

INFORMATION TECHNOLOGY/KNOWLEDGE MANAGEMENT

PROJECT: Waste and D&D Engineering and Technology Development: Deactivation and Decommissioning Knowledge Management Information Tool (D&D KM-IT)

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

Description:

D&D work is a high priority across the DOE complex. Subject matter specialists associated with the DOE sites and the D&D community have gained extensive knowledge and experience over the years. To prevent the D&D knowledge and expertise from being lost over time, an approach is needed to capture and maintain this valuable information in a universally available and easily usable system.

The overall objective of this project is to provide a focused web-based tool to assist the DOE D&D community in identifying potential solutions to their problem areas by using the vast resources and knowledge-base tools available through the web.

- Providing a mechanism to the global D&D community for searching relevant D&D information.
- Collecting information from subject matter specialists.
- Building a knowledge repository for future reference.
- Archiving lessons learned, best practices, photos/videos, and other relevant documents.
- Providing a secured collaboration platform for the global D&D community to share knowledge.

Benefits:

- D&D KM-IT is serving as a centralized repository to provide a common interface for all D&D related activities.
- Assisting D&D community users in gathering, analyzing, storing and sharing knowledge and information.

- Reducing the need to rediscover the knowledge of the past while capturing the new knowledge and experiences gained during D&D operations.
- Resulting in enhanced worker safety and schedule efficiencies.

Accomplishments:

- Technology module contains information on over 1250 D&D related technologies and includes over 470 robotic technologies.
- Vendor module provides descriptions, areas of expertise, and contact information for over 920 D&D related vendors.
- Specialist directory lists D&D experts, their areas of expertise, and contact information.
- Hotline module receives D&D questions and provides solutions from experts.
- Web crawler aids users in searching the D&D KM-IT and web for D&D related information.
- Document library hosts legacy Innovative Technology Summary Reports (ITSRs), international documents, ALARA Center newsletters, and other documents from the D&D community.
- Mobile system provides access to modules on the hand held devices supporting Windows, Android, Blackberry and Apple's iOS.



D&D KM-IT main system at <u>www.dndkm.org</u> and D&D KM-IT mobile at <u>m.dndkm.org</u>

ABOUT

Since 1995, the Applied Research Center at Florida International University has provided critical support to the Department of Energy's Office of Environmental Management mission of accelerated risk reduction and cleanup of the environmental legacy of the nation's nuclear weapons program. ARC's research performed under the DOE-FIU Cooperative Agreement (Contract # DE-EM0000598) can be classified as fundamental/basic, proof of principle, prototyping and laboratory experimentation.

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