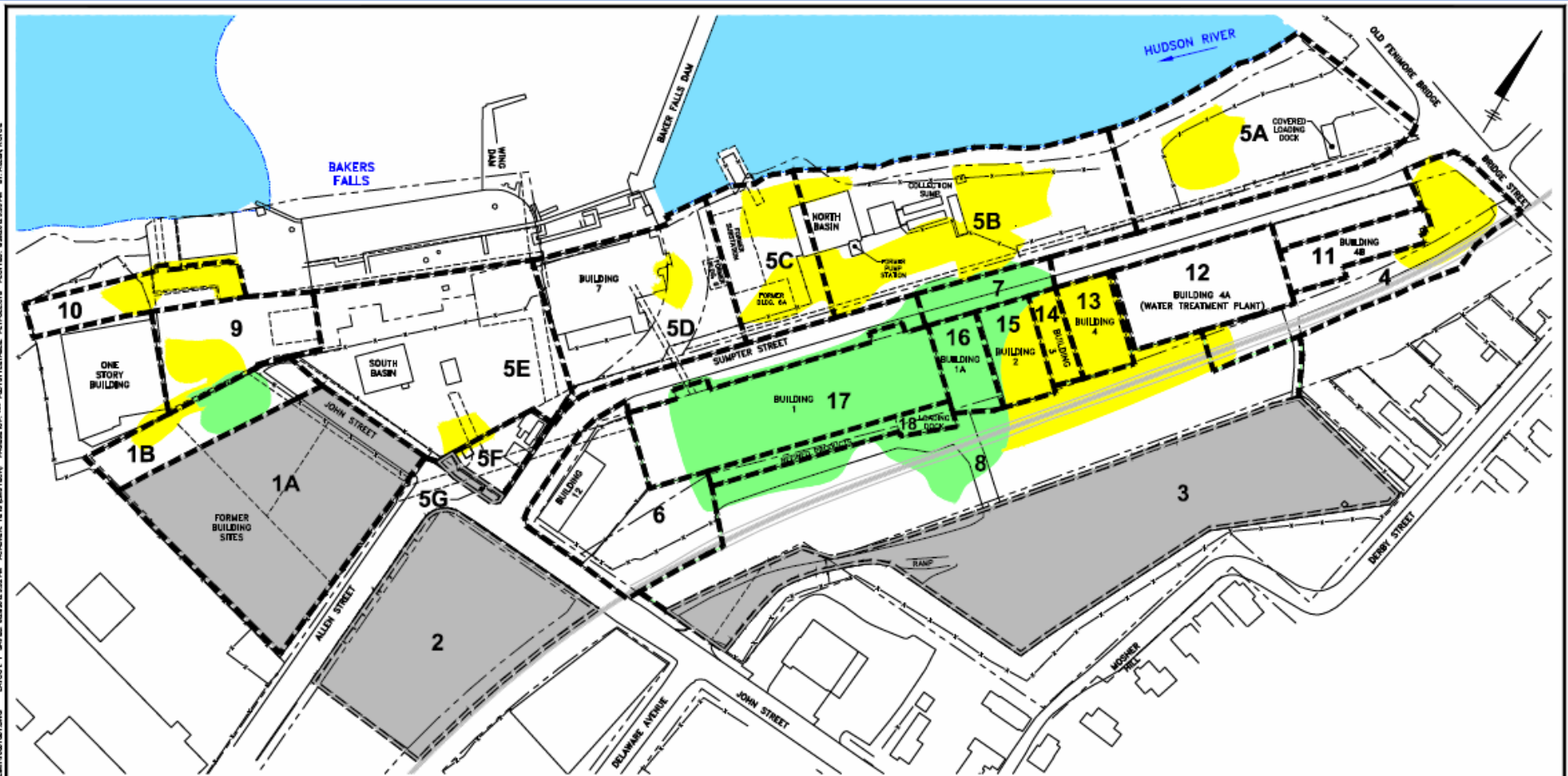
- A Record of Decision was issued in 2004 to address the soils and groundwater/PCB oil migration.
- The design and construction of the Tunnel Drain Collection System was done between 2005 and 2009 to address groundwater/PCB oil migration to the Hudson River, and included a significant expansion of the existing on-site wastewater treatment plant.

# Remaining Work – Hudson Falls Plant

- 2013 – 2014: Complete the final fitting of the site-wide groundwater/PCB oil recovery system (Phase 4 of the Tunnel Drain Collection System); possible relocation of the treatment plant.
- 2013 – 2015(?): Implement the soils remedy - currently developing technology assessments for the various areas at the plant. Most likely will have different technologies for different areas depending on PCB concentrations and the presence of other contaminants like VOCs.

# Soils Design Process – Hudson Falls

- Three step process remaining to complete soils design work (by geographic area at the site):
  - 1 - Technology Assessment Pre-Design Work Plan  
*evaluation of technologies, technology selection, and treatability studies*
  - 2 - Remedial Design Summary Report  
*results of treatability studies or other pre-design activities, and a schedule for completion*
  - 3 - Final Design Report  
*final plans and specifications*



**POTENTIAL SOIL REMEDIATION AREAS AND CONCEPTUAL APPROACH**

- EXCAVATION AND OFF-SITE DISPOSAL - Remedial approach based on existing site features, extent of impacted soils, and coordination/timing with overall site remedial program.
- SOIL TREATMENT - Feasibility of treatment, and treatment technology (if feasible) will be evaluated and will consider coordination/timing of overall site remedial program.
- SOIL REMEDIATION ESSENTIALLY COMPLETE

NOTE: COMPARTMENTS 11 AND 12 MAY REQUIRE ADDITIONAL SOIL CHARACTERIZATION.



GENERAL ELECTRIC COMPANY HUDSON FALLS, NEW YORK	
<b>CONCEPTUAL REMEDIATION PLAN - OVERBURDEN SOILS</b>	
<b>ARCADIS</b>	FIGURE <b>1</b>

DATE: 08/14/00  
 DRAWN: [unreadable]  
 PROJECT: [unreadable]

# Overall Impact of Plant Site Remediation on the River Project

- PCB concentrations measured downstream of the Plant Sites at Rogers Island continue to be at levels consistent with or lower than EPA's goals for upstream source control in the ROD (i.e. an average of less than 2 parts per trillion Tri-Plus PCBs).
- Measurements in 2013:
  - <0.943 nanograms/liter or ppt (April),
  - 1.31 ppt (May), and 1.55 ppt (June)



# For More Information

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