

Public Information Meeting

Former Raritan Arsenal

Edison, New Jersey

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US Army Corps of Engineers
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Agenda

- Public Involvement Plan
- Restoration Advisory Board
- Operable (Decision) units
 - ▶ Site-wide Groundwater / Indoor Air
 - Groundwater Long Term Monitoring
 - Groundwater / Indoor Air / Vapor Intrusion Feasibility Study
 - Indoor Air / Vapor Mitigation Systems
 - ▶ Middlesex County College property
 - ▶ Thomas Edison Park property
 - ▶ Commercial / Industrial Area
 - Area 5
 - ▶ USEPA / GSA property
 - Area 18E – Soil removal actions
 - ▶ Undeveloped Wetlands Area
- Site-wide Remedial Investigation / Feasibility Study
- Fiscal Year 2012* Milestones
- Fiscal Year 2013* Future Planned Activities
- Funding

* FY 2012: 10/1/2011 – 9/30/2012

* FY 2013: 10/1/2012 – 9/30/2013



What is a Public Involvement Plan?



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Goals and Objectives of a Public Involvement Plan

- Community participation
 - ▶ Provide site information and describe cleanup process;
 - ▶ Determine community's knowledge of the site;
 - ▶ Understand and respond to community concerns; and
 - ▶ Provide formal and informal opportunities to comment on the cleanup process



Components of a Public Involvement Plan

- Site Information
 - ▶ Capsule history of investigations
 - ▶ Status of sites
- Community profile
 - ▶ Including any environmental justice communities
- Identify stakeholders
 - ▶ With an interest in the cleanup
- Determine their information needs and questions
 - ▶ Through community interviews
- Plan public involvement activities to address those needs



Stakeholders for the Public Involvement Plan



Community Interviews for Public Involvement Plan

- Mailed questionnaire week of April 16th
 - ▶ Over 150 stakeholders
- Conducted interviews week of April 23-27
 - ▶ Goal: speak with 1-2 people from each sub-group of stakeholders
- Other interested people are invited to send in written answers to questions
- Results will be summarized and used to prepare Public Involvement Plan
 - ▶ All individual responses are confidential



What is a Restoration Advisory Board?



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What is a Restoration Advisory Board (RAB)?

- Is made up of representatives from the local community AND government agencies
 - ▶ All members are equal
- Is NOT a decision-making or consensus body
 - ▶ Members provide individual advice on environmental restoration issues to government decision makers
- Addresses ONLY environmental cleanup issues
 - ▶ RAB support funding comes from USACE environmental restoration account



Purpose of the RAB

- Act as a forum for USACE, regulatory agencies, and the community to discuss and exchange information about cleanup
 - ▶ Complements other community involvement initiatives
- Offer members and the community the opportunity to
 - ▶ Share their questions, concerns, and ideas with agencies involved in the cleanup
 - ▶ Participate throughout the cleanup process
 - ▶ Provide input to decision makers



Mandatory Formation of a RAB

- The installation is closing and transferring property to the community
- When at least 50 citizens have petitioned for a RAB
- When federal, state, or local government requests formation of a RAB
- When the Project Delivery Team (PDT) determines the need for a RAB



Determining the need for a RAB

- The USACE District Engineer determines when there is both ***sufficient*** and ***sustained*** community interest to establish a RAB
 - ▶ Various community involvement techniques are used to identify and solicit interest in a RAB
- If the community does not express interest in a RAB
 - ▶ Document efforts taken to solicit interest , results, and plans for future efforts in the Public Involvement Plan and Information Repository
 - ▶ Monitor community interest at least every 2 years
 - ▶ Continue other community involvement activities



How are RAB Members Selected?

