

**Statement of Frank Marcinowski
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Good morning, Madame Chairman and Members of the Committee. I am pleased to be here today to discuss how the Department of Energy's (DOE's) Office of Environmental Management (EM) conducts environmental cleanup at federal facilities. I appreciate the opportunity to share our experiences with you.

The year 2009 will mark 20 years since the EM program was first established to take responsibility for cleaning up the legacy nuclear waste left by nearly 50 years of nuclear weapons production and energy research. At that time, the extent of the risk to our citizens and communities was literally unknown, and certainly many of the processes and technologies to reduce that risk had not yet been invented.

This is an enormous and complex responsibility. Funded at more than \$5 billion annually, EM represents the largest environmental cleanup program in the world. Even today, after 20 years of measurable progress, the estimated cost of the remaining nuclear cleanup work in this country ranks behind only the national debt and pensions owed to military and federal retirees among the government's future potential obligations.

Allow me to describe the progress that we have made. Since our work began, we have closed 86 of more than 100 sites nationwide. The national "footprint" of the DOE's nuclear complex and its accompanying risks has been drastically reduced, and eliminated altogether from 31 states. We have packaged and safely stored the nation's entire excess plutonium inventory. We have pioneered new technologies that have allowed us to make progress retrieving millions of gallons of tank waste, and to safely dispose tens of thousands of cubic meters of transuranic waste (materials contaminated with plutonium and other elements above uranium on the periodic table). In FY 2006 and FY 2007 alone, we demolished approximately 500 buildings (nuclear, radioactive, and industrial) as part of our decontamination and decommissioning (D&D) projects. And finally, we have made great strides in protecting groundwater using innovative treatment systems.

HOW WE CONDUCT OUR CLEANUP WORK

Our program's 1,400 federal employees do not accomplish this work alone. More than 30,000 experienced contractor workers – skilled scientists, technologists, engineers, managers, and cleanup workers – play crucial day-to-day roles in the cleanup. In addition, we work closely with local stakeholders, state regulators, and the Environmental Protection Agency (EPA) to plan, execute, and evaluate how cleanup is conducted at individual sites. At nine of our largest sites, we consult formally with stakeholders through boards chartered under the Federal

Advisory Committee Act (FACA). The work at most of our sites is governed by federal facility agreements (FFAs), legal agreements that include DOE, the EPA and state regulators.

An FFA sets forth schedules and processes for site cleanup under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), including enforcement provisions for non-compliance. Some FFAs that include the state as a party also incorporate compliance requirements found in the Resource Conservation and Recovery Act (RCRA), as well as state hazardous waste law requirements that flow from that Act. The enforceable milestones contained in these FFAs have played a major role in EM's planning, budgeting and the setting of priorities.

Of EM's currently active 19 cleanup sites, 16 are federal facilities. (The non-federal sites, which are not owned by the government but where government work was conducted, include the Energy Technology Engineering Center (ETEC) in California, the Moab uranium mill tailings site in Utah, and the West Valley site in upstate New York.) With the 2007 completion of the FFA for the Pantex site in Texas, DOE now has in place FFAs for all nine of its sites on the EPA's National Priorities List (NPL). One additional site, the Nevada Test Site, is not on the NPL but has an FFA in place.

Development of each of these FFAs has been a multi-step process. First, DOE has worked closely with EPA and the respective state regulators to develop the terms of a draft agreement. Once the parties reach agreement, they develop a letter of intent to execute it. As voluntarily agreed to by DOE, EPA then releases the draft agreement for public comment, after which it is either finalized or renegotiated to address comments received. Only after all public comments are addressed and the parties reach consensus on all terms, does an FFA become final.

DOE considers stakeholder involvement to be a key component of the cleanup decision-making process, including the development and modification of FFAs. Thus, for example, stakeholder input during renegotiation of the Hanford FFA in the late 1990s led DOE to change several critical aspects of that agreement. DOE has worked to ensure similar public participation in the development and modification of other FFAs since that time.

EM PROGRAM PLANNING FOR FY 2009

We manage our program on the principle of prioritizing risk reduction across the *entire* complex for which EM is responsible, supported by our four guiding tenets of safety, performance, cleanup and closure. Our FY 2009 budget request totals \$5.528 billion. With 90 percent of our budget addressing mission activities at our cleanup sites, more than half of FY 2009 funding will go towards our highest-risk activities of stabilizing tank waste, nuclear materials and spent nuclear fuel; another one-quarter of the budget will be devoted to cleaning up contaminated soil, groundwater, and excess facilities, and about 14 percent will go to manage wastes streams related to those cleanup activities. The remaining 10 percent covers mission activity support, including costs for program oversight provided by our federal personnel, and technology development.

Madame Chairman, I mentioned the importance of milestones in planning and executing our work and let me relate that to our funding. We recognize that our budget is based on, and would implement, an environmental management approach under which some of the milestones and obligations contained in the environmental agreements would not be met. It is also important to recognize that some upcoming milestones will be missed regardless of the approach that is chosen and its associated level of funding.

Moreover, some of the relevant agreements were negotiated many years ago, with incomplete knowledge by any of the parties of the technical complexity and magnitude of costs that would be involved in attempting to meet the requirements. This incomplete knowledge, coupled with other issues including contractor performance, overly optimistic planning assumptions, and emerging technical barriers, also have impeded DOE in meeting all milestones and obligations contained in the environmental compliance agreements.

In planning its environmental cleanup efforts and developing the budget for those activities, the Department seeks to focus on work that will produce the greatest environmental benefit and the largest amount of risk reduction. DOE strongly believes that setting priorities and establishing work plans in this way is the most effective use of taxpayer funds and will have the greatest benefit, at the earliest possible time, to the largest number of people.

