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ENVIRONMENTAL MANAGEMENT PROGRAMS OF THE DEPARTMENT OF ENERGY

HEARING

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE

ONE HUNDRED NINTH CONGRESS

FIRST SESSION

ON

ENVIRONMENTAL MANAGEMENT PROGRAMS OF THE DEPARTMENT OF ENERGY

NOVEMBER 15, 2005

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ENVIRONMENTAL MANAGEMENT PROGRAMS OF THE DEPARTMENT OF ENERGY

TUESDAY, NOVEMBER 15, 2005

U.S. SENATE,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The committee met, pursuant to notice, at 10 a.m. in room SD–366, Dirksen Senate Office Building, Hon. Pete V. Domenici, chairman, presiding.

OPENING STATEMENT OF HON. PETE V. DOMENICI, U.S. SENATOR FROM NEW MEXICO

The CHAIRMAN. The hearing will please come to order.

Senator Bingaman has advised me that he's attending a Finance Committee hearing, which is urgent, on the tax matters, and that he will come soon. There are two additional Senators that have matters in their State that are similar, who have indicated they're going to come, but we have seven stacked votes at 10:45, so it's important that we start.

I have a statement that I was going to give, but I'm going to put it in the record and abbreviate my remarks.

Today, we're going to hear from those who were involved in the cleanup at Rocky Flats. We're going to hear from Senator Allard and Assistant Secretary Rispoli. And we're going to hear from Ms. Tuor. They're going to talk about the success story. Then we're going to proceed with testimony regarding the other activities regarding cleanup.

Suffice it to say that, aside from the statement which recaps all of this, one of the success stories—real success stories—with reference to environmental cleanup has been the Rocky Flats story, the Rocky Flats event, and I am very pleased to hold it up, because it does set forth that something can be done, and we can get to the end of the line. We don't have to continue for year upon year with a project that is in the nature of cleanup. I'm hopeful that we're going to, by analyzing all this, get to the bottom of the difference between one cleanup project and another. I'm not sure we can do that, but I have a surmise about one of the differences. But let's proceed.

Senator Allard, we'd like to hear from you first.

[The prepared statements of Senators Domenici and Smith follow:]

PREPARED STATEMENT OF HON. PETE V. DOMENICI, U.S. SENATOR FROM NEW MEXICO

This hearing of the Energy and Natural Resources Committee on the Office of Environmental Management at the Department of Energy shall come to order.

The purpose of this hearing is to evaluate progress in the Environmental Management (EM) Program of the Department of Energy (DOE) and to learn about the recent success story at the former DOE weapons facility at Rocky Flats in Colorado.

The EM program inherited the responsibility for the cleanup of 114 sites involved with past nuclear weapons activities. Those sites cover a vast area, over 2 million acres—the equivalent land area of Rhode Island and Delaware combined.

This program is the largest single function within the Department, the Congress has funded this program at $6.66 billion in FY 06, $116 million more than the Administration's budget proposal. This represents nearly one-third of the Departments total budget.

In addition to a progress report on the overall EM programs, I look forward to learning from our witnesses today about the success at Rocky Flats and the issues associated with cost overruns and project delays at the Hanford Site and other current issues.

Specifically on Rocky Flats, I am hopeful that this monumental achievement is not discounted as a one-time miracle. The Department faces numerous challenges in the management of operations and the cleanup of liabilities from legacy sites. It would be an unacceptable outcome if we did not apply the successful lessons learned during the clean-up at Rocky Flats.

I understand the desire to impose greater rigor in the management of the Department's projects. When you look at the Waste Treatment Plant and the Yucca Mountain Project, clearly there is a need to impose fundamental principles of project management. However, I want to caution the Department not to forget the wonderful result from daring to accelerate and overachieve. We have the perfect example of these lofty goals before us today.

I would ask the Department not to learn the wrong lesson from its present challenges. The American public does not want you to default to decade's long schedules and unfathomable budgets. We want you to look for constant improvement and acceleration.

I hope that our witnesses today can tell us some good news and address these complex issues so that we can all better understand the status of clean-up of our facilities from the Cold War.

Testifying today are:

My friend and colleague, Senator Wayne Allard from the great State of Colorado.

The Honorable Jim Rispoli, Assistant Secretary of Energy for Environmental Management of the Department of Energy.

And finally, Nancy Tour, President and CEO of Kaiser-Hill Company in Colorado. Welcome.

PREPARED STATEMENT OF HON. GORDON SMITH, U.S. SENATOR FROM OREGON

Chairman Domenici, thank you for convening this hearing on the Environmental Management Programs of the Department of Energy. We all understand the importance of following through on the cleanup of the extensive environmental problems resulting from our nuclear weapons research, development, and production programs of the past half century. Congress and the Administration share the responsibility for ensuring that cleanup programs are scientifically sound and efficient. Hearings such as this are essential to our successful collaboration in carrying out that cleanup responsibility.

I also want to thank Mr. Rispoli for testifying on behalf of the Department of Energy to share information concerning the Department's Environmental Programs, and Ms. Tuor for reporting on Kaiser-Hill's progress on the cleanup of Rocky Flats.

I want to congratulate the Department and its contractors on the completion of the cleanup at the Rock Flats nuclear site in Colorado. The closure of Rocky Flats represents a noteworthy success in this nuclear complex cleanup campaign. Because of Senator Allard's commitment to putting this milestone "in our rear view mirror," I appreciate his comments here to highlight this accomplishment in his home state.

Of course, we're not nearly done with this overall cleanup campaign. This celebration of a major victory also must serve as a point of redoubled commitment to planning and implementing the best nuclear complex cleanup that we can deliver to the American people. It needs to be carefully planned—with changes in plans as appropriate—reflecting new science or technology as those become available. It must also be implemented by the most capable team that we can access for the task. And, Mr.

Rispoli, I commend your commitment to application of systematic and thorough project management practices throughout this campaign.

I do want to raise several specific issues of particular concern to me and to my constituents. These all relate to the cleanup of the Hanford site, just across the Columbia River from Oregon in our neighboring State of Washington. My most immediate concern has to do with the safety of the Columbia River itself. As you know, 67 of the 177 large waste storage tanks at Hanford have been identified as "leakers." According to the Oregon Department of Energy, some of that leaking waste has already reached groundwater. While I understand that the level of contamination detected thus far doesn't represent a threat to humans or other species, it is vital that we take whatever actions are necessary to make sure we don't end up with a safety issue in the Columbia River.

My second concern relates to a potential project management issue. We all understand that emptying or stabilizing the wastes in those 177 tanks in a benign state is a critical element in the cleanup of Hanford. In 2003, CH2MHill estimated that all of the wastes from one of the earliest tank fields, the C-tank field, could be removed by September 2006, for a total of $90 million. However, a recent Inspector General report states that the schedule won't be met, and the budget is likely to be $215 million. I would like a clear explanation, please, of why we are seeing this schedule delay along with this substantial cost increase. Is some of this due to unforeseeable events or technological issues? How much is attributed to contractor performance issues, and how much of this reflects inadequate project management? Most importantly, what is the real schedule for emptying these tanks, and what does it tell us about the plan for emptying all of the rest of the tanks?

Finally, while we've achieved an important milestone in the closure of the Rocky Flats cleanup project, we still have a long way to go. We are still facing decades of cleanup efforts at Hanford alone, costing hundreds of millions of dollars. I am committed to doing my best to ensure that the federal government fulfills this national cleanup responsibility. We need to be able to assure the residents of the Pacific Northwest that we'll follow through. In this context, I ask you to be sure that the Department is recommending an appropriate and adequate plan and budget for continuing the Hanford cleanup. I also urge you to identify and implement mechanisms to strengthen this cleanup effort.

Thank you, again, for appearing before the Committee today and for sharing your thoughts on carrying out this nuclear weapons complex cleanup campaign.

STATEMENT OF HON. WAYNE ALLARD, U.S. SENATOR FROM COLORADO

Senator ALLARD. Mr. Chairman, thank you. And, like many of your committee members, I have another committee. We'll have Dr. Bernanke, Federal Reserve chairman, in the other committee. So, as soon as I've made my testimony, I would like to be dismissed.

Mr. Chairman, I'm pleased to testify before this committee and discuss one of the Department of Energy's greatest achievements, and that is the cleanup of Rocky Flats, the largest site in the 25-year history of Superfund that has been cleaned up.

As you know, Rocky Flats is located just a few miles northwest of Denver, Colorado. For over 4 decades, this facility was the Department of Energy's dedicated site for manufacturing plutonium pits for the U.S. nuclear weapons stockpile. This highly classified production facility was run by over 8,000 Coloradans, who worked day and night for most of the cold war. These Coloradans were cold-war heroes who kept America's nuclear deterrence strong and helped protect our country.

When plutonium-pit production ended in 1991, the cleanup of Rocky Flats was uncertain, at best. No one knew quite how to proceed. The cleanup of a site this contaminated had never been considered before. Tons of weapons-grade plutonium, plutonium compounds, uranium, and other radioactive metallic residues remained. Significant volumes of hazardous and radioactive waste generated during the decades of production would need to be re-

moved. Building 771, in particular, was so contaminated that it was dubbed by the national media as "the most dangerous building in America."

In 1995, the expected cleanup of Rocky Flats was estimated to cost approximately $35 billion and take over 70 years to complete. Few believed that they would be alive when the site was finally cleaned up. Yet, 5 years after that date, the cleanup agreement was signed. The contractor, Kaiser-Hill, has done something few of us have believed possible. On October 13 of this year, Kaiser-Hill declared the cleanup of Rocky Flats complete.

Mr. Chairman, as you see in these photos, you won't find any buildings or structures on Rocky Flats. You won't find any radioactive materials that exceeded natural background levels. Even the roads have been torn up and removed. The site has been returned to the way it was before plutonium production at Rocky Flats began. It is now a beautiful open space that we can all enjoy.

Although much has been achieved over the last 5 years, it was not easy, and a number of challenges had to be overcome. Let me share a couple of lessons learned, which, from my perspective, were key to the successful cleanup of Rocky Flats.

First, we discovered what we should have always known. We discovered that those who are appropriately incentivized can, and will, achieve incredibly difficult goals. Kaiser-Hill, the Rocky Flats cleanup prime contractor, agreed to a tough cleanup timetable for the cleanup of the site without fully knowing the extent of the contamination or the level of cleanup that would be required. It was a risk on the company's part. But the incentives for success made the risk worthwhile.

I applaud the Department of Energy for its creativity in negotiating the Rocky Flats cleanup contract. And I commend Nancy Tuor, Bob Card, Jesse Roberson, and the many others who worked hard for Kaiser-Hill to meet and exceed the goals of the cleanup contract.

Second, we learned the value of State and local support. We were fortunate in Rocky Flats to have a number of local, city and county governments who embraced accelerated cleanup and did everything they could to support it. The Rocky Flats coalition of local governments, in particular, played a pivotal role in ensuring the cleanup was done right the first time.

The State of Colorado also deserves tremendous credit for agreeing to an accelerated cleanup plan that allowed the Department of Energy to move forward without a formal record of decision prior to cleanup activities. In an unusual partnership, the State of Colorado joined with the Environmental Protection Agency and the Department of Energy in an effort to work together to verify and monitor proposed cleanup remedies. This collaboration allowed these parties to solve problems and deal with issues before they got out of hand.

Community organizations, like the Rocky Flat Citizens Advisory Board and the Rocky Mountain Peace and Justice Center, also played an important role. These organizations demanded that Department of Energy live up to its cleanup commitments, and refused to allow the Department to take shortcuts.

The third lesson that I took away from the Rocky Flats cleanup is that the workers must buy into the cleanup. The workers can make or break the cleanup. If they work hard, as they did in Rocky Flats, then I believe even the most difficult cleanup becomes possible. However, if the workers are not appropriately incentivized, or if the workers see their jobs as lifetime employment, then the broad project can quickly fall behind schedule and experience enormous cost growth.

The workers at Rocky Flats believed in the cleanup and did everything they could to meet the goals set for them. They learned new jobs. They wore extremely uncomfortable respiratory gear. They removed some of the most dangerous radioactive waste known to man. And they did this knowing that their job was going to come to an end.

I cannot fully express the respect and admiration I have for the workers at Rocky Flats. They made the impossible possible, and deserve the lion's share of credit for completing the Rocky Flats cleanup a year and 3 months ahead of schedule. Their actions saved the American people over $500 million in fiscal year 2007, alone.

And last, Mr. Chairman, I would be remiss if I did not express my gratitude and thanks to you, Ranking Member Bingaman, and the other members of this committee for the support you've provided for the accelerated cleanup of Rocky Flats. Your leadership, Mr. Chairman, in particular, was key to ensuring that we had the necessary funding and particular support to get this project done ahead of schedule and under cost.

As the Department of Energy turns its focus on other cleanup sites, it is my hope that the lessons learned at Rocky Flats will not be forgotten. The accelerated cleanups are possible, and the savings to the American taxpayer can be very significant. We need to do everything we can to encourage accelerated cleanups, and you can count on my continued support in that effort.

Mr. Chairman, I encourage you and other members of the committee to tour Rocky Flats when you're in Colorado next. I agree that you will be impressed by how we've turned a highly contaminated nuclear-weapons production facility into a natural wildlife refuge.

Mr. Chairman, this concludes my testimony, and thank you for the opportunity to share my thoughts with the committee.

The CHAIRMAN. Thank you very much.

Senator, I might also add—I know you intended this—the Appropriations Subcommittee, of which you now serve, that I have been privileged to chair, is the one that appropriates the money for this. And this is the only shining light we have as we annually struggle with how in the world Americans are going to be able to pay for the cleanup as it's occurring. And I want to express, in the record, not only my appreciation, but my genuine admiration for the contractor, the Department, the State and local entities, and the regulatory groups, because I believe this is not only unique in its conclusion, but it's unique in its inception. It started in a way that the other cleanup around the country did not, and probably would not, have started, because this was not started with rancor among the participants, but, rather, with the willingness to join together and

get it done. And, second, I think it was probably clear from the beginning that the employees would not be there forever, this would not be a constant, continual forever-source of payroll checks for the area. Before we're finished, I'm going to ask about that. But, you know, what we hear most, or as much as anything, about the other projects, is, "If you cut it, so many people lose their jobs," or, "If you get less money, so many people will be unemployed." It's very difficult, we know. But, frankly, these were not intended to be hundred-year laboratories. They were intended to be something else.

So, thanks for your interest, and for what you've done. And to those who I have just mentioned, my—did I mention the Department of Energy? If I didn't, I should, because this is one of their real flags, that they decided that they could get a start here and try to do it right, from the beginning. And they did.

So, thank you, Senator.

Senator ALLARD. Well, thank you, Mr. Chairman, for your comments. It was a pleasure to deal with people who kept their commitments in this project.

The CHAIRMAN. Now, we're going to move quickly, because of time, as the Senator indicated, as I indicated. We have seven stacked votes starting soon. Not enough time to hear everybody. But we're going to move to you and ask if you'd please handle your statement as expeditious as you can so I can get to Secretary Rispoli, and then ask a few questions.

Please proceed.

Ms. TUOR. Thank you. I will, sir.

STATEMENT OF NANCY TUOR, PRESIDENT AND CEO, KAISER-HILL COMPANY, LLC, BROOMFIELD, CO

Ms. TUOR. Chairman Domenici, Senator Bingaman, committee members, I am pleased to be here today. And I am even more pleased to report to you the safe completion of the accelerated closure of Rocky Flats. On behalf of the entire project team, please accept our sincere appreciation for your leadership over the years.

It is a pleasure to be here with Senator Allard, who has dedicated a significant portion of his Senate career to ensuring the successful completion of this project.

I'm also happy to join Assistant Secretary Jim Rispoli today. He represents so many people in the Environmental Management Program who have provided leadership and support for the Rocky Flats project.

I would also like to recognize the work Senator Salazar has done in Congress and, previously, as our attorney general in Colorado.

The closure of Rocky Flats is a monumental accomplishment that could not have been possible without the support of this committee and without the commitment, efforts and dedication of the entire Colorado congressional delegation, the U.S. Department of Energy from the Rocky Flats project office, all the way to DOE headquarters, and, ultimately, Secretary of Energy Sam Bodman. This vision, support and commitment spanned three administrations and involved the collaborative efforts of many DOE sites across the country.

On October 13, 2005, this vision became a reality. At 9:15 that day, Kaiser-Hill declared to DOE the physical completion of the

Rocky Flats closure project, culminating a 10-year, $7 billion project, making Rocky Flats the largest nuclear decommissioning project to be completed anywhere in the world. Moreover, it was done through a consultative process with the community and our regulators, using risk-based methods to ensure that real threats to public health and the environment received the highest priority.

When Kaiser-Hill took on the job of the Rocky Flats cleanup in 1995, official reports estimated that the cleanup would take 7 decades and cost $37 billion. When Kaiser-Kill and DOE signed the follow-on closure contract in January 2000, many thought accelerated cleanup was just a pipe dream. The Government's own General Accounting Office questioned the viability of the project; not once, but twice issuing reports calling closure, even by 2006, unlikely. Yet today I report to you that the Rocky Flats closure was completed more than a year ahead of the aggressive 2006 schedule, ultimately delivering nearly $30 billion in taxpayer savings and taking a $600 million-a-year liability off the DOE books forever.

This was a monumental effort that included the remediation of the toxic legacy from 4 decades of nuclear weapons production. It has literally turned from an environmental liability to an asset for the community.

Highlights of the accomplishment include the removal of 21 tons of weapons-usable plutonium and highly enriched uranium, the disposition of 106 metric tons of high-content plutonium residues, the remediation and/or closure of more than 360 areas of potential environmental contamination, the demolition of more than 3.6 million square feet of buildings, including more than 1 million square feet of highly contaminated nuclear production facilities, and the off-site shipment and disposal of more than 600,000 cubic meters of radioactive waste.

Many, many factors contributed to the success of this project, from the day-to-day involvement and support of DOE at all levels to the efforts and innovation of our workforce.

A few of the most important success factors included the establishment of a clear vision for a closure and a sense of urgency for the mission; strong bipartisan support; stable project funding; dramatic improvements in safety; the unique nature of the incentive-based closure contract; effective technology funding and deployment; innovations in regulatory processes embedded in the unique Rocky Flats cleanup agreement, coupled with strong leadership from the Colorado State government; and finally, a dedicated and talented workforce that got in there each and every day and came up with the best way to safely get the job done.

Thank you for the opportunity to be here today and to join Senator Allard, Assistant Secretary Rispoli, and the entire committee in celebrating this shared success.

I look forward to answering your questions about the accelerated closure of Rocky Flats.

The CHAIRMAN. Thank you very much.

Mr. Secretary, we're going to wait just a moment for your testimony.

Senator Salazar, you were mentioned by our witness as part of not only the Senate team that worked on this, but the Colorado team, when you were in your job as attorney general. Would you

like to just make a few observations? I would tell you, at 10:45, we must vote on seven consecutive votes, but we're going to try to get the next witness in, and some questions.

With that, I'd yield to you.

STATEMENT OF HON. KEN SALAZAR, U.S. SENATOR FROM COLORADO

Senator SALAZAR. Thank you very much, Senator Domenici. Let me just, first, say that I'm proud of the work of the Senate and this committee in making sure that the funds were, in fact, available for the completion of the cleanup at Rocky Flats, proud of the work of the Department of Energy and Kaiser-Hill, in this very successful effort.

I have a prepared statement, Mr. Chairman, that I will submit for the record. But I would like to say a couple of things about this project, because I think it's a very important template.

First, this was a project which transcended administrations, Republicans and Democrats, but really showed us a way in which, when we can work together, things can, in fact, happen. You know, I remember well, in 1995, when the process was just beginning, that we were in the middle of the Clinton administration. And the project has now been completed during the Bush administration. And I think what it has shown is, when you have the kind of effort, with the local governments and communities involved, and the employees of the Department of Energy, along with a company that had a vision and a willingness to take a risk to get the job done on time, that we, in fact, accomplished something which was miraculous. And, at the end of the day, what this means for Colorado, and for America, is, one, we're a more secure Nation, because this plutonium factory has been dismantled appropriately, and, second, we have been able to do it in a manner that has saved the taxpayer billions and billions of dollars.

So, I think it is a kind of template that we can continue to look at as we look at other sites around the country which, seemingly, appear to be intractable, in terms of their cost and how we're going to ultimately deal with their cleanup.

And so, I appreciate this being a model. I appreciate the work of my colleagues, including Senator Allard and others who have worked on this project over the years, Senator Campbell, and, on the House side, Representative Skaggs, who did a lot of work on this.

And, Senator Domenici, thank you, again, for your personal interest in this very important project for our Nation.

