

## Army Continuation of Cleanup Sunflower AAP Public Update

Office of the Deputy Chief of Staff, G-9 (Installations)

Presented by: Mr. Ian Thomas, ISE BRAC

17 July 2024

### G-9 Mission

The DCS, G-9 leads integration across the Army enterprise to modernize installations, enhance quality of life, and develop and implement policies, plans, and programs that enable the Army to recruit, train, deploy, fight, and win.

### G-9 Vision

Dedicated professionals driving excellence across the Army Installations Enterprise to support Soldiers, families, and Army civilians wherever they train, work, and live.

Microsoft Teams Meeting

Conference ID: **NA**

Optional Call-in: **NA**

# Agenda

- Introduction of Participants and Organizations
- Restoration Advisory Board Update
- BRAC Ops/AEC/USACE (Co-briefers)
  - Objectives Background and Map Overview
  - Site Remediation: Army Process
  - Munitions and Explosives Remediation and Decontamination Summary
  - Contracts and Current Status
  - SFAAP Groundwater Update
  - Questions on Progress
- End of Presentation



Goal: To *provide* information and answer questions about Army Restoration Advisory Boards (RAB)

## *RAB Purpose*

- A RAB provides the community with the opportunity to become involved in the environmental restoration process either as a RAB member or participation at RAB/public meetings
- RABs offer members the opportunity to influence cleanup decisions through discussions and to provide input to the installation decision makers
- Because representatives of the environmental agencies overseeing cleanup participate in the RAB, the RAB offers members and the public the opportunity to share their questions, concerns and ideas with agencies involved in the cleanup

- Solicitation occurred on multiple media platforms in January/February 2024 such as the local newspapers, websites and emails
- Received 34 expressions of interest in establishing the RAB
- Based on that response there is sufficient interest in forming a RAB
- Army requested confirmation from the 34 interested parties and received 25 confirmations
- The Army will initiate the establishment of a Sunflower Army Ammunition Plant Restoration Advisory Board.
- The first RAB meeting is tentatively scheduled for late October 2024. Date to be determined.

## *Meeting Objectives*

- To *inform* the Public of the overall progress of Army's continuation of the clean-up at Sunflower
- To *provide* participants with a status of clean-up in the re-development priority areas and other sectors of Sunflower



## Background

- Installation listed excess in 1997 and transferred to Sunflower Redevelopment Limited Liability Corporation (SRL) in 2005.
- The 2005 transfer included approximately 9,065 acres of Sunflower property with \$109M contract funds and \$32M in kind consideration for SRL's remediation agreement and commitment to cleanup approximately 5,300 acres of SFAAP classified as potentially contaminated.
- SRL conducted cleanup until 2011, completing a portion of the cleanup before the funding was expended.
- In 2015 we determined that Army management of cleanup responsibilities at SFAAP was the best path forward to address Army obligations at the site.
- Since then, the Army has awarded 14 contracts valued at over \$200M to remediate the site.



