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U.S. Department of Energy  
before the Subcommittee on Strategic Forces  
Committee on Armed Services  
U.S. Senate  
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Good Afternoon, Chairman Sessions and Members of the Subcommittee. I am pleased to be here today to answer your questions on the Fiscal Year 2007 budget request for the Environmental Management (EM) program. I want to thank you and your subcommittee for your support of the EM program.

Since my appointment in August of 2005, I have been visiting Department of Energy sites and familiarizing myself with the breadth of work that EM has the crucial mission to accomplish. I have been impressed with the dedication and focus of the workforce to remedy the environmental legacy of the Cold War, a task that is both inherently challenging and innately beneficial to our country. As I have become more informed on the sheer immensity of the challenges that face the program, I have a greater understanding of the progress we have made and the significant challenges that lie before us.

Over the last four years, EM has made major strides in achieving results. To our credit, the program has made significant progress in shifting focus from risk management to risk reduction and cleanup completion, an achievement not possible without the strong leadership and support of this committee. In fact, in 2005, we physically completed the cleanup of the Rocky Flats site, Colorado, produced 257 canisters of vitrified high level waste at the Savannah River Site, South Carolina, ready for repository disposal, and completed the Melton Valley legacy waste cleanup at the Oak Ridge Reservation, Tennessee, while beginning the decontamination and decommissioning of the last remaining gaseous diffusion plant facilities at Oak Ridge. During 2006, we expect to complete regulatory actions associated with Rocky Flats closure and complete cleanup at up to eight other sites. The eight other sites targeted for cleanup completion and/or closure are:

- Fernald, Ohio
- Mound, Ohio\*
- Kansas City Plant, Missouri
- Lawrence Livermore National Laboratory Main Site, California
- Lawrence Berkeley National Laboratory, California
- Ashtabula Environmental Management Project, Ohio
- Sandia National Laboratories, New Mexico
- Columbus Environmental Management Project, Ohio

\*With the possible exception of OU-1, which is being addressed now as a result of FY 2006 Appropriations Act direction.

The Fiscal Year 2007 budget request builds on the past success of cleanup and closure and sets our course for accomplishing our cleanup responsibilities. The FY 2007 Environmental Management budget request is \$5.39 billion for defense activities, a decrease of \$760 million from the FY 2006 appropriation, an indicator of our anticipated success with completion and closure of Rocky Flats in Colorado and several other sites in 2006. The FY 2007 budget request reflects a balance of reducing risk and completing cleanup with other Departmental and national priorities. Overall, our request puts a high priority on tank waste treatment and radioactive waste disposition while preserving our site completion and closure impetus.

This budget request will make possible a ramp up in construction of key components of the Waste Treatment Plant at Hanford, Washington, which had been slowed in 2005 and 2006, and continues safe management and retrieval of waste from single shell tanks at Hanford, in pace with the Waste Treatment Plant delays. This request increases funding for the Advanced Mixed Waste Treatment Project in Idaho to support shipments of transuranic waste to the Waste Isolation Pilot Plant and the construction of the Sodium Bearing Waste Facility to treat liquid tank waste. This request reflects an increase to support the critical path to closure for the East Tennessee Technology Park in Oak Ridge.

At the Savannah River Site, this request will support ongoing stabilization of the site's stored nuclear materials, including funding for a container surveillance capability and consolidating the site's own plutonium into a single location. The request also provides for management and disposition of liquid tank waste, including funding for design and construction of the Salt Waste Processing Facility.

In addition, the request supports ongoing cleanup at National Nuclear Security Administration sites, such as the Nevada Test Site, Pantex Plant, and Lawrence Livermore-Site 300. It also supports the first full year of remote-handled transuranic waste disposal at the Waste Isolation Pilot Plant in New Mexico.