[The prepared statement of Senator Salazar follows:]

PREPARED STATEMENT OF HON. KEN SALAZAR, U.S. SENATOR FROM COLORADO

Good morning. Thank you, Mr. Chairman. I am delighted to welcome my friend and colleague, Senator Allard, to our committee meeting today, as well as Assistant Secretary Rispoli, whom I met in this same room just a few months ago, and Ms. Tuor, whom I know from our efforts together on the Rocky Flats cleanup. Thank you all for being here.

As Colorado's Attorney General, I spent a lot of time and energy working on the many issues presented by Rocky Flats. I am happy today to point to the clean up of Rocky Flats as a shining example of what the government, private industry and American workers can do when we work together.

We will soon celebrate the successful completion of the clean up of one of the most contaminated sites on earth. This cleanup will protect human health and our environment, and—we don't get to say *this* very often—it was completed *under* budget and more than a year *ahead* of schedule.

Things at Rocky Flats didn't always look so rosy, so it's important to look back and understand how we arrived at this day. There were years of tension between the federal government and the State of Colorado over the operations and the clean up at Rocky Flats. Finally, the Department of Energy, the U.S. Environmental Protection Agency and the State came together to establish standards and processes to assure that this former nuclear weapons facility can one day become a National Wildlife Refuge. As Colorado's Attorney General, I worked with Colorado's Governor, Bill Owens, and the Colorado legislature to enact a state law to ensure the long term safety of former Superfund sites like Rocky Flats by permanently restricting future development on the site. I am proud to see the Department of Energy working with the State of Colorado to use that same state law to create permanent protections for Rocky Flats.

The officials of the Department of Energy and the representatives of Kaiser-Hill negotiated a contract with appropriate targets, incentives, standards and flexibility, and Kaiser-Hill, under your guidance, Ms. Tuor, skillfully managed a very complex project. Congress, with the strong support of Colorado's Congressional delegation and the leadership of this Committee, gave the necessary authorization for this new approach and, when necessary, gave the parties a good push in the right direction. As I said, the clean up at Rocky Flats is a model of what we can accomplish when government and private industry work hand in hand.

Finally, let me offer my thanks and my admiration to the hard-working men and women whose ingenuity and dedication made this happen. Many of the same men and women who worked at Rocky Flats to produce the nuclear weapons that helped end the Cold War later worked just as hard to clean up this Cold War site so that it can become a National Wildlife Refuge, a place for recreation and spiritual renewal. Many of these patriotic Cold War veterans have died and many more are suffering today from illnesses caused by exposure to radiation at Rocky Flats. As we celebrate our successes, let us remember those who paid dearly to bring us to this day. And let us also remember that it was their innovation and their committed efforts that played a very large role in completing this project under budget and ahead of schedule. The Rocky Flats workers are the real heroes of this story.

As we look ahead to more successful cleanups at other former nuclear sites, we should remember that, at all these sites, it will be American working men and women who bear the risks and who get the job done. Let's make sure we treat them with fairness and with respect.

Again, thank you, Mr. Chairman and Senator Bingaman. And thank you, Assistant Secretary Rispoli and Ms. Tuor for your presence today.

The CHAIRMAN. Thank you, Senator.

Ms. Tuor, could you, for the record, tell us how the environmental regulatory aspects of this were "innovative"? You used that word. I'd like to have you tell us—not now, because we don't have enough time—how they were agreed upon. I'm not going to say "changed," because some people think that means we cut corners, but much of the delay in other projects is the inability to come to grips with regulations and regulatory problems, and they become intractable, to borrow your word, and then litigation ensues and everything ends up taking forever. So, would you do that for us? Whatever help you need. And would you help with that, Mr. Secretary, so we could have that? I assume we agreed on some regulatory approaches that were unique and different here, did we not?

Ms. TUOR. Yes, we did, sir. We used efforts that were already in the Superfund law—the accelerated action methods that are in the law, but not often used. So, we would be glad to give you a white paper on how we believe that came together and what it accomplished.

The CHAIRMAN. Mr. Secretary, before you testify, would it be fair to say that the Department is aware of those kinds of initiatives and their positive effect on getting this done?

Mr. RISPOLI. Yes, Mr. Chairman, it is fair to say that. In fact, I think, because of the tremendous working arrangement in the State of Colorado, there were—there was much more focus on accomplishment rather than specific milestones. And that gave the contractor much more flexibility in keeping the momentum up and working on things that had to be worked on.

The CHAIRMAN. Let's stay on this line of questioning, if we could.

Mr. RISPOLI. Yes, sir.

The CHAIRMAN. Now, when you ended up here—either or both of you—we had this site—when we ended up, we have this site, as you've depicted it. I wish it would get a lot more notoriety in the country, because all we hear about is that, "We can't clean up radiation; therefore, we ought to give up." What is that site now, as far as human use? Can I go out there and walk on it?

Ms. TUOR. Not today, sir. It is currently locked up——

The CHAIRMAN. Why?

Ms. TUOR [continuing]. Finishing the paperwork——

The CHAIRMAN. Okay.

Ms. TUOR [continuing]. That will de-list it from the Superfund site. Then, Mr. Chairman, once that de-listing has occurred, it will formally be turned over to the U.S. Fish and Wildlife Service, under the Department of the Interior, and they will then manage it as a national wildlife refuge. They have not yet announced when it will be open for public access.

The CHAIRMAN. But maybe my question, following on that, would be: Is it currently, in terms of the adequacy of the formerly contaminated site—does it qualify for wilderness, if all these processes are finished?

Ms. TUOR. Yes, Mr. Chairman, it does. It has been cleaned up to a public health standard that will allow public access. And, indeed, the most restrictive use was to look at the wildlife refuge workers, since they would be spending 40 hours a week on the site. And it is adequate for their protection.

The CHAIRMAN. That's truly a remarkable achievement.

One last question. I was being very honest a while ago when I said that in the Appropriations Committee—incidentally, that's where the money comes from, and I happen to be on that—every year, we have to appropriate all the money for all the cleanup projects. It's beginning to be one of the largest components of this appropriations bill. It comes out of the Department of Defense, incidentally, Senator. It's transferred from them to this subcommittee, that is not Defense, to be spent. So, to the extent that we spend it, it diminishes the Defense budget for other things.

But what we always hear is, "You've got to fund it fully, because we've got to keep these jobs that are there." Now, we've been at that, in some instances—and I don't—I mean, it's clear that—at Savannah River, in South Carolina. But what's the difference between yours and theirs? How do the people accommodate to the realistic idea that their jobs are going to end, pretty—you know, probably while they're still working, and—still working people and still wanting jobs? How is that done?

Ms. TUOR. I think, Mr. Chairman, there were two points I would make. First, it was very difficult, and a real leadership challenge, to convince the people, who had gone to work at Rocky Flats think-

ing they would retire there, that there was a benefit to them working themselves out of their jobs. The two key assets were incentives that we did share with the employees out of our earnings, and rekindling the pride they had in the role they had played in, they believed, winning the cold war, and having the opportunity to bring that full circle and turn a liability in the community back to an asset to the community. But, second, I would tell you, we did benefit from the fact that Rocky Flats is part of a larger regional economy, which, when we proposed the accelerated cleanup, was quite robust.

In short, I think it's fair to say that the community viewed Rocky Flats as a greater asset gone than it did as a job provider. And that was a key benefit to us in our political efforts.

The CHAIRMAN. Mr. Secretary, we've been speaking and using the word here regularly, "incentives." What does that mean, in terms of Rocky Flats? And how is it applied in other cleanups, if it is?

Mr. RISPOLI. Mr. Chairman, the way that incentives are used, in this contract and in others, is that incentives are basically a profit pool, if you will, a set-aside amount of money in the contract that's available for superior performance on schedule and cost containment. And the Department has generally gone to that type of a format in all of our contracts. It worked particularly well at Rocky Flats, because there was a finite end date in the near term, as a few of our other sites also have. The end dates were well known. Again, as has been stated, the cooperative environment in the State of Colorado was very, very supportive. And we had a good commitment to funding. And so, with all of that said, it enabled the contractor to keep up with the momentum. If they ran into a problem in one area, they could move the workforce to another to keep the forward motion going and keep on schedule. And all of that just worked amazingly well at Rocky Flats.

We have learned from this. We have applied the same types of incentives for schedule and cost control to other contracts. Obviously, when you have those that have a more near-term closure and a well-known end date, it is more straightforward, you might say, to apply. It's a little more difficult at very large sites, where you have to pick out segments of the work and apply those incentives to each segment individually.

The CHAIRMAN. Let me follow up there, and then I'll ask the Senator if he has some questions.

Would it be correct to assume that, in your case, the time you started entering into the agreements with the contractor, Kaiser-Hill, that those were brand new? You didn't have any contracts that extended over a long period of time that had covenants and agreements between local units and the government? They were all done when this project started? Do you understand what I'm getting at?

Mr. RISPOLI. Yes, Mr. Chairman, I do—I believe I do. This contract was clearly the flagship in being innovative in this approach. As was mentioned by both Senator Allard and Nancy Tuor, it took a great deal of commitment and innovative approach on both the part of the company and on the part of DOE to set this contract in place. And I do believe we've learned greatly from the accom-

plishments, and, therefore, the format, of the contract and the way that it was incentivized.

The CHAIRMAN. Do you have any questions at this point, Senator?

Senator SALAZAR. Keep going. I——

The CHAIRMAN. I was going to ask Mr. Rispoli if he'd take 3 or 4 minutes to give us his statement.

Your statement will be made a part of the record. But let's ask you, Mr. Secretary, to abbreviate your statement. Then we'll ask some more questions.

Mr. RISPOLI. Yes, sir. Thank you, Mr. Chairman.

STATEMENT OF JAMES A. RISPOLI, ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT, DEPARTMENT OF ENERGY

Mr. RISPOLI. Chairman Domenici and members of the committee, I'm pleased to be here today to discuss the Department of Energy's Environmental Management program.

I would like to particularly thank you, Mr. Chairman, and this committee, for your strong support of the EM program. In particular, I'd like to recognize not only your efforts, but also those of Senator Allard, with respect to the cleanup of the Rocky Flats site. I would also like to thank Senator Salazar for your work on Rocky Flats at the State level and since coming to Congress. And certainly I would like to acknowledge the remarkable performance by Nancy Tuor and the entire Kaiser-Hill organization.

Since I first appeared before you in July, during my confirmation hearing, and since being sworn in on August 10, I've been familiarizing myself with the program, the issues, and the people. I have visited ten of our sites since then. It's clear to me we have a driven workforce that's making immense headway in some of the Nation's most crucial environmental actions.

We've made significant progress, as you have obviously recognized, in the last 4 years, shifting focus from risk management to risk reduction and cleanup and completion. Most notably, not only do we have Rocky Flats as an example, but we're on schedule to clean up Fernald and Mound and a number of other sites during fiscal year 2006.

My written statement has specific accomplishments, and they're in the record, but I'd like to say that all those who contributed to those successes should be proud to have played a part, and we thank this committee, in particular, for your support.

As you know, this is not an easy mission. The most visible example is the waste treatment plant at Hanford. It's arguably the largest, most complex construction project in the Nation, equivalent to building two nuclear reactors. As you know, that project is encountering design and construction setbacks. I would like you to know that Secretary Bodman and the Department have remained absolutely committed to fix the problems correctly. We are working with the Corps of Engineers and our contractors, taking several major actions to ensure that we fully understand what is required to complete construction and begin operations.

I'd like to briefly mention safety, because I know that's of interest to you, and to this committee. It affects everyone involved—the

employees, the Federal employees, the contractor employees, the site, and the community. I have told our field managers, everywhere I go, that safety must be our first priority. No schedule, no milestone, is worth any injury to the workforce.

It's vital that we acquire the best services and attract the best contractors, including small business. Obviously, we must sharpen our reliability and be unambiguous meeting deadlines, and be responsive to bidders. And my goal is to have a high-performing organization in which at least 90 percent of our projects will perform on, or better than, cost and schedule targets. So, with that in mind, I'm taking steps to upgrade Environment Management's project-management systems to be best in class in project execution.

I firmly believe that an organization is never better than its people. Our employees, Federal and contractor, hold the key to success. I'm committed to partnering with all the affected communities, States, tribal nations, contractors to achieve success, because I truly believe that we succeed or we fail together.

The continued support of this committee and the Congress is very much appreciated, and it's crucial to maintain the momentum that we have achieved.

Thank you for your confidence in confirming me, confirming my nomination as Assistant Secretary this past summer. I'll be happy to answer any questions you may have.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Rispoli follows:]

PREPARED STATEMENT OF JAMES A. RISPOLI, ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT, DEPARTMENT OF ENERGY

Mr. Chairman and Members of the Committee, I am pleased to be here today to answer your questions on the status of the Department of Energy's Environmental Management (EM) program I would like to thank Chairman Domenici and this committee for your support for the EM program. In particular, I would like to recognize the efforts of Chairman Domenici and Senator Allard with respect to the impending cleanup of the Rocky Flats site. I would also like to thank Senator Salazar for his work on Rocky Flats at the state level and since coming to Congress. As you are aware, the Department is currently verifying the physical completion of Rocky Flats cleanup.

Since I first appeared before you in July, I have been familiarizing myself with the program, the issues and the people that are responsible for cleaning up the environmental legacy of the Cold War. From my visits to Paducah, the Idaho National Laboratory, Hanford, West Valley, Savannah River Site, Oak Ridge Reservation, Ohio Field Office and the Consolidated Business Center and interactions with our personnel throughout the complex, I can say we have a driven workforce that is making immense headway in some of the nation's most crucial environmental actions. 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 issues that lie before us.

The program has made significant progress in the last four years in shifting focus from risk management to risk reduction and cleanup completion We are on schedule to complete cleanup at Rocky Flats, Fernald, and Mound. We have moved and secured nuclear material and spent fuel to reduce risk and prepare them for ultimate disposition. We have disposed of huge amounts of radioactive waste and remediated many of the contaminated areas at our sites. These accomplishments add up to an impressive amount of cleanup and risk reduction Some highlights include:

- Rocky Flats has concluded the physical cleanup of the site and the Department is in the process of verifying completion.
- All buildings at Mound planned for demolition have been taken down.
- Fernald completed the largest waste shipping campaign in DOE history as the 154th train of waste pit material was shipped off site for disposal. The remedi-

ation of the waste pits eliminated a direct source of contamination to the Great Miami Aquifer.
- The Waste Isolation Pilot Plant continues to play a major role in completing cleanup throughout the EM complex—in the spring the site received the final transuranic waste shipment from Rocky Flats.
- Richland completed removal of plutonium "hold up" from the Plutonium Finishing Plant more than a year ahead of schedule, significantly reducing a security, worker, and community risk.
- The Savannah River Site completed construction of the M Area Dynamic Underground Stripping System. After 2 months of operation, 14,200 pounds of volatile organic compounds have been removed from the soil and ground water.
- The Idaho National Laboratory emptied a Category 1 Material Access Area four years ahead of plan, reducing a security threat and mortgage costs.

All those who contributed to these successes should be proud to have played a part and we thank this committee in particular for your support.

As you are fully aware, the mission is not an easy one—-the most visible example being the Waste Treatment Plant at Hanford. The Waste Treatment Plant project is arguably the largest, most complex construction project in the nation. As you know, the Waste Treatment Plant is encountering design and construction setbacks. The Department has remained committed to fix the problems correctly. Because of the size and complexity of the plant, fully understanding all the facts will take a few more months. The Department, along with the U.S. Army Corps of Engineers and our contractor, is currently undertaking several major activities to ensure we fully understand what is required to complete construction and begin operations. While some may characterize our effort to validate the cost and timeline for the project as overly cautious, it is responsible management—-responsible management that is key to the successful completion of our mission.

Just as importantly, for us to be successful, we must have:

- credible project baselines,
- effective identification and management of risks,
- selection of the most appropriate contract type and fee earning method corresponding to the scope of work and uncertainties,
- realistic schedules,
- early and frequent communication with regulators, communities, stakeholders, Congress, and contractors,
- improvements and training on the source selection process,
- an integrated human capital management program stressing an experienced acquisition and project management staff, and strong technical staff, especially for nuclear related issues, and
- constant real-time feedback of lessons learned.

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. Every worker deserves to go home as healthy as she or he was when they came to the job in the morning. I have told all our field managers that no schedule, no milestone, is worth any injury to our work force.

Such a multi-faceted approach is central to superior performance and improved accountability.

Clearly, opportunities exist to improve our acquisition practices. We are an "Acquisition" agency with a capital A—in terms of both procurement and project execution. It is vital that EM acquire the best services and attract the best the contractor community, including small business, has to offer. In order to do that we must be reliable, clear, meet deadlines and be responsive to our prospective bidders. We must ensure that we have highly skilled employees dedicated to this process. For us, we are acquiring an end state——a site that has completed cleanup or attained closure. We will sharpen our skills and refocus our enterprise to reflect our acquisition responsibilities. The organizational structure must support the emphasis of technical excellence, integration of project management and contract acquisition/administration in order to meet this goal. It must also incorporate effective incentives for the federal and contractor workforce for superior performance, and accountability for field office and headquarters managers, project managers, and contracting officers for meeting cost, schedule and performance expectations.

It is my goal to lead EM as a results-driven high performance organization. We will instill a strict project management mindset that will be ingrained in all projects. Our performance on many key projects has not been acceptable. My goal is that at least 90 percent of our projectized portfolio will perform on or better than our cost and schedule targets. We have taken major strides in integrating safety;

now we must do the same with project management. Project management must not be viewed as a burden or an extra step that we have to take. It is the very backbone of our project planning and execution. This includes reporting and oversight as well. The management tools used to manage cost and schedules must be used to manage and provide oversight integrally. Our success will depend on our ability to build in this rigor. I am taking immediate steps to upgrade EM's project management systems and initiate remedies to be a best-in-class project execution organization. We will target the shortcomings in our project management by using both DOE and industry standard project management and business management processes. I will personally conduct Quarterly Reviews of all EM projects and have directed that my senior staff carry out monthly reviews. This includes fully implementing our management systems through the use of earned value management, following through on corrective actions, and better applying risk management principals—that is identifying project uncertainties, developing mitigation measures and contingency and holding action officers accountable for their resolution. I believe that this is the key to our success with strong and effective project management.

Complementing these refinements, we must ensure that our projects are managed by highly skilled, competent and dedicated leaders and staff workers, both Federal and contractor. Our managers and staff must have the appropriate skills to perform their functions. We are currently doing a skills gap analysis to determine where we may need to provide additional help to our existing staffs training or adding to staff We have instigated a certification program for our project managers. Our goal is, by May 2006, all EM Federal project managers will be certified. We want to assure ourselves that we have the right skills mix to get the job done. We are assuring that our employees are provided career development, rewards, and support in the appropriate way. I firmly believe that an organization is never better than its employees. Our employees, federal and contractor, hold the key to our success.

Just as importantly, these managers and their staff, skilled in the competencies to do their job, will have the responsibility and the authority to meet the program's objectives. We will streamline the relationship between the field and headquarters to enable the program to be more effective in its oversight role. I believe that if you have the right people in the right job with the right skills, they should be empowered to execute their responsibilities and be accountable for their decisions and outcomes.

Our desire is that at Headquarters and each site, our key acquisition and technical personnel, including contracting officers, have knowledge of technical issues, project management, business management at an equivalent level of expertise as their contractor counterparts to promote meaningful, and cogent dialogue on substantive issues. Our job as a federal agency is management and oversight, to be responsible envoys and stewards of the public's trust and resources. Therefore, we must have a highly qualified and technically proficient management team. Ultimately, 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.

I believe that by taking these steps we will be in a position to address the challenges that lie before us. 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. This partnership goes far beyond the limits of a contract or an agreement. Our success relies on this partnership. We are in this together—we all succeed or we all fail together. Your continued support is crucial to maintain the momentum that has so painstakingly been achieved. Thank you for your confidence in confirming my nomination as Assistant Secretary this past summer.

I look forward to continuing dialog with you and your staff.

The CHAIRMAN. Thank you, Mr. Secretary.

Again, I was telling you about the time. I'm very concerned that we're not going to have time to do enough oversight. We don't need oversight on Rocky Flats. We need to know about these other sites. We're not going to get that done today. I'm hopeful we can find time during the year, during the Congress, to do one on some of the troubled sites.

So, let me ask you about Hanford.

Mr. RISPOLI. Yes, sir.

The CHAIRMAN. After 5 years of work, as I understand it, this particular waste treatment facility, the Hanford Waste Treatment Plant, you've discovered that the plant was being built on an inadequate seismic requirement base. As far back as 2002, the Defense Nuclear Facilities Safety Board cautioned about the plant design and said that it might be inadequate on seismic requirements. Were you aware of that?

Mr. RISPOLI. Yes, Mr. Chairman, I was.

