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U.S. ENERGY DEPARTMENT AGREES TO REVIEW KEY ASPECTS OF MAJOR NUCLEAR WASTE PROGRAM IN RESPONSE TO INDEPENDENT STUDY

RECENT \$550 MILLION FAILURE OF KEY HIGH-LEVEL WASTE PROGRAM HIGHLIGHTS PROBLEMS AND MANAGEMENT CHALLENGES

WASHINGTON, D.C. -- The U.S. Department of Energy (DOE) today acknowledged several problems in a major nuclear waste program. These problems were among those first made public in [*Containing the Cold War Mess: Restructuring the Environmental Management of the U.S. Nuclear Weapons Complex*](#), a report released last fall by the Institute for Energy and Environmental Research (IEER). As part of a formal response to IEER's Report, DOE's Office of Environmental Management announced that it would review key aspects of its plans for handling portions of the radioactive legacy of nuclear weapons production.

[DOE's response](#), made public at a National Press Club news conference, expressed a desire to continue seeking the advice of IEER and other independent groups. "The very fact that DOE has undertaken a serious review of our report represents a positive break from its past pattern of all too frequently ignoring inconvenient advice," said IEER President Dr. Arjun Makhijani, co-author of the study.

DOE acknowledged that key premises of its plan for managing large volumes of buried transuranic waste (waste contaminated with significant quantities of plutonium and similar radioactive materials) are based on information that is no longer valid. For example, plutonium and other transuranic radionuclides are moving far faster through the soil than anticipated at sites in Idaho, Tennessee, and Washington state.

"DOE's decisions have been based on faulty technical arguments apparently driven by political expediency," explained Marc Fioravanti, principal author of the IEER study. "Focusing resources on opening the Waste Isolation Pilot Plant, a deep repository in New Mexico, is the wrong priority. Buried transuranic wastes are already contaminating soil and groundwater at several sites. These risks are far greater than those for stored wastes scheduled to go to WIPP."

IEER recommended that the stored waste now destined for WIPP should be stored on-site. "Moving this waste poses needless risks," said Makhijani. "DOE should continue careful monitoring of stored waste while it refocuses its efforts on the more urgent buried waste problem."

In response to an IEER recommendation and a later National Research Council study, DOE has recently announced that it will establish a technical and financial review process for major projects. "DOE deserves praise for this important initiative," said Makhijani. IEER had criticized DOE for rushing into large projects without adequate preparatory work. As a result, several projects such as the Pit 9 project in Idaho and the high-level waste pre-treatment facility at Savannah River Site have been major failures.

At the news conference, IEER released a [supplemental report](#) analyzing additional problems at DOE sites across the country, particularly the implications of a sixteen-year, \$550 million effort to pretreat high-level waste at the Savannah River Site in South Carolina using an approach called "In-Tank Precipitation." Historical project documents released by IEER describe DOE's expenditures on this technology in the face of continued warnings from outside experts about safety risks, especially the potential for fires and explosions. The waste that was to be treated by In-Tank Precipitation represents 90% of the reprocessing waste at the site and one-seventh of all radioactivity in the DOE complex.

"The recalcitrance of DOE and its site contractor, Westinghouse, in response to scientific information they didn't want to hear is alarming," said Brian Costner, Director of the Energy Research Foundation, a DOE watchdog group in Columbia, South Carolina. "ITP is now added to a long list of examples where the isolated culture of the nuclear weapons complex has needlessly cost taxpayers hundreds of millions of dollars and thrown an important project years farther behind schedule. Westinghouse's public response has been largely to downplay the problem. This leaves us with both a serious, unresolved environmental and safety problem in South Carolina and cause for concern nationally that reforms have yet to adequately permeate into the DOE culture." DOE has announced formation of a review team to investigate the ITP issue. In a March 18 letter to Dr. Makhijani, Acting Assistant Secretary for Environmental Management James Owendoff promised a "thorough and independent assessment."

While noting areas of agreement and some positive signs from DOE, IEER stated strong concerns about several programs DOE and IEER discussed. At the Fernald site near Cincinnati, Ohio, Fioravanti stated that a new proposed approach to dealing with radium and thorium waste, which would involve the construction of new temporary holding tanks for the waste, was too big and too hasty and recommended a more measured approach. IEER also reiterated that DOE should take steps to protect the public against radon releases in case the project runs into problems.

IEER commended DOE's recent attention given to issues of contamination of the vadose zone and groundwater at Hanford by Undersecretary Moniz. This was a key recommendation in [*Containing the Cold War Mess*](#).

On the Hanford tank remediation effort itself, IEER's prognosis was less sanguine. "DOE is proceeding with a risky technical and contracting arrangement for privatizing treatment of Hanford high-level tank waste. Its plans do not adequately reflect the level of complexity of wastes at Hanford," said Fioravanti.

IEER also questioned DOE's claim that it is applying lessons from other sites to the Hanford tanks remediation. "That doesn't seem so to us," said Makhijani. "In response to the problems with high-level waste treatment at Savannah River Site, DOE should rethink its high-level waste pretreatment and treatment programs at Hanford as well as in South Carolina."

Both DOE and IEER said that they are continuing the dialog to improve DOE's Environmental Management Program.