- Member selection

- ▶ Community members are nominated by a selection panel
 - Represents the diverse interests of the community
 - Panel should not become RAB members
- ▶ Government members are selected by agencies

- Joint leadership

- ▶ USACE Co-Chair is appointed
- ▶ Community Co-Chair is elected by members



RAB members

- USACE project manager
- State environmental agency - Project (case) manager
- EPA region - Project manager / facility manager
- Local (state, county) and tribal agencies and officials
- Affected members of the local community who
 - ▶ Live or work in the affected community
 - ▶ Are otherwise affected by the cleanup program



RAB Responsibilities

- Develop a RAB mission statement and operating procedures
- Attend regular meetings
 - ▶ Always open to the general public
- Record minutes of the meeting
 - ▶ Available in information repository
- Review and comment on environmental restoration documents



RAB Responsibilities

- Provide information to the community
- Receive, listen closely to, and consider community input
- Obtain information about the schedule, type, and status of environmental restoration activities
- Identify Formerly Used Defense Sites (FUDS) project requirements and recommend priorities



Community Interest Form

COMMUNITY INTEREST FORM FOR FORMER RARITAN ARSENAL RESTORATION ADVISORY BOARD (RAB)

Conditions for Membership:

RAB members are volunteers who serve a term and attend all meetings. Responsibilities will include reviewing and commenting on technical documents and activities associated with the Defense Environmental Restoration Program (DERP) – Formerly Used Defense Site (FUDS) at the Former Raritan Arsenal, Edison, Middlesex County, New Jersey. Technical experts will be available to assist the RAB. Members will be expected to be available to community members and groups to facilitate the exchange of information and/or concerns between the community and the RAB. Members will also be expected to attend meetings as scheduled.

Priority for membership will be given to local residents.

Name: _____

Address: _____

Street	Apt#	City	State	Zip
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Phone: () _____

Daytime	Home	Fax
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1. Are you affiliated with any group related to environmental restoration? If yes, list group & affiliation.

2. Briefly state why you would like to participate on the RAB.

3. What has been your experience working as a member of a diverse group with common goals?

4. The community co-chairperson will be selected by community members of the RAB. Please indicate if you are interested in being considered for the community co-chair position.

_____ Yes, I would like to be considered.

5. Are you willing to voluntarily serve on the RAB?

_____ Yes, I am willing to serve voluntarily.

6. The term of members will be decided at the first scheduled meeting.

Signature _____



What is DERP – FUDS?

- Defense Environmental Restoration Program – Formerly Used Defense Sites (DERP–FUDS)
 - ▶ Goals: Complete environmental restoration of the former Raritan Arsenal
 - ▶ Address potential human health and environmental risks associated with past Department of Defense (DOD) activities.
 - ▶ Former Raritan Arsenal project being completed by the U.S. Army Corps of Engineers (USACE)
 - Includes remedial investigation (RI) and cleanup, as appropriate, of 33 soil investigation areas.
 - Includes several groundwater plumes (Areas of Concern – AOCs).