The CHAIRMAN. Construction on the plant continued, using these standards. Recently, the Pacific Northwest National Laboratory concluded that the standards were inadequate by today's seismic requirements. As a result, the plant design may have to be reworked on the partially built waste treatment facility, and that will obviously add a significant additional cost.

How do things like this happen? And why did it take so long to find out about this inadequacy? And how are we going to improve the oversight so we don't have this?

Mr. RISPOLI. Mr. Chairman, let me begin by stating that, in my very first meeting with Secretary Bodman, in his third week on the job, this plant was the exclusive subject of discussion. And I'd like to begin my answer by telling you that the Secretary's commitment to this plant has been unwavering and strong since that day. It, obviously, is a very complex project. As I mentioned, it's over $5 billion. Clearly, we know there are going to be cost increases to that figure. What we are doing now, with the Secretary's full support, is we are going over all the seismic issues. We are reevaluating the seismic conditions in that part of the country to ensure that we have it right.

I should tell you that we do not expect any future rework related to the seismic conditions. In addition, we have the Corps of Engineers reviewing all of the seismic design that the contractor has done to be absolutely certain that when we recommence work on those portions that are affected by the seismic issues, that we will have no difficulty going forward.

We have also initiated other specific management improvements on this project, in the area of project management, with the intention that we apply a more rigorous project-management discipline going forward to avoid the types of problems that you have mentioned.

The CHAIRMAN. I'm going to yield now to Senator Salazar.

Senator Salazar.

Senator SALAZAR. Yes. Thank you very much, Mr. Chairman.

I want to ask a question on Rocky Flats with respect to the environmental covenants law that was passed in Colorado on a bipartisan basis, which I helped author and the Governor signed, I think, last year.

The institutional controls that are contemplated by that law will allow us to regulate the activity on what is probably 400 to 500 acres of the area that may not have been cleaned up to the highest theoretical standards. That law has now been adopted as part of the uniform covenant laws for the States across the country. And I was wondering, Secretary Rispoli, whether or not we ought to take a look at that kind of an institutional control law as a model for a Federal law that might help us, in terms of the cleanup ef-

forts that we have at some of the other, I think, 113 sites that we must still work on.

Mr. RISPOLI. We understand the purpose of the new—of the institutional control law in the State of Colorado. At the present time, the Department is actually in dialog with the State to develop the covenants by which to go forward, and we expect that to be completed by 2006. I do believe that this may be the first instance where we are doing that, and we certainly will look at the applicability in other examples, in other States.

Senator SALAZAR. I would ask you just to keep me informed as you move forward with the progress on that issue.

Let me ask a second question. I know we're running short on time here.

The transition of this area, this 6,000 acres, from a Rocky Flats DOE facility over to the wildlife refuge under the Department of the Interior, is something that we all expect to happen. It's something that the legislation says will happen. Can you let me—can you give us a quick summary of where we are on that transition now and the timing for getting the memorandum of understanding signed between the Department of the Interior and the Department of Energy so the baton can be taken from DOE over to DOI?

Mr. RISPOLI. Senator Salazar, we have been in dialog with the Department of the Interior. In fact, we have obviously begun, and are working on, that memorandum of understanding as to how to go forward. We expect to complete that within the near future, and have the framework established for the path forward to transfer the site to the Department of the Interior.

Senator SALAZAR. I would also ask you, Mr. Secretary, to keep both Senator Allard and myself informed about the progress being made with respect to the transition and the negotiations on the MOU.

The CHAIRMAN. Senator, let me just say, it's preferable that you ask that the committee be advised, rather than the Senators.

Senator SALAZAR. Absolutely. If you——

The CHAIRMAN. You get advised that way, but he should advise the committee on both those issues that you asked about.

Senator SALAZAR. Absolutely.

The CHAIRMAN. If that's all right with you, that's what it should be.

Senator SALAZAR. Absolutely. And so, with that amendment, please, Mr. Secretary, advise us as to the progress on both of those two issues.

I guess this is a question. Let me ask it to DOE. At the end of the day, the incentives here were monetary. That's what sped this thing up to create a model for what we may be able to do in other places in the country. Can you give us a quantification of what those bonuses have been to Kaiser-Hill?

Mr. RISPOLI. Senator Salazar, I think that, obviously, the monetary aspects were a significant part of the equation. I would offer that, in my having visited the site and talked with contractor personnel, both the site workers, as well as management, I really do believe that, for them, it became even more than just the monetary aspects. I think the keys to success were not only the financial in-

centives to the company, but, as Nancy Tuor has mentioned, the individual employees were also——

Senator SALAZAR. I understand that very much, Mr. Secretary, and I applaud the workers, and I applaud the leadership of Kaiser-Hill, but get back to just the money question. The incentive there was a financial incentive for a private-sector company to come and do a good job and, ultimately, it ended up saving the taxpayers billions and billions of dollars and lots of time. What was that quantum at Rocky Flats?

Mr. RISPOLI. Nancy, that was, I believe—can you answer that?

Ms. TUOR. I can, sir.

Senator Salazar, the way the contract worked, if we were to accomplish the closure by the end of 2006 for $3.9 billion, our earnings would be $340 million. For every dollar we saved after that point, for our first portion, we earned 30 cents on the dollar, the Government got 70 cents. And then, after that, we earned 20 cents on the dollar and the Government got 80 cents. So, the total earnings for the project over the lifetime were $510 million, based on our being able to deliver $3.9 billion worth of work for about $3.3 billion.

The CHAIRMAN. Terrific.

Senator SALAZAR. Just one other quick question, if I may, Mr. Secretary—Nancy and Mr. Secretary. Again, part of the great success here is that we were able to avoid litigation that stopped this thing in its tracks. How did we do that in Colorado?

Mr. RISPOLI. I believe the answer was that, in the State of Colorado, there was tremendous support at all levels—both the State level and community level. And, as I mentioned earlier, the regulatory approach provided more flexibility than you would normally find, in that instead of—we have some situations, for example, where we have over 1,000 interim milestones. And you can either be measured against each interim milestone or the contractor can have more flexibility to keep up that forward momentum. But that takes a—I would say, a certain amount of trust on the part of the Federal Government, on the part of the regulator, and a contractor that obviously has performed superbly in this case. I think all of that, combined, is what helped us to achieve the success that we did. And, again, perhaps Nancy Tuor would like to add more to that.

Ms. TUOR. Just briefly, sir, I would comment that, in 1995, the regulatory and stakeholder relationships at Rocky Flats were as difficult and contentious as they are probably anywhere in the complex today. Under the Governor's leadership, by appointing Lieutenant Governor Schoettler to lead the negotiation of the new regulatory agreement between EPA, the Colorado Department of Public Health and Environment, and the DOE, she came into that process and said, "Before we can decide how, we must know what." And we reached agreement and an alignment between the regulators and the community on what the outcome would be, which then allowed us to deal with the details of its implementation. That alignment, I believe, and the working agreements that resulted from that, the long-term trust and coordination, really were a key—in fact, probably the largest single attribute of the success.

Mr. RISPOLI. Thank you, Mr. Chairman. And, once again, thank you for holding this hearing.

The CHAIRMAN. Let's see, we have Senator Cantwell here, but let me just ask, before we get to you, did you get as much in here as you would like for today's session? We have your statement, you've answered some questions, but is there something else that we didn't ask you, on short notice here, that you want to tell the committee?

Mr. RISPOLI. Mr. Chairman, I think that—given the time and the tone, I think that we have conveyed what we would like to convey, but, of course, we remain available for any questions you or the committee may have.

The CHAIRMAN. I would ask a couple of questions before yielding to the Senator.

Senator Salazar mentioned delays caused by regulatory confrontations elsewhere. Were any lawsuits filed in this case that delayed the matter, from the time you entered into the agreements until your completion? And could you briefly describe that overall situation?

Ms. TUOR. There were no lawsuits filed. And, indeed, in the last 2 years of the project, we received a letter from the State saying they were not going to establish any further milestones because we were so far ahead of their expectations that there was no longer a need for interim milestones.

The CHAIRMAN. Could you tell me, either now or for the record, pick the other sites around the country, any one that comes to mind, and then, for the record, do them all, and tell us how many lawsuits have been filed on each of them, and about what, just in a kind of a record summary?

Mr. RISPOLI. Mr. Chairman, I certainly will give a for-the-record summary. I will tell you that at a number of sites, obviously, we have had litigation, or we have other ongoing issues, but I think, in fairness, it would be better for me to give you a recap for the record.

[The information follows:]

Given the context in which this issue came up, the U.S. Department of Energy has interpreted the question to include administrative actions and lawsuits brought by states, their political subdivisions, or Indian tribes, alleging violations of environmental cleanup obligations. The specific cases are as follows:

- *Energy Technology and Engineering Center (ETEC):* In October 2004, two environmental groups and the City of Los Angeles filed a lawsuit alleging that the Department's cleanup decisions and activities at ETEC fail to comply with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), including a 1995 Joint DOE and U.S. Environmental Policy Act Policy on Decommissioning, the Endangered Species Act, and the National Environmental Policy Act (NEPA).
- *Fernald Closure Project (FCP)*: The Department remains involved in a lawsuit filed by the State of Ohio in 1986 originally alleging that the Department failed to comply with requirements of various environmental laws, including CERCLA and the Resource Conservation and Recovery Act at the FCP. Most of the State's claims have been settled under a consent decree, but the State's natural resource damages claims remain pending.
- *Hanford Nuclear Reservation:* There is a two-part lawsuit in Federal court in which the State of Washington is suing the Department. The first part addresses the applicability of the Waste Isolation Pilot Plant Land Withdrawal Act Resource Conservation and Recovery Act storage exemptions for transuranic (TRU) mixed waste stored at DOE sites. The second part (i.e., the NEPA Case), challenges the sufficiency of NEPA analysis related to bringing off-site waste to

Hanford; specifically the State challenges the groundwater impacts analysis in the Hanford Solid Waste Environmental Impact Statement. Finally, Washington Initiative 297, passed by voters in November 2004 and subsequently enacted into law, seeks to bar DOE from importing any waste to Hanford "until cleanup is complete." DOE challenged the law in Federal District Court and the Court granted a stay of the implementation of the initiative until full resolution in court. In addition to the above, the State of Washington has threatened to sue DOE concerning alleged violations of Tri-Party Agreement milestones associated with the Waste Treatment Plant. Those milestones include starting operations in 2011 and disposal of all tank wastes by 2028.

- *Idaho National Laboratory (INL):* The Department remains involved in a lawsuit filed by the State of Idaho in April 2002, alleging that the 1995 Settlement Agreement in this case required the Department to dig up all of the buried TRU waste from the Subsurface Disposal Area at INL. The Department disagrees with the State's interpretation of the Settlement Agreement.
- *Savannah River Site:* The U.S. Department of Energy is involved in one case filed by a South Carolina county, *Aiken County* v. *Bodman.* Aiken County, filed on September 21, 2005, is an Administrative Procedure Act case in which the county alleges that the Department has violated section 3182 of the 2003 Defense Appropriations Act by failing to meet the notification requirement of that Act concerning progress on the Savannah River Site Mixed Oxide facility.
- *INL, Savannah River, and Richland.* The Department appealed the Idaho District Court's ruling in *NRDC* v. *Abraham*, that the provisions of DOE Order 435.1, *Radioactive Waste Management,* governing the Department's management of radioactive waste are invalid insofar as they enable the Department to determine that some waste associated with reprocessing spent fuel is not high-level waste. The court of appeals previously decided that the plaintiffs' claims are not ripe for review and, therefore, it vacated the district court's judgment and remanded the case with directions that it be dismissed. The court of appeals held that any challenge to DOE's Waste Incidental to Reprocessing criteria and process should be framed as a challenge to an actual application of those criteria and that process, not in the abstract. The original lawsuit was brought by the Natural Resources Defense Council (NRDC) and the Snake River Alliance. The States of Idaho, South Carolina and Washington supported the plaintiffs as amici (friends of the court).

Mr. RISPOLI. I would say that it does not have to be the norm to have litigation or difficult issues. If we're in a partnership, as I stated, we should work together, because that's what we all want is a successful cleanup. But, for the record, I will answer your question.

The CHAIRMAN. Well, Mr. Secretary, you're new at this, and that wonderful statement that you just made just happens to be a wish, not a reality, that what you just said should happen. It doesn't happen, because some people don't want it to happen.

But, in any event, my last observation and question would be, if the delays are not by litigation, as I am going to ask you—just asked you to tell us about, could you list each site and tell us what delays have occurred—and this could be a tough job, but, nonetheless, what delays have occurred, and why, so we will know, on each site what's happened?

Mr. RISPOLI. I will do that, Mr. Chairman.

[The information follows:]

DELAYED BY LITIGATION

Idaho National Laboratory and Savannah River Site: The planned closure of liquid radioactive waste tanks was delayed due to litigation regarding DOE authority to determine whether residual waste in tanks storing reprocessing wastes could be classified as other than high-level waste under DOE Order 435.1, Radioactive Waste Management. This issue was addressed by

FY 2005 National Defense Authorization Act section 3116 which established procedures for completing waste determinations in consultation with the U.S. Nuclear

Regulatory Commission. Delays will continue until waste determinations are completed in accordance with section 3116.

DELAYED FOR OTHER REASONS

Stanford Linear Accelerator Center, CA: The planned completion date for this project was originally FY 2006 based on the assumption that no further physical work was required beyond that date. A recent regulator decision has added soil and groundwater cleanup scope which has moved the completion date to FY 2010.

Savannah River Site: The construction of the Salt Waste Processing Facility has been delayed due to the redesign of the facility based on DOE's implementation of a Defense Nuclear Facilities Safety Board recommendation that more stringent seismic criteria be used. A delay of approximately 26 months is projected at this time.

Hanford Site: The decontamination and decommissioning of the Plutonium Finishing Plant has been delayed by uncertainties regarding off-site consolidation of special nuclear material. This delay will continue until either the material is transferred off site or a new storage facility is constructed at Hanford.

The decontamination and decommissioning of the K Reactor Basins has been delayed by technical obstacles and performance issues. The project is currently being re-baselined with an expected three or more year delay in completion from FY 2008 to FY 2011 or beyond.

River Protection: The construction of the Waste Treatment Plant has been delayed due to the redesign of critical portions of the facility to determine whether increased protection against a potential seismic event is needed. Cost increases and schedule delays are anticipated. Also delays in the emptying of tanks have occurred due to technical obstacles in conditioning the waste for removal. The Bulk Vitrification Demonstration Project is also experiencing delays in subcontract procurements. The impact on the project life-cycle from these delays in undetermined at this point.

Idaho National Laboratory: The Advanced Mixed Waste Treatment Facility missed a December 2005 milestone for shipment of transuranic waste to the Waste Isolation Pilot Plant. The plant initially experienced startup delays, exacerbated by maintenance problems left from the previous operating contractor, as well as other issues associated with the availability of waste to ship. There were also delays associated with suspension of shipping authorization due to issues relating to drum characterization data. Good progress has been made recently, and the delay in meeting the milestone is expected to be by approximately two months.

Energy Technology Engineering Center, CA: Completion date for this project is expected to extend from FY 2007 to FY 2009. Delay is due to ongoing negotiation with the performance contractor and site owner regarding cleanup work scope to be performed and the site end state at completion.

Columbus, OH: This project is experiencing a minor delay in completion due to the discovery of higher contaminated soil volumes than expected. The projected delay is approximately three months, from December 2005 to March 2006.

Depleted Uranium Hexafluoride Project, KY and OH. In August 2002; the Department awarded a contract to UDS with an estimated date to complete construction in August 2005. Due to delays in awarding the contract, the Department changed the construction completion date to March 2006. The 2006 completion date was based on the contractor's estimate without detailed design or independent review. Following completion of the detailed design and development of a validated project performance baseline, the current estimated date to complete construction is November 2007. The change in construction schedule reflects contractor design and procurement delays, design delays associated with increased safety features for seismic protection and containment of hazardous chemicals, and addition of DOE schedule contingency to increase confidence that the project's major milestones will be met.

Amchitka, AK: The original completion date for this site was planned for FY 2005. Delay in finalizing the site closure strategy and documents have slipped expected completion to the end of FY 2006.

Mound Plant, OH: The Mound project experienced an increase in scope when additional contaminated soil volumes were identified. The original estimate of 4.3 million cubic feet of contaminated soil requiring remediation has risen to 8.3 million cubic feet. The original completion date of March 2006 has been extended to an anticipated September 2006 completion date to accommodate the increase in soil volume.

The additional soil volumes identified above do not include the planned remediation of Operable Unit 1. The Department and the Miamisburg Mound Community Improvement Corporation are currently in discussions to define the scope of work

to be accomplished with the additional $30 million Congress appropriated in Fiscal Year 2006.

The CHAIRMAN. And let me move now to the most difficult one, which Senator Cantwell will certainly talk about.

You have told us that the Secretary's—is on the site that you have talked about in detail, the Hanford site, and he told me the same thing, that he understands this is one that we've got to get to the bottom of, and it's very tough. Could you tell me, now, have you made some changes in how this is going to be done? And do you need any help from Congress? You don't have to tell me that today, you can look into it, what we might do to make this a more forthright and expeditious cleanup. I think it's very important. The people there think it's just a matter of pushing a whole bunch more money in, which we try to do, but something seems to be missing that we have to get to the bottom of, on Hanford. Could you just address that for me, for a minute?

Mr. RISPOLI. Mr. Chairman, what I will tell you is that this project in the State of Washington is, in fact, the Department's largest capital project.

The CHAIRMAN. Yes.

Mr. RISPOLI. And, as I mentioned, it may very well be the largest publicly funded project in the Nation, equal to building two nuclear power plants. The Secretary, himself, directed certain actions to be taken when we recognized the potential impact of what was happening. For example, he had us appoint an oversight team that now has full-time, dedicated oversight to this project, from the headquarters level. Additionally, he has directed that we reevaluate all the seismic concerns at the two facilities that are affected—the high-level waste facility and the pre-treatment facility—to ensure that when we build this plant, it is built safely for the workers, for the community, and for the people in the State of Washington.

I, myself, upon being briefed by the after-action review team, took a number of actions. For example, we realized that we needed to have more people at that site with certain types of expertise, so we've assigned them. We've brought in the Corps of Engineers, as I mentioned earlier in passing, to help us with the seismic criteria—that is, the shaking-of-the-earth part—so we could get that right, as well as oversight over the contractor's engineering, to be sure that the contractor gets the engineering right.

We have taken a number of actions already, based upon what we have learned from our after-action review team, to get this project back on track.

And you're right, it's not—it's a very, very expensive project, but it's a very technically complex project, and we want to be sure that, going forward, we're doing it the right way to deliver the right product for the people of the State and our Nation.

The CHAIRMAN. All right.

Senator Cantwell.

Senator CANTWELL. Thank you, Mr. Chairman. And thank you, Mr. Chairman, for holding this hearing and for your diligent questions about the Hanford site. While, in fact, it is in Washington State, it is a Federal project and a Federal responsibility, and I ap-

preciate all my colleagues' attention to what is the largest nuclear cleanup project, I believe, in the entire world.

The CHAIRMAN. Yes.

Senator CANTWELL. And we certainly are spending billions of dollars doing it. And to meet milestones, I think, is very important.

Mr. Secretary, thank you for being here. And I have a couple of questions for you, following on what the chairman was asking; specifically, about the projects and where we are, going forward.

I guess my first question is, when you take into consideration—I mean, we're talking about seismic issues, but the seismic issues have been related to the vit plant; would you agree?

Mr. RISPOLI. Senator Cantwell, the seismic issues relate to two of the structures. One is the vit—the high-level vitrification plant—there's actually a low-activity and a high-level vit plant—and also a part of the project called a pre-treatment facility. Those are the two that have the impact from the change in the seismic criteria.

Senator CANTWELL. But if I look at my budget numbers correctly from what the President proposed and what the conference committee came out with, and if you include the President's rescission, we're talking about over $400 million in cuts from the 2005 level. And if I look at that, I look at over $200 million of that coming from the Office of River Protection and the tank waste project, not related to the vit plant. So, I look at a big chunk of that coming from something that I don't think has anything to do with seismic issues. Am I wrong there?

Mr. RISPOLI. Senator, my understanding of the appropriation side of the House is that, overall, the site—with the of the waste treatment plant, the site was actually plussed up by conference, by the Congress. This particular project, called the waste treatment plant, the conference language basically says that they will fund $526 million, instead of $626 million, with the expectation that the prior year balance—that is, the rescission—would be available for expenditure during fiscal year 2006.

My belief is that, at the moment, we are waiting to see how that rescission plays out. The conference action has been completed, although not voted on by the full Congress, but we are still waiting to determine whether or not the rescission will be in effect.

Senator CANTWELL. I guess my question is, what does the $194 million and the cut from the 2005 level from the Office of River Protection, and the $35 million cut from the 2005 level of tank waste have to do with seismic issues? Do they have anything to do with seismic issues?

