DEPARTMENT OF THE INTERIOR, ENVIRONMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2011

WEDNESDAY, MARCH 3, 2010

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 9:33 a.m., in room SD–124, Dirksen Senate Office Building, Hon. Dianne Feinstein (chairman) presiding.

Present: Senators Feinstein, Reed, Nelson, Tester, Alexander, and Murkowski.

ENVIRONMENTAL PROTECTION AGENCY

STATEMENT OF HON. LISA P. JACKSON, ADMINISTRATOR

ACCOMPANIED BY BARBARA BENNETT, CHIEF FINANCIAL OFFICER

OPENING STATEMENT OF SENATOR DIANNE FEINSTEIN

Senator FEINSTEIN. Good morning, ladies and gentlemen. I want to welcome you to the Interior Appropriations Subcommittee and our hearing on the fiscal year 2011 budget request for the United States Environmental Protection Agency, more fondly known as the EPA.

I am very pleased to welcome back Administrator Lisa Jackson to testify before the subcommittee. She is joined by Chief Financial Officer, Barbara Bennett. Welcome.

Since this is our first subcommittee hearing of the year, I would also like to welcome my colleague, Senator Lamar Alexander, the distinguished ranking member of this subcommittee, and say how much I am looking forward to working with you. We had a good year last year, and there is no reason why we will not have one again this year. So welcome and it is great to sit next to you.

Turning to the budget, the administration has requested a total of $10.02 billion for the EPA for fiscal year 2011. That is a 3 percent cut below fiscal year 2010's enacted level, which means that EPA proposes to tighten its belt and reduce funding for a number of programs. That recognizes, of course, the constraints of these very difficult economic times, at least to some extent.

The budget requests $2 billion for the Clean Water State Revolving Fund and $1.29 billion for the Drinking Water State Revolving Fund. Overall, that is a 5 percent cut for these very popular programs.

The request further eliminates $157 million for congressionally designated water and sewer projects. Again, a very popular program.

The request also reduces funding for the Great Lakes Restoration Initiative by $175 million, a 37 percent cut from the enacted level, for a total of $300 million.

Because of these reductions, it might be easy to say that EPA's budget is going in the wrong direction, but I would like to point out that this subcommittee provided a 35 percent increase to EPA's budget for fiscal year 2010. EPA also received an additional $7.22 billion from the stimulus act, known as the American Recovery and Reinvestment Act (ARRA), including $6 billion in funds for water and sewer infrastructure alone.

I really believe that America's water and sewer infrastructure is outdated, and I remember the day before bottled water when you could literally drink water from the tap anywhere in the United States. We have more or less regressed, and, therefore, the ability to provide clean water is extraordinarily important. We are going to have to see that we do not backslide with these cuts. I know we had a large amount last year. I guess it was the largest water and sewer infrastructure program that we have ever done, but we do not want to backslide.

I would like to commend the administration for shifting resources within this tight budget to provide increases for other critical priorities, starting with climate change. Most importantly, the budget includes a $43 million increase for a total of $56 million to move forward with regulation of greenhouses gases under the Clean Air Act (CAA). I am looking forward to hearing more detail from you, Administrator Jackson, on how you would expect these funds to be used.

I am also very pleased to see that the budget includes $21 million to implement the greenhouse gas reporting rule that this subcommittee directed the agency to promulgate in 2008. That is a 24 percent increase. This rule takes effect this year and will provide EPA with critical data on some of the Nation's largest emission sources.

I am also pleased to see that the administration has used this budget request to address core air and water quality improvements. Overall, the request provides a 36 percent increase for grants to States to monitor and improve air quality, for a total of $309 million.

The request includes a 20 percent increase for State water pollution control grants to improve water quality permitting and enforcement, for a total of $274 million.

And the budget also contains several initiatives to improve community cleanup efforts, starting with a 24 percent increase for the Brownfields programs for a total of $215 million. For me that is a welcome increase.

Now, when we are talking about numbers, I think it is also important that we discuss some of the policy decisions that drive this budget because, after all, a budget is in fact a policy document. Specifically, I want to talk about the choices that EPA is making as it moves forward with the regulation of greenhouse gas emissions under the CAA.

It has been 3 years since the United States Supreme Court ruled in *Massachusetts* v. *EPA* that EPA has a legal responsibility under the CAA to determine whether greenhouse gases endanger public health and welfare. Justice Stevens in that decision said the following:

"Because greenhouse gases fit well within the Clean Air Act's capacious definition of air pollutant, we hold that EPA has the statutory authority to regulate emissions of such gases. EPA can avoid taking further action only if it determines that greenhouse gases do not contribute to climate change or if it provides some reasonable explanation as to why it cannot or will not exercise its discretion to determine whether they do."

This is the opinion.

"Nor can EPA avoid its statutory obligation by noting the uncertainty surrounding various features of climate change and concluding that it would, therefore, be better not to regulate at this time. That EPA would prefer not to regulate greenhouse gases because of some residual uncertainty is irrelevant. The statutory question is whether sufficient information exists to make an endangerment finding."

The Court's language was clear and unambiguous. EPA is expected to follow the CAA. That means that once EPA issued its endangerment finding, the agency was required to regulate greenhouse gases under all sections of the CAA that apply, which means EPA is now responsible for regulating both mobile sources and stationary sources. It is that direct and that clear.

Now, there are those who chose to question EPA's decision to follow the law. In particular, a number of my colleagues are working to pass legislation that would strip EPA of its obligation and ability to determine whether greenhouse gases endanger public health and welfare as the CAA requires.

I think this is the wrong approach. Legislation overturning the endangerment finding countermands the Supreme Court's landmark decision and contradicts scientific consensus about global warming. Once more, it also jeopardizes groundbreaking efforts to harmonize EPA's tailpipe emissions standards with the Department of Transportation's corporate average fuel economy standards, which we call CAFE. I very much believe that opposition to EPA's efforts to regulate greenhouse gas emissions is generated by uncertainty about how EPA intends to follow the law.

Administrator Jackson, last week you made public additional details of how and when EPA plans to address regulatory stationary resources, but it is clear that more questions remain. I think the most important thing we can do this morning is try to answer some of those questions. As EPA explains its plans, I believe my colleagues will increasingly realize that the agency is proceeding in a deliberate and legally defensible fashion, beginning with facilities already subject to regulation, tackling only the largest polluters at this time, and developing a long-term approach to emissions that is as cost effective and flexible as the law permits. So I very much look forward to that conversation.

And I would say one other thing. The alternative to EPA proceeding in my view is that the Congress passes a new law, and thus far, we have refused or been unable, whichever it is, to do so. Therefore, EPA's mandate, given to it by the Court in the *Massachusetts* case, I think remains exceedingly clear.

So now I would like to turn it over to my distinguished ranking member, Senator Alexander, for his opening statements.

Senator ALEXANDER. Thanks, Madam Chairman, and I look forward to working with you this year, just as we did last year.

Ms. Jackson, thank you for being here.

I will reserve my questions until the proper time, but I would like to indicate the areas in which I am most interested.

In talking with you about the regulation of coal ash, specifically, what would be the impact to electricity rates and recycling uses if coal ash were regulated as a "hazardous waste." I would like to talk about that.

Two, mountaintop mining. Senator Cardin and I have legislation to end the practice of blowing off the tops of mountains and dumping the residue in streams, and I want to discuss that subject a little bit.

Clean air. Senator Carper and I have a hearing tomorrow on our bill which 11 of us are on, a bipartisan bill, the clean air bill which moves forward pretty aggressively on SO_X, NO_X, and mercury. We call it the Clean Air Act Amendments of 2009. I want to make sure that we get from EPA all you can give us about what that bill would cost, and we will talk more about that. But we need the best possible information about what the impact upon ratepayers and utilities would be of that bill.

And then hydraulic fracturing. There is concern that one of the great advantages we have right now as a country is suddenly we have a lot of new natural gas which is cheaper and lower carbon than coal. Well, it is cheaper than most forms of electricity and it is lower carbon, half the carbon of coal plants, and could be very useful as a bridge to a cleaner energy future. The questions about hydraulic fracturing—I want to make sure that whatever your conclusions are about the relationship between hydraulic fracturing and drinking water are peer reviewed so that we can have the maximum amount of confidence in the results.

The chairman and I have a little different view on climate change. I agree I am ready to buy some insurance from climate change. I think it is a problem and we need to deal with it. I support efforts in the Congress to make that the responsibility of Congress to deal with rather than the EPA because I think the current law does not give EPA the appropriate flexibility to deal with it, and I think it is of such major importance that it ought to be done by Members of Congress rather than an agency.

But I look forward to your testimony, and those will be my questions.

Senator FEINSTEIN. Thank you very much, Senator.

Administrator Jackson, if you would like to proceed.

I would like the subcommittee to know that we will follow the early bird rule with 5-minute rounds of questions.

Please proceed.

SUMMARY STATEMENT OF HON. LISA P. JACKSON

Ms. JACKSON. Thank you.

Chairman Feinstein and Ranking Member Alexander and members of the subcommittee, thank you for the opportunity to appear before you this morning to discuss the EPA's proposed budget for fiscal year 2011. This budget fully reflects President Obama's and my commitment to environmental protection and to ensure that

families all across the country have access to clean air, clean water, and land.

Much work has gone into this budget over the last year, and I am proud that it supports my key goals for the agency. Specifically, this budget is a framework to address climate change, improve air quality, assure the safety of chemicals, clean up our communities, protect America's waters, expand the conversation on environmentalism and environmental justice, and continue to build strong State and tribal partnerships.

I would like to touch on just some of the highlights of this budget that will protect human health and the environment and lay a new foundation for our prosperity.

Let me begin by being direct. The science behind climate change is settled and human activity is responsible for it. The global warming from 1980 to 2009, a little more than 1 degree Fahrenheit is statistically significant at the 99.9999 percent level. The National Academy of Sciences has concluded it is unequivocal that the climate is changing and it is very likely that this is predominantly caused by the increasing human interference with the atmosphere. These changes will transform the environmental conditions on earth unless countermeasures are taken. That conclusion is not a partisan one.

The Senate has twice passed on a bipartisan basis a resolution finding that greenhouse gas accumulation from human activity poses a substantial risk of increased frequency and severity of floods and droughts. And Senator Alexander, you cosponsored that resolution. I thank you for that.

This budget reflects that science and positions EPA to address this issue in a way that will not cause an adverse impact to the economy. The budget includes a requested increase of more than $43 million for efforts aimed at taking action on climate change. The bulk of this funding, $25 million, is for State grants focused on developing technical capacity to address greenhouse gas emissions under the CAA. It also includes funding for implementing new emissions standards that will reduce greenhouse gas emissions from mobile sources such as passenger cars, light-duty trucks, and medium-duty passenger vehicles, a rule that I am pleased was supported by the States, by the auto industry, and many stakeholders.

This budget also requests an additional $3.1 million to promote work on current and future carbon capture and sequestration projects.

While addressing global warming, this budget also takes steps to ensure that the local air quality is good for all, including those with respiratory problems. To improve air quality, EPA will continue our support of enhanced monitoring and enforcement efforts. This budget requests $60 million for State grants to address new and expanded national ambient air quality standards, as well as new air monitoring requirements. Also, this budget provides $6 million to improve air toxics monitoring capabilities and address compliance and enforcement issues in local communities.

But toxins are found not only in air emissions but in many of the common chemicals that we use every day, and we have an obligation to the American people to ensure these chemicals are safe. At the end of 2009, EPA released the first-ever chemical action plans

for four groups of substances. More plans are in the pipeline for 2010.

In this budget, EPA proposes $56 million for chemical assessment and risk review, including continued development of chemical management plans to ensure that no unreasonable risks are posed by new or existing chemicals.

This budget also promotes new and innovative strategies for cleaning up communities to protect sensitive populations such as children, the elderly, and individuals with chronic diseases.

It proposes $215 million for Brownfields, an increase of $42 million to support planning, cleanup, job training, and redevelopment of Brownfields' properties, especially in underserved and disadvantaged communities.

In addition, this budget proposes $1.3 billion for Superfund cleanup efforts across the country. Cleanup of contaminated properties takes pollution out and puts economic opportunity, jobs, in.

Protecting America's waters is a top priority for EPA due to the tremendous impact water quality has on human and environmental health and also on economic health. For fiscal year 2011, this budget reflects EPA's commitment to upgrading drinking water and wastewater infrastructure with a substantial investment of $2 billion for the Clean Water State Revolving Fund and $1.3 billion for the Drinking Water State Revolving Fund. This will initiate approximately 800 clean water and 500 drinking water projects across America.

Also, the fiscal year 2011 budget request supports numerous national ecosystem restoration efforts. For instance, $300 million is requested for the Great Lakes, the largest fresh water system in the world. There is $63 million for the Chesapeake Bay program and continued funding for the San Francisco Bay and other important programs. These programs will address critical environmental issues such as contaminated sediments and toxics, nonpoint source pollution, habitat degradation and loss, and invasive species, including the Asian carp.

PREPARED STAEMENT

We have also begun a new era of outreach and protection for communities historically under-represented in environmental decisionmaking. We are building strong working relationships with tribes, communities of color, economically distressed cities and towns, young people, and others, but this is just a start. We must also bolster our relationships with our State and tribal partners. These are areas that call for innovation and bold thinking, and I am challenging all of our employees to bring vision and creativity to our programs.

Thank you for allowing me to briefly go through the highlights of EPA's 2011 budget. I would be happy to answer any questions you may have.

[The statement follows:]

PREPARED STATEMENT OF LISA P. JACKSON

Chairwoman Feinstein, Ranking Member Alexander, and members of the subcommittee, thank you for the opportunity to appear before you to discuss the Environmental Protection Agency's (EPA) proposed budget. Let me first say that I am particularly proud of the fiscal year 2011 budget as it reflects President Obama's

continuing commitment to providing the environmental protection that keeps our communities healthy and clean and his commitment to fiscal responsibility. Families across America are tightening their budgets; the President has directed us to do the same.

Environmentalism is a conversation that we all must have because it is about protecting people in the places they live, work and raise families. In fiscal year 2011, EPA is focused on expanding the conversation to include new stakeholders and involve communities in more direct ways. Over the years, EPA has worked to prevent pollution at the source and promoted the principles of responsible environmental stewardship, sustainability, and innovation. EPA works to improve and encourage sustainable practices and help businesses and communities move beyond compliance to become partners in protecting natural resources, managing materials more wisely, reducing greenhouse gas emissions, and improving the environment and public health. Today's challenges require renewed and refocused efforts to address old pollution and prevent new pollution. The $10 billion proposed for EPA in the fiscal year 2011 President's budget will support key priorities during this time of fiscal challenges. These themes are: taking action on climate change; improving air quality; assuring the safety of chemicals; cleaning up our communities; protecting America's waters; expanding the conversation on environmentalism and working for environmental justice; building strong State and tribal partnerships; and maintaining a strong science foundation.

These themes are aligned with a Government-wide effort to identify near-term, high-priority performance goals. For EPA, such goals include reducing Greenhouse Gas (GHG) emissions, improving water quality, and delivering improved environmental health and protection to our communities. EPA will work toward meeting these goals over the next 18 to 24 months.

Madam Chairwoman and members of the subcommittee, let me touch on some of the highlights of this budget, both the hard choices and the targeted investments that will protect our health and the environment, advance creative programs and innovative solutions, and help build a new foundation for our prosperity.

TAKING ACTION ON CLIMATE CHANGE

EPA continues to take meaningful, common sense steps to address climate change. Making the right choices now will allow EPA to improve health, drive technology innovation, and protect the environment; all without placing an undue burden on the Nation's economy. The budget includes a requested increase of more than $43 million for additional regulatory efforts aimed at taking action on climate change. It includes $25 million for State grants focused on developing technical capacity to address greenhouse gas emissions under the Clean Air Act. It also includes $13.5 million in funding for implementing new emission standards that will reduce GHG emissions from mobile sources such as passenger cars, light-duty trucks, and medium-duty passenger vehicles, developing potential standards for large transportation sources such as locomotives and aircraft engines, and analyzing the potential need for standards under petitions relating to major stationary sources—all through means that are flexible and manageable for business.

A request of $21 million will support continued implementation of the Greenhouse Gas Reporting Rule to ensure the collection of high-quality data. This budget also requests an additional $3.1 million to promote work on current and future carbon capture and sequestration projects.

IMPROVING AIR QUALITY

To improve air quality we'll continue our support of enhanced monitoring and enforcement efforts already underway. We are also requesting $60 million for state grants to address new and expanded National Ambient Air Quality Standards (NAAQS) as well as air monitoring requirements. Through the Healthy Communities Initiative (HCI) we will provide $6 million to improve air toxics monitoring capabilities and address compliance and enforcement issues in communities. I will have more to say both about the HCI and our efforts to improve air quality momentarily.

ASSURING THE SAFETY OF CHEMICALS

Assuring the safety of chemicals in our products, our environment and our bodies is of utmost concern, as is the need to make significant and long-overdue progress in achieving this goal. Last year, I announced principles for modernizing the Toxic Substances Control Act. At the end of 2009, we released our first ever chemical action plans for four groups of substances, and more plans are in the pipeline for 2010. Using our streamlined process for Integrated Risk Information System assessments,

we will continue strong progress toward rigorous, peer-reviewed health assessments. Additionally, we will continue focus on high-profile Integrated Risk Information System assessments on dioxins, arsenic, formaldehyde, trichloroethylene and other substances of concern. We are proposing $56 million for chemical assessment and risk review, including continued development of chemical management plans, to ensure that no unreasonable risks are posed by new or existing chemicals. Further, this budget invests $29 million in the continuing effort to eliminate childhood lead poisoning. We will implement the Renovation, Repair and Painting Rule to address lead hazards created by renovation, repair and painting activities in homes and child occupied facilities with lead based paint. In fiscal year 2011, $6 million would support national efforts to mitigate exposure to high-risk legacy chemicals, such as mercury and asbestos.

CLEANING UP OUR COMMUNITIES

Among our highest priorities in this budget are investments in new and innovative strategies for cleaning up communities, especially to protect sensitive populations, such as children, the elderly, and individuals with chronic diseases. We will continue to focus on making safer, healthier communities. To clean up our communities, we're proposing investments that will get dangerous pollution out, and put good jobs back in.

This budget proposes $215 million for Brownfields, an increase of $42 million to support planning, clean-up, job training and redevelopment of Brownfields properties, especially in underserved and disadvantaged communities. EPA encourages community development by providing funds to support community involvement and is adding area-wide planning efforts to enhance the positive impacts associated with the assessment and clean-up of Brownfields sites. Through area wide planning, particularly by focusing on lower income communities suffering from economic disinvestment, Brownfield properties can be redeveloped to help meet the needs for jobs, housing, and infrastructure investments that would help rebuild and revitalize these communities, as well as identify opportunities to leverage additional public and private investment. We'll also provide funding for assessment and clean-up of underground storage tanks and other petroleum contamination on Brownfields sites.