With this budget request, achieving our short term completion goals for risk reduction and cleanup are achievable, with the intention to complete cleanup of eight more sites by 2009. They are:

- Argonne National Laboratory-East, Illinois
- Pantex Plant, Texas
- East Tennessee Technology Park, Tennessee
- Lawrence Livermore National Laboratory-Site 300, California
- Stanford Linear Accelerator Center, California
- Energy Technology Engineering Center, California
- Brookhaven National Laboratory, New York
- Inhalation Toxicology Laboratory, New Mexico

The structure of FY 2007 Congressional budget request focuses on each site. This structure has three appropriations: Defense, Non-Defense, and Uranium Enrichment

Decontamination and Decommissioning. This structure will allow the consolidation of all site activities for visibility, accountability and performance.

With this FY 2007 budget request, we are proposing several shifts between program offices with the completion of cleanup.

- With the completion of cleanup at Rocky Flats in FY 2006, this request transfers site responsibility from EM to the Office of Legacy Management. However, EM's request does include funding for Rocky Flats for the final Comprehensive Environmental Response, Compensation and Liability Act Record of Decision.
- With the physical completion of cleanup work at Fernald, this request transfers responsibility from EM to the Office of Legacy Management for Fernald.
- This request transfers the work scope associated with the Nevada Offsites (Project Chariot, Amchitka Island, and the Salmon Site; Central Nevada Test Area, Gasbuggy Site, Gnome Coach Site, Project Shoal Area, Rio Blanco Site, and the Rulison Site) from EM to the Office of Legacy Management.
- This request transfers long-term response actions at the Lawrence Berkeley National Laboratory from EM to the Office of Science.
- With completion of active remediation work planned in FY 2006 at Sandia National Laboratory, Kansas City Plant, and Lawrence Livermore National Laboratory-Main Site, this request transfers long-term response actions from EM to the National Nuclear Security Administration.

EM envisions that as cleanup work is completed at sites with continuing missions, EM will transfer long-term surveillance and monitoring activities to the cognizant program office or, for those sites without a continuing mission, to the Office of Legacy Management.

Your support of this request will keep the cleanup program on track to meet the commitments and produce results worthy of the investment of the American people. We have shown we can deliver meaningful results important to accomplishing a technically complex mission. With your support, we will continue to show results important for today as well as far into the future.

## RESULTS AND CHALLENGES

The risk reduction, cleanup completion strategy has borne key results. We will build on this success and commit our efforts to refine our processes, taking advantage of opportunities and breakthroughs to meet or exceed past expectations of performance. For instance, as of the end of last year EM had cumulatively accomplished the following:

- Packaged and certified 5,541 containers of enriched uranium (out of 9,110 containers required over the cleanup lifecycle) for long-term storage.
- Packaged 11,307 metric tons of depleted uranium (out of 685,161 metric tons required over the cleanup lifecycle) in a suitable form for disposition.

- Disposed of 960,143 cubic meters of legacy low-level waste and mixed low-level waste (contaminated with hazardous chemicals), out of 1,532,871 cubic meters required over the cleanup lifecycle.
- Eliminated 9 out of the 13 highly secure and costly special nuclear materials storage areas, or Material Access Areas.
- Completed decommissioning, deactivation, dismantlement and/or demolition of 1,106 out of 3,113 industrial facilities.
- Completed remediation of a total of 5,858 release sites (that is, discrete areas of contamination), out of 10,516 release sites required over the cleanup lifecycle.

In addition, on a site-specific level, we have:

- Consulted with the Nuclear Regulatory Commission under Section 3116 of the *National Defense Authorization Act for FY 2005* and made the first waste determination to allow certain low-level waste from reprocessing to be disposed of on-site at the Savannah River Site in South Carolina, thereby reducing the risks associated with the approximately 36.4 million gallons of radioactive waste stored in the underground tanks there.
- Retrieved the first 13,000 of 75,000 drum equivalents of suspect-transuranic waste five months ahead of the Tri-Party Agreement regulatory milestone at Hanford in Washington.
- Completed the first “wet to dry” spent nuclear fuel transfer campaign at the Idaho National Laboratory, with Training Research and Isotope Production, General Atomics (TRIGA) spent nuclear fuel now being held in dry storage.
- Completed disposal of all low-level waste generated during the Cold War era (>12,000 cubic meters) one year early at the Savannah River Site.
- Disposed of over 8,000 tons of scrap metal from Portsmouth, Ohio.
- Completed disposal of the remaining inventory of hazardous waste generated during the Cold War era and over 8,000 cubic meters of polychlorinated biphenyl (PCB)-contaminated low-level waste from Oak Ridge, Tennessee.

