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ENVIRONMENTAL MANAGEMENT PROGRAM: ACCELERATED CLEANUP

HEARING

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE

ONE HUNDRED EIGHTH CONGRESS

SECOND SESSION

TO

RECEIVE TESTIMONY REGARDING THE ENVIRONMENTAL MANAGEMENT PROGRAM OF THE DEPARTMENT OF ENERGY AND ISSUES ASSOCIATED WITH ACCELERATED CLEANUP

JUNE 17, 2004

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CONTENTS

STATEMENTS

APPENDIX

ENVIRONMENTAL MANAGEMENT PROGRAM: ACCELERATED CLEANUP

THURSDAY, JUNE 17, 2004

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. Good morning, everyone. We will get started.

Now, I have listed as witnesses: the Honorable Jessie Roberson and Gregory H. Friedman, the Inspector General. Thank you very much for coming. Glenn Podonsky, the Director of Office of Security and Safety Performance, Safety Performance Assurance, the Department of Energy. Thank you very much for coming.

I have a brief opening remark that I would like to make and I will do it as quickly as I can. This hearing of the Energy and Natural Resources Committee on the Office of Environmental Management at the Department of Energy is now in session. The purpose of the hearing is to evaluate the progress in the environmental management program of the Department of Energy and the complex issues associated with the conduct of accelerated cleanup.

This program inherited the responsibility for the cleanup of 114 sites involved with past nuclear weapons activities. Those sites cover a vast area, over two million acres, the equivalent of the land area of Rhode Island and Delaware combined. Environmental Management, frequently called "EM," is also responsible for remediation, processing and disposal of about 90 million tons of radioactive liquid—now, that use of that word "radioactive" does not mean that it is all the same or that it is all the same in toxicity; it varies, varies from transuranic all the way to high-level irradiated spent fuel rods—2,500 tons of spent fuel, 137 cubic meters of transuranic waste, 324 nuclear facilities, and 3,300 industrial facilities.

This is an immense undertaking. It is only made more complicated by the substantial hazards associated with many of these materials. This program is the largest single function within the Department, at $7.4 billion in the President's budget proposal. This represents nearly one-third of the Department's total budget request.

Now, that sounds kind of incredible when you take the entire Department with all its mission and you look up there and say, put a graph up there and graph out the functions and right off the bat you have got $7.4 billion for this aspect. The most interesting thing is if you had another one and you showed where it has been, where it is now and where it is going, of course the latter has not been easy to come by. But I believe the Honorable Jessie Roberson has done some things that are making us more able to understand where it is going.

We have between us, Senator Bingaman and I in our various capacities, we have seen estimates that go off the wall as to what it is going to cost over 20 or 30 years.

In addition to a progress report on the EM program, I look forward to learning from the witnesses today about the recent issues associated with worker safety and the concerns at the Hanford site and other current issues. I hope our witnesses today can address these complex issues and that we can all better understand the status of the cleanup at our facilities from the Cold War.

Testifying today are the Honorable Jessie Roberson, Assistant Secretary of Energy for Environmental Management of the Department. I always appreciate your perspective of complex issues like we are discussing today. I want to thank you, Jessie, for the immense effort that you and Ines Triay put into the negotiations with the State of New Mexico to gain concurrence on a management plan for the cleanup of Los Alamos. It was not easy. It took a lot of effort and, just like other States, most will have something to thank you for; others will have something to complain about. But we will listen to both and surely you will, too.

But they were also vital because they allowed progress to resume on the cleanup at Los Alamos and it did the same for other sites.

Now, with that, that is my best effort at a summary. Now I would yield to my friend the ranking member, Senator Bingaman.

STATEMENT OF HON. JEFF BINGAMAN, U.S. SENATOR FROM NEW MEXICO

Senator BINGAMAN. Thank you very much, Mr. Chairman. Thanks for having the hearing. It is a very important set of issues. Obviously, trying to clean up the nuclear laboratories and plants, the residue that we have from the Cold War and since, is extremely important and it is obviously costing billions of dollars and is expected to for many, many years.

Let me thank Jessie Roberson for her good work and contribution to this effort. I know she is leaving her position next month, so this will probably be her last hearing before this committee. I appreciate the work she has done. Rather than go through any kind of a recitation of issues, I will wait and hear the witnesses' testimony and then have some questions.

Thank you.

The CHAIRMAN. Thank you.

Senator WYDEN. May I very briefly, Mr. Chairman?

The CHAIRMAN. Yes, please.

STATEMENT OF HON. RON WYDEN, U.S. SENATOR FROM WASHINGTON

Senator WYDEN. I am going to have to be in and out. First, Mr. Chairman, let me thank you for holding the hearing. This is very important to those of us in the Pacific Northwest. The bottom line for me, and I say this with all due respect to the Department, it is simply unacceptable to my constituents to leave 10 percent of the high-level nuclear waste in the Hanford tanks. That is just the bottom line here, and it does not matter what legalisms or financial inducements the Energy Department comes up with or what they call them. I think that the people of my State just feel that it is a significant safety problem to leave that much behind in leaking tanks.

We are not going to accept turning Hanford into a national sacrifice zone. I believe that, with the Department's proposal to leave behind 10 percent of highly radioactive waste, that comes to more than 5 million gallons of radioactive contamination that would be left at the site and not cleaned up. That is just unacceptable.

I want to let the chairman proceed expeditiously, but I really think that the Department's notion of accelerated cleanup essentially is a faster effort to walk away from a major health and safety problem. I for one am going to do everything I can to reverse this policy.

Mr. Chairman, I thank you. I am going to have to be in and out a bit this morning and I appreciate the chance to make that brief comment.

The CHAIRMAN. Senator, would you like to make a brief statement?

STATEMENT OF HON. MARIA CANTWELL, U.S. SENATOR FROM WASHINGTON

Senator CANTWELL. Yes, thank you, Mr. Chairman. And I thank you as well for holding this hearing and giving attention to this issue, and to Senator Bingaman and Senator Wyden and Smith for supporting the request for a hearing on this issue.

I believe that the DOE's environmental management oversight program and recent developments have made this hearing today even more important. I know, Secretary Roberson, that you are here today and that you have turned in your resignation earlier this week. You have probably had one of the toughest jobs in the administration, in the Department of Energy and in this area, and I appreciate your detail and attention to this and the fact is that these issues have been very controversial and I appreciate that you have tried to be open and honest with our office about that. We may not have always agreed on issues in the past, but you certainly have provided open and honest information.

I think the issue that is the most frustrating to me is that if we were going to have a discussion about high-level waste and a discussion about what percentage of waste should be left in tanks, we should have had that discussion right here in this committee room. And instead the Department of Energy has done an end run on that debate by trying to make the American public think that somehow a State and the Federal Government can make a decision

about high-level waste and how much to leave in the tanks and call it a day.

I think it is absurd that the Department of Energy has done an end-run around these organizations. People deserve to have this fully debated and to have the safety and security of groundwater in the State of Washington, in Savannah River and in various parts of the rest of the country discussed. People deserve to have debate on the impacts and to have a proper policy put in place. Yesterday our attorney general sent a letter to President Bush, who just happens to be visiting the Northwest today, and I think that her statement sums up the concerns of all Washington State residents and probably those for the Pacific Northwest region as well. She said, quote:

> The bottom line is this: DOE's accelerated cleanup plan cannot depend on a shortened yardstick for success. We cannot allow the Federal Government to declare success by simply lowering the bar for cleanup standards.

So I want to look at this issue and get some straightforward answers. I know that we have had this discussion before and it is very confusing to us in Washington State, because DOE has said at various points in time—in 2004 DOE holds a press conference saying that it will continue to adhere to the Tri-Party Agreement, which calls for DOE to remove 99 percent of the waste in the tanks, and to do that through the vitrification plant. So that is what we have in one statement.

Then earlier DOE issues a draft risk-based vision of Hanford and basically says: Well, less treated waste for disposal, for example 90 percent of the waste rather than 99 percent, could save us $2 to $3 billion.

So I am not even sure why we are having this discussion. The Department of Energy says it is going to live up to the Tri-Party Agreement and clean up 99 percent of the waste, yet you are having discussions saying, well, listen, maybe we will only do 90 percent. So the charade that the Department of Energy is doing is very clear to me and it is going to be very clear to the rest of America.

It has taken us 3 years to get under the Enron charade, but I guarantee you we will get to the bottom of this. We will find out that the Department of Energy does not want to have a discussion and debate about the science of what is physically possible in the cleaning up of the tanks and what is environmentally safe. They want to have carte blanche and that is what they are trying to get at Savannah River, and that is what we are going to stop them from getting at Hanford.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

I forgot in my opening remarks to allude to the fact that you have served, Jessie, and you have found it within your life that you are going to proceed on to another career. I hope it is not the difficulty of this job that has caused that and from talking to you I assume it is not. I do not think any job in the world that you took would scare you away.

Also, Mr. Gregory Friedman, we are very, very pleased that you have been Inspector General for the Department, and you will testify today. And I understand that your career dates back to 1974.

I understand your career also includes work with one of DOE's predecessor agencies. We welcome you and your extensive experience that you bring with you.

Finally, Mr. Glenn Podonsky, Director of the Office of Security and Safety Performance Assurance of the Department of Energy, will provide testimony on the recent evaluations conducted at the Hanford site.

Do we have another witness or are you here to help somebody? You will be helping Glenn, is that correct?

Ms. WORTHINGTON. Yes.

The CHAIRMAN. What is your name?

Ms. WORTHINGTON. Worthington, Patricia Worthington.

The CHAIRMAN. We will just have that in the record because you may be helping from time to time.

Ms. WORTHINGTON. Thank you.

The CHAIRMAN. Let us proceed in the order that I discussed the witnesses. This is an issue that causes a lot of acrimony, shall I say, and we will keep it under control and I will do my best to moderate from time to time.

If you have a written statement, we will leave it up to you. If you want to insert it, if you want to say the whole thing, you should have your chance.

You heard the challenge from the distinguished Senator, two Senators, and if you can, address them. If you want to leave it for questions, that is okay.

STATEMENT OF JESSIE HILL ROBERSON, ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT, DEPARTMENT OF ENERGY, ACCOMPANIED BY ROY J. SCHEPENS, MANAGER, OFFICE OF RIVER PROTECTION, DEPARTMENT OF ENERGY

Ms. ROBERSON. Well, good morning and thank you, Chairman Domenici. I would like to read my written statement.

The CHAIRMAN. Please.

Ms. ROBERSON. Of all the opportunities I have had to sit before all of you in one form or another, this is probably one I enjoy the most——

The CHAIRMAN. Would you push the button somewhere in front of you there?

Ms. ROBERSON. Is that better?

The CHAIRMAN. That is better, right.

Ms. ROBERSON. I really would like to have the opportunity to read the written statement.

Again, good morning to you, Chairman Domenici, Senator Bingaman, Senator Wyden, Senator Cantwell, and to the staff of the other members. Good morning, and first of all I would like to start out by thanking you for all of your interest and support of this program throughout my term.

First of all, if I could, I would like to introduce just a couple of people who are—I feel a little vulnerable here—IG, Office of Independent Assessment. So I do have a bit of support with me. I would like to introduce Lee Otis, the Department's General Counsel, who is sitting directly behind me; Roy Schepens, our Manager for our

River Protection Project; and Rick Provencher, our Manager for Environmental Cleanup at Idaho, who are joining me here today.

I am pleased to be here to continue the dialog that I started with this committee in 2002. When I was last before this esteemed committee, we were at the beginning stages of transforming a faltering cleanup program, a program that had lost sight of the path that it was intended to follow, which was to remedy the environmental legacy of the Cold War, a program recognized as the third largest liability of the Federal Government, behind only Federal employee and veterans benefits and the Federal debt, a program mired down in process, a program on an unfocused march with a bitter gift of ever-increasing risk to future generations.

All too often we forget why the Environmental Management program was created. This program, created in 1989, was devised to deal with an environmental legacy created by nearly half a century of nuclear weapons production and nuclear research activities shared and supported by over 100 sites in 32 States of the Union.

No one site got to where it is on its own and neither will solutions be found on an individual isolated basis. Our Nation fought and won the Cold War and in its wake, a vast legacy was created, a legacy of approximately 88 million gallons of radioactive liquid waste, over 20 metric tons of plutonium, many tons of enriched uranium, three-quarters of a million tons of depleted uranium, 2,400 metric tons of spent nuclear fuel, 108 metric tons of plutonium residues, and over 140,000 cubic meters of transuranic waste, all in need of disposition and remedy.

In addition, there are over 3,000 facilities that supported and housed the nuclear weapons production program that have to be dealt with. Many of these facilities were built in the 1940's, 1950's, and 1960's. In fact, we have one facility at Oak Ridge that has over 40 acres of contaminated floor space under a single roof. Many are radiologically contaminated and have beryllium, asbestos, and other forms of chemical contamination. We need to also remediate the contamination from under and around these facilities that resulted from many decades of operation.

All this needs to be dealt with. It will not be remedied without hard work. We are extremely fortunate to have some of the best trained and most competent workers in the world working on this job at our different sites. The work is difficult and tedious. It requires training, engineering controls, procedures, and personal protective equipment that few can imagine.

To get into a process area at one of our sites requires passing through security, radiological and nuclear checkpoints. To stabilize just one kilogram of plutonium requires a safety and security infrastructure that includes security guards, radiological control technicians, nuclear criticality engineers, ventilation engineers, plutonium chemists, trained nuclear operators wearing layers of anti-contamination clothing, respirators, thermoluminescent dosimeters, and leaded rubber gloves which are in a glove box that is specially designed to keep the radioactive contamination inside and controlled. This represents but a single work task that we have to complete.

The legacy is here today. The infrastructure is only getting older and more difficult to maintain. We simply do not have the luxury

of spending our time debating all the issues before us. We have to move forward. We owe our citizens a real and a responsible solution.

Three years ago, the cleanup program was in need of an expedited transformation. Despite the fact that we had spent over $60 billion on this program in the 1990's and projected a $14 billion cost increase in just fiscal year 2001, little in the way of real, measurable risk reduction and environmental improvement was taking place. We embarked on a program that at its roots changed this program from risk management to accelerated risk reduction that would be safer for the workers, protective of the environment, and respectful of the taxpayer. We insisted that our progress be measurable and that we be held accountable for delivering on it.

Today I stand before you and report that we have delivered on this commitment and more. We are putting in place the systems and processes to complete this work in our lifetime. In the last 3 years, we have taken significant risk out of the system, making communities and the environment safer, and I am glad to discuss site by site specific accomplishments. I have outlined in my written testimony specific accomplishments as well.

In less than 3 years, we have reduced reportable accident and injury rates of our workers by over 35 percent. Our work force boasts one of the best safety records in government today, despite the fact that they deal with some of the most dangerous and hazardous material and operations. In less than 3 years, we have decreased the cost to complete this program by over $50 billion, as documented by the U.S. Government financial reports of fiscal years 2001, 2002, and 2003.

This program has delivered on its commitment. This program has demonstrated its success, that it is good for our workers and good for our communities, it is good for our environment, and it is good for our country.

When I took this job in July 2001, Secretary Abraham made it clear that we could, and indeed should, expect more real progress at every site. The Secretary was not satisfied with the plan in place, a plan that called for a timetable of more than 70 years to complete at a cost of $300 billion. He said: "That is not good enough for me and I doubt it is good enough for anyone who lives near these sites."

To that end, he directed a Top-to-Bottom Review of the entire program. We completed that review in February 2002, and for some skeptics, the recommendations were viewed as unorthodox and flew in the face of a mindset comfortable with a program whose focus was compliance and risk management. The Top-to-Bottom Review exposed clear discrepancies in accomplishing our vital mission of risk reduction and environmental improvement. Innovative actions in all elements of the EM program were needed to make this program viable.

Since the release of the Top-to-Bottom Review of the EM program, we have taken decisive steps to transform this once-faltering program. We have introduced dynamic reforms. We have delivered fundamental change and achieved significant improvements in health, safety, and environmental protection.

There are some who say that accelerating cleanup means that we need to cut corners and expose our workers to more hazards. Well, it is simply not true. In fact, the opposite is the case. Our best performing sites are also our safest sites. EM is no different than private industry; improved safety performance is a necessary precursor for improved operational performance. In order to accomplish our accelerated risk reduction and cleanup mission, we must improve safety performance first. We have done so and will continue to do so. Safety and results go hand in hand. Neither can be compromised if we are to reach our goals. We are committed to a mindset of continuous improvement and work to instill this philosophy in every worker's day to day decisions from start to finish of every project. For example, in August 2001, EM's Total Reportable Cases and Lost Workday Cases were 1.9 and 0.8 per 100 worker-years respectively. Our Total Reportable Cases and Lost Workday Cases are standard OSHA tools used to measure safety performance across all industry. Since then we have reduced our Total Reportable Cases to 1.1 versus 1.9, and our Lost Workday Cases to 0.5 versus 0.8.

These rates are significantly better than private industry, which OSHA reported in 2002, had a Total Reportable Case rate of 5.3 and Lost Workday Case rate of 1.6. Our rates are among the best in the Federal Government as well. The construction industry alone had rates of 7.1 for Total Reportable Cases and 2.8 for Lost Workday Cases.

