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FISC WILLIAMSBURG
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CONSENSUS STATEMENT REGARDING WORK PLAN FOR SITE SCREENING AREA 25
(SSA 25) FISC WILLIAMSBURG VA
09/26/2005
BAKER ENVIRONMENTAL

WPNSTA YORKTOWN/CHEATHAM ANNEX

Date: September 26, 2005

Site Description:

SSA 25, the Wetlands Down-Gradient of Beaver Pond, is approximately 5.6 acres in size and is located between two impounded portions of Ballard Creek: a natural beaver dam (Impoundment No. 1) which forms the eastern edge of Beaver Pond and a second impoundment approximately 750 feet down-gradient, whose history of construction is unclear. Ballard Creek is hydraulically connected for its entire length. Water flows from the erosive, up-gradient areas down to Beaver Pond, then over a low area along the northern edge of the beaver dam into the down-gradient wetlands, and then through a break in the southern edge of the second impoundment towards the York River. The second impoundment serves as a barrier to tidal influences from the York River. The centerline of Ballard Creek, which meanders throughout the area, marks the property boundary between WPNSTA Yorktown and the Colonial National Historic Park. Based on its location on Ballard Creek between two impoundments, the wetlands represent a low energy, bottomland depositional habitat.

Consensus Topic:

Team approval of Draft Work Plan for SSA 25 Mercury Investigation

Consensus Statement:

The Team agrees that the Work Plan for the SSA 25 investigation can be finalized and that field work can be scheduled with the understanding that:

1. The Team recognizes additional sampling may be necessary (a "Phase II") if the extent of contamination is not satisfactorily determined during the proposed sampling effort.
2. Based on the eco-subgroup meeting minutes from the August 8, 2005 call, the Team understands that the eco-subgroup agreed to the overall strategy of the work plan. In addition, the Team agrees that the work plan does adequately address Steps 3b and 4 of the Navy Ecological Risk Assessment Tiered Approach. Step 3b defines the problem formulation with reference to toxicity evaluation, assessment endpoints, conceptual model, and risk hypothesis, as needed. Step 4 defines the study design and the data quality objectives with reference to lines of evidence, measurement endpoints, and work plan and sampling and analysis plan, as necessary. The Team recognizes that the Steps 1 and 2 screening-level risk assessment and Step 3a refinement were not accomplished for SSA 25 as the levels of mercury contamination between the impoundments invalidated the need for evaluation of an exit criterion.
3. The on-going Site 12 long-term monitoring (LTM) program includes data with mercury detections in sediment that exceed the USEPA's sediment screening value of 0.15 mg/kg. However, the Team recognizes that existing data suggest that STP No. 2 likely is the primary source of mercury detected in the impoundment area, as evidenced by:

- The highest detected mercury concentration of 5.9 mg/kg was found at 12SD39, which is located down-stream of the first impoundment and below STP No. 2 (and within the planned study area for the SSA 25 investigation).
- The second highest mercury concentration of 0.72 mg/kg was located at 12SD38, which is immediately up-stream of the first impoundment.
- In Year 4 (2001) of the Site 12 LTM Program, three additional sediment samples were taken in the vicinity of 12SD39, with resulting mercury concentrations ranging from 2.8 mg/kg to 4.4 mg/kg.
- In August 2003, 39 surface and 12 subsurface sediment samples were collected along transects around the former STP No. 2 discharge pipe (and in the vicinity of 12SD39) to capture the nature and extent of mercury contamination in Ballard Creek, down-gradient of Beaver Pond. Mercury was detected in all but one of the samples (one sample had blank contamination from the laboratory) in the following concentrations: 0.031J – 15.3 mg/kg (surface sediment) and 0.37 – 19.5 mg/kg (subsurface sediment).
- A comparison of the highest mercury concentration in the Site 12 LTM data from sediment samples collected up-stream of the impoundment (0.72 mg/kg) to the maximum Year 4 and August 2003 mercury data collected down-stream of the first impoundment (19.5 mg/kg) shows an order of magnitude increase in mercury concentrations in the impoundment area sediment near the STP No. 2 discharge pipe.

This data, as well as historical information related to source releases, indicates that STP No. 2 is the likely primary source for the study area.

4. The Team recognizes that this work plan is a starting point and that the major focus of the work plan is to address the known release of mercury from STP No. 2.
5. The Team is dealing with time constraints and access restrictions that require an expeditious start of study work, keeping in mind that this is a work plan and not a remedial investigation.

Team Members:

NAME	ORGANIZATION	Signature & Date
CORE MEMBERS		
Greyson Franklin	USEPA Region III	<i>Greyson Franklin 9/27/05</i>
Steve Mihalko	VDEQ	<i>Steve Mihalko 9-27-05</i>
Linda Cole	NAVFAC Atlantic	<i>Linda Cole 9/27/05</i>
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