Mr. RISPOLI. Addressing the waste treatment plant, the $100 million cut is related to the same project that is having the seismic issues. The other projects on this site are not.

Senator CANTWELL. The Office of River Protection dollars or the tank waste are related to seismic?

Mr. RISPOLI. The tank waste portion of the Office of River Protection, that work is not related, or does not have seismic implications. Only the waste treatment plant does.

Senator CANTWELL. Okay. So, my point is the $194.2 million that is a cut from the 2005 level of Office of River Protection, and the $35 million that is related to cuts from tank waste program have

nothing to do with seismic issues. You just said that. So, I appreciate that.

So, my question is, why are we seeing such significant cuts in these programs, which is—I'm saying it's going to be $200 million of the $400 million that the administration is recommending in this area—when a lot of people are saying, "Well, there's a seismic problem"? I get the seismic problem at the vit plant, but what I don't understand is the additional $200 million in cuts to a project that has particular milestones to meet.

Mr. RISPOLI. Senator, let me answer your question, if I may, this way, in two parts. One is that within the Department and within Environment Management, it is clear to me that this project and this site are the most significant in the Department. This site receives nearly 30 percent of the Environment Management annual budget, nearly 30 percent to this one site. Clearly, it is our highest, most complex—highest-priority, most complex site with all the issues that——

Senator CANTWELL. But it's receiving a 25 percent budget cut, when it has milestones to meet and an Inspector General report that said you were even shortchanging the accelerated cleanup that you were doing on the tank waste anyway, and now it's going to come in at a higher amount than what you anticipated. So, how do you take something that's your highest priority and give it a 25 percent budget cut and threaten the ability to make the milestones that you've agreed to in a Tri-Party Agreement?

And I understand the—if you hear frustration in my voice, it's the frustration of every new Energy Secretary that comes along wakes up to the Hanford problem and realizes that it's a huge obligation. We, in Washington State, know it's a huge obligation. We want the financial commitment to meet the milestones.

Mr. RISPOLI. Senator Cantwell, I appreciate your frustration. I guarantee you, I'm frustrated, as well. As I said, this is—in my book, it's the most significant project in Environment Management—the most complex and the most significant. Obviously, as I stated, the conference committee took $100 million off the budget request, followed by which, or about the same time as which, the rescission recommendation was made. As I indicated earlier, we don't know, at this point in time, whether that second amount, the rescission amount, will, in fact, stand, or whether it will not stand. We expect the conference language to stand, but we just don't know, at this point in time today——

Senator CANTWELL. Well, I would like a response. If you can look into the specific reasons why the $200 million for two different programs were cut, and we can get—you can give me specifics on that.

What is your outlook for—I mean, do you think that this budget cut means that the administration might not meet the milestones laid out in the Tri-Party Agreement?

Mr. RISPOLI. We have already, on October 6, notified the State, and, I believe, your offices, as well as others in the Washington delegation, that we know that there are three interim milestones that will not be met. I would point out that the Department has already met 900 milestones, interim milestones, at the Hanford site, and there are 300 milestones to go. So, when we talked earlier about

interim milestones, this site has a huge number of interim milestones.

We notified the State that three of those interim milestones, in the near term, are not achievable. And we also notified the State that there are three other interim milestones which we believe are in jeopardy, although we do not yet know whether or not they will be missed.

Senator CANTWELL. I would like to see that document, as well, because I think the document that we saw earlier says that they "might be missed." That was—there's a difference between saying something "might be missed "and "will be missed." And if—again, if my concern sounds very—you know, a level of frustration, yesterday our attorney general and Governor held a press conference basically saying that they'll threaten lawsuits if milestones for completion aren't met, and that they think that the budget cuts are already a violation of the Federal Government's legal obligation. So, the State of Washington is very concerned on that.

So, I think—I'd love to see the document that you—that they will—that the milestones were articulated that they would be missing.

[The information follows:]

- Complete Waste Treatment and Immobilization Plant hot commissioning by January 31, 2011 (Milestone-62-10)
- Complete K East Basin sludge removal by January 31, 2006 (Milestone-34-34)
- Containerize K West Basin Sludge by June 30, 2006 (Milestone-34-35)
- Complete four limited retrieval demonstrations and all tank waste in Waste Management Area-C (WMA-C) by September 30, 2006 (Milestone-45-00B)
- Submit supplemental treatment technologies report, by June 30, 2006 (Milestone-62-08)
- Submit final waste treatment baseline by June 30, 2007 (Milestone-62-11)

Senator CANTWELL. How are you looking at the 2007 level of funding for this site? Are you looking at further cuts? Are you looking to make up what this 25 percent reduction has been? How are you looking at that, as it relates to attainment of future milestones?

Mr. RISPOLI. Senator Cantwell, there's—obviously, we know that that overall budget is not available, but I will tell you that if you look at the Hanford site as a whole, the amount of EM's budget it has represented year after year has been in the range of 28 to 30 percent. We do not see any significant change to that share for the Hanford site, although the exact numbers are not known to me today. But I do know that it's been in that range, and we intend for it to continue in that range.

I'll also point out that, in the particular contract for the waste treatment plant, the contract itself assumes, and provides for, $690 million per year, for a period of time, to get that plant built. So, there are two indicators, you might say, that both go to answer your question.

Senator CANTWELL. But if you had—again, I'm sorry to keep focusing on these different numbers, but, to me, they're what's available, knowing what projections have been and what the IG report has said. So, if you've had a 25 percent reduction, and we've missed some milestones, and we could miss more, you would assume that if you're not going to make up for some of that in, particularly, the tank waste site, which the IG report, again, is just scathing on the

fact that the plan missed by—I can't remember, but I think it's $100 or $200 million, the estimates of what it was going to take for cleanup. So, if you're not making a commitment today to try to make up for some of the reductions that we're seeing right now, then you'd have to draw a conclusion that you're going to miss a lot more milestones.

Mr. RISPOLI. Obviously, Senator, it is our intention to meet all of our regulatory requirements. At the present time, given the news on the 2006 budget picture and the rescission that we've recently learned of, obviously we need to go back now and reassess schedule and cost for the overall project. I don't have that information for you today.

Senator CANTWELL. If I could, Mr. Chairman, just ask another question about the tanks—the tank waste?

The CHAIRMAN. Please.

Senator CANTWELL. Are you willing to acknowledge, today, that you're going to miss the milestones on the tanks?

Mr. RISPOLI. We believe that one milestone on the tanks is in jeopardy. It has to do with Tank Farm C. What I will tell you is that we have actually emptied three tanks from Tank Farm C—three single-shell tanks from Tank Farm C—and, at the present time, even as we're here today, we are currently retrieving waste from two more tanks in that tank farm, plus two tanks in Tank Farm F, which is not part of that same interim milestone. So, you see, it's not as though we have stopped making progress; we are working where we can to retrieve tank waste. And so, in addition to the three in Tank Farm C that are tied to that milestone that is in jeopardy, we're working two more in that tank farm and two other tanks in Tank Farm F; additionally, getting ready another tank in Tank Farm C to have the retrieval operations begin.

I'd like to also point out that this past summer we also brought many of the other tanks into compliance with environmental regulation by upgrades to the piping and other parts of the components of the system to, again, reduce the risk in that area. So, although we have one milestone that deals solely with Tank Farm C, and we are making progress in Tank Farm C, again there are many other areas that we are pressing forward with tank waste outside of that milestone.

Senator CANTWELL. How should the State of Washington, the attorney general and the Governor, who are looking at the previous Tri-Party Agreement document, view what you just said as it relates to the deadlines for tank waste? I mean, are you saying you want to set new deadlines? Are you saying——

Mr. RISPOLI. I understand the frustration with the current situation with funding, and the technical problems at the plant, which cannot be minimized. Obviously, we have had, and are having, significant issues, and need to improve our management of that project. What I can assure you is that we are keeping forward momentum going. We intend to meet all those interim milestones. Again, you've picked one that is in jeopardy, but we're working on not only those tanks, but other tanks. But it is our intent to continue with forward momentum at that site to fulfill our responsibilities to the people of the State of Washington.

The CHAIRMAN. Senator, I'll be happy to do a little changing of time here. Do you have one more?

Senator CANTWELL. Go ahead, Mr. Chairman. Go ahead.

The CHAIRMAN. Do one more. Because we're going to leave here shortly. I want you to get your last question in.

Senator CANTWELL. Yes. I think that I've asked for a couple of things that I hope, Mr. Chairman, that we can follow up with the Assistant Secretary on. And I hope that——

The CHAIRMAN. Whatever you need, get—you ask the questions, they'll submit answers quickly.

Senator CANTWELL. Yes. I think the—on documentation, about why $200 million was cut from this budget when it has nothing to do with seismic obligations, or seismic studies, what additional milestones—why the original milestones—the document that basically said milestones were missed, because I think that was a—more of an alert than a declarative and this process moving forward.

Mr. RISPOLI. We will get you that information.

[The information follows:]

During the course of Congressional deliberations on the FY 2006 President's Budget request for the Waste Treatment and Immobilization Plant (WTP) at the Hanford site, the Department had been asked by other committees for the impact of a $100 million, $200 million, and $300 million funding reduction from the $626 million request. The Department responded with those impacts.

The Congress appropriated $526 million for WTP for FY 2006, which was a reduction of $100 million. In the Appropriations conference report, (accompanying H.R. 2419), the following language was included concerning this reduction.

"Office of River Protection—The conference agreement provides $329,471,000 for Tank Farm activities, and $526,000,000 for construction project 01-D-416, the Waste Treatment and Immobilization Plant. The high-level waste vitrification program at Hanford has had a long history of failure—more than $9,000,000,000 has been spent over the last 15 years. Based on a report by the Corps of Engineers, the estimated cost of the Waste Treatment and Immobilization Plant (WTP), originally $4,300,000,000, may rise to as much as $9,300,000,000, and the schedule may slip four more years to 2015. Reasons for these increases include: contractor estimating problems, technical problems, and insufficient project contingency.

"It is unclear what steps DOE will take to better ensure effective management and oversight of the project in the longer term. Based on this troubled history, the conferees provide $526,000,000, for the Waste Treatment and Immobilization Plant, a reduction of $99,893,000 from the request. The conferees understand that $98,000,000 remains available from fiscal year 2005 to be used in fiscal year 2006 for this project. The Department needs better control and oversight of the scope, cost and schedule of this project, and the conferees direct the Department to report to the House and Senate Committees on Appropriations on the actions taken to rectify the management failures of this project, and to report quarterly on the activities and financial status of each of the subprojects within WTP."

As part of the deliberations by the Administration for the response to the Katrina Disaster, the Administration had proposed a $100 million reduction for the FY 2005 funding as part of an overall Administration rescission package. However, the FY 2006 Defense Appropriations Conference Report H.R. 2863 indicated that the Administration's proposed $100 million offset from EM's WTP project as part of the Katrina Supplemental was dropped. As a result, no DOE funding will be used as a funding source to offset the Katrina Supplemental.

The Department remains committed to the Tri-Party Agreement (TPA) and to meeting all objectives for completing the cleanup of tank waste at Hanford. However, because of difficulties, such as sludge removal issues at the K Basins and WTP issues, some of these milestones are not achievable. The Department informed the State of Washington, members of the Washington Congressional delegation, and committees of jurisdiction, including the Senate Energy and Natural Resources Committee, on October 6, 2005, when it knew that milestones would be missed. In that notification, the Department stated its belief that three near-term interim TPA milestones, one for the WTP and two for K Basins, are not achievable:

- Complete Waste Treatment and Immobilization Plant hot commissioning by January 31, 2011 (Milestone-62-10)
- Complete K East Basin sludge removal by January 31, 2006 (Milestone-34-34)
- Containerize K West Basin Sludge by June 30, 2006 (Milestone-34-35)

The Department also believes three near-term milestones associated with the commissioning of the WTP, the treatment of tank waste, and certain tank retrieval related activities are in jeopardy:

- Complete four limited retrieval demonstrations and all tank waste in Waste Management Area-C (WMA-C) by September 30, 2006 (Milestone-45-00B)
- Submit supplemental treatment technologies report, by June 30, 2006 (Milestone-62-08)
- Submit final waste treatment baseline by June 30, 2007 (Milestone-62-11)

The Department will notify Congress and the State of Washington should other milestones be in jeopardy.

Senator CANTWELL. But I guess, Mr. Chairman, I don't have any further questions, as much as I would like to say, for the record—and I know that my colleagues have seen a copy of this IG's report—that Hanford cannot keep just getting the short end of the stick just because it's the largest cleanup project. We can't keep missing milestones, and we can't keep spending—not millions, or hundreds of millions, but billions of dollars, and just have new Assistant Secretaries come through. The reason we got to the Tri-Party Agreement was because of missed plans and obligations. And so, I think we're at a conclusion now that if the administration isn't stepping up to a reversal in the 2007 budget of some of these cuts to the tank waste, as the inspector general is saying is a major problem with product flow of contamination, then the State of Washington will have to take action on this. And so, I hope that you will look at those numbers, particularly as it relates to the Office of River Protection and tank waste cleanup, and make a commitment for the 2007 budget that reflects the milestones that have been agreed to in the past.

I hope, Mr. Chairman, that this committee could help in the discussion of that as we move forward. I understand that anytime you can look for hundreds of millions of dollars to cut in a budget, it's a big target, but this is a critical project for the country, to clean up and to move forward, and not to continue to push out for many years new proposals and new programs.

So, I hope, Mr. Chairman, that the committee will, in its process of oversight, take an aggressive role, on the Hanford issue particularly. Even thought it resides in the State of Washington, as I said, it affects an entire region and the entire country. And the fact that we have almost 70 tanks that have been confirmed having suspected leaks, and that there are a million gallons of waste being discharged into the soil, that that becomes a national priority, and not just having the two Senators of Washington constantly pushing for. Mr. Chairman, I hope that the fervor, of which you fought for Los Alamos, will help in shining some light on the challenges we have with this particular budget moving forward.

So, I thank the Chairman.

The CHAIRMAN. Well, let me say, we're getting close to adjournment here, and, Senator Cantwell, any questions you submit will be answered. What would be a—is 10 days adequate? You're very busy. Let's say 2 weeks.

Mr. RISPOLI. Mr. Chairman, that's—yes, sir.

The CHAIRMAN. Because there'll be questions for both of you. I will submit some also.

Let me ask, am I correct—if you know; if not, you can find out—what is the total budget? The total amount—if I'm correct here, the total amount appropriated—this is for year 2006—for cleanup is $6,659,000,000. That's the largest line item in the appropriation bill that covers the Corps of Engineers, all of the Defense nuclear work. No, I'm not talking about Washington; I'm talking about all of them. So, the record should reflect that, you know, it's not like this U.S. Government isn't spending a lot of money. The problem is, we don't get any success, we don't achieve. That's why we are so pleased to have you up here.

Senator Cantwell, I want to suggest—and this is from a Senator that is very concerned and wants to get this done, and wants to fund it, you know—maybe all the leadership at the State level, all the regulatory entities, the National Government, maybe they all ought to sit down and think about another agreement. Something's wrong with the way this project has to be managed by those who manage it. It's not all-those-who-manage-it's fault. Some of it is that the requirements are so difficult, the way we have done it, and nobody wants to change, because, you know, when somebody suggests change, it is violating the environmental concerns of those involved. You heard, Colorado doesn't even have any milestones. It's incredible. All we talk about is milestones, hundreds of them. They didn't have any. Is that correct, Senator? Written-in milestones. Is that right?

Ms. TUOR. That is correct, in the later years of the project.

The CHAIRMAN. None. So, in the early years—so, I don't—I'm not trying to con anybody here. Tell us about the milestones in the early part of the project.

Ms. TUOR. Mr. Chairman, in the early part of the project, we did have milestones that were similar to those at other sites, but once we agreed with the regulators on our baseline plan, starting in 2000, under the closure contract, the regulators agreed to dispense with individual milestones and measure us based on the percentage of the work that was planned each year that we actually accomplished. So, we set an agreement on how much environmental remediation work, how much building demolition, and if we accomplished a certain percentage of that, then we were in compliance. What that did was give us the flexibility, if we ran into technical problems in one place to move assets and resources and to continue the forward progress on the project.

The CHAIRMAN. Let me ask another question, Mr. Secretary. There were incentives built in. We even had the representative of the company tell us what they were, in dollars. Are there incentives built into the contract in Washington?

Mr. RISPOLI. Yes, Mr. Chairman, there are incentives. In fact, with some of our contracts there, there have been significant, you might say, deductions from the available incentive because of these types of things.

The CHAIRMAN. Right.

Mr. RISPOLI. I think your suggestion is certainly a valid one, in that, as I mentioned, we have met 900 milestones at Hanford, and you don't see a lot of celebration of the ones we've met. But there

are 300 to go, and we're talking about missing three, and another number—a small number in jeopardy. But I think the approach was so different that it gave the contractor the flexibility to keep forward momentum; even if you encounter a roadblock here, you can redeploy workforce there to keep forward momentum.

The CHAIRMAN. And my last question. How many workers are employed, in total, for the project that we're talking about in Senator Cantwell's State? Do you know? Maybe the Senator knows.

Mr. RISPOLI. Well, I can answer specifically for the Hanford Waste Treatment Plant. At the present time, the Hanford Waste Treatment Plant has 2,600—approximately 2,600 workers onsite.

The CHAIRMAN. Now, you said "treatment plant." Is there something else besides that?

Mr. RISPOLI. Yes. That is the one significant capital project that has been most of the discussion. But yes, sir, there are far more workers there at the site that are working on tank farms, K basins, soil and groundwater remediation——

The CHAIRMAN. How many?

Mr. RISPOLI. I'll get that back to you for the record.

The CHAIRMAN. Right. Is it four times as much?

Mr. RISPOLI. Oh, I'm sure. Yes, sir.

[The information follows:]

In November 2005, there were approximately 9,600 contractor employees at the Hanford Site, excluding the Waste Treatment Plant workers.

The CHAIRMAN. Does anybody know? If you don't, can you put in the record how many employees there were when this project was not a cleanup site, but was an ongoing site, where we were actually doing a—where we had nuclear reactors producing the substances for the Defense Department? Can you get us the number of how many were employed then?

Mr. RISPOLI. I will do that, yes, sir.

[The information follows:]

Prior to the transfer of the Hanford Site landlord responsibilities to the Office of Environmental Management in 1992, the site employed approximately 15,000 contractor employees.

The CHAIRMAN. Let me say, when I suggested here, for the record, and was addressing—in a sense, perhaps I should not have to—but when I said maybe we should all sit down and see if we couldn't have a more operative agreement, I want everybody to know I'm not an expert in the field. All I know is that there are going to be constant concerns about funding. And I don't know how to do it. I mean, nobody is giving the Congress enough money, and the budgets don't have it. No matter who is the President, they can't—they don't put in their budget what's requested. So, we have to find some way to do this more reasonably priced and still get it done. We can't just continue to say we can't achieve under it. There ought to be some human capacity to enter into a—in a knowledgeable way to something better. And that's all this Senator is suggesting.

But actually, it's the Appropriations that puts up the money. The Senator knows that. And we get a limited amount for all the things we have to do. And we can't go out and say, "You've got to abolish the Corps of Engineers." We have to allocate the money. And so, people out there in the West ought to know, it's a big problem. And

those who oppose and argue and insist and litigate—you know, they all ought to say, "Let's sit down and see what in the world can be done." Now, maybe there's nothing.

I'm going to ask the Secretary, personally, whether he could see some leeway that that might help with the situation. I may be totally wrong.

With that, Senators——

Senator CANTWELL. Mr. Chairman, could I just add, for the record, that it is 11,000 workers at the Hanford, 11,000. And I'm well aware of your dual role, and that's as an appropriator and an authorizer. That's why I'm hoping that I can get you more engaged in the creative issues on this——

The CHAIRMAN. Senator, I'm about as engaged as somebody who doesn't live there can be.

[Laughter.]

Senator CANTWELL. Good. Well, I'm happy to hear that, because I think the history is just as you've described, a role of getting people involved. Again, it's the enormity of the project. So, I look forward to working with you on it.

Mr. RISPOLI. Mr. Chairman, if I may, for the record, just state that the Secretary has met with Governor Gregoire, and has had several discussions by phone with her, and we are working to try to normalize relations in the State. And I believe that the relationship has been quite productive in that regard.

The CHAIRMAN. Yes, well, I want to state for the record here—and there may be some press from out there; it looks like the only ones here must be interested in this issue and that's why they came—if the State is looking for a Secretary that understands and is capable of putting something together—no, I'm not in any way being pejorative about any other Secretaries, but this man can do it, if they will just sit down and work with him. He is extremely talented in matters of science and engineering, and has been an executive and knows how to do it. He's committed to this one. And I would hope that people would think maybe this is time to start anew. And I urge that.