We have not stopped, nor will we stop, paying attention to safety. We will continue to demand improvement and hold ourselves accountable to the highest standards. Success of our program begins and ends with safety performance.

There are others who say we are doing a dirty cleanup. That could not be further from the truth as well. We have taken decades off the time to complete cleanup at most of our sites and we will complete the entire EM cleanup a generation earlier than planned. Removing the hazards and source terms significantly before anyone had ever hoped or planned. For example, in the cleanup of our liquid waste tanks, for which we have received much notoriety, notoriety that I believe overshadows the benefits in risk reduction that is well within our grasp—if I may, please direct your attention to our charts. Many of you have seen these before. These are before and after pictures of liquid waste tanks at Hanford, Savannah River, and Idaho.

This is Hanford, typical tank at the top, Tank C106 at the bottom. As you can see, the weld seams of the tank at the bottom of the tank are visible. We also have photos depicting the bottom of Tank 17 at Savannah River and you will see the same thing. And the last one is the bottom of the Tank WM185 at Idaho, which we see the bottom of in the bottom picture as well.

I believe the old adage that a picture speaks a thousand words is quite appropriate here. We are committed to meet our responsibilities. Cleanup of our liquid waste tanks will meet all requirements, like the stringent Nuclear Regulatory Commission's standards and safe drinking water standards. We are not evading our responsibility. Upon completion of cleanup, many of these liquid tanks will pose no more of a radiological risk to a person than fly-

ing from coast to coast. Our cleanup will be protective of the environment and fully support the future uses of the site. Our cleanup standards are based on good science, and require full review by State and Federal regulators.

Others claim that we are compromising national security in our cleanup. We are in full compliance with the design basis threat. We are working to ensure all requirements have been met by 2006, as directed by the Secretary. More importantly, we are safely and securely disposing of radioactive waste, and we are consolidating our once-scattered special nuclear materials inventory into fewer, more robust and secure locations.

There are still others who say that we have delivered less cleanup than we had promised. The truth is at nearly every site we are doing more real cleanup today than anyone could ever have imagined in the 1990's. We have dug up buried waste in Idaho. We are tearing down facilities in Savannah River. Rocky Flats, the facility that manufactured nearly every single plutonium pit in the United States stockpile, has no more special nuclear material. The West Valley site in New York completed shipping its spent nuclear fuel.

Prior to the Top-to-Bottom Review, EM had lost its focus on its core mission, the mission that the program was established to solve, to address cleanup of the Nation's Cold War nuclear weapons research and production legacy. In the last 3 years, we have established a new floor of performance not seen in this program and our strategy has begun to pay dividends and a return on the investment that we made.

I have included in my written statement highlighted examples of our progress, so I will not repeat them here. These are visible, these are real and these demonstrate results, the results of our ability to accelerate cleanup and reduce our estimated life-cycle costs while showing to our public and surrounding communities the Department's commitment to improve worker safety, reduce health risks, and eliminate environmental hazards.

We can deliver significant risk reduction and cleanup, as I stated earlier, in combination with improved safety performance. Accelerating risk reduction and cleanup, in concert with safety performance, accomplishes consequential outcomes important to the public, our communities, and for the generations that follow us.

In conclusion, we commit to never going backward to a time when we measured success by how much we spent, not by how much real environmental improvement was achieved. We must never again believe the falsehood that it is a choice between being safe and doing work, for it is only when we do our work that we are really safe. We must not, by our inaction, allow this legacy to become our children's, our grandchildren's, or our great-grandchildren's problem. It is for us to solve and for us to complete this work on our watch.

We must demand excellence and never again accept that this job is too hard or too dangerous to complete. We have demonstrated that we can do the work, that we can do it safely, that we can complete it in our lifetime. We have demonstrated that this cleanup can be done in a way that is safe for the worker, protection of the environment, and respectful to the taxpayer.

Three years ago we started down this path; however, we must continue to better our performance and to look beyond the gains we have made to achieve our vision and the results that will truly be groundbreaking for the benefit of the generations that follow us. I have challenged our partners in cleanup; our work force, our contractors, our regulators, our communities, as much as you challenged me in 2001 as I went through the confirmation process for this position. We need all of those interested in joining us in our vision of cleanup to put their most innovative ideas and people forward. We must not lose our momentum that has been established through collaboration and a singular focus of delivering meaningful results for the American public. We are committed to employ our resources to show meaningful results.

As we move forward in getting these results, one thing for sure I can promise you is that this program will be criticized. This program was criticized when I came in for moving too slow and now we are criticized for moving too fast. But after all, this program is based solely on solving existing environmental problems. Every morning when we begin our day, we start with a new challenge.

It is a problem-rich environment. That was what the program was designed to address. But we should remember, by design, critics see what is. They only see tank waste. They only see the most dangerous building in America at Rocky Flats. They only see the contamination on the Columbia River. Our responsibility is to see what is, but also to see what can be and to turn that into a reality.

The only measure of our success should be positive, measurable, environmental improvement. The longer we wait, the greater the potential risk. I ask for your continued support in this very important work. We are safer today than we were last year and we must stay the course so that we are safer next year than today. The potential is definitely there to lose what we have gained should we fail to stay true to our commitments; a cleanup that is safe for the worker, protective of the environment, and respectful of the taxpayers.

Thank you very much and I look forward to your questions and answers.

[The prepared statement of Ms. Roberson follows:]

PREPARED STATEMENT OF JESSIE HILL ROBERSON, ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT, DEPARTMENT OF ENERGY

Mr. Chairman and Members of the Committee, I take great pleasure and pride today to discuss the transformed Environmental Management Program in the Department of Energy, our progress in implementing cleanup reform, and the importance of sustaining this momentum for the benefit of our workers, our communities, our environment, and the generations to come.

All too often, we forget why the Environmental Management Program was created.

This program was created in 1989 to deal with the environmental legacy created by nearly a half-century of nuclear weapons production and nuclear research activities, activities that were conducted at over 100 sites in 32 states of this Union. In the United States Government's Financial Report, this environmental legacy was recognized as the third largest liability of the Federal Government, behind only Federal Employee and Veteran's Benefits and the Federal Debt. In fiscal year 2001, the cleanup cost associated with environmental damage and contamination was reported by the Treasury Department to be $306.8-billion. The Environmental Management program was the largest component of that liability.

Our nation fought and won the Cold War. In its wake, a vast legacy was created including approximately 88 million gallons of highly radioactive liquid waste in 239

tanks, with some capable of holding more than 1-million gallons each. Many were built during the Manhattan Project or in the early stages of the Cold War and some of these are known to have leaked. Additionally, this nuclear legacy includes over 20 metric tons of plutonium, many tons of enriched uranium, three-quarters of a million tons of depleted uranium, 2,400 metric tons of spent nuclear fuel, 108 metric tons of plutonium residues and over 140,000 cubic meters of transuranic waste. All of this needs to be remedied.

In addition, there are over 3,000 facilities that supported and housed the nuclear weapons production program that have to be addressed. Many of these facilities were built in the in the 1940's, 50's, and 60's. In fact, we have one facility, at Oak Ridge, that has over 40 acres of contaminated floor space under a single roof. Many are radiologically contaminated and have beryllium, asbestos, or other forms of chemical contamination. We need to also remediate the contamination from under and around these facilities that resulted from the many decades of operation.

We are extremely fortunate to have some of the best trained and most competent workers in the world to complete this job. The work is difficult requiring training, engineering controls, procedures, and personnel protective equipment that few can imagine. To get into a process area at one of our sites requires passing through security, radiological, and nuclear checkpoints. To stabilize just a kilogram of plutonium requires a safety and security infrastructure that includes dozens of security guards, radiological control technicians, nuclear criticality engineers, ventilation engineers, plutonium chemists, and trained nuclear operators wearing layers of anti-contamination clothing, respirators, thermo luminescent dosimeters (TLDs), leaded rubber gloves which are in a glove box that is specially designed to keep the radioactive contamination inside and controlled to prevent a nuclear criticality. This represents but a single-work task.

This legacy is here today. Doing nothing or keeping the status quo only makes things less safe. The infrastructure is only getting older and more costly to maintain. This infrastructure across the complex costs us literally billions of dollars every year just to maintain. Doing nothing is simply not an option.

Three years ago, the cleanup program was badly in need of refocusing. Despite the fact that we spent more than $60-billion on this program in the 1990's and our projected cost to complete this program increased in FY01, little in the way of real, measurable risk reduction was taking place. We embarked on a program that at its roots was very simple; change this program from risk management to accelerated risk reduction that would be safe for the workers, protective of the environment, and respectful to the taxpayers. We insisted that our progress be measurable and that we be held accountable for our performance.

Today, I can report to you that we have delivered on this commitment and more. We are putting in place the systems and processes to complete this work. While I will discuss site-by-site specific accomplishments later in my testimony, overall in the last three years, we have taken significant risk out of the system, making communities and the environment safer. In less than three years, we have reduced reportable accident and injury rates of our workers by over 35 percent; our workforce boasts one of the best safety records in government today despite that fact that they deal with some of the most dangerous and hazardous materials and operations known to man. In less than three years, the Department has reduced its environmental liability by a total of $55 billion as documented by the United States Government Financial Reports of Fiscal Year 2001, 2002, and 2003. These reports show that this is the only major program in government that actually decreased its financial liability in that timeframe. In less than three years, we have shortened the time to complete this work by 35 years, essentially eliminating the need for another generation of Cold War cleanup workers to finish the job.

This program has delivered on its commitment. This program has demonstrated success that is good for our workers and our communities; is good for our environment, and is good for our country.

When I took this job in July 2001, Secretary Abraham made it clear that we could, and indeed should, expect more real progress at every site. The Secretary was not satisfied with a plan that called for a timetable of some 70 years to complete and at a potential cost of $300 billion. "That is not good enough for me", he said, "and I doubt it is good enough for anyone who lives near these sites." To that end, he directed a *Top to Bottom Review* of the entire program. We completed that review in February 2002 and for some skeptics, the recommendations were viewed as unorthodox and flew in the face of a mindset comfortable with a program whose focus was mainly compliance and risk management. The Top to Bottom Review exposed clear discrepancies in accomplishing our vital mission of risk reduction. Innovative actions in all elements of the EM program were needed to make this program viable.

Since the release of the Top-to-Bottom Review of the EM program we have taken decisive steps to transform this once faltering program. We have introduced dynamic reforms, delivered fundamental change and achieved significant improvements in health, safety, and environmental protection.

There are some who say that accelerating cleanup means that we are cutting corners and exposing our workers to more hazards. That is not true—in fact, the opposite is the case. Our best performing sites are also our safest sites. EM is no different than private industry; improved safety performance is a necessary precursor for improved operational performance. In order to accomplish our accelerated risk reduction and cleanup mission, we must improve safety performance first. Safety and results go hand in hand. Neither can be compromised if we are to reach our goals. We are committed to continuing to instill this philosophy in every worker's day-to-day decisions from start to finish of every project. For example in August 2001, EM's Total Reportable Cases (TRC) and Lost Workday Cases (LWC) were 1.9 and 0.8 per 100 worker-years (200,000 hours), respectively. TRC and LWC are standard OSHA tools used to measure safety performance across all industry. Since then we have reduced our Total Reportable Cases to 1.1 and Lost Workday Cases to 0.5. These rates are significantly better than private industry, which OSHA reported in 2002, had a Total Reportable Cases of 5.3 and Lost Workday Cases of 1.6. Indeed, our TRC's and LWC's are among the best in the federal government. The construction industry alone had rates of 7.1 for Total Reportable Cases and 2.8 for Lost Workday Cases in 2002. We have not nor will we stop paying attention to safety. We will continue to demand improvement and hold ourselves accountable to the highest standards. Success of our program begins and ends with safety performance.

There are others who say that accelerated cleanup means a dirty cleanup. That could not be further from the truth; we have taken decades off the time to complete cleanup at most sites and will complete the entire EM cleanup a generation earlier than previously planned. Removing the hazards and source terms significantly before anyone had ever hoped or planned is good for the environment. Our cleanup will be protective of the environment and fully support the future uses of the site. Our cleanup standards are based on good science, and require full review and approval by the state and federal regulators. Just as important, we work with our communities stakeholders day-in and day-out, the recipients of the benefits of cleaning up and closing a site earlier.

Others claim that we are compromising national security in our cleanup. We are on schedule to meet all the new security requirements as directed by the Secretary. Just as important, we are safely and securely disposing of radioactive waste, and we are consolidating our once scattered special nuclear materials inventory into fewer, more robust and secure locations.

There are still others who say that we have delivered less cleanup than we had promised. The truth is at nearly every site we are doing more *real* cleanup today then anyone could have ever imagined in the 1990's. We have dug up buried waste in Idaho; we are tearing down contaminated facilities at Savannah River. Rocky Flats, the facility that manufactured every single plutonium pit in the US stockpile, has no more special nuclear material. Our West Valley Site in New York shipped its spent nuclear fuel off-site to a more secure location. Prior to the Top to Bottom Review, EM had lost focus on its core mission, the mission that the program was established to solve—addressing the cleanup of the Nation's Cold War nuclear weapons research and production legacy. In the last 3 years, we have established a new *floor* of performance not seen before in this program and our strategy has begun to return on the investment that we made. Some examples of this progress include:

At the Savannah River Site, we have

- Increased waste loading in the Defense Waste Processing Facility (DWPF) by over 30 percent, resulting in a one-third reduction in the number of canisters to be produced that will require deep geologic isolation.
- Completed packaging of all plutonium metal and initiated plutonium-oxide packing operations.
- Reduced liquid waste inventory volume by over 1 million gallons.
- Repackaged and disposed of the worst 10 percent of the site's depleted uranium.
- Completed de-inventory and commenced deactivation of the F-Canyon facility.
- Completed dissolving plutonium residues through the H-Area HB-Line.
- Attained a shipping rate of 2,000 cubic meters of TRU waste per year.
- Emptied two spent nuclear fuel basins, consolidating all material into L-Basin.
- Demolished 48 facilities including 46 industrial facilities and 2 nuclear buildings.

At our Hanford Site, we have

- Completed waste retrieval from C-106, the first at the Hanford tank farms; retrieval of tank S-112 is 83 percent complete; retrieval equipment installations are nearing completion on the next four tanks.
- Removed over 99 percent of pumpable liquids from single-shell tanks and over three million gallons to date. Today, only 40,000 gallons remains to be pumped from one tank.
- Placed all plutonium in safe, stable 3013 storage containers.
- The Waste Treatment Plant (vitrification plant) construction is over 25 percent complete.
- Stabilized and packaged all plutonium residues.
- Commenced Fast Flux Test Facility deactivation on April 7, along with draining the sodium coolant.

At the Rocky Flats Environmental Technology Site, we have

- Completed 80 percent of the project and are firmly on track for 2006 closure.
- Removed over 85 percent of the glove boxes—1,241 of 1,457.
- Completed removal of all weapons grade special nuclear material.
- Demolished over 350 structures.

At the Idaho National Laboratory, we have

- Emptied and cleaned five large waste pillar and panel tanks.
- Completed pilot waste excavation work at Waste Area 7.
- Deinventoried 3 spent nuclear fuel pools, placing over 93 percent of the fuel at Idaho in safe, dry storage with the remaining fuel being stored in the state of the art CPP-666 facility.
- Constructed and commenced operation of a 500,000 cubic meter disposal facility for the disposal of remediation waste.

In Ohio, we have

- Removed all legacy transuranic (TRU) waste from the Mound Site.
- Removed all Plutonium-238 from the Mound Site and all nuclear material from the Fernald Site.
- Decontaminated and demolished 57 percent (77) of the facilities at Mound and 75 percent (157) of the facilities at Fernald.

At the West Valley Demonstration Project Site, we have

- Removed all spent nuclear fuel.
- Emptied and decontaminated the spent nuclear fuel basin.
- Completed vitrification (275 high-level waste canisters generated) and melter shutdown.

At Oak Ridge, we have

- Completed uranium converter removal operations in Building K-29, 31, and 33 at East Tennessee Technology Park.
- De-fueled tower shielding reactor.
- Removed all EM spent nuclear fuel from the site.
- Disposed of over 40,000 cubic meters of low-level and low-level mixed waste.

At the Waste Isolation Pilot Plant, we have

- Disposed of nearly 20,000 cubic meters of TRU waste, safely receiving 2,600 waste shipments involving more than 2.6-million highway miles.
- Completed removal of TRU waste at four small-quantity sites and recently initiated TRU shipments from the Nevada Test Site.
- Closed Panel 1; Panel 2 is receiving waste; Panel 3 is under construction.
- Submitted our Recertification Application signifying five years of safe operation.

I can go on and on with examples of accelerated risk reduction and cleanup. These are visible, these are real and these results demonstrate our ability to accelerate schedule and reduce life cycle cost while showing to our public and surrounding communities the Department's commitment to improve worker safety, reduce health risks and eliminate environmental hazards.

So you may have a better comprehension of the magnitude of our cleanup results, I would like to insert for the record a copy of our recent corporate performance measures. EM's Performance Measures is a compilation of the program's sixteen complex-wide performance measures. As you can see, we can deliver significant risk reduction and cleanup and, as I stated earlier, in combination with improved safety performance. Accelerating risk reduction and cleanup, in concert with exceptional safety performance, accomplishes consequential outcomes important to the public, our communities, and for the generations that follow us.

