# Engineering Evaluation / Cost Analysis (EE/CA) Public Meeting Area 18E – Soil Removal Action

Former Raritan Arsenal

Edison, New Jersey

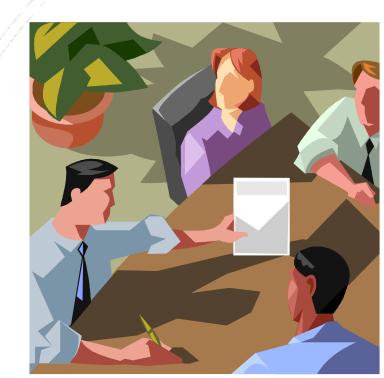
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US Army Corps of Engineers

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## Agenda

- Background
- Site map
- Area 18E Soil Investigations
- Purpose of Non Time Critical Removal Action
- Engineering Evaluation / Cost Analysis (EE/CA)
- DERP-FUDS
- Recommendation
- Area 18E path forward
- Raritan Arsenal website
- Questions



## Background Area 18E – Former Maintenance Area

- Area 18E is located in the northern portion of the Former Arsenal
- Area 18E property is currently owned by the USEPA Region II
  - ▶ This area is entirely developed, zoned for light industrial use and is situated just south of Woodbridge Avenue. The area consists of Buildings 10 and 18 with the remainder being a grass-covered lawn. The grass-covered lawn once included three former U.S. Army buildings: Buildings 14, 15, and 19. These three former buildings were constructed in 1918. USEPA demolished these buildings from July through October of 1997.
- Area 18E consists of the following former Arsenal buildings:
  - Building 14 served as a small arms shop;
  - ▶ Building 15 served as a machine shop; and
  - ▶ Building 19 was referred to as a vehicle rebuild assembly shop.



### What is DERP - FUDS?

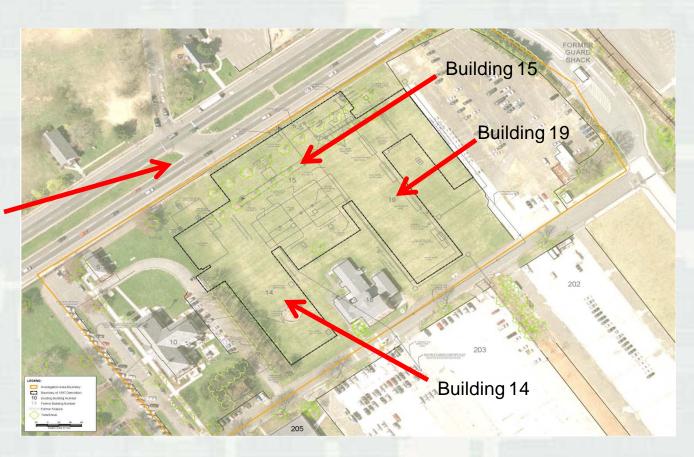
- Response actions at the former Raritan Arsenal (former Arsenal) are being funded under the Defense Environmental Restoration Program-Formerly Used Defense Sites (DERP-FUDS).
  - ► Goals: Complete environmental restoration of the former Raritan Arsenal
  - ► Address potential human health and environmental risks associated with past Department of Defense (DOD) activities.
  - ► Former Raritan Arsenal project being completed by the U.S. Army Corps of Engineers (USACE)



## Area 18E (Soil) - Site Map



Woodbridge Ave





### Area 18E – Soil Investigations

- Area 18E Remedial Investigation
  - Scope of work: complete the delineation of volatile organic compounds (VOCs) and metals in soil
    - Investigation commenced / completed July / December 2009
    - Results from the investigation have been included in the Final Remedial Investigation report and has been issued to NJDEP for review – Sept 2011
- Area 18E Remedial Action
  - Scope of work: Excavation and Off-Site Disposal of 1,850 cubic yards of shallow sub-surface soils
    - Work Plan (WP) generated to meet requirements of the New Jersey Technical Requirements for Site remediation (N.J.A.C 7:26E); WP issued to NJDEP for their review; NJDEP approval – Sept 2011
    - Completion Report will be submitted to NJDEP for their review Winter 2011