The CERCLA Process

Removal Actions

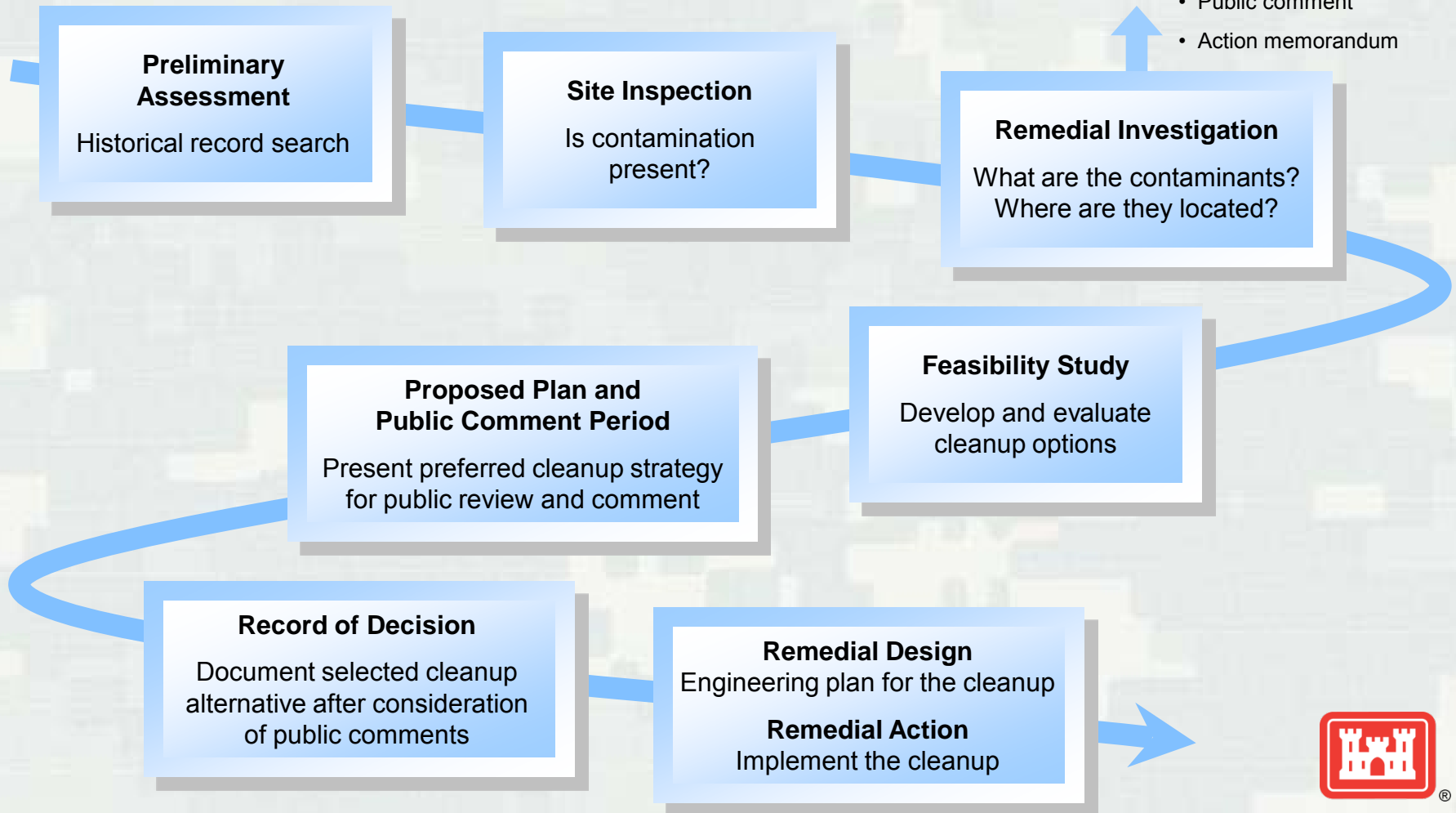
(this can occur at any phase)

Time-critical removal

- Action memorandum

Non-time critical removal

- Engineering evaluation/ cost analysis
- Public comment
- Action memorandum



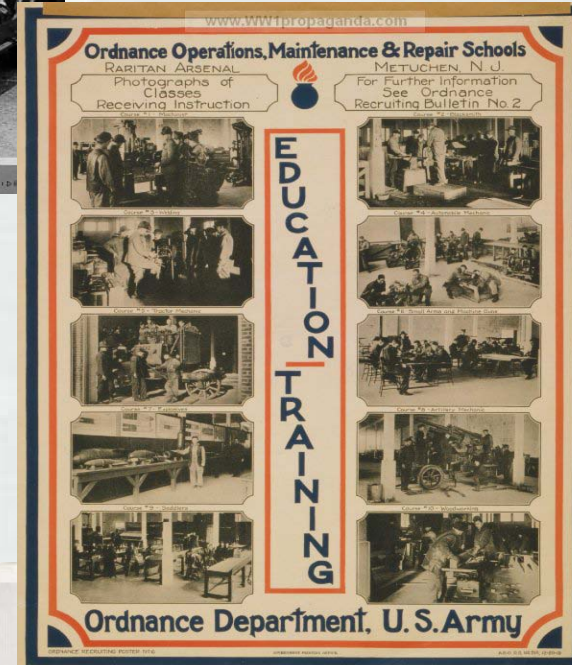
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Project Status