With that, I thank the Senators for coming, particularly Senator Salazar, you've devoted a great deal of time here, and you are proud of that project out there in front of us, and you should be.

[Whereupon, at 11:15 a.m., the hearing was adjourned.]

APPENDIX

RESPONSES TO ADDITIONAL QUESTIONS

DEPARTMENT OF ENERGY,
DEPARTMENT OF CONGRESSIONAL AND INTERGOVERNMENTAL AFFAIRS,
Washington, DC, February 9, 2006.

Hon. PETE V. DOMENICI,
Chairman, Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: On November 15, 2005, James Rispoli, Assistant Secretary, Office of Environmental Management, testified regarding the evaluation and receipt of a status report on Environmental Management programs of the Department of Energy.

Enclosed are the answers to 61 questions that were submitted by you, Senators Alexander, Smith, Bunning, Bingaman, Cantwell, and Salazar.

Also, enclosed are the four remaining inserts that you and Senator Cantwell requested to complete the hearing record.

If we can be of further assistance, please have your staff contact our Congressional Hearing Coordinator, Lillian Owen, at (202) 586-2031.

Sincerely,

JILL L. SIGAL,
Assistant Secretary.

[Enclosures.]

QUESTIONS FROM SENATOR DOMENICI

Question 1. With the cleanup and closure of the Rocky Flats site an apparent success, how does EM plan on incorporating the lessons learned from that experience into future contracts for site closures?

Answer. Lessons learned from the accelerated closure of Rocky Flats will be used by at least four different methods. First, the Department has established a Consolidate Business Center (CBC) and is transferring "closure cadre"—EM staff who lived through Rocky Flats closure—to the CBC to support closure of other sites.

Second, the Rocky Flats Project Office is developing a lessons learned seminar for managers at other cleanup sites. Top-level discussions such as contract and project management, regulator and stakeholder interactions, and Federal staff management will be framed in a presentation format and sent to other cleanup sites. EM Headquarters will consider this in development of acquisition strategies for new contracts.

Third, the Department also is preparing a lessons learned document entitled The Rocky Flats Closure Legacy. The document takes a two-tiered approach at describing the lessons learned. The first tier addresses strategic planning issues, and their convergence during the early stages of the project. Successes, failures, and key learning points are described and analyzed. The second tier of discussions addresses lessons learned related to implementation of the project. The chapters describe in detail some of the most relevant technical and management challenges that were faced throughout implementation of the ten-year closure project. This will be used in formulating strategy for new contracts.

Lastly, a digital video disk (DVD) and 30-page brochure are being produced that synopsizes the cleanup effort and key challenges.

Question 2. When do closure contracts make sense for the department, and what are the risks and benefits associated with such an approach?

Answer. Closure contracts make sense when the Department has clearly defined end states. The Rocky Flats site is a prime example of this. The Department's mission to support national defense at that site was over and the environmental cleanup mission had a finite life. Additionally, a clear scope could be developed since the

end point was defined in accordance with regulations. From this scope, a relatively high-confidence baseline that described the remaining work could be developed. Therefore, a closure contract was appropriate to complete the work and close the site.

There are several benefits associated with this type of contract, which is a cost-plus-incentive fee contract. These include establishing site-wide incentives instead of individual incentives for subprojects, establishing total project cost incentives with a negotiated Federal government and contractor share for any savings realized, establishing project schedule incentives, and an increased focus on project management. This emphasis on total site performance allows the contractor to manage all of the work and allows the Department to focus on project and contract management oversight.

The risks associated with a closure contract revolve around the effectiveness of the Department's and the contractor's project and contract management systems and the ability to manage project risk. It is essential that effective systems be in place to monitor the progress of the work. For example, there must be a baseline with a high degree of confidence established to describe and track the project's cost and schedule. Uncertainties (i.e., project risks that include a validated earned value management system) must continually be identified, assessed, and mitigated. Also, regular progress reports must be developed and analyzed to verify contract performance and any potential savings.

Question 3. With the closure of the DOE EM sites, there has been much interest in the Department's plans for administering retiree pension and medical systems. As I noted in a letter to Secretary Bodman earlier this year, the U.S. taxpayer is entirely responsible for this obligation. I also expressed concern that the Department's actions on the disposition of these programs could have a significant impact on drawing the best employees and best contractors to do this important work.

Answer. DOE officials briefed Senate and House staff members on the Department's general approach regarding the provision of pension benefits to facility management contractor employees. Pursuant to this approach, incumbent employees who are employed by a contractor under a new contract(s) will remain in their existing pension plan(s) pursuant to plan eligibility requirements and applicable law; that is, "if you're in, you're in." However, contractors selected for award of a new contract(s) will be required to provide market-based pension plans for new, non-incumbent employees hired after contract award. DOE believes this is a fair approach that reflects current best commercial practices and will enable the Department to continue to attract the best employees and contractors. With respect to medical benefits for contractor employees, the Department is currently assessing its approach.

Question 4. What actions has the Department taken since my communication to implement a workable program for the future?

Answer. As explained in Question 3, recently the Department has been briefing House and Senate staff on the Department's general approach to the provision of pension benefits for contractor employees and is currently assessing its approach with respect to medical benefits. The Department anticipates completing a formal policy statement concerning contractor employee benefits in the late winter timeframe.

Question 5. GAO recently reported that DOE was unlikely to achieve the $50 billion in savings originally attributed to implementing the accelerated cleanup strategy. Given significant potential project cost increases—such as those associated with Hanford's Waste Treatment Plant—does DOE still believe it will achieve any savings? If so, what savings does DOE believe it can achieve and how?

Answer. Some of the assumptions upon which the Department's estimate of $50 billion in cost savings have not materialized. In addition, changing circumstances and emerging requirements have led to an increase in the scope and thus cost of the Environmental Management program. However, the Department still believes that focusing on risk reduction rather than risk management is fundamentally sound and based on the independent audit of the Department's financial statement, should result in life-cycle savings.

Question 6. Under the accelerated plan, DOE's project risk has become significantly greater than under DOE's prior cleanup strategy. What implications does the higher project risk have on DOE's ability to reduce environmental risk and realize cost and schedule savings expected under the accelerated strategy?

Answer. While an accelerated cleanup strategy may result in higher project risk on certain projects because of more aggressive schedules, environmental and safety risk are, in fact, decreased. The accelerated cleanup strategy has demonstrated significantly decreased long-term public, worker and environmental risk and cost by cleaning up, closing out, treating, or disposing of radioactive wastes much earlier, rather than later when the potential costs for remediation, environmental and

human exposure risks are much greater. However, the Department still believes that focusing on risk reduction rather than risk management is fundamentally sound and based on the independent audit of the Department's financial statement, should result in life-cycle savings.

Question 7. Recently, the Department has been criticized for attempting to reduce overall costs and schedule by accelerating its cleanup work but at the same time increasing operational risks and risks to worker safety. What steps do you think could be taken to avoid increasing these risks and to ensure that the work is performed timely and in a safe and reliable manner?

Answer. The Department of Energy and its contractors emphasize the overriding priority of safety. This is done through proven methods, including oversight by contractor staff and DOE safety specialists and facility representatives; incentivizing safety by tying contract award fees to safety performance (48 CFR 9705215-3, *Conditional payment of fee, profit, or incentives* contract clause); expanding job-specific training opportunities, including mockups of complex activities; and frequent jobsite walkthroughs by senior managers.

The Department integrates the protection of the environment, safety and health into the way it does work. This integration is implemented through the 48 CFR 970.5223-1, *Integration of environment, safety, and health into work planning and execution* contract clause. The core functions of the DOE Integrated Safety Management System (ISMS) require contractors to: 1) define the scope of work; 2) identify and analyze the hazards; 3) develop and implement hazard controls; 4) perform work within the controls; and, 5) provide feedback and continuous improvement. These functions ensure safety and health are integral considerations as work is planned and conducted. Contractor ISMSs are verified as effective by DOE, and contractors and field element managers are required to provide an annual declaration to the adequacy of their programs to the Assistant Secretary for Environmental Management. The Environmental Management (EM) ISMS worker safety performance has been good and compares very favorably to private industry. For calendar year 2004, the total recordable injury rate for EM activities was 1.4 injuries per 200,000 work hours as compared to the overall private industry rate of 4.8. While the EM program has demonstrated good safety performance doing hazardous cleanup work, the program has recently initiated a DOE-wide effort to further enhance ISMS. This effort includes development of site action plans to improve work planning and feedback and improvement, and to provide increased Headquarters' oversight of the ISMS annual verification process.

Question 8. Over several decades, the Department has had mixed results in developing and implementing new technologies as part of its nuclear waste cleanup efforts. Several of its technology failures have been costly and have hampered cleanup progress. The Department's current accelerated cleanup approach and schedule assumes that several technologies currently under development (such as those for the Hanford waste treatment project) will be successfully developed and deployed under very aggressive time frames for treating portions of the waste. What steps are you taking to ensure that the Department has identified and fully tested and demonstrated the best available technology to use in treating the waste?

Answer. Annually, the Office of Environmental Management (EM) requests funding for technology development activities to provide innovative and better technologies to support the EM cleanup mission priorities. Identifying and assessing the EM complex technology gaps in site baselines is the responsibility of EM Headquarters and is the first step. This assessment is conducted for the entire life-cycle of the EM cleanup program. The next step is establishing the priority of candidate technology areas for each site. This is done collaboratively with the respective field site contacts, and is an iterative and integrated process. Following this assessment, a recommended list of technology needs for new funding is completed, and acquisition plan(s) developed and approved by EM Headquarters. The acquisition plan describes the appropriate contract type and duration of work (Phases).

Subsequently, competitive Requests For Proposals are issued by EM Headquarters to solicit proposals from the private sector. A Source Selection Board, comprising Federal experts in specific technology areas, is assembled to conduct a technical evaluation of the proposals and to submit recommendation(s) to the Source Selecting Official.

Finally, selection of the proposed technology(s) is completed and the contract(s) is awarded. The technology development, testing, and deployment are carried out via the contract requirements.

Question 9. In the past couple of years, DOE has incurred several bid protests after making contract awards—for example, the Hanford River Corridor Contract received two bid protests. These protests waste time and resources. What is DOE doing to ensure that future bid protests are minimized?

Answer. The Department of Energy cannot prevent protests from being filed by offerors who disagree with the Department's procurement selections or its solicitations. The Competition in Contracting Act clearly provides them with the right to file such challenges, and the robust competition for DOE contracts means that there are offerors who do not win competitions.

DOE takes a number of actions to minimize the incidence of protests and to efficiently deploy the resources needed to address protests. DOE does extensive planning for debriefing unsuccessful offerors and continues to collect and implement lessons learned. Because the proposals submitted by the offerors and the details of DOE's evaluation are not public information, unsuccessful offerors frequently cannot obtain the information they would like to see about their competitors in order to decide whether a protest would be well-founded. However, DOE attempts to provide the maximum information in debriefings to enable companies to decide that a protest is not warranted. In addition, DOE has pioneered the use of early, electronic document production in protests where the U.S. Government Accountability Office has issued a protective order that permits attorneys for the parties to review proposal and source selection information. This facilitates protesters deciding early to withdraw or refine their protests, and reduces the amount of effort needed to provide the documents.

In order to strengthen the procurement process, the Department is conducting a review to identify improvements to the process. The Office of Environmental Management (EM) is developing an improved acquisition model to streamline the process using lessons learned from past procurements. EM will create a Deputy Assistant Secretary position specifically for acquisition and project management to oversee implementation of the results of the Department's procurement review. This Deputy Assistant Secretary will be responsible for incorporation of "real time" lessons learned and for ensuring that procurements are consistent, defensible, reproducible and completed on a reasonable schedule. EM is also planning to hire and train employees to enhance its staffs procurement capabilities.

Question 10. What oversight steps does DOE plan to implement to ensure that its contractors develop reliable cost estimates, including contingency funding, for completing environmental cleanup projects? It is important to our national energy security and economic competitiveness that the Department support efforts to bring the next generation uranium enrichment facility utilizing domestic enrichment technology to the commercial marketplace. In order to meet the schedule for constructing such a facility in Piketon, the Gaseous Centrifuge Enrichment Plant (GCEP) buildings must be cleaned up, the waste stored in the buildings must be removed and they must be turned over by the Department on or before September 30, 2006. Congress specifically appropriated money to accomplish this in order to make the buildings available for the construction of a new enrichment facility. Can you assure this Committee that the Department is on track to remove all of the waste, clean up the GCEP buildings and turn them over on or before September 30, 2006 for construction to commence on time?

Answer. The Department typically requires a scope, cost, and schedule baseline be developed within 60 days of contract award. The contractor's baseline is reviewed by site personnel and approved by the Contracting Officer. This baseline is then placed under Office of Environmental Management (EM) Headquarters' configuration control by the cognizant Departmental field manager. Any changes require submission of a baseline change proposal. Scope, cost and schedule baselines are reviewed periodically by EM Headquarters. The Department has determined that an improved acquisition and contract administration strategy is needed to incorporate lessons learned and to integrate fundamental project management principles that may be lacking in some instances. This includes more effective implementation of project management principles and discipline in accordance with both industry practices and the Department's own project management directives, which have been reviewed by the National Academy of Sciences.

With respect to the Gaseous Centrifuge Enrichment Plant (GCEP), the project has experienced delays and will not meet all of the activities to complete the September 30, 2006, milestone. Issues that have delayed the schedule include obtaining the necessary security clearance levels for the workforce, obtaining an approved security plan for the disassembly operations, and obtaining cleared drivers for transporting classified waste. In addition, DOE identified a small amount of waste that does not have a current disposition path and may require on-site treatment. The Department has made every effort to mitigate the schedule delays to accommodate the GCEP turnover. DOE has daily and weekly project status meetings, monthly project reviews, and conducts surveillances/assessments to ensure contractor performance.

The Department is continuing efforts to make facilities available to the United States Enrichment Corporation (USEC) to support its development needs. In a June

2002 Agreement between DOE and USEC, both parties agreed to make long-term commitments to support the further development of gas centrifuge technology. As a result, the February 17, 2004 Agreement between DOE and USEC for Lead Cascade activities at Portsmouth was negotiated and signed. Accordingly, all facilities and areas identified in the February 17, 2004 Agreement have been leased to USEC to support its Lead Cascade construction activities. To further support USEC's activities, DOE entered into negotiations for a new lease arrangement with USEC. Currently, these negotiations have not been completed, and a schedule for turnover of the GCEP facilities is still being negotiated with USEC in accordance with its actual requirements. The turnover schedule being negotiated identifies a sequence of target turnover dates for several GCEP facilities and systems. In accordance with this schedule, many facilities have already been leased to USEC, and more will be leased as late as December 2006 and a few in 2007. Our plan focuses on the need and schedule for each area of the GCEP facilities in sequence.

Question 11. After nearly five years of construction work on the largest, most complex waste treatment plant in the country, Hanford's Waste Treatment Plant, DOE discovered the plant was being built based on inadequate seismic requirements. As far back as 2002, the Defense Nuclear Facilities Safety Board cautioned that the plant design was based on inadequate seismic requirements, yet construction of the plant using the inadequate standards went forward. In a recent study, the Pacific Northwest National Laboratory concluded that the standards were inadequate by today's seismic requirements. As a result, the plant design may have to be reworked on the partially built waste treatment facility at a significant additional cost. How did this fundamental miscalculation happen?

Answer. The seismic design requirements for the Waste Treatment Plant (WTP) site were changed in early 2005 due to extensive recalculation of the effects of uncertainty in soil properties in the mudstone and siltstone layers located 350 to 1,200 feet underneath the WTP site. The effect of these layers was estimated in 1993 through 1996 design basis calculations developed by Geomatrix, Inc., Westinghouse Hanford, Pacific Northwest National Laboratory, and Fluor Hanford. Between 1996 and 1999 the design basis calculations were technically reviewed by British Nuclear Fuels Limited, Bechtel National Inc., nationally recognized independent expert consultants, Lawrence Livermore National Laboratory, and the U.S. Army Corps of Engineers (USACE). In 1999, DOE accepted their recommendations and adopted the seismic design basis for the WTP.

The seismic ground motion criteria changed in 2005, principally due to incorporating a much greater range of these potential soil properties than heretofore. The extensive calculation of the effects of variable layer properties was not required (or performed) when the plant design was commenced in 1997. The Defense Nuclear Facilities Safety Board (the Board) identified three specific concerns in its July 30, 2002, letter to DOE: the probability of tectonic activity of the anticlines and associated faults for the Yakima Fold belts; the spectral amplification associated with the attenuation relationship; and the amplified floor and equipment response of the superstructure. On September 18, 2002, DOE issued an extensive response to the Board's July 2002 letter (ORP/OSR 2002-2 *Office of River Protection Position Concerning Assumed Probability of Tectonic Activity and Adequacy of Ground Motion Attenuation Model Used in the Design of the Waste Treatment Plant*). This response, which included a variety of new analyses using improved calculational methodology, concluded that the existing design basis was adequately conservative. In January 2003, the Board agreed that most of these issues had been resolved satisfactorily, but the Board indicated that the site ground response modeling was still not considered sufficiently conservative. In response in 2003, to further confirm the calculated basis, DOE began a program to acquire additional data regarding the site. The data acquired was limited due to difficulties acquiring it (for example, a leak developed in the polyvinyl chloride well casing at the 360 ft depth). Cementing of the casing to repair the leak had a deleterious effect on the soil, sand and gravel in the vicinity which interfered with receiving clear signals using the suspension logging system in the borehole, but when analyzed and combined with intensive re-examination of available data, using a much more extensive modeling of site performance than heretofore, the Pacific Northwest National Laboratory determined in late 2004 that unfavorable stiffening of the sandstone and mudstone interbed layers located between 350 and 1,200 feet under the WTP site could allow earthquakes to shake the site more severely in the building frequency range of 4-6 Hertz than had been previously calculated. The Department has engaged the USACE to assemble a panel of seismic experts to review and affirm the seismic criteria before going forward.

Question 12. Why did it take so long to find out that the seismic standards were inadequate?

Answer. Development of seismic ground motion criteria is an intensive process that generally takes 18-24 months to complete. Modifications to these criteria require a similarly careful and deliberate process involving expert geologists, seismologists, and geophysicists. The time spent to revise the criteria in this case was not excessive, but was proportionate to the potentially significant impact of any increases in the criteria.

Question 13. How will the Department improve its oversight practices to avoid such a fundamental problem in the future?

Answer. On August 10, 2005, the Secretary of Energy issued a memorandum that laid out a strategy for aggressive and disciplined project management for the Department. The strategy focuses on four main areas: 1) strict adherence to DOE Order 413.3, *Project Management for the Acquisition of Capital Assets*; 2) training, education, and experience; 3) recognition of superior performance by program managers, project directors, and contracting officers; and 4) accountability of program managers, project directors, and contracting officers for meeting project cost, schedule and performance targets. The DOE Project Management System includes several rigorous internal and external independent reviews throughout the life of a project that are performed by senior expert professionals. They assess and evaluate the existence and implementation of key project management, project control, business, and technical systems and processes on an ongoing basis. The Department has sound project management policies and procedures in place and a capable workforce committed to successful performance. We need to vigorously pursue both increased competencies in program management and more consistent application of the standard practices.

Question 14. Other recent problems at the Hanford waste treatment plant could result in project costs increasing significantly. How will DOE assure the Congress that DOE can manage this project in the future so that project problems will be minimized and cost increases prevented?

Answer. The Secretary of Energy has implemented several key initiatives to address the cost, scope, schedule, contract, and management issues associated with the Waste Treatment Plant (WTP) project. They include: 1) assembling a Headquarters' senior level management team to oversee the project comprised of individuals with specialized expertise in cost, contracting, management, and technical design/engineering that will conduct an after action review to assess the causes of the project issues; 2) submitting weekly progress reports to the Assistant Secretary for Environmental Management; and, 3) providing periodic progress reviews from the Assistant Secretary for Environmental Management to the Secretary of Energy; and, 4) holding periodic meetings where Bechtel senior corporate officials provide to the Secretary of Energy Bechtel's demonstration of its corporate commitment and project management capabilities to WTP.

The Department is presently having all project management, project control, business, and technical aspects of WTP reviewed and evaluated by internal and external independent senior professionals. These recommendations will be reviewed and implemented as applicable to ensure the project is being planned and executed in accordance with commitments. In addition, beginning in the first calendar quarter 2006, a status report on the WTP project will be sent to Congress on a quarterly basis.

QUESTION FROM SENATOR ALEXANDER

Question 1. There are plans to conclude some EM projects despite the fact that numerous facilities and properties will remain contaminated. What are your plans for finishing the job at these sites?

