

Army Continuation of Cleanup

Sunflower AAP Public Update

**Army Environmental Division – BRAC Branch
Office of the Deputy Chief of Staff, G-9 (Installations)**

14 June 2023

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.

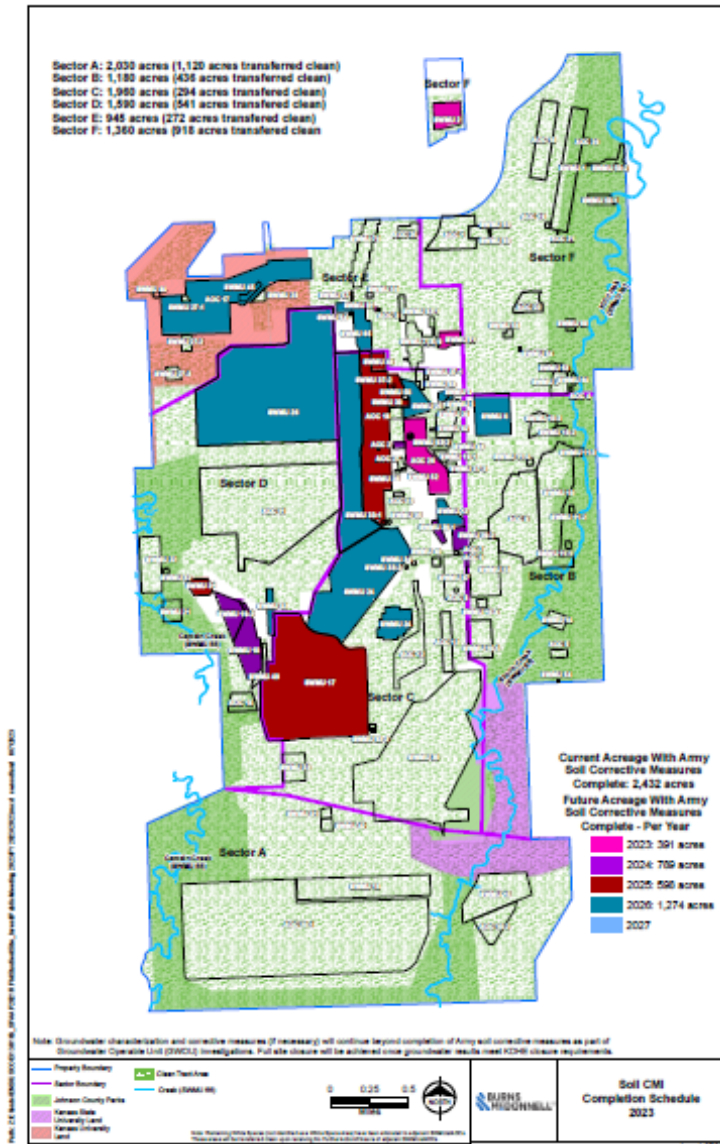
- Introduction of Participants and Organizations
- BRAC Ops/AEC/USACE (Co-briefers)
 - Objectives Background and Map Overview
 - Site Remediation: Army and RCRA Process
 - Remediation and Decontamination Update and Next Steps
 - Current Status and Contract Update
 - Questions on Progress
- Restoration Advisory Boards
- End of Presentation

- 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

- 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 approximately \$200M to remediate the site.

- 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

- 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



- RCRA Facility Assessment (**RFA**) – conducted by regulator (Kansas Department of Health & Environment) to identify solid waste management units and areas of concern
- RCRA Facility Investigation (**RFI**) – delineates nature and extent of contamination
- Corrective Measures Study (**CMS**) – evaluates alternatives
- Corrective Measures Implementation (**CMI**) – implements corrective action
- Statement of Basis or Fact Sheet – documents the preferred alternative and solicits public comment
- No Further Corrective Action Planned – KDHE requested document that facilitates site close-out and removal from the permit
- Corrective Action Permit – KDHE regulatory document that records the corrective measure or No Further Action for a site. A new permit will be issued by KDHE in early 2023. Application in progress

- The RCRA Corrective Action permit application is complete and submitted to KDHE for adjudication. KDHE was given authority for corrective action and will write and approve the new permit. EPA will continue “as needed” modifications of the old permit until the new permit is in effect.
- Focus is now on completing the sitewide Environmental Remediation
 - Corrective Measures Implementation
 - No Further Action determinations
- Of 97 response sites in the RCRA permit, 19 have been closed and require No Further Action (NFA) and were removed from the permit. Two sites are remediation complete with 14 additional sites awaiting No Further Action approval from the regulators. Leaving 62 sites that are in various stages of investigation, corrective measures, and no further action.
- All sites are on contract for remediation.