In addition, we're proposing $1.3 billion for Superfund clean-up efforts across the country. We will continue to respond to emergencies, clean up the Nation's most contaminated hazardous waste sites, and maximize the participation of liable and viable parties in performing and paying for clean-ups. EPA will initiate a multiyear effort to integrate and leverage our land clean-up authorities to address a greater number of contaminated sites, accelerate clean-ups, and put sites back into productive use while protecting human health and the environment. The new Integrated Cleanup Initiative represents EPA's commitment to bring more accountability, transparency and progress to contaminated site cleanups.

This budget also requests $27 million for the HCI which covers clean, green, healthy schools; community water priorities; sustainability and the air toxics monitoring in at risk communities I mentioned earlier. Six million dollars is requested for the Clean, Green, and Healthy Schools Initiative to support States and communities in promoting healthier school environments, to broaden the implementation of EPA's existing school environmental health programs including asthma, indoor air quality, chemical clean out, green practices, enhanced use of Integrated Pest Management, and safe handling of PCB-containing caulk. EPA will work in partnership with the Departments of Education and Health and Human Services to accomplish this initiative.

HCI also includes an increase of $5 million for and Smart Growth work, including the Interagency Partnership for Sustainable Communities with the Departments of Transportation and Housing and Urban Development. The Smart Growth program works with Federal partners and stakeholders to minimize the environmental impacts of development.

These modest investments will make real, measurable, improvements in a small number of pilot communities. In addition, the strategies that will be developed could be used in communities across the Nation.

PROTECTING AMERICA'S WATERS

Protecting America's waters is a top priority and EPA has an ambitious vision for the Nation's waters in the years ahead. Water quality has tremendous impacts on quality of life, on economic potential, and on human and environmental health. In fiscal year 2011, EPA continues its commitment to upgrading drinking water and wastewater infrastructure with a substantial investment of $2 billion for the Clean Water State Revolving fund and $1.3 billion for the Drinking Water State Revolving

Fund. EPA, the States, and community water systems will build on past successes while working toward the fiscal year 2011 goal of assuring that 91 percent of the population served by community water systems receives drinking water that meets all applicable health-based standards. EPA's partnership investments will allow States and tribes to initiate approximately 800 clean water and 500 drinking water projects across America, representing a major Federal commitment to water infrastructure investment. These investments send a clear message to American taxpayers that our water infrastructure is a public health and environmental priority.

The fiscal year 2011 budget request supports national ecosystem restoration efforts; $300 million is requested for the Great Lakes, the largest freshwater system in the world. This multiagency restoration effort represents the Federal Government's commitment to significantly advance Great Lakes protection, with an investment of more than $775 million over 2 years. The focus is on addressing critical environmental issues such as contaminated sediments and toxics, nonpoint source pollution, habitat degradation and loss, and invasive species, including Asian carp.

We're requesting $63 million for the Chesapeake Bay program including increased funding to implement President Obama's Chesapeake Bay Executive Order. We are accelerating implementation of pollution reduction and aquatic habitat restoration efforts to ensure that water quality objectives are achieved as soon as possible. A centerpiece of EPA's fiscal year 2011 Chesapeake Bay activity is the implementation of the Nation's largest and most complex Total Maximum Daily Load (TMDL) for the entire Chesapeake Bay watershed. The TMDL will involve interstate waters and the effects on water quality from the cumulative impact of more than 17 million people, 88,000 farms, 483 significant treatment plants, thousands of smaller facilities, and many other sources in the 64,000 square mile watershed.

In addition, the budget request includes $17 million for the Mississippi River Basin. EPA will work with the Department of Agriculture and States to target nonpoint source reduction practices to reduce nutrient loadings. EPA will also work with other Federal partners to target two high-priority watersheds in the Mississippi River Basin to demonstrate how effective nutrient strategies and enhanced partnerships can address excessive nutrient loadings that contribute to water quality impairments in the basin and, ultimately, to the hypoxic conditions in the Gulf of Mexico.

The budget also proposes $10 million for green infrastructure research, more than doubling research that offers the potential to help us transition to more sustainable water infrastructure systems.

EXPANDING THE CONVERSATION ON ENVIRONMENTALISM AND WORKING FOR ENVIRONMENTAL JUSTICE

We have begun a new era of outreach and protection for communities historically underrepresented in environmental decision making. We are building strong working relationships with tribes, communities of color, economically distressed cities and towns, young people and others, but this is just a start. We must include environmental justice principles in all of our decisions. This is an area that calls for innovation and bold thinking, and I am challenging all of our employees to bring vision and creativity to our programs. The protection of vulnerable subpopulations is a top priority, especially with regard to children. Our revitalized Children's Health Office is bringing a new energy to safeguarding children through all of our enforcement efforts. We will ensure that children's health protection continues to guide our path forward. The increased Brownfields investments I mentioned will target underserved and economically disadvantaged neighborhoods—places where environmental cleanups and new jobs are needed.

We're also proposing $9 million for Community Water Priorities in the Healthy Communities Initiative; funds that will help underserved communities restore urban waterways and address water quality challenges.

Furthermore, the fiscal year 2011 President's budget includes approximately $615 million for EPA's enforcement and compliance assurance program. This request reflects the administration's strong commitment to vigorous enforcement of our Nation's environmental laws and ensures that EPA will have the resources necessary to maintain a robust and effective criminal and civil enforcement program and pursue violations that threaten vulnerable communities.

BUILDING STRONG STATE AND TRIBAL PARTNERSHIPS

Another hallmark of this budget is strengthening our State and tribal partnerships. The budget requests $1.3 billion in categorical grants for State and tribal efforts. State and local governments are working diligently to implement new and expanded requirements under the Clean Air Act and Clean Water Act. New and ex-

panded requirements include implementation of updated National Ambient Air Quality Standards (NAAQS), for the first time addressing Greenhouse Gas (GHG) emissions, and addressing growing water quality issues, such as nutrient pollution. This increase includes the $25 million for greenhouse gas permitting activities already mentioned, as well as increases of $45 million for core work under air quality management grants and $15 million for air monitors, all of which I mentioned previously.

We are also requesting $274 million, a $45 million increase more than 2010, to help States enhance their water quality programs. New funding will strengthen the base State, interstate and tribal programs, address new regulatory requirements, and support expanded water monitoring and enforcement efforts.

The request also includes increased support for our tribal partners. In order to help tribes move beyond capacity building to implementation of their environmental programs, $30 million is budgeted for a new competitive Tribal Multimedia Implementation grant program. These grants are tailored to address an individual tribe's most serious environmental needs through the implementation of Federal environmental programs, and will build upon the environmental capacity developed under the Tribal General Assistance Program (GAP). To further enhance tribal capacity, this budget also includes an additional $9 million for GAP grants for a total of $71 million. GAP grants develop capacity to operate an environmental program, and support a basic environmental office or circuit rider that can alert the tribe and EPA to serious conditions that pose immediate public health and ecological threats.

MAINTAINING A STRONG SCIENCE FOUNDATION

In fiscal year 2011, the range of research programs and initiatives will continue the work of better understanding the scientific basis of our environmental and human health problems We are requesting a science and technology budget of $847 million to enhance—among other things—research on endocrine disrupting chemicals, green infrastructure, air quality monitoring, e-waste and e-design, and to study of the effects of hydraulic fracturing on drinking water. It's important to highlight that most of the scientific research increase will support additional Science to Achieve Results (STAR) grants and fellowships to make progress on these research priorities and leverage the expertise of the academic research community. The $26 million increase for STAR includes $6 million for STAR fellowships in support of the President's priority for Science, Technology, Engineering, and Math investments. This reflects a near doubling of the STAR fellowships program. This budget also supports the study of computational toxicology, and other priority research efforts with a focus on advancing the design of sustainable solutions for reducing risks associated with environmentally hazardous substances.

These are the highlights of a budget that reduces costs while strengthening American communities and boosting the green economy. Responsible, targeted investments will protect our health and the environment, advance creative programs and innovative solutions, and help build a new foundation for our prosperity. Thank you again for inviting me to testify today and I look forward to answering your questions.

Senator FEINSTEIN. Thank you very much, Madam Administrator.

You sent a letter to a group of Democratic Senators on February 22 that says EPA is finalizing two actions to lay out how it plans to move forward: one action to clarify the schedule, the other the so-called Tailoring Rule to define entities EPA would initially regulate. Could you briefly walk us through your timeline and explain what actions you plan to take?

CLEAN AIR ACT—REGULATIONS

Ms. JACKSON. Certainly, Chairman, yes. The letter on February 22, first, clarifies that EPA expects that no source will be required to get a CAA permit to cover greenhouse gas emissions in calendar 2010. So there will be no CAA regulation essentially of stationary sources—that is an important distinction—this calendar year.

Also, it clarifies that we will soon put out a memo that says that the first potential for regulation of stationary sources will be early

2011 when the car rules become effective. If you read the CAA, as you mentioned in your opening statement, it is the first regulation of greenhouse gases that then triggers regulatory requirements for greenhouse gases under other areas of the CAA.

We also talk about the need to respond to the numerous comments we have gotten on the Tailoring Rule, many from States who say, listen, we want to get involved in CAA regulation. We know it is coming. We know that even if there is new legislation, States will need to get ready for their significant role under the CAA. But we need more time and we need resources. That is why the budget includes the $25 million and resources for States.

My letter also talks about phasing in, even more slowly than we originally anticipated, regulation of stationary sources, starting with what we call "anyway" sources, those sources that need what, is called a PSD permit, no matter what. We would then move to the very largest sources and clarify that over a 5-year period between next year and 2016, we would phase in sources so that, over time, you move to regulation of a larger and larger universe of sources.

TAILORING RULE

Senator FEINSTEIN. Two other quick questions I want to get to in the 5 minutes.

What percent of emissions do you believe will come under some form of regulation during 2011?

Ms. JACKSON. It is a little difficult until we finalize the Tailoring Rule to be specific, but let me give you a couple of numbers I think are helpful. Sixty-seven percent of U.S. stationary source emissions come from sources that emit more than 100,000 tons per year of CO_2 equivalents. Seventy percent come from sources larger than 50,000 tons, and 75 percent come from sources that emit more than 25,000 tons. So you get fully two-thirds of our stationary source emissions, if you look at the largest sources, those more than 100,000 tons.

Senator FEINSTEIN. Thank you very much.

As you say in this letter, EPA plans to start phasing in permitting requirements for sources that are substantially higher than the 25,000 tons. Your threshold that you discuss in your draft Tailoring Rule—how do you define "substantially?"

Ms. JACKSON. We have not selected another number. I am clear in the letter that we are in the middle of rulemaking, and so I am somewhat constrained until we finalize a rule or set of rules. But I believe, based on the almost 500,000 comments we have received and as I said, many from States that there may be a need to phase in and look at a different number than 25,000 as being our definition of what are significant sources.

Senator FEINSTEIN. But if I understand what you are saying then, for the near future, in terms of the next 2 years, you are going to be dealing with sources, at least 75,000 or more than 100,000, but they would all be more than 75,000.

Ms. JACKSON. That is absolutely true. It will probably be at least 2 years before we would look at something like, say, a 50,000 threshold.

Senator FEINSTEIN. Thank you.

Senator Alexander.

COAL ASH

Senator ALEXANDER. Thank you.

Administrator Jackson, I would like to ask you some questions about coal ash. You know, in Tennessee, we had a problem in the Tennessee Valley Authority at Kingston, a big coal ash problem, and that raised the issue of who ought to regulate it. Am I correct? Today EPA does not regulate coal ash but is in the process of considering whether to regulate coal ash. Is that correct?

Ms. JACKSON. That is correct.

Senator ALEXANDER. And I am correct that a part of that consideration is whether you consider it hazardous waste.

Ms. JACKSON. That is correct, Senator.

Senator ALEXANDER. When that regulation comes down, we will know whether you are going to regulate it, which I think you should do, and whether it should be hazardous waste, which I think it should not be. And I wanted to ask you a few questions about that and get your thought on it. I will go ahead and ask the questions and then sit back and give you time to answer.

About half, 45 percent, of 136 million of annual tons of coal ash is recycled, about half of it. Most of that, a lot of it, maybe all of it comes from coal plants. Is that what we are talking about? Let us say all that comes from coal plants that produce 50 percent of America's electricity. This recycled coal ash ends up in everything from high-strength concrete for buildings and roads, structural fills, embankments, wallboard, asphalt filler, grout, paint procedures, blasting, sanding, grit, roofing products. It is a lot of stuff, and it is recycled in a way that gets rid of it, which is important, and makes it useful and, in the process, gives it some value and that helps keep down electric rates, which is important for jobs and heating our homes.

Now, yesterday an entrepreneur came by to see me, and I will not give his name. You know him, I suspect. But he brought me these limestone pellets, and he claims that he is able to turn CO_2 from smokestacks into limestone, which he then can use for concrete or aggregate. Of course, if he can actually do that in a commercially viable way, that would be, I guess, the holy grail of electricity and make the job of dealing with carbon a lot easier because 40 percent of carbon comes from coal plant smokestacks.

The first question would be if this stuff, coal ash turned into limestone, is regulated as a hazardous waste, would that have a chilling effect on entrepreneurs such as the one who came by to see me and make it more difficult for him to develop this technology to get rid of carbon on coal plants, which is something that we all hope happens?

I know enough about this, having been in business—if you have a business and you buy a plant that is on a "former hazardous waste site", you have a real problem with potential liability. Let us say you have a food processing plant on a site that used to be a hazardous waste site. You worry about whether somebody is going to sue you and shut your plant down and slow down your operation.

So what I am asking you to consider carefully is not whether EPA should regulate coal ash. I think you should. I think it is better that you do. But I think it is better that you not call it a hazardous waste because if you do and if half of it is used for products like this and if they turn out to be commercially viable, this product or some other product that someone invents that finds a way to remove carbon from coal plant smokestacks is exactly what we are hoping happens in our country over the next several years and having a chilling effect on the development of this technology would be a big mistake.

So I wanted to ask your thoughts about that whole subject and where you are in the regulatory process.

Ms. JACKSON. Thank you, Senator. First, thank you for recognizing that there probably is a need for an increased regulatory role at the Federal level. I think the Kingston spill and subsequent coverage really worried people about the safety of these big impoundments, as well as what might be leaching from them. So let me start there.

Your first question was about essentially a stigma. It is fair to say that many have speculated that a hazardous waste designation would stigmatize a material that is clearly being reused in significant amounts; I absolutely agree with your numbers. I have to preface all this by saying there is no proposed rule out yet. Please understand we are still working on it.

The vast majority of uses are fine. They are actually to be encouraged because they are in places where the material is essentially not allowed to be subject to leaching.

The concern we have seen with this material are twofold. Number one, very large pounds that are very wet and full of very heavy materials so that structurally that material can—the impoundment can break and you can have the kind of environmental catastrophe you have down in Kingston. And we are all working, and I have told you how hard the State of Tennessee and how much I appreciate their partnership in that cleanup.

And the second issue is what leaches out of the bottom of those impoundments because what we have found is that this material is subject to leaching, and most of those impoundments are wet impoundments. We realize that you put that much stuff in those impoundments and let water leach through it, you are going to see impacts to groundwater and those are documented.

So our primary concern is addressing those issues while not having the unintended consequence of shutting down reuse in an industry that we primarily agree with. There are some relatively minor reuses that might be of concern where you take large amounts of the same material and use it for fill, sir. But by and large, the reuse of it in wallboard, in concrete is admirable and to be encouraged.

So that is what we are trying to do.

I do not necessarily agree that saying that the material in a landfill as waste stigmatizes the material that is not in a landfill, but that is something that will certainly be subject to much comment, I would imagine, during the rulemaking process.

CARBON

Senator ALEXANDER. I thank you for such a good answer. I found this a fascinating possibility because, Madam Chairman, I have never suspected—I am not a scientist—that you could capture and sequester enough carbon from coal plants to make that all work. I have always thought somebody would come along with one or two or three or four ways to get rid of carbon in the same way we do sulphur, nitrogen, and mercury. I just want to be real careful that any Federal action we take does not discourage, that we actually should be encouraging it.

Senator FEINSTEIN. This is a building material?

Senator ALEXANDER. This is limestone. So what this entrepreneur says—and I will let him speak for himself in the marketplace—is that he has turned CO_2 coming out of the smokestack into limestone. It is then used in concrete or in aggregate, and according to him, it has been through the EPA and it does not leach. So hopefully, there will be four or five inventions that do a similar thing.

Senator FEINSTEIN. Yes.

Senator ALEXANDER. In fact, the cost of doing this would be substantially less than some other ways of dealing with carbon.

You know, if you are buying a product and it is labeled "hazardous waste," all of a sudden, your lawyers come in and say, wait a minute. We better not use this in this house or 20 years from now somebody will come and say it is like asbestos and we will all go to jail or we will all be broke.

Senator FEINSTEIN. Thank you very much, Senator.

Senator ALEXANDER. Thank you for your time.

Senator FEINSTEIN. It was very interesting.

Senator Nelson.

CLEAN AIR ACT—ETHANHOL BLENDS

Senator NELSON. Thank you, Madam Chairman.

Administrator Jackson, thanks for coming by. I was glad to have the opportunity to meet with you yesterday. One of the points that we talked about was the EPA's pending decision to waive the CAA for ethanol blends and gasoline up to 15 percent. And as you understand, as we discussed, it is critical that the tests on engine compatibility be completed on time in order to provide stability to the ethanol industry. Without the increase in blends, advanced technologies may not materialize that will allow commercial-scale cellulosic ethanol to develop and allow high-tech efficiency improvements to continue even in the corn-to-ethanol process.

As such, can you confirm that EPA anticipates the Department of Energy (DOE) will finish its testing this April and get some additional detail from you on the next steps the agency would take towards a proposed decision increasing ethanol blends in gasoline?

Ms. JACKSON. Thanks, Senator.

I did confirm, after our meeting yesterday, that the DOE testing remains on schedule. So when we last talked about this publicly, we said that we believed those tests would finish up in spring, April or May time frame. As of December, only 2 of 19 tests were completed. That did not seem to be enough information on which

to make a waiver decision. We expect that once we get that additional data—and it will be publicly available—then EPA will be in a position to move toward a final decision on waiver. Late summer is the time period.

Senator NELSON. So at this point, you think things are on track with the time frame that we talked about.

Ms. JACKSON. Yes. We did double check that.