These results provide only one perspective or “snapshot” of the progress EM has made in risk reduction and cleanup. As with a photo, these accomplishments present only a limited view of the total program. With EM, as with many complex and diversified programs, the challenges behind achieving these results are not always apparent. EM foresaw some of these challenges, but other challenges were unexpected. Some challenges assail us from the technology perspective as we face some of the most difficult issues in environmental cleanup. Other challenges do not necessarily manifest themselves until we experience poor performance or missed milestones. More recently, due to poor performance and inadequate oversight, we have been challenged with losing ground in completing design and construction on some key projects. We are taking steps to regain momentum we have lost on these projects, but we are realistic and recognize that overly optimistic assumptions, statutory and legal issues, and unrealized technology advancements have led us to setbacks we are now experiencing within several key projects across the program.

One of the most visible projects on which our progress has slowed is the Waste Treatment Plant at Hanford. The Waste Treatment Plant project—perhaps the largest, most complex environmental construction project in the nation—has encountered design and construction setbacks. We remain committed to fix the problems, complete the project, and begin operations to treat the radioactive tank waste at the site. We have both internal and independent external reviews underway to evaluate the major project management, project control, business, and technical systems and processes, to ensure we fully understand what is required to complete the project and begin operations. An After Action Review by an external independent firm to assess the causes of the issues surrounding the project was recently completed. Actions are currently being implemented as appropriate to ensure the project is being planned and executed responsibly, to bring it back to acceptable performance.

Other examples of challenges to cleanup progress include delays in facility design and construction in South Carolina to address protection of workers under certain accident scenarios associated with postulated seismic events, delays in sludge cleanup from spent nuclear fuel basins in Washington to address more difficult conditions than foreseen and allocation of cleanup resources to allow us to implement security upgrades to safely store our special nuclear materials. We are establishing realistic project baselines to account for these developments and to refocus our efforts.

We are addressing these challenges while strengthening our ability to address future challenges. For example, we have had performance issues with environmental management work at Los Alamos and have not had an integrated baseline yet that we are able to validate. But we are making significant progress toward a new baseline. Additionally, we have a new contract in place that is focused on finding new ways of doing business in all areas of site operations, including cleanup and waste disposition. We believe the new contract and a successful baseline validation will offer us new opportunities to continue significant risk reduction and cleanup with our FY 2007 funding.

We have demonstrated that we can deliver. We will not falter in our responsibilities to meet our mission objectives. We have and are taking immediate steps to strengthen our performance by refining processes to emphasize safety, project management, acquisitions, contract execution and human capital.

## RENEWED EMPHASIS

First and paramount to our success is safety—it is our top priority. Safety affects all involved—federal employees, contractors, the site, and the community. We will continue to maintain and demand the highest safety performance in all that we do. We have taken steps to fully integrate safety into our project designs earlier than ever, assure our line project teams have the necessary experience, expertise, and training, and utilize a constant real-time feedback of lessons learned. Every worker deserves to go home as healthy as she or he was when they came to the job in the morning. No schedule, no

milestone, is worth any injury to our workforce. Safety is a cornerstone in the execution of good project management.

In order to successfully execute our portfolio of projects, we are instilling a rigorous project management mindset that will be ingrained in all projects. Our performance has not been acceptable on several key projects. My goal over the next couple of years is that at least 90 percent of our projectized portfolio will perform on or better than our cost and schedule targets. The management tools used to plan, execute, and monitor projects must be integrated into our business processes. Our success will depend on our ability to build in this rigor. We will target the shortcomings in our project management by using both DOE and industry standard project management and business management tools. I am personally conducting Quarterly Performance Reviews of all EM projects, and have directed my senior staff to carry out monthly project reviews. This includes fully implementing our management systems, following through on corrective actions, and better applying risk management principles—that is, identifying project uncertainties, developing mitigation measures and contingency, and holding responsible managers accountable for their resolution. I believe that this approach, strong and effective project management will be the key to our success.

