DuPont Chambers Works FUSRAP Site
Deepwater, NJ

RAB Meeting – April 30, 2009

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DuPont Chambers Works FUSRAP Site

***Purpose:** Overview of the project and discuss our path(s) forward.*

Agenda

Introductions	*All*
FUSRAP Project Overview	*George Bock, USACE*
FUSRAP Investigation Overview	*Carl Young, Cabrera*
Feasibility Study	*Jay Johnson, Cabrera*
Schedule	*George Bock, USACE*
Upcoming Meeting Schedule	*Ann Johnson, Cabrera*

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RAB Meeting – FUSRAP Project Overview

- *Manhattan Engineer District (MED) Background*
- *Program History*
- *DuPont Chambers Works FUSRAP Project*
- *Program/Project Challenges*
- *Site Map*

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How and why FUSRAP was established

- ***During the 1940s, 1950s, and 1960s, work was performed at sites throughout the United States as part of the nation's early atomic energy program. Some sites' activities can be traced back as far as World War II and the Manhattan Engineer District (MED).***

- ***Most sites that became contaminated during the early atomic energy program were cleaned up under the guidelines in effect at the time. In most cases those cleanup guidelines were not as strict as today's and trace amounts of radioactive materials remain at some of the sites.***

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Site History

- *In support of MED activities, DuPont worked on developing a process for converting uranium oxide to produce uranium tetra-fluoride and small quantities of uranium metal.*

- *No enrichment or depletion occurred at the site.*

Processing activities included the following:

- *Brown Oxide process (in Bldg 708 – AOC 2)*
- *Recovery process (in Bldg 845 – AOC 1)*
- *Green salt process (in Bldg 708 – AOC 2)*
- *Hexafluoride process (in Bldg J-26 Area, AOC 5)*
- *Metal process (in Bldg 708 – AOC 2)*

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Site History Cont'd

- *1942 – Operations involving uranium began at this site.*
- *1946 – All MED activities transferred to the Atomic Energy Commission (AEC).*
- *Late 1947 – DuPont continued research for the AEC.*
- *1948-49 – AEC conducted radiological surveys and decontamination of building surfaces.*
- *1949-50 - AEC released buildings and sites back to DuPont based on then-existing criteria.*
- *In 1974 DOE initiated the FUSRAP Program.*
- *In 1997 - FUSRAP Program was transferred to the US Army Corps of Engineers.*

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Objectives of this Remedial Investigation

- *Define the nature and extent of Manhattan Engineer District (MED) - related radiological contamination in each AOC or OU.*
- *Obtain the necessary data for the risk evaluation and conduct baseline risk assessment.*
- *Refine site conceptual model, including potential pathways and receptors for human health and ecological risk evaluation.*
- *If necessary, design the appropriate remedial actions for an AOC or OU.*

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Challenges

- *Active / Operating Industrial Site:*
  - *Health and safety issues*
  - *Other on-site contaminants*
  - *Rich industrial history*
- *Coordination with Regulators*
- *Not an NPL site*
- *Multiple environmental programs at Chambers Works*

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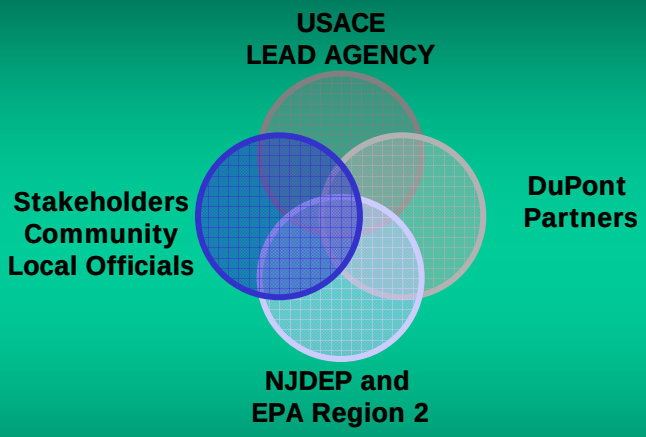

USACE follows the administrative, procedural, and regulatory provisions of CERCLA and the NCP to guide the cleanup at Chambers Works