ETHANOL BLENDS

Senator NELSON. We also spoke about the concerns regarding the impact that increased ethanol blends would have on legacy vehicles and small motors. During our talks, I cited the example of Brazil which has a blend level defined in the range of E-20/25. In the 30-plus years of their use of mid-level blends, there have been no reported negative impacts on motors used in the Brazilian fleet, as well as small engines used to equip motorboats, lawn mowers, and chain saws.

I really, as we discussed, hope that you will look very closely and the agency will look closely to the successes of Brazil while making your final determination on the E-15 blend so we can incorporate the success they have had towards energy and efficiency and bring that back to America as well, as we discussed.

Ms. JACKSON. Thanks, Senator. As you requested, we are passing that data and that information on to the technical staff who are reviewing this matter.

SUPERFUND SITE—OMAHA LEAD SITE

Senator NELSON. I think it would be helpful to have that other experience in the process of looking at the situation from our standpoint. We do not have to reinvent all experience if we can learn from others. So I appreciate your looking at that.

I was also pleased to see in your written testimony the continued commitment to Superfund cleanup across the country. As you know, the city of Omaha has the largest residential Superfund site in the country. The so-called Omaha Lead Site, as it is known, contains more than 15,000 yards contaminated with dangerous levels of lead, posing a significant health risk.

The EPA, up until now, has worked very closely with the city of Omaha. They have addressed more than 5,600 yards, and your staff at Region 7 has been doing an outstanding job with all interests involved. And I am certain, as we discussed, this cooperation, this excellent working together will continue under the new regional administrator, Karl Brooks, with whom we met recently.

My question today is just to confirm that EPA's budget request will enable the agency to continue excavating these contaminated yards in implementing the 2009 record of decision.

Ms. JACKSON. Yes, Senator, that is absolutely right. We remain committed. It is a top priority for the Superfund program.

INTEGRATED RISK INFORMATION SYSTEM (IRIS) ASSESSMENT

Senator NELSON. I appreciate that.

And then finally, I know we touched very briefly on the arsenic issue, but I wanted to follow up regarding a letter I wrote you back

in October. We discussed EPA's draft—IRIS—assessment. To be brief, the original arsenic rule set the arsenic limit for tap water at 10 parts per billion in 2001, put a lot of major, new costs on small communities across Nebraska. We have significant numbers of small communities under 2,500 and under 1,500 and under 750 in population.

Now the new IRIS assessment is proposing even more stringent regulations which would result in even additional major consequences. We obviously do not want contaminated water, but if we are not careful in our efforts here—and I hope that you will look at Dr. Samuel Cohen from the University of Nebraska's Medical Center, a leading scientist on this low-dose arsenic exposure—because if we continue to press smaller communities, not just in Nebraska, but I would imagine in Montana and elsewhere, on these stringent requirements, the communities will shut down their municipal water supply and go to individual wells and drink the same water without any oversight by EPA. So we have to have a rational approach to this that keeps in mind good health but good common sense as it relates to the economics of communities.

Ms. JACKSON. Thank you, Senator. I could not agree more. Common sense needs to always be in the front of our minds as we make regulation. I pride myself on it.

Dr. Cohen's research—we have it. We are providing the entire IRIS risk assessment back to our scientific advisory board. They peer reviewed the draft, but this is such an important issue that we have asked them to conduct a focused review of our response to their review. Dr. Cohen's research will be provided as well. We are being as careful as we can.

Let me just say for the record that as EPA Administrator, I am absolutely committed to helping small communities deal with the conundrum that they find themselves in, not to simply put requirements out knowing that the day we do, those communities find themselves choosing between having enough money to buy food and pay the water bill.

Senator NELSON. Well, I know with your leadership and Karl Brooks' leadership, we will see less command and control situations and more partnership relationships develop so that we can solve these problems together rather than create additional burdens on communities' budgets.

Thank you, Administrator, and thank you, Madam Chairman.

Senator FEINSTEIN. Thank you very much, Senator Nelson.

Senator Reed.

STATEMENT OF SENATOR JACK REED

Senator REED. Thank you very much, Madam Chairman.

And I want to thank you, Administrator Jackson, and the chairman for the great support you have given to the Clean Water and Drinking Water State Revolving Funds. These are absolutely critical to my State and to many other States, not only in terms of investment in environmental quality, but also we have an unemployment rate of 13 percent and all this eventually translates to people working. In fact, I had the privilege to accompany Curt Spalding to the Fields Point sewage treatment facility, and they are doing

a major renovation and a major project. Seventy-five people are at work.

And by the way, that was a wise choice, making Curt an administrator of Region 1. You and the President should be commended.

Ms. JACKSON. Common sense prevails.

CLEAN WATER AND DRINKING WATER REDUCTION

Senator REED. I agree.

But the need is so huge. Just yesterday I had the mayor of Newport, Rhode Island, and they are facing a $180 million need for water infrastructure improvements. They are in negotiations with EPA and they understand they have to make water pollution reductions. But I know you have done a lot, but it is a little bit concerning to me that the budget calls for a $100 million reduction in both the Clean Water and Drinking Water State Revolving Funds.

So could you comment on that difficult choice and also whether there is an opportunity, perhaps in another recovery package, to put more funds in?

Ms. JACKSON. Thank you, Senator, and thank you for the kind words about Curt. He is great and so is Karl Brooks in Region 7.

You are absolutely right. There were some tough choices that had to be made. One of them in the budget was trying to balance all the priorities that States are facing. I have to say that one of the pieces of good news has been the State reaction and responsibility and accountability under the ARRA. As you know, States got $6 billion of ARRA funding for water projects, and they also got a requirement that they had to have that money under contract, absolutely under contract by February 17 of this year. Every single State made it. So I think it is a testament to two things: the fact that in the States folks are working hard and that they understand the need for clean water, both economically and environmentally and from a public health perspective. But they also need a lot more, as you point that out in your remarks.

So I would say that between spending the ARRA money and the significant amount of money that is in this budget, it is still twice what we saw at the end of the last administration, a real acknowledgement that now is not the time to cut those funds, that they are tied to jobs and create jobs. I believe we have struck a nice balance.

I have to point out there is also money in this budget, a significant increase, in money for the State water staff and air staff, by the way, because we know right now the other problem that States are facing is they are trying to balance their budgets. And we are hoping that they do not do that by laying off State environmental workers because they are the folks who write the permits and do the work to get these funds on the street.

Senator REED. Thank you, Madam Administrator.

One other point I would make is it strikes me that the delivery system for the State revolving funds has been in existence for a long time and they have the capacity to get the money out. There are other State programs across the country that have not been as successful, but this is one where there is a very good delivery system. Again, I think your comments indicate an investment in this is not only appropriate and necessary, but also it is a pretty effi-

cient way to deliver resources and get people to work. So I thank you for that effort.

Ms. JACKSON. Thank you, Senator Reed.

ENDANGERMENT FINDING

Senator REED. There is an issue that we will confront shortly, which a Congressional Review Act motion to essentially withdraw or compel you to withdraw your endangerment finding on greenhouse gases. I understand that other countries around the globe have recognized this, for example, China. And then other countries are suggesting that it is not a problem, like Saudi Arabia. I think if I was producing lots of petroleum, I would also not consider it to be a problem.

But can you comment on the consequences if we do not address this issue as you propose?

And one other point I would suggest is that what is most interesting to me in one respect is that this issue of climate change is now being debated seriously as a national security problem by defense officials, by planners within the Department of Defense (DOD), and something that is causing them grave concern. So I think we might—well, I know we will benefit from your comments.

Ms. JACKSON. Thank you, Senator.

The Congressional Review Act resolution asks Senators essentially to invalidate EPA's finding that greenhouse gases endanger public health and welfare. It is, you know, 5–10 lines long. That is all it says, that Congress says that the endangerment finding is not true.

Senator REED. Based on our scientific expertise.

Ms. JACKSON. Based on something.

I think that simple statement is contrary to multiple lines of scientific inquiry and the belief of the vast majority of climate scientists and people who work in the field that not only is the climate changing, the amount of greenhouse gases in our atmosphere is continuing to increase. That interference in the atmosphere is man-made, man-induced, and something needs to be done.

That is what EPA's endangerment finding says, and I think for this country, for our U.S. Senate, to take that position in the year 2010 would, indeed, be an enormous step backwards for science and the results of decades of scientific inquiry.

You asked about national security considerations. The endangerment finding in and of itself has no regulation with it, but it will unlock the key to, first, mobile source regulation and later, as I discussed in my colloquy with the chairman, common-sense, step-wise regulation. We do know that our national security is threatened and imperiled by a reliance on oil that we import. Well more than 50 cents of every dollar we spend for gasoline is actually for gasoline that is not produced here in our country, and we need to find a different method to power our transportation system. I think Americans agree with that. But more importantly, DOD, CIA, and NSA people who worry about our national security, say this is a real threat.

Finally, I would be remiss if I did not bring up the opportunity for tremendous jobs in dealing with climate pollution. In dealing with the negative impacts, you have a tremendous benefit, which

is we create opportunities. I was taken by your example, Senator Alexander, of the limestone pellets. That is what always happens. When it is clear that there is a regulatory imperative, America always steps in and finds new ways to deal with the problem. It happened with catalytic converters on cars. It happened with scrubbers on powerplants. I have no doubt in my mind as an engineer that the engineers in this country will rise to the challenge and create an entire industry around dealing with carbon dioxide pollution.

Senator REED. Thank you, Madam Administrator.

Thank you, Madam Chairman.

Senator FEINSTEIN. Thank you very much, Senator Reed.

Senator Tester.

WATER QUALITY STANDARDS

Senator TESTER. Yes, thank you, Madam Chair.

I appreciate you being here today, Administrator Jackson.

And Ranking Member Alexander, when we find CO_2 can be an asset, then many more problems will be solved. So I appreciate you bringing forth the limestone example.

I want to thank you for your leadership in the position you hold in the EPA. I want to thank you for guiding your agency so efficiently to direct stimulus funds out to States and into communities to help restart those economies, while building critically important infrastructure, and improving environmental quality. I am proud to say that Montana was one of the fastest States to distribute those recovery funds, and they were very much appreciated and infused almost $40 million into rural communities throughout the State to help with water distribution and bring them in compliance with drinking water standards. So it was a good thing and, unfortunately, we need even more. But thank you for your work there.

I want to touch on a question that Senator Nelson asked. In Montana, where every community is a rural community—and some of those rural communities are even frontier communities—their ability to comply with standards that continue to get tighter and tighter and tighter is very, very difficult. Make no mistake about it. I do not want rural America to have substandard water quality, but as the standards get tighter with our advancement with science, the folks in a lot of these areas are asking themselves are the tighter standards really providing a health benefit.

And so I want to ask you two questions. Number one, as these standards get tighter down the line and I do not care there are numerous bad things in the water that you always try to get to zero, but at some point in time, it becomes cost-prohibitive. Do you feel strongly about the science as these standards get tighter and tighter, number one?

And number two, is there any ability to give any relief to these rural communities? I know Senator Nelson asked a very similar question, but it is very important because, quite honestly, they are getting to the point where they cannot afford it. And they are not poverty stricken areas either.

Could you just kind of touch on those things?

Ms. JACKSON. I certainly will.

First, on the science question, I think it is incumbent on me as head of the EPA to make sure the science is absolutely strong, es-

pecially when we are dealing with something like drinking water. I mean, we cannot live without it, clearly. But we also do not want to frighten people unnecessarily with all the things that they are worried about, especially in this day and age.

That is why we are going the extra mile on the contaminant like arsenic, which in many cases is naturally occurring, to say to people before we move into what this means from a regulatory position, let us go back and make sure that our science advisory board, who advised us on this last time, thinks we took the right approach in responding to their comments. We will include comments that we have received already through the public comment period and give those to the science advisory board as well.

You have my commitment we will be as rigorous as we know how to be, and generally peer review is a really important part of ensuring scientific rigor.

On the second question of affordability, there is currently in the law some ability to look at affordability criterion for small systems. There are also you mentioned the ARRA and the budget that passed last year. The Safe Drinking Water Act has always had, as part of the Drinking Water Revolving Fund, the ability to have loan forgiveness, essentially grants, to help smaller communities if they cannot afford it. I think we were talking recently about this because it came up in another hearing earlier last week, and I do think EPA will renew its effort to work at the State level with the professionals of the State to make sure that it is clear where those flexibilities that currently exist are because they are significant. A lot of times the problem is less than the flexibility and more that there is just more money needed. There is flexibility but there is not enough money to give out. And that, of course, we know is a concern in terms of investments in water infrastructure.

Senator TESTER. And I appreciate the answer. It is important to know where the majority of the country is dealing with hundreds of thousands or millions of people on these water systems, where I live, for example, you are actually talking about a couple hundred people that covers an area probably four times the size of New Jersey. And so it is really important that, as we move forward everybody wants clean drinking water. You are exactly right. If we do not have this, we do not survive. But by the same token, we need to make sure that we are not eliminating the ability for communities to provide water or they will disappear. Period.

I have got about 12 more questions, but I will go around. I assume we are going to have another round, Madam Chair?

Senator FEINSTEIN. Yes, we are.

Senator TESTER. Well, thank you.

Senator FEINSTEIN. Thank you, Senator Tester.

Senator TESTER. I will be back. Thanks.

WATER QUALITY FUNDING AND ENFORCEMENT

Senator FEINSTEIN. Okay, good.

I wanted to change my topic, at least a little bit, to water quality funding and enforcement. As I mentioned, we put in nearly $10 billion for water and sewer projects in fiscal year 2010, including $6 billion through the stimulus. My understanding is all States needed to have their ARRA funds under contract by February 17 or risk

losing them. Are all of the ARRA funds under contract at this time?

Ms. JACKSON. They are, indeed, Madam Chairman.

Senator FEINSTEIN. And how many are there?

Ms. JACKSON. There were $6 billion total. Are you asking for the number of projects?

Senator FEINSTEIN. Yes.

Ms. JACKSON. I do not know. We will grab that number for you.

Senator FEINSTEIN. I think it is 3,416. They say do not ask a question you do not know the answer to.

Senator FEINSTEIN. I think it is that, which I think is a very good record. We got those projects funded and that was good.

The New York Times recently reported that more than one-third of sewer systems have violated clean water laws since 2006. The Times also reported that fewer than 3 percent of Clean Water Act violation resulted in fines or other significant enforcement actions.

And as a matter of fact, I must tell you I have noticed that too. When I was president of the board of supervisors, we were under a cease and desist order and a sewer connection ban, and had to build a whole new wet weather sewer system because the sewers overflowed. If they overflowed more than 200ths of an inch and the water went into the ocean and the Bay of San Francisco, it was a bad thing. And so there was a penalty. Since that time, I have really seen no real penalties.

And I want to get to the delta and all the sewer systems that empty into the delta area of California in a minute.

But what specific steps is EPA taking to improve enforcement and what is your time table for making changes, if there is one?

Ms. JACKSON. Chairman, the time table is easy. That is immediate. It has already begun. The Assistant Administrator for Enforcement, Cynthia Giles, who is here in response to that series of articles. There was a series of articles in the New York Times, and they were not alone. There were lots of people who were saying that water enforcement had seemed to be de-prioritized has stepped up enforcement.

Now, I have to tell you we are going to continue to focus on the biggest threats to human health, not just to get, you know, cases for the sake of bringing cases. Oftentimes, these cases can be against municipalities that are already financially strapped. Our desire is to get them into compliance, not to take all their money so that they then have to spend it on a penalty, but to get them into compliance. And that is what we have been saying.

The other focus is transparency. One of the things that series of articles did is that the reporter spent an incredible amount of time going State by State to get data that is not now nationally available. So people cannot look and see whether or not systems are complying without lots and lots of work. They cannot get a picture of the U.S. water compliance. So we are insisting, when we work with our States they are our partners, but we are being pretty tough on this that they have to make that data available and transparently available so that folks can see what is going on.

Senator FEINSTEIN. Well, let me stop you for a minute. Now, the budget has $45 million. It is an increase for State water pollution

control grants. How are you going to assure that the States use this money for enforcement?

Ms. JACKSON. That money will be for permit writing and for enforcement. Oftentimes, they are the same person at the State level, as we all know. And it will be given out through grants under our performance partnership agreements with the States and will be conditioned on use and sometimes some amount of match to ensure that it is used for water programs. There is actually a slightly larger amount for air programs as well.

States have been asking for this money, and we are proud to as a former State commissioner, I am proud to be able to give them some help, especially now.

GREAT LAKES FUNDS

Senator FEINSTEIN. Okay.

Let me go on quickly to the Great Lakes. There were $475 million. It was cut to $300 million. As of February 17, I think you have only obligated or transferred $39 million of that amount. So we have a huge appropriation out there for the Great Lakes with very little movement. Why is that?

Ms. JACKSON. The President asked me, as head of the Great Lakes process, to do several things. One was to ensure that we involved all the Federal agencies that have real work to do on the Great Lakes. The other was to include a real outreach process so that we would come out with an action plan, which we just released about 2 weeks ago, that reflected what the community and the stakeholders, the States, the tribes, around the lakes wanted, industry as well. I think it is a very strong plan. It builds on a lot of work.

And last but not least, we really did not get the appropriation until the budget was reviewed, and that was toward the end of last calendar year. And so we could not put out the grant solicitation until we had the money to back up that grant solicitation. Those grant solicitations are out now, and I think we will start to see money awarded very soon. I also think it will be money for real projects on the ground. What we have said is what the President said is he wants work done in the Great Lakes, not lots and lots of

Senator FEINSTEIN. Right, exactly. Well, I appreciate that. You know, I think we should take a look at that and monitor it because this is a huge project. And there is a lot of use for those monies. I am thinking of one specifically in California, which is the bay delta.

The bay delta is, Senator, a very interesting place. It is enormous. It has got maybe 2,000 miles of levee. There are a lot of artificial islands, peat soil. You know, when the soil leaks into the delta, it throws off trihalomethanes, which are difficult to treat. It is the source of drinking water for 20 million people. The federally run Central Valley Water Project has a huge aqueduct, which pumps water out of the delta all the way down to southern California essentially. And it is under great stress.

My question to you, Madam Administrator, is what can the EPA do to achieve the goals you identified in your work plan to address the water quality issues, including what are growing discharges of

ammonia and something called pyrethroids, which I gather are dangerous, toxic to crustaceans and therefore fish. We have two endangered species, namely the smelt and the salmon, and that impacts everything done in the delta. There is a real need for some EPA participation in this. So if you have any suggestions that you would like to put on the table, I would love to hear them.

Ms. JACKSON. Well, thank you, Madam Chairman.