To ensure effective project management, we must also apply the proper procurement vehicles to meet our acquisition strategy. Clearly, opportunities exist to improve our acquisition practices.

EM is an “Acquisition” organization. We accomplish our mission through procurement and execution of our projects. It is vital that EM acquire the best services and attract the best the contractor community, including small business, has to offer. I have recently proposed and will shortly implement a new organizational structure, including a new Deputy Assistant Secretary (DAS) for Acquisition and Project Management. This new organization will integrate the two functions of procurement planning and project management, a significant step in building up the expertise to carry out our responsibilities. We will sharpen our skills through training and refocus our enterprise to reflect our acquisition responsibilities. With this organizational integration of project management and contract acquisition/administration, EM will be positioned to provide technical excellence commensurate with the responsibilities with which we have been entrusted.

Complementing these refinements, we must ensure that our projects are managed by highly skilled, competent and dedicated leaders and staff, both Federal and contractor, who have the responsibility and the authority to meet the EM program’s objectives. We have in place a rigorous certification program for our project managers. Our goal is to certify all EM Federal project managers for each project by May 2006.

We want to assure ourselves that we have the right skills mix to get the job done. We will provide our employees career development, rewards, and support. I firmly believe that an organization is never better than its people. Our employees, both federal and contractor, hold the key to our success as an agency.

Our desire is that at Headquarters and each site, our key acquisition and technical personnel have knowledge of technical issues, project management, and business management at an equivalent level of expertise as their contractor counterparts to promote meaningful, cogent dialogue on substantive issues. Our job as a federal agency is management and oversight, to be responsible stewards of the public's trust and resources. Therefore, we must have a highly qualified and technically proficient management team and staff. My aim is to have a high performing organization, sustained by a career oriented workforce, driven to produce results that are important now and into the future.

## THE FY 2007 BUDGET REQUEST

The investment we have requested in our FY 2007 budget will continue the Department's success in achieving its mission of risk reduction and cleanup completion. The Department's FY 2007 budget request for defense EM activities totals \$5,390 million. The request consists of one defense appropriation, Defense Environmental Cleanup.

*Ensure safety is number one:* The budget request continues to place the highest priority on protecting workers, the public, and the environment. EM is introducing new fervor in the integration of safety and project management, validation and adherence to cost and schedule baselines, effective identification and management of risks, and the design of contracts that drive outstanding performance. Safety is central to superior performance.

*Ensure the appropriate levels of safeguards and security:* It is crucial that we maintain vigilance in our security to protect our citizens. The EM program is responsible for tons of surplus nuclear material. There is an overall increase in the safeguards and security budget in FY 2007 due to additional security requirements at Savannah River, as a result of revisions to the Department's Design Basis Threat policy—the performance based standard, which each of our sites must meet to ensure an acceptable level of protection. Hanford has fully met the 2003 DBT policy, and will be reviewing the 2005 DBT policy as the Department is considering options for consolidation of special nuclear material throughout the complex.

*Risk reduction and cleanup completion:* Risk reduction requires a pragmatic approach to cleanup and occurs in various stages, which involve the elimination, prevention, or mitigation of risk. Because safe disposal of many materials will take a number of years to complete, our major focus of risk reduction is stabilization of high-risk materials:

- High-curie, long-lived isotope liquid waste;
- Special nuclear materials;
- Sodium bearing liquid and other radioactive waste in tanks;
- Deteriorating spent nuclear fuel in leaky or poor integrity basins;
- Remote-handled transuranic waste and high transuranic content solid waste stored on the surface;
- Decommissioning of highly-contaminated facilities.