WE HAVE OUR CHALLENGES TOO

As we continue to challenge the status quo, we may be confronted with legal actions and court decisions that will direct us to alter or modify our activities from the accelerated cleanup and closure path. We will continue to work diligently with all concerned parties to avoid interruptions in reducing risk and advancing cleanup for the public.

We expect to be challenged on our delivery of Government Furnished Services and Items, or GFSI. We are accountable on delivery of GFSI and we expect to be held to our commitments.

Also, we have challenged our managers at all levels to stay true to our commitment and employ our corporate performance measures and baselines as an accountability and success gauge assessing our progress as well as a tool that alerts us when management action or intervention is warranted.

With the Idaho District Court decision on Waste Incidental to Reprocessing, the Department's ability to proceed prudently with accelerated risk reduction for some activities is drawn into question. The decision makes it difficult, if not impossible, for us to undertake all of the actions planned at Idaho, Hanford and Savannah River Site to aggressively reduce risks posed by wastes stored in tanks at those sites—actions we had committed to take, in agreement with our host states, before the court decision.

The Senate agreed to provisions, which if enacted into law, would provide fiscal year 2005 funding and enable DOE to proceed with the full suite of previously planned accelerated cleanup activities for the Savannah River Site tank farms, pursuant to plans developed in conjunction with the State of South Carolina. In addition, the Senate agreed to allow FY 2005 funding for certain critical tank waste cleanup activities at Idaho and Hanford, pursuant to plans approved by the states of Idaho and Washington.

CONCLUSION

Three years ago we started down this path; however, we must continue to better our performance and to look beyond the gains we have made to achieve our vision and the results that will truly be groundbreaking for the benefit of the generations that follow us. I have challenged our partners in cleanup; our workforce, our contractors, our regulators, our communities, and all those interested in joining us in our vision of cleanup to put their most innovative ideas and people forward. We must not lose our momentum that has been established through collaboration and a singular focus on delivering meaningful results for the American public. We are committed to employ our resources to show meaningful results.

The job is not done until it is done. We cannot be complacent; we must continue to do better. It is not done when we develop a plan—it is not done when we agree to a milestone—it is not done when we ask for funding—it is not done when we sign a contract—it is not done when we get money. It is not done until it's done and there is positive and measurable risk reduction for the investment.

The only measure of success will be positive, measurable performance. The longer we wait, the greater the potential risk. I ask for your continued support in this very important work. We are safer today than we were last year and we must stay the course so we are safer next year than today. The potential is there to lose what we have gained should we fail to stay true to our commitments; a cleanup that is safe for the worker, protective of the environment, and respectful of the taxpayers. I look forward to working with Congress and others to achieve this worthy goal. I will be happy to answer questions.

EM'S COMPLEX WIDE PERFORMANCE MEASURES*

Performance Measure	Unit	FY2003 Target	FY2003 Actual	FY2004 Target	FY2005 Target	Actual Lifestyle Through FY2003	Lifestyle Scope
Pu packaged for long-term disposition	# Cont.	2,836	3,065	1,323	165	4,549	5,850
eU packaged for disposition	# Cont.	277	201	925	669	2,054	9,101
Pu/U residues packaged for disposition	kg Bulk	934	1,140	254	76	107,659	107,782
DU & U packaged for disposition	MT	1,815	4,551	0	0	7,651	742,149
Liquid Waste eliminated	gallons (1000s)	700	0	1,300	1,900	0	88,000
Liquid Waste Tanks closed	# Tanks	1	0	9	9	2	241
HLW packaged for disposition	# Cont.	130	115	250	250	1,727	18,735
SNF packaged for disposition	MTHM	857	807	633	1	1,446	2,420
TRU disposed	m3	4,522	6,361	12,952	13,678	14,081	141,314
LL/LLMW disposed	m3	75,030	118,362	89,815	107,067	402,568	1,155,360
MAAs eliminated	# MAA's	0	1	1	1	7	14
Nuclear Facility Completions	# Facs.	2	4	6	14	22	518
Radioactive Facility Completions	# Facs.	7	24	39	66	149	799
Industrial Facility Completions	# Facs.	49	107	105	201	653	2,647
Geographic Sites Eliminated	Sites	2	1	0	2	76	114
Remediation Complete	# Rel. Sites	214	258	200	283	5,186	10,374

*Each of EM's 16 corporate performance measures is quantitative and focuses on those materials, wastes, environmental media, and facilities that comprise the majority of the risk to environment, public health, and safety. When these measures are completed, the EM program has accomplished its mission. Each measure is tracked in the context of the total life-cycle on 2035 accelerated schedule. The corporate performance measures are under strict configuration control, thereby establishing performance expectations and accountability. Through strict configuration control, EM is able to make crucial corporate decisions that will keep the program on track, monitor and control costs, and manage site closure expectations.

Consistent with Rev 9 of the Gold Chart (4/22/04).

The CHAIRMAN. Thank you very much.

We went well beyond the time allotted, but I think you deserved the opportunity to explain your theory and your accomplishments as you see them.

Now let us go to Mr. Friedman, Inspector General of the Department.

STATEMENT OF GREGORY H. FRIEDMAN, INSPECTOR GENERAL, DEPARTMENT OF ENERGY, ACCOMPANIED BY JOHN HARTMAN, ASSISTANT INSPECTOR GENERAL FOR INVESTIGATIONS, DEPARTMENT OF ENERGY

Mr. FRIEDMAN. Good morning, Mr. Chairman and members of the committee.

I have a full statement which I would like to submit for the record and I will give an abbreviated statement. I am pleased to be here today to respond to your request to testify regarding recent allegations associated with occupational medical services and tank farm vapor exposures at the Hanford site. I am joined this morning at the witness table by Mr. John Hartman, the Assistant Inspector General for Investigations.

The CHAIRMAN. Is that him right there? Nice to have you.

Mr. FRIEDMAN. For several years my office has identified environmental cleanup and worker and community safety as significant challenges facing the Department. In 2003 the Office of Inspector General initiated an audit addressing whether the Department's Computerized Accident and Incident Reporting System, commonly referred to as CAIRS, contained accurate data. CAIRS is used by the Department to track occupational injuries and illness data. It provides management with the ability to calculate workplace safety indicators.

In addition, in conjunction with this audit we conducted a limited review of accident and injury records to determine whether Hanford site contractors had correctly classified 45 chemical vapor exposure incidents that had been made public in September 2003.

Further, in February 2004, at the request of the Secretary of Energy, we initiated an investigation to address allegations of criminal misconduct associated with occupational medical services provided to Department and contractor employees at the Hanford site.

Today I will discuss the results of these three reviews. In May of this year we issued an audit report that addressed the accuracy of data in CAIRS. This was a Department-wide review that included the Hanford site. Overall, we found there were inaccuracies in CAIRS data for a number of contractors. We concluded that this occurred because of weaknesses in the Department's quality assurance process over injury and illness reporting to CAIRS. Specifically, errors were not promptly corrected and there was no standard procedure for the Department or its contractors to reconcile data.

With respect to the Hanford site, we found that in 2002 Bechtel National, the contractor responsible for managing and operating the waste treatment and immobilization plant, internally reported 1,113 days of restricted work activity for its work force, while CAIRS listed only 552 days, a discrepancy of 561 days.

We found a similar problem at CH2M HILL Hanford Group, the Department's contractor that manages the tank farm at Hanford. In conducting our review, we noted that CH2M HILL had not performed any reconciliation of its data in CAIRS with Occupational Safety and Health Administration logs. In addition, CH2M HILL did not routinely review data contained in logs utilized for workers compensation purposes. In this regard, we identified eight workers compensation claims that were not reported in CAIRS for the period January 1, 2000, to March 31, 2003.

In the second matter that I referred to, we conducted a review of accident and injury records to determine whether Hanford contractors had correctly classified 45 chemical vapor exposure incidents. We concluded that Hanford contractors had for the most part correctly classified the chemical vapor exposure cases. However, we did find two exposures that were incorrectly classified as non-recordable.

Finally, in February 2004 we initiated an investigation of specific allegations of criminal misconduct, and I emphasize, allegations of criminal misconduct, associated with occupational medical services provided to Department and contractor employees. There were three primary allegations: First, alteration and destruction of medical records by the Hanford Environmental Health Foundation, the Department contractor that provided occupational medicine and industrial hygiene services at the Hanford site; second, false injury reporting by Hanford contractors; and third, cover-up of ammonia vapor readings at the tank farm by contractor employees.

The facts developed during the investigation did not substantiate criminal misconduct with regard to these allegations. We coordinated our investigative findings with the United States Attorney's Office for the Eastern District of Washington, which declined to pursue criminal prosecution in this matter. However, we observed several worker safety and health protocols that need to be addressed by Department managers.

Specifically, the Department needs to ensure that: No. 1, vapor exposure readings are taken in a timely manner following reported exposure incidents and that exposure readings are appropriately documented; second, site employees on work restriction are assigned meaningful duties; third, patient care is not inappropriately influenced by whether the care will make an injury or illness recordable; and fourth, work restrictions following injuries and illnesses are identified and applied in a timely manner.

During our investigation we interviewed over 70 individuals and it became clear that, despite costly health and safety efforts by the Department, a significant number of individuals interviewed had unresolved safety and health concerns about the work at Hanford and the quality of occupational health care provided to employees. We believe management needs to intensify its efforts to improve employee confidence in the occupational health and safety program.

Mr. Chairman and members of the committee, this concludes my statement and I would be pleased to answer any questions.

[The prepared statement of Mr. Friedman follows:]

PREPARED STATEMENT OF GREGORY H. FRIEDMAN, INSPECTOR GENERAL, U.S. DEPARTMENT OF ENERGY

Mr. Chairman and members of the Committee, I am pleased to be here today to respond to your request to testify regarding recent allegations associated with occupational medical services and tank farm vapor exposures at the Hanford Site. During the Cold War, the United States' nuclear weapons complex generated large amounts of hazardous and radioactive waste. The Department of Energy is responsible for the cleanup of numerous contaminated sites and facilities that supported nuclear weapons production activities. Associated with this is the need to protect the safety and health of the Department's workforce and the citizens in the communities surrounding these cleanup sites. For several years, my office has identified environmental cleanup and worker and community safety as significant challenges facing the Department.

In 2003, the Office of Inspector General initiated an audit addressing whether the Department's Computerized Accident/Incident Reporting System (CAIRS) contained accurate data. CAIRS is used by the Department to track occupational injuries and illness data, and it provides management with the ability to calculate workplace safety indicators. In addition, in conjunction with this audit, we conducted a limited review of accident and injury records to determine whether Hanford Site contractors had correctly classified 45 chemical vapor exposure incidents that had been made public in September 2003. Further, in February 2004, at the request of the Secretary of Energy, we initiated an investigation to address allegations of criminal misconduct associated with occupational medical services provided to Department and contractor employees at the Hanford Site.

Today, I will discuss the results of these reviews.

DEPARTMENT'S REPORTING OF OCCUPATIONAL INJURIES AND ILLNESSES (DOE/IG-0648)

On May 21, 2004, the Office of Inspector General issued an audit report that addressed the accuracy of data in CAIRS. The Hanford Site was among the sites included in the review. We found that there were inaccuracies in CAIRS data for a number of contractors. We concluded that this occurred because of weaknesses in the Department's quality assurance process over injury and illness reporting to CAIRS. Specifically, errors were not promptly corrected and there was no standard procedure for the Department or its contractors to reconcile data.

With respect to the Hanford Site, we found that in 2002, Bechtel National Incorporated, the contractor responsible for managing and operating the Waste Treatment and Immobilization Plant at the Hanford Site, internally recorded 1,113 days of restricted work activity for its workforce while CAIRS listed only 552 days, a discrepancy of 561 days. Similarly, in 2002, CH2M HILL Hanford Group, Incorporated (CH2M HILL), the Department contractor that manages the tank farms at Hanford, internally recorded 404 days away from work while CAIRS only listed 303, a discrepancy of 101 days. In conducting our review, we noted that CH2M HILL had not performed any reconciliation of its data in CAIRS with Occupational Safety and Health Administration (OSHA) logs. In addition, CH2M HILL did not routinely review data contained in logs utilized for workers' compensation purposes. In this regard, we identified eight workers' compensation claims that were not reported in CAIRS for the period January 1, 2000, to March 31, 2003.

During the audit, Department management advised us that efforts were underway to address many of the data accuracy issues we identified. For example, shortly after a draft of our audit report was issued, the Department published the *Environment, Safety and Health Reporting Manual*, which required electronic reporting of data to CAIRS, strengthened verification procedures, and clarified roles and responsibilities.

Our report recommendations included that the Department revise its policy to improve the accuracy and usefulness of data in CAIRS by requiring quarterly reconciliation of the various sources of contractor data with CAIRS.

Management generally concurred with our recommendations, but advised us that it believed the report overstated the implications of CAIRS data errors. In our opinion, data quality problems such as those observed during our audit had the potential to affect the accuracy of occupational injury and illness indicators. These indicators provide the Department with the ability to assess the complex-wide effectiveness of its safety programs and to modify procedures to resolve recurring occupational injury and illness issues.

REVIEW OF SELECTED ISSUES PERTAINING TO VAPOR INHALATION ALLEGATIONS AT THE HANFORD SITE (OAS-L-04-14)

As part of our audit of CAIRS, we conducted a limited review of accident and injury records to determine whether Hanford contractors had correctly classified 45 chemical vapor exposure incidents that had been made public in September 2003. Our review involved the examination of data drawn from employee records and contractor-maintained occupational injury and illness files. We concluded that Hanford contractors had, for the most part, correctly classified the chemical vapor exposure cases. Of the 45 items examined:

- Thirty-five cases appeared to have been appropriately classified;
- Two exposures were incorrectly classified as non-recordable;
- Four cases were not discrete incidents and duplicated other cases; therefore, they were excluded from the universe of cases we reviewed; and
- Four purported exposures could not be appropriately evaluated because we were unable to obtain sufficient information as to their existence and/or nature.

To determine if the cases were correctly classified, we used rules promulgated by OSHA. The OSHA definition of "recordable" incidents includes work-related injuries and illnesses that result in medical treatment beyond first aid, days away from work, restricted work activity, job transfer, loss of consciousness, cancer, chronic irreversible disease, or death. Recordable injuries and illness are required to be logged onto a *Log of Work-Related Injuries and Illnesses* (Form 300)—also known as OSHA 300 logs.

INVESTIGATION OF ALLEGATIONS INVOLVING OCCUPATIONAL MEDICAL SERVICES AND TANK FARM VAPOR EXPOSURES AT THE HANFORD SITE (I04RL003)

In February 2004, in response to a request from the Secretary of Energy, we initiated an investigation of specific allegations of criminal misconduct associated with occupational medical services provided to Department and contractor employees at the Hanford Site. There were three primary allegations:

- Alteration and destruction of medical records by the Hanford Environmental Health Foundation (the Foundation), the Department contractor that provided occupational medicine and industrial hygiene services to about 11,000 contractor and Federal workers on the Hanford Site;
- False injury reporting by Hanford contractors; and
- Cover-up of ammonia vapor readings at the tank farms by contractor employees.

This was a criminal investigation of specific alleged events and activities. Thus, we did not focus on general concerns with mismanagement, the technical aspects of tank vapor monitoring activities, whether medical services met professional standards, or the merit of individual worker's compensation claims. It was our understanding that these topics were included, either directly or indirectly, in other concurrent reviews involving the Hanford Site. In this regard, during the course of our investigation, we furnished relevant information regarding potential administrative or operational irregularities at Hanford to other offices performing programmatic reviews of these subjects.

As part of our investigation, we conducted extensive interviews of over 70 current and former Department Federal and contractor employees at Hanford and obtained and analyzed volumes of documents. We also retained the services of an independent medical and OSHA regulations specialist to review medical files and safety records. During our investigation, we coordinated with the United States Attorney's Office for the Eastern District of Washington. At the conclusion of our fieldwork, we provided details of our investigative findings to the United States Attorney, the Chief of the Criminal Division, and an Assistant United States Attorney. The United States Attorney's Office declined to pursue criminal prosecution in this matter. The following are the results of our investigation:

Alleged inappropriate changes to patients' medical files by Foundation personnel

It was alleged that changes were made to patients' medical files by Foundation personnel that resulted in the misrepresentation of the nature, cause, extent, and/or severity of injuries or illnesses. Individuals believed that the changes were often prompted by pressure placed on Foundation physicians by contractor safety representatives. It was also alleged that the Foundation recently shredded documents, presumably to destroy evidence of wrongdoing.

The facts developed during the investigation did not substantiate criminal misconduct with regard to the alteration and destruction allegations. Further, the independent medical and OSHA specialist we retained reviewed a sample of files relat-

ing to worker injuries and illnesses at the Hanford Site, including patient medical files, contractor safety files, and related documentation. The sample was drawn from a universe of cases identified—primarily by witnesses we interviewed—as potentially having improper alterations, documents removed, or issues relating to recordability. The specialist reported that: (1) the Foundation medical files were detailed, well-organized, and consistent with standard medical practices; (2) changes and modifications to documents and/or entries in medical files appeared to be reasonable and proper; and (3) no improper alteration, destruction, and/or manipulation of records was identified.