Site History

- Mission of Arsenal from 1917-1963
 - ▶ shipping and storage of ordnance material;
 - ▶ general supplies to other arsenals and military facilities;
 - ▶ stored, modified, and shipped military vehicles.
- Decontamination process completed in October 1963.
- Arsenal closed 1964
- Upon disposition, Arsenal consisted of 3,234 acres, approximately 440 buildings, 2.8 million square feet.
- Site-wide network of over 62 miles of roads and railways.
- Government officials and citizens proposed an orderly conversion of property from military to civilian use.
- Group recommended two-thirds of Arsenal be targeted for future industrial use.
- In 1964, GSA sold 2,360 acres to private landowners.
- EPA/GSA, Middlesex County College and Thomas Edison Park retained 840 acres of former Arsenal property.



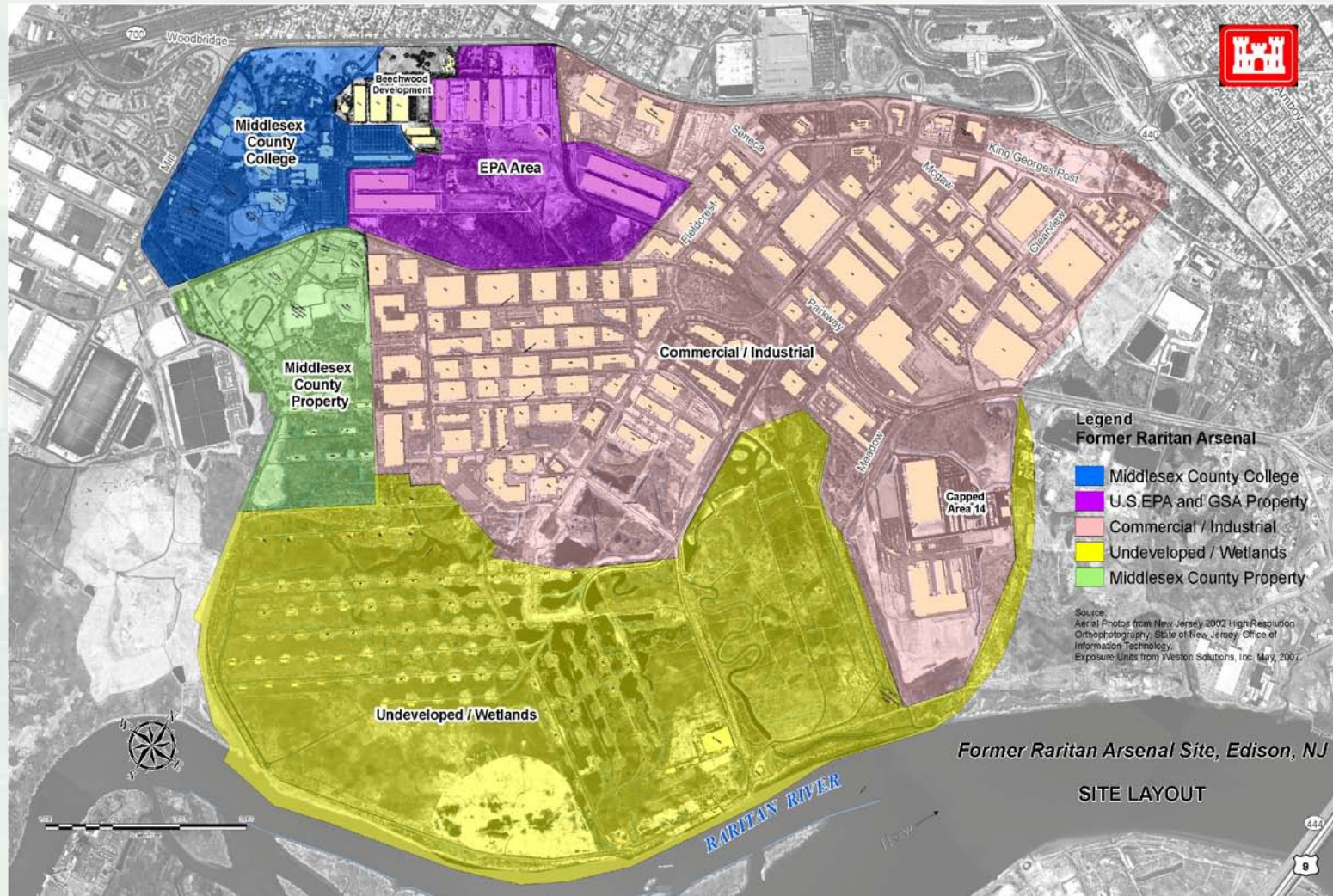
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Operable (Decision) Units

