Hudson River PCB Superfund Site Project Update

Community Advisory Group Meeting
Thursday, November 8, 2018
Saratoga Town Hall

Hudson River PCB Superfund Site
Project Update

- Surface sediment data
  - Ongoing technical evaluation and collaboration with NYSDEC on GE2016/NYSDEC2017
- Second Five-Year Review
- Certification of the Remedial Action
- Long-term monitoring (fish, sediment, water, caps and habitat)
- Habitat monitoring – ongoing discussions with NYSDEC
- Lower River – data/information collection and supplemental studies
- Floodplain - comprehensive study – ongoing activities

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Surface Sediment Evaluation

- Two data sets used (inside and outside dredge areas)
  - GE successfully collected 215 samples in fall 2016
    - Program targeted 450 samples
    - Detect an approximate 5 percent annual change in 10-year time period (sample every 5 years)
    - Long-term monitoring
  - NYSDEC successfully collected 1,162 samples in summer 2017
    - Program targeted 1,673 samples
    - Improve spatial and temporal variability
- Randomized, unbiased sampling design
- EPA/DEC continuing discussion
  - Goal is to reach common understanding of data
  - Joint findings and conclusions

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Surface Sediment Evaluation

Considerations include:

- Assess the comparability of the two data sets
- Identify potential “hot spots”
  - Determine if dredging left behind substantive areas in excess of the ROD surface criteria
- Characterize - entire Upper Hudson, river section and reach (pool by pool)
  - Consider recoverable sediment and area weighted average
  - Consider Tri+ and Total PCBs
- Analytical methods aroclor and congener
- Examine pace of sediment recovery

Five-Year Review and Certification

- Five-Year Review Report
  - Draft report released June 1, 2017
  - Comprehensive report (covers 5-year period)
  - More than 2,000 comments received during comment period
  - Relies on data collected up to end of 2016 - surface sediment data considered
  - EPA continuing to consider comments and develop responses
  - Protectiveness determination under consideration
- Remedial Action Completion Report
  - Dated December 2016
  - EPA continuing to consider comments


PROPOSED SECOND FIVE-YEAR REVIEW REPORT FOR
HUDSON RIVER PCBs SUPERFUND SITE

Prepared by

U.S. Environmental Protection Agency
Region 2
New York, NY

Walter E. Mugdan
Acting Deputy Regional Administrator

May 31, 2017
Date

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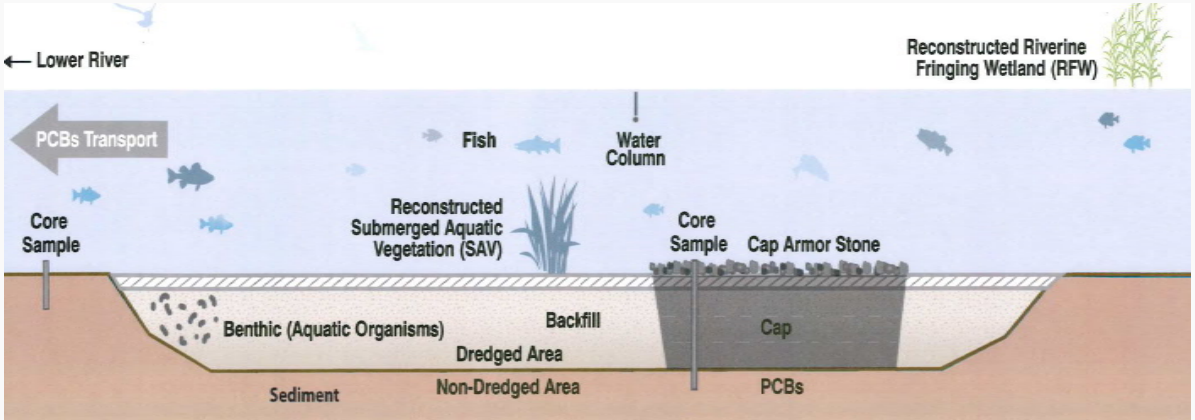
Long- term Monitoring