Alleged false injury reporting by Hanford contractors

It was alleged that there was an ongoing conspiracy between the Hanford Site contractors' safety representatives and Foundation management to avoid creating and documenting recordable injuries. Witnesses provided examples in which contractors allegedly required injured workers who should have stayed home to report to work but perform no duties. We also examined aspects of contractor input of data into CAIRS.

The facts developed during the investigation did not substantiate criminal misconduct with regard to injury or illness reporting. However, the investigation did verify a single instance in 1999 where a former Hanford Site subcontractor encouraged an injured employee to report to work following a work-related injury, yet the subcontractor had the employee perform no duties for five days. The employee remained on restricted duty for another 24 days. The subcontractor did not conceal the nature or cause of the injury itself, and it was documented as "recordable." The subcontractor's actions were, nonetheless, troubling.

Alleged cover-up of ammonia vapor readings at the tank farms by contractor employees

It was alleged that employees of CH2M HILL had taken steps to cover up excessively high vapor exposure readings at the tank farms. High exposure readings allegedly were either misrepresented or not documented. Our investigation focused on the two specific vapor exposure incidents provided as examples by witnesses.

The facts developed during the investigation did not substantiate criminal misconduct relating to alleged cover-up of vapor readings. With respect to the first incident, we identified conflicting testimony among various witnesses. We were unable to reconcile the differences through other witnesses or available documentation, and no independent corroborating evidence was found to support either version of events with certainty. With respect to the second incident, two witnesses initially identified to us as having valuable information did not provide such corroborating information.

Other alleged potential violations of law

It was also alleged that: (1) the Foundation artificially inflated results in an annual performance self-assessment report; (2) a Department supervisor improperly removed relevant information from a report that was critical of a contractor's occupational injury and illness reporting and recordkeeping program; (3) the Foundation improperly maintained two sets of medical records; and (4) there was a conspiracy to develop an intentionally vague "Record of Visit," a form that is used by the Foundation to record assorted information about a patient's visit, in order to facilitate the underreporting of injuries and illnesses.

The facts developed during the investigation did not substantiate criminal misconduct with regard to these allegations. However, we received conflicting testimony from various witnesses with respect to the annual self-assessment allegation, and we were unable to reconcile these differences through other witnesses or available documentation. No facts were developed to support the other allegations in this area.

Although criminal allegations were the focus of our investigation, we observed several worker health and safety protocols that we believed needed to be addressed by Federal managers at the Hanford Site. Specifically, we believed action was needed to ensure that:

- Industrial Hygiene Technicians take vapor exposure readings in a timely manner following reported exposure incidents at the tank farms and document exposure readings in appropriate reports. During an examination of the vapor exposure cover-up allegation, we determined that a Technician failed to record vapor monitoring data on a "Direct Reading Instrument" survey form, as required by the contractor's tank farm monitoring policies and procedures. The reading was recorded instead in a log book. Additionally, the vapor reading was not taken until approximately two hours after the exposure was reported.

- Site employees on work restriction are assigned meaningful duties. As noted previously, we identified a troubling instance in 1999 where a former Hanford Site subcontractor encouraged an injured worker to show up at the job site but perform no duties, rather than remain at home. Despite the placement of work restrictions on this employee and documenting the injury as "recordable," the subcontractor's actions raise questions about its practices.
- Patient care is not inappropriately influenced by whether the care will make an injury or illness "recordable." We identified internal Foundation e-mails that some recipients interpreted as encouraging physicians to emphasize recordability of injuries over patient standard of care. We received no confirmation that care was, in fact, improperly compromised. However, unclear communications such as these appear to have led to concerns over the provision of patient care.
- Work restrictions following injuries and illnesses are identified and applied in a timely manner. We identified a particular worker who was not given an immediate work restriction following a diagnosis for beryllium sensitivity, in accordance with standard medical practice.

As noted previously, we interviewed over 70 individuals with knowledge of relevant operations at the Hanford Site. During this process, it became clear that, despite major health and safety efforts by the Department, a significant number of individuals interviewed had unresolved concerns about the safety of the work at Hanford, the potential for health problems as a result of this work, and the quality of occupational health care provided to Hanford employees. Given the challenges at Hanford, where the acknowledged risks to the workforce are significant, some level of concern would be understandable even if the Department's occupational health program worked perfectly. However, the number, scope, and continuing nature of the employee and citizen concerns we heard during our investigation suggest that management needs to intensify its efforts to improve employee confidence in the occupational health and safety program at Hanford. One example of an action we believe would be beneficial is evaluating current mechanisms for receiving, analyzing, and addressing employee complaints about occupational medical services. A more effective and robust program for dealing with employee concerns has the prospect of building employee and public confidence in worker safety at the Hanford Site.

CONCLUSION

The Office of Inspector General has provided its findings and conclusions with respect to these three reviews to the Department for immediate action, as well as for consideration in its overall assessment regarding the serious issues that have been raised regarding worker safety and health at the Hanford Site.

Mr. Chairman and members of the Committee, this concludes my statement. I will be pleased to answer any questions.

The CHAIRMAN. Thank you very much.

Mr. Podonsky.

STATEMENT OF GLENN S. PODONSKY, DIRECTOR, OFFICE OF SECURITY AND SAFETY PERFORMANCE ASSURANCE, DEPARTMENT OF ENERGY, ACCOMPANIED BY PATRICIA WORTHINGTON, PH.D., DIRECTOR, OFFICE OF ENVIRONMENT, SAFETY, AND HEALTH OVERSIGHT, DEPARTMENT OF ENERGY

Mr. PODONSKY. Thank you very much, Mr. Chairman and members of the committee, for inviting me to testify today.

Accompanying me today is Dr. Pat Worthington, my Director of Office of Environment, Safety, and Health Oversight and also the team leader on the recent independent oversight investigation at the Hanford site.

The Secretary of Energy directed us to conduct this investigation, which focused on selected aspects of worker safety, with the emphasis on the tank farms and the potential for workers being exposed to hazardous vapors. We have issued an investigation report that presents the results of our investigation and I would like to

request that my written statement, which presents the key results, be entered into the record.

The CHAIRMAN. It will be.

Mr. PODONSKY. Thank you.

In February the Secretary directed my Office of Independent Oversight to evaluate the safety-related allegations made by GAP, the Government Accountability Project, in their recent report and to evaluate the root causes of any identified deficiencies. The Secretary made it clear that we were to make this investigation our highest priority.

We started the investigation immediately with a team of 23 of our top experts from various disciplines, including occupational medicine and industrial hygiene.

Concurrently, the Secretary tasked the Office of the Inspector General to evaluate the allegations from the perspective of potential violation of law, as we just heard.

Our final report to the Secretary addresses three major areas: worker vapor exposures, occupational medicine programs, and injury and illness reporting. We found some positive aspects in each of these three areas, but we also identified a number of weaknesses that warrant increased management attention.

In the review of worker vapor exposures, we concluded that there have been no known cases of workers being exposed to chemical vapors at the Hanford site tank farms in excess of regulatory limits, and available sampling data indicates that the worker exposures are low. However, we also concluded that Hanford's personnel sampling data is too limited to completely conclude that no worker has had any exposure that exceeded regulatory thresholds for any chemical to which workers might be exposed.

We found some positive aspects in the ES&H programs, but determined that there were weaknesses in the tank farm industrial hygiene program, hazard analysis and controls, engineered controls, communications, contract feedback systems, and DOE oversight.

The Office of River Protection and its contractor have taken appropriate interim actions, including the use of supplied air respirators, to mitigate worker risks and are evaluating longer term solutions.

In reviewing the occupational medicine program, we concluded that the allegations that workers' medical records were falsified and that workers were given inappropriate medical treatment were not substantiated. We found that occupational medicine program keeps detailed patient records. Although we did not find any major problems in occupational medicine, we did identify areas where improvement is needed, specifically with interfaces between site contractors and oversight.

In the area of injury and illness investigation and reporting, our review of sample reports from the tank far contractor and four other Hanford contractors showed that most injury and illness events were appropriately categorized. We found no egregious examples of misreporting. However, a fraction of the events were in the gray area of the regulation and decisions to treat them as nonrecordable were questionable in a few cases. Despite some time lags and other data quality issues, the DOE Computerized Accident

and Incident Reporting System we believe is providing valuable feedback on injury and illness trends and is useful as a management tool.

The Secretary of Energy is directing the DOE Office of Environmental Management to develop and implement corrective actions to comprehensively and effectively address the findings and recommendations in our report. They are also being directed to coordinate with the State of Washington to ensure that the corrective action plan encompasses the State of Washington's Department of Ecology review, which covered some of the same areas and reached similar conclusions as ours. We will review the corrective action plans and continue to monitor the status.

To summarize, the Office of Independent Oversight and Investigation identified some positive aspects, but a number of improvements are needed in all the areas we reviewed. We believe the interim measures currently in place mitigate the risks associated with the vapor exposures. Early indications are that the site, DOE and contractor organizations are taking timely and appropriate actions to address our findings and recommendations. Continued oversight both at the site level and by independent oversight will be needed to ensure that the actions are effective and provide a high level of worker protection expected by the Secretary.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Podonsky follows:]

PREPARED STATEMENT OF GLENN S. PODONSKY, DIRECTOR, OFFICE OF SECURITY AND SAFETY PERFORMANCE ASSURANCE, DEPARTMENT OF ENERGY

INTRODUCTORY REMARKS

Mr. Chairman and honorable members of the committee, I want to thank you for inviting me to testify today at this hearing on accelerated cleanup of Department of Energy sites.

My testimony will focus on the recent independent oversight investigation at the Hanford Site. As you are aware, the investigation was directed by the Secretary of Energy and focused on selected aspects of worker safety, with emphasis on the Tank Farms and the potential for workers being exposed to hazardous vapors.

We have issued an investigation report that presents a detailed discussion of our investigation methods, findings, conclusions, and recommendations. This testimony will provide a brief overview of the results of that investigation report.

BACKGROUND ON SSA AND OA

Before talking about the investigation, I would like to provide some background on organizational changes that have been directed by the Secretary in the past year, and that may be new to some of you. Secretary Abraham established the relatively new Office of Security and Safety Performance Assurance, known as SSA, in 2003. In my role as the Director of this Office, I report directly to the Secretary and Deputy Secretary. SSA assumes management responsibility for two previously existing staff organizations: the Office of Security, which is responsible for security policy and certain related functions, and the Office of Independent Oversight and Performance Assurance, or OA for short.

OA independently evaluates the effectiveness of policy implementation in the areas of safeguards and security, cyber security, emergency management, and environment, safety and health. OA performed the recent investigation of worker safety at the Hanford Site in accordance with its standard protocols for performing inspections and special reviews of topics and issues in environment, safety, and health-or as we call it, ES&H. These protocols place a great deal of emphasis on ensuring that we have the right expertise to perform the review and that we validate the facts to ensure that we have a solid basis for our conclusions.

BACKGROUND ON THE INVESTIGATION

In February 2004, the Secretary directed me to have OA conduct an investigation at the Hanford Site. We were tasked to evaluate the safety-related allegations made by GAP—the Government Accountability Project—in a report entitled *Knowing Endangerment: Worker Exposure to Toxic Vapors at the Hanford Tank Farms*, published in October 2003. Concurrently, the Secretary tasked the Office of the Inspector General to evaluate the allegations from the perspective of potential violations of law.

Although OA was specifically tasked to look at the safety-related aspects of the GAP allegations, the Secretary gave us considerable latitude to examine the allegations in the broader context of the safety management systems at the Tank Farms. In a number of areas, we looked not only at the specific allegations but also at the effectiveness of the relevant ES&H programs and management systems. For example, we took a broad look at engineered controls and engineering design processes in addition to specific allegations documented by GAP about equipment problems. We also extended our review of injury and illness reporting practices by evaluating all Hanford Site prime contractors. We took a broader look so that we would be better positioned to evaluate the allegations and the root causes of any deficiencies.

When directing the investigation, the Secretary made it clear that OA was to make the investigation its highest priority. OA started the investigation immediately and conducted an extensive evaluation of all safety-related GAP allegations on an accelerated schedule. The OA team conducted four site visits (two of which lasted two weeks each) from February to April 2004.

For this investigation, OA assembled a team of 23 of our top experts from various disciplines, including occupational medicine, industrial hygiene, radiological protection, nuclear engineering, waste management, environmental protection, chemistry, maintenance, operations, and management systems. The OA team included individuals from other DOE sites, who had specialized expertise in industrial hygiene and Tank Farm operations. OA also designed and implemented a sampling strategy to independently collect vapor samples from a number of storage tanks, as well as selected workplaces and worker breathing zones, and to have them analyzed by a certified laboratory.

We provided our final report to the Secretary on April 19, 2004, addressing three major areas: worker vapor exposures, occupational medicine programs, and injury and illness reporting. These three areas directly addressed the major allegations made by GAP. As the report documents, we found some positive aspects in each of these three areas, but we also identified a number of weaknesses that warrant increased management attention. I will very briefly go over some of the key results in the three areas.

WORKER VAPOR EXPOSURES

In the review of worker vapor exposures, OA examined current and past worker safety practices to determine their effectiveness in preventing worker exposures to vapors and other hazardous materials that could cause illnesses. The review included engineered systems as well as the various administrative controls and processes by which Tank Farm workers may raise safety questions or concerns.

Before I outline our conclusions, it is important to recognize that worker vapor exposures are not a new issue at the Hanford Site Tank Farms. The DOE Office of River Protection and the Tank Farm contractor, and their predecessors, have developed a number of initiatives over the past 20 years to address vapor exposure issues. In the past two years, these organizations have taken a number of actions to better understand and prevent vapor exposure events. For example, they established a major program to evaluate and develop better administrative and engineered controls. In reviewing these initiatives, OA found that some were appropriate but were not sufficiently comprehensive, and were in various stages of development and implementation.

We concluded, first of all, that there have been no known cases of workers being exposed to chemical vapors at the Hanford Site Tank Farm in excess of regulatory limits, and available sampling data indicates that worker exposures are low. However, we also concluded that Hanford's personal sampling data is too limited to conclude that no worker has had any exposure that exceeded regulatory thresholds for any chemical to which workers might be exposed.

As our report describes in detail, we found some positive aspects in the ES&H programs. For example, the Office of River Protection and its contractor had chartered a number of industrial hygiene reviews and, as a result, had increased the use of respiratory protection. We also saw cases where these organizations had used engineered controls in an attempt to mitigate vapor releases at tanks that were

known to cause problems. However, we concluded that the Tank Farm industrial hygiene program has vulnerabilities that reduced its effectiveness and need to be corrected to ensure that workers are not overexposed to Tank Farm chemical vapors.

We also determined that weaknesses in hazard analysis and controls, engineered controls, communications, contractor feedback systems, and DOE oversight contributed to or exacerbated the weaknesses in the industrial hygiene program. Hazard analysis processes are not sufficiently rigorous in some cases. Increased attention is needed in the area of engineering design and support. For example, some tanks did not have pressure release valves as specified by design codes. In some cases, ORP and its contractor are conducting good assessments and self-identifying deficiencies; however, the corrective action management processes also need to be more rigorous to ensure that self-identified deficiencies and their root causes are corrected.

Clearly, these weaknesses need continued and increased attention to develop comprehensive, long-term solutions. At the time we completed our investigation and in subsequent contacts, we believe that the Office of River Protection and its contractor are taking appropriate actions to evaluate additional engineered controls, such as evaluating engineered dilution (e.g., stacks) and abatement (e.g., scrubbers) systems, and to enhance the industrial hygiene program, including better characterizing the tank head spaces and better monitoring of workspaces and personal breathing zones. It is also important to recognize that these organizations took the significant step of requiring additional respirator protection, including supplied air respirators, for much of the work at the tank farms, while longer-term solutions are evaluated. These conservative interim measures are appropriate to enhance improve worker safety, while longer-term solutions are evaluated.

In addition to the findings—there were 18 formal findings across the three areas investigated—the OA report provided a number of recommendations for improving the systems that protect workers from vapor exposures. These recommendations cover a broad range, from specific technical issues, such as the need to install dilution systems on certain tanks or equipment, to broad recommendations for improving management oversight. The Secretary has directed that line management—from DOE Headquarters to the Office of River Protection to the site contractor—evaluate the OA findings and recommendations and ensure that comprehensive and effective actions are taken. Based on our more recent contacts with site personnel, it appears that the site is already implementing a number of appropriate actions and plans to do more.

OCCUPATIONAL MEDICINE PROGRAM

In reviewing the occupational medicine program, OA examined current and past occupational medicine program practices, focusing on aspects relevant to the recent GAP allegations. OA reviewed the medical treatment of Tank Farm workers, focusing on those with vapor exposures, and also examined occupational medicine program issues for site-wide applicability.