As I have said, in determining these priorities, DOE works closely with the federal and state regulators, and will seek the cooperation of those entities in helping evaluate needs and focus work on the highest environmental priorities based on current knowledge, particularly where doing so necessitates modification of cleanup milestones embodied in prior agreements with DOE.

MANAGING OUR PRIORITIES

Next, let me address a number of issues that guide our work at every site, whether governed by an FFA or not. First, all workers deserve to go home as healthy as they were when they arrived at the job in the morning. No milestone is worth any injury to our workforce. I am pleased to say that EM's safety performance continues to be outstanding. As a result of collaborative efforts by DOE and our contractors, worker injuries have been reduced by 50 percent during the past three years. Currently EM's injury rate is less than 10 percent of comparable commercial waste disposal and construction industries.

Another priority is our goal of making EM a high-performing organization by every measure. This goal has required us to look critically at every aspect of how we plan, procure, execute and manage every project under our jurisdiction, and how we align every dollar the taxpayers provide to achieving environmental cleanup goals.

In September 2005, Congress asked the National Academy of Public Administration (NAPA) to undertake a management review of EM, including an assessment of EM's human capital. NAPA's study, conducted over a period of 18 months, was very interactive; we opened our operations to NAPA for scrutiny and in turn have embraced and implemented nearly all of NAPA's proposals. Most of all, we were gratified that NAPA concluded in its final report issued

this past December that EM, “is on a solid path to becoming a high-performing organization.” We know we have much remaining to be accomplished, but we take NAPA’s conclusion as a sign that we are, in fact, headed in the right direction with regard to how we function as an organization.

Third, we recognize that our ability to accomplish our work and perform under our agreements is only as good as our planning basis. We develop our budget from our project baselines defining the scope, cost, and schedule for each project. In past years, baselines for many of our projects were unrealistic, due to overly aggressive assumptions in the technical and regulatory arenas, increasing costs of materials and simple underperformance.

Since that time, our sites have undergone an independent review to verify the reasonableness of the scope, cost, and schedule for each project. As a result, all near-term baselines up to five years have now been independently reviewed and certified by Logistics Management Institute, a non-profit consultant to the DOE’s Office of Engineering and Construction, while long-term cost ranges have been determined to be reasonable. Accurate project planning is essential to our ability to meet our commitments at our facilities.

Fourth, as an “acquisition” organization, EM accomplishes its mission through procurement and execution of our projects. To oversee this process, about 18 months ago, we implemented a new organizational structure, including the creation of a Deputy Assistant Secretary for Acquisition and Project Management. This position integrates the two functions of procurement planning and project management, helping us to professionalize the procurement process so that we learn from, and improve upon, each contract experience. Moreover, it provides us with strong management oversight after the contract is awarded. We are striving to make EM nothing short of a “Best-in-Class” organization for project and contract management and engineering and technology.

Fifth, the EM program has always required a strong technology component to accomplish its mission, one that is focused on developing and deploying technologies to enhance safety, effectiveness, and efficiency. As we look ahead to our cleanup work, we face the ongoing challenge of maturing and integrating technology into first-of-a-kind solutions. An Engineering and Technology Roadmap has been developed to address this need. The Roadmap identifies the technical risks the EM program faces over the next ten years, and strategies to address the risks. EM’s validated baselines are a powerful tool that allows EM managers to identify the points at which new knowledge and technology can be efficiently inserted into EM cleanup projects to address risks.

EM’S CLEANUP PROGRESS

Finally, allow me to draw attention to the significant cleanup progress achieved recently. We have:

- Completed stabilization and packaging for all plutonium residues, metals, and oxides and begun consolidation of all of these materials at the Savannah River Site (SRS);

- Produced for disposition more than 2,500 cans of vitrified high-level waste from highly radioactive liquid wastes;
- Completed retrieval and packaging for disposal of more than 2,100 metric tons of spent nuclear fuel from K-basins at Hanford to protect the Columbia River;
- Shipped more than 50,000 cubic meters of transuranic (TRU) waste from numerous sites to the Waste Isolation Pilot Plant (WIPP) for permanent disposal, including 25,000 out of a planned 30,000 drums from SRS;
- Disposed of nearly one million cubic meters of legacy low-level waste and mixed low-level waste;
- Eliminated 11 of 13 high-risk material access areas through material consolidation and cleanup;
- Cleaned up the Melton Valley area at the Oak Ridge Reservation and continued decontamination and decommissioning of three gaseous diffusion buildings at Oak Ridge; and
- Disposed of more than 8,500 tons of scrap metal from Portsmouth.

The program has made significant progress in shifting focus from risk management to risk reduction. To strike the balance that allows EM to continue achieve risk reduction and pursue cleanup goals, we propose funding the following risk reduction and regulatory activities in priority order:

- Stabilizing radioactive tank waste in preparation for treatment (about 32 percent of the FY 2009 request);
- Storing, stabilizing, and safeguarding nuclear materials and spent nuclear fuel (about 18 percent of the FY 2009 request);
- Disposing of transuranic, low-level, and other solid wastes (about 14 percent of the FY 2009 request); and
- Remediating major areas of EM sites, and decontaminating and decommissioning facilities (about 26 percent of the FY 2009 request).

Madame Chairman, I am proud of the progress the EM program has made in recent years in terms of meeting the nation's cleanup priorities, working closely with stakeholders, and building the foundation for future efforts. I appreciate your interest in our program and am pleased to answer your questions.

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