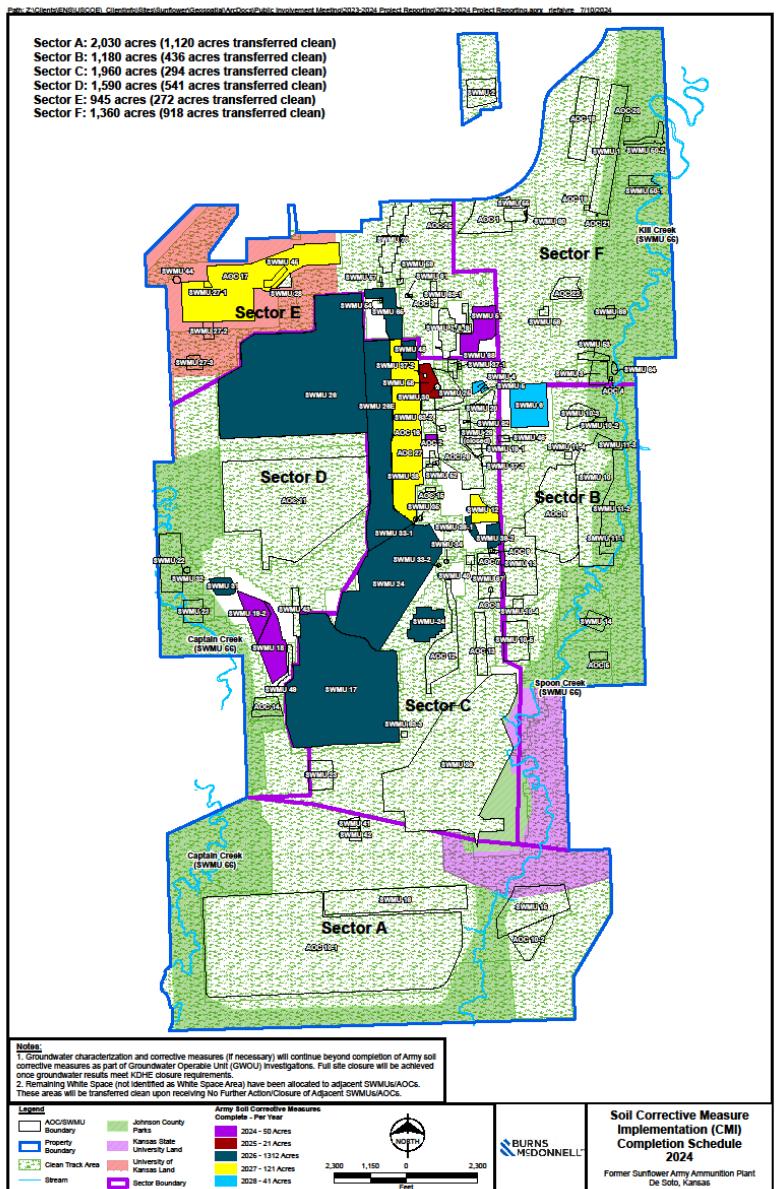
## *Site Remediation: Army Process*

- Three Army organizations work together to award contracts to conduct explosive and environmental hazard remediation and removal
  - Base Realignment and Closure Office has overall responsibility for the closed site
  - US Army Environmental Command has responsibility for funding projects eligible for Defense Environmental Restoration Program dollars
  - The US Army Corps of Engineers Kansas City District procures the contracts and provides contract oversight and ensures contract execution

## *Site Remediation: Army Process (Cont.)*

- The Army's process for remediation is governed by law and requires a specific order of activities and completion of one step before we can start another
- The Army is working within the Defense Environmental Restoration Program to accelerate site cleanup with priorities provided by SRL to the maximum extent practical
  - Explosive decontamination work prevented access to some of the interior sites due to safety exclusion zones
  - Exclusion zones were removed upon completion of the explosive hazard remediation allowing access to sites for additional remediation requirements

# Map Overview



*This map depicts the boundary of Sunflower AAP with the various response sites, SWMUs and AOCs, in assorted colors. Clean areas/ acres are colored light green, dark green areas are acres apportioned to Johnson County, and light pink and light purple areas are acres apportioned to the various universities. Areas in white await further delineation based on the remediation completed at the adjacent response site.*



## *Munitions and Explosive Summary*

- Estimated MEC work as of 2015 (Govt Estimate)
  - 1.5 million sq ft of concrete
  - 11,144 linear ft of inside sewer lines
  - 170,000 linear ft of outside sewer lines
- Prime MEC Contractors were Zapata and Sevenson
- MEC work physically completed as of December 2023
  - 1,487,474 sq ft of concrete removed (**4,887,474 SF total**)
  - 10,369 linear ft of inside sewer line
  - 172,296 linear ft of outside sewer lines (**225,296 LF total**)
- MEC work is now complete
- Site is unencumbered by the previously required explosive safety arcs

