

A large, faint watermark of the United States Environmental Protection Agency (EPA) logo is centered in the background. The logo features a stylized flower with three leaves and a circular head, surrounded by the text "UNITED STATES ENVIRONMENTAL PROTECTION AGENCY".

# **Hudson River PCB Superfund Site Project Update**

Community Advisory Group Meeting

December 8, 2016

# Project Update



## Topics

- Floodplains (focus on ongoing sampling/work)
- Facility Demobilization (work near complete/next steps)
- Habitat Reconstruction (2016 construction)
  - Monitoring (separate presentation)
- Remedial Action Certification of Completion
  - Next steps and considerations
- Five-Year Review (update)
- Operation, Maintenance and Monitoring (OM&M)
  - 2016 sediment sampling update/considerations

# Floodplain Update



## Sampling

- Purpose – fill data gaps
- 2016 sampling ongoing (started October 25)
- Small diameter cores (to 12 inches – some deeper/shallower)
- Property access ongoing (GE lead with EPA follow up as needed)
- Approximately 900 locations targeted
- Alternate properties/locations sampled if no access
- Any locations not sampled will be deferred to spring 2017 for potential sampling (as needed)
- Sampling expected to continue for several weeks or until weather (snow) prevents access
- Flood mud sampling to continue

# Floodplain Update



## Remedial Investigation

- Comprehensive study - underway
- Once soil data are in:
  - Begin screening-level ecological risk assessment
    - Conservative first step of the assessment
    - Some details on approach to work out with GE
  - Begin screening-level human health risk assessments
    - Conservative first step of the assessment
    - Every property gets an assessment
- Surveys to better understand ecological and human health features of the floodplains ongoing

# Facility Demobilization/Restoration



# Demobilization Update



- Work near complete (expect to be complete in next several weeks)
  - EPA focus is to confirm any impacts (including from PCBs) are mitigated
  - On-River Facilities – early inspections completed
  - Processing Facility – early inspection completed
    - Few follow up items remaining
      - Cleaning of buildings and infrastructure
      - Small soil removal recently done
      - Removal of remaining equipment
  - Property transfer
    - Wharf (EPA) to NYSCC
    - Main property (GE lease with WCC)
    - Facility access road to ?

# Habitat Reconstruction



- Habitat remedial action construction work complete
- EPA in process of reviewing the remaining engineering submittals
- 6 Certification Units done in 2016
  - Subaquatic vegetation – 1.2 acres planted, 2.9 acres natural recolonization
  - River fringing wetlands – 6.4 acres
- Areas continued to be surveyed each season (fall)
- Response actions are completed as needed based on results of surveys
- Ongoing coordination with NYS
- Next presentation has additional details

# Remedial Action - Certification



- Construction activities near complete
- GE needs to comply with consent decree requirements
- Items remaining include:
  - Engineering documents
  - Demobilization and restoration
  - Site inspections
  - GE completion report (anticipated this month)
- Certification of Completion not anticipated before five-year review



# Five-Year Review (FYR)



## Update

- Physical construction is almost complete
- Project is in transition between Remedial Action and OM&M
- Ongoing analysis of data and sharing with FYR team
- Receiving input from team members
- Developing supporting technical information for report
- Considering analyses provided by others (NOAA, etc.)
- Providing opportunities for public input (workshops)
- EPA currently drafting report
- EPA coordinating with internal experts and headquarters

# Five-Year Review Meetings/Discussions



Month	Format	Topics Discussed
May 5	Public workshop	<ul style="list-style-type: none"> <li>• Overview of five-year review process</li> </ul>
June 22	Meeting	<ul style="list-style-type: none"> <li>• Team roles and responsibilities</li> <li>• Status of data and proposed data collection</li> </ul>
July 28	Conference call	<ul style="list-style-type: none"> <li>• Human health risk evaluation</li> <li>• Water, sediment, fish data sets</li> </ul>
August 17	Meeting	<ul style="list-style-type: none"> <li>• EPA's perspective on current data</li> </ul>
September 8	Webinar	<ul style="list-style-type: none"> <li>• Air monitoring</li> <li>• Impacts of implementation on recovery</li> </ul>
September 25	Meeting	<ul style="list-style-type: none"> <li>• NOAA perspective on current data</li> <li>• Discuss NYSDEC's questions</li> </ul>
September 21	Conference call	<ul style="list-style-type: none"> <li>• NYSDEC questions, continued</li> </ul>
October 13	Meeting	<ul style="list-style-type: none"> <li>• Sediment sampling scope of work</li> <li>• Water data</li> </ul>
October 13	Public workshop	<ul style="list-style-type: none"> <li>• Overview of progress to date</li> </ul>
October 18	Conference call	<ul style="list-style-type: none"> <li>• Sediment sampling approach</li> </ul>
November 9	Meeting	<ul style="list-style-type: none"> <li>• Institutional Controls</li> <li>• Model forecast and long-term projection considerations</li> </ul>
November 30	Public workshop	<ul style="list-style-type: none"> <li>• Overview of progress to date</li> </ul>

# FYR Schedule – 2016/2017



- December/January – continue to provide information to team and have conference calls (as needed)
- February – release report to public
- Several weeks after report release - FYR team meeting/public workshop
- February - March – public comment period
- April – EPA review and consider comments
- April 23<sup>rd</sup> – Five-Year Review Report issued

\*EPA considering requests for additional time to review report

# OM&M Sediment Sampling



- Sampling plan was designed to provide an unbiased estimate of surface sediment PCB concentrations in the Upper Hudson River
- Sampling occurred during November and December 2016
  - Sampling outside of dredge areas completed
  - Recently ended data collection due to weather/river conditions
- Samples inside dredge areas will be completed in spring 2017 - other data available to adequately represent inside dredge areas
- Results of fall 2016 samples expected in early 2017



# Long –Term Monitoring Considerations



- Important to monitor fish, water and sediment
- Sediment as the source is most challenging to measure
  - sediments can vary in close proximity to one another
- Water is a less complex indicator
  - provides information related to source release
- Fish is primary indicator
- For all three, time is a critical component to determine change
- Monitoring will be needed for the foreseeable future
- Sediment considerations
  - EPA expects that the sediment program will meet project needs
  - EPA will be responding the NYSDEC request for more sampling
- Summary table

# Summary of Sediment Sampling Related information by River Reach

RS	Reach	Approx RM (# of mi)	Points within Undredged areas	Points within Dredged areas	Total Points	Expected Relative Error in Average TPCB concentration (%)	Large Fish Stations/ Small Fish Stations	Notes
1	8	194.5 - 188.5 (6)	35	31	66	50	5/5	Water monitoring location RM 187.5
2	7	188.5 - 186.5 (2)	27	17	122	30	2/2	Land-locked area
	6	186.5 - 182.5 (4)	43	35			2/2	-
3	5	182.5 - 168.5 (14)	63	47	187	20	5/5	Water monitoring location RM 181.4
	4	168.5 - 166 (2.5)	6	5			0/0	Rocky river bottom
	3	166 - 163 (3)	10	8			0/0	Rocky river bottom
	2	163 - 159.5 (3.5)	17	3			0/0	Drained during winter
	1	159.5 - 154 (5.5)	25	3			0/0 Add fish station	Water monitoring location RM 156
<b>Grand Total</b>			<b>226</b>	<b>149</b>	<b>375</b>			Alb-Tr 145 Pou 75

# Questions?

