INFORMATION TECHNOLOGY/KNOWLEDGE MANAGEMENT

PROJECT: Waste and D&D Engineering and Technology Development: *Waste Information Management System (WIMS)*

CLIENT: U.S. Department of Energy
SITE: DOE Complex-wide
PRINCIPAL INVESTIGATOR: Dr. Leonel Lagos

Description:

This task supports DOE EM in its mission to gather, organize, and display waste forecast data from across the DOE complex in a web-based system to allow identification of volumes, material classes, disposition sites, choke points and barriers.

The overall objective of this project is to provide DOE HQ and site waste managers with the tools necessary to easily visualize, understand, and manage the vast volumes, categories, and problems of forecasted waste streams. The comprehensive, web-enabled Waste Information Management System (WIMS) supports:

- Expediting site waste management decisions.

- Providing DOE complex-wide information.

- Identifying, understanding and resolving existing barriers and choke points.

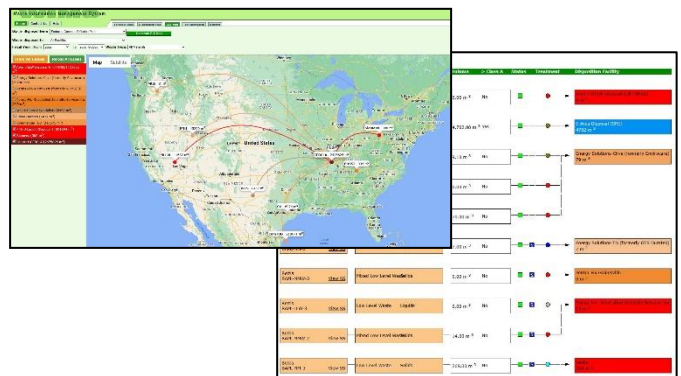- Providing a mechanism for achieving the accelerated cleanup objectives.

Benefits:

Benefits of developing and implementing WIMS include:

- Meeting the need of DOE for the waste forecast information to be available to the public.

- Assisting DOE and local sites in meeting individual site goals and milestones.

- Achieving improved efficiencies of scale when outsourcing treatment and disposal services by providing information regarding complex-wide waste streams.

- Providing information to technology vendors regarding DOE waste needs to plan future technology capacity.

- Sharing site-to-site resources and treatment capabilities to allow the sites to leverage capacity and expertise.

Accomplishments:

- The Forecast module provides the waste forecast information in a tabular format.

- The Disposition Map module provides the waste forecast information as a disposition map.

- The GIS Google Map module summarizes the waste forecast information and displays its path from generation site to disposition site.

- The Transportation module displays the waste shipping forecast information via the transportation modes – rail, road and intermodal.

- The Reports module creates custom-filtered reports for printing in a variety of formats (MS Excel, MS Word, and PDF).

- WIMS is updated annually based on waste and transportation forecast information provided by DOE EM.

WIMS is deployed at https://emwims.org