- Work at former Raritan Arsenal is organized into the following six (6) operable (decision) units:
 - ▶ Site-wide Groundwater / Indoor Air / Vapor Intrusion
 - ▶ Middlesex County College property
 - ▶ Thomas Edison Park property
 - ▶ Commercial / Industrial Area
 - ▶ USEPA / GSA property
 - ▶ Undeveloped Wetlands Area
 - subject to change as remedial investigations progresses

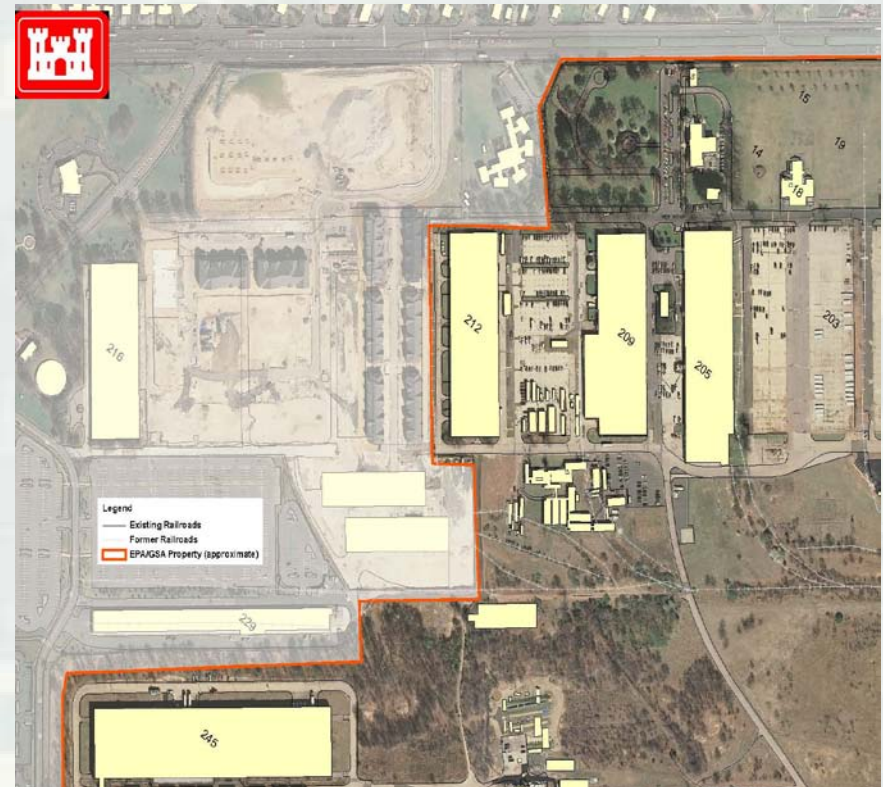


Site map of the Former Raritan Arsenal



Beechwood Developments & Shopping Center

- There are no Area of Concerns or Operable Units on Beechwood however there are some investigations sites that are nearby.