Answer. DOE faces future cleanup activities from currently operational or excess facilities that are contaminated or overlay contaminated soil and groundwater. This work scope includes cleanup activities for the Department's excess facilities, including deactivation and decommissioning of facilities, cleanup of contaminated media, and disposition of excess nuclear and/or hazardous materials. The contamination is generally at facilities managed by the National Nuclear Security Administration, the Office of Science, and the Office of Nuclear Energy, Science, and Technology.

The Department expects to develop plans for these facilities and properties in fiscal year (FY) 2006. The FY 2006 planning activities are expected to include updating the data related to defining the scope, cost and schedule. The Department anticipates being guided by its cleanup obligations under the Comprehensive Environmental Response, Coordination, and Liability Act.

QUESTION FROM SENATOR SMITH

Question 1. In 2003, CH2MHill estimated that all of the wastes from the C-tank field at Hanford could be removed by September 2006, for a total of $90 million. However a recent Inspector General report states that the schedule won't be met, and the budget is likely to be $215 million. Can you explain in detail the delays and the cost overruns? More importantly, what is the real schedule for emptying these tanks, and the rest of the tanks?

Answer. The primary challenges impacting waste retrieval are 1) ensuring worker safety, and 2) the chemical complexity of the Hanford wastes. The Department has taken appropriate steps to ensure worker safety, such as placing tank farm workers on supplied air where necessary due to tank vapor concerns. The use of supplied air decreases worker productivity and can extend retrieval durations. The Department and the contractor are undergoing a study of these chemicals to assess where workers can cease the use of supplied air. Relative to chemical complexity, Hanford wastes are chemically unique due to the multiplicity of processes that generated those wastes. In some cases, the wastes are readily retrievable. In other cases, tank-specific technical challenges arise and must be addressed.

As was discussed with the State of Washington, the Washington Congressional delegation, and committees of jurisdiction, including the Senate Energy and Natural Resources Committee on October 6, 2005, some elements within this milestone are in jeopardy. The Inspector General (IG) report IG-706 looked at one element within the M-45-00B milestone, i.e., completing the retrieval of all 16 tanks within C Farm by September 30, 2006. That element of M-45-00B is in jeopardy, yet the Department continues to strive to complete that element in full compliance with the M-45 retrieval criteria despite the challenges encountered in retrieving the C farm tanks. The three tanks retrieved to date have been retrieved in compliance with established Tri-Party Agreement (TPA) standards.

The Department does not know at this time whether all elements of this complex milestone will be met by the date specified in the TPA.

QUESTIONS FROM SENATOR BUNNING

Question 1. I have learned from previous inquiries that the clean-up contract for Paducah needed to be awarded in October, 2005 in order to have the new contractor transitioned and in place by January 2006. Please provide my office with evidence that DOE will have the new clean-up contractor in place in order to prevent another extension of the current clean-up contract.

Answer. The contract was awarded on December 27, 2005, to Paducah Remediation Services. As requested by the companies, the unsuccessful, as well as the successful bidders were debriefed on January 11-12, 2006. The companies have up to ten days (January 22, 2006) after these debriefs to file a timely protest with the U.S. Government Accountability Office. Nonetheless, the Department is proceeding with contract execution. The contract with Bechtel Jacobs was extended through April 23, 2006, to allow them to provide assistance to the new contractor.

Question 2. We are over two years behind on having the clean-up contractor in place. Please provide my office with the evidence to show that we are still on schedule for an accelerated clean-up with a completion date of 2010.

Answer. In October 2003, the Department signed an agreement with the Commonwealth of Kentucky that set forth a strategy to complete site cleanup by the planned accelerated cleanup completion date of 2019. This 2019 cleanup strategy has been incorporated into the enforceable site cleanup agreement between DOE, the Commonwealth of Kentucky, and the U.S. Environmental Protection Agency. Since Fiscal Year 2004, the Paducah budget requests have been based on achieving the 2019 cleanup date, and the Department has been requiring its remediation contractor to perform work consistent with the 2019 date.

The Paducah Remediation small business contract was awarded in December 2005, accelerated cleanup work at the Paducah site is continuing to progress under the current remediation contract, as the new contractor transitions into place. While some projects (e.g., scrap metal) have experienced delays, and other projects (e.g., inactive facility decontamination and decommissioning and legacy waste disposition) are ahead of schedule, the project is on track to meet the 2019 cleanup completion date.

Question 3. The DOE Lexington Office was set up eliminate unnecessary delay of communication between Paducah and DOE headquarters. The technical direction for all work comes from Lexington, but certain administrative functions continue to go through Oak Ridge and the Consolidated Business Center in Cincinnati, Ohio. This structure puts Lexington at the discretion of these other offices for administrative approvals and assistance which can directly impact technical performance. If DOE

can establish direct reporting for the Lexington office for technical matters, why can't they do the same for the administrative responsibilities?

Answer. The Portsmouth Paducah Project Office (PPPO) reports directly to Headquarters regarding all mission-related activities and responsibilities. Support functions are provided by the Consolidated Business Center in Cincinnati, Ohio, for approximately 20 Office of Environmental Management sites, including the PPPO. The Department has determined that the consolidation of these functions in a central location for some small and medium-sized sites is the most cost-effective, and appropriate approach.

Oak Ridge continues to provide the following support to PPPO: safeguards and security (personnel security oversight, general physical security, control of classified matter, Nuclear Materials Control and Accountability, etc.) contracts/grants (e.g., limited administration of contracts and grants that originated from Oak Ridge Operations that have not yet been transferred to PPPO), and activities arising under the United States Enrichment Corporation (USEC) lease (certain administrative support for budget and finance activities arising from the USEC lease).

No delay in communication or technical performance is expected as a result of this organizational structure.

Question 4. When the new clean-up contract is awarded at Paducah, will the Oak Ridge office still have an administrative role with Paducah matters?

Answer. The Oak Ridge Office will not have a role in administering the new Paducah remediation contract. The Office of Environmental Management is evaluating the current structure for Paducah project execution. As a result of this review, the Oak Ridge Office may have a continuing role at Paducah in connection with certain areas, such as safeguards and security and the administration of the Gaseous Diffusion Plant lease agreement between the Department and the United States Enrichment Corporation. This does not affect the line responsibility for budget and performance of the environment work at the site, for which the Manager, Portsmouth Paducah Project Office, reports directly to the DOE Headquarters.

Question 5. The community in Paducah is trying to establish a vision for the long term strategy for the site. I am committed to the community and share their concern for the future. What is your office's role with regard to the post clean-up and reindustrialization of the Paducah site?

Answer. The Department is committed to working with the community and other stakeholders at the Paducah site to ensure that they are included in the process for establishing a vision for site uses following cleanup. Our stakeholders have several avenues for participation at the sites. For example, our stakeholders can work through Site Specific Advisory boards, such as Paducah's Citizens Advisory Board, which provide formal recommendations to the Department with respect to future site uses. Stakeholders are also provided the opportunity to review and comment upon various cleanup documents, which include discussions of projected future land uses. The Department maintains a productive relationship with Paducah re-use organizations as they seek economic development and re-industrialization opportunities for the Paducah community.

The Portsmouth Paducah Project Office's management also is available to speak with members of the public who wish to discuss the Paducah cleanup strategy. Once the Department has completed its cleanup activities at the Paducah site, responsibility for long-term management of the site will transfer to the Department's Office of Legacy Management.

Question 6. When do you expect DOE to begin implementing a worker health and safety rule as required under Section 3173 of FY 2003 Defense Authorization Act that follows Congressional intent?

Answer. The Department has submitted a final rule to the Office of Management and Budget implementing section 3173 of the National Defense Authorization Act (NDAA). The Department expects to publish the final rule in the *Federal Register* by the end of the 2nd quarter of FY 2006. Based on section 3173 of the NDAA, these regulations "shall take effect on the date that is one year after the promulgation date of the regulations." However, DOE will continue to enforce DOE Order 440.1A, *Worker Protection Management for DOE Federal and Contractor Employees*, and 10 CFR 850, *Chronic Beryllium Disease Prevention Program*, worker safety and health requirements through contractual means until the effective date of the final rule.

Question 7. I just learned the start date for DUF_6 operations could be delayed because DOE is requiring the contractor to submit new design activity plans to comply with the Defense Nuclear Facility Safety Board's seismic data standards. These standards are more stringent than current DOE standards. The contractor has already submitted design plans to DOE that account for the geology of the site, and construction is underway. Is DOE still firmly committed to the May 2007 start date for the DUF_6 operations?

Answer. On September 30, 2005, the Deputy Secretary approved the Project Performance Baseline and Start of Construction for the depleted uranium hexafluoride (DUF_6) project with expected commencement of operation in April 2008. Previous schedules were based on conceptual and preliminary designs that had not been validated through the Department's external independent review process. The need to adjust the previous schedules reflects the typical uncertainty associated with large construction projects during early design stages. The Department has higher confidence in the new schedule now that the design is complete.

Since approval of the project baseline in September, we have seen continuous progress at the site.

QUESTIONS FROM SENATOR BINGAMAN

Question 1. Mr. Rispoli, a number of my fellow members have been concerned about the Department's policy towards contractor employee pension plans at EM sites. These employees include incumbent as well as new hires at EM operations including Hanford, Paducah and the Waste Isolation Plant or those about to be closed including Rocky Flats and Fernald. There appears to be particular unease amongst employees and even contractors when an operation changes contracts with respect to credit for time-in-service as well as a disparity in overall benefits between incumbent employees who may be in defined benefit plans and new hires who may be in defined contribution plan. Other issues in the overall benefits disparity in a contract change include health care while working and in retirement. I cite these benefit combinations only as examples, they may of course vary site-to-site. Does EM have a uniform policy towards pension plans and if so would the Department please forward this policy to us at the earliest possible date and be prepared to brief staff and members?

Answer. During the past several weeks, DOE officials have been briefing Senate and House staff members on the Department's general policy approach regarding the provision of pension benefits to Management and Operating Contractor (M&O) and former M&O contractor employees. Pursuant to this policy, incumbent employees who are employed by a contractor under a new contract(s) will remain in their existing pension plan(s) pursuant to plan eligibility requirements and applicable law; that is, "if you're in, you're in." However, contractors selected for award of a new contract(s) will be required to provide market-based pension plans for new, non-incumbent employees hired after contract award. With respect to medical benefits for contractor employees, the Department is currently assessing its policies. The Department anticipates completing a formal policy statement concerning contractor employee medical benefits in the late winter or early spring timeframe. Like the pension policy for M&O and former M&O employees, the medical benefits policy would be applied Department-wide, not just to contracts at EM sites.

Question 2. It is my understanding that at WIPP, the EM program has intervened a number of times in negotiations between the bargaining units and the WIPP contractor. Is this true? If this is true what specifically did the DOE say to the WIPP contractor?

Answer. The Office of Environmental Management is not aware of intervention by the

Department with the Waste Isolation Pilot Plant contractor, Washington TRU Solution, Inc., or the bargaining unit during labor negotiations.

Question 3. Much has been credited towards the Rocky Flats closure by moving from performance based contract to incentive based contracts—that is the contractor receives more cash award for achieving milestones at an earlier date. Do you think this contracting model will work at long-term closure sites like Hanford, Savannah River or Idaho where the remediation involves the removal or isolation of liquid high level wastes?

Answer. Yes, in fact, contracts similar to the one used at Rocky Flats were awarded at Idaho and for the River Corridor at Hanford (the former involves remediation of tank waste). In addition, the Department will review all contracting models for each acquisition and will utilize the model that will give taxpayers the best return on investment and yield the best results in public health and safety and protection of the environment. The Rocky Flats contract is a cost-plus-incentive fee contract, and its attributes will be considered for Hanford and Savannah River liquid waste management scope of work in upcoming contract competitions this fiscal year.

Question 4. In the case of Rocky Flats accelerated clean up Kaiser-Hill received on the order of $500M for closing the site successfully and one year before the target date. I note that Rocky Flats did not—like Hanford or Savannah—involve large reprocessing facilities which generated large volumes of liquid high level waste. Given that early Rocky Flats closure resulted in a $500M incentive award would the De-

partment have to recalibrate the incentive award fee for the more difficult and long-term cases like Hanford?

Answer. While sites like Savannah River and Hanford do have large inventories of liquid wastes unlike Rocky Flats, the Department will evaluate each contract requirement on a case-by-case basis to determine the appropriate incentive fee structure for these large facilities. Over the past few years, the Department has implemented aggressive performance-based contracting approaches that include clearly defined statements of work and results-oriented incentives. We will continue to put in place site-wide or project-specific incentives, tailored to each individual site or project mission, to try to produce significant cost and schedule savings and duplicate the success of the Rocky Flats closure site.

Question 5. A recent GAO report on performance reporting found that the EM accelerated clean up effort was behind schedule for three of the most challenging and costly activities (1) disposing of transuranic waste, (2) disposing of radioactive tank wastes and (3) closing tanks of contaminated radioactive wastes. The GAO estimates that the EM program will not save the $50 billion as originally claimed under accelerated clean up with a total program cost of $129 billion by 2035. What program tools are in place so that the Congress can monitor not only the amount of waste cleaned up but the cost expended in meeting targeted milestones against the targeted cost?

Answer. The Department of Energy is constantly working on improved ways to better report performance and the costs to attain program performance. Earned value management system is an industry standard that measures how planned work on a project was completed within expected costs and schedule and is now a tool being fully implemented throughout the Environmental Management (EM) program. Earned value data are collected from all the EM sites for all EM cleanup projects, both line item and expense funded, along with the targeted milestones using the Integrated Planning, Accountability, and Budgeting System—Information System (IPABS-IS)—a single information management system for all the programs and activities overseen by EM.

These data are reported monthly and are reviewed by EM project and program managers to track the status of projects and to implement recovery actions, if necessary. On a quarterly basis, the Assistant Secretary reviews project performance with site managers to assess project status and resolve issues. DOE plans to provide a new biannual report to Congress, using the earned value data by site. This report will also include annual budget estimates and life-cycle costs. This report will summarize progress on these measures and discuss issues associated with accomplishing the cleanup goals. This report should amount to a complete response to the U.S. Government Accountability Office's report and allow Congress the ability to monitor both the amount cleanup completed along with the cost expended in meeting targeted milestones.

Question 6. The Nunn-McCurdy Act governs expenditures for Department of Defense acquisition programs triggering a set of notifications and actions when certain cost and milestone thresholds are exceeded. What is the Department's opinion to developing a similar set of guidelines for EM programs?

Answer. The Department of Energy (DOE) currently has a comparable set of guidelines for notifications and actions by the acquisition executives for all capital asset projects under DOE Manual 413.3-1, *Project Management for the Acquisition of Capital Assets*. The Deputy Secretary, as the Secretarial Acquisition Executive (SAE) for DOE, must evaluate and approve any change in project scope or performance that affects the project's mission need as originally approved by the SAE at Critical Decision-0, *Approve Mission Need*. In addition, the SAE must review and approve any increase of six months or more in the original project completion date or an increase of $25 million or 25 percent of the original cost baseline as originally approved by the SAE at Critical Decision-2, *Approve the Performance Measurement Baseline.*

In addition, the Office of Environmental Management (EM) has expanded the Department's requirements by establishing similar thresholds for all of its operating (i.e., expense funded) projects and has implemented additional control points internal to EM through the establishment of a Headquarters' Configuration Control Board (CCB). The CCB is designated and chartered as a management system by the Assistant Secretary for EM to ensure the proper definition, coordination, evaluation, and disposition of all proposed changes to the program elements under Headquarters' configuration control.

This system also documents all requests for changes, justification for changes, and final decisions concerning project cost and milestone changes.

Question 7. The OMB has used the Program Assessment Rating Tool, or PART, in addition to GPRA to bring accountability to the expenditure of funds by the agen-

cies. On page 17 of the FY06 EM budget submission, the EM program received an overall PART score of 49 (ineffective) with a 20 (failing) for "results/accountability" for Fiscal Year 2004, for Fiscal Year 2005 the overall score was 61 (adequate) with a 26 (failing) for "results/accountability" due to a lack of cost and performance monitoring and for the Fiscal Year 2006 budget it says "EM was not required to do a PART evaluation for the FY2006 budget given its participation over the last two years." Can you please explain what you mean that you were not required to perform a PART analysis given the past two years of failing grades in "results and accountability"?

Answer. The Office of Environmental Management (EM) was one of the first DOE programs that the Office of Management and Budget (OMB) and DOE selected to conduct a Program Assessment Rating Tool (PART) evaluation. Two PARTs were completed for EM in the first year—one for clean up (rated ineffective) and one for R&D (rated results not demonstrated). Both appeared in the FY 2004 Congressional Budget request. For the FY 2005 Budget, the two EM programs were re-evaluated in one PART and the program improved its PART score to 61 (adequate). EM was not reassessed for the FY 2006 Budget because it is OMB policy to assess programs using PART once every five years or when the program provides evidence of significant improvement. Although EM was not re-evaluated using the PART, DOE-EM was requested to provide current data on the performance measures included in the PART Summary and report on the status of its follow-up actions. This information was reported with the FY 2006 President's Budget. Comparable information was collected again this year and will be reported in a new website, *ExpectMore.gov*, designed to better inform the public on how Federal programs are performing. *ExpectMore.gov* will be launched with the release of the President's FY 2007 Budget. The Department continues to use PART to identify areas of program management weaknesses and improve its programs to produce meaningful results for the taxpayer.

Question 8. The National Academies recently released an interim report as required under last year's Defense Authorization Act on reclassifying the residual high level waste left in storage tanks at Savannah River National Laboratory. Their recommendation was that it might be better to decouple the removal of the bulk tank waste from the permanent grouting in of the residual waste until a better technological solution becomes available. What is the Department's opinion of the report's recommendation?

Answer. The Department does not believe that, in general, removal of the bulk tank waste should be decoupled from the permanent grouting of the residual waste. A primary purpose of section 3116 of the National Defense Authorization Act of 2005 was to specify criteria that would permit tank closures and associated actions to go forward if the specified criteria were met. One of the criteria is that the highly radioactive radionuclides have been removed to the extent practical.

The Department will work closely with the appropriate agencies in each State where storage tanks are located in making decisions. While the Department understands the importance of proceeding with tank closures in a timely manner, it will not proceed in cases where it determines that a delay in tank closure is called for to protect public health and safety and protection of the environment.

Question 9. Do you know how stable this grout material is with respect to the long-lived radioactive residual waste?

Answer. Yes, the Department has conducted studies which show the grout material will be stable with respect to the long-lived radioactive residual waste for at least 1,000 years.

Question 10. Given that the Congress has not approved the transfer of clean up functions to the NNSA for their site specific generated waste—will EM continue to hold the function of cleaning up sites and waste streams from ongoing Department Activities?

Answer. The Office of Environmental Management (EM) continues to be responsible for the legacy environmental cleanup work at National Nuclear Security Administration (NNSA) sites. NNSA is responsible for the management of any newly generated waste. EM retains budget authority, responsibility and accountability for all cleanup activities at NNSA sites. Under the NNSA Act, NNSA retains authority in directing its contractors and Federal personnel in conducting the cleanup.

QUESTIONS FROM SENATOR CANTWELL

Question 1. The Secretary has committed to me on multiple occasions that the Department is committed to Hanford cleanup in accordance with the Tri-Party Agreement (TPA). Yet, when suggested at the oversight hearing that the TPA should be redrafted, you seemed to agree. Do you support Hanford cleanup in accordance with

the provisions of the Tri-Party Agreement? If not, do you speak for the Secretary in reversing the Department's stated position to support the federal cleanup commitment contained in the TPA?

Answer. The Department remains committed to the cleanup at the Hanford site in accordance with the Tri-Party Agreement (TPA). It is important to remember that the TPA is a "living" document that was designed to be updated. For example, there are TPA milestones to define new milestones at specified points in time. Similarly, new sections are added to the TPA, as appropriate. As with any "living" document, the TPA parties should continue to explore any and all mutually beneficial opportunities to improve safety, effectiveness, efficiency, and flexibility of the Hanford cleanup. The objective of the TPA is to ensure that cleanup is being accomplished in a safe and timely manner.

Question 2. How many times have TPA milestones been amended?

Answer. The total number of milestones and target dates currently exceeds 1,400 of which approximately 900 milestones and 290 target dates have been completed. In accordance with the terms of the Tri-Party Agreement (TPA), there have been 442 approved change requests, six amendments, and three modifications known as "Directors Determinations." Originally, in 1989, the TPA contained only 161 milestones, all of which were enforceable.

Question 3. How many times has the Department of Energy requested that a TPA milestone be amended?

Answer. Under the terms of the Tri-Party Agreement (TPA), there have been 442 approved change requests, six amendments, and three modifications known as "Directors Determinations."

Within these requests, the parties have agreed to adding 864 new milestones, deleting 168 milestones, and extending 208 milestones.*

Question 4. How many TPA milestones have been completed since the adoption of the agreement in 1989?

