



RADIOACTIVE WASTE MANAGEMENT (MS-EM-1)

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Overview

Introduction

 Joint USA/Japan environmental management collaborative research as it relates to environmental safety in association with the management of radioactive waste resulting from the decommissioning of Nuclear Power Plants (NPP).

Goals

- Contribute to the acceleration of decommissioning of Fukushima Daiichi NPP.
- Contribute to the overall DOE Office of Environmental Management cleanup mission.
- Contribute to storage, treatment and disposal of fuel debris and other associated radioactive wastes.

Research Areas

Radioactive Waste Treatment and Packaging

- Systems Studies that contribute to the optimization of waste management/decommissioning operations and/or processes
- Critical processes: initial characterization, decontamination technology, secondary waste treatment, final characterization, data processing, etc.

Rapid Analysis of Radiological Contaminants

- Key contaminants include: Cs-137, Sr-89, Sr-90, others
- Contaminants in water and soil matrices
- Easily deployable field technologies to support remedial operations

Risk Modeling Tools/Techniques

- Development or demonstration of models and techniques for assessing contaminant risk
- Supports the development of target cleanup goals, and selection of remedial options

Collaboration Approach

- Joint US/Japan Research
 - US DOE, Offices of Environmental Management (EM) & Nuclear Energy (NE)
 - Japan Ministry of Education, Culture, Sports, Science and Technology (MEXT)
- Research conducted by US-lead universities in direct collaboration with Japanese universities/research institutions
- An equivalent amount of funds are anticipated to be provided by the Japanese government to the Japanese collaborators. Availability of these funds will be addressed in a solicitation sponsored by the MEXT.

Anticipated Schedule / Budget

- No Pre-proposals required
- Full Proposal Applications due February 18, 2016
- Application Technical reviews March/April
- Award Selection June
- Anticipated Start October 1, 2016
- 1-2 Awards Anticipated
- Anticipated DOE Budget \$400-525K
- First-year US Budget \$175K
- Duration 3 year max

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