Although these items are to be considered when setting priorities, their relative ranking may vary from site to site. Risk reduction is a major consideration in the development of the site baselines. Examples of planned activities and milestones for FY 2007 that correspond to site-specific risk categories are:

#### Hanford

- *Ramp up construction of the Waste Treatment and Immobilization Plant (WTP) Pretreatment and High-Level Waste facilities.*
  - The WTP is the primary facility to immobilize (vitrify) the radioactive tank waste at the Hanford Site. The WTP complex includes five major components: Pretreatment facility, Low-Activity Waste facility, High-Level Waste facility, Analytical Laboratory, and the Balance of Facilities. In FY 2007, construction will ramp up on the two facilities slowed in 2006 to address revised seismic criteria: the Pretreatment facility, which will separate the radioactive tank waste into low-activity and high-level fractions, and the High-Level Waste facility which will vitrify the high-level fraction into glass, ready for disposal at a Federal repository.
- *Maintain tank farms in safe, compliant condition and continue single-shell tank waste retrievals to maintain adequate double-shell tank space.*
  - The double-shell tank system has limited capacity to receive wastes from the single-shell tanks and that is anticipated to continue to be the case until the WTP can provide tank waste treatment. The FY 2007 budget request supports a reduced rate of single-shell tank waste retrievals that can be sustained with the available double-shell tank capacity until tank waste treatment can commence.
- *Complete containerization and consolidation of K-East and K-West Basin sludge in the K-West Basin.*
  - The K-Basins are located about ¼ mile from the Columbia River. This project involves removing radioactive sludge, debris, and water from wet storage in the K-Basins to safe, interim storage or final disposition away from the Columbia River. The K-Basin facilities are well past their design lives and are a major threat to the environment due to the potential for basin leakage to the surrounding soil and the Columbia River. The request is an increase over FY 2006 and reflects additional work scope due to more challenging, as-found conditions of sludge and debris; implementation of improved techniques for sludge containerization; and application of a systematic approach to design, testing, and operation of sludge transfer activities.
- *Continue retrieval of suspect transuranic waste and shipments to the Waste Isolation Pilot Plant.*
  - Hanford has several thousand containers of previously generated suspect transuranic waste stored in the ground in a retrievable configuration. Approximately 2,400 cubic meters of suspect transuranic waste will be retrieved, an increase of approximately 600 cubic meters over FY 2006. Characterization



and shipment of confirmed transuranic waste to the Waste Isolation Pilot Plant for final disposal will reduce the risks to facility workers as well as reduce the safeguard and security vulnerability associated with this waste. This action represents final disposal of this waste in an environmentally protective repository.

- *Increase River Corridor remedial action activities for Reactor Areas D, F and H; and complete three high priority waste site interim remedial actions in the 300 Area.*
  - The River Corridor Closure Project focuses on areas and facilities adjacent to the Columbia River and includes remediation of contaminated waste sites; decontamination, decommissioning, and demolition of facilities; and placing eight reactors into interim safe storage condition. This also includes digging up contaminated soil and disposing of waste in the on-site Environmental Restoration Disposal Facility, an engineered landfill away from the river.
- *Maintain Plutonium Finishing Plant (PFP) complex facilities, including vaults.*
  - The PFP Complex consists of several buildings that were used for defense production of plutonium nitrates, oxides and metal from 1950 through 1989. The end state for the PFP is the dismantlement of all facilities to slab-on-grade. The continuing presence of special nuclear materials has caused a delay in decommissioning and decontamination of PFP facilities. However, safe, secure maintenance of the existing facility continues as we finalize plans for consolidation of the material, as does dismantlement and demolition of ancillary PFP facilities.