The GAP allegations that workers' medical records were falsified and that workers were given inappropriate medical treatment were not substantiated by our review. We found that the occupational medicine program keeps detailed patient records, and all changes and corrections in the records are fully documented and explained. OA found no instances where medical treatment was lacking or inappropriate. In fact, we determined that medical records were detailed and well organized, and are controlled by strict record-keeping practices. Laboratory and other medical tests, a part of the vapor exposure exam protocol, were accomplished (unless declined by the employee). The OA team found the clinical practices and protocols to be consistent with standard occupational medical practices.

Although we did not find any major problems in occupational medicine, we did identify areas where improvement is warranted. For example, in a few cases, the records of workers' visits did not give the employers enough information about workers' medications to ensure that the employers could correctly determine whether that information should be reported to the Occupational Safety and Health Administration (OSHA).

In addition, stronger interfaces and communication between the medical program contractor and site operating contractors would help ensure that relevant information is exchanged. The Richland Operations Office has not established the necessary interfaces between prime contractors and the occupational medicine program to address the integration of occupational medicine program services as required by DOE occupational medicine directives and contractor requirements. Weaknesses were found in some administrative Hanford Environmental Health Foundation (HEHF)

protocols. For example, communications to professional staff were not always effective and contributed to misunderstandings and conflict among staff. Protocols also did not address the proper completion of records of visits to assure that case managers were provided accurate information for properly categorizing work-related incidents. Richland Operations Office oversight of the occupational medical program has been limited, and needs to be more rigorous as the site transitions to a new occupational medical service contractor.

Injury and Illness Reporting (Sitewide)

In the area of injury and illness investigation and reporting, OA evaluated the adequacy of the injury and illness policies and processes for the tank farm contractor and the other Hanford Site prime contractors. OA reviewed documentation related to injuries and illnesses to determine whether contractor policies and procedures have been properly implemented and whether DOE and OSHA requirements have been met. Selected workers involved in Tank Farm exposure incidents were interviewed to determine the effectiveness of illness and injury reporting.

OA's review of a sample of reports from the tank farm contractor and four other Hanford contractors showed that most injury and illness events were appropriately categorized. We found no egregious examples of misreporting. However, a fraction of the events were in gray areas of the regulation, and decisions to treat them as non-recordable were questionable in a few cases. In addition, there continue to be discrepancies between reported events (OSHA 300 logs) and the DOE Computerized

Accident/Incident Reporting System (or CAIRS for short) which is used to report performance metric data to senior DOE management. These discrepancies occur primarily because of data entry time lags and record keeping errors. Based on the OA investigation and other recent oversight activities, we believe that despite some time lags and other data quality issues, CAIRS is providing valuable feedback on injury and illness trends and is a useful management tool. Further, the appropriate DOE Headquarters organizations are taking appropriate actions to improve injury and illness reporting across Environmental Management sites, including actions to improve the timeliness of CAIRS data.

Planned Actions

Before closing, I will take a minute to summarize the ongoing and planned actions. The Secretary of Energy has directed the DOE Office of Environmental Management to work with the DOE Richland Operations Office and the Office of River Protection and their respective contractors to develop and implement corrective action plans to comprehensively and effectively address the findings in the OA report. EM has also been directed to coordinate with the State of Washington to ensure that the corrective action plan encompasses the State of Washington Department of Ecology review, which covered some of the same areas as OA and reached similar conclusions, as well as the OA and IG reviews. The Secretary also directed the Office of Environment, Safety and Health to continue ongoing actions to ensure that CAIRS data is accurate and timely. Hanford Site line management is required to develop formal corrective action plans for the 18 findings identified in the OA report. OA will comment on the corrective actions plans as appropriate and monitor the status as part of its independent oversight role. In fact, the OA investigation team leader has had several contacts with site personnel since the investigation was completed and has been informed about the status of the ongoing and planned actions.

CLOSING REMARKS

To summarize, the OA investigation identified some positive aspects. There are no known cases of exposures in excess of regulatory limits and the medical program provides quality health care. However, improvements are needed in all of the areas reviewed. The most significant concerns relate to the potential for vapor exposures to Tank Farm workers. The interim measures currently in place mitigate the immediate risk, but increased management attention is needed to ensure that long-term solutions are implemented and verified to be effective. Improvements are also needed in various aspects of management systems for DOE organizations and contractors at the Hanford Site, including corrective action management, engineering support, communications, and line management oversight. Early indications are that the site DOE and contractor organizations are taking timely and appropriate actions to address the findings and recommendations in the OA report. Continued oversight both at the site level and by OA will be needed to ensure that the actions are effective and provide the high level of worker protection expected by the Secretary.

Thank you. This concludes my prepared testimony.

The CHAIRMAN. Thank you very much.

Senator Smith, thank you for joining us. Did you want to make some remarks? Everybody had a couple.

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

Senator SMITH. Thank you. In the interest of time, Mr. Chairman, I will put my statement in the record and thank you for responding to the letter that Senator Cantwell and I sent requesting this hearing. It is very important.

[The prepared statement of Senator Smith follows:]

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

Mr. Chairman, I appreciate your willingness to convene this important oversight hearing to receive testimony regarding the Department of Energy's Environmental Management Program and issues related to the accelerated cleanup of the Hanford, Idaho and Savannah River sites.

In February, I joined with my colleague, Senator Cantwell, in requesting this oversight hearing. At the time, there were ongoing reports that concerns over worker safety at the Hanford Site were not being taken seriously in the push to speed the cleanup.

Regionally, for the millions of Northwesterners who find themselves in either in the immediate vicinity—or downstream—of the Hanford site, the accelerated cleanup schedule and the handling and shipment of additional transuranic waste to Hanford are issues of the utmost importance.

Cleaning up nuclear waste must never be about cutting corners to save money. It must always be about eliminating the environmental hazards created by defense nuclear production, and worsened at Hanford by leaking storage tanks. The United States has an obligation to protect the Columbia River and the people of the Pacific Northwest. I will never settle for short-cuts and pinching pennies in the clean-up of the Hanford Site.

The Hanford Site is a 586-square-mile area located along the Columbia River in southeastern Washington State. For almost 40 years, it was a production site for nuclear materials for our nation's defense.

Now it is the world's largest environmental cleanup project, and the challenges are numerous. They include more than 50 million gallons of high level liquid waste in 177 underground storage tanks, 2,300 tons of spent nuclear fuel, 12 tons of plutonium in various forms, and 500 contaminated facilities.

Of vital concern to Oregon, there are about 270 billion gallons of contaminated groundwater, spread out over about 80 square miles, that is leaching ever closer to the Columbia River.

Oregonians and Washingtonians want this site cleaned up, and the waste transported to a long-term repository. A glass vitrification plant to process tank waste is currently under construction. Initially, all of the tank waste was supposed to be vitrified. However, in May 2002, the Department of Energy announced that it planned to study multiple "supplemental technologies" that might be used to treat as much as two-thirds of the underground tank waste.

In December 2003, without any advance notice or opportunity for input, the Department selected a single technology that could be used to treat as much as 34 million gallons of tank waste. I have joined with other Northwest Members to ask that the Appropriations Committee compel the Department of Energy to fully fund at least two detailed scientific studies into supplemental technologies at Hanford.

We have also asked that the Department prepare a report on worker safety allegations and the steps taken to address any potential problems. I know that CH2M HILL has undertaken a number of actions to improve worker safety at the Hanford site, particularly for those workers operating near the tank farms, and they are to be commended for undertaking these measures.

I have also reviewed the memorandum from Gregory Friedman, the Inspector General for the Department of Energy, to the Secretary summarizing the findings of the Inspector General's investigation into allegations involving occupational medical services and tank farm vapor exposures at Hanford.

In his conclusion, Mr. Friedman made the following insightful remarks: "Given the challenges at Hanford, where the acknowledged risks to the workforce are sig-

nificant, some level of concern would be understandable even if the Department's occupational health program worked perfectly. However, the number, scope, and continued nature of the employee and citizen concerns we heard during our investigation suggest that management needs to intensify its efforts to improve employee confidence in the occupational health and safety program at Hanford."

Mr. Chairman, I am confident that this Committee, under your leadership, will remain diligent in its oversight role to ensure that these worker safety efforts are indeed intensified, and that accelerated clean-up of these sights doesn't shortchange the workers, or future generations.

The CHAIRMAN. You are welcome.

I think we are going to have time to let you two Senators get your points out. I will nonetheless take a few minutes, I assume Senator Bingaman will, and then we will move as quickly as we can.

I guess I would like to try in my own way to simplify this. I do not know if I can. Mr. Friedman, in your capacity with the Department would you quickly describe what your mission is? What were you charged to do in this investigation?

Mr. FRIEDMAN. In this particular investigation? Actually, Mr. Chairman, the direction, the directive from the Secretary—I described three particular, three individual efforts on our part. The specific with regard to the criminal investigation, the Secretary broadly charged both Mr. Podonsky and me to look at issues relating to the allegations at Hanford. I decided that it made sense not to have too many duplicative, repetitive investigations, reviews, ongoing at one time and that I would carve out the piece that we were I think uniquely charged with, which is the criminal aspects, whether there was any criminal conduct. So that was the charge as I saw it.

The CHAIRMAN. Now, is that, is the addressing and investigation of that issue normal and the kind that you would do in your capacity as we described it heretofore?

Mr. FRIEDMAN. It is.

The CHAIRMAN. Now, can I summarize it by saying, with reference to that question which you were charged to address, to wit criminal activities with reference to the Hanford project, that you found no evidence of criminal activity?

Mr. FRIEDMAN. That is correct, and we, as I indicated, we closely worked with the United States Attorney's Office and ultimately provided them with a detailed briefing at the end of our investigation, and they found no reason to take further action.

The CHAIRMAN. Mr. Podonsky, what is your mission with reference to the allegations which will be talked about later by others? What were you charged with and was it within the purview of your responsibility?

Mr. PODONSKY. Mr. Chairman, first, to answer that question I would appreciate if the committee would indulge me to let me give a little background of what my office does for the Department.

The CHAIRMAN. Please.

Mr. PODONSKY. It is rather unique to the executive branch. We do not do waste, fraud, or abuse investigations. That is clearly within the purview of the Inspector General's Office. We do oversight of the Department of Energy for environment, safety, health, safeguards, security, cyber security, emergency management. The purpose is to report back to the management of the Department on

how well they are performing within not just compliance with DOE requirements, but also how well they are performing because we understand oftentimes you can be in total compliance and have terrible performance.

So in all the disciplines I just mentioned, we oversee all the activities for both NNSA, advise the Administrator as well as the Secretary for the ESE activities.

Dr. Worthington is my Office Director for the Oversight of Environment, Safety, and Health. The Secretary charged us in February to go out to Hanford to investigate the allegations contained in the GAP report, and those allegations we characterize into worker safety in terms of occupational medicine, in terms of the vapor exposures, as well as the CAIRS reporting system. That is totally within the charter and what Congress funds us to do.

The CHAIRMAN. Now, you did that and are you telling this committee—I think you have, but let us ask you again—that I reviewing this you found no situation where the Department had violated the rules that you were charged with interpreting on the site with reference to either violating or complying with them?

Mr. PODONSKY. I would not describe it as not violating any of the rules. I would describe it that we saw issues that were contained in the GAP report that required further actions by the Office of Environmental Management and the site office to correct. We did not find any egregious connection to some of the allegations in the GAP report. So it is not quite no violations, it is not quite not being in compliance; it is more about not necessarily performing at the level that we would like them to perform at in all areas.

However, we did note, as I made in my statement as well as my written statement, they are moving toward improving on most of these areas.

The CHAIRMAN. Now, Ms. Roberson, you are the head of all this and you have heard the testimony and I assume that your office has been the subject matter of these investigations. Will you tell the committee: one, did you participate and accommodate Mr. Friedman and Mr. Podonsky as they attempted to do their work?

Ms. ROBERSON. Mr. Chairman, I think that they would both say that we openly and honestly and quite committedly did participate and support their reviews and investigations. Further, we have either implemented or are in the process of implementing corrective actions. I would also say in some areas we had actually initiated corrective actions based upon reviews that we, the program, had initiated before these investigations or reviews.

The CHAIRMAN. Now, all three of you, if it is not your job just say so; but if it is, answer the question. Mr. Friedman, Ms. Roberson, Mr. Podonsky: In your capacity on the job and the rules that you interpret and govern, was anything done on this project that was, in your opinion, in violation of the rules and responsibilities that are imposed upon Jessie Roberson as she attempted to comply and do this job?

Did you get the question?

Mr. FRIEDMAN. I am not sure, Mr. Chairman. Could you give me a shot at that again?

The CHAIRMAN. Would you repeat it?

The REPORTER. "In your capacity on the job and the rules that you interpret and govern, was anything done on this project that was, in your opinion, in violation of the rules and responsibilities that are imposed upon Jessie Roberson as she attempted to comply and do this job?"

Mr. FRIEDMAN. I do not want to personalize it to Jessie Roberson. Certainly she is the head of the environmental program from a personal responsibility. From a purely criminal aspect, we did not find any corroboration for the allegations. We did identify three or four management issues, which were not the primary focus of our investigation, which was a criminal investigation, which were included in our report and which are things that we believe the Department needs to address.

The CHAIRMAN. Mr. Podonsky.

Mr. PODONSKY. You do not need to repeat the question. We do not believe that there was any violations. What we are about is evaluating the performance of the management in the application to worker safety, and what we saw was initiatives under way, as Ms. Roberson just mentioned. But we also, being critics of the Department internal, we found that there were areas to be improved.

Ms. ROBERSON. May I answer that, Mr. Chairman?

The CHAIRMAN. Yes, ma'am.

Ms. ROBERSON. I can assure you Jessie Roberson did not violate any of the rules that were being imposed on her by the Department.

The CHAIRMAN. Thank you.

Senator Bingaman.

Senator BINGAMAN. Thank you, Mr. Chairman.

Let me ask Ms. Roberson first on this issue about the change in law that the Department has advocated and I gather the Senate is now adopting as part of the defense bill, to essentially permit DOE to agree with States for the leaving of certain amounts of what was previously thought to be high-level waste in those States. You stated, as I understood it, in your testimony if the NRC standards—you indicated the NRC standards are in all cases being met?

Ms. ROBERSON. The performance requirements for leaving waste, we have to meet the performance requirements for low-level wastes, the NRC requirements.

Senator BINGAMAN. For low-level waste you are saying?

Ms. ROBERSON. That is exactly right. To dispose of waste as low-level waste, we must meet those performance requirements.

Senator BINGAMAN. My understanding is the language we have been presented with and that the Senate has adopted calls for the NRC to have a rule on the issue of ensuring that high-level radioactive radionuclides have been removed to the maximum extent practicable or that criteria be provided by the Nuclear Regulatory Commission. The problem that I had and I think some other Senators may have had with the language the Senate is evidently adopting now is that you have got the Department of Energy making the determination as to whether or not the NRC criteria has been complied with. You have got the Department of Energy making the determination as to whether the removal has been done to the maximum extent practicable, rather than the NRC.

Why shouldn't the NRC be making the determination that its criteria have been met?

Ms. ROBERSON. Well, I have to say I am not—I do not really fully understand the language as it resulted from the Senate actions yesterday. To my understanding there was some change in that language. What the Department from the very beginning, almost a year ago when I testified in front of the House, the House subcommittee on this topic, subcommittee for oversight on this topic—the Department in all of its tank activities and its closures has collaborated with the NRC.

The first two tanks we closed at Savannah River, even before putting in place our DOE Order 435.1, we also collaborated with the NRC.

Senator BINGAMAN. I think collaboration is a good idea, but why doesn't the NRC have the ultimate responsibility in the case of these tanks for determining whether or not their criteria have been met?

Ms. ROBERSON. Well, the NRC has held the position, and it has been validated by court ruling, that the NRC did not have regulatory authority over DOE in this area.

Senator BINGAMAN. But if we are going to change the law to loosen the requirements essentially for the handling of this high-level waste, why do we not provide that the NRC step in and make a determination that its criteria has been met?

Ms. ROBERSON. Senator Bingaman, I would say I do not believe we are loosening the law. The Department does believe it has been complying with the law. And if the Congress's determination is that NRC will have that role, a greater role, then the Department obviously is going to comply with that.

Senator BINGAMAN. But you do not believe they should have that role?

Ms. ROBERSON. I do not believe it is essential. We have worked extremely closely with the NRC. For the last decade the Department has, even before I was here, has paralleled their process. The NRC, as you well know, has endorsed the process that we are using. I do not believe it is necessary, but that certainly is a choice of the Congress.

Senator BINGAMAN. Well, let me just say for the record that I would feel much more comfortable if the NRC actually had to make the determination that its own criteria had been met, rather than leaving that up to the Department of Energy.

Let me move to another issue. In the fiscal year 2005 budget submission, your office proposed creating an Office of Future Liabilities to handle facility decommissioning and other environmental liabilities that are not assigned to your office. You also state in there that the needs in this area are expected to grow substantially. Can you be more precise about what these needs are? What are the things that your office is not going to be responsible for and that we need to establish a separate Office of Future Liabilities for and how substantial is the growth in those as you see it?

Ms. ROBERSON. The Department's plan, proposal, for establishing the Office of Future Liabilities really was a sunset office. You have the Environmental Management program which is working very hard to address the issues that are within its purview right now.

There are more than 100 facilities that are still in operation today for other programs—the Office of Science, the NNSA. Eventually those facilities will move into a state of environmental cleanup, where they are now in operation.