## *Example of Work from Zapata Contract*

AOC 16 - Before



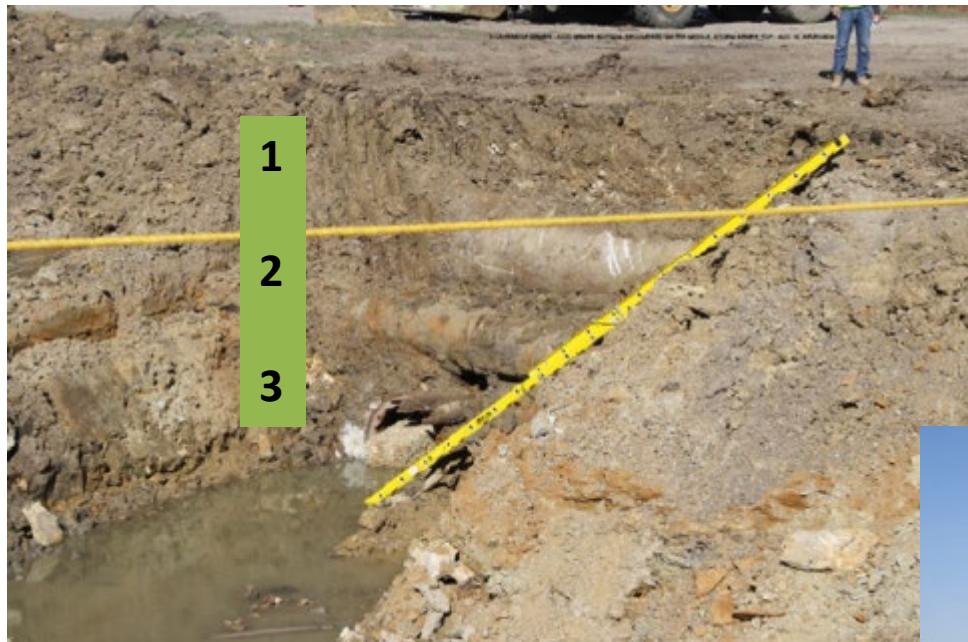
AOC 16 - During



AOC 16 - After



## *Three Layers of Piping*



- 1. Storm sewer
- 2. Recovered Nitrocellulose water
- 3. Acid sewer

Deep acid sewer trench after pipe removal between AOC16 and Pond A



# *Example Work from Sevenson Contract*

**SWMU 26 - Sewer Removal**



**SWMU 26 – Sewer Removal**



**SWMU 26 - Sewer Removal**



**SWMU 26 - Restoration**



# *Example Work from Sevenson/USA 2019*

AOC 16 During



AOC 16 After



Disturbed areas were backfilled, graded and seeded - turf grass is being established to provide permanent vegetative cover - E Line, AOC 16, looking east



## Contracts

- As indicated previously, the Army awarded over \$200M in 14 contracts awarded since 2015. Of these 14 contracts, 10 are complete. Much of the remaining requirements fall under the remaining four open contracts. Additional sites awaiting remediation may be added to the last contract for execution as a task order during the next 12-18 months, *subject to availability of funds*. The goal is all soil cleanup completed by 2028.



## *Current Status As of 1 July 2024*

- 97 sites required RCRA corrective action
  - 56 sites at remediation complete
    - ❑ 24 sites subsequently removed from the RCRA permit
    - ❑ 2 sites (SWMU 41/42) will be closed under Solid Waste Landfill Permit 340
    - ❑ 2 sites (SWMU 18/19-2) are landfills in final stage of Closure Approval
    - ❑ 17 sites have KDHE approval of Army No Further Corrective Action (only Consent Order cleanup remains)
    - ❑ 11 additional sites awaiting KDHE approval for No Further Action
  - 41 remaining sites are in the various stages of remediation sitewide
    - ❑ 18 sites are still in the RCRA investigation stage
    - ❑ 3 sites are in the soil cleanup phase
    - ❑ 17 sites have a draft NFCAP written and under Army review
    - ❑ 1 site awaiting an internal Army decision on future actions
    - ❑ 2 sites are administrative sites created for the MEC program and are no longer an issue
- Currently addressing the Ground Water Operable Unit (GWOU) requirements (5 OUs)

- Groundwater Characterization
  - Determine presence or absence of contamination by groundwater sampling or lack of contamination in soil
  - Delineate groundwater contamination
  - Determine if groundwater is potable.
- Groundwater no further action can be determined through no contamination, contamination below Target Media Cleanup Level (TMCLs), non-potable aquifer risk evaluation, or a combination of the three.

## *SFAAP Groundwater (Cont.)*

- 5 Operable Units (OUs)
- TMCL updates proposed in new Corrective Action Permit
- OU1, OU2, OU3 CSM complete
  - Snapshot of current state of groundwater contamination in the three OUs. Additional RFI delineation/characterization will stem from results
  - OU4 workplan approved by KDHE. Characterization will begin Fall 2024
  - OU5 workplan under Army review

## *SFAAP Groundwater (Cont.)*

- Objective
  - Shrink Groundwater OU boundaries as SWMUs/AOCs are characterized
  - OU4 boundary redefined in Corrective Action Permit
- SWMUs/AOC with no further action on Groundwater as agreed to by KDHE - 19
- SWMU/AOCs to be proposed as no further action for Groundwater - 40

## *SFAAP Groundwater (Cont.)*

- Groundwater Contaminants (vs residential TMCLs)
  - Nitrate (193,000 ug/l vs 10,000 ug/l)
  - Guanidine Nitrate (highest detection was 2000 ug/l vs 600 ug/l)
  - Chromium (highest detection was 500 ug/l vs 100 ug/l TMCL)
  - Fluoride (highest detection of 4700 ug/l vs 4000 ug/l)
  - Lead (highest detection was 90ug/l vs 15ug/l)
  - Nitroguanidine (highest detection was 1600 ug/l vs 1560ug/l)
  - Total Petroleum Hydrocarbon (TPH) (highest detection of 7100ug/l vs 1000 ug/l)
  - Pesticides (Dieldrin) (highest detection of 3.23 ug/l vs 0.048 ug/l)

## *Former Sunflower AAP Website*

- The Sunflower website was established and is a subset of the Army Environmental Command website:  
**<https://aec.army.mil/sfaap>**
- This meeting presentation will be added to the website
- Your feedback on whether there is additional information about the cleanup or Army environmental restoration in general that would be helpful if included is appreciated



## *End Of Presentation*

- We are here to answer your questions
- You can also reach us later by emailing:

[usarmy.jbsa.imcom-aec.mbx.public-mailbox@army.mil](mailto:usarmy.jbsa.imcom-aec.mbx.public-mailbox@army.mil)



# Questions On Progress