EPA is committed to working on the water quality side of the equation when it comes to the bay delta. Obviously, there are water quantity issues, but if the water that we get is dirty and requires lots of money to treat in order to be used, whether it is for agriculture or drinking water or whether it is hurting the ecosystem, at the end of the day, we still have a problem in the bay delta.

So I think that is where EPA's expertise and assistance to the State of California can be absolutely invaluable. You have my commitment that we will work on looking at dischargers to try to ratchet those numbers down so that people are properly stewarding the bay in terms of what they discharge and also looking at ecosystem health and water supply issues from the context of we do not want dirty water once, we get it, to see what we can do ensure water quality.

Senator FEINSTEIN. Thank you. That is very helpful. Thank you very much.

Senator Alexander.

Senator ALEXANDER. Thanks, Madam Chairman.

HYDRAULIC FRACTURING AND DRINKING WATER

Administrator Jackson, $4.3 million requested this year to undertake a study of the relationship between hydraulic fracturing and drinking water. This is a pretty important study. I mean, suddenly in the United States we find we have a whole lot of natural gas at low prices, which is important for a wide variety of reasons.

My question is we hear a lot of talk about good science. I want to make sure that in the review of this issue that you have the maximum amount of peer review and good science so that everyone has confidence in the conclusion. What is your plan?

Ms. JACKSON. Thank you, Senator.

I am happy to give you that assurance. The study has not begun yet. In fact, what we are in the process of doing is reprogramming money for the current fiscal year so that we can begin the study this year rather than wait. I think this is a very important and timely issue and we need to start sooner rather than later. We have not completely scoped out the peer review aspect of it, but I will be happy to work with you and your office to ensure you feel comfortable that there is adequate and sufficient review of the results.

Senator ALEXANDER. I would appreciate that. Would you consider peer review entities outside the EPA?

Ms. JACKSON. They normally are, sir. There are several options for peer review. Our science advisory board is an organization that is outside the EPA, but we have also used different methods for peer review. So I am happy to discuss that with you.

CLEAN AIR

Senator ALEXANDER. Thank you.

I would like to move to clean air. Two questions.

As I mentioned, Senator Carper and I have a hearing tomorrow in the Environment and Public Works Committee on our clean air law, which would be nationally stronger standards for SO/x/ and NO/x/ and the first law requiring a 90 percent reduction in mercury from coal plants.

One, will you work with us to make sure we understand the cost of that? You have a lot of capacity for modeling and a lot of experience in that. I want to make sure we know what we are doing. In other words, I do not want us to put a law—in the early estimates from EPA are that the cost might not be more than $2 or $3 a month more on the average electric bill by 2025. If that is so, that is not much money. But I do not need a complete answer today. I just want to get it to the top of your list in your agency and make sure you give us as much help as possible, as quickly as possible, in having a reliable cost estimate because we would like to pass the bill this year.

Ms. JACKSON. Thank you, Senator.

Senator ALEXANDER. So will you help us?

Ms. JACKSON. I am happy to make sure our staff sit down with you as soon as possible to talk to you about exactly what analyses you need in order to support your work on the bill this year.

CLEAN AIR ACT—AMBIENT OZONE STANDARDS

Senator ALEXANDER. Thank you very much.

Now, here is my other question. EPA will soon issue final regulations to tighten local ambient ozone standards nationwide, and it looks like it is going to put every metropolitan area in the country, such as those in California and Tennessee, Madam Chairman, in nonattainment status with the CAA.

Now, that is of great practical importance. When I was Governor and Nissan came to Tennessee, the first thing they did was run down to the air quality agency and get a clean air permit so they could open a paint plant. And if Volkswagen has come to Chattanooga and they are recruiting suppliers, the first thing they are going to do is, in some case, to have to get a clean permit.

We have a lot of air blowing into our State, for example, and a lot of it blows up against the Smoky Mountains. So we have a lot of special clean air problems, and I know that our communities are working very hard. Senator Corker, when he was mayor of Chattanooga, worked very hard. In other words, we are doing almost all we can locally. Perhaps we can do some more to clean up our air.

It will take strong national emission controls on coal plants for us to be able to meet your upcoming stricter local standards. I want to make sure we do not get the cart before the horse here. I am working hard for stronger national emission control standards, but if you come in with unrealistic local standards, the effect will be to send Volkswagen offshore with its suppliers, and that will put jobs where we do not want them.

So what are you doing, as you look over the next 3, 4, 5 years to harmonize your local ambient standards with the national re-

quirements that will help local communities meet your upcoming tougher local standards?

Ms. JACKSON. Thank you, Senator.

You are absolutely right on the way the CAA works. There are requirements that are put on States and regions. But one of EPA's most fundamental responsibilities is to deal with what is called interstate transport, the fact that the Eastern United States gets a lot of pollution just by virtue of the way the wind blows. EPA is planning to release a proposed rule in the coming months, actually very soon, to replace what is called the CAIR Rule. You probably recall that CAIR was thrown out by the courts. The last administration's rule was thrown out as not following the Clean Air——

Senator ALEXANDER. And the purpose of our legislation is to fix that problem.

Ms. JACKSON. I think we have the same goals there and I think it is extremely important.

Let me just say one word about the proposed ozone standards. Those are not final yet. So, again, I do not want anything I say here to somehow prejudice the public comment period, which is ongoing and very, very important.

The CAA is also very clear about how standards have to come to be set. It says, first, figure out what is necessary to protect health. That is the foundation. And that is based entirely on science, as you know, not on economics, but then the regulations that ensue afterwards are very much based on economics. You, I think, know me now well enough to know that as we move to the regulatory—whatever happens on the national ambient air quality standards themselves—I believe it is important to be honest with the American people. Sometimes we have good environmental news and sometimes we have challenges. Until we are clear about what the challenges are, we cannot expect people to be able to figure out how to solve them.

So we will go through the process and we will move, I think, in a way that will ensure that the CAA will do what it has always done. Air pollution is down 41 percent for priority pollutants, while GDP has gone up. I think that kind of story is entirely possible. As I know you do, in your proposed legislation.

Senator FEINSTEIN. Thank you very much, Senator.

Senator Tester.

Senator TESTER. Yes, thank you, Madam Chair.

SUPERFUND SITE—LIBBY, MONTANA

Montana also has some other big challenges. I think we have 11 Superfund sites on the national priorities list. They are some of the biggest and complex in the United States in a headwaters State.

As I invited you last year to come to Libby, the invitation is still on to take a look at some and, if you have the time, all of these Superfund sites. So that invitation still stands, and I look forward to the time where you can get to Big Sky Country.

I want to talk about Libby for just a second. First of all, I want to thank you for your work with Kathleen Sebelius and with Senator Baucus and myself in declaring the public health emergency for Libby. That was critically important with more than 200 folks dead in a very small town, I might add, and thousands more sick.

This designation was warranted and will help bring proper resources to that community, and I want to express my appreciation for that, as well as Secretary Sebelius.

What I wanted to ask you about now, in reference to Libby, is that last year the subcommittee instructed you to report back within 180 days, which you have still got about 60 days of those left, about the known health risks and baseline for determining the cleanup activities planned for Libby with sufficient science to develop a record of decision. How is that report coming?

Ms. JACKSON. I believe it is in process. I think we have continued to work on it, sir, and we will get you a status report for the record because I do not have the specifics on the report.

Senator TESTER. Okay, that would be good.

[The information follows:]

DETERMINING CLEAN-UP ACTIVITIES PLANNED FOR LIBBY

A draft report is currently undergoing internal Environmental Protection Agency review and we plan to transmit the report to you on schedule.

Senator TESTER. One of the things that is going on right now in Libby is the risk assessment is using old methodology, both data and methodology from about 2000. So I think, as with everything—in Libby's case, all we want in the end—all you want, all I want—is to have a place that is safe to live in. And so we need to have the best or the newest techniques. So make sure that we do the work that we do right and make sure we are not spending our money on stuff that we do not need to be spending money on.

So the question is since Libby is really setting the science for asbestos resource, what kind of oversight can we expect from you or the agency to make sure that we are using the best science available.

Ms. JACKSON. Well, we will continue to—I absolutely agree. Libby is sort of the frontier of this amphibole asbestos science. We will continue to make sure that we refine that science as more information becomes available.

One of the problems in Libby is that we are using very old risk information. We have committed to updating that toxicity information, but it will not happen until sometime in 2011.

What my commitment to you, Senator, is that we do not want to stop all cleanup while we wait for new information.

Senator TESTER. No.

Ms. JACKSON. So sort of the common-sense approach is where the risk information is irrelevant, let us move ahead on cleanup because we know we have to do it, and in those cases where we need the risk information to make a final decision, let us hold off, but we want to continue to do both. Right? Great science but also keeping the cleanup going for the citizens.

SOUND SCIENCE—ASBESTOS

Senator TESTER. And can you give me any sort of assurance that before that record of decision is issued, that we will have sound science behind that?

Ms. JACKSON. I absolutely will, but let me just be clear because I do not want you to be angry at me later. There are some decisions we can make based on the science we have now. The science we

have now is necessary and sufficient to support some decisions. Let us try to make them, but let us not run to make a decision if we do not have the necessary science.

Senator TESTER. But when that final record of decision comes out, it has got to be based on solid science.

Ms. JACKSON. Absolutely, Senator.

Senator TESTER. Okay.

There are about 8,000 folks in Libby that have been exposed to asbestos. There is epidemiological data to bear that out on those 8,000 folks. I am wondering why that data—if you can respond to this, and I know it is pretty specific—but why that data is not being used to evaluate the risk on human health, rather we are utilizing animal testing.

Ms. JACKSON. Yes. I cannot respond to it. It is sort of beyond what I know of the site. But why do I not check and we will get back to you.

[The information follows:]

LIBBY—USING EPIDEMIOLOGICAL DATA

The approach that the Environmental Protection Agency (EPA) is using to evaluate the human health risk from current and future exposure to Libby amphibole is multifaceted and is described in detail in the above-referenced report that will be submitted to the Senate Appropriations Committee. Animal studies are only one component of this effort. Epidemiologic data based on measured exposures and observed cancer incidence in Libby mine workers, who also were residents of Libby, are being evaluated to determine a Libby amphibole-specific cancer toxicity value. Similarly, epidemiological data based on measured exposures and observed noncancer effects in processing plant workers exposed to Libby amphibole are being evaluated to determine a Libby amphibole-specific noncancer toxicity value. These values, coupled with exposure concentrations measured in Libby, will be used to evaluate the risk of cancer and noncancer effects for the Libby community. These values are expected to be available for use in the baseline risk assessments for the Libby and Troy communities, which are planned to be completed in 2012. The animal studies that also are underway are expected to provide additional toxicity information to inform the uncertainty sections of the baseline risk assessments. Long-term epidemiological studies designed to tie health effects to quantitative measures of exposure to Libby residents that did not work in the mine or mills are also underway. In order to use epidemiological data to quantitatively evaluate the incidence of adverse health effects, quantitative measures of exposures are required. The incidence of adverse health effects in Libby residents who were not mine or mill workers is well-documented, but has not yet been tied to quantitative measures of exposure. This is one of the goals of the long-term epidemiological studies that are now underway in Libby.

Senator TESTER. And I would just say that the CARD Clinic up in Libby is doing a great job and if EPA utilizes them to the best of their ability, they can be a great asset for you in that community because they are on the ground.

One more question very quickly. Libby is complex. There has not been a risk assessor working with EPA in the community, and I was wondering what your sentiment is on placing a risk assessor on the ground in Libby. It could help with agency communication with the residents. My understanding is—and you can correct me if I am wrong on this that basically there is a toxicologist that comes up once a month from California, and communication is critically important. I just want to get your perspective on why a risk assessor is not there and if you think there is a need for one.

Ms. JACKSON. I am happy to look into the specific staffing issues, sir, through the San Francisco office. I would say that I do know

that the daily presence of public health professionals is extremely important. The risk assessment part of the science is a bit more wonky and a bit more it drives cleanup levels, but it is usually not necessary to have someone there all the time. It is very unusual to have a risk assessor full-time at a site, but let me check into it.

[The information follows:]

LIBBY—FULL-TIME, ON-SITE RISK ASSESSOR

The Environmental Protection Agency (EPA) operates a project specific information center and field office in Libby that is open during regular business hours. The Libby office is staffed by an EPA Remedial Project Manager and a Contract Administrative Assistant who live in Libby. Their full-time presence in Libby provides the opportunity for individuals to meet with EPA concerning the site. The remedial project manager's duties include oversight of field activities and coordination with the site toxicologist to address community concerns regarding site risks. The remedial project manager in the EPA Libby field office, supported by his team of response contractors, also serves as an Environmental Resource Specialist (ERS) so that if community members encounter vermiculite that may contain Libby amphibole asbestos they will be able to get immediate action from EPA. Action is tailored to the circumstance; EPA may offer on-the-spot answers to any questions regarding how to address the situation or, if necessary, on-scene support. This service is available during business hours and for emergencies. Community members have often sought the help of the ERS to help reduce the potential for exposure to asbestos.

Regarding a full-time on-site risk assessor, at this time, EPA does not believe that the tasks associated with the site risk assessor require full-time residence in the community. Since 2007, contractors for EPA have been conducting activity based sampling to quantify current exposures to Libby amphibole asbestos during various types of yard work and children's playtime. Once Libby amphibole specific cancer and noncancer toxicity values are developed, the risk assessor will use these values and the activity based exposure concentrations to quantitatively estimate risks in the Libby community.

CLARK FORK RIVER

Senator TESTER. Okay. Communication, I think, is key and I think it helps your effectiveness, as well as communities understanding what is going on and why it is going on. But I appreciate your attention to that.

Very quickly, and I will just make this my last question. Currently the State of Montana has a great working relationship on the Clark Fork River, restoring a watershed and turning that area into a scenic park. The work will restore clean water, fish, aquatic species habitat, and revitalize a corridor that is home to many of Montana's farms and ranches. This site was listed in 1985. It has waited a long time for cleanup. The State and the EPA have entered into a consent agreement where the State is the lead agency, a position well deserved after their good work, particularly in Silver Bow County and Milltown Dam.

There is more than $100 million ready to put folks to work in restoration economy in Montana. Unfortunately, this work is stalled because of what I would call a minor disagreement between the EPA and the State. I just need your commitment that you will work with the State of Montana, which is the lead agency, to get these issues resolved so that we can get these projects commenced in a timely fashion. As I said, Montana is a headwater State. This is no different, and the quicker we get it cleaned up, I think the better it is for the whole country.

Ms. JACKSON. Certainly, Senator. Obviously, we have the same goal, which is to get it cleaned up.

Senator TESTER. Yes. Thank you very much. Once again, thank you, Lisa. I appreciate your time. I appreciate your answering the questions.

Thank you, Madam Chair.

Senator FEINSTEIN. Thank you very much, Senator.

Welcome, Senator Murkowski. You are up next if you would like to be.

STATIONARY SOURCE EMITTERS

Senator MURKOWSKI. Thank you so very much. I appreciate it. I apologize that I have not been here for opening statements. We have Secretary Salazar testifying in the Energy Committee, so we are kind of bouncing back and forth this morning.

But good morning, Administrator Jackson. Thank you for being here.

A couple questions. You probably already know where I am going to be coming from in terms of my questions this morning.

When the President spoke to us at his State of the Union Address, he called on the Congress to develop comprehensive energy and climate legislation, and then it was just a few days later when he released his budget, that the EPA requested more than $40 million in order to begin regulating greenhouse gas emissions on its own.

I have expressed my concerns about that. I believe it should be the Congress that does the policymaking in this area. I am quite concerned that EPA's actions will harm our economy at a time that we can least afford it.

Now, I understand and I have read the letter that you have sent just last week—I believe it was last Monday—in response to several of my colleagues about how you understand the EPA would implement its proposed regulations. I would like this morning to just get some better clarification from the points that were raised in that letter.

According to that timeline, you said that roughly 400 stationary source emitters will face regulation under the CAA in the first half of 2011. My questions this morning are, given that timeline then, how many stationary sources do you anticipate would be regulated in the second half of 2011? I am trying to anticipate what it is that we might be seeing as we move through this transition, I guess, for lack of a better term, that you have proposed. So can you give me some indicators as to what we might anticipate that second half of 2011 and then how many stationary sources we would see regulated by the end of 2013?

And then it is my understanding 2016 is when you hit the smaller sources. So the number of increases that we will anticipate and when we actually hit what you defined as smaller stationary sources.

Ms. JACKSON. Thank you, Senator.

I just have to preface everything I say by saying the letter was an attempt to give what we know about an ongoing rulemaking process. I need to just say that up front.

You asked about the first half of next calendar year, first half of 2011. And then the second half. So as you move into the second half, it is likely, depending on the final rulemaking, that you could

see up to 1,700 permits manually that would need to be reviewed for greenhouse gas emissions that would not this year, for example. So I think that was your question.

Senator MURKOWSKI. So that would be July 2011 you would see an additional 1,700. Is that right?

Ms. JACKSON. Yes. We have not set an exact date, but you said second half of the year. I feel more comfortable with that terminology.

Senator MURKOWSKI. Yes, sure.

Ms. JACKSON. And then you asked about 2012?

Senator MURKOWSKI. 2013.

Ms. JACKSON. Depending on the level that we choose, it probably looks around 3,000 additional major sources. Again, that is based on what we know right now from public comment. A lot of this is based on comment we have received from States who say, "This is what we see our workload being."

And then you asked about 2016 where we are looking at—what the letter says and what I feel comfortable saying today sitting here is that it—be no sooner than 2016 that we would move to the smallest sources.

SMALL SOURCE REGULATIONS

Senator MURKOWSKI. And can you give me then some examples of what you would consider to be those smaller sources that would be subject to regulation after 2016? The big concern, the fear is that the local corner restaurant would be subject to regulation. Can you give me some examples of what you might consider?

Ms. JACKSON. I do not have any specific categories. I would say that it would be based on a tonnage amount per year. We said that would be the smallest of the small sources.

Perhaps this would be helpful. Sixty-seven percent of covered major stationary source emissions come from facilities larger than 100,000 tons of CO_2 equivalent; 70 percent from facilities larger than 50,000 tons; and 75 percent from facilities larger than 25,000 tons. So you can see you do not get a whole lot more in terms of percentage reduction when you move from, say, 100,000 down to 50,000. And the same is true when you move from 50,000 to 25,000.

Senator MURKOWSKI. So as you define a small stationary source by ton, what would that number be?

Ms. JACKSON. The letter simply says that in the proposed rule, we talked about 25,000 tons as being the number.

Senator MURKOWSKI. Right.