The intent of the Office of Future Liabilities is to have an independent office that could work full-time for about a year, which is what we expect it will take, really a small group of people about that long, to work with all of the organizations in DOE to put together a time release schedule of when those areas would be available or would be free or would be turned over for environmental remediation.

In looking at that, that required fairly intense collaboration with NNSA, with the Office of Science, with Nuclear Energy, and in fact with Environmental Management. The Department believed it made sense to establish a specific organizational element to put together that information and to propose to the Secretary of Energy how to most efficiently and effectively manage and plan for that work organizationally as it became due. That is the purpose of the Office of Future Liabilities.

Senator BINGAMAN. Mr. Chairman, I still, I remain very confused about how you sort of those types of responsibilities from the ongoing and existing responsibilities of your office. But obviously my time has expired, so I will wait and perhaps ask some more questions next time.

Ms. ROBERSON. If I might respond to that for Senator Bingaman, the decision to not have Environmental Management do that work was always an option. It was never eliminated. The goal was to simply not tie up the resources of the Environmental Management Program doing the physical cleanup in doing the planning for the next generation of facilities that need to be remediated. That really is the difference.

Senator BINGAMAN. Thank you, Mr. Chairman. I will wait for another round.

The CHAIRMAN. Senator Bingaman, I am not sure in your statement what is going to happen to the bill on the floor. What happened in the approach to have the NRC do this was they left the issue to the Appropriations Committee, Energy and Water, to provide for a study to be done by the National Academy of Science. That is the agreement made by the various people.

Probably the way it will come out will be that the Energy and Water Subcommittee will do the Nuclear Regulatory Commission and the NAS will not be provided for.

Senator BINGAMAN. Yes. Clearly, I agree that there is a plan for having the study. My understanding is that it is an after the fact study. The basic language, though, that was included in Senator Crapo's amendment—I believe it is Crapo's amendment—calls upon the Secretary of Energy to clean up these tanks to the maximum extent possible, in accordance with the rules issued by the Nuclear Regulatory Commission.

My question was why shouldn't the Nuclear Regulatory Commission be deciding whether or not its own rules have been adequately complied with? It seems to me I would feel much more comfortable if the Nuclear Regulatory Commission with its expertise were say-

ing, yes, you complied with my rules. That was the difference of opinion that we had. I just wanted to clarify that.

The CHAIRMAN. It was a very big group of Senators. I cannot tell you right now what happened, but what they expected to happen did not happen. So I do not know what that means. But when my staff arrived at that meeting everything got changed, because the question was asked, where is Senator Domenici, and I was not aware of what they were doing. So the meeting did not proceed to finality, I know that much.

Senator.

Senator WYDEN. Mr. Chairman, I was just hoping to get a couple of questions in.

The CHAIRMAN. You are next.

STATEMENT OF HON. LARRY E. CRAIG, U.S. SENATOR FROM IDAHO

Senator CRAIG. Would the gentleman yield for just a clarification of the Crapo-Craig-Graham amendment? I do not want it misportrayed here. Consultation versus concurrence is the difference. Pre-amendment, consultation; post-amendment, concurrence. That puts the Nuclear Regulatory Commission in a much stronger position, and I think it is important that that is understood in the relationship with the cleanup process that Jessie is in charge of.

The CHAIRMAN. Senator Wyden.

Senator WYDEN. Thank you, Mr. Chairman.

Ms. Roberson, the Federal Government signed an agreement in 1989 to clean up 99 percent of the wastes in the tanks. In April we learn that the Department is now looking at cleaning up 90 percent of the waste in the tanks. Could you give us an analysis of what is the minimum amount of radioactivity left in the tanks if it is 90 percent? I have received some very high figures from activist groups, dangerously high figures. But I would like your analysis of the minimum amount of radioactivity left in that bottom 10 percent of the waste in the tanks.

Ms. ROBERSON. Senator Wyden, I honestly cannot give you estimates for 10 percent because our working plan is reflected in our commitment in the TPA to meet 1 percent, and that is what we are working on. So 1 percent or less is what our working plan incorporates.

Senator WYDEN. If you are giving us some good news here, I want to make it clear what it entails. But Senator Cantwell and I have both been bearing down on this Department proposal that you all are looking at going to an approach that does not clean up 99 percent but cleans up 90 percent. Are you telling us that 90 percent is off the table this morning? I would like a yes or no answer to that question: Is it off the table to go to 90 percent rather than 99?

Ms. ROBERSON. Let me tell you unequivocally, it is off the table. It is our intent to comply with our TPA. Now, let me also say that in the conduct of our single-shell tank closure EIS and obviously of the ongoing discussions, which are not decisions, they are discussions, we will continue to evaluate alternatives. We are required by law to do that.

That does not mean they are decisions. Unless the Tri-Party Agreement reflects something different, then 99 percent is what we are living by. Ninety-nine percent or more is what we removed from Tank C106 and that is our plan for the other tanks.

Senator WYDEN. It sure sounds to me like you put it back on the table. I would like to ask you again. The people in the Northwest want to know this. Is there any chance that you are going to go to 90 percent rather than 99 percent of cleanup? Just a yes or no answer: Is there a chance that you are going to go to 90 percent?

Ms. ROBERSON. I do not see that, any chance that we are going to go to 90 percent. We built our facilities and our program——

Senator WYDEN. Why don't you stop there.

Ms. ROBERSON. Well, I will keep going—but I will stop.

Senator WYDEN. That is an encouraging, encouraging answer. Would you put that in writing to Senator Cantwell, myself, Senator Murray, and Senator Smith? Our constituents want to know that. We want to know that there is no chance that you are going to reduce the amount of cleanup that our constituents are counting on and I would like that in writing. Can you furnish that to us?

The CHAIRMAN. You can take the record. It is available. You can get the record. She just said it.

Ms. ROBERSON. I will be glad to provide you augmentation to the record, but it is clearly in the record.

[The material referred to follows:]

DEPARTMENT OF ENERGY,
Washington, DC, July 13, 2004.

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

DEAR MR. CHAIRMAN: The purpose of this letter is to provide follow-up to the testimony I provided to the Senate Energy and Natural Resources Committee on June 17, 2004. The Department of Energy remains committed to fulfilling its obligations contained in the Tri-Party Agreement, including those that relate to the amount of residues that will remain in the single-shell tanks at Hanford on their closure milestone date. That amount is described as a volume of the tank waste present when the Tri-Party Agreement was executed in 1989. The Tri-Party Agreement also specifies a process whereby the parties can adjust the 99% goal in light of their experience in retrieving the contents of particular tanks.

The Department has proceeded successfully under these Tri-Party Agreement provisions since their adoption and has no intention to depart from the 99% goal as it is specified in the Agreement. Cleanup of the Hanford Site is a top priority of the cleanup program.

If you have any further questions, please call me at (202) 586-7709 or Ms. Jill Sigal, Principal Deputy Assistant Secretary, Office of Congressional and Intergovernmental Affairs, at (202) 586-5450.

Sincerely,

JESSIE HILL ROBERSON,
Assistant Secretary for Environmental Management.

Senator WYDEN. You are being very constructive this morning.

Mr. Chairman, I thank you. I have only one other question right now.

With respect to the accelerated cleanup, Ms. Roberson, and the concept of saving taxpayers' money, are you going to try to recoup the millions of dollars paid to the Hanford contractors to improve worker safety programs that the Department's Office of Independent Oversight found to be flawed? It would seem to me that when you paid contractors for what your own people have found were flaws in some of the work that they were doing, that one way

to save the taxpayers some money would be to try to recoup that money paid for flawed work from the contractors. Are you looking at doing that?

Ms. ROBERSON. I actually believe we have withheld funds from the contractor, from our tank farm contractor, in the last year.

Senator WYDEN. Are you going to try to recoup additional amounts?

Ms. ROBERSON. We may. We continue to follow our contract and we pursue those options aggressively when we think they are warranted and we leave open the option to do it again. We have done it and we will do it again.

Senator Wyden, can I add one more thing to your first question? Also, the concern or rhetoric about the 10 percent—one of the other options in the single-shell tank closure EIS that has been evaluated is the no-action alternative, which we are required by law to evaluate. That is clearly not an alternative we are implementing, either.

Senator WYDEN. Well, I think you have been constructive this morning, Ms. Roberson, and we have obviously had differences of opinion over the years, but you have always been responsive. The reason I am asking for this in writing is that we do keep coming back to it, and I would like to have in writing, please, as you call it, augmentation for what has been said today, because my constituents want to know that it is off the table with respect to reducing the amount of waste that would be cleaned up. I thank you for your cooperation.

Thank you, Mr. Chairman.

The CHAIRMAN. Senator, you are next.

Senator CANTWELL. Thank you, Mr. Chairman, and again thank you for holding this hearing. I appreciate my colleagues support in having this hearing.

Mr. Chairman, are you planning on having two rounds? I have a lot of questions.

The CHAIRMAN. Get what you can in one, then we will see.

Senator CANTWELL. Okay. Then I might ask that the answers to the questions be succinct, if we could. Secretary Roberson, I know when you are in charge of an organization you want things to be seen in a positive light and you want to shine on those accomplishments. But I find it ironic that three of the four most important people to the Northwest as it relates to Hanford and cleanup, Under Secretary Card and Assistant Secretary Cook and yourself, all head various parts of the environmental cleanup and health and safety, are all resigning. Part of that has been, I think, the scrutiny of this committee's last hearing about the outrage about the lack of progress that had been made on processing information about health and safety standards for employees. Now all of a sudden we find Under Secretary Card is resigning.

So maybe it is just a weird coincidence, but for the people in the Northwest, who have provided great scrutiny, oversight and criticism of the organization, we find it ironic that everybody is resigning and now we are told everything is great. Well, I think we have two witnesses here who are saying that things—well, we have a few issues that we need to deal with.

I think, Mr. Friedman, is not your main point about the health and safety issues that documentation was not kept and that we do not have all the information that we need to make sure that the health and safety of workers are properly being taken care of?

Mr. FRIEDMAN. Well, in certain issues, Senator Cantwell, there were conflicting testimony provided to us and we could not find documentation to confirm one position or the other, and we sought that documentation, that is correct. However, we essentially did not—we were not able to corroborate the allegations of criminal misconduct.

Senator CANTWELL. I am not asking about criminal conduct. I am talking about records. I mean, part of our entire debate about getting compensation for employees for past issues, not the current vapor exposure, is that nobody keeps any records. That is why we are passing legislation on the floor as part of the defense authorization bill to make sure that we get these site provisions done so that you have better records and information.

But is that not the primary issue that you uncovered in your report, that not enough record and documentation exists?

Mr. FRIEDMAN. That was not part of our report.

Senator CANTWELL. Okay.

Mr. Podonsky, is it not—I will have to get back to you, Mr. Friedman, on that question.

Mr. Podonsky, did it not take a report from a whistleblower group to get these problems actually under investigation?

Mr. PODONSKY. Senator, actually my office that Dr. Worthington heads up, we do scheduled inspections and when the report that came out from GAP came out in September we actually responded to GAP in October and informed GAP that we shared concerns about worker protection and that we were going to do our normally scheduled inspection at Hanford in the fall.

That timetable was accelerated by the Secretary's desire to have us out there right away once the correspondence had come in. So on the one hand, yes, it served as a catalyst; on the other hand, we have the regular scheduled inspection priorities that we go through all the sites. So it is a combination.

Senator CANTWELL. So the whistleblowers helped bring attention to these issues. Your report said, quote, "While many individual weaknesses need to be addressed, the overarching weakness is that the overall strategy for protecting workers from vapors is not adequately defined and documented at a level that can be translated into an adequate set of engineering controls, administrative controls, and personnel protective equipment." That was your key recommendation?

Mr. PODONSKY. That is what the report said.

Senator CANTWELL. So why did the DOE fail to catch these problems through its own system oversight? Why did it take you coming out there to catch that and document that for them?

Mr. PODONSKY. Let me ask Dr. Worthington to follow part of my answer to that. In our oversight capacity, we have gone across the complex looking at all matters, and it is very easy for us oftentimes to look at an operation and find issues and problems. Most of the time we find that so much work is being done at these sites that

the individual oversight and self-assessments are not as rigorous as we are because that is all we do.

Let me ask Dr. Worthington to continue.

Dr. WORTHINGTON. I would like to comment a little bit about some ongoing initiatives when we arrived at the site. There were a number of external reviews that had been commissioned by DOE or by the local contractor there that were already under way. Some of the things clearly in various places in the report where it was appropriate we tried to point out, some of these things had already been identified by the contractor or by DOE, and some of them they had already initiated some actions.

Our review certainly looked across many aspects of the program and provided a comprehensive look at the various pieces. But there were some individual components that the site and DOE had initiated and had taken some corrective actions.

Senator CANTWELL. But your document says the overarching weakness was that there was no strategy for protecting and defining the documentation. So you are saying you might have had some individual instances, but no one in the agency had seen the extent of the problem from a documentation perspective?

Dr. WORTHINGTON. Certainly there were a number of various activities going on, but with respect to a comprehensive documented strategy, we had a lot of discussion and I believe at the end of the review certainly we were getting consensus the need to move forward for a more comprehensive look at what was needed at the tank farm.

Senator CANTWELL. Thank you.

Mr. Chairman, I see the red light is going on and we may have a second line, but if I could just ask again for a yes or no. I do not need anything else, just a yes or no answer from Secretary Roberson. If we get to a second round I am happy to hear more and have more dialog.

Secretary Roberson, the Department of Energy today, yes or no, will pursue, live with, and agree to cleaning up all but 1 percent of the waste in tanks at Hanford?

Ms. ROBERSON. That is our commitment, yes.

Senator CANTWELL. Thank you.

Ms. ROBERSON. I would ask the chairman—I mean, even though it is not a question, I really do, since it is unlikely I will have the opportunity in the future, I would like to respond to two other comments from the Senator. One, I want to make sure on CAIRS because the IG did raise the issue of CAIRS, incident reporting system, which I think was part of your question early on, the question of lack of reporting. I want to make sure that we understand what CAIRS is and what it is not.

CAIRS is the Department's reporting system. It is a slave reporting system. We also have legally required OSHA log reporting of those incidents, and I would like to point out that what the IG used to compare to the reporting in CAIRS was the OSHA log, which did have the reports in them and there are also logs that the Department of Energy's EM program uses in our assessment of the performance of the contractors.

So I do not want to leave it, leave the impression that we did not understand what was occurring at our sites. We certainly did

and we have multiple layers on every front in understanding what is happening, besides having people in the forefront.

The last comment is really on my resignation. I appreciate your raising that. I really must say, because I have seen interesting comments in the media, my choice for leaving is truly independent of anybody else and anything else. Being that I have had the opportunity to sit before most of you in other hearings, certainly a little ruffling in a hearing is not going to cause me to resign this job. I had a very good job when I came here. I knew this was a tough one. I expected criticism. You and others have not let me down, but you have also been fair in that.

I leave for personal reasons and they are unconnected to anyone else but my family.

Senator CANTWELL. Thank you. I am sure that you think we have been fair, is that correct?

Ms. ROBERSON. Of course you have been fair.

Senator CANTWELL. Great, thank you.

So I just think that the tension for the Northwest with three people leaving, the state of the whole program is something that we are very concerned about.

The CHAIRMAN. Senator Craig is going to go next. Senator Craig, could I just take 2 minutes, then yield to you.

I do want to say, I very much appreciate your presence on this committee and you are very helpful to me and very knowledgeable. I have two questions. One is just very precise. On June 4, 2004, our leading newspaper reported that the Department of Energy agreed to cease their efforts to bring wastes now stored in tanks at the Hanford site in Washington to the Waste Isolation Pilot Project in New Mexico. Under an agreement with the State, the DOE can apply in the future for permission to bring the sludge to WIPP, but the State would be given the legal right to say no.

Will the DOE honor its commitment to New Mexico and not bring the waste from Hanford without first getting approval from the State of New Mexico?

Ms. ROBERSON. Mr. Chairman, we worked with the State of New Mexico on an approach that includes revising the permit. As we have in past years, we will continue to comply with that permit in the future. So yes, it is our intent to fulfill that commitment.

The CHAIRMAN. I want to make an observation, I want to make an observation with reference to the great job you have done. You know, in the past from year to year or maybe from 2 years to 2 years we changed the plan at each one of these facilities because outsiders attacked it, outsiders contended that it was never enough, although we were paying more money per year to clean up than we had been paying at the full operation of these facilities when we were producing nuclear weapons and the plutonium for them there.

When you tell that to somebody, they hardly believe it. In other words, more paychecks were on the wall for people in the area to pick up than were there at the heart of the biggest program on nuclear, production of nuclear needs in the country.

My observation regarding your efforts is that you did clear that approach—I do not know how many checks are up there, but you did clear up the approach of getting to a situation where everybody

knew what they were doing and the plans were moving ahead through your office and people had to do them in order to get money from the Federal Government. Is that not correct?

Ms. ROBERSON. That is correct, sir. We were insistent on being respectful of the taxpayers' investment.

The CHAIRMAN. I thank you.

Now, Senator Craig.

Senator CRAIG [presiding]. Well, thank you very much, Mr. Chairman.

