



USA Environmental, Inc.
A Small Business • Munitions Response Services

**Professionalism
Responsiveness
Cost Effectiveness**

Environmental Remediation

USA Environmental, Inc. (USAE) leverages more than 26 years of environmental remediation experience to deliver solutions using advanced technologies and methods to achieve the highest levels of safety, cost effectiveness, and quality.

Supporting our terrestrial and underwater characterization, assessment and remediation of munitions and explosives of concern (MEC) and hazardous, toxic, radioactive waste (HTRW), USAE's environmental remediation capabilities include building demolition and remediation at former military installations, former army ammunition plants and depots, and aqueous film-forming foam (AFFF) removal, replacement and disposal at active installations. USAE characterizes, removes, and disposes of contaminants to include:

- Munitions and Explosives of Concern (MEC);
- Munitions Constituents (MC) including TNT, RDX, HMX, PETN, as well as other explosives, propellants, and incendiaries;
- Chemical Warfare Materiel (CWM) consisting of chemical munitions as well as chemical agents in non-munitions configurations;
- Containerized AFFF to include water-based and hydrocarbon-based surfactants such as sodium alkyl sulfate, and fluorosurfactants, such as fluorotelomers, perfluorooctanoic acid (PFOA), or perfluorooctanesulfonic acid (PFOS);
- Hazardous wastes and chemical compounds;
- Other soil contaminants such as asbestos containing material (ACM), lead, mercury, arsenic, antimony, copper, and zinc.

Building Demolition and Remediation

USAE has performed dozens of environmental remediation projects involving building and infrastructure demolition at DoD facilities contaminated with explosive residues.

Across the >9,000-acres at the former Sunflower Army Ammunitions Plant (SFAAP), the team safely located, identified, recovered, evaluated, managed, and disposed of HTRW comingled with MEC/MC in compliance with RCRA. USAE utilized a portable robotic crawler camera to safely inspect discharge pipes for MEC explosives contamination which increased pipe removal production by reducing the need for UXO technicians to manually inspect shorter runs of pipe and enhanced safety by reducing entry into confined spaces. This cost effective and easily transportable camera system provided cost savings of >\$440,000.

- Removed and thermally decontaminated >171,765 LF of MEC-contaminated piping.
- Removed and disposed of >4,400 lb. of mercury contaminated material.
- Removed >614,364 SF of concrete building foundations.
- Crews completed 532,104 safe workhours without a lost-time incident.
- USAE robotically inspected >15,154 linear feet of pipeline.

Client Satisfaction

"Contractor's efforts and work practices received positive remarks from the Kansas Department of Health and the Environment, supporting the continued good relationship the Army and USACE has with this state regulatory agency."

"Contractor significantly reduced three major cost growth modifications (thru greatly improved efficiency of pipe removal) by 57%."

"Contractor continued to effectively incorporate additional scope to an already complex project execution thru adaptable crew sizes and assignments."

Core Value: "Client Satisfaction"
Delivering solutions that exceed expectations through collaborative achievement to gain the trust and confidence of each customer.



**(top) Removal/decontamination of sewers, underground foundations at the former SFAAP.
(bottom) Robotic crawler inspects pipe.**



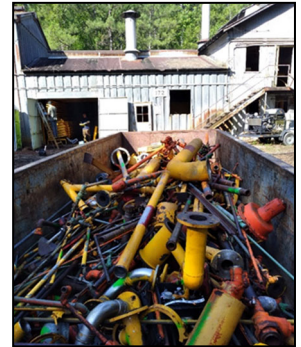
Environmental Remediation (cont.)

USAE performed **building demolition and remediation** of explosives contamination to deconstruct, demolish, and dispose of a former trinitrotoluene (TNT) washout building at a former DoD facility within Anniston Army Ammunition Depot, AL.

- Along with the removal of lead and asbestos, a total of 129 lb of bulk explosive material was removed from the buildings and piping prior to the building demolition.
- Explosives constituents in high concentrations included HMX, RDX, and TNT.
- More than 70 soil samples were taken to define the extent of contamination, with select groundwater samples taken to determine the impacts to groundwater.
- 1,632 tons of contaminated soil was excavated and removed for offsite disposal.
- Area regraded to original drainage characteristics and backfilled to original grade with clean soil.



(top) Excavation and removed 1,620 tons of contaminated soil.



(right) Pipes and flanges cleaned of explosives contamination before removal.

Client Satisfaction

"USAE continues to provide quality submittals and has worked thru various changes on the project."

"USAE promptly responds to project issues and is customer focused. They submit detailed, concise invoice statements. During fieldwork, they lead weekly calls to keep the government personnel up to date on the progress."

"USAE really does a great job of keeping the team informed and providing updated schedules when needed."

AFFF Removal, Replacement, & Disposal

At Marine Corps Installations East, USAE safely removed and replaced approximately 50,000 gallons of legacy AFFF concentrate with an approved MILSPEC AFFF, and disposed of approximately 60,000 gallons of concentrate and contaminated solution from 53 stationary systems and 116 trucks / mobile units. Disposed of an additional 15,000 gallons of AFFF concentrate being stored in various drums and tanks.

Client Satisfaction

"Contractor went above and beyond to conduct bi-weekly calls with the customer, Marine Corps rep and installation POCs to coordinate site mobilization and field activities, and worked with the customer to ensure work was accomplished to their satisfaction."

"Performance meets contractual requirements and exceeds many to the Government's benefit. The contract completed all reports ahead of the Task Order POP. They submitted the Final invoice and Release of Claims as soon as possible to allow for timely close out of the Task Order."

"The contractor maintained a safe work site, and no accidents while conducting field work."



(top)

The team completed the project in 4,625 total exposure hours without any safety incidents or injuries.

(right)

Drained and disposed of > 60,000 gals of concentrate and contaminated solution.