Ms. JACKSON. What the letter says is that we are looking at a significantly higher level because one thing we have heard from many, many States is that 25,000 tons would still get in certain facilities that they do not consider large, and would more appropriately be considered small. This is the Tailoring Rule. That is what it is generally called—to tailor greenhouse gas regulation and phase it in over a long period of time. We are looking at something significantly higher than 25,000 tons, you know, 50,000, 75,000. We are looking at those numbers as we finalize the rule.

Senator MURKOWSKI. Madam Chairman, my 5 minutes are up. I do not know if we are doing second rounds.

Senator FEINSTEIN. Why do you not take some more time?

REGULATION VERSUS LEGISLATION

Senator MURKOWSKI. Okay, I appreciate that. I appreciate the indulgence.

Let me ask for some clarification here, and this is clarification on EPA's position on regulation versus legislation. There was a statement that was made in Copenhagen that I think has generated a little bit of confusion. You had stated—and this was presumably in reference to the choice between either Congress or EPA acting to reduce emissions—that "this is not an either/or moment. It is a both/and moment." So you have made that statement.

But then you have also made other statements that provide that "I absolutely prefer that the Senate take action." Elsewhere you have been quoted as saying that you firmly believe—and the President has said all along—that new legislation is the best way to deal with climate change.

So I am not sure whether you agree with me—and I think the President as well—that new legislation is the best way to deal with climate change or whether it should be EPA regulation. I would like you to provide to me and certainly to the subcommittee here to explain what the position is regarding whether it should be EPA or whether it should be Congress that should develop our Nation's climate and energy policy.

Ms. JACKSON.Well, I stand behind my statement in Copenhagen. I certainly stand behind the President's call for a comprehensive energy legislation that puts a price on carbon. I believe that is absolutely the best way, as you said, to move our country into a clean energy future. I think it is critical.

I also think that it is not an either/or moment. I think even legislation that has currently passed the House—that is the standard we have right now—envisions that EPA will have certain roles to play. There is lots of regulatory work that the EPA can do that is entirely consistent with new legislation in the future. I believe it is incumbent on me as head of the agency to ensure that regulations that we propose and promulgate are consistent with what is going on here in Congress with respect to new legislation. It is complex, but it is not the time to make a choice as to whether or not EPA can regulate.

I think the CAIR rules are an excellent example of that because they are rules that are likely—I do not want to guess what Congress may do or take away any prerogatives, but likely to survive because they are such an important milestone for our country. The auto industry wanted the rules. Labor unions wanted the rules. Environmentalists believe in the rules. States wanted the rules in order to have one regulatory picture for cleaner cars for this country between now and 2016. And I think those rules are an example of the kind of common-sense, smart rulemaking we can do that is entirely consistent with my belief and hope that Congress will, indeed, enact new legislation in the future.

REGULATORY APPROACH

Senator MURKOWSKI. Well, I think the President, in his statements that I have read, has been quite clear that he prefers and

is encouraging the Congress to move on climate policy, and that is the direction that should be taken as opposed to the regulatory approach.

And I think one of the concerns that we face, what I am discussing with Secretary Salazar just upstairs, is the concern that there are policies that are happening over here and regulation that is basically doing whatever they want within the agencies. And you do not have a meshing. You do not have a coordination. We see far too often, I think, kind of this bootstrap—not necessarily bootstraps. What is the expression I am thinking of? "Belts and suspenders" where you have overlap of regulation and policy that do not necessarily mix, and then we do not have a coherent scheme in place.

So, I do not know that I am any more clear, based on your statement this morning, as to whether or not you think it should be the Congress and those of us that are elected by our constituents and accountable to them to enact and advance climate policy. So we will continue to work and address this.

I have one parochial question, if I may.

Ms. JACKSON. If you would not mind, let me just be clear again that I would like nothing more than to see Congress enact comprehensive energy and climate legislation. I join the President in that call. It is my belief that there is no example out there of EPA regulation, since I have been Administrator, that is not entirely consistent with a belief that that is where we are heading.

And it is also my belief that the States, as well as EPA, will have a significant role to play as we move into a world where carbon pollution is addressed, hopefully by law. And we have to get ready for that. We can take steps now that put us on that road that are entirely consistent with where we are trying to head. As you know, Secretary Salazar and I are part of a green Cabinet that meets regularly to ensure that our efforts under President Obama's leadership are coordinated and support his call for legislation.

Senator MURKOWSKI. Given what you have just said then, would you support Senator Rockefeller's proposal to delay for 2 years any implementation of EPA regulations?

Ms. JACKSON. I support the need for new legislation to address carbon pollution, and I support and believe that it is my duty as EPA Administrator to promulgate and finalize common-sense, smart regulations that do not put this country in lose-lose situations, but that are win-win. And I think the automobile proposal, which we will soon need to finalize, is an example of how we can do that. I do not think we are at a fork in the road.

I also think, Senator, and I should point out that the law compels me as EPA Administrator to follow the Supreme Court decision of April 2007. The law says that EPA has to move forward on these issues, and the rule of law and my respect for it demands that we move forward as well.

VILLAGE SAFE WATER PROGRAM

Senator MURKOWSKI. Thank you. I think there are many of us who feel that the EPA is expanding their interpretation beyond what you believe.

Let me ask very quickly a last question here, and again, this is parochial. This is regarding the village safe water funding.

Funding for the Village Safe Water program has been reduced in past years and remained flat-funded in the fiscal year 2011 budget request. We have some pretty considerable needs in my State for water and sewer infrastructure, but our greatest needs are in communities that have absolutely no running water, no sewer service. Approximately 20 percent of our Native Alaska villages do not have what I think people would consider just basic services, basic needs.

I would ask that you look at the funding for the Village Safe Water program. This is something that we have been working with your agency on, and I would like to think that this is an area where we can find areas of cooperation as we work to address some pretty basic needs for people in some of the most remote areas of the country.

Ms. JACKSON. I am happy to do that, Senator.

Senator MURKOWSKI. Thank you.

Thank you, Madam Chairman.

GREENHOUSE GASES—MARKET-BASED SYSTEM

Senator FEINSTEIN. Thank you very much.

Well, I think it is obvious that I greatly respect Senator Murkowski, but we have a very different view on this subject. I strongly believe, based on the *Massachusetts* case and I have read the law, the opinion here this morning, that you have to move forward and should move forward.

However, I just want to say personally I have always felt that an incremental approach to the legislative approach is a much better way of going. Some time ago, I introduced a bill that affected the electricity sector only. I still, to this day, believe that if we move to institute a system affecting the electricity sector first, that it would work well and that people would see how a global warming cap and trade bill could be put into play. I believe each sector is different, but that is for another day.

Your budget asks for $7.5 million to fund the development of national new source performance standards for greenhouse gases, which you contend, I believe, that it would allow EPA to consider market-oriented mechanisms and flexibilities to provide a lowest cost compliance option.

Is it possible to set a market-based system to regulate greenhouse gases in the utility sector using these standards? And has EPA ever done something similar to this?

Ms. JACKSON. I think, Chairman, the reference to market-oriented mechanisms should not be read too broadly to imply that EPA is currently looking at a market-oriented mechanism, say, cap and trade, such as has been discussed—passed in the U.S. House of Representatives and is certainly being discussed in various quarters in the U.S. Senate. Rather, I believe that section 111 of the CAA might authorize inclusion of some market-oriented mechanisms. That is one of the discussions that we are having for certain categories. So I do not want the language in the budget document to be read too broadly and for us to assume at this point that the agency has broader information.

Senator FEINSTEIN. Well, let me discuss it with you. As I understand it, you have created a cap and trade system for sulfur dioxide and nitrous oxide under this provision of the CAA, known as the CAIR Rule. So EPA can do this. It would have to be sector by sector instead of economy-wide. And it would not be able to benefit from offsets. But if you can do it with sulfur dioxide and nitrous oxide, I do not understand why you cannot do it here too.

Ms. JACKSON. Yes, Madam Chairman. I am not saying that it cannot be done. There are certainly limitations on it. I think it is something that we are happy to continue to work with your staff as we develop our thinking on where that might be appropriate.

The New Source Performance Standards have the advantage under the CAA of being sector-wide so that they are different than the best available control technology standards under 112, which are case-by-case analyses. They give a real road map to where the technology is on any particular pollutant. In this case, it would be CO_2 and greenhouse gas pollution. So there are real advantages to looking that way, to working with the industry to say, okay, what is doable, what can be commercially viable, what do we do now. And it allows the law to change—excuse me—the regulations to change as we learn more. But I would say our thinking is not so involved that I feel comfortable sitting here today telling you the extent to which that could be done.

Senator FEINSTEIN. Fair enough. Thank you.

Senator, do you have a question?

Senator ALEXANDER. I have only one.

Senator Cardin and I have a bill on mountaintop mining. Our goal is not to eliminate surface mining of coal but to limit the practice of blowing off the top of a mountain and dumping the fill in streams. Would such a bill, if you had a chance to look at it, help clarify the 404 permitting process that you are now going through various permits for surface mining?

Ms. JACKSON. Thank you, Senator.

In response to requests from you and Senator Cardin, EPA is completing certain analyses on the bill. Obviously, EPA's responsibilities are pursuant to the Clean Water Act. In some ways, they are narrower and speak to a narrower set of issues than your bill does, which speaks to the practice in general.

But certainly it is my belief that as we learn more and more from outside scientists and inside scientists, we know that there are clear water quality impacts that come from filling in streams—that is pretty intuitive—and from the valley fills that result when you have to take this tremendous amount of overburden. It is EPA's focus, in reviewing your bill, to give you as much information as we can about what your bill would do to alleviate that situation. That is our interest. And we are happy to continue working with you on that.

ADDITIONAL COMMITTEE QUESTIONS

Senator ALEXANDER. Thank you, Madam Chairman.

Senator FEINSTEIN. Thank you, Senator.

And Madam Administrator, let me thank you very much and everybody with you.

Ms. JACKSON. Thank you, Senator.

[The following questions were not asked at the hearing, but were submitted to the Agency for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR DIANNE FEINSTEIN

GREENHOUSE GAS (GHG) REGULATION

Question. Administrator Jackson, you stated in your February 22 letter to Senator Rockefeller and a number of Democratic Senators that you don't plan to regulate the smallest sources of GHGs before 2016. Your comments have been interpreted by some to mean that the Environmental Protection Agency (EPA) does in fact plan to regulate small businesses after all. How do you plan to address the question of whether to regulate small sources? Will you study how practical it would be to regulate small sources like family farms, apartment buildings and dry cleaners before subjecting them to any regulation?

Answer. In the proposed tailoring rule, EPA explained the need to conduct a 5-year study concerning the potential application of Clean Air Act permitting programs to sources that emit less than 25,000 tons per year of GHGs and to follow that study with a rulemaking to determine how to address such small sources. As I indicated in my letter to Senator Rockefeller, the final tailoring rule will ensure that small sources will not become subject to Clean Air Act permitting for at least 6 years. In any event, I believe there is every reason to expect that Congress will enact a comprehensive program to address GHG pollution—a program that settles any questions about small sources—before 2016. I hope you share that expectation.

Question. During 2011, a very small number of the largest sources will come under greenhouse gas regulation. This will require these facilities to use the "Best Achievable Control Technology" (BACT). Calpine and Pacific Gas and Electric's new power plant in California has voluntarily attained this standard already, so we have a general picture of what efficiency targets such a permit would require. When will EPA complete guidance explaining to these sources what EPA believes the best technology to be?

Answer. EPA worked with the Clean Air Act Advisory Committee to establish a work group comprised of States, industry, and other stakeholders that focused initially on the BACT requirement, including information and guidance that would be useful for EPA to provide concerning the technical, economic, and environmental performance characteristics of potential BACT options. In addition, the work group identified and discussed approaches to enable State and local permitting authorities to apply the BACT criteria in a consistent, practical and efficient manner. The work group issued its phase I report in February 2010.

As a result of the work group's recommendations, EPA is developing technical information and guidance to assist sources and permitting authorities as they begin to address GHGs in PSD permitting actions. EPA plans to issue guidance before January 2, 2011, the date that the permitting requirements will begin for large sources of GHGs that already require permits for other pollutants.

STATE GRANTS

Question. Your budget proposes a $25 million increase for grants to States to ramp up their ability to issue GHG permits in fiscal year 2011. How do you expect States to use these funds?

Answer. States with approved or delegated permitting programs also will be incorporating new climate change requirements into their permitting programs in fiscal year 2011. The $25 million increase for State grants in fiscal year 2011 will assist in avoiding delays in evaluating and approving permits. In consultation with the States, funding will be allocated to the States based on the number of sources to be permitted, the total emissions from the facilities to be permitted, and the amount of funding the State is matching under their existing grant workplan.

Question. How many permits will they be expected to process in fiscal year 2011?

Answer. After the EPA issues the tailoring rule, the EPA can be more specific about how many sources will be affected and how the new requirements will impact State workloads.

Question. Will additional funds be required in the outyears as States assume more permitting responsibilities?

Answer. At this point we are unable to determine whether States may need additional funding in the outyears as they assume more permitting responsibilities. This is dependent on the number of sources that will be subject to additional permitting requirements and the extent to which permitting fees offset the cost of running the program.

PERCHLORATE

Question. EPA has been studying perchlorate for years, and the links between the chemical and health problems are well known. Yet the Bush administration refused to set a drinking water limit on perchlorate. You announced last August that EPA was going to re-evaluate the decision and the scientific data on the health effects from perchlorate exposure. I am concerned that EPA has not said when it will finish this new review and hope that this is not a repeat of the Bush administration's delaying tactics. When will EPA finish its review and announce whether it will regulate perchlorate?

Answer. EPA plans to complete its drinking water regulatory determination for perchlorate in 2010. We continue to evaluate the extensive information in the public comments we have received on this action. If the determination is to regulate, EPA will move expeditiously to develop a national drinking water standard for perchlorate and conduct the health risk reduction cost analyses and consultations required in developing such a rule.

BISPHENOL-A (BPA)

Question. I am very concerned about how pervasive chemicals are in the environment and how little is known about whether these chemicals are really safe. BPA, for example, has been linked to cancer and infertility, and yet it is widely used in food packaging and containers. I have introduced legislation to ban these uses. Last December, EPA announced it was taking action against four chemicals of concern, including phthalates, but that action against BPA was still being developed.

Given all we know about the harms posed by BPA, why hasn't EPA already taken some action against this chemical?

Answer. On March 29, 2010, EPA posted the action plan for BPA, in line with the Administrator's announcement to complete and post an initial four action plans in December 2009, with additional plans at approximately 4-month intervals. On December 29, 2009, EPA made public the first four action plans on phthalates, short-chain chlorinated parraffins, perflourinated chemicals, and Polybrominated diphenyl ethers. EPA's plan for BPA focuses on the environmental impacts of BPA, and will look to add BPA to EPA's list of chemicals of concern under section 5(b)(4) of the Toxic Substances Control Act, and require testing related to environmental effects. EPA remains committed to protecting human health, but notes that most human exposure, including exposure to children, comes through food packaging materials under the jurisdiction of Food and Drug Administration (FDA). EPA will continue to consult and coordinate closely with the FDA, the Centers for Disease Control and Prevention, and the National Institute of Environmental Health Sciences to better determine and evaluate the potential health consequences of BPA. The results of this assessment work will factor significantly in any future EPA decisions to address potential risks to human health resulting from uses within EPA's jurisdiction. More information can be found at http://www.epa.gov/oppt/existingchemicals/pubs/actionplans/bpa.html.

QUESTIONS SUBMITTED BY SENATOR ROBERT C. BYRD

ECONOMIC DIVERSIFICATION

Question. In June 2009, the administration released a Memorandum of Understanding (MOU) entitled "Implementing the Interagency Action Plan on Appalachian Surface Coal Mining." The MOU noted that "Federal agencies will work . . . to help diversify and strengthen the Appalachian regional economy and promote the health and welfare of Appalachian communities. This interagency effort will have a special focus on stimulating clean enterprise and green jobs development . . ."

What new programs or initiatives is the EPA proposing to advance economic diversification in Appalachia?

Answer. Pursuant to the June 11, 2009 interagency MOU, EPA continues to work with the Council on Environmental Quality and other Federal agencies to diversify and strengthen the Appalachian regional economy. EPA is supporting upcoming community outreach meetings throughout Appalachia, led by U.S. Department of Agriculture, to foster community development and regional collaboration. Additionally, EPA is continuing to support the existing E^3 initiative (Economy, Energy, and Environment), in coordination with the Departments of Commerce, Energy, and Labor, and the Small Business Administration, in identifying opportunities to apply E^3 in Appalachia. The State of West Virginia recently announced a new small busi-

ness program that will be coordinated within the E3 framework including EPA's Green Suppliers Network.

Question. What new resources is the EPA requesting to advance economic diversification in Appalachia?

Answer. EPA continues to work with Federal agencies to identify promising and coordinated opportunities for promoting Appalachian economic diversification. EPA continues to provide staff resources and technical expertise to support upcoming Appalachian listening sessions and expanding E3 activities (Economy, Energy, and Environment) in Appalachia. EPA continues to evaluate how its core programs, such as Brownfields, water and wastewater infrastructure, and E3, can be used toward promoting Appalachian economic diversification.

Question. In addition to devoting greater amounts of funding to programs such as Brownfields Redevelopment, and the Clean, Green Schools Program, how will EPA also use its own technical expertise, and the expertise and resources of other Federal partners, in order to strengthen the support and collaboration that are necessary for grantees' projects to be successful in achieving long-term viability?

Answer. The EPA's goal is for all grant programs to become successful and achieve long-term viability. The general approach is to work in partnership with States, tribes, and local governments to promote and encourage effective development and implementation of environmental programs. An essential part of this is ensuring that nongovernmental organizations and the general public have and use reliable/valid scientific information and exposure prevention techniques and tools when making decisions that impact human health and the environment. To this end, the EPA deploys a suite of approaches to support its grantees. These approaches include:

—Using all available legislative authorities as vehicles for comprehensive grantee assistance.

—Providing focused outreach and technical assistance to increase adoption and deployment of assessment tools.

—Continual improvement of transparency and coordination in sharing information and providing technical assistance, tools and materials to partners and stakeholder groups, including information on emerging issues.

—Focusing on improving coordination across the EPA to ensure that EPA's policies and programs explicitly consider and use the most up-to-date data and methods.

—Working with other Federal partners to improve government-wide support in implementing legislative mandates and coordinating outreach and technical assistance.