Jessie, it is good to have you before us again, and I must tell you in all sincerity that your announcement of your leaving DOE comes as a frustration to me. I say that because we have had an excellent working relationship. The thing that excites me about your talent and your willingness to take on the tough issues is that we can be tough with you and you are going to be strong back when the facts are on the table that prove you are doing the job the right way, and that is appreciated.

Of course, this is a highly charged political issue and it is much more desirous in my State politically to be anti-DOE. But it is wrong when it is wrong, and when you have done your job and you have done it well and you have the systems in place to do it well, oversight is important and that is your job. To be critical of you or to expect critical responses and clear responses is important. And I think you have done your job well and we will miss you, because you have taken on a most difficult task for all of the reasons that I think are clear out there, and for the reason that clean is never clean enough in the minds of some, because of what is believed to be, although sometimes not true. The perceptions are very important on issues of nuclear waste cleanup. And we thank you for your effort.

Ms. ROBERSON. Thank you, Senator.

Senator CRAIG. In Idaho DOE has emptied five tanks and they are clean. The question is closure, and of course I hope that you and Idaho can arrive at an agreement that will bring on the final standards for that closure. And we hope now that we have facilitated by our actions of the past week to make sure that that 2005 money to continues for the purpose of doing that.

I guess my question to you: Are you confident that with enough time, in consultation with Idaho and Washington, that we can come to an agreement with DOE acceptable to final cleanup levels of their tanks?

Ms. ROBERSON. I absolutely am, sir.

Senator CRAIG. Do you think DOE and the State wants the same thing ultimately?

Ms. ROBERSON. I believe that additional information-sharing is necessary, that collaboration is essential. I think in the end we all want the same thing, and that is to improve the environment at these sites. So yes, I do.

Senator CRAIG. Do you think that accelerated cleanup has been successful in addressing the highest risk waste earlier than otherwise?

Ms. ROBERSON. You know, quite frankly, Senator, every day when I come in to work I look only at the problems. This year as we went through our cleanup caucus reviews, I was astounded.

[Pause.]

Ms. ROBERSON. I was absolutely astounded by how much work had been accomplished and grateful to our employees for doing so.

Senator CRAIG. Well, I think that emotion and that observation is clear at the INEL in Idaho. We are not done and we have a long way to go, but a great deal has been done and the environment is safer today than it might have been otherwise. And I think that is important to reflect that, and I do not blame you for being reflective of a team that does their job well.

We are going to watch closely for all the reasons that the Senator from Washington and I believe in. We want our States to be clean and we want our people to be safe, and we think that there is a reasonable record out there, if not a very good record.

How vital is the opening of Yucca Mountain repository to reducing the overall cost of the EM program?

Ms. ROBERSON. I think it is vital to reducing the costs and it is vital to resolving the issue of disposition of canistered high-level waste and spent nuclear fuel. It is the Department's plan and I think it is critical.

Senator CRAIG. Thank you. I do too.

Mr. Friedman, are the worker safety statistics of the EM program and for DOE far better than the industry average?

Mr. FRIEDMAN. Senator Craig, I wish I could answer that question. I really have not compared the statistics to the private sector.

Senator CRAIG. Is it worth comparing?

Mr. FRIEDMAN. Certainly it is, and I think that earlier in her testimony Secretary Roberson addressed that issue and it was impressive.

Senator CRAIG. Jessie.

Ms. ROBERSON. If I might, Senator. I did in my testimony, I cited the statistics, and those statistics are a matter of record. We did not quantify any on our own. We took them from the reports, OSHA reports.

Senator CRAIG. Thank you. Well, safety records are important. People are of most importance to all of us, and in this business perfect is not good enough. We all know that, because it can hurt lives and put people at risk. But we do believe that, and it has certainly been my observation at the INEL, that the redundancy and the work done to assure worker safety is really phenomenal. That does not mean it is perfect and it does not mean there has not been an accident on occasion, because they work in sometimes relatively high-risk environments. But I appreciate you saying that.

That is all of the questions I have to ask and I have to go, and I will leave the committee to the ranking member, Senator Bingaman. But I once again thank you very much for being here today and I thank you very much for your service to our country and the work you have done to move this important program along as far as you have. Thank you.

Ms. ROBERSON. Thank you, sir.

Senator BINGAMAN [presiding]. Well, thank you very much.

Let me just ask another 5 minutes of questions and then I will defer to Senator Cantwell to do the same, and then we will mercifully let you folks go on about your business.

Let me make another run at this jurisdictional issue with regard to disposal of waste in these tanks. My understanding of the law is that short-term storage is under the jurisdiction of the Department of Energy, short-term storage of high-level waste that DOE has in their complex. But when you get the long-term storage or disposal, the law has always been that that is up to the Nuclear Regulatory Commission, and I think that was in 1974 that law was written.

We now have, I am afraid, in this language we are adopting here in the Senate at the urging of the Department of Energy, we now have a situation where we are saying we are going to make an exception out of these tanks down in Savannah River, that as to those tanks the DOE can permanently dispose of high-level waste in those tanks without any NRC oversight.

Now, the NRC does not have oversight because we did not give it to them back when the tanks were built. We assumed those tanks were short-term, that the waste would be in there, it would be taken out and then the NRC would get jurisdiction. Now we are essentially saying, okay, some part of that waste can remain in those tanks permanently, can be grouted over, and NRC jurisdiction does not apply.

That concerns me. Now, am I misinterpreting what is going on or is that your understanding of what is going on as well?

Ms. ROBERSON. Well, aside from whatever action the Senate chooses to take, Senator Bingaman, the NRC has long held and clarified itself that it does not have jurisdiction over those decisions, over the Department of Energy.

Senator BINGAMAN. There has never been permanent disposal of any high-level waste in these tanks. That is why they have never had authority, right?

Ms. ROBERSON. Well, I guess let me say this. We may disagree, but I believe the tank waste that we are discussing, the residue in the tanks that we are talking about mixing with grout—not covering over; we have a tremendous amount of testing and experimentation and now actually have real results from the two tanks that we have closed at Savannah River of how the grout and the residues mix.

We believe that meets the requirements, performance requirements for low-level waste. We do not rely long-term on the tank structure as a protective mechanism.

Senator BINGAMAN. So you say that this is no longer something that ought to be under the authority of the Nuclear Regulatory Commission because you have treated it in such a way with this grout or whatever that it is no longer——

Ms. ROBERSON. I do not want to confuse the two issues. We have worked with the Nuclear Regulatory Commission, but the NRC has not had that authority and they themselves, even as late as 2000 in a response to an NRDC petition in Savannah River waste tanks, NRC made clear that it did not have that authority over the Department of Energy.

Senator BINGAMAN. Let me ask, Mr. Friedman, did you look at the issue—this is on totally different issue that you did your analysis on—did you look at the issue of the independence of this Environmental Health Foundation from other Hanford contractors? Do

you think that maintaining independence is an important feature for future health care providers at Hanford? Is that something that you looked at?

Mr. FRIEDMAN. Let me ask Mr. Hartman to answer that question, Senator.

Mr. HARTMAN. We did not specifically examine the independent relationship and whether or not it is the best solution. What we did find during our criminal investigation is that there was a pull and tug between the foundation and the contractors on-site in the treatment of the patients and the recordability determinations, and that that relationship was contractually mandated. But we did not find any indicators of misconduct or criminal conspiracy.

Senator BINGAMAN. So you are saying there was a pull and tug in a healthy sense?

Mr. HARTMAN. Correct.

Senator BINGAMAN. There should have been a pull and tug and there was?

Mr. HARTMAN. Correct.

Senator BINGAMAN. Let me ask about one other issue that I have talked to you about, Ms. Roberson, before and that is the Trupact III. In the past, as you know, we have had full-scale testing of Trupact II, and you folks have been proposing that you go forward with the use of a Trupact III shipping container with half-scale testing instead of full-scale testing.

Could you explain to us why that makes sense, why we should not go ahead and have full-scale testing of Trupact III just as we had full-scale testing of Trupact II?

Ms. ROBERSON. Well, Senator, first of all we plan to meet the requirement of the NRC during its certification process. In fact, for the Trupact II's the necessary regulatory testing required half-scale testing, although the Department did full-scale testing. To meet the performance criteria to support NRC's analysis, half-scale testing was required.

We believe that half-scale testing is required for Trupact III's. They have to meet the exact same performance requirements. If the NRC determines that full-scale testing is necessary we will do that. But as we believe right now, it will not be required.

Senator BINGAMAN. But you made an independent judgment that, in spite of the NRC requirement, you would do full-scale testing of Trupact II? I mean, the Department did.

Ms. ROBERSON. The Department did, I am sure in consultation with others. It was a part of the WIPP startup approach. It needed to be done to ensure that there remained confidence in the operation on the shipping containers.

We believe that that performance standard was validated and we have to satisfy the same performance requirements with the Trupact III.

Senator BINGAMAN. Well, as I have stated to you, I believe in my office on several occasions, I think that there was a real value in doing full-scale testing of Trupact II and I hope that the Department will determine to do the same thing on Trupact III. I think it would have a value again in ensuring public confidence in the safety of that container.

Ms. ROBERSON. Senator Bingaman, if I might. It certainly seems to be puzzling you. I don't feel like I am doing justice to you regarding DOE's determining whether what is left, what residual material is left and grouted, is adequate versus NRC. That is certainly again, like I said, the choice of the Congress. I do not want to leave you with the impression that we have not truly spent a lot of time with our NRC counterparts in this area. For the last two decades we have. We have ensured that the NRC reviews every one of our tank closure plans specifically.

We have worked very closely with the NRC. We believe we actually have some requisite experience in this arena as well, too. But we have also ensured that we have benefited from theirs.

Senator BINGAMAN. Well, as I tried to say, I think this distinction between DOE having jurisdiction of short-term storage and NRC having jurisdiction of long-term storage and disposal has served us well. As I understand what we are about to legislate as part of this defense bill, this would be writing an exception into that law. This would essentially say DOE can permanently dispose of high-level waste in these short-term tanks, whereas the NRC has jurisdiction of all other high-level waste disposal.

Ms. ROBERSON. If I might, we do believe that we are removing the high-level waste from the tanks and vitrifying it for disposal in a geologic repository. We believe that the residual waste that will remain in the tanks is being treated in accordance with the law and is other than high-level waste in the tanks, and we believe that NRC agrees.

Senator BINGAMAN. So your position is there will be nothing in there which by today's definition, by the NRC definition, would constitute high-level waste?

Ms. ROBERSON. We believe that we are not leaving high-level waste in the tank.

Senator BINGAMAN. Senator Cantwell.

Senator CANTWELL. Thank you, Mr. Chairman. I would like to follow on a line of your questioning, but I also have so many other issues here that we would like to get answers to.

Secretary Roberson, on this issue, in answering Senator Craig's question you said one of the reasons to get this accelerated program is to get the high-level waste and get it to Yucca Mountain; is that correct?

Ms. ROBERSON. I believe his question was do I think Yucca Mountain is critical to the environmental cleanup program and I certainly do.

Senator CANTWELL. In the EIS for Yucca Mountain, in the appendix J of that, it basically said that the Department was going to take as little as 17 percent of the high-level waste from the Hanford Reservation and take it to Yucca Mountain. Is that still the intent?

Ms. ROBERSON. I cannot tell you that I am knowledgeable of the specific details. I wish I had my comrade Dr. Chu here. But my experience in this program, I do not know if it is 17 percent, but if 17 percent is what they start with, then I think that is 17 percent less that we have left at the site. But I do not know if that is indeed the current information. I am not familiar with it.

Senator CANTWELL. Well, I think you can imagine how concerned Washingtonians will be if they think only 17 percent of the high-level waste at Hanford is going anywhere. If it is staying right there then Washingtonians are very concerned about all the changes to definitions of high-level waste. They are very concerned about how the cleanup program works. They are worried about the science and the proof of the science, because if only 17 percent is going to leave the State and we keep getting illegal shipments, as we are, from South Carolina and Savannah River that we have to take the DOE to court on, we are very concerned about these definitions and how they are changed.

One question I wanted to ask you, because I know you are very concerned about the safety of the facility, and I am certainly very concerned about the science, because I think that is what this debate really should be about, what is the definition of high-level waste and what does the science say that we should do with high-level waste? One issue we are dealing with at the Hanford site is the leakage of underground storage tanks. About one million gallons of waste is making its way to the Columbia River.

What is the program for treating tritium iodine-129?

Ms. ROBERSON. Well, I do not know that I could specifically tell you. I probably have—no. If you would like I can ask Mr. Schepens to join me and respond to that.

Senator CANTWELL. That would be great.

Ms. ROBERSON. Then if I could, I would like to come back to the earlier comments.

Mr. SCHEPENS. My name is Roy Schepens and I am the Manager of Office of River Protection.

Relative to tritium, there is no known technology——

Senator BINGAMAN. I think there is a button there that needs to be lit up. Thanks.

Mr. SCHEPENS. Relative to tritium, there is no known technology that treats tritium today. We are in collaboration continually with the Savannah River Site because they have that same problem and we are continuing to look and study. If some technology were to become available, then we would look at implementing that in the future.

Relative to iodine-129, we are continually looking at how we are going to handle the second stream wastes coming off the vitrification plant. We have that documented in our high-level waste system plan and we are continuing to look at technologies for treating iodine-129.

Senator CANTWELL. I am sorry, did you want to add something?

Mr. SCHEPENS. Relative to the tank leakage, the Department of Energy has conservatively estimated, that there has been about potentially 67 leaky tanks over the years of operation and conservatively estimated that they could have leaked a million gallons. We have a beta zone monitoring program which we work with the Department of Ecology. Every year we do testing of it, we analyze it, we look at how it is moving. The good news is it is not moving very much. It is basically where it is today.

This is the leakage from the high-level waste tanks. It has not—and the reason why it does not move very much is because most of the radionuclides that come out of the tank are what is called

non-soluble radionuclides. Non-soluble radionuclides means that they get trapped in the sand and they actually cannot move. They stay there. The sand serves as a filter and prevents it from moving.

Also, in the State of Washington——

Senator CANTWELL. Are you saying that there is no leakage into the Columbia River at this time?

Mr. SCHEPENS. Not from the high-level waste tanks. There is none from the high-level waste tanks. From what we have been able to tell, none of the high-level waste has reached the Columbia River.

Senator CANTWELL. Are you saying that there is no nuclear waste reaching the Columbia River?

Mr. SCHEPENS. No, I am saying from the high-level waste tanks.

Senator CANTWELL. Okay. What nuclear waste from the Hanford Reservation is reaching the river today?

Mr. SCHEPENS. You would have to talk to Keith Klein. I am not familiar with that area. I am over the high-level waste system. But from the high-level waste tanks——

Senator CANTWELL. You are aware that there is leakage into the Columbia River?

Mr. SCHEPENS. I believe there is——

Senator CANTWELL. There are plumes?

Mr. SCHEPENS. There are plumes into, yes, but not from the high-level waste tanks.

The good news about Hanford is—and I came from Savannah River to Hanford—is Hanford does not get a lot of rain. We only get seven inches of rain a year, and the only way that radionuclides are going to be driven down to the aquifer are through rain water.

One of the things that we have implemented in the tank farms, per the Department of Ecology, is we actually have built up a lot of culverts around our tank farms. So we minimize any rain water so that it does not get over the areas that are contaminated, so it does not drive the contamination further down quicker.

Senator CANTWELL. How can we say that we are safer if we do not know how we are going to clean up the tritium which is in that plume? Are you saying a conservative estimate is a million gallons? Are saying we do not have a technology solution for it today?

Mr. SCHEPENS. For the tritium, there is not a technology solution for it and that is something that we are looking at how we can deal with that in the future.

Ms. ROBERSON. We are investing in research in this area for the complex.

Senator CANTWELL. Great, I am glad we are. My point is everybody wants accelerated cleanup and everybody wants it based on science. That is what the debate is not about right now as it relates to the floor discussion. This would have been the appropriate committee to have it and you could have had the discussion about what can be treated and what cannot be treated. What does the science say? Who should have oversight? Who historically has had oversight?

But we are still letting one deal be cut by one State and one Federal agency, and I think Senator Bingaman's questions have pointed that out.

Mr. SCHEPENS. If I could clarify one——

Senator CANTWELL. I know my red light is going on and I do have a couple of other questions that are really important to the Northwest. Could I get some response on that, and then if we have time—or we can maybe even get letters or what have you.

The other issue that has arisen out at Hanford deals with the RFP for the river corridor closure project. Historically, pensions for the Hanford site plan have protected employees. Recently sections of those contracts have been removed so that now the requirement is that successor contracts only pay employees a pension for 5 years. Why is that being changed?

Ms. ROBERSON. The Department issued its draft RFP. It has taken input both from bidders, from the public, and it is still considering modifications to the final. It has not issued the final yet. So I do not know if that will change in the final or not.

Senator CANTWELL. Why would you take the hard work of employees over years and years at the Hanford Reservation, who have been guaranteed a pension for life, and then all of a sudden say to the workers out there that we are shortchanging you on a pension?