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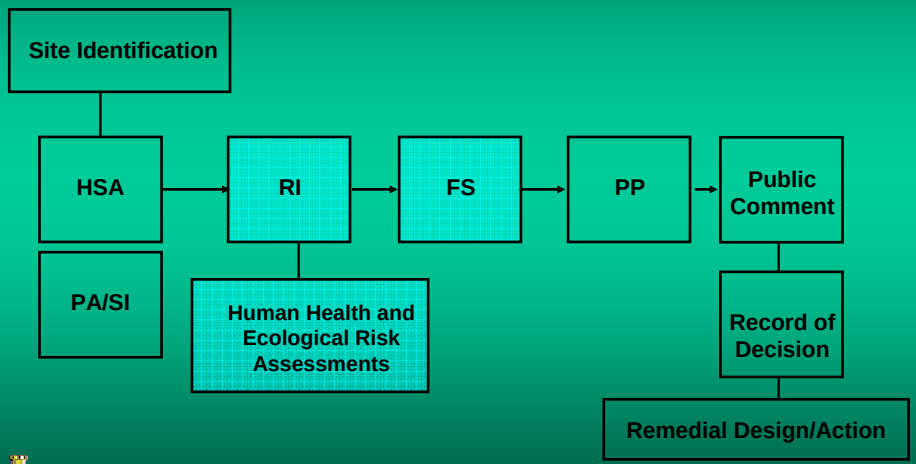
Environmental Cleanup Process



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Our Site

Three Operable Units

Six Areas of Concern

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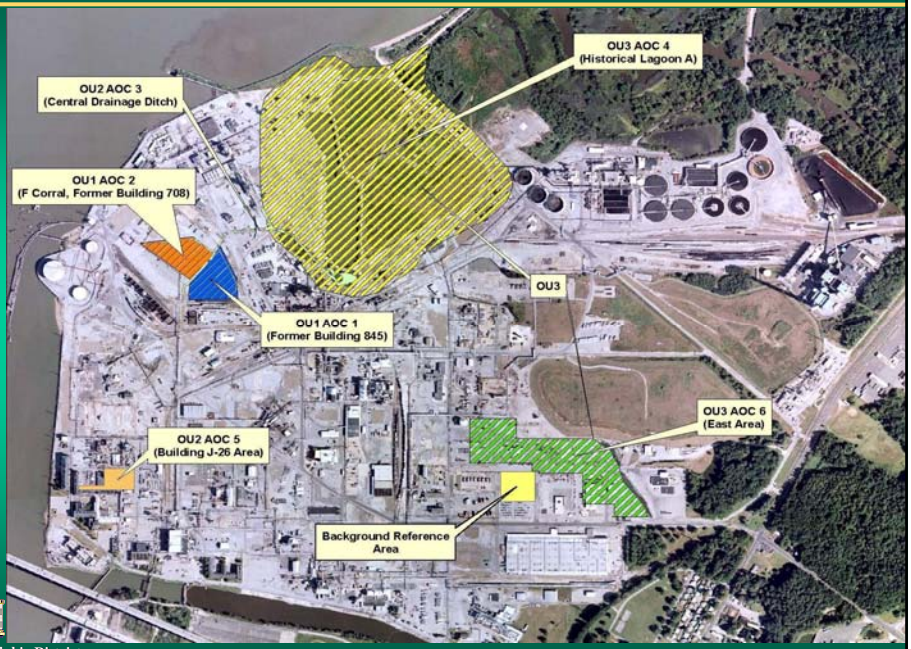

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Where we've been

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Accomplishments and Highlights

Fiscal Year (FY) 1998

- *Sept 1998 - Completed DOE's ongoing action: Removed / disposed drums of waste and PPE remaining in Building 845.*

FY 1999 / 2000

- *Oct/Nov 1999 – Corps removed structural steel from Building 845. First FUSRAP Emergency Response Removal Action.*
- *First Public and RAB Meetings.*

FY 2001 - 2002

- *Completed our first Intrusive Sampling Effort: Operable Unit #1 (Building 845 and F-Corral Areas of Concern).*

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Accomplishments and Highlights

