

OCCU-TEC's Environmental Investigation of a Former Munitions Factory

SERVICE:
WORKPLACE SAFETY, ENVIRONMENTAL
MANAGEMENT

SERVICES PROVIDED:
FEDERAL ENVIRONMENTAL TESTING

INDUSTRY:
FEDERAL



SITUATION

OCCU-TEC was contracted by a public government agency to identify and characterize the scope of environmental contamination within the workspace at a former munitions factory that was converted into a large urban federal office facility. When the WWII-era ammunition plant was converted into government office space in the 1960s, the complex was not decommissioned to the standards that are currently in place, which left significant contamination issues inside the structures. OCCU-TEC provided extensive support in identifying, quantifying, managing and developing mitigation strategies for contamination within the complex.

CHALLENGES

The former munitions complex presented several considerable challenges, including:

- **Legacy Contamination:**
The site had legacy environmental contamination from its previous use as an ammunition plant that manufactured 50-caliber bullets during WWII, and the Vietnamese and Korean wars. When the facility was closed in the late 1960s, the public government agency did not perform thorough initial testing for contaminants.
- **Operational Constraints:**
The complex housed active federal agencies, requiring investigation and remediation efforts to be conducted without disrupting critical operations. The complex consisted of 17 buildings, with several being extremely large and containing extensive crawl spaces and tunnel systems.
- **Health and Safety Concerns:**
Significant health and safety concerns arose from tenants regarding potential exposure to contaminants such as asbestos, lead, cadmium and chromium. In 2014, a complaint was registered with OSHA, which led to a complete shutdown of all operations and maintenance at the facility due to concerns about hazardous chemical exposure.

OCCU-TEC'S SOLUTIONS

At the request of the government agency, OCCU-TEC provided a variety of environmental and industrial hygiene services to address these challenges:

Environmental Testing and Oversight:

- **Site Specific Safety Plan Development and Review:** OCCU-TEC developed the first Site Specific Safety Plan (SSSP) for the Operation and Maintenance contractor which served as the template for SSSPs for all contractors working on site going forward. OCCU-TEC then provided reviews of all SSSPs and ensured contractors were following the procedures outlined in them.
- **Lead, Cadmium and Chromium Testing:** OCCU-TEC oversaw a contractor's work and conducted testing during the cleaning of more than one million personnel files within an occupied building.
- **Warehouse Decontamination:** Managed and tested during the decontamination of an active federal agency warehouse, ensuring continuous operation.

- **Crawlspace Membrane Installation:** Oversaw and completed testing during the installation of a large rubber membrane, to encapsulate contamination, in a building's crawlspace while maintaining the building's critical functions.
- **Electrical Vault Decommissioning:** Conducted oversight and baseline testing during the decommissioning of numerous subsurface electrical vaults.

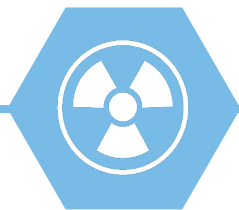
Health and Safety Assurance:

- Collected hundreds of environmental samples to assist in characterizing contamination.
- Responded to tenant concerns regarding employee health and safety.
Developed and implemented Site-Specific Safety Plans (SSSPs) to ensure safe working conditions.

OCCU-TEC's comprehensive approach not only addressed immediate contamination concerns but also provided ongoing support and expertise. This collaboration continued seamlessly even after a large engineering firm took over the contract, with OCCU-TEC serving as the industrial hygiene arm.

TECHNICAL HIGHLIGHTS

OCCU-TEC's expertise and meticulous approach led to several key technical achievements throughout the project:



COMPREHENSIVE CONTAMINATION CHARACTERIZATION

Collected hundreds of environmental samples to help the government understand the extent of contamination at the site, which included 83 contaminants in various areas like basements, crawl spaces and soil around the buildings.



HEALTH & SAFETY TESTING

Conducted rigorous testing activities to address tenant concerns and ensure the safety of employees. This included exposure monitoring for the operations and maintenance contractor and the development of safety plans to guide safe operations.



SITE-SPECIFIC SAFETY PLANS

Guided contractors through the development and implementation of SSSPs to work safely at the complex. OCCU-TEC also performed spot inspections and provided continuous oversight to ensure compliance with safety protocols.



RESULTS

Due to OCCU-TEC's efforts, the government agency effectively managed the environmental contamination at the former munitions factory while maintaining the operation of critical federal agencies. OCCU-TEC's ongoing support has been instrumental as the facility nears its final decommissioning in the coming years. The collaboration ensured the health and safety of the building's occupants and facilitated the complex's safe and efficient remediation efforts.

OCCU-TEC's work exemplifies our capability to manage extensive environmental investigation and remediation projects in challenging, operationally-constrained environments. By providing expert oversight, comprehensive testing and effective safety planning, OCCU-TEC has helped the government agency address significant legacy contamination issues, ensuring the safety and well-being of federal employees and preparing the site for its eventual decommissioning.

“OCCU-TEC'S WORK EXEMPLIFIES OUR CAPABILITY TO MANAGE EXTENSIVE ENVIRONMENTAL INVESTIGATION AND REMEDIATION PROJECTS IN CHALLENGING, OPERATIONALLY-CONSTRAINED ENVIRONMENTS.”