



Fort Detrick

Engineering Evaluation / Cost Analysis Provision of a Safe Potable Water Source for Five Kemp Lane Residences

Restoration Advisory Board Meeting

28 August 2013

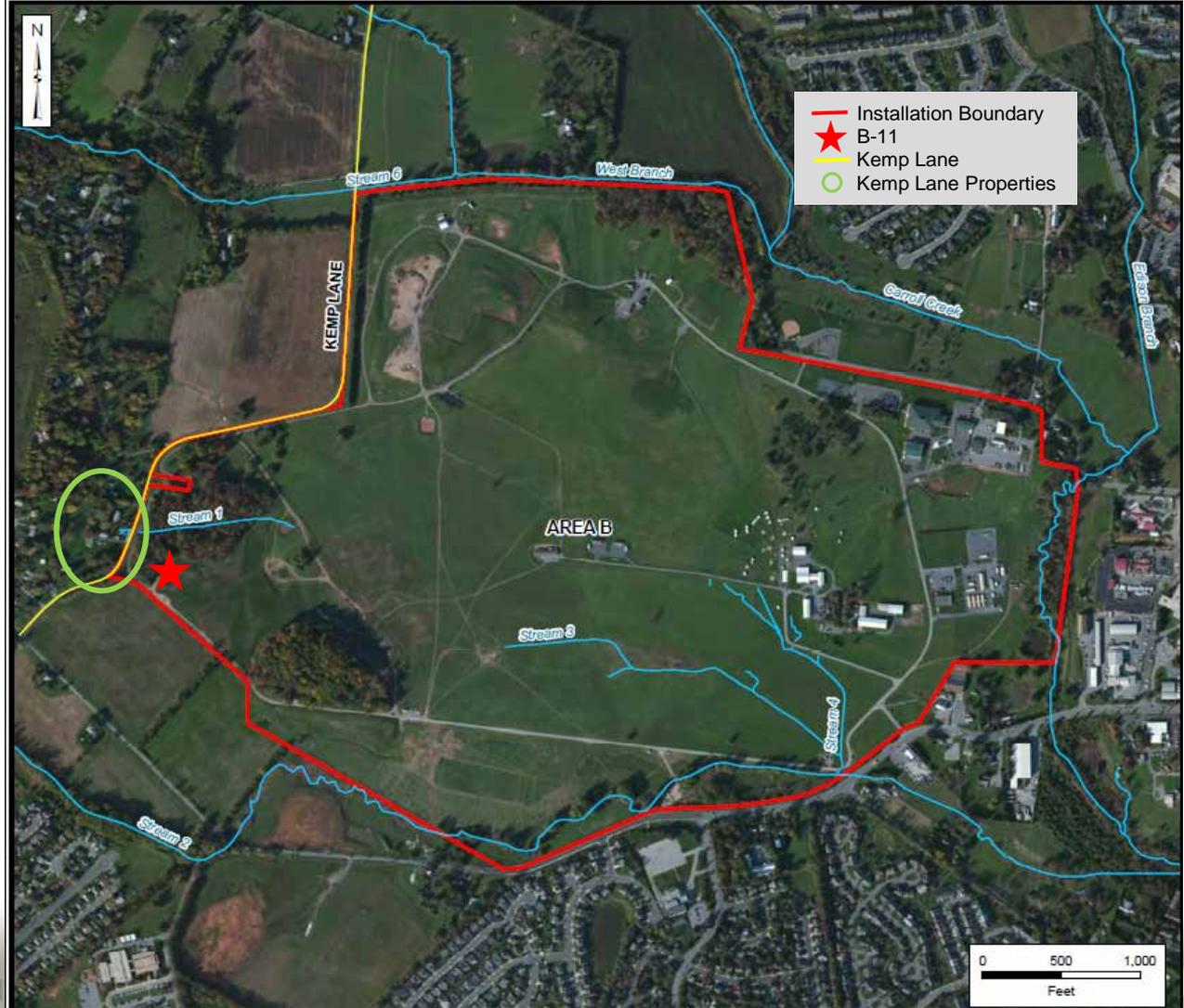
Shelly Morris / ARCADIS



ARMY STRONG[®]



