E-ENTERPRISE for the environment

Modernizing the business of environmental protection

PROJECT SUMMARY

Smart Mobile Tools for Field Inspectors supports inspection planning and management, field data collection, and evidence management, all within an integrated suite of digital tools to improve the quality and consistency of environmental inspections.

PROJECT LEADS

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RESOURCES

RCRA User Documentation

SMART MOBILE TOOLS FOR FIELD INSPECTORS

Improving field inspection quality, consistency, and efficiency using mobile devices.

Challenge

Environmental inspections are largely paper-based processes requiring hours of preparation and post-inspection work. Smart Mobile Tools for Field Inspectors bring environmental inspections into the 21st century by streamlining operations and improving quality of information.

Benefits

Smart Mobile Tools for Field Inspectors (Smart Tools) will fundamentally improve the operation and management of environmental inspection programs by providing digital assistance to inspectors and their managers during each stage of the inspection process.

Smart Tools will:

- Improve communication and clarity of information
- Optimize inspection resources
- Improve field inspection quality and efficiency

Accomplishments

The Smart Tools effort draws on the work of several states that developed inspection support software for a variety of media programs. States and EPA started by holding a lean process improvement event that addressed joint Resource Conservation and Recovery Act (RCRA), National Pollutant Discharge Elimination System (NPDES), and air requirements for a mobile inspection software solution. The team also tested ruggedized laptops for use with the Smart Tools software. In 2018-2019, the Environmental Council of States (ECOS) and the Association of State and Territorial Solid Waste Management Officials helped EPA customize Smart Tools for use in RCRA Subtitle C inspections. In 2019, a smaller team of state and federal RCRA inspectors developed and tested Minimum Viable Product (MVP) software for Smart Tools for RCRA. Smart Tools for RCRA was completed at the end of 2019 and rolled out for use by inspectors in the early adopter regions and the states of Arkansas and Maryland in June 2020. EPA Region 10 successfully completed the first inspection using Smart Tools for RCRA software and mobile hardware in Alaska in July 2020.

What's Next?

The Smart Tools project team, in partnership with ECOS and the Association of Clean Water Administrators, is building upon Smart Tools version 1.0 for RCRA to define and develop an MVP for inspectors implementing the NPDES permit program addressing water pollution. To the extent possible, in-person and remote field testing will be conducted through October, and online 'live' training will be delivered in the fall. Smart Tools for NPDES is expected to launch in December 2020.