Answer. Under the terms of the Tri-Party Agreement, 901 enforceable milestones and 292 unenforceable target dates have been completed.

Question 5. How many times has a DOE request for TPA amendment been agreed to by the State of Washington and the EPA?

Answer. All of the 451 Tri-Party Agreement changes to date have been the consensus of the three agencies. The original number of milestones, 161, has increased over time to the current number of 1,158 enforceable milestones to date.

Question 6. On October 28, the administration sent the Congress a list of proposed funding rescissions. Included in that list was a request to rescind $100 Million of previously appropriated funds from the construction of the Waste Treatment Plant. The administration included the Waste Treatment Plant rescission into a series of reductions that the administration termed ". . . lower-priority federal programs . . ." Do you believe that the construction of the vitrification plant is a lower priority federal program?

Answer. The Waste Treatment Plant at Hanford is the Department's single largest and most complex construction project, the most significant project in the Environmental Management portfolio, and the Department is committed to completing the plant. Taking into account the technical and management issues associated with the Waste Treatment Plant, the Administration's proposal and the congressional appropriation support the fiscal year 2006 plans to continue construction while technical issues are being resolved and a new estimate at completion is being developed and validated.

Question 7. Does the Department of Energy support the proposed rescission of funding?

Answer. The Department supports the Administration's decision to dedicate needed resources to the relief efforts resulting from the Gulf Coast hurricanes. Taking into account the technical and management issues associated with the Waste Treatment Plant, the Administration's proposal and the congressional appropriation support the fiscal year 2006 plans to continue construction while technical issues are being resolved and a new estimate at completion is being developed and validated.

Question 8. If the Department does not support the rescission related to the Waste Treatment Plant, what has the Department done to convey that message to the President?

Answer. The Department supports the need to balance the nation's priorities with the more immediate needs resulting from the Gulf Coast hurricanes. As you are aware, construction of the plant has been slowed due to significant technical challenges, which reduced near-term funding requirements for this project. Based on the status of the project, Congress decided to provide $521 million for the plant in 2006,

*The accompanying graph has been retained in committee files.

more than $100 million below the 2006 Budget request. Getting the Waste Treatment Plant back on track continues to be one of the Department's highest priorities.

Question 9. What factors would the department consider when deciding whether to ship waste to a commercial disposal facility?

Answer. The Department of Energy's (DOE) waste management orders and policies dictate the usage of commercial disposal facilities, which vary by type of waste. For example, high-level waste will be disposed of at the Yucca Mountain, Nevada, national repository and defense transuranic waste is being disposed of at the DOE Waste Isolation Pilot Plant in Carlsbad, New Mexico.

It is the Department's current policy that low-level waste, owned by the DOE, be disposed of on-site, when possible, or off-site at one of DOE's regional disposal facilities. DOE policy does provide for use of commercial low-level waste disposal sites or facilities if specific conditions are met. Specifically, the Department must: 1) certify that use of the commercial facility represents safe and compliant disposal, in accord with the commercial facility's licensed capabilities; and, 2) demonstrate that use of commercial disposal is more cost-effective, or in the best interest of the government. To determine the best interest of the Federal government, the Department considers numerous factors including safety, security, compliance, schedule efficiency, long-term liability, and stakeholder and regulator acceptance. It is the Department's policy that waste disposal decisions be made in the context of life-cycle cost analysis, which includes the unit cost of disposal, pre-disposal activities, transportation, and post-closure liabilities. The Department is reviewing this guidance as part of its development of its National Low-Level Waste Disposition Strategy. The purpose of the National Disposition Strategy is to integrate and optimize low-level waste management activities throughout the complex.

Question 10. The Department has yet to acknowledge that it will miss the September, 2006 milestone for cleanup at the C-Tank Farm. As you know, an October 2005 Inspector General report has projected that the C-Tank milestone will be missed. Is there some aspect of the IG report you disagreed with?

Answer. The M-45-00B milestone is complex with multiple sub-elements ranging from C-tank farm Retrievals and technology demonstrations to the submittal of Tank Waste Retrieval Work Plans and Integration Plans. A number of those sub-elements have been successfully completed and progress is being made on the remaining sub-elements. The Department does not know at this time whether all elements of this complex milestone will be completed by September 30, 2006, and, therefore, appropriately informed the State of Washington, the Washington Congressional delegation, and committees of jurisdiction, including the Senate Energy and Natural Resources Committee, that some elements of the M-45-00B milestone are in jeopardy of being missed. As noted in Appendix 3 to the Inspector General (IG) Report, the Assistant Secretary for Environmental Management (EM), concurred with the recommendations in the IG report, but disagreed that an updated waste retrieval plan and notification to regulators of changed schedules should be based on the limited retrieval experience to date. Rather, the Assistant Secretary indicated that the revised waste retrieval plan, cost, and schedule will be developed "when additional meaningful operational data is (sic) obtained" and that the best course of action relative to establishing new regulatory milestones is to "defer revision of the existing milestones for C Farm retrieval until addition additional operational data is (sic) obtained on the tank retrievals currently ongoing." The Assistant Secretary noted that this course of action is "Consistent with the concern identified in the report regarding limited retrieval experience."

Question 11. The October Inspector General report also found that missing the C-Tank Farm milestone may impact the ability of the Department to complete a 2018 milestone to cleanup waste from Hanford's single shell tanks. Does the Department agree with that assessment?

Answer. We do not agree with estimating retrieval costs and schedules for the remaining approximately 145 single-shell tanks based solely upon retrieval results for the first one or two tanks. Recent tank waste retrievals have shown sharp performance improvements, e.g., Tank C-202 required only approximately 25 percent as much time to retrieve as tank C-203. DOE plans to develop a revised retrieval plan (after resolution of related issues regarding the Waste Treatment Plant and the tank farm contract) that takes into account the variety of factors that influence waste retrieval including the characteristics of the waste in each tank, lessons learned from all tank waste retrievals and retrieval technology tests to that point in time, and the logistical factors that influence tank waste retrieval rates.

Question 12. What issues are coming from the ongoing reviews of the Waste Treatment Plant and what are your plans to get the project back on track?

Answer. The Department, along with the U.S. Army Corps of Engineers and Bechtel National, Inc., is currently undertaking several major activities to ensure that

we fully understand what is required to complete the project and begin operations. The Department is reviewing and evaluating the major project management, project control, business, and technical systems and processes by both internal and independent external senior professionals. An After Action Review is being conducted by an external independent firm to assess the causes of the issues surrounding the project. All recommendations will be reviewed and implemented as appropriate to ensure the project is being planned and executed responsibly.

The Department has directed several actions to strengthen the project management system for the Waste Treatment Plant (WTP). A summary of keys actions include:

- Establishing a senior-level WTP Oversight Team;
- Hiring several experienced Federal personnel in the areas of contracting, procurement, and contract law;
- Certifying WTP Federal Project Directors to the highest level of the DOE Project Management Career Development Program;
- Clarifying roles and responsibilities of senior field managers and contracting personnel;
- Commissioning a Headquarters' Team to assess the Office of River Protection compliance with DOE Order 413.3, *Program and Project Management for the Acquisition of Capital Assets;*
- Assuring the WTP contractor has an Earned Value Management System inplace that fully complies with American National Standards Institute/Environmental Industry Association (ANSI/EIA) 748-A-1998;
- Regularly updating DOE senior management on the status of the project; and,
- Conducting rigorous periodic evaluations by the EM WTP Oversight Team, and other DOE project oversight offices.

Question 13. What are you doing or will you do to improve communications with the Congress, the State, and the stakeholders on the Waste Treatment Plant?

Answer. Improving communications with all interested parties, not just the Congress, has been a priority of mine since entering office. The Department will continue to communicate with interested parties regarding the Waste Treatment Plant. The Department plans on a series of briefings with Congressional committees and State delegation members and the State, as the following activities are completed: After Action Report, December 2005 Estimate At Completion, External Reviews of the WTP Technical Capability/Cost/Schedule, and the U.S. Army Corps of Engineers Cost Validation of the Estimate At Completion. In regard to communicating with stakeholders of the State of Washington, senior officials from the Office of River Protection meet regularly with the Hanford Advisory Board and State of Washington representatives. Also, frequent site tours of the WTP project are given upon request that includes opportunities for questions and discussion.

Question 14. What are you doing or will you do to ensure that any proposed supplement treatment technologies for single-shell tank waste are brought on line safely and in a cost-effective manner?

Answer. Technologies that are being developed in the Office of Environmental Management (EM) program are tested and demonstrated to ensure that they meet or exceed safety requirements as required in all applicable DOE Orders, Resource Conservation and Recovery Act (RCRA) requirements, and the Hanford Federal Facility Agreement and Consent Order. For a technology to be considered for implementation, it must clearly be shown that it is more cost-effective than the current baseline technology selected.

For example, the Demonstration Bulk Vitrification System (DBVS) pilot plant at Hanford will demonstrate the ability of the bulk vitrification supplemental treatment process to treat actual Hanford single-shell tank (SST) waste (waste from tank S-109). The management of the DBVS subproject is compliant with applicable DOE Orders, RCRA requirements, and the Hanford Federal Facility Agreement and Consent Order. The DBVS project will be evaluated at each design, construction, and operations step (Critical Design—CD) for safety and cost. The DBVS design will be completed prior to the emplacement of equipment. Prior to DBVS startup the system will undergo an On-Site Operational Readiness Review (ORR) that ensures all procedures and safety measures are in place.

DOE considers cost-effectiveness as part of the evaluation of an alternative project technology, if it is to be deployed in the site's baseline operations. DOE is currently developing new and improved technologies for Waste Treatment Plant waste loading and melter performance, which could assist in the retrieval of SST wastes.

Question 15. Which program of the Environmental Management budget is funding current efforts to develop supplemental tank waste treatment technology?

Answer. The funding of current efforts to develop supplemental tank waste treatment technology is included in the budget of the Office of River Protection's Tank Farm Activities program.

Question 16. What is DOE doing or will it do to develop other supplemental treatment technologies to treat the least radioactive waste in double shell tanks?

Answer. The Office of Environmental Management's (EM) Technology Development and Deployment activities invest in innovative technologies which could be demonstrated to be evaluated and considered for deployment by site operations. Early development work on supplemental tank waste treatment technology was jointly funded by DOE-EM Headquarters and the Office of River Protection site operations. The Department is considering several technologies, with a focus on bulk vitrification. If, through tank waste demonstration, bulk vitrification is found to be capable of safely and effectively treating Hanford tank waste, it could be deployed in parallel to the Waste Treatment Plant. Additional technologies, such as Selective Dissolution and Fractional Crystallization, are being studied to optimize this supplemental technology.

Question 17. The Tri-Cities community has several contract procurement concerns at Hanford. These include effective performance incentives, small business opportunities, and the DOE strategies to rebid the tank farms and central plateau work scopes. Also, I understand that DOE is moving ahead to rebid these Hanford contracts. As a member of the Senate Committee on Small Business and Entrepreneurship I am willing to work with DOE to resolve small business procurement issues, such as the credit DOE receives for small business procurements by its prime contractors. Would you be willing to participate in these discussions if they were structured in a manner that does not conflict with federal procurement laws and regulations?

Answer. In accordance with section 6022(a) of Title VI of the Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Tsunami relief, 2005, P.L. No. 109-13, the DOE and Small Business Administration entered into a Memorandum of Understanding (MOU) on September 30, 2005, setting forth a methodology for measuring the achievement of DOE with respect to contract awards to small businesses. This MOU defines how DOE receives credit for small business procurements by its prime contractors, as well as how DOE receives credit for the award of prime contracts to small businesses. The Department appreciates your offer to work with us and is willing to meet with you on small business issues.

Question 18. The Tri-Cities community is dedicated to continue expanding the missions of the Volpentest HAMMER Training and Education Center beyond the training of Hanford cleanup workers. This initiative would reduce DOE-EM's commitment to HAMMER as the cleanup work force continues to decline. As part of the overall Hanford contract procurement strategy, will you evaluate the benefit of a separate procurement on HAMMER, perhaps as a small business set aside, that would facilitate the expansion of HAMMER's missions?

Answer. We are currently working on a procurement strategy for large pieces of cleanup work and services at Hanford, including the scope currently under Fluor Hanford, which manages the Volpentest Hazardous Materials Management and Emergency Response Training Center (HAMMER) facility and whose contract expires at the end of fiscal year 2006. As part of this process, we do plan to evaluate various contracting options for HAMMER. Our goal is to find an approach that reflects its ongoing role in training our cleanup workers and, at the same time, supports its ability to grow and prosper through a diversified clientele.

Question 19. Are you willing to endorse and support these mission development activities with other parts of DOE, the Department of Homeland Security, the Department of Defense, and others?

Answer. The Department utilizes the Volpentest Hazardous Materials Management and Emergency Response Training Center (HAMMER) facility to provide hands-on safety training for workers involved in environmental cleanup.

The HAMMER facility remains available for use by other DOE entities and other agencies on a full cost recovery basis. Because HAMMER was established to ultimately be self-sustaining, the Department continues to encourage the development of new missions to offset the impacts of a declining Office of Environmental Management workforce in the future. The Department will cooperate with the U.S. Department of Homeland Security (DHS) to develop a strategy and a cooperative agreement to ensure that HAMMER remains available to meet its training needs.

HAMMER is already involved in the training of fire, law enforcement, Customs and Border Protection, security, emergency medical, and other emergency response personnel for a wide-spectrum of regional and Federal agencies on a full cost recovery basis. A strong partnership has been forged between HAMMER and the Pacific

Northwest National Laboratory to use HAMMER as a test bed to deploy new field technologies for homeland security personnel.

QUESTIONS FROM SENATOR SALAZAR

Question 1. The Department will soon complete the environmental cleanup of its Rocky Flats plant west of Denver. In general, the cleanup has progressed well. But, as at many contaminated sites being cleaned up across the country, some contamination will remain in the ground. A part of the site will be designated a National Wildlife Refuge. It will be necessary, therefore, to impose certain restrictions on land use to ensure that the remedy remains protective of human health. Because existing legal mechanisms to restrict land use are not adequate for this purpose, many states have adopted or are adopting legislation to create enforceable use restrictions, or "institutional controls." In 2001, the Colorado Attorney General's office drafted and sponsored such legislation, and, with the support of the Colorado Department of Public Health and Environment, the General Assembly passed the legislation unanimously. Governor Owens signed it into law. Colorado's institutional control legislation enjoyed strong support from both industry and the environmental community, because it reduces cleanup costs and it makes cleanups safer and more reliable. Colorado's legislation served as the model for the Uniform Environmental Covenants Act, which is now being considered in a number of states across the country. When I questioned you about the Department of Energy's willingness to comply with this Colorado law at Rocky Flats by entering into environmental covenants to restrict future uses of the site, you promised to look into this question. I understand that the Department of Energy has now committed to comply with Colorado law and is now negotiating a written agreement with the State. Can you confirm today that the Department of Energy will enter into environmental covenants for the Rocky Flats site and will you please explain the current status of the Department's discussions with the State?

Answer. The Department of Energy fully supports the concept of an environmental covenant at Rocky Flats and has been working closely with the Colorado Office of the Attorney General and the Colorado Department of Public Health and Environment to define an implementation approach for the Colorado covenants law at the Rocky Flats site. The Department anticipates that agreement will be reached on the text of covenants between the U.S. Department of Energy and the State of Colorado prior to regulatory completion of the Rocky Flats Closure Project.

Question 2. Financial savings in expedited clean up and bonus to Kaiser-Hill. I have heard estimates that the Department of Energy and the American public will save between $500 million and $600 million as a result of the early completion of the physical cleanup at Rocky Flats. What is the Department of Energy estimate of the cost savings realized as a result of the expedited clean up?

Answer. The target cost for the Kaiser-Hill Closure Contract effective February 2000 is $3.987 billion. Actual cost, still subject to final audit, is $3.443 billion reflecting a savings of $544 million. Kaiser-Hill is expected to receive $153 million (28 percent) of that savings as additional incentive fee under the terms of the contract. The taxpayers would receive $391 million of the savings (72 percent).

Question 3. What is the Department of Energy's current estimate of the bonus that will be paid to Kaiser-Hill as a result of completing the physical cleanup in October 2005 instead of December 2006?

Answer. The schedule incentive in the Kaiser-Hill Closure Contract is $15 million for physical completion on December 15, 2006. The maximum Kaiser-Hill can earn for acceleration of the cleanup is $20 million if completed by March 31, 2006. Further acceleration to October 2005 earns Kaiser-Hill no additional fee for schedule performance.

It should be noted that the total fee that can be earned, from all schedule, cost and performance incentives is approximately $510 million. This fee was in recognition of: (1) meeting the target cost, $342 million, (2) coming in below the proposed target cost (e.g., contractor earns thirty cents of every dollar under the proposed target to a maximum fee), $149 million, and, (3) as noted above, finishing cleanup before March 31, 2006, $20 million. The total available fee pool was approximately $562 million.

Question 4. What is the total amount of all bonuses that have been paid to date by the Department of Energy to Kaiser-Hill for services at Rocky Flats?

Answer. Under the current contract, Kaiser-Hill, Inc., has been authorized to collect provisional fee payments of $225,348,794 in advance of final fee determination, as of September 30, 2005. Final determination of fee earned is contingent upon validation of physical completion of all contract scope, and total closure contract target costs.

It should be noted that the total fee earned, from all schedule, cost and performance incentives is approximately $510 million. This fee was in recognition of: (1) meeting the target cost, $342 million, (2) coming in below the proposed target cost (e.g., contractor earns thirty cents of every dollar under the proposed target to a maximum fee), $149 million, and, (3) as noted above, finishing cleanup before March 31, 2006, $20 million. The total available fee pool that can be earned is approximately $562 million.

Question 5. The regulatory transition at Rocky Flats from the jurisdiction of the Department of Energy's Office of Environmental Management to the Office of Legacy Management will mark the first such transition in the nation at a major cleanup site. Over the course of the cleanup, and especially as we near the completion of the cleanup, Environmental Management has made many promises and commitments to the State of Colorado and to the local communities surrounding Rocky Flats. These commitments include the procedures and standards for monitoring programs, the management of surface water impoundments, and other long term management activities. The State of Colorado, the local governments and the residents of the surrounding communities are also concerned about the ability of the Department of Energy to respond promptly to any emergency situations that present real or potential releases of radiation in excess of the governing standards. I, and other members of Colorado's Congressional delegation, will be closely watching the transition from Environmental Management to Legacy Management to be sure that these past commitments are honored and that the Department of Energy retains the expertise necessary to properly monitor and to respond to any violations of the standards. What is the Department of Energy doing to ensure that the Office of Legacy Management will fully honor all of the commitments made by the Office of Environmental Management at Rocky Flats?

Answer. The Office of Legacy Management (LM) intends to fully honor all of the commitments made by the Office of Environmental Management (EM) at Rocky Flats. Representatives of both Offices, at the Headquarters and site level, worked very closely during the final phases of site cleanup and the beginning of site transition to ensure that LM has full and complete knowledge, understanding, and support of all post-closure monitoring and maintenance commitments. The staff members for all of the environmental monitoring and maintenance, records management, and information technology activities are previous Rocky Flats employees. In addition, LM is the lead for negotiating the modification of the Rocky Flats Cleanup Agreement to include post-closure activities. LM is also developing the Long-Term Surveillance and Maintenance Plan for all post-closure activities at the site with EM support. These responsibilities ensure a clear partnership with EM and LM in securing regulatory completion for Rocky Flats, and in fulfilling all commitments for the site.

Question 6. What is the Department of Energy doing to ensure that the knowledge and skills developed by Environmental Management will be immediately available to aide in the response to emergency events, should they occur?

Answer. The Office of Environmental Management (EM) has been working with the Office of Legacy Management (LM) to develop emergency procedures for the future surveillance and maintenance of the site, after LM assumes jurisdictional responsibility. During the transition period from physical completion of cleanup to regulatory completion and transfer of jurisdiction from EM to LM, LM is assisting EM in implementing appropriate emergency management procedures in accordance with applicable requirements.

In addition, the Department has ensured that it has site-specific knowledge and skills available at Rocky Flats by transferring several Rocky Flats Office EM employees to LM. This staff will help ensure the continuity of knowledge of site history needed for an appropriate response to routine, as well as emergency, situations.

The Department also maintains national assets, such as the Radiological Assistance Program (RAP), in the event of a radiological emergency. The RAP Teams are the first responders for a suspected radiological emergency and are designed to arrive on-site within four to six hours. Rocky Flats is within RAP Team Region 6, which maintains its offices at the Department's Idaho Operations Office.

Question 7. Will you notify me and this Committee promptly if you become aware of any funding limitation or any bureaucratic roadblock that is negatively impacting the transition from Environmental Management to Legacy Management?

Answer. The Department will promptly notify you and the Committee should any issues arise that could adversely impact transition.