CUI

Nitrocellulose (NC) Bulk Explosive



General Overview of Contract Completions:

- Project Totals: 52,976 bank cubic yards removed; 833,867 Square Feet concrete removed; 12,918 linear feet of MEC piping removed
- Site Areas Completed for Non-Temporary Burn Pad Building Accounts:
 - SWMU 8, 59, 65 – North Acid; Laundry Facility; and Tank Farm
 - SWMU 13 & 67 – South Acid Area
 - SWMU 14 – Rocket Static Test Area
 - SWMU 26 – Single Base Propellant, Wastewater Settling Sumps
 - SWMU 48 – Nitroguanidine Support Area
 - AOC 5 – Cannon Range Tunnels (Facility 303)
 - AOC 16 – NC Production Lines
 - Interim Corrective Measures (ICM) and MEC Completion reports are complete.

Bldg 5900 - Before



Bldg 2500 - Before



Bldg 5900 - After



Bldg 2500 - After



AOC 16 - Before



AOC 16 - During



AOC 16 - After



General Overview of the Project Progress

- Building Foundations (SWMU 8,14,17,26,48 & AOC 16)
 - ☐ 100% physically complete
 - ☐ Removed: 254,441 sq. ft.
- Inside Sewer Lines (SWMU-17,26 & 48)
 - ☐ 100% physically complete
 - ☐ Removed: 1,460 linear feet
- Outside Sewer Lines (SWMU 8,14,17,26,48 & AOC 16)
 - ☐ 100% physically complete
 - ☐ Removed: 138,815 linear feet
- Restoration is complete in all areas
- ICM and MEC completion reports are complete

Three Layers of Piping



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



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

E Line Acid Sewer Removal - During



E Line Acid Sewer Removal - During



SWMU 26 - Sewer Removal



SWMU 26 - Sewer Removal



SWMU 26 – Sewer Removal



SWMU 26 - Restoration



- General Overview of the Project Progress
 - Building Foundations (SWMU 24,31,43,46,65,67 & AOC 12,16,17)
 - ☐ 100% physically complete
 - ☐ Removed 400,112 sq ft
 - Inside Sewer Lines (SWMU 24,65,67 & AOC 16,17)
 - ☐ 100% physically complete
 - ☐ Removed 857 linear feet
 - Outside Sewer Lines (SWMU 24,65,67 & AOC 16,17)
 - ☐ 100% physically complete
 - ☐ Removed 28,615 linear feet
 - Transport & Disposal of contaminated soils are complete in all areas. Site restoration is ongoing
 - ICM and MEC completion reports are complete in SWMU 31,43,46 & AOC 12. The remainder will be completed by Fall 2023.

AOC 16 During



AOC 16 After



- 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
- MEC work physically completed as of 1 May 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

- Louis Berger Group (LBG) 2015 task order: Complete RCRA documents, update or revise existing work plans and prepare studies to evaluate alternatives for 27 sites. This documentation work has been completed.
- AECOM 2015 task order: Perform sampling investigations (rind soils) and prepare data reports of soils around various structures at selected sites. This work has been completed.
- Zapata-ENVIROCON 2015 contract: Perform explosive decontamination of inside sewer piping; environmental soils excavation, and foundation slab, sump, and subsurface foundations removal in multiple MEC areas. All work is complete.

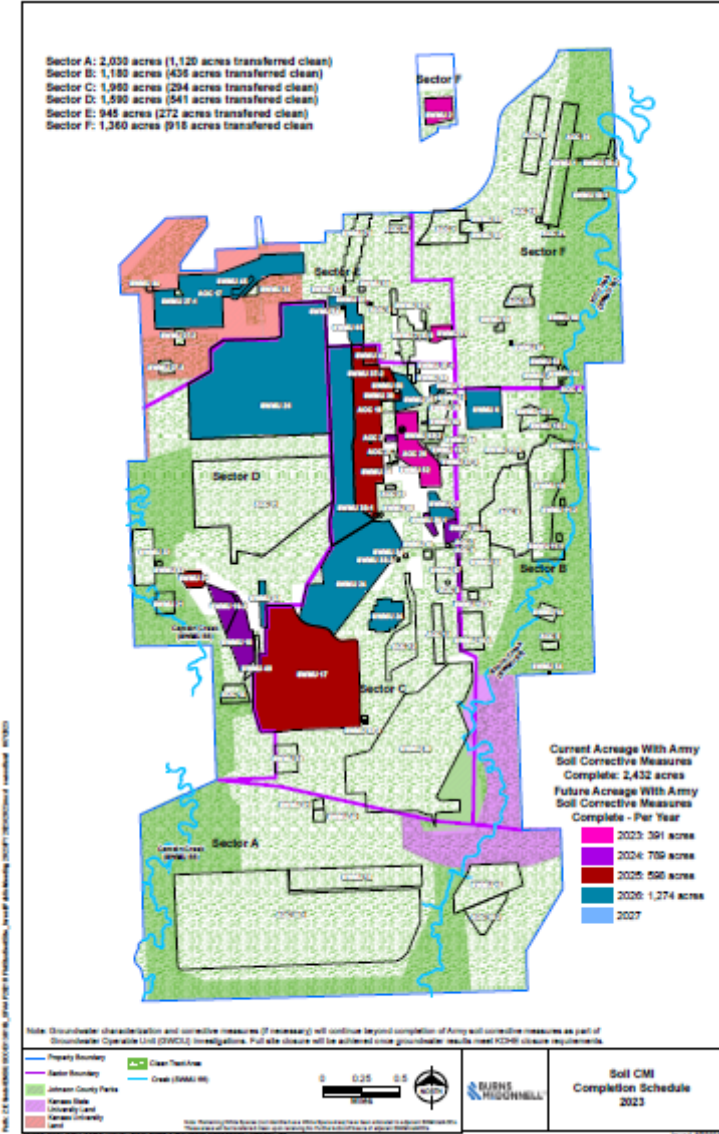
- Severson-USA (SES-USA) 2016 contract: Perform work on outside sewer lines including excavation, removal, explosive decontamination and environmental remediation work underneath explosive sewers after the explosive hazards have been removed. This work is complete.
- LBG 2017 contract: Conduct RCRA Facility Investigations (RFI) and develop subsequent reports, alternatives, and Army Decision Documents for 5 sites. This work is complete.
- AECOM 2018 task order: Conduct RFIs and Corrective Measures Studies (CMS) and develop subsequent reports, alternatives, Army Decision Documents and No Further Action Documents. The 13 initial sites on this contract required one or more of the above-mentioned phases of environmental work. This work is complete.