The Brownfields program is one example of how EPA uses its technical expertise and the expertise and resources of other Federal partners to ensure that grantee's projects will be successful in achieving long-term viability. Through dedicated project officers, workshops, and guidance documents, EPA provides technical assistance, outreach, coordination, and other assistance as quality assurance reviews to support grantees' projects of assessing and cleaning up Brownfield sites. To further support the effort to assess and cleanup Brownfields properties, EPA recently initiated a new pilot program which will provide grants to disadvantaged communities for the purpose of preparing an "area-wide" plan for sustainable redevelopment, which is targeted to increase the likelihood of attracting private investors and Federal and State grant funding for implementation. The Brownfields program is also engaged with Federal partners on several cross-cutting priorities. For example, under the HUD–DOT–EPA initiative, EPA is engaging with other Federal agencies to maximize the expertise offered under the Brownfields technical assistance and resources provided directly to communities to generate sustainable community redevelopment. EPA is also participating in the White House Council on Automotive Communities and Workers to find productive and efficient ways to bring Federal resources and technical assistance to communities suffering from the effects of economic disruption. Through these collaborative efforts, EPA will continue to look for ways to align and coordinate the disparate Federal resources to help communities address their environmental and economic development challenges.

PUBLIC HEALTH ISSUES

Question. What are the levels of metals and other contaminants in domestic wells and public water systems in communities downstream from mountaintop mining activities?

Answer. Little data are available that describe the impact of mountaintop mining activities on domestic wells and public water systems in Appalachia, especially private wells. Information on the location of drinking water supplies and private wells

in relation to surface coal mining operations is inconsistently collected by States as part of permit applications under the Surface Mining Control and Reclamation Act (SMCRA). EPA regions are working with the Corps of Engineers, the Office of Surface Mining (OSM), and States to improve data-sharing on the relationship between mountaintop mining activities and drinking water wells, and to evaluate potential drinking water impacts from proposed surface mining projects. Because nearby communities often rely on private wells (those that serve fewer than 25 people and have fewer than 15 connections) that are not regulated by EPA, data collection poses additional challenges.

With the Public Water System Supervision grant programs, States or primacy authorities track any violations of Maximum Contaminant Levels (MCLs) or treatment techniques at public water systems, both community and noncommunity water systems, that serve more than 25 persons. Under the Safe Drinking Water Act, EPA is required to track violations occurring in public water systems when contaminant levels exceed the MCL. There have been very few violations of MCLs for metal contaminants in Appalachia. Such violations, even if discovered, would represent deficiencies in finished drinking water, not source water.

Question. Do you have a record of water quality violations in public water systems in communities downstream from mountaintop mining activities?

Answer. As referenced above, little data are available that specifically connect the impact of mountaintop mining activities on domestic wells and public water systems in Appalachia, especially private wells. There are few public water systems with MCL violations from metals in Appalachia.

It is worth noting that under the Safe Drinking Water Act, EPA tracks public water systems violations that occur in finished water that has already undergone treatment. As a result, public water system violations reported to EPA are not meaningful indicators of source water quality prior to any treatment.

Question. What are the levels of toxic air pollutants and particulate matter in communities proximate to surface mining operations and coal processing facilities?

Answer. Most of EPA's monitoring for particulate matter and toxic air pollutants is focused in areas where populations and potential exposures are highest. We have limited information about levels of pollutants near surface mining operations and coal processing facilities. Surface coal mining operations are generally regulated by the Department of the Interior's SMRCA. EPA recently finalized new source performance standards for new coal preparation/processing facilities which integrated with certain SMRCA requirements. These standards reflect the degree of emission limitation achievable through the application of the best system of reduction that has been adequately demonstrated.

Question. What are the human health impacts from mountaintop mining?

Answer. The scientific literature is increasingly documenting a relationship between coal mining practices and impacts to human health in communities near coal mines. The potential human health impacts of these mining practices were most recently described in a peer-reviewed analysis by Palmer et al. in Science, as part of a literature review of the ecological effects of Appalachian surface coal mining. Additionally, research by Hendryx and Ahern (2009) demonstrates significant and growing gaps in age-adjusted mortality between coal mining areas of Appalachia and non-coal mining areas, and that higher rates of specific illnesses are consistent with a hypothesis of exposure to pollution from mining activities. A new study by Hitt and Hendryx (2010 demonstrates significant relationships between coal mining and both ecological integrity and human cancer mortality in West Virginia. While such research does not directly identify specific mining practices or operations as the source of such impacts, their conclusions point to negative and significant human health consequences from mountaintop mining that results in impaired watershed health and decreased environmental quality.

Question. Are people drinking ground or surface waters that are significantly impacted by alkaline mine drainage? Can you tell us how many drinking wells you have sampled and what fraction of those have selenium present at levels that are higher than the background levels in nonmining areas?

Answer. As discussed above, data on the location of private drinking water wells, and on the impacts of surface coal mining activities on private wells or public water systems, are currently lacking for a variety of reasons. EPA has not sampled private residential wells and does not have any data showing that water systems have abnormal alkalinity. Appalachian States may have analytical results available for private wells.

It is worth noting that under the Safe Drinking Water Act, EPA tracks public water systems violations that occur in finished water that has already undergone treatment. As a result, public water system violations reported to EPA are not meaningful indicators of source water quality.

SELENIUM POLLUTION

Question. What are the impacts of high levels of selenium exposure on the health of humans and animals? Is there recent or emerging evidence that is of concern to EPA?

Answer. Studies by Hawkes and Keim (2003) identified human data suggesting the potential for adverse thyroid effects such as increases in body weight when the diet is supplemented with excess selenium. The same study also saw the potential for adverse effects on the thyroid when the diet was made deficient in selenium.

Selenium is an essential nutrient for humans and animals. Either too little or too much selenium can cause adverse effects in humans. The EPA reference dose is one that was developed to protect against clinical selenosis (increased blood clotting time, reduced serum glutathione, hair loss, nail malformation, and/or loss) based on data from human subjects living in an area of China that had high levels of selenium in the soils.

In animals, high levels of selenium are of concern primarily for egg-laying vertebrates, such as fish and birds. Mammals are less sensitive than fish and birds. For fish the most sensitive effect is the occurrence of deformities in offspring spawned from selenium-exposed adults. For birds the most sensitive effect is a reduction in hatchability of eggs laid by exposed adults. Recent scientific evidence better defines the thresholds for these effects but has clarified that the risks of selenium are confined to a few types of pollution sources, such as surface coal mining.

Question. What happens to selenium at each mountaintop mining site?

Answer. At mountaintop mining sites, placement of overburden in valley fills can result in increased surface area available for water contact with rock particles. Water runoff can have higher concentrations of major ions and some trace metals, including selenium. This can result in elevated selenium concentrations in streams and other surface waters, and potential toxicity to aquatic organisms. In West Virginia and eastern Kentucky, the source of the selenium at mountaintop mining sites is thought to be the organic black shale material associated with the coal seams in this area. The selenium leaches from the organic black shale material and migrates down gradient into the aquatic ecosystems and adjacent terrestrial areas.

Question. Is it accumulating in the plants used to reclaim abandoned mine lands and does this exposure pathway pose a risk to upland wildlife?

Answer. Most mining companies in Appalachia use a standard set of plants in the reclamation of the mine sites. The Colorado State University Cooperative Extension (Series No. 6.109) has researched and classified plant species based on their ability to uptake and accumulate selenium. Even though most plant species are non-accumulators, almost all plants will absorb selenium if grown in seleniferous soils.

Question. To what extent is selenium accumulating in aquatic sediments? Is this storage temporary, and will it eventually release hazardous levels of selenium over an extended period of time?

Answer. Selenium can cycle in aquatic habitats by moving in and out of sediments. A large portion of the total selenium in a stream or reservoir may be present in sediments, deposited directly from the water or from plants and animals as they die and decompose. However, this pool of selenium is not permanently removed from the system. Biological activity, water chemistry changes, and physical disturbance can mobilize selenium back into water and organisms. This means that the selenium in sediments may remain active, and may provide a source of pollution to bottom-dwelling invertebrates and the fish that feed on them. Case studies show that selenium in sediments can recycle into the water and food chain for decades after selenium inputs are stopped.

Question. To what extent is selenium accumulating in aquatic plants and animals, and other wildlife, both on-site and downstream?

Answer. Selenium concentrations have been found to be elevated downstream of mountaintop mining operations and valley fills. Selenium can bioaccumulate through the aquatic food web, and elevated levels have been found in fish in the Appalachian mining region. Scientific literature suggests that many Appalachian streams surveyed downstream of mountaintop mining operations and valley fills exceed EPA's national recommended chronic Ambient Water Quality Criterion for selenium. Excessive selenium has been associated with increased death and deformities in fish and reduced hatching in birds in studies of coal overburden effluents in other mining regions. A recent report from the West Virginia Department of Environmental Protection (WVDEP) showed that fish egg concentrations in largemouth bass exceeded the proposed selenium fish tissue egg ovary criterion by approximately four-fold.

Question. Are toxic levels being exceeded?

Answer. The WVDEP has completed several studies on accumulation of selenium in the eggs of several species of waterfowl, amphibians and fish. Results suggest that selenium may be approaching levels toxic to aquatic life and that adverse effects on wildlife within watersheds studied in West Virginia may be occurring. These adverse effects include fish deformities and poor hatch and survival of larvae. Additional studies are ongoing.

Question. Are there any State or Federal threatened or endangered species at risk?

Answer. There may be State or federally listed species at risk. Several endangered species are found in Central Appalachia, including several species of freshwater mussels. The U.S. Fish and Wildlife Service believe that freshwater mussel populations within the Kanawha River watershed are being threatened by upstream mining activities, specifically at the Kanawha Falls and the Elk River watersheds. The West Virginia Division of Natural Resources recently described a new species of fish—diamond darter—as existing only in the Elk River watershed, which is threatened by upstream mining activity. This species is being evaluated by the Fish and Wildlife Service but is not yet listed.

Question. Are there any birds at risk, such as geese or migratory waterfowl?

Answer. There may be bird species at risk from selenium. Selenium has been documented to have toxic effects on waterfowl from areas around the world; however, the WVDEP study on the Mud River watershed did not document any problems with birds at this particular watershed. The WVDEP does not plan to expand the investigation any further at this time.

Question. How long does selenium persist in stream and reservoir sediments, and to what extent is selenium pollution from prior decades contributing to selenium pollution today?

Answer. Selenium can persist in stream and lake sediments for a long time, but selenium deeper than a few centimeters is generally described as nonbioavailable. Historic mining in these watersheds may have minimally contributed to the selenium problem. However, current large scale mining activities are exposing the organic black shales on a much greater scale, which is believed to result in greater selenium exposure and environmental impacts, as discussed above with respect to impacts to fish populations.

Question. How far downstream are elevated concentrations of selenium showing up in water, sediment, plants, and animals?

Answer. Selenium levels can be elevated several miles downstream of mine sites. One measurement of elevated levels of selenium in water comes from the State's biennial assessment of water quality conditions under sections 303(d) and 305(b) of the Clean Water Act. Water segments with elevated selenium levels (segments with the selenium criterion not met) are placed on the State's list of impaired waters.

Surface coal mining practices with the potential to expose selenium-bearing strata are most likely in West Virginia and Kentucky. In West Virginia, 29 water segments have been placed on the impaired waters list. Three of the 29 have since been removed from the impaired water listing. Of the remaining 26, 13 have had studies completed to determine necessary steps to restore the conditions in the segment to allow the selenium criterion to be met. Thirteen stream segments were listed for selenium impairments on the most recent completed assessment in 2008. EPA is not aware of any 303(d) listings in Kentucky with selenium listed as the pollutant of concern.

Question. What is the degree of groundwater contamination by selenium, and what is the physical extent of the contamination? Is contaminated groundwater able to enter surface water?

Answer. EPA does not have comprehensive data on the degree or extent of groundwater contamination by selenium, but we are working gather data relating to drinking water complaints. We do know, based on an EPA-funded study in selected areas of West Virginia and Kentucky, that selenium-contaminated water is discharging from the toes of valley fills at concentrations greater than 5 parts per billion (ppb); 50 ppb is the maximum contaminant level for selenium. Contaminated groundwater can enter surface water, depending on the aquifer and its hydrologic connection to streams.

EXTENT AND FORM OF IMPACTS

Question. How is EPA building upon the work that was conducted as part of the programmatic environmental impact statement on mountaintop mining and valley fills, in order to maintain an updated and detailed understanding of the geographic extent of mountaintop mining/valley fill operations in the central Appalachians? Are

the permitting agencies capable of estimating watershed scale impacts at this time, or have they obtained such estimates from third parties?

Answer. The programmatic Environmental Impact Statement concluded that approximately 1,200 miles of headwater streams were directly impacted by mountaintop mining operations between 1992 and 2002. This represents a loss of almost 2 percent of the stream miles in the study area during this 10-year period. Furthermore, the permitted area for mountaintop mining in the study area over the same 10-year period was estimated at 403,810 acres. At that time, both mine footprint and stream losses were projected to double by 2012. The U.S. Government Accountability Office (USGAO, 2009) recently updated this inventory by reviewing permits issued between 1990 and 2008. However, updated estimates of stream loss and other cumulative impacts associated with these operations are not yet available.

Question. Do accurate maps exist and, if so, are they being used to guide monitoring and evaluation?

Answer. Large scale maps depicting impacts in select areas of the Appalachian region exist, and are being used where available. Typically, however, resolution on these maps is not fine enough to be used for site-specific monitoring. EPA and our other Federal and State regulatory partners are working to improve our capabilities in this regard, but we are not currently at the point of mapping impacts in all watersheds. To that end, however, EPA is working with the OSM on collecting and sharing geospatial data in order to evaluate existing impacts and better inform decisions on proposed surface coal mining projects.

Question. What evidence exists to suggest that the runoff or export of mining-derived pollutants (sulfates, manganese, selenium, aluminum, etc.) declines following reclamation of mountaintop mining/valley fill projects?

Answer. According to a draft EPA review of scientific peer-reviewed literature, there is no evidence that current reclamation approaches reduce conductivity downstream of valley fills. For example, in larger streams of the Kanawha Basin, Paybins et al. found that median concentrations of sulfate had increased 1.6 times between 1980 to 1998 (Paybins et al. 2000).

Question. How long does the process take?

Answer. Concentrations of metals that are not soluble in alkaline conditions, including total iron, manganese, and aluminum, decreased by approximately one-third to one-half during the 1980 to 1998 time period. Their decrease may reflect the increased sources of alkaline water from valley fills.

Question. We have heard a lot about mayflies, and it is my understanding that their loss indicates unsuitable water quality. But are there other species being lost as well? What impact has mountaintop mining had on the loss of species other than mayflies? For example, could the loss of sensitive animals like salamanders wind up negatively affecting the larger animals, such as bear?

Answer. Mayflies have long been recognized as important indicators of stream ecosystem health and are a very important part of the native organisms in the central Appalachian streams. Significant effects on macroinvertebrate communities, including other aquatic insects, crayfish, and other invertebrates from burial, loss of habitat, and water quality impacts from mountaintop mining activities will be transmitted up the ecosystem. This is true especially of sensitive species, such as salamanders, some fish species, and insectivorous birds and bats. Outside the aquatic ecosystem, land clearing from mining activities can also adversely affect bird and bat species.

The Central Appalachians ecoregion where the majority of mountaintop mining is located has some of the greatest aquatic animal diversity of any area in North America, especially for species of amphibians, fishes, mollusks, aquatic insects, and crayfishes. Salamanders in particular reach their highest North American diversity in this ecoregion. For example, nearly 10 percent of global salamander diversity is found within streams of the Southern Appalachian Mountains. It is likely that many of the aquatic organisms inhabiting these stream systems are eliminated or displaced when headwater streams are buried or blasted during the mining process. It has also been documented that other specialized wildlife such as some neotropical migrant birds and forest amphibians rely on natural headwater streams and adjacent forest types exhibited in this ecoregion. Finally, it is unclear what impact, other than habitat fragmentation and displacement, surface mining has on larger wildlife populations such as bear, that are not exclusively dependent on aquatic resources for their food supply.

Question. How many times over the last decade have mining companies been cited for violating water quality standards associated with mountaintop mining/valley fill activities?

Answer. With respect to the number of violations, we are not able to determine violations specifically associated with mountaintop mining or valley fill activities, but we can provide data on violations involving bituminous coal or lignite surface mining more broadly. Please note that this category includes bituminous coal and lignite preparation plants that perform such activities as cleaning, crushing, screening, or sizing that are operated in conjunction with a mine site, or operated independently, as well as conventional surface mining operations. To date we have found 15 permitted bituminous coal or lignite surface mining permitted facilities that have violated their National Pollutant Discharge Elimination System (NPDES) permit limits since January 2000. The facilities are located in Kentucky (1), West Virginia (1), Illinois (7), Louisiana (1), Montana (4), and Utah (1) and violated their permits by either exceeding their limitations, failing to report discharge monitoring data, or by reporting a single event violation. This number is out of 857 NPDES permits for bituminous coal or lignite surface mining facilities for which we have permit and effluent limitation data. The following chart shows which facilities in which States had what type of violation.

State	Permit number	Facility	Violation type
IL	IL0061166	JADER FUEL COMPANY, INC.	Single event
IL	IL0061247	FREEMAN UNITED COAL—INDUSTRY	Single event
IL	IL0064611	JADER COAL COMPANY	Single event
IL	IL0072745	KNIGHT HAWK COAL, LLC	Single event
IL	IL0073351	ARCLAR COMPANY, LLC	Single event
IL	IL0078026	KNIGHT HAWK COAL, LLC	Single event
IL	IL0078565	Sugar Camp Energy, LLC	Single event
KY	KY0043133	HARLAN CUMBERLAND COAL TOTZ	Failure to report
LA	LA0064076	DOLET HILLS LIGNITE CO., LLC	Single event
MT	MT0000892	DECKER COAL CO (WEST MINE)	Single event
MT	MT0023965	WESTERN ENERGY COMPANY	Single event
MT	MT0024210	DECKER COAL CO (EAST MINE)	Single event
MT	MT0021229	WESTMORELAND RESOURCES, INC.	Single event
UT	UT0024368	Crandall Canyon Mine	Single event
WV	WV0050717	UPSHUR PROPERTY, INC.	Exceeded limits

Question. What have companies done in response to these violations? What additional protections have been implemented by violators to prevent future water quality degradation?

Answer. Two recent civil judicial settlements—with Massey Energy Company (Massey) in 2008 and Patriot Coal Corporation (Patriot Coal) in 2009—provide examples of what mining companies have done in response to Clean Water Act violations and to prevent future water quality degradation:

—In its 2008 Federal consent decree, Massey agreed to invest approximately $10 million to develop and implement a set of procedures to prevent future violations. Massey agreed to implement an innovative electronic tracking system that allows the company to quickly address compliance problems and correct any violations of permit limits. This measure is part of a comprehensive environmental compliance program that Massey has agreed to implement under the decree, which includes in-depth internal and third-party audits, employee training, and a plan to prevent future slurry spills. Massey also agreed to set aside 200 acres of riverfront land in West Virginia for conservation purposes and is required to perform 20 stream restoration projects downstream from mining operations.

