Pompton Lake Acid Brook Delta Corrective Measure Implementation Presentation

Pompton Lakes Environmental Community Advisory Group Meeting

June 1, 2011

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DuPont Corporate Remediation Group

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Objectives of Presentation:

To provide a summary and technical rationale for project elements contained within the Corrective Measures Implementation Workplan (CMI WP) developed for the Pompton Lake Acid Brook Delta Area Remediation.

Obtain feedback from the Pompton Lakes Environmental Community Advisory Group sponsored by the USEPA on the proposed CMI Workplan.

What is the Purpose of the CMI WP?

The purpose of the Corrective Measures Implementation Program as stated in the *USEPA Final RCRA Corrective Action Plan, OSWER Directive 9902.3-2A, May 1994* is to design, construct, operate, and monitor the performance of the selected corrective measure. The Permittee/Respondent will furnish all personnel, materials and services necessary to implement the corrective measures program.

A CMI work plan typically provides an overall description of how corrective measure will be implemented. It could also contain specific details in the form of engineering drawings, bench scale test data, and operating procedures.

Status of the CMI Program for this project?

A draft CMI WP was submitted in June 2010 and updated in Dec 2010.

This document presents the implementation approach developed by a team of national and local technical experts for the remediation of soil and sediments and restoration activities to be completed within the Acid Brook Delta area.

Detailed process related information pertaining to soil/sediment removal techniques, sediment dewatering applications, and material handling/transportation will be developed by the remedial contractor selected to complete the remediation. This information will be added to the CMI WP in the form of a Project Operations Plan.

The current timeline for the final CMI WP submittal is September 2011

Who has been assisting DuPont develop the CMI WP?

Dr. Mike Palermo

- **36 yrs with U.S. Army Corps of Engineers**
- **Engineer Research & Development Center, Waterways Experimental Station where he managed & conducted research & applied studies for USACE, USEPA, DOJ, NOAA, US Navy and others**
- **Numerous publications & Lead Author of USACE, EPA & International Guidance Documents**
- **USACE/USEPA 2008 Technical Guidelines for Environmental Dredging of Contaminated Sediments**

Arcadis – Sponsor Bi-yearly International Dredging Conference

Parsons Engineering

URS

Dredging Contractors

- **Sevenson; Clean Earth**
- **Hudson River; NY/NJ Harbor;**

What are the remediation elements proposed in the CMI WP?

The CMI is comprised of several basic elements:

- **Work area containment**
- **Sediment/soil removal**
- **Material handling/solidification**
- **Restoration.**

Remediation Elements Proposed in the CMI WP

Element	Options/Considerations	Proposed Element/Rationale
Work Area containment	Silt Curtain – low impact fast installation, reduces potential for turbidity migration, Rigid Barrier- longer noisy installation, solid wall, will extend above water line	Rigid Barrier provides maximum isolation and minimizes potential for transport out side work area
Soil removal	Excavation - provides for safe and fast removal of material	Direct excavation
Sediment removal	Dry excavation – minimize material solidification requirement, will expose highly organic materials likely to generate odor issues, need to remove and manage large quantities of groundwater, high potential to mobilize off-site plume through groundwater pumping. Dredging- minimizes odor potential, process will not require long term groundwater dewatering, will need to solidify sediment for transport	Dredging was selected due to minimal groundwater dewatering and potential to mobilize off-site plume related to dry excavation

Remediation Elements Proposed in the CMI WP

Material handling	**<u>Solidification</u> – choice of mixing with additives such as polymers/cement or physical such as plate/frame press. Additives normally increase the amount of material to be handled which will increase the number of loads for transportation.** **<u>Transportation</u> – trucks will be loaded at shoreline (within rotary park) for placement in a licensed facility). Routes for trucks will need to be determined.**	**Goal is to select contractor shortly**
Restoration	**<u>Regulatory Required</u>** **Ecolayer** **SAV replacement** **Wetland** **Upland** **Private Property** **<u>Recommended</u>** **Recreational aspects** **Educational** **Amenities**	**Will replace ecologically as required, shift SAV to Rotary Park, and repair private property/structures to pre-remediation conditions** **Added walking trails near water, educational pavilion near school, improved walkways along lake, added canoe/kayak storage near boat ramp**

Additional elements in the CMI WP

Final Material Placement

DuPont listened to community feedback on the potential for reuse of the material. While the material is suitable for reuse, we have made arrangement for placement of the material in an off-site licensed facility.

Operations Monitoring

The goal of this element is to protect people and the environment. The following various types of monitoring will be conducted to measure performance aspects of the program:

- **Material Removal QA/QC – contractor and third party verification**
- **Surface water – quality in lake during material removal**
- **Vibration – levels during installation of rigid barrier and material handling**
- **Air – quality and aesthetics during material removal and handling operations**
- **Noise – levels during material removal and handling operations**
- **Traffic- levels during material handling operations**

Additional elements in the CMI WP

Communications

The goal of this element is to provide timely communications to the community regarding the implementation of the CMI WP. The following activities are planned to ensure we are meeting our goal:

- **Install a community observation point in the park of the work areas with informational brochures and posters on the various project elements.**
- **Conduct additional information sessions before and during the remediation**
- **Provide updates to residents using our website and listserve email service**

Schedule

Based on information from the contractors providing proposals for implementing the CMI WP, it appears that the soil/sediment removal elements of the project as currently proposed can be completed in 12-18 months.

Questions regarding Pompton Lake Acid Brook Delta CMI Workplan?


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