FUSRAP VICINITY PROPERTY ASSESSMENTS TO SUPPORT CLOSEOUT AND TRANSFER

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INTRODUCTION AND PURPOSE

FUSRAP is a 40+ year old Program, significant changes have occurred since many projects began. Vicinity Property (VP) evaluations are required to facilitate closeout of Sites, NPL delisting, and project transfers to Legacy Management (LM).

The purpose of this presentation is to discuss and provide recommendations on approach to VP evaluations.





KEY TERMS

CERCLA Facility

- "....any building, structure, installation, equipment, pipe or pipeline....., well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or any site or area, where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located;......"

Vicinity Property

- Undefined in CERCLA
 - Could be considered individual CERCLA facility
- Some projects define in ROD or FFA
- As used here: A property in the vicinity of a CERCLA "Facility" or part of a Facility or Site.



WHY EVALUATE VPs

Site conditions, regulations, and regulators have changed over FUSRAP time frame.

Initial FUSRAP not done IAW CERCLA

- Changes in Criteria
- Not covered by a ROD
- Required for delisting
- Must conduct reviews to evaluate whether prior actions were sufficient to meet the current cleanup criteria

Data Limitations





WHY EVALUATE VPs

Site conceptual model developed later

Limited project scope

5/15 UMTRCA standard used early on

- Other ARARs
 - Risk Based Criteria versus Dose Based
 - Hot Spot versus Elevated Measurement Comparison





OVERALL FUSRAP CERCLA PROCESS

- Preliminary Assessment
- Site Inspection
- Remedial Investigation
- Feasibility Study
- Proposed Remedial Action Plan
- Record Of Decision
- Remedial Action
- Close Out





IMPORTANT VP PROCESS ASPECTS

- History (not just the site)
- Topo maps and aerials
- Site conceptual models
- Data
- Understanding of FSS process
- Documentation
- All other properties meet ROD statement

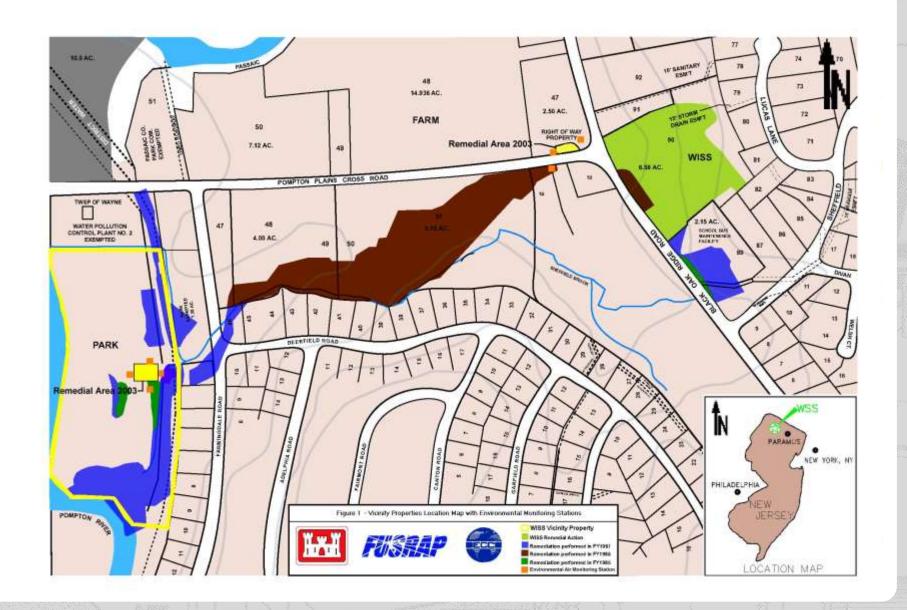




EXAMPLE VP ASPECTS



WAYNE FUSRAP RE-ADDRESSED



WAYNE INTERIM STORAGE SITE WAYNE, NJ

VP Technical Memorandum

- Reviewed all Characterization, Remedial Action, and Independent Verification Reports
 - Verified identified contamination was addressed by excavated areas
 - Compared Post RA data to current ROD criteria
 - Past hot spot criteria similar to current EMC
 - Some past data and IVC identified 200 pCi/g Th-232 spots
 - Used past data and organized to be MARSSIM like
 - "Floating" SU used (any 2000 sq. meters had to pass)
 - Used area factors from WISS FSS plan
 - Stated if not identified as an issue then meets ROD