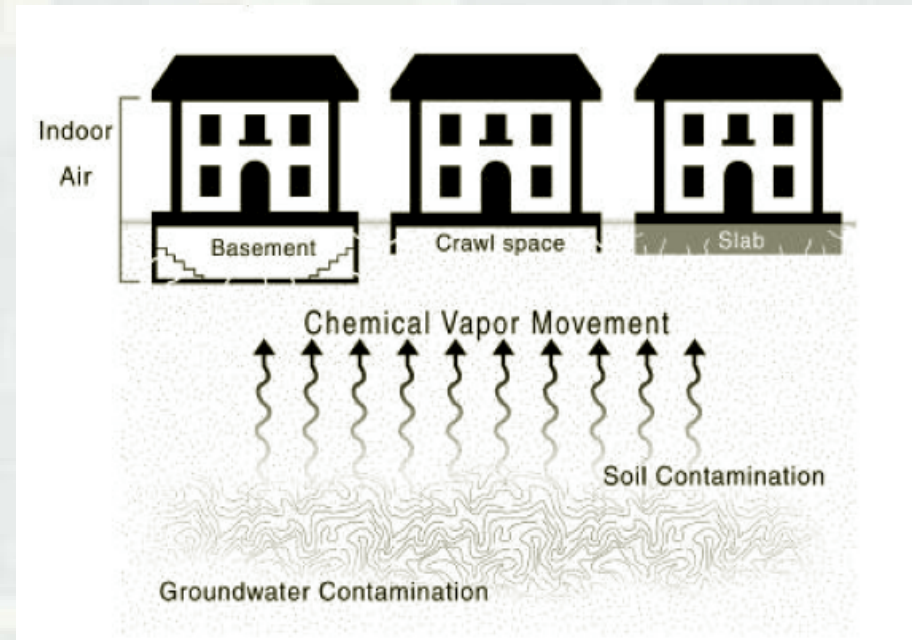
Groundwater Long Term Monitoring

- Site-wide Groundwater Remedial Action Work Plan (GWRAP)
 - ▶ Monitor Groundwater Areas of Concerns (AOCs) for natural attenuation in the 6 AOCs (2, 4, 6, 8, 9 & 10);
 - Sampling schedule for monitored natural attenuation:
 - ▷ First round of sampling – Summer 2010 – completed
 - ▷ Second round of sampling – Summer 2012 – underway
 - ▷ Future sampling – every five (5) years for thirty years (until 2042)
 - Monitored natural attenuation is a technique used to monitor or test the progress of concentration of contaminants in groundwater are decreasing without human involvement.
 - ▶ Based on previous sampling results showing decreasing concentration levels: 4 GW AOCs dropped from consideration (AOCs 1, 3, 5 & 7) – no further action is required



Indoor Air / Vapor Intrusion

- What is Vapor Intrusion: volatile chemicals can evaporate from groundwater and soil and may build up in the indoor air of nearby buildings
- What is vapor mitigation system: its designed to reduce the air pressure beneath the building and keep vapors that may collect beneath the building from entering into building.
- Status:
 - ▶ Monitoring 9 industrial buildings for volatile organic compounds (VOCs) in indoor air and sub-slab soil gas
 - ▶ These results are documented in the Indoor Air Quality Reports; currently up to report #7
 - ▶ Report #7 is being reviewed by NJDEP