FY 2003 and 2004

- *Completed Intrusive Sampling Effort of OU #2.*
- *Completed CPT Field Investigation Screening Effort of OU #3.*
- *Completed Groundwater Well Installation in OU #1 and #2.*

FY 2005 / 2006

- *Completed the Groundwater Well Installation throughout the site..*
- *Completed the Sampling of Operable Unit #3.*

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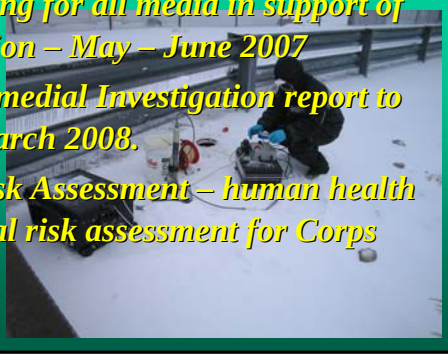
Accomplishments and Highlights

FY 2007 / 2008

- *Performed groundwater sampling - Winter and Spring 2007*
  - *Sampled over 40 wells, including existing DuPont wells*
  - *Uranium found in the "A" aquifer in OU #3, (AOC 4)*
  - *Demonstrated no movement of uranium in groundwater*
- *Conducted additional sampling for all media in support of RI and BRA report preparation – May – June 2007*
- *Submitted Draft Sitewide Remedial Investigation report to Corps Team for Review - March 2008.*
- *Submitted Draft Baseline Risk Assessment – human health and screening level ecological risk assessment for Corps review – June 08.)*



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Accomplishments and Goals

FY 2009 / 2010

- *Complete the Remedial Investigation (RI) and Risk Assessment (RA) Reports – April / May 2009.*
- *Began Draft Feasibility Study (FS) Report Review – May 2009.*
- *Corps TPP in May 2009.*
- *Regulator Review of RI and RA to begin May 2009.*
  - *Regulator meetings in May, June and July 2009 to discuss RI and RA Reports.*
  - *Comment incorporation to be completed in July and August 2009.*

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Schedule

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FY09- Document Review and Revision

FY08 Program Priorities
Internal Corps
Remedial Investigation/Risk Assessment Review

FY09 Program Priorities
NJDEP and EPA
Remedial Investigation/Risk Assessment Review

FY09 Program Priorities
Internal Corps
Feasibility Study/Proposed Plan Review

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Initial Assessments and Site Inspections	Site Characterization	Human Health/ECO Risk Determination	Analysis of Cleanup Alternatives	Proposed Cleanup Action
HSA	RI	BRA	FS	PP

CERCLA Cleanup Process

- USACE responsible and lead agency
- NJDEP and EPA review remedial action documents
- Public provides input and reviews USACE plans and actions

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Technical Planning Meeting

APRIL 2008

Technical discussions

- **Results of RI**
- **Preliminary DCGLs**
- **Remedial Technologies**
- **Issue Resolution**

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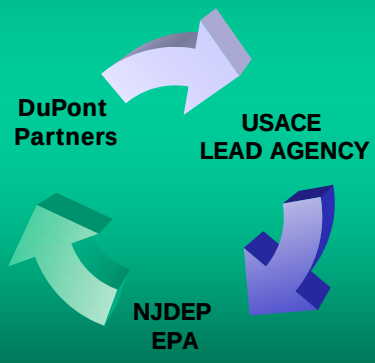
Partnering Meetings

FY 2009

With NJDEP, EPA, and DuPont

- Facilitate review of RI/BRA
- Technical discussions
- Effective communication
- Schedule
- Issue identification/ resolution