Question 8. The Senate recently adopted an amendment to the Department of Defense Authorization bill, sponsored by me and Senator Allard, which provides direction and funding for the acquisition of certain mineral rights at Rocky Flats to facilitate the transfer of affected lands to the U.S. Fish and Wildlife Service for creation

of a National Wildlife Refuge. As you know, this amendment was offered in order to resolve a long-standing disagreement between the Departments of Energy and Interior over the impact of these mineral rights on the transfer of the subject lands from Energy to Interior and the creation of the Wildlife Refuge. In anticipation of enactment of these provisions into law, what will the Office of Environmental Management do so that the program to acquire these mineral rights can proceed as quickly as possible?

Answer. The Ronald W. Reagan National Defense Authorization Act (P.L. 109-163) signed on January 6, 2006, authorized $10 million for the Secretary of Energy to purchase the essential mineral rights at the Rocky Flats Environmental Technology Site. In preparing for the potential purchase of privately held mineral rights at Rocky Flats, the Department of Energy conducted an appraisal of mineral rights values (sand and gravel). The appraisal is complete, and the information will be used by the Department when effecting the purchase of mineral rights from willing sellers.

Question 9. In the written testimony submitted by each of you, you refer to the need for a skillful, dedicated workforce to accomplish the ambitious goals of the

Department of Energy's environmental cleanups. Ms. Tuor's testimony credits the "efforts and innovation" of the Rocky Flats workforce as one of the factors that contributed to the completion of the Rocky Flats cleanup under budget and ahead of schedule. Assistant Secretary Rispoli's testimony describes the need for "effective incentives for the federal and contractor workforce for superior performance" in future cleanup efforts. At Rocky Flats, the workers in the field made many contributions that helped Kaiser-Hill and the Department of Energy achieve this great success. These contributions include:

- Participating in safety work planning and in the Joint Company Union Safety Committee, resulting in very few project closures due to safety violations.
- Determining methods for deploying chemical decontamination that led to the successful decontamination of more than 85 percent of the sites' 1,457 gloveboxes to low level. This method of decontamination greatly reduced the cost of disposal and improved safety by avoiding dangerous cutting operations.
- Developing cans and containers for the treatment, packaging and disposal of the site's high content plutonium wastes.

In a recent article in the journal Weapons Complex Monitor, Ms. Tuor is quoted as saying,

> "When we started listening to them on safety, the trend was really changed . . . What we learned, and we saw it time after time after time, was if we got them involved in planning of the work, and the identification of the hazards and the controls, and we put together with them a reasonable work process, they would exceed our production expectations every time."

We have learned from Rocky Flats that the dedicated participation of the workers on the ground is critical to the safe, cost-saving and expeditious completion of these projects. Frankly, I am concerned that the message to workers from the early completion at Rocky Flats is not helpful. When the workers at Rocky Flats put their hearts and their minds and their backs into the project and helped complete the cleanup fourteen months ahead of schedule, many workers lost the lifetime medical benefits they would have received if the project had been completed on time.

Contractors like Kaiser-Hill receive a bonus for early completion, but the workers may feel that they are not rewarded fairly upon early completion. What are the Department of Energy and its contractors doing to assure the workers on the ground that their retirement benefits will not be reduced or eliminated if these workers help complete the cleanup ahead of schedule?

Answer. Neither Kaiser-Hill nor the Department took the Rocky Flats workforce by surprise by the 2005 closure objective. In fact, Kaiser-Hill negotiated collective bargaining agreements with the Guards (1999) and the Steelworkers (2001) that provided more generous compensation and retirement eligibility components as part of Kaiser-Hill's objective of providing just the sort of rewards for the workforce as your question suggests are appropriate. Although these sorts of collective bargaining commitments by Kaiser-Hill were subject to DOE approval (or disapproval), the Department did not seek to limit extension of these expanded benefits for the Rocky Flats workforce. Their added costs, of course, are borne by the taxpayer.

It should be understood that there is no certainty that any individual Rocky Flats employee would have been continuously employed there accruing pension and benefits service credits had the completion date occurred a year or two years later. That is because there would have been continued phased layoffs based on particular work completions done during the progress of the items comprising the closeout work ele-

ments. There was no commitment made to the representatives of the Rocky Flats workforce that this natural progression would not occur. On the contrary, the represented workforce was fully apprised of the early closure objective and successfully negotiated enhanced compensation and retirement eligibility benefits, as its collective bargaining representatives determined were most advantageous for the members of its bargaining units.

The Department's general approach regarding the provision of pension benefits to facility management contractor employees is that incumbent employees who are employed by a contractor under a new contract will remain in their existing pension plans pursuant to plan eligibility requirements and applicable laws; that is, "if you're in, you're in." However, a contractor selected for award of a new contract will be required to provide market-based pension plans for new non-incumbent employees hired after contract award. The Department is currently assessing its approach with respect to reimbursing the costs of medical benefits for contractor employees.

RESPONSES OF NANCY TUOR TO QUESTIONS FROM SENATOR DOMENICI

Question 1. I am particularly interested in what Congress did or did not do to enable the success at Rocky Flats. Were there any programmatic or financial decisions enabled by the recent legislation that, in your mind, directly contributed to your efforts?

Answer. In my view, there were a couple of significant factors related to role of Congress in the success of Rocky Flats.

First, the predictable and stable funding delivered by the House and Senate Appropriations Committees was absolutely critical to support the structure of the closure contract, and ultimately the project's success. Our team was hired to complete this specific work based on our collective experience in project management. Among the most important elements of effective project management is a robust baseline that included over 16,000 separate activities for senior management to plan and tract progress to the overall project completion goal. An essential component to a well-developed baseline is predictable funding to match the forecasted activities.

Second, our efforts at Rocky Flats enjoyed considerable attention and support from key leaders in Congress. Starting with our own delegation, including Senator Allard who addressed this Committee hearing, and other Congressional leaders, such as Chairman Domenici, we were fortunate to have supporters who tracked our progress. Through this informed oversight, Congress was able to anticipate and offer assistance when necessary to help the project to completion. For example, some quantity of our weapons-grade plutonium was designated for shipment to Savannah River site for disposition through the mixed-oxide reactor fuel program. When some concern from South Carolina developed over this program, Senator Allard, Senator Graham and key leaders in the House and Senate committees of jurisdiction were able to resolve the issue. Effectively, this allowed us to complete our shipments and, ultimately, complete the project.

Question 2. I am also very interested in the cooperative nature of the relationship between the Rocky Flats project and the environmental regulators. This is not a common occurrence at major DOE cleanups. What were the elements that promoted increased cooperation and collaboration among the agencies in this regulatory relationship?

Question 3. What elements of your contract were the most important drivers in this cleanup?

Answer. As discussed during the hearing, I am submitting the attached document detailing a number of key enablers in the success of the Rocky Flats project. Specifically, the document addresses elements of the contract and interactions with environmental regulators.

FUNDAMENTAL CHANGES ENABLING SUCCESSFUL CLOSURE, ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE, DECEMBER 6, 2005

Several fundamental changes were implemented at the Rocky Flats Environmental Technology Site (RFETS) that contributed to its successful closure. The most significant of these are: the contract incentivized total project performance and allocated risk between the government and the contractor. Second, appropriate expertise and talent were retained and community outreach was conducted, such that the right people/organizations were always engaged in the project. Third, strong foundations for success were created by the development of broad consensus on the RF end-state and the government/contractor commitment to safety, compliance and state-of-the-art practices. Fourth, the State and Federal regulators were fully integrated into the cleanup decision-making process and vested in project success, re-

sulting in a revised regulatory agreement with a bias for action, more efficient/predictable decisions, and completion of accelerated actions. Fifth, the pace of risk reduction was accelerated. Finally, the entire project was funded on a consistent and predictable schedule and enjoyed strong bipartisan support.

Background. In 1995, the Rocky Flats Environmental Technology Site (RFETS) was one of the Department of Energy's (DOE) biggest and most challenging efforts to cleanup and close a former nuclear weapons site, and the largest Site designated for accelerated closure. Like many other DOE facilities, it had been shrouded in Cold War secrecy. Much of the surrounding community viewed Rocky Flats negatively, expressing concerns about environmental contamination and potential threats to public health which were fueled by the 1989 FBI raid. Furthermore, stakeholders were becoming increasingly impatient and distrustful, as cleanup and risk reduction activities were not prioritized and activities during that period were directed primarily to security and maintenance.

At that time, Rocky Flats was subject to a very complex regulatory structure due to differing requirements under the Superfund, hazardous waste, clean water, drinking water, and clean air laws, both state and federal; and, due to overlapping jurisdiction between the U.S. Environmental Protection Agency (EPA) and Colorado's environmental agencies. The relationship between DOE's environmental regulators and the Defense Nuclear Facility Safety Board was also new, not completely defined, and further complicated cleanup activities.

By 1995 the corporate culture at the Site was *bankrupt,* suffering from five years of an uncertain mission, no clear vision for the future, and a revolving door of external oversight and assessment requirements. Since the time of the FBI raid in 1989 and the ensuing safety shut-down, the Site's mission was in question and little work was being performed. Despite the hundreds of millions of dollars spent to address contamination between 1991 and 1995, little effective cleanup and risk reduction had occurred. The workforce was extremely demoralized and relations with the Site's unions were strained. Issues fundamental to the new closure mission were unknown, including end-state, future land-use, and soil cleanup levels. DOE estimated it would take 70 years and cost more than $36 billion to clean up the site. The Management & Operating (M&O) contract and fee structure remained intact.

The Site's ability to maintain compliance with environmental requirements was also in question. DOE's 1991 Interagency Agreement (IAG) with Colorado Department of Public Health and Environment (CDPHE) and EPA provided a legally enforceable framework for assessing and remediating environmental contamination. It specified completion of 268 milestones over a 12-year period. These were primarily "paper milestones," calling for the submittal of investigation plans and reports to CDPHE and EPA for approval, and did not require actions/results based on risk reduction priorities. The transaction costs of gaining the approval of both agencies, frequent adjustments to scope of work, and negotiating "good cause" for milestone revisions were high. Further, it became clear that many milestones could simply not be met and there was no clear path to resolve the domino effect this would have on subsequent dependent milestones. The regulators lost confidence in the ability of the Site to meet commitments, thus further diminishing their willingness to adjust the milestones.

As a result, DOE entered negotiations with EPA and CDPHE to amend the IAG. Negotiations were unsuccessful until the parties realized that they shared a common vision and goals, and that the command and control paradigm should change to accomplish their mutual interests as soon as possible.

Closure Strategy. Fundamental changes in several key areas were required to successfully close the Site. These are briefly summarized, below.

1. Performance Contracts. DOE departed from the traditional M&O contracting approach utilized at weapons production facilities and adopted a contracting strategy in late 1993 that abandoned the traditional M&O cost-plus-award-fee approach in favor of a performance based integrating management contract. The 1995 contract with K-H tied 85% of fee to discrete outcomes or deliverables (performance measures). Under the new contract, DOE rescinded the authority of low and mid-level DOE personnel to provide detailed and sometimes conflicting contractor direction and, instead, designated high-level managers as Contracting Officer Representatives (CORs). The COR-designation provided for better integration and allowed the contractor to determine how work would be accomplished.

In 2000, a second DOE contract with K-H replaced the first, further accelerating the target completion date to 2006. K-H's performance justified a sole source award for the follow-on contract, building upon the parties' experience and successes. The structure of the 1995 performance measures, incentives and

planning cycles transitioned to the 2000 Cost-Plus-Incentive-Fee contract format. The 2000 closure contract authorized all project completion work at the time of signing, provided the contractor with a great amount of flexibility for work sequencing and allocation of resources, incentivized a relentless drive for closing the site, and established a 70/30 (government/contractor) risk-sharing ratio for cost under-and over-runs. Finally, the 2000 performance contract included specific DOE commitments about what services/items it would provide and when they would be provided, such as receiver sites for Special Nuclear Material and radioactive waste.

2. Human Relations. Both DOE and K-H realized the value of bringing the right talent to the table and in retraining and redirecting the highly skilled workforce that remained at Rocky Flats. DOE selected K-H in 1995, in part, based upon the environmental remediation expertise of its parent CH2MHill, and K-H's commitment to engage high-quality management, policy, legal, and technical experts and subcontractors, and to retain a discouraged but knowledgeable and capable workforce. K-H invested in and reinvigorated the workforce, emphasizing safe work practices, retraining its steelworkers to perform D&D work, offering performance incentives, and providing out-placement services to all when their part of the project was concluded. DOE and K-H also shared the realization that they could not achieve the desired results alone. Regulatory agencies, state and local governments, Congress, citizen groups and environmental groups had been vocal critics in the past; active participation and support from these groups was consciously cultivated by the DOE/K-H senior management team. Indeed, the successful closure of the Site could not have been achieved without this coalition's focus upon key results and willingness to embrace creative, innovative approaches.

3. Strong foundations. DOE and K-H built a strong foundation for ultimate success in the early years, most notably in the form of—

- *End-State Vision.* DOE and K-H developed a "straw man" end-state proposal in 1995, offering an image of the Site in 2015. By so doing, it provided a beginning point for thoughtful discussion among regulatory agencies, state and local governments, Congress, citizen groups and environmental groups. As modified to reflect their consensus, the Vision and underlying assumptions became a commonly shared, powerful statement of the closure goals for Rocky Flats. This vastly important 8-page statement of common ground led to a fundamental change in DOE's relationship with its regulators, the community and its contractor.
- *Safety Culture.* A strong emphasis was placed upon identifying and mitigating hazards, maintaining a safe workplace, and performing all work safely. A safe workplace was embraced as a necessary performance standard, and the Site began its transition back from expert-based to standards-based performance. As the project progressed, safety was fully incorporated as a fundamental component of success. K-H's management team measured safety on a daily basis, recognizing that it is the key factor in maintaining a healthy workforce and continuing productivity.
- *State of the art* practices, procedures and data systems were implemented and adjusted as needed throughout the Project. These included rigorous project management principles and reliance upon life cycle baseline planning.
- Robust programs to assure *compliance with all requirements* were created. Moreover, program termination planning was initiated 3 years before the target completion date to ensure that compliance programs would be terminated as soon as their underlying purpose was fulfilled and an orderly transition would occur to DOE's Office of Legacy Management for all continuing requirements.

4. RFCA. The end-state Vision was codified in RFCA as a non-enforceable preamble and appendix, providing guidance to future decision-makers. The function of the regulatory agreement fundamentally shifted, from one containing numerous procedural controls over DOE to one that enabled accelerated actions to achieve the consensus end-state as soon as possible. Several basic propositions of RFCA became significant factors in the successful closure of the Site, including its *bias for action,* in the form of—

- Prioritizing risk reduction activities to assure the elimination of the highest risks first;
- Conducting the cleanup activities as Accelerated Actions, not waiting to initiate remediation until completion of site-wide investigations and publication of the final remedy decision;

- Streamlining the decision processes, allowing for utilization of standard operating procedures for recurring conditions;
- In-process environmental characterization *during* remediation thereby allowing work to proceed early while nevertheless providing full and accurate characterization; and,
- Site-wide remediation action levels (avoiding debate for each separate accelerated action) based upon reasonably foreseeable land use (first, as an open space; subsequently established as a congressionally mandated wildlife refuge). These action levels were calculated to assure that in the aggregate, after completion of the accelerated actions, the risk profile of the Site would satisfy the requirements of CERCLA and RCRA and most likely result in no further cleanup actions being required.

RFCA also redefined DOE's *regulatory relationships* to achieve more efficient and predictable decisions, in the form of—

- High level commitments from the RFCA signatories (Assistant Secretary for DOE-EM, Acting Regional Administrator for Region 8, EPA, Executive Director of CDPHE, and RF Field Office Manager) to its end-state vision, goals, objectives and processes allowed every person involved in the RF closure/cleanup to understand the Project's direction;
- Consultative process among DOE (and K-H as its prime contractor), CDPHE and EPA, emphasizing early-and-frequent, rather than announce-and-defend, communication;
- Regulatory integration between RCRA and CERCLA so that all requirements would be achieved through a single process, without needless duplication of effort;
- Lead-regulator designations so that one agency would have primary but contingent decision authority within its sphere (work-versus statute-based day-to-day oversight), reserving final authority to each agency according to its statutory mandates;
- Rapid dispute resolution. Each organization encouraged its personnel to make agreements at the lowest working level possible. Disagreements were raised to the next level of managers quickly, going up all the way to the Governor, EPA Administrator, and Secretary of Energy if need be;
- Integrated sitewide life cycle planning addressing high risk reduction actions typically outside the ambit of an environmental regulatory agreement (such as non-enforceable target dates for stabilizing/removing plutonium solutions and residues in aging systems housed in aging buildings) and,
- Mutual respect for the parties' differing statutory and contractual responsibilities, as well as trust in the *bona fides* of each, developed as a result of implementing these provisions and the roadmap to success provided by the Vision. This, in turn, led to an ever-stronger foundation for sound and efficient cleanup decisions.

RFCA established rolling milestones and aligned them with the budget planning process. No more than 12 milestones would be set for any fiscal year, each to denote key results to be achieved within the following year plus two future years. This allowed goal-setting participation in the federal budget process by the regulators and stakeholders. The future year milestones could be adjusted, according to the circumstances, including project sequencing, budgetary, and other considerations.

5. Risk Reduction. The pace of risk reduction was accelerated through

- Early actions to address *highest risks first* by stabilizing, consolidating, and removing the nuclear material. K-H shrank the Protected Area and consolidated storage of plutonium into one building thereby significantly reducing the "mortgage", then reprogrammed the saved money into other accelerated D&D and environmental remediation projects;
- Broad consensus on the *radionuclide soil action levels* (RSALs) was reached by working with the RFCA Parties and communities. A key element in the evolution of the RSALs was making them risk-based. This allowed the community and site to focus on the surface and near-surface contamination which drove risk rather than the radionuclide contamination at greater depth. (NOTE: In reality, the community and regulators got a very good deal—the surface soil clean up was greatly expanded due to lower action levels while it turned out that very little deep contamination existed.)
- *Success* breeds success. Early building demolitions and tank closures were completed, and all promised reports were delivered satisfactorily and on-time. To resolve historic non-compliance, DOE entered into orders on consent with

agreed compliance plans. These actions helped to establish DOE/K-H credibility, provided tangible evidence that closure could be accomplished, and demonstrated the Site's commitment to successful closure on-time. It also allowed K-H and the RFCA parties to *practice* the consultative process in non-controversial projects before moving on to the harder cases. These corollary results of early actions, in turn, helped to create and sustain a shared momentum toward closure.

6. Innovation and Technology. K-H completed the closure project based upon sound science and good business practices, bringing in outside expertise as needed (e.g., the Actinide Migration Evaluation Panel). K-H also encouraged creativity in responding to technical challenges (e.g., the use of a passive groundwater treatment system; cerium nitrate as a glove box decontaminant; unique packaging for oversized equipment; and adaptation of commercial equipment for D&D purposes). It was essential in each case to stay focused on the cleanup issue and how to apply innovative technologies to identified needs, avoiding the trap of innovations in search of an application.

7. Other factors contributing to the successful closure of Rocky Flats. Several additional parties and circumstances were significant. These include:

- A shared commitment to successful closure by DOE-HQ and complex-wide field office cooperation;
- Strong bipartisan support in Congress, both from the Colorado delegation and from key leaders in the House and Senate;
- Stable project funding, which allowed for mortgage reduction and effective project planning;
- Strong leadership from the Colorado State government;
- Community concerns about potential offsite contamination were addressed early by DOE funding for the Water Diversion project to route potentially contaminated water away from a city-owned drinking water reservoir; and, by a thorough investigation of the offsite downwind area which concluded that offsite contamination was nonexistent or so minimal as to present no significant risk. Further, the Health Advisory Panel sponsored by CDPHE, with financial support from DOE, concluded that the surrounding community residents have never been subject to significant increased health risks by their proximity to Rocky Flats;
- DOE-HQ publicly committed that there would be no onsite disposal of waste.

RESPONSE OF NANCY TUOR TO QUESTION FROM SENATOR SALAZAR

Question 1. In the written testimony submitted by each of you, you refer to the need for a skillful, dedicated workforce to accomplish the ambitious goals of the Department of Energy's environmental cleanups. Ms. Tuor's testimony credits the "efforts and innovation" of the Rocky Flats workforce as one of the factors that contributed to the completion of the Rocky Flats cleanup under budget and ahead of schedule. Assistant Secretary Rispoli's testimony describes the need for "effective incentives for the federal and contractor workforce for superior performance" in future cleanup efforts. At Rocky Flats, the workers in the field made many contributions that helped Kaiser-Hill and the Department of Energy achieve this great success. These contributions include:

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Answer. This question is appropriately addressed by the Department of Energy.

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