WAYNE FUSRAP SITE

- NPL Site VP evaluation required for delisting
- Wayne VP Tech Memo (2003) inhouse
 - 39 VPs (All previously given clean letters by Government)
 - 5/15 UMTRCA criteria
 - 5 identified as requiring further investigation
 - 3 ended up requiring additional remediation
- ROD Explanation of Significant Difference done to incorporate VPs into ROD
- Three additional RA completed. Last one in 2010.
- Site delisted from NPL Sep 2012
- Site transferred back to USDOE



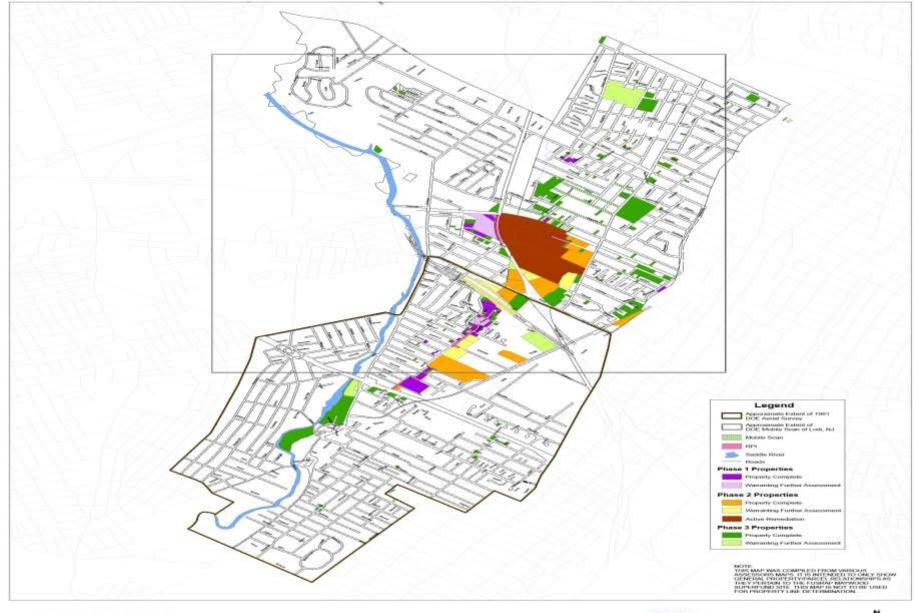


COLONIE INTERIM STORAGE SITE COLONIE, NY

- Similar process utilized as at Wayne
- Initial surveys done in 1980's and identified 56 VPs.
 - 53 cleaned up in mid-late 1980's
 - 2 VPs cleaned up with main property. 1 VP was determined to not need remediation
 - USACE evaluation of historic VP work identified 2 VPs with residual contamination.
 - 1 VP determined to not need remediation and one required limited remediation.
 - DU dust sampling performed at commercial and residential properties after being requested. Based on CERCLA Risk Assessment No action required.



Figure 1 - FUSRAP Maywood Superfund Site Property Inventory















APPROVED BY: A. EWY DATE: 04/08/12

FUSRAP MAYWOOD SUPERFUND SITE MAYWOOD, NJ

- Similar process utilized as at Wayne
 - Many properties with scan only or other data limitations
 - Microshield modeled exposure rate from ROD criteria
 - Utilized a data matrix to determine if met current ROD each step had to pass
 - Exposure rate, soil screening data, soil lab data, isotopic data, rare earth data
 - Utilized site waste characteristics to identify non FUSRAP waste contaminated or NORM VPs
 - Log books, boring logs, and reports of coal ash
 - Th-232 to Ra-226 ratios
 - Rare earth data when available
 - U-238 to U-234 ratios