Groundwater / Indoor Air / Vapor Intrusion Feasibility Study

- Evaluate the need for, and possible alternatives to address final remedial actions for the groundwater contamination at Areas of Concerns (AOCs):
 - ▶ AOCs – 2, 4A, 4B, 6A, 6B, 6C, 8A/B, 8C, 8D, 9 and 10
- Status:
 - USACE and NJDEP review – summer 2012



Site map of Middlesex County College property



Middlesex County College property

- Generate a Remedial Investigation (RI) / Feasibility Study (FS) / Proposed Plan (PP) / Decision Document (DD)
 - Status:
 - ▷ Draft Remedial Investigation report has been prepared
 - ▷ USACE and NJDEP review – summer 2012
 - ▷ Proposed Plan / Decision Document to be generated after Remedial investigation is final
 - ▷ During the Proposed Plan, USACE will present the cleanup strategy for public review and comment



Site map of Thomas Edison Park property



Thomas Edison Park property

- Generate a Remedial Investigation (RI) / Proposed Plan (PP) / Decision Document (DD)
 - Status:
 - ▷ Draft Remedial Investigation report has been prepared
 - ▷ USACE and NJDEP review – summer 2012
 - ▷ Proposed Plan / Decision Document to be generated after Remedial investigation is final
 - ▷ During the Proposed Plan, USACE will present the cleanup strategy for public review and comment



Site map of Commercial / Industrial Area



Commercial / Industrial Area

- Generate a Remedial Investigation (RI) / Proposed Plan (PP) / Decision Document (DD)
 - ▶ Status:
 - Awaiting Draft RI report – early spring 2012;
 - USACE will review – late spring 2012;
 - NJDEP will review – summer 2012;
 - Proposed Plan / Decision Document to be generated after Remedial Investigation / Feasibility Study is final;
 - During the Proposed Plan, USACE will present the cleanup strategy for public review and comment



Site map of Area 5



Area 5 – Remedial Investigation / Feasibility Study (desktop)

■ Status

- ▶ Work Plan – completed; documented all previous investigations and findings
- ▶ USACE review – early spring 2012;
- ▶ NJDEP review – late spring 2012;
- ▶ Remedial Investigation / Feasibility Study report will be generated after Work Plan is approved by NJDEP
- ▶ Proposed Plan / Decision Document to be generated after Remedial Investigation / Feasibility Study is final;
- ▶ During the Proposed Plan, USACE will present the cleanup strategy for public review and comment



Vegetation Clearing and Digital Geophysical Mapping

- Air Force Research Laboratory (AFRL)
 - ▶ Scope of work:
 - Clear vegetation on 8-9 acres
 - Locate and create digital map of buried metallic objects
 - ▷ using specialized metal detectors towed by robotics equipment
 - ▷ Metallic objects may or may not be munitions
 - ▶ Status:
 - Field work – May 2012
 - Review data and create map – June 2012
 - Map to be included in Remedial Investigation / Feasibility Study Report of Area 5



Air Force Research Laboratory



Advanced Mobility
Research and
Development
System (AMRADS)
autonomous
platform
with EM-61 towed
array



All-Purpose
Remote
Transport
System (ARTS)
with Brush Cutter
attachment



Command &
Control System



Site map of USEPA / GSA property



USEPA / GSA property

(Area 1 and 18A thru G)

- Generate a Remedial Investigation report
 - ▶ Status:
 - Draft Remedial Investigation report has been generated;
 - USACE review – spring 2012;
 - NJDEP review – summer 2012;
 - Anticipate data gaps and additional characterization /investigation needs to be performed (Area 1, 18D, 18E and rail beds)



USEPA property (Area 18E) Completed Excavation Sub Areas



USEPA property (Area 18E – Soil Removal Action)

- Status:
 - ▶ Field work completed – January 2012;
 - Five (5) excavation areas identified during the remedial investigation were removed;
 - Goal: removed the elevated levels of volatile organic compounds in soil at the excavation areas
 - ▶ A Draft – Remedial Action Completion Report has been generated;
 - ▶ USACE review – spring 2012; and
 - ▶ NJDEP review – summer 2012