- CAPE Environmental 2018 task order: Perform RCRA Corrective Measures Implementation (CMI) at 10 sites, including removal of environmentally impacted soils and development of CMI Completion Reports. This work is complete.
- LBG 2019 task order: Conduct RFI/CMS, Decision Documents and No Further Action Documents for multiple sites. The 29 initial sites on contract require one or more of the above-mentioned phases of environmental work. All work to be final by September 2023.
- Severson-USA (SES-USA) 2019 contract: Third Explosive Decontamination contract. Perform remaining work on inside sewers/foundations and outside sewer lines including excavation, removal, explosive decontamination and environmental remediation work underneath explosive sewers after the explosive hazards have been removed. This MEC work is complete and only reporting remains.

- SRS-CAPE 2020 contract: Perform RCRA Corrective Measures Implementation (CMI) at 10 sites, including removal of environmentally impacted soils and development of CMI Completion Reports. This work is complete.
- AECOM 2020 task order: Conduct RFI/CMS and develop subsequent reports, alternatives, Army Decision Documents and No Further Action Documents. The 27 initial sites on this contract require one or more of the above-mentioned phases of environmental work. The contract also covers 3 Groundwater Operable Units. The groundwater study will produce a Conceptual Site Model (CSM). This CSM will advise how groundwater flows under SFAAP, its connectivity and its ability to transport contamination throughout the site. This work is about 60% complete.

- CAPE Environmental 2021 task order: Perform RCRA Corrective Measures Implementation (CMI) at 10 sites, including removal of environmentally impacted soils, installation of landfill covers on 2 of the sites and development of CMI Completion Reports. This work is 80% complete.
- Burns and McDonnell 2021 AE task order: This task order consists of ~48 sites requiring at a minimum one phase of environmental work and includes continued investigation of groundwater sitewide. This task order also prepared the application for the new RCRA Corrective Action permit for Sunflower. This permit will be granted and administered by KDHE. This work is 40% complete.

- In 2022, the Army awarded a contract with the capacity to complete all remaining RCRA Corrective Measures Implementation. Currently, two task orders for two sites are in progress. Remaining requirements expected award FY23 through FY25. The goal is all soil cleanup completed by 2028.



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

- 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

- Posted in newspapers in January/February 2022 – Kansas City Star, Lawrence Journal World, Gardner News, The Call
- Received 14 requests for community interest forms; 11 were completed and returned (one from a county official and ten from community members)
- Based on that response there was insufficient interest in forming a RAB
- Despite high attendance at the 2022 public meeting the required expression of interest was not achieved
- The Army will solicit for a RAB in January/February 2024 and provide an update at the next scheduled public meeting in June/July 2024

- As suggested by the community a website was established and is a subset of the Army Environmental Command website:

<https://aec.army.mil/index.php/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

Goal: To *provide* participants the opportunity to provide their feedback to the Army on what information they'd like to receive about the cleanup and how the Army can best communicate with them

- When should we meet again?
 - Stakeholder and public meetings are now held annually
- An interim update can be provided by email
 - Please sign up if you are interested
- There will be some requirements for documents to be available for public review
 - Please sign up if you are interested
- Information repository is available at:
 - Bldg. 229 at the former Sunflower Army Ammunition Plant

- We are here to answer your questions
- You can also reach us later by emailing:
usarmy.jbsa.imcom-aec.mbx.public-mailbox@army.mil