Ms. ROBERSON. Well, Senator Cantwell, I honestly, having looked at this at our different sites, we may simply disagree. I do not believe we are shortchanging the employees. What we are doing is trying to arrange our contracts to fulfill and complete specific tasks efficiently and to ensure that we have in place the parameters to ensure that that is done. So we size that contract according to the specific project, and we believe that was appropriate.

Senator CANTWELL. What does that mean?

Ms. ROBERSON. That means we arranged our contract—in the draft RFP our goal was to arrange our contract to ensure that the contractor, whomever that may be, the successful bidder and its work force were really focused on doing the work.

Senator CANTWELL. Without a pension more than 5 years?

Ms. ROBERSON. No, there is a pension plan built in.

Senator CANTWELL. For 5 years there is a pension. You get a pension for 5 years.

Ms. ROBERSON. There is a pension—we maintained the site pension plan for 5 years and the successful winner will have to have an additional pension plan for new employees that they bring in. That essentially covered vested employees.

Senator CANTWELL. I think this is quite a significant change and I think you will hear from lots of people in the Tri-Cities that it is quite significant. If you are saying that the Hanford site is a closure project and you are looking at it this way, then why are other sites at Rocky Flats and Ohio, which have also been closure projects, not getting short-termed on their pension program as they have their RFP's out?

So I am just questioning why, and maybe we can look into that.

Ms. ROBERSON. I would be glad to follow up with you. Having a little familiarity with the contracts at the Ohio sites since those were redone since I have been there, as well as the Rocky Flats contract, I think you will find a significant amount of similarity in our approach. But we may not have done as good a job as we could

in explaining to you what we were trying to accomplish. I would be glad to do that.

Senator CANTWELL. Thank you, I appreciate that. I would say, as anxious as the entire State is about living up to the Tri-Party Agreement of cleaning up 99 percent, Hanford wants to be known for the best cleanup, not just in the United States but globally, and they want it done in the most efficient fashion.

But people also want to know that the work force is going to be taken care of and that the work force is not going to be short-changed in the future.

I have a couple other questions and then I want to give you a chance to answer or remark on anything else that you wanted to make comment on.

Senator BINGAMAN. Why don't you go ahead and ask your two or three questions and then let them respond, and then we will put the rest in the record.

Senator CANTWELL. Right, thank you, Mr. Chairman.

Senator BINGAMAN. Great.

Senator CANTWELL. Does the Department have cost estimates on what happens if grout does not work?

Ms. ROBERSON. The Department has, I would say, an experimentation or research program to continue to work in this area. I am not sure that I understand the question, I am sorry.

Senator CANTWELL. If grout does not work and instead of a liquid substance, you are dealing with basically a concrete substance, has the Department gotten estimates of what it would take to clean that kind of material up if the grouting process were determined not to be successful?

Ms. ROBERSON. Well, we did our testing program prior to using grout, so we have quite a bit of confidence that it does indeed serve the purpose in which it is intended. You mean if 10 years down the road we have to go back in and remove?

Senator CANTWELL. Yes.

Ms. ROBERSON. One of the things that we do is we actually assess, through the NEPA process, just that option. I cannot recite verbatim for you here, but we have done that at each of the sites. We actually do evaluate the worst case, although——

Senator CANTWELL. I am happy to hear more, but can I get a few other things just on the table, then you can answer whatever.

Is there any discussion, documentation, emails or communication within the agency that you know of for the development of a new plutonium pit at Savannah River?

Ms. ROBERSON. Goodness no. I have so many of my own. I am not familiar with that at all.

Senator CANTWELL. So you know of no discussion within the agency?

Ms. ROBERSON. And I would not have a need to know. No, I do not.

Senator CANTWELL. Then the last question is, can you just explain how bonus payments work for tank closure? What do contractors get when they close a tank? Do they get a bonus payment? I am not familiar with that structure.

Ms. ROBERSON. Our structure is different at each site because we have some relatively different structure to our contracts, Savannah River, Idaho, and Hanford. Specifically at Hanford——

Mr. SCHEPENS. I can speak to that. They get paid on an incremental basis based upon completing work once they get so much percentage of the waste out of the tank. Like S112 right now, we are pumping waste out of S112. When they get it down to a certain volume percentage, and they have done it safely and properly, then they get a performance fee for that. So it is based upon conducting real work safely.

Senator CANTWELL. What would that bonus payment be?

Mr. SCHEPENS. I do not have it off the top of my head, but it is written in their contract.

Senator CANTWELL. Are we talking thousands or millions?

Mr. SCHEPENS. It is hundreds of thousands of dollars. And when the job is done it could be a million dollars. I just do not know off the top of my head.

Senator CANTWELL. So you would be surprised if it was several—if it was more than, say, $100 million?

Mr. SCHEPENS. Oh, yes, yes.

Senator CANTWELL. Thank you.

Mr. SCHEPENS. Could I answer your——

Senator CANTWELL. I just want to say to the chairman, thank you so much for the hearing and for the time to ask these questions. They are important to the State of Washington on a whole variety of perspectives, and I think most people could understand, given that we have the largest cleanup project in the United States, that we are very proud of the history that Washington State has in the Cold War, but we also want to make sure that we are getting our due attention for the most complex of the challenges of cleanup.

So I thank the witnesses for their time in answering these questions.

The CHAIRMAN [presiding]. Well, Senator, let me say——

Ms. ROBERSON. Mr. Chair—I am sorry.

The CHAIRMAN. Somebody want to?

Ms. ROBERSON. I did, yes.

The CHAIRMAN. Please.

Ms. ROBERSON. If you would grant me just one moment to follow up on one of the questions Senator Cantwell asked and I do not believe we completely responded to, really regarding the leaking tanks. As you well know, one of the things we are very proud of is we are about 99 percent complete removing waste out of the high-risk single-shell tanks. That was an important milestone for the State and an important milestone for us.

One of the things that we have to consider when we talk about the contaminated soil and the contaminated groundwater is a step-wise process in which we can get to that. Since many of these tanks are the age that they are, it is unwise for us to be too aggressive at remediating inside the tank farms until we have the tanks cleaned and stabilized. It is important to do that in that order to ensure the safety of the work force. So we have every intention of doing that, but we have to do it in that step-wise fashion.

The CHAIRMAN. Senator, let me say that I am glad that we can use our committee for issues like this. I am not from your State. I know a lot about these problems because I do work on a lot of nuclear issues. But I do think, while it is tremendously important that you get a chance to get your questions answered, I do also think that it is important for you—not lecturing you, just stating—that it is important for you to look at the issues as objectively as you can, because before you were here as a Senator there were many, many contradictory proposals for cleaning up your State. And the poor Federal Government that tried to do it was having to change every couple of years because a new approach was offered by those who claimed to know more than the Federal Government.

Frankly, from my standpoint it had reached a point where I was not sure what her predecessors were supposed to do, and that was very frustrating. It turns out that many times the changes and the objections and the arguments and the lawsuits came from people, not you, not your people, that really did not want to let this thing happen.

Frankly, you know that it is there and we cannot be party to changing our minds every couple of years and never getting anything done. I think what I have heard from you so far is that you want specific conclusions because your people are confused, and that is what we ought to do, do what you are asking in terms of the confusion.

I do not think we are going to get another one any better than her. When she established some rules, it was terrific for the projects, less for yours because yours is so complicated. But if you went up to Colorado, where we had the plutonium plant and we went so long without being able—and then we come up and it is the first project to put its head up and say, we now have a plan—is that not right—we know how it is going to go, we know when it is going to be completed, and these are the guidelines and strategy points. I mean, to me it was like, it cannot be true; I mean, this cannot be happening.

Well, I brought them up to my office and they said it was going to happen. We brought the people from the area and they said: We are satisfied.

So I am very hopeful that by doing it the way we are doing that we may end up with your area and your concerns being satisfied in open session by your getting answers that you need and you make the decisions after we have heard things and we do not change them all the time. That is what I hope.

Now, I want to say——

Senator CANTWELL. Could I, Mr. Chairman, just add one comment to that?

The CHAIRMAN. Sure.

Senator CANTWELL. I certainly do appreciate your indulgence in having the hearing and having that open forum, because I agree, nothing could be more important than basing this discussion on science and not changing that at a whim. Certainly I know you know these issues very well. Your recent State debate and law settlement between New Mexico and DOE shows how much your State has wrangled them on these various issues as well.

You know, I think in my short tenure here—and I certainly respect all the members who have wrestled with this issue before—and I do not know if the chairman would be interested in my personal opinion, but I think the head of DOE ought to be like the Federal Reserve. You ought to appoint them for 12 years or for life or until we get this cleaned up, because I do think that the fluidity of change and people does cause new ideas and new discussion.

I think the last thing that anybody wants from a public perspective is that OMB says you got to do it quicker and cheaper. I think that your help today gets the answers on the table. So I appreciate it.

The CHAIRMAN. I will tell you, Senator, if you want to get somebody to take her job for 12 years——

[Laughter.]

The CHAIRMAN [continuing]. You would have to put her in involuntary servitude. We would have to tie a rope around her and say, well, you cannot go out of the Energy Department's office because the rope will get you, because actually it is too tough.

To the rest of you, I am very sorry that—you know, Mr. Friedman, 99 percent of the hearing had nothing to do with you and I should have let you go. But I hope, other than my question, which was not intelligible, that the rest of it went fairly well.

With that, we stand adjourned to the call of the chair. Thank you.

[Whereupon, at 12 o'clock noon, the hearing was adjourned.]

APPENDIX

RESPONSES TO ADDITIONAL QUESTIONS

DEPARTMENT OF ENERGY,
Washington, DC, July 14, 2004.

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

DEAR MR. CHAIRMAN: This is in response to your June 30, 2004, letter in which you forwarded questions submitted for the record for your June 17th hearing on *Environmental Cleanup Program of the Department of Energy and Issues Associated with Accelerated Cleanup*. Enclosed please find my responses to those questions.

Please do not hesitate to contact me if I can be of any additional assistance.

Sincerely,

GREGORY H. FRIEDMAN,
Inspector General.

[Enclosure.]

Question 1. Would you briefly summarize actions that you recommend to address concerns of workers and avoid future recurrences of these issues?

Answer. The Office of Inspector General's (OIG) June 1, 2004, memorandum to the Secretary contains several recommended actions. In summary, we observed several worker health and safety protocols that need to be addressed by Federal managers at the Hanford site. Specifically, action is needed to ensure that:

1. Industrial Hygiene Technicians (IHT) take vapor exposure readings in a timely manner following reported exposure incidents at the tank farms and document exposure readings in appropriate reports.
2. Site employees on work restriction are assigned meaningful duties.
3. Patient care is not inappropriately influenced by whether the care will make an injury or illness "recordable. "
4. Work restrictions following injuries and illnesses are identified and applied in a timely manner.

Additionally, we found that the Department did not always utilize contractor self-assessments and internal quality assurance reviews when evaluating performance relative to the provision of contractor occupational medical services. Internal reviews, when coupled with effective contractor metrics, can provide useful performance information to responsible Federal program officials.

During our investigation, it became clear that, despite major health and safety efforts by the Department of Energy, a significant number of individuals interviewed had unresolved concerns about the safety of the work at Hanford, the potential for health problems as a result of this work, and the quality of occupational health care provided to Hanford employees. I suggested in my letter to the Secretary that an action that would be beneficial would be a more effective and robust program for dealing with employee concerns. We felt this would have the prospect of building employee and public confidence in worker safety at the Hanford site.

Question 2. CH2M HILL has recently announced additional steps to protect workers at the tank farms at the Hanford Site. Will these steps be effective in enhancing worker safety at Hanford?

In your view, have recent actions by the main contractor CH2M HILL gone far enough to resolve these issues?

Answer. We understand that CH2M HILL announced that they have taken the following additional steps to address employee concerns and strengthen their efforts while they conduct a more comprehensive review: Enhanced Personal Monitoring; Expanding Breadth and Expertise of Industrial Hygiene Program, to include the re-

cent selection of a senior-level position of Environmental Health Director; and providing Supplied Air Respirators for Employees.

Additionally, we understand that effective, May 24, 2004, CH2M HILL created a new "Workplace Injury Benefits Advisor." CH2M HILL stated in news release that, "This newly created ombudsman-like position is sponsored by CH2M HILL corporate offices as part of the ongoing commitment to strengthen our programs for our workforce."

At the present time, the Office of Inspector General is unable to assess the true impact of these measures on worker health and safety, given the limited passage of time. All of these actions, however, are important first steps and should contribute in enhancing worker safety at the Hanford site. It is important to recognize that this should be a fluid process and the Department should constantly be looking for opportunities to improve worker safety at Hanford as well as their other complexes.

DEPARTMENT OF ENERGY,
CONGRESSIONAL AND INTERGOVERNMENTAL AFFAIRS,
Washington, DC, July 14, 2004.

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

DEAR MR. CHAIRMAN: On July 21, 2004, we sent you the edited Transcript of the June 17, 2004, testimonies given by Jessie Hill Roberson, Assistant Secretary for Environmental Management, and Glenn S. Podonsky, Director, Office of Security and Safety Performance Assurance, regarding evaluation of the Environmental Management Program of the Department of Energy and Issues Associated with Accelerated Cleanup.

Enclosed is the Insert that was requested by Senator Wyden. Also enclosed are the answers to three questions that you submitted for the hearing record. The remaining answers are being prepared and will be forwarded to you as soon as possible.

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

Sincerely,

RICK A. DEARBORN,
Assistant Secretary.

[Enclosures.]

QUESTIONS FROM THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES

There have been serious allegations at the Hanford Site, even allegations of criminal activities, related to aspects of the cleanup program. I appreciate that the Secretary requested careful investigations of these charges by both of your Offices. I believe I am correct that both of your reports did not support those accusations of criminal activities.

I'm glad this was your conclusion, but I'm concerned about the workers' concerns that led to the accusations in the first place.

Question 1. Would the two of you briefly summarize actions that you recommend to address concerns of workers and avoid future recurrences of these issues?

Answer. Our investigation report contained a number of recommendations to address weaknesses in the industrial hygiene program including the development of a long-term comprehensive and documented protection strategy to support a technically defensible set of engineered, personnel protective equipment and administrative controls. It was further recommended that the DOE Office of River Protection Project strengthen its oversight of the CH2M HILL industrial hygiene (IH) program to ensure that timely and effective actions are taken to correct weaknesses in the IH program and to prevent reoccurrences.

At the conclusion of the investigation, the DOE Richland Operations Office was in the process of transitioning to a new occupational medical site contractor. We provided some recommendations for further enhancing this program that could be incorporated into the new contractor's processes. The recommendations included establishing clear expectations from DOE for interfaces between the occupational medical contractor, the local DOE and the various operating contractors to integrate the occupational medical program activities on the Hanford Site. We also recommend strengthening DOE oversight of the occupational medical program. The injury and illness reporting processes require coordination and integration of the occupational

medical contractor and the various contractors operating on the Hanford Site. This was an area of increased local DOE oversight over the last year and improvements in the rigor and formality of these programs were evident. It was our recommendation that DOE Headquarters initiatives to improve the consistency and timeliness of reporting of DOE and OSHA injury and illness data be accelerated and that protocols for generating Record of Visit information from the occupational medical contractor be improved.

Question 2. In your view have recent actions by the main contractor, CH2M HILL gone far enough to resolve these issues?

Answer. At the conclusion of the Office of Independent Oversight and Performance Assurance (OA) investigation, the site had initiated a number of conservative interim actions to ensure that workers conducting tank farm activities were adequately protected. The site required respirator use for all access to the tank farms as an interim measure. Breathing air or self-contained breathing apparatus are now required in areas where ventilation systems are inoperable. Personal monitoring and sampling were expanded. There was an increase in the quality and number of instruments. Improvements to engineering controls were evaluated and implemented to further reduce the potential for worker exposure to vapors.

Worker exposures to tank farm vapors are a long-standing concern. The site has initiated a number of actions to involve the workers and to better understand their concerns. Some of these actions were well underway at the time of the OA investigation, however workers are still concerned because some workers are experiencing symptoms. We recommended that the site continue to ensure frequent communication between the DOE, CH2M HILL leadership and workers regarding vapor issues. The site should develop and disseminate information regarding what is not known about tank farm vapors.

The tank farm operations have been subject to a number of recent external reviews including the OA investigation. Collectively, these reviews serve as a good basis for needed process improvements. While the worker trust issue will be more difficult and take more time to address, the improved controls (more personal sampling, improved instrumentation) in the industrial hygiene worker program, coupled with the development of a more in-depth technical evaluation in support of a long-term defensible worker protection strategy, should improve worker safety and communication of these safety concerns.

LEGACY MANAGEMENT SITES

Question 8. Has DOE identified which sites will be Legacy Management sites?

Answer. The Office of Legacy Management will be responsible for those sites where the Department has completed cleanup and there is no ongoing Departmental mission (e.g., Rocky Flats and Fernald). Legacy Management will also be responsible for any federal long-term stewardship responsibilities at sites remediated under the Uranium Mill Tailings Radiation Control Act (UMTRA), surveillance and maintenance at uranium mill tailings disposal sites that are transferred to the Department in accordance with UMTRA, and any federal long-term stewardship responsibilities at the sites associated with the Formerly Utilized Sites Remedial Action Program following the completion of active remediation by the U.S. Army Corps of Engineers.

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