Site map of Undeveloped Wetlands Area



Undeveloped Wetlands Area

(Area 6, 6A, 6B, 11, 12, 13, 16)

■ Status:

- ▶ A Draft – Remedial Investigation / Feasibility Study Work Plan has been generated;
- ▶ Work plan documents and explains our field work investigations
- ▶ USACE review – early spring 2012;
- ▶ NJDEP review – late spring 2012;
- ▶ Field investigation work to commence – summer 2012;
- ▶ Proposed Plan / Decision Document to be generated after Remedial Investigation / Feasibility Study is final; and
- ▶ During the Proposed Plan, USACE will present the cleanup strategy for public review and comment



Site-wide Remedial Investigation / Feasibility Study

- 12 Investigation areas: 1, 6, 6A, 6B, 10, 10C, 11, 12, 13 (Pier), 16, 18D and 9/19
- Scope of work:
 - To characterize the nature and extent of munitions and explosives of concern, munitions constituents, and hazardous and toxic waste;
 - Perform human health and ecological risk assessments;
 - To complete a munitions and explosives of concern hazard assessment;
 - To collect data sufficient to evaluate remedial/removal alternatives into a Remedial Investigation, develop a Feasibility Study, and ultimately a decision document for each area
- Status:
 - A Draft – Remedial Investigation / Feasibility Study Work Plan has been generated;
 - USACE review – spring 2012;
 - NJDEP review – summer 2012;
 - Fieldwork to commence – summer 2012;
 - Proposed Plan / Decision Document to be generated after Remedial Investigation / Feasibility Study is approved by NJDEP and final; and
 - During the Proposed Plan, USACE will present the cleanup strategy for public review and comment



FY 2012 Milestones

- Groundwater Compliance Monitoring Progress Report dated Dec 2011
- Feasibility Study – Groundwater / Indoor Air (Vapor Intrusion)
- Indoor Air Quality report #7
- Work Plan: Area 5 – Remedial Investigation / Feasibility Study
- Remedial Investigation & Remedial Actions Summary Report – Middlesex County College
- Proposed Plan – Middlesex County College for public comments
- Remedial Investigation & Remedial Actions Summary Report – Thomas Edison Park
- Proposed Plan – Thomas Edison Park for public comments
- Decision Document – Thomas Edison Park
- Remedial Investigation & Remedial Actions Summary Report – Commercial / Industrial Area
- Remedial Investigation & Remedial Actions Summary Report – USEPA / GSA property
- Work Plan: Site-wide Remedial Investigation / Feasibility Study
- Commence fieldwork activities at various areas
- Stakeholders – Working Group Meetings – March and October 2012
- Public Information Meetings – April and November 2012



FY 2013

Future Planned Activities

- Proposed Plan – Groundwater / Indoor Air (Vapor Intrusion) for public comments
- Annual Indoor Air Quality report #8
- Management Action Plan
- Decision Document – Middlesex County College
- Proposed Plan – Commercial / Industrial Area for public comments
- Decision Document – Commercial / Industrial Area
- Remedial Investigation / Feasibility Study report – Area 5
- Remedial Investigation / Feasibility Study – Site-wide – Munitions and/or Hazardous, Toxic Waste
- Public Involvement Plan
- Stakeholders – Working Group Meetings – March and October 2013
- Public Information Meetings – April and November 2013



Funding

- Raritan funding:
 - ▶ Funding spent: \$ 86.5 M
 - ▶ Planned, 2012: \$ 1.9 M
 - ▶ Planned, 2013: TBD
 - ▶ Cost to Complete: \$ 33.5 M



For more information on the USACE's environmental cleanup activities, please visit the USACE's former Raritan Arsenal webpage at:

www.nan.usace.army.mil/business/buslinks/raritan/index.php



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