

CASE STUDY:

Environmental Inspections and Soil Sampling for Federal Facility Demolition and Construction



SITUATION

OCCU-TEC was contracted by a large engineering firm to conduct environmental inspections and soil sampling at a U.S. Defense Department facility as part of a planned demolition and construction project. The client, in collaboration with the federal government, required environmental testing to meet strict regulatory standards and ensure the safety of future developments. The scope of work focused on preparing two facilities for demolition and inspecting a new build site for a childcare center on an active military base.

CHALLENGES

The project presented multiple challenges:

- **Access restrictions:** Navigating the protocols for an active military base required obtaining multiple levels of approvals, including permits from the base itself.
- **Complex, evolving scope:** Modifications in construction plans required flexibility and real-time problem-solving.
- **Coordination across stakeholders:** OCCU-TEC worked closely with the client and partners to align on scope, methodology and compliance requirements.

- **Project delays:** The team was initially delayed due to a base personnel error resulting in an incomplete permit, halting work and compressing the original two-week timeline. Additionally, due to the unknown nature of the soils on site, the project required real time modifications to sampling methodology to accomplish project goals.

SCOPE OF SERVICES

The project involved two main parts:

Part 1: Inspections for asbestos and hazardous paint (including lead, cadmium and chromium) across two existing facilities slated for demolition. Pesticide sampling was also conducted on surficial soils (0-3 feet) around the foundations of the buildings to test for banned pesticides.

Part 2: Completion of more than 263 soil borings (0-3 feet deep) across a large open field designated as the site for a new childcare center. The borings were conducted in a grid pattern to ensure comprehensive soil analysis and samples were analyzed for pesticides.

SOLUTIONS & EXECUTION

The team acted quickly to mobilize on-site, navigating complex access requirements and adjusting the scope in response to construction plan changes and site constraints. Despite unforeseen delays, OCCU-TEC utilized innovative sampling methods to create efficiency in the soil sampling process and complete the project within the compressed timeframe.

Key services employed:

- Asbestos and hazardous paint inspections.
- Soil sampling and analysis for pesticides and metals.
- Project management and permitting coordination.

RESULTS

OCCU-TEC's testing confirmed:

- No elevated levels of banned pesticides in the soil.
- Asbestos-containing materials were found in limited areas and scheduled for abatement before demolition.
- Paint inspections identified the presence of cadmium, chromium and lead, providing critical data for demolition planning.

TECHNICAL HIGHLIGHTS

The project involved completing more than 263 soil borings across the open field, ensuring comprehensive site coverage and thorough environmental testing. OCCU-TEC also conducted hazardous paint inspections that went beyond standard lead testing, identifying metals such as cadmium and chromium in paint that are not commonly assessed in building demolition projects. Working on an active military base presented additional challenges, but OCCU-TEC successfully navigated access restrictions, permitting requirements and evolving project plans to keep the project on track.

THE PROJECT WAS COMPLETED ON SCHEDULE, WITH ALL ENVIRONMENTAL ASSESSMENTS MEETING REQUIREMENTS, ENSURING THAT THE CLIENT COULD PROCEED WITH DEMOLITION AND CONSTRUCTION WITHOUT FURTHER DELAYS.





IMPACT

OCCU-TEC's ability to quickly mobilize, adapt to changing circumstances and deliver accurate environmental assessments ensured that the client could meet their project goals. The thorough inspections provided peace of mind and ensured compliance with all relevant regulations.

The project highlighted the importance of:

- Effective communication across multiple stakeholders.
- Proactive project management to address undefined or evolving scopes.
- Flexibility and problem-solving to overcome access challenges and permitting issues.

Through this project, OCCU-TEC demonstrated its capacity to deliver high-quality environmental services in complex environments, paving the way for future opportunities with the firm and other federal clients.

“**OCCU-TEC'S EXPERTISE AND ADAPTABILITY WERE CRUCIAL IN NAVIGATING THE UNIQUE CHALLENGES OF THIS PROJECT. THEIR TEAM DELIVERED COMPREHENSIVE ENVIRONMENTAL ASSESSMENTS ON SCHEDULE, ALLOWING US TO PROCEED WITH CONFIDENCE AND MEET STRICT REGULATORY REQUIREMENTS.**”

OCCU-TEC's ability to deliver accurate, timely environmental assessments under challenging conditions ensured the project's success, enabling the client and its government partners to move forward. Whether your project requires detailed environmental inspections, hazardous material testing or comprehensive project management in complex environments, OCCU-TEC is equipped to meet your needs.

Contact OCCU-TEC today to learn how our expertise can help keep your next project safe, compliant and on schedule.