- Cleanup is two parts: dredging and natural recovery
- Long-term monitoring is very important to assess recovery - includes:
  - Fish, sediment and water
  - Caps – limited capping
  - Habitat – including restoration
- Gathering data over time to determine recovery progress
- Establishing scopes of work and work plans
- Revising quality assurance plans as needed



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Fish Monitoring

- Work plan is under development (ongoing discussions with NYSDEC and GE)
- Annual fish monitoring continues

- Supplemental Fish Monitoring Program being discussed with GE and NYSDEC
- EPA working with NYSDEC to finalize fish processing and analytical procedure revisions
- 2017 fish data being reviewed by EPA and NYSDEC
  - Laboratory location change considerations
- 2018 spring and fall fish collection completed
- Fish to be sampled from Reaches 1-4 spring 2019
- NYS collects additional fish in upper and lower river

Water Monitoring

- Work plan is under development (ongoing discussions with NYSDEC and GE) – baseline/off-season monitoring continues
- Three locations sampled weekly (Thompson Island, Schuylerville, Waterford)
- Other locations monthly (Bakers Falls, Lower Hudson River)
- High flow sampling (15,000 cubic feet per second at Fort Edward and 22,500 at Waterford) – multiple events sampled in 2018
- Sampling from bridges and by boat
- Samples analyzed for
  - Total suspended solids
  - PCBs using congener methods

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Cap Monitoring

- Work Plan is established
  - Phase 1 & 2 cap surveys (bathymetry) underway this year (2018)
    - Next Phase 2 survey 2023, and then every 10 years
    - Next Phase 1 survey 2028 and 2038
  - Additional surveys after flood events
  - If cap disturbance – evaluation required
    - Repair as needed

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Habitat Monitoring

Remedy includes monitoring the restoration of aquatic vegetation (river fringing and sub-aquatic)

- Currently in Benchmark Evaluation Phase
  - Typically five years, including year of planting
    (Phase 1 areas restored in 2010 likely to transition to success criteria in next few years)
  - Observation of percent cover and species composition
  - Purpose: to monitor progress of initial plantings and natural recolonization
  - Comparison of individual areas to reference areas

- Success Criteria Phase
  - Quantitative, statistically-based evaluation
  - Habitat-specific
  - Comparison of larger areas to reference areas not CU-specific like Benchmarks

Lower Hudson River

- EPA is gathering existing data, studies and historical information regarding the lower river
  - Close coordination with NY State regarding available data
  - Met with Hudson River Foundation to discuss available data
- Scope of work of supplemental studies being discussed
  - Future meeting planned with NYSDEC
- Fish and water collection continues
- Other discussions and interactions anticipated

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Floodplains Comprehensive Study

- Data gap sampling continues
  - Standing Water Area Sampling
    - Conducted October 15 – 18, 2018
    - Collected 10 surface water samples, 21 sediment samples from 11 areas on six properties

  - 2018 Soil Sampling
    - Began October 22, 2018 - ongoing
    - Currently 81 soil cores collected from 44 properties
    - Expected to collect soil cores from 70 properties
  - Short-Term Removal Actions
    - Conducted inspections and cover repairs on two properties
  - Flood mud samples collected in May 2018

Preliminary Risk Assessment

- Preliminary assessments have begun – data collection continues
- Screening Level Ecological Risk Assessment
  - Draft report recently submitted to EPA
  - Identifies representative species that may be impacted by PCBs
  - Currently under EPA and other agency review
- Human Health Screening Level Assessment
  - Draft Report recently submitted to EPA
  - Identifies properties needing further evaluation for risk to human health
  - Currently under EPA and other agency review

Old Champlain Canal – Schuylerville Park

- EPA continues to coordinate closely with Village and Town of Schuylerville as well as NYSDEC, NYSDOH, NYSCC and GE
- Sediment samples have previously been collected from Old Champlain Canal by NYSDEC and GE
- Soil samples and flood mud samples collected from Schuylerville Park after flooding by Old Champlain Canal
  - Park is safe for use
  - EPA continues coordination with all parties related to the development of work plan for additional sampling of the Old Champlain Canal
    - Includes analysis for characterization of sediments planned for removal from the canal

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Questions?

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