Kemp Lane Property Locations





Kemp Lane Residential Wells



- Ø Periodic drinking water monitoring at residences located on Kemp Lane has been on going since the early 1990s.
- Ø The properties are adjacent to and in close proximity to B-11 (principal contaminant source area).
- Ø In 2005 and 2006 TCE and PCE were detected at levels below the US EPA's Maximum Contaminant Level (MCL) of 5 parts per billion (ppb) in two residential wells and at the MCL at a Fort Detrick boundary well.
 - Ø Severe drought conditions at the time are believed to have been a factor, and
 - Ø No additional TCE or PCE detections have occurred since the detections in 2005 and 2006.
- Ø The Army has provided bottled water and continues to monitor the drinking water as a protective measure since the detections.
- Ø Army is considering long term solution under an Non-Time-Critical Removal Action (NTCRA) under CERCLA.





Process to Address Contamination



Ø Cleanup activities regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

Ø CERCLA prescriptive regulatory process that is required to be followed,

Ø CERCLA includes tools/processes for accomplishing cleanup actions in an accelerated manner when conditions warrant (EE/CA), and

Ø Study and Cleanup activities are funded using Defense Environmental Restoration Account.





The CERCLA Process

- ü Preliminary Assessment (PA) – initial review of site -existing records
- ü Site Investigation (SI) – initial sampling for contamination presence
- Ø Remedial Investigation (RI) – study phase to gain full understanding of extent of contamination
- q Feasibility Study (FS) - assessment of possible solutions to address contamination
- q Proposed Plan (PP) - solicit public input on preferred solution
- q Record of Decision (ROD) - legal documentation of solution selection
- q Remedial Design (RD) – work plan for solution
- q Remedial Action (RA) – solution is employed