—In its 2009 Federal consent decree, Patriot Coal agreed to implement extensive measures to prevent future violations and to perform environmental projects at a total estimated cost of $6 million. Patriot Coal will develop and implement a company-wide compliance-focused environmental management system including: creation of a database to track information relevant to compliance efforts; conducting regular internal and third-party environmental compliance audits; implementing a system of tiered response actions for any possible future violations; and conducting annual training for all employees and contractors with environmental responsibilities.

Question. What is EPA's protocol for measuring stream ecosystem structure and function (for instance, how much water was running through the stream before the mining occurred)? If there is not a functional assessment available, how have permittees been complying with the Clean Water Act regulations?

Answer. EPA is currently working with the Huntington District Corps of Engineers to develop an assessment protocol to appropriately describe the ecological condition of Appalachian headwater streams and to develop an accounting system that assures functions will be effectively compensated. The protocol has recently been advertised on public notice by the Huntington district. EPA has been working to incorporate mitigation performance measures within the permit conditions to ensure that the stream mitigation proposal meets the requirements of the Clean Water Act and the 2008 Compensatory Mitigation Rule. We strongly agree with the importance of providing permit applicants with technically sound, consistent, and cost effective methods for meeting the information requirements of the agencies' regulations.

There are numerous existing stream assessment protocols available for use by mining companies applying for CWA permits. In lieu of a single approved assessment protocol, applicants may currently select an existing assessment protocol of their choosing and submit their functional analysis to the Corps as part of their permit application. The Corps generally relies on information submitted by permit applicants to determine if proposed mining projects comply with requirements of the CWA regulations. EPA believes that the development of a standard assessment protocol that ensures scientifically sound and repeatable evaluations of high-gradient streams in the coal fields of Central Appalachia will better ensure effective and consistent implementation of regulatory requirements.

QUESTION SUBMITTED BY SENATOR BEN NELSON

COMBINED SEWER OVERFLOW (CSO)—INFRASTRUCTURE IN OMAHA

Question. Like hundreds of localities across the country, the city of Omaha administers a combined sewer system that is no longer able to perform at a level necessary to comply with the Clean Water Act. As such Omaha was directed by the Environmental Protection Agency (EPA) to develop a long-term control plan to upgrade the sewer system. The city has completed this task and has in place a process to fund the necessary upgrades via user fee increases. The infrastructure upgrades associated with this project are going to cost well more than $1.5 billion and result in significant fees on the community.

While I applaud the city of Omaha for addressing this issue head on I'd prefer to see the Federal Government, as the entity mandating these changes, play a greater role in the financing of the required upgrades.

Does the EPA have a plan for addressing the costs that localities will incur in order to upgrade combined sewers outside of State revolving loan funds and/or allowing localities to completely self-finance? If so, what is that plan and did EPA describe the plan in its fiscal year 2011 budget request?

Answer. The Clean Water State Revolving Fund (CWSRF) program is the EPA's method for assisting States and localities to address water infrastructure improvements, including CSOs. Since 1988 and through 2009, the CWSRF has provided approximately $7.2 billion in assistance for CSO projects thereby helping communities across the country improve their respective water infrastructure systems. The fiscal year 2011 CWSRF request level represents a substantial increase more than requested and enacted levels prior to fiscal year 2010 and the fiscal year 2009 Recovery Act. The fiscal year 2011 CWSRF request level is a 190 percent increase more than the fiscal year 2009 enacted level.

The fiscal year 2011 budget request contains language requiring that up to 30 percent of the CWSRF funds be used by the States to provide grants, forgiveness of the principal, or negative interest loans. This provision will help communities that otherwise could not afford a standard State revolving fund loan.

QUESTIONS SUBMITTED BY SENATOR LAMAR ALEXANDER

OFFICE OF PESTICIDE PROGRAMS (OPP)

Question. Congress's key purpose in adopting procedural requirements in the Administrative Procedure Act and other statutes that Environmental Protection Agency (EPA) implements, is to allow for meaningful public participation in the regulatory process. This participation ensures that those affected by EPA's regulations have a voice in the process. It also ensures that EPA bases its decisions on sound

science and the all available scientific expertise on a topic. On October 7, 2009, EPA publicized its notice that it would re-evaluate Atrazine and called for written comments by October 23, 2009. This gave the public only 16 days to prepare for and provide written comment on a complicated scientific review. Is 16 days really sufficient lead-time to ensure meaningful public participation and to ensure that EPA benefits from the best thinking of the many non-EPA participants with expertise in the science underlying the registration of Atrazine?

Answer. We believe there was sufficient lead time for public participation in the November meeting on Atrazine because the meeting was not held to discuss or review the substantive science issues; it merely presented the proposed plan for re-evaluation in the upcoming year. The Federal Register notice announcing the meeting (October 7, 2009, 74 FR 51593), indicated that the November Scientific Advisory Panel (SAP) meeting was an informational meeting only, to inform Panel members and the public about EPA's plans for three SAP meetings planned for February, April, and September 2010. The meeting was intended to communicate and clarify the nature, scope, and breadth of the Atrazine-related discussions planned for those three 2010 SAP meetings. Although EPA encouraged submission of written comments by October 23, the notice said the EPA would accept written comments until the day of the meeting, November 3, 2009 (thereby providing an additional 11 days for the submission of written comments). Due to the informational nature of the November Atrazine meeting, we believe the time allotted for public comment was adequate.

The October 2009 notice also provided information relevant to the upcoming SAP meetings including how and when to participate. Background documents for the Atrazine SAPs are available through the EPA public docket (http://www.regulations.gov) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) SAP home page (www.epa.gov/scipoly/sap).

Question. EPA announced its scientific review plan for Atrazine on November 23, 2009—less than 1 month after closing the public comment period. How many studies does EPA have on file on Atrazine?

Answer. There are more than 6,000 studies in EPA's files on the human health and environmental effects of Atrazine.

Question. How many SAPs have been created to review Atrazine?

Answer. Prior to the November 2009 informational meeting of the SAP, the EPA has held seven SAP reviews exclusively on Atrazine (September 1988, June 2000, June 2003, July 2003, October 2007, December 2007, and May 2009). Some of these meetings were to address human health issues and others were to address ecological effects issues.

Question. What is the cost of empanelling a SAP?

Answer. The resources associated with organizing, convening, and developing the final report for the April FIFRA SAP meeting is estimated to be approximately $200,000. This cost estimate is comparable to the cost of a typical SAP meeting.

Question. What is the mean number of studies for all registered products?

Answer. Since there are more than 6,000 Atrazine studies and there are 6 technical registrations, the mean number is approximately 1,000 studies. For a new food-use pesticide active ingredient registration, EPA would require at least 100 studies.

Question. Is this adequate time, given the number of studies that EPA has on file on Atrazine?

Answer. Yes, this was adequate time for EPA staff working on Atrazine to prepare. Most of the 6,000 studies on file for Atrazine were reviewed prior to the Atrazine Interim Reregistration Eligibility Decision (IRED) in 2003. In 2001, EPA developed a preliminary risk assessment based on many of these studies and published a risk assessment for public comment as part of the re-registration process. As a result, most of the stakeholders interested in the regulation of Atrazine are also very familiar with the body of Atrazine research, having followed developments closely over the last decade.

In the 7 years since the 2003 IRED was issued, significant Atrazine research has been done, with more than 100 new studies available on its potential human health effects. These additional data have been received from the Atrazine registrants, or published in the peer-reviewed open literature. EPA reviews these new data internally as quickly as possible within the overall framework of the program. For example, after the water monitoring data have been reviewed and quality controlled, the EPA makes these data available to the public via its Web page.

Question. Is this adequate time given that EPA just re-registered Atrazine in 2006 and concluded it could be used without harm to humans?

Answer. Yes, this is adequate time. The 2003 IRED was the EPA's decision on the individual chemical Atrazine, establishing data requirements and risk manage-

ment measures for the uses of Atrazine and associated human health and environmental risks. However, Atrazine's re-registration eligibility and tolerance reassessment decisions could only be finalized once the cumulative assessment for all of the triazine herbicides was completed. The EPA's publication of the triazine cumulative risk assessment in 2006, therefore, finalized the EPA's Atrazine re-registration decision.

Since the 2003 IRED was published, the EPA has continued its review of Atrazine as data have become available through IRED-required studies and water monitoring programs, published literature, registrant-submitted studies, and EPA-sponsored studies. The OPP keeps in place an Atrazine team consisting of scientists and regulatory managers to ensure that the review of data and implementation of decisions reached in the 2003 IRED for Atrazine are current.

OPP has received and reviewed ongoing monitoring data as a condition of re-registration. For example, the EPA has received an extensive amount of drinking water and ambient surface water monitoring data from the registrants of Atrazine as an ongoing condition of Atrazine's re-registration under the 2003 IRED. EPA continuously reviews and makes decisions based on these data. In accordance with the 2003 IRED, the EPA has added 26 new community water systems into the monitoring program (as of April 2010) because they warranted closer scrutiny, and removed others where no immediate problems or violations were identified. Additionally, EPA is aware of recent Atrazine research in the fields of both epidemiology and laboratory toxicology. Moreover, three FIFRA SAP meetings have been convened by EPA to review new Atrazine research and methods to assess its risk since the re-registration decision was reached, but prior to the 2009 decision to re-evaluate Atrazine.

In sum, EPA scientists and regulatory managers have stayed abreast of developments in Atrazine research, and have continually kept the public informed about new data through the SAP review process.

Question. On October 7, 2009, Assistant Administrator for the Office of Prevention, Pesticides and Toxic Substances Stephen Owens was been quoted by the New York Times in a story regarding EPA's plans to re-review the registration of Atrazine as saying that you at EPA "have a question: Did the decisions made in previous administrations use all available science?" Does this statement accurately reflect the basis for decisions at EPA regarding resource allocation, that EPA intends to reach back and re-consider the scientific decisions already made by EPA scientists?

Answer. The EPA has an ongoing statutory responsibility to ensure that pesticides currently on the market continue to meet the standards in the FIFRA. Over the last 7 years since the Atrazine re-registration decision was completed, the EPA has received additional data and convened a number of FIFRA SAP to review new research and methods to assess Atrazine's risks. Moreover, the EPA has received an extensive amount of drinking water and ambient surface water monitoring data from the registrant, which was a condition of re-registration. EPA continuously reviews these data. In addition, the 1994 Atrazine special review covering cancer issues and drinking water remains open, highlighting the EPA's historical and ongoing focus on the potential health effects of Atrazine.

Question. Is EPA reconsidering all of its own past scientific analyses?

Answer. Consistent with our statutory mandate, EPA will revisit its past pesticide assessments whenever warranted by new information and at least every 15 years.

Question. What is the basis for reconsideration?

Answer. Atrazine is one of the most widely used pesticides in the United States and is the subject of significant scientific research and regulatory interest. Given the new body of scientific information, as well as the documented presence of Atrazine in both drinking water sources and other bodies of water, the EPA determined that this is an appropriate time to consider the new research and other information to ensure that our regulatory decisions about Atrazine protect public health. Therefore we are re-evaluating of Atrazine.

In the 7 years since the IRED was issued, significant Atrazine research has been done, with close to 100 new studies available on its potential human health effects. The EPA has also received an extensive amount of drinking water and ambient surface water monitoring data from the registrants of Atrazine as an ongoing condition of re-registration. Given the new research and the availability of additional data on Atrazine in drinking water sources and other bodies of water, the EPA is reviewing the new data to ensure that our regulatory decisions about Atrazine are protective.

EPA has continued to work on Atrazine since the 2003 IRED. EPA has convened a number of SAPs in the last 7 years to review issues concerning cancer, effects on amphibians, and evolving methods to assess ecological risks. The EPA also continues to review drinking water monitoring data collected as a condition of re-reg-

istration. EPA has already modified aspects of its 2003 decision based on the results of these SAPs and implementation efforts.

Question. Just 3 months ago, EPA announced on its Web site that Atrazine is not likely to cause cancer in humans. Furthermore, the next round of registration review for Atrazine was already scheduled to begin in 2013, which would have ensured an appropriately deliberative process. Given EPA's tight budget and many competing environmental demands for resources, why is EPA abandoning its plan and now rushing to re-review Atrazine now?

Answer. There is more than one review process by which EPA is looking at potential risks associated with the use of the pesticide Atrazine. These review processes have been integrated and are ongoing.

In November 1994, EPA initiated a special review for the triazine pesticides, which at that time included Atrazine, Simazine, and Cyanazine. The special review process is set in motion when EPA has reason to believe that the use of a pesticide may result in unreasonable adverse effects on people or the environment. The basis for the special review of the triazines included the potential for cancer risks resulting from dietary or occupational exposure, as well as the potential for human health risks resulting from drinking water exposure caused by ground and surface water contamination.

When the EPA initiated the re-registration process for Atrazine, it took Atrazine's special review into consideration. In 2000, the EPA determined that Atrazine was not likely to cause cancer in humans. However, in an abundance of caution, the 2003 Atrazine IRED committed the EPA to present to the FIFRA SAP its assessment of all available data about the potential carcinogenicity of Atrazine—both epidemiology studies and laboratory animal studies—including its review of forthcoming results from the National Cancer Institute's Agricultural Health Study. Thus the EPA's commitment to convene an SAP on Atrazine and cancer well predated the EPA's Atrazine re-evaluation announcement of October 2009. The 2003 IRED also required a drinking water monitoring program, which is ongoing. The special review case for Atrazine remains open, highlighting the EPA 's historical and ongoing focus on Atrazine and its potential health effects from drinking water exposures.

The 2003 IRED is the EPA's decision on the individual chemical Atrazine, establishing data requirements and risk management measures for the uses of Atrazine and associated human health and environmental risks. However, Atrazine's re-registration eligibility and tolerance reassessment decisions could only be finalized once the cumulative assessment for all of the triazine herbicides was completed. The EPA's publication of the triazine cumulative risk assessment in 2006, therefore, finalized the EPA's Atrazine re-registration decision.

Atrazine is one of the most widely used pesticides in the United States and is the subject of significant inquiry and regulatory interest. Given the new body of scientific information since the 2003 IRED, as well as the documented presence of Atrazine in both drinking water sources and other bodies of water, the EPA determined it appropriate to consider the new research and to ensure that our regulatory decisions about Atrazine protect public health.

EPA is following an open and transparent process and has presented its approach to the SAP on several occasions to ensure the scientific soundness and integrity in the review process for Atrazine. In February of this year, the SAP met to focus on generic issues concerning approaches for reviewing epidemiology studies and their use within risk assessments. An SAP review scheduled for later in April will evaluate laboratory studies addressing the human health effects of Atrazine as well as sampling protocols used to monitor Atrazine levels in community water systems. The SAP will also meet this September. At the fall meeting, EPA will present and seek peer review of its evaluation of Atrazine health effects based on experimental laboratory studies and epidemiology studies. This review is intended to also include any new experimental laboratory data since the April SAP meeting.

Also, EPA will present and seek peer review of its evaluation of Atrazine cancer and noncancer effects based on animal laboratory toxicology studies and epidemiology studies. This review is intended to include the most recent results from the National Cancer Institute's Agricultural Health Study.

Question. Does this review currently underway satisfy the registration review of Atrazine scheduled for 2013—and if not why again require significant EPA resources for another review in 2013?

Answer. The current re-evaluation will help address aspects of the registration review scheduled for 2013 that involve human health risk assessment. As a result, the current re-evaluation of Atrazine should reduce the resources needed to complete the registration review, and possibly reduce the scope of the EPA's final plan for Atrazine, which would likely be implemented between 2013 and 2019.

As mentioned above, based on this evaluation, the EPA will decide whether to revise its current Atrazine risk assessments and whether new restrictions are necessary to better protect health. For more information on this and other Atrazine-related programs as well as the schedule for the upcoming SAP meetings, see the Atrazine Web page at http://www.epa.gov/pesticides/reregistration/atrazine/atrazine_update.htm#ewmp.

Question. Congress adopted the FIFRA, and the Federal Food, Drug and Cosmetic Act (FDCA), which together ensure the registration and safe use of herbicides in the United States. Under these laws, EPA established long-standing requirements to ensure the scientific integrity of data that underlies decisions under FIFRA and FDCA. EPA regulations require that studies relied on to register products meet Good Laboratory Practice standards (GLPs). These standards are intended to ensure the quality and reliability of information in a FIFRA study. Does EPA consistently require that all studies used to support FIFRA registrations meet these standards?

Answer. EPA evaluates available information from all kinds of sources—pesticide companies, other governments, academia, or the published scientific literature—to ensure that its decisions are informed by the best science available. We look closely at every study to determine whether the results are scientifically sound. The fact that a study may not have been conducted under prescribed GLP conditions does not necessarily mean that it is of lesser quality than a GLP study. EPA scrutinizes the experimental procedures used and the overall quality of the resulting data for each individual study and then makes a weight of evidence judgment of the quality and robustness of that study.

EPA has promulgated regulations that describe procedures designed to enhance the integrity of scientific data. This regulation is referred to as the GLP standards. GLP regulations cover broad topics ranging from archiving to personnel training. They also require that registrants or applicants for registration submit with any data intended to support registration a statement "describing in detail all differences between the practices used in the study and those required" by the GLP regulation. The regulations further provide that EPA "may refuse to consider reliable for purposes of supporting an application for a research or marketing permit any data from a study which was not conducted in accordance" with the regulation. As a result of this study-specific review, EPA may not require that a given study used to support a FIFRA registration meets every GLP standard because some failures to follow those standards do not result in data that are unreliable. It is possible that a study may not be fully GLP compliant for a reason that does not compromise the integrity or validity of the study (e.g., personnel training records may not have been provided).

In sum, even when relying on non-GLP studies, the EPA adheres to its high standards of evaluating the integrity, quality, and robustness of the studies under consideration. Our analysis gives greater weight to better run studies and those findings confirmed by multiple sources. Ultimately, EPA looks at all of the studies to decide what the preponderance of evidence shows.

Question. As EPA works through the latest Atrazine review, will EPA be requiring that all data used to make all of its decisions regarding the continuing use of Atrazine meet GLP standards?