#### Idaho

- *Continue transuranic waste shipments to the Waste Isolation Pilot Plant.*
  - These actions will serve to reduce operating, surveillance, and maintenance costs while at the same time reducing risk and enhancing long-term safety and security.
- *Complete design and initiate construction of the Sodium Bearing Waste Treatment facility to treat tank radioactive wastes.*
  - This project supports the EM goal of reducing the risk of stored liquid radioactive waste. This action will reduce the potential risk to human health by preventing the potential migration of contamination into the Snake River Plain Aquifer which is a sole source aquifer used to supply water to the people of southeastern Idaho.
- *Close the first three emptied underground storage tanks at Idaho.*
  - Removing the liquid waste decreases the risks they pose to human health and the environment, including the underlying Snake River Plain Aquifer.
- *Initiate final demolition of the Loss of Fluid Test Reactor.*
  - This will be the first of four high-risk reactor dispositions under the current cleanup contract. These actions will reduce potential risk by deactivating high risk excess nuclear buildings at the Idaho National Laboratory that have reached the end of their useful lives.

## Oak Ridge

- *Ship 75 percent of stored contact-handled transuranic waste to the Waste Isolation Pilot Plant.*
  - This waste is stored in above grade-storage trenches and in earthen trenches. Processing and off-site disposal of the waste prevents the risk of release to the environment and the continued cost of waste storage and monitoring.
- *Initiate remediation field work at David Witherspoon 1630 Site.*
  - This action will reduce the risks posed to workers and the surrounding community from uranium and polychlorinated biphenyls contamination in the soil.
- *Perform surveillance and maintenance of Building 3019.*
  - This action will provide storage of the Uranium-233 inventory in Building 3019 while we evaluate alternatives to disposition the Uranium-233 inventory.

## Los Alamos National Laboratory

- *Characterize 1,800 m<sup>3</sup> of contact-handled transuranic waste and prepare oversized transuranic waste items for disposal at the Waste Isolation Pilot Plant.*
  - Characterization and shipment of this waste to the Waste Isolation Pilot Project for final disposal will reduce the risks to facility workers as well as reduce the safeguard and security vulnerability associated with this waste. This action represents final disposal of this waste in an environmentally protective repository.

## Savannah River Site

- *Complete consolidation of on-site plutonium to K Area.*
  - This action will consolidate Savannah River's own plutonium from various on-site storage locations into one existing Category 1 Special Nuclear Materials Storage Facility to meet Design Basis Threat criteria.
- *Continue to stabilize liquid waste from underground storage tanks.*
  - Complete design and initiate site preparation, long lead procurement, and construction of Salt Waste Processing Facility.
  - Produce 250 canisters of vitrified high-level waste.
  - Use the Interim Salt Processing System to develop cesium removal capability.
- *Complete treatment of legacy mixed low-level waste and complete shipment of drummed legacy transuranic waste to the Waste Isolation Pilot Plant.*
  - Characterization and shipment of this waste to the Waste Isolation Pilot Project for final disposal will reduce the risks to facility workers as well as reduce the safeguard and security vulnerability associated with this waste.

## Waste Isolation Pilot Plant

- *Complete first full year of remote-handled transuranic waste receipt and disposal.*
  - The Waste Isolation Pilot Plant, in Carlsbad, New Mexico, is the nation's mined geologic repository for the permanent disposal of defense-generated transuranic waste. All retrievably stored transuranic waste comes to the Waste Isolation Pilot

Plant for receipt, handling, and disposal. This will remove these wastes from around the complex where it constitutes a major health and safety risk, into a centralized, safe disposal configuration in New Mexico.

## CONCLUSION

Significant results and emerging challenges went hand in hand this last year. We will build on our successes in completing the EM mission in a manner that is protective of the environment and public while demonstrating fiscal responsibility. This FY 2007 budget request supports a critical portion of the Department's environmental stewardship responsibilities. It will enable the next steps in accomplishing the cleanup mission from past operations in support of the Cold War while balancing the effective implementation of other Departmental and national priorities for the American people.

I am committed to work with all interested parties to resolve issues and will work with this committee and the Congress to address any of your concerns or interests. DOE, our regulators, the communities and our contractors are partners in this effort. Our success relies on this partnership. As a partnership, we all succeed or we all fail together.

The Senate Armed Services Committee and this subcommittee in particular, are key supporters of the Nation's cleanup efforts. I look forward to a continuing dialog with you and the subcommittee. This concludes my formal statement for the record. I will be pleased to answer any questions at this time.