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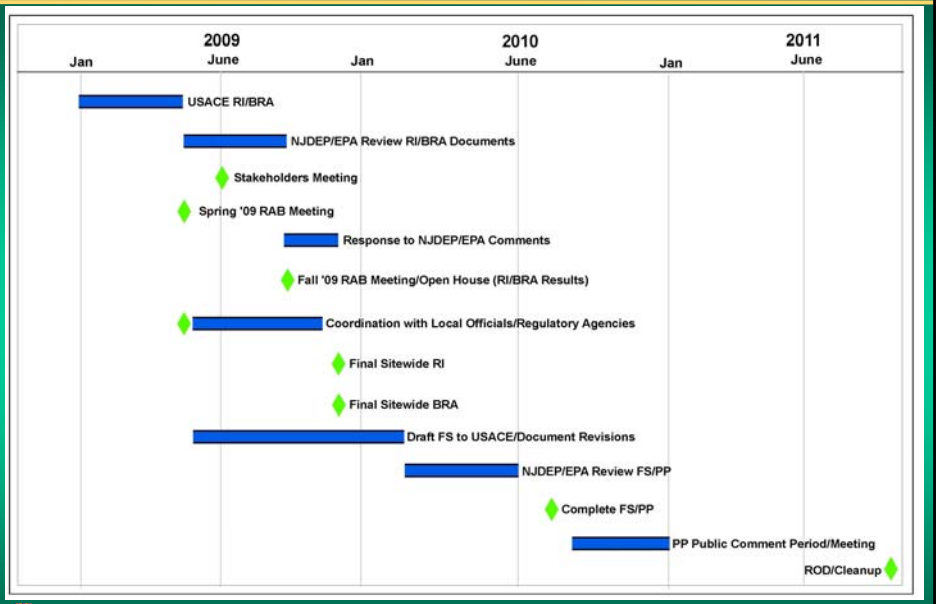

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Big Picture Schedule

FY 09 — ***Draft Remedial Investigation (RI) Report for regulatory agency review (Fall 2008)***

FY 09 (summer 2009) — ***Final RI Report***
Draft Feasibility (FS) Report

FY 10 – FY 11 — ***Final FS Report / Proposed Plan***
Record of Decision

FY 12 — ***Remediation (possible removal)***

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DOE Information

Occupational Illness Compensation Program
1-866-888-3322

http://www.whitehouse.gov/omb/expectmore/detail/10009004.2007.html

http://www.energy.gov/index.htm

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Public Web Site

http://fusrap.eaest.com

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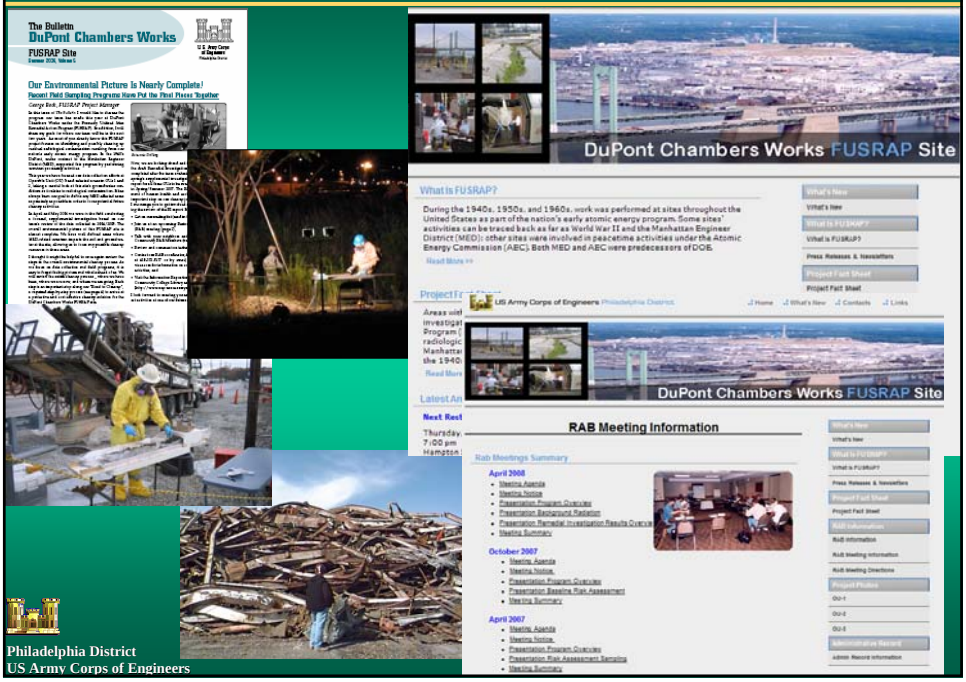

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Questions

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