MAYWOOD FUSRAP

NPL Site VP evaluation required for delisting

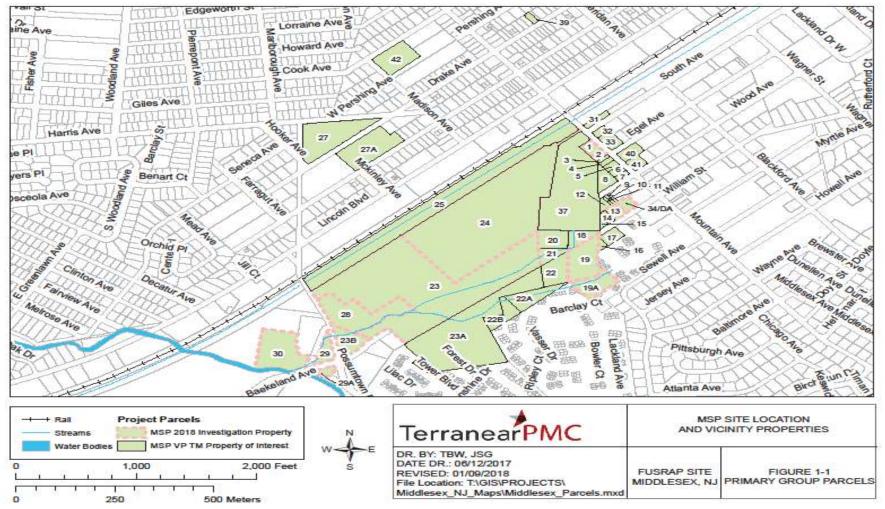
Some questions raised in first 5 year review

Maywood VP Tech Memo (2012, inhouse, Reg. review)

- Over 350 VPs evaluated
- 20 identified as requiring further investigation/work
 - Some were designated and previously remediated properties
 - Individual property assessment reports produced.
 - Four new properties Designated as VPs
 - Two previously Designated VPs re-addressed.
- Similar process utilized as at Wayne
 - Many properties with scan only or other data limitations
 - Utilized a data matrix to determine if met current ROD each step had to pass
 - Utilized site waste characteristics to identify non FUSRAP waste contaminated or NORM VPs



MIDDLESEX SAMPLING PLANT







MIDDLESEX SAMPLING PLANT MIDDLESEX, NJ

NPL Site VP evaluation required for delisting VP Tech Memo in-house

- Review of 49 VPs
- Additional aerial survey based on NJDEP comment to be conducted prior to TM being completed.
- Further assessment of 11 VPs lead to 1 VP requiring further remediation.





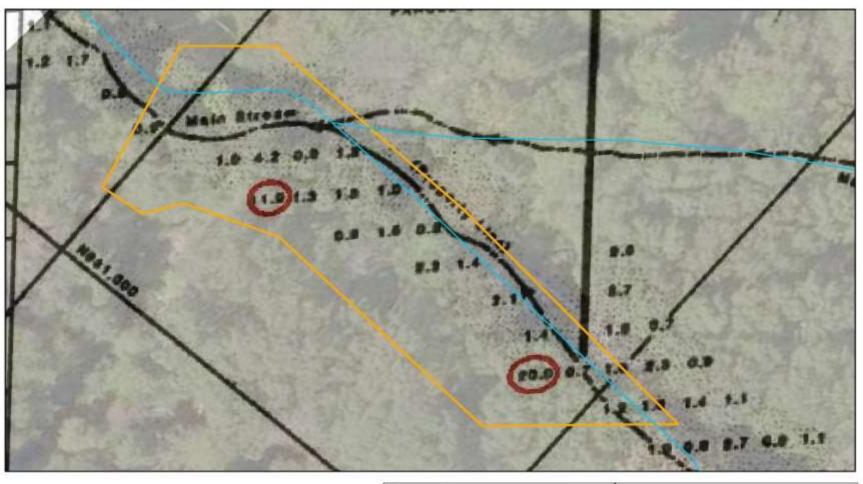
SUMMARY AND CONCLUSIONS

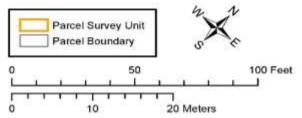
Assessment of VPs at FUSRAP sites is a necessary step in the lifecycle of our site management. These assessments allow USACE to ensure compliance with the ROD criteria of previously addressed VPs.

VP Assessments are planned in advance of site closeout allow USACE to address potential issues with data gaps or properties not meeting the ROD criteria. This allows for a smooth and efficient transfer of sites back to USDOE.

USACE FUSRAP District's are using a standardized approach to VP assessments and records retention. Multiple projects have completed the process following this approach.

QUESTIONS







US Army Corps of Engineers ®

DR. BY: TBW DATE DR: 28 June, 2018 REVISED: File Location: TvGISVPROJECTS/Middlesex_NJ_Maps Widdlesex_Parcel_23,23B,28_SU_2_ HistoricData_(Fig1-2).mxd FUSRAP MSP SITE LOCATION AND VICINITY PROPERTIES

FUSRAP SITE MIDDLESEX, NJ HISTORIC SAMPLING DATA

FIGURE 1-3 PARCEL 23,238,28 SU 2