Engineering Evaluation / Cost Analysis

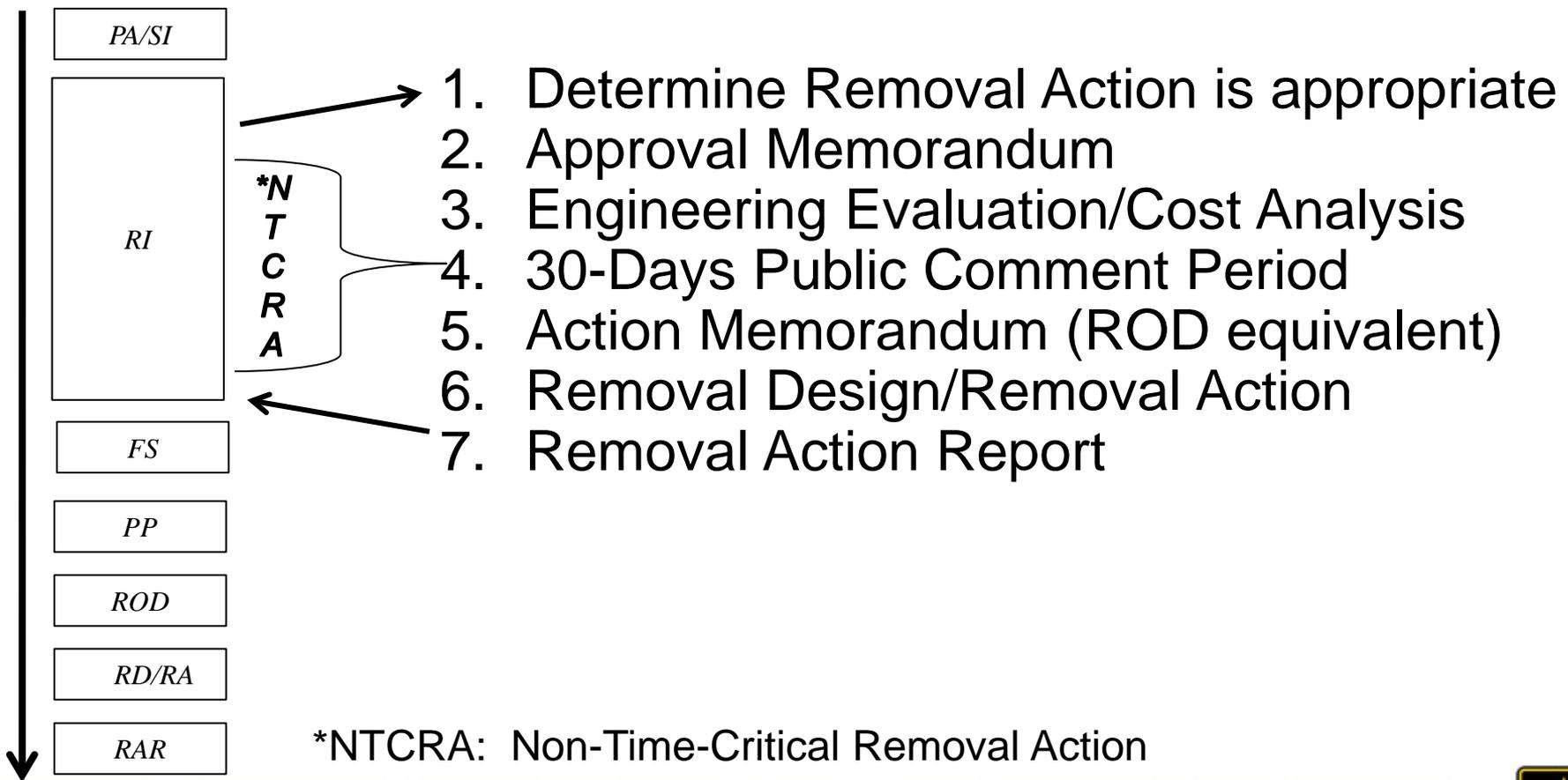


- What is an Engineering Evaluation / Cost Analysis (EE/CA)?
 - A CERCLA tool for accomplishing early actions in an accelerated manner to achieve prompt risk reduction. (Prior to the Feasibility Study completion)
 - EE/CAs:
 - Identify objectives of the removal action
 - Identify alternatives to achieve the objectives, and
 - Evaluate alternatives against effectiveness, implementability and cost criteria.
 - Identifies and summarizes the recommended action.





NTCRA Process and Integration into CERCLA Process



*NTCRA: Non-Time-Critical Removal Action





Fort Detrick Area B EE/CA Overview



- The Army conducted an Engineering Evaluation / Cost Analysis (EE/CA) to evaluate options for providing a permanent source of safe potable water.
- The following options were evaluated:
 - No Further Action (serves as a baseline of comparison for alternatives)
 - Provide Bottled Water Service and Groundwater Monitoring
 - Connect Residences to the City Water Supply
- Connection to the city water supply is recommended based on:
 - Effectiveness: most effective in the long-term because it permanently removes access (all pathways) to the source of VOCs eliminating the potential health hazards at the site.
 - Implementability: the pipeline for the City of Frederick water supply runs in front of these homes.
 - Cost: cost effective and permanent solution.





Next Steps



26 August 2013	Notify Kemp Lane residents of EE/CA recommendations
28 August 2013	Notify the Restoration Advisory Board of EE/CA recommendations
29 August 2013	Notify the surrounding community of the EE/CA recommendations
29 August 2013 – 12 October 2013	EE/CA Public Comment Period (Public Information Session Schedule is to be announced)
November 2013	Document decision in an Action Memorandum
Spring 2014	Implement selected removal action





Discussion / Questions