Answer. No, whether they follow GLP standards or not, the EPA has historically considered all scientifically reliable and relevant data. In the evaluation of all studies, the EPA makes a weight of evidence judgment, which involves evaluating the quality and robustness of each individual study. The study needs to be well-documented with respect to the methods used and the results, so an independent analysis and scientific review can be conducted. Greater weight is given to high-quality and well-documented studies and those findings confirmed by multiple sources. As EPA evaluates each study it considers a variety of factors such as the study design, the dose response, the cohesiveness of results with results seen in other studies, and the current understanding of the mode of action of toxicity for the compound. Ultimately, EPA looks at all of the studies to decide what the preponderance of the data shows.

Question. What new scientific studies led EPA to re-review Atrazine and who conducted the study?

Answer. The EPA did not base its decision to formalize the re-evaluation process on the results of any one study. Atrazine's re-evaluation process has always been dynamic. Over the last 7 years since the 2003 Atrazine IRED was completed, significant Atrazine research has been done. Moreover, the EPA has received an extensive amount of drinking water and ambient surface water monitoring data from the registrants of Atrazine, as an ongoing condition of re-registration. With respect to environmental toxicology studies, the EPA has so far identified approximately 100 studies which are being considered in the 2010 re-evaluation (www.regulations.gov,

docket EPA–HQ–OPP–2010–0125–0022). In addition, more than 40 epidemiology studies published since 2004 are being considered as part of the 2010 re-evaluation. A subset of these epidemiology studies were included as a case study at the February 2010 SAP (www.regulations.gov, see docket number EPA–HQ–OPP–2009–0851–0002). The remaining epidemiology studies will be included in subsequent SAP reviews.

Given this significant body of new scientific information as well as the documented presence of Atrazine in both drinking water sources and other bodies of water, the EPA determined it appropriate to consider the new research and to ensure that our regulatory decisions about Atrazine protect public health.

Question. Did EPA conduct internal data evaluation reviews of the new data prior to announcing the re-review?

Answer. In the case of Atrazine, formal Data Evaluation Records were not generated. However, EPA determined these newer studies, warranted a closer look at the data to determine whether there are other health concerns not previously identified, whether our current understanding of how Atrazine produces its toxicity has changed and to re-evaluate the amount and duration of exposure that may lead to an impact human health. Reviews of these studies are being included as components of the 2010 SAP review. Given the amount of data the EPA is aware of since the IRED, internal review of data can occur rapidly to protect the public.

Question. Were these studies conducted in compliance with EPA's GLP standards? If not, why isn't EPA following its own standards in reviewing scientific evidence?

Answer. Since the most recent human health risk assessment in 2003, more than 100 new studies on a variety of scientific topics have been published (details provided above), of these only a small number (< 10) were conducted under GLP standards. In the case of the Atrazine review, sole reliance on GLP studies would require the EPA to ignore important information on the human health effects of Atrazine. EPA evaluates all available information from every source—whether from pesticide companies, other governments, or the published literature. The EPA utilizes a weight of evidence judgment which involves evaluating the quality and robustness of each individual study. Thus, when relying on GLP or non-GLP studies, the EPA adheres to its high standards of evaluating the integrity, quality, and robustness of the studies under consideration. A number of the new experimental toxicology studies were conducted at EPA's Office of Research and Development's (ORD) National Health and Environmental Effects Laboratory. ORD conducts research on environmental chemicals to ensure the strongest possible scientific basis for EPA risk assessments and risk management decisions. While ORD labs are not required to follow GLP procedures, they are required to conduct their research under the NHEERL Quality Management Plan (2005) which ensures that data generated are of the highest quality and fully transparent.

PESTICIDE REGISTRATION FEES

Question. Administrator Jackson, the President's budget proposes a host of new fees on pesticide registrants, including the imposition of tolerance fees, enhanced registration service fees, and additional pesticide maintenance fees. Will the proposed fees be retained by the EPA, or returned to the Treasury?

Answer. The administration's fee proposal would authorize EPA to collect fees beyond the current fee authorization, which expires at the end of fiscal year 2012. If authorized, the administration's proposal would direct increased receipts to the Department of Treasury and be subject to congressional appropriation with one exception: in fiscal year 2011 maintenance fee collections up to the current authorization amount will continue to be directed to the Reregistration and Expedited Processing Revolving Fund (Treasury Account Number 020–00–4310).

Question. How will these fees increase the EPA's ability to review these products or to increase its efficiency in review of new registrations and the renewal of existing registrations?

Answer. Proposed fee increases are intended to better align existing user fees with the full cost of direct services provided by the Federal Government to pesticide registrants. EPA expects the cost of reviewing new and existing pesticide registrations to increase in the future due to higher fixed costs (e.g., payroll and benefits) as well as the continued desire for more detailed screens on submissions, expedited data review, earlier feedback to applicants, and consultation and implementation of the Endangered Species Act with the Services.

EPA intends to pursue further improvements to processing times with investments in helping registrants develop complete and error-free submissions through training events and by developing and implementing electronic application and review tools. The EPA's long-term goal is for registrants to apply electronically via the

Web and for routine parts of the application or submission to be reviewed electronically, thereby reducing both amount of time and burden imposed on regulated entities to develop an application and for the EPA to reach a decision.

Question. Does the EPA regard the Pesticide Registration Improvement Renewal Act as having been successful in ensuring that fees assessed to registrants are retained by the EPA to perform its duties and in providing the EPA with dedicated funding to expedite the review process?

Answer. The Pesticide Registration Improvement Act and the Pesticide Registration Improvement Renewal Act specify how collected fee receipts will be used by EPA. Specifically, registration service fees are to be used by the EPA for the review and decisionmaking related to specific pesticide registration applications, including costs associated with salaries, contract employees, advisory committees, peer reviews, information management expenses, and collecting the registration service fees. EPA has used the resources consistent with the law.

CLIMATE PROTECTION PROGRAM

Question. Administrator Jackson, the President's budget proposes funding in the Science and Technology, Climate Protection Program of $16.94 million for fiscal year 2011. This represents a $1.875 million reduction from the fiscal year 2010 appropriation.

What impact will the reduction have on the laboratory's operations, particularly in the area of research and development?

Answer. This $1.857 million reduction will have limited impact on the laboratory's operations. The funding request reflects a phase down of the Federal cost-share for California technology demonstration partnerships while retaining the traditional focus on development of advanced automotive technologies in support of the administration's goal to take action on climate change. The administration is also supporting the deployment of alternative and advanced vehicle technologies and providing opportunities for demonstration and commercialization through substantial resources provided by the American Recovery and Reinvestment Act for these activities in the Department of Energy.

Question. As EPA contemplates additional regulation to curtail greenhouse gas emissions, what additional research is needed to achieve additional reductions in the following vehicle classes: Passenger vehicles, light trucks, medium-duty trucks, heavy-duty trucks.

Answer. The Climate Protection Program, and specifically the Clean Automotive Technology Program, emphasizes research and collaboration with the automotive, trucking, and fleet industries. The Program will continue its focus to transfer the research advances of the hydraulic hybrid technology to the industry, and demonstrate the effectiveness of the high-efficiency, clean-combustion, gasoline, homogenous-charge compression ignition (HCCI) engine.

However, analyses to inform regulatory decisions are conducted through a different program, namely the Federal Vehicles and Fuels Standards and Certification Program. In fiscal year 2011 the President's budget requests an increase of about $4 million to support additional needs for heavy-duty vehicle and engine greenhouse gas (GHG) standards and for initial analysis and technology assessment efforts needed to support potential development of GHG emission standards for other mobiles source categories. Additionally, the budget requests an additional $2 million to support promulgation of GHG standards for passenger vehicles, light-duty trucks, and medium-duty passenger vehicles.

Question. Does the funding requested facilitate this research? If not, what additional resources would be required?

Answer. Yes, the requested funding is adequate to achieve our highest-priority research goals.

Question. What is the status of the commercialization of the hydraulic hybrid technology? Is this technology ready for deployment in fleet vehicles, medium and heavy-duty trucks and busses? If not, what additional research needs to be conducted? What additional resources are needed?

Answer. EPA has been actively working with its broad mix of partner companies to demonstrate that its unique hydraulic hybrid technology works and that there are no fundamental technical barriers or road blocks that could prevent its commercialization.

EPA has focused its initial technology transfer demonstrations on prototype series hydraulic hybrid technology in class 6 urban delivery vehicles such as UPS and FedEx trucks. These successful demonstrations have sparked some interest among the heavy fleet industry to purchase series hydraulic hybrid trucks, which spurred

several of EPA's technology transfer partners to progress to the early stages of designing and building their first pre-production series hydraulic hybrid trucks.

In fiscal year 2011, because of technical challenges of this patented EPA technology, the manufacturers require EPA's technical assistance, expertise and experience to get these vehicles operating effectively.

In order for hydraulic hybrid technology to gain acceptance industry-wide, the program tries to leverage other projects to also demonstrate its application in other vehicles including shuttle buses (partnering with California's Air Resources Board and the South Coast Air Quality Management District) and nonroad trucks such as cargo handling equipment used in sea ports in California and the rest of the Nation.

The core technology is ready for proof of concept demonstrations in commercial trucks (meaning there are technical improvements needed, but no technical barriers or road blocks that should prevent its commercialization), and commercial truck companies and suppliers are working with EPA in designing and developing their pre-production vehicles. Industry is now preparing to build its initial pre-production vehicles and will test them in various pilot commercial truck fleet trials during 2011 and 2012.

The technology for delivery vehicles and shuttle bus applications is ready for initial field evaluations. Research is underway to overcome some application specific hurdles for other types of vehicles such as passenger cars and light trucks, including research to increase the efficiency of various hydraulic components, reduce their weight, reduce the "hydraulic noise," and extend service intervals.

QUESTION SUBMITTED BY SENATOR THAD COCHRAN

INORGANIC ARSENIC IMPACTS ON DRINKING WATER

Question. Due to the consequences and implications of the Environmental Protection Agency's (EPA) Integrated Risk Information System assessment of inorganic arsenic on drinking water, agriculture practices, and the perceived safety of the food supply compliance, do you agree the EPA should extend the comment period by 30 days and include a broader peer review?

Answer. EPA believes that this second review and the announced public comment period are appropriate and adequate. The EPA agrees that the public should be afforded an opportunity for review and comment on EPA's draft human health assessments, and that this review period should be of adequate length to ensure that the public's participation is full, transparent, and open. EPA also agrees that it should bring the best available science and scientific analyses to bear on such assessments.

In 2005, EPA's draft human health assessment for carcinogenic effects of long-term exposure to inorganic arsenic was provided for public review and comment and the resulting public comments were made available to EPA's Science Advisory Board (SAB) as part of its independent external peer review. In June 2007, the SAB issued a final report, "Advisory on EPA's Assessments of Carcinogenic Effects of Organic and Inorganic Arsenic: A Report of the US EPA Science Advisory Board." EPA then revised the draft assessment to address the recommendations and comments as part of the EPA's standard process for the development of human health assessments.

EPA has now taken the extra step of requesting that the SAB conduct an evaluation of the EPA's interpretation and implementation of key recommendations included in the SAB's 2007 peer review report. This will act as a useful check to ensure that EPA is achieving our goal of having the best science inform this assessment.

A 2-month public comment period on the EPA response to the SAB's 2007 report was announced in the Federal Register on February 19, 2010. In accordance with EPA's peer review guidance, the SAB panel will be provided with the public comments submitted by the end of the announced public comment period. After the SAB's review is complete, EPA will finalize the assessment based on the public and expert comments and include it on the IRIS Web-based database.

QUESTIONS SUBMITTED BY SENATOR ROBERT F. BENNETT

DEPARTMENT OF ENERGY (DOE) SMALL REFINERY STUDY

Question. In the RFS II rulemaking, did Environmental Protection Agency (EPA) rely on the DOE small refinery study that Congress had determined to be unreliable and needed to be revised? If so, please justify such reliance.

Answer. The criteria specified by statute (Clean Air Act section 211(o)(9) for providing a further compliance extension to small refineries is a demonstration of "dis-

proportionate economic hardship." The statute provides that such hardship can be identified through the DOE study (CAA section 211(o)(9)(A)(ii)), or in individual petitions submitted to the Agency (CAA section 211(o)(9)(B)). However, the DOE study concluded that no disproportionate economic hardship exists, at least under current conditions and for the foreseeable future under RFS2. DOE had not revised its study, as requested by Congress, as of the time of the RFS2 rulemaking. Therefore, EPA had no basis under section 211(o)(9)(A)(ii) to extend the temporary exemption for small refiners but indicated that it could do so in the future on the basis of either a revised DOE study or in response to a petition under section 211(o)(9)(B).

We are aware that there have been expressions of concern from Congress regarding the DOE study. Specifically, in Senate Report 111–45, the Senate Appropriations Committee "directed [DOE] to reopen and reassess the Small Refineries Exemption Study by June 30, 2010," noting a number of factors that the Committee intended that DOE consider in the revised study. The final Conference Report 111–278 to the Energy and Water Development Appropriations Act (H.R. 3183), referenced the language in the Senate Report, noting that the conferees "support the study requested by the Senate on RFS and expect the Department to undertake the requested economic review." At the time EPA issued the RFS2 rule, however, the DOE study had not been revised. If DOE prepares a revised study and the revised study finds that there is a disproportionate economic hardship, we will revisit the exemption extension in accordance with section 211(o)(9)(A)(ii).

Question. Because DOE is currently revising the small refinery study, would you support extending the temporary exemption of small refineries from the RFS until a credible and valid study is completed and the facts surrounding the issue are actually known?

Answer. EPA does not currently have authority to grant such an extension of the temporary exemption, since the statute states that such relief shall only be provided upon a demonstration of "disproportionate economic hardship". As previously noted, if DOE prepares a revised study and the revised study finds that there is a disproportionate economic impact, we will revisit the exemption extension at that point in accordance with section 211(o)(9)(A)(ii). In addition, EPA is prepared to review and act on individual petitions for an extension of the temporary exemption on the basis of disproportionate economic hardship experienced by individual facilities.

Question. Has EPA corresponded with DOE regarding this study since enactment of the Energy and Water Development and Related Agencies Appropriations Act, 2010? If so, please provide me with copies of that correspondence.

Answer. We are working on assessing potential correspondence regarding DOE's Small Refinery Study and will respond further once we finish reviewing the relevant documents.

Question. Is EPA participating with DOE in the revised small refinery study? If so, what is the status of that study?

Answer. We anticipate that we will be coordinating with them as they move forward—in particular providing them with information related to the RFS standards and compliance issues.

QUESTIONS SUBMITTED BY SENATOR SUSAN COLLINS

LONG CREEK WATERSHED

Question. The Long Creek watershed near Portland, Maine is one of the first in the Nation being required to reduce nonpoint source pollution under the Clean Water Act. This will affect 110 landowners. The affected businesses, local government entities, and National Estuary Program (Casco Bay Estuary Partnership) have formed a nonprofit organization to help acquire grants and other funding to assist landowners with the cost of the clean up. I recently met with Regional Administrator Curt Spalding, who pledged to help with this unique project. Will you also work with the Long Creek watershed groups and my office to identify EPA funding that could help landowners meet their Clean Water Act obligations?

Answer. Yes, the Environmental Protection Agency (EPA) will work with Long Creek watershed groups to help them identify funding for the landowners required to reduce stormwater pollution under the residual designation. While EPA's State Revolving Fund is the most likely source of funds for small business owners who need assistance to comply with National Permit Discharge Elimination System permit requirements, other Federal and State funds may also be available. EPA is prepared to work with your office to assist the landowners in identifying various funding sources.

MERCURY

Question. I have long believed that we, as a Nation, are not paying sufficient attention to the dangers posed by mercury to our children and, in general, to all of our citizens. When I have spoken to experts in Maine about this problem I have learned that each new scientific study finds more mercury in the environment and more affected species than the previous study. In 2006, when EPA released a major new mercury regulatory rule, its Inspector General found that data for mercury pollution models was severely lacking and recommended EPA implement a national mercury monitoring network. Last year, to address this need for better data, I and Senator Carper introduced the Comprehensive National Mercury Monitoring Act to ensure that we have the information we need to make decisions necessary to protect our people and environment. Do you support implementing a National Mercury Monitory Network? What specific steps will the EPA take in the coming year to protect us against this persistent and dangerous neurotoxin?

Answer. EPA recognizes the value in comprehensive, long-term mercury monitoring data and has made significant and tangible progress toward collecting national mercury monitoring data. Mercury is a complex and multi-faceted issue that is present in all media, including air, water, sediments, fish, and wildlife. EPA is collaborating with Federal, State, and tribal agencies, and academic partners to provide a comprehensive understanding of mercury in the environment using existing data, monitoring capabilities, and resources. EPA has convened workshops to discuss the design of a comprehensive national mercury monitoring program.

—In 2003, EPA co-sponsored a workshop with the Society for Environmental Toxicology and Chemistry to develop a national-scale program to monitor changes in mercury levels in the environment resulting from anticipated mercury emissions reductions in the United States. The workshop recommended a set of environmental measurements and indicators, EPA is evaluating these recommendations.

—In 2008, EPA co-convened a follow-up workshop with experts from USGS, NOAA, USFWS, NPS, State and tribal agencies, the BioDiversity Research Institute, the National Atmospheric Deposition Program, industry, academic institutions, and Environment Canada. Workshop participants agreed on a goal and major design elements for a national mercury monitoring program, EPA is evaluating these recommendations.

—Since 2008, EPA and its partners have achieved significant progress in developing new mercury monitoring and assessment capacity, including the National Atmospheric Deposition Program's newly established North American network that monitors atmospheric concentrations of mercury at 20 sites throughout the United States and Canada, and collaborative efforts to develop common databases of multi-media mercury concentrations for the Great Lakes Region that can be merged with existing databases from the Northeastern United States and Eastern Canada.

Mercury emissions have declined substantially in the United States since 1990 through regulatory and nonregulatory measures. Total estimated mercury emissions were reduced from about 246 tons in 1990 to 103 tons by 2005, about a 58 percent reduction, largely due to reductions from municipal waste combustors and medical waste incinerators, but also due to reductions from other sectors, such as chlor-alkali production plants. Moreover, reductions are currently being achieved from the steel industry through the National Vehicle Mercury Switch Recovery Program and a 2007 National Emissions Standard for electric arc furnaces at steel mills, as well as hazardous waste combustion units. EPA is also in the process of developing revised standards for Portland Cement Kilns, Industrial/Commercial/Institutional Boilers and Process Heaters, and Commercial and Industrial Solid Waste Incineration units. In 2011, EPA plans to continue progress with reducing mercury emissions and continuing its progress in significantly reducing exposures to mercury by 2015.

SUBCOMMITTEE RECESS

Senator FEINSTEIN. I believe that concludes the hearing for today. So we will stand recessed.

[Whereupon, at 11:13 a.m., Wednesday, March 3, the subcommittee was recessed, to reconvene subject to the call of the Chair.]