## Purpose of Non Time Critical Removal Action (TCRA)

- Recent and historic analytical data indicate these contaminated soils act as a contributing source to groundwater impacts in this area, specifically groundwater area 8A/B.
  - Groundwater aquifer is not used as a drinking water source
- Removal action has been recommended to address the potential threat from exposure to soils containing trichloroethylene (TCE), tetrachloroethylene (PCE) and arsenic in the shallow subsurface soils at the former Raritan Arsenal.



## Engineering Evaluation/Cost Analysis (EE/CA)

- An Engineering Evaluation/Cost Analysis (EE/CA) was issued in September 2011, which included an evaluation of alternatives and costs to address Area 18E soils.
- Public review and comment is being solicited on the removal action recommendation outline in the EE/CA.
  - ► A Responsiveness Summary will be generated after the public comment process and made available to the public.
- Public review period is: Sept 19<sup>th</sup> Oct 17<sup>th</sup>
- The EE/CA can be found:
  - ► Electronically at the Raritan Arsenal Website: www.nan.usace.army.mil/business/buslinks/raritan/index.htm
  - Hard copy is located at the Public repository at USACE Raritan Arsenal field trailers at 2890 Woodbridge Avenue, Edison, NJ.

#### Recommendation

#### Proposed action:

- ► Alternative 2: Excavation and Off-Site Disposal of 1,850 cubic yards (≈ 90 trucks loads) of shallow sub-surface soils has been identified as the removal action. In addition, the excavation and off-site disposal of impacted soils would result in a permanent solution that requires no additional long-term oversight, operation and maintenance, and monitoring.
  - Approximate depth of excavations is 3 to 6 feet below grade
  - Dumpster trucks will exit off EPA property onto Woodbridge Ave
  - Off-site disposal hours: 7am 5pm

#### Cost:

► Estimated cost of this non-Time Critical Removal Action (TCRA): \$650,000

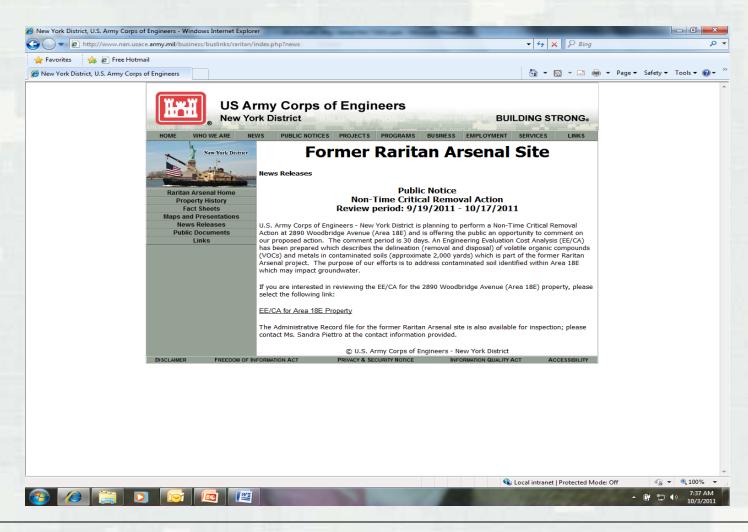
## Area 18E – path forward

- Subsequent to the soil removal action, Groundwater Area of Concern (AOC) 8A/B will be incorporated into our Monitored Natural Attenuation program
  - Groundwater Remedial Action Work Plan (GWRAWP) addendum will be submitted to NJDEP for their review – Winter 2011
  - A Classification Exemption Area (CEA) is in place for the whole Raritan Arsenal site:
    - Land use restriction
    - > Prevents land users from installing any groundwater wells



### Raritan Arsenal Website:

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



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