

**DEPARTMENT OF THE INTERIOR, ENVIRONMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2013**

**WEDNESDAY, MAY 16, 2012**

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

The subcommittee met at 10:36 a.m. in Room SD-124, Dirksen Senate Office Building, Hon. Jack Reed, (chairman) presiding.

Present: Senators Reed, Tester, Murkowski, Cochran, Blunt, and Hoeven.

**ENVIRONMENTAL PROTECTION AGENCY**

**STATEMENT OF LISA P. JACKSON, ADMINISTRATOR**

**ACCOMPANIED BY BARBARA J. BENNETT, CHIEF FINANCIAL OFFICER**

**OPENING STATEMENT OF SENATOR JACK REED**

Senator REED. Let me call the hearing to order. On behalf of the Interior, Environment, and Related Agencies Appropriations Subcommittee, I'd like to welcome everyone to our hearing on the fiscal year 2013 budget request for the United States Environmental Protection Agency (EPA).

I'm very pleased to again welcome Administrator Lisa Jackson to testify before us. We're also very glad that you and your Chief Financial Officer, Barbara J. Bennett, are here this morning to talk about your budget request and related policy issues.

As you know, Administrator Jackson, this subcommittee has been ground zero for many of the contentious policy issues that you face. And so we all know what a challenging job you have.

It's hard to address environmental challenges when our economy is strong, let alone when our current fiscal situation is challenging. That's why I particularly appreciate your message that environmental protection is not only compatible, but it is, in fact, essential for the economic growth and well-being of our Nation. That's an important message.

Of course, balancing environmental protection needs against economic constraints isn't limited to policy choices. Turning to the budget, we can see the difficult choices that you have made.

Overall, the administration has requested a total of \$8.344 billion for EPA programs. That's a decrease of \$105 million or about 1 percent less than the fiscal year 2012 enacted level.

Within this amount, the budget request includes a 5-percent increase in EPA's operating programs for a total of \$2.8 billion, which

includes major investments in enforcement and compliance and chemical safety programs.

The request also includes a 10-percent increase for grants to States and tribes to help them run their environmental permitting and monitoring programs, including a large increase for State air quality grants.

I also would like to note that the budget request includes \$14 million, an \$8 million increase, to expand EPA's current slate of hydraulic fracturing research to ensure that the Nation can continue to access its unconventional oil and gas reserves in a safe and environmentally sustainable way.

I know there is a lot of interest in how EPA plans to use these funds as well as interest in new EPA regulations that address the effects on air and water quality associated with hydraulic fracking. So I expect we'll discuss these issues in some length this morning.

Now, while I agree that the investments I've just discussed are very important, I'm very concerned that the water infrastructure grant program bears the brunt of cuts in this budget.

Specifically, the budget proposes to cut \$359 million or 15 percent from Clean and Drinking Water State Revolving Fund program levels. That would mean a 20-percent cut to the Clean Water State Revolving Fund program and a 7-percent cut for the Drinking Water State Revolving Fund program.

These additional cuts mean that the State Revolving Funds (SRF) would be cut by more than 40 percent compared to where the programs were 3 years ago, and would negatively impact our communities in at least two ways.

First, by EPA's own estimates, our communities face more than \$600 billion in sewer and drinking water project needs over the next two decades. And these needs are far outpacing the Federal Government's ability to help communities pay for them.

My own State of Rhode Island has more than \$1.6 billion in projects waiting for funding on its intended use plan, including \$1.3 billion in clean water needs. Yet, in the President's fiscal year 2013 budget, we are only slated to receive about \$16 million in SRF grants.

So I'm concerned that further cuts to SRFs will cause us to fall even further behind.

Second, the SRFs are tremendous job creators, especially when our Federal grants are combined with the additional funds that States contribute as a matching requirement, or stretched even further by leveraging through the bond markets.

Every \$1 we invest in these grants creates more than \$2 in total investments in actual projects on the ground.

The bottom line is that cutting these programs means cutting construction jobs. And despite the fact that many of EPA's programs we'll discuss here today are controversial, funding for water infrastructure has bipartisan support.

So I'm very concerned that the administration is proposing to cut one of the few areas of the EPA budget that both sides agree is extremely important.

There are some additional reductions to smaller programs in the EPA budget which also concern me, including a proposal to cut diesel emission reduction grants by one-half, and to eliminate Beach

Act coastal monitoring grants and the environmental education program.

As part of our conversation today, I'd like to know why these programs were selected for reductions, and I hope you'll work with me, Administrator Jackson, and the subcommittee to restore these proposed cuts.

Finally, I'd like to turn to an area of the budget that is very important to my home State, if you would allow me.

For many years, I've worked to protect Rhode Island's coastal environment since I became chairman. I've been working closely with the EPA to emphasize the need to restore coastal watersheds in southern New England like the Narragansett Bay.

Last year, I directed the EPA through the Interior, Environment, and Related Agencies appropriations bill to take a leadership role to coordinate and expand restoration programs in the region.

I'm happy that EPA's moving forward with these efforts and thank you very much, Madam Administrator, and your Regional Administrator Curt Spaulding in Region 1.

And I'm particularly pleased to see your proposed \$2 million investment in the region as part of your budget request. I want to thank you both, Administrator Jackson and Ms. Bennett, for your personal attention to this issue. Thank you very much.

And, now, let me turn to my ranking member, Senator Murkowski. Senator.

STATEMENT OF SENATOR LISA MURKOWSKI

Senator MURKOWSKI. Thank you, Mr. Chairman.

Administrator, welcome. Good morning, Ms. Bennett. Thank you also for being here.

Administrator, as you might expect, many of my questions today will involve policy issues. But first, I want to recognize and thank you for maintaining the Alaskan Native Villages Program at \$10 million in your budget request.

The need in rural Alaska for wastewater improvements is enormous. I truly appreciate that you've maintained this critical program while keeping the overall budget request below last year's level. So thank you for that.

Earlier this month, there was an editorial in the Washington Post entitled "The EPA is Earning a Reputation for Abuse". Not a very complimentary headline there.

And this was in response to statements that came to light from one of your regional administrators concerning the EPA's enforcement tactics.

And the editorial states as follows: "The most reasonable interpretation is also among the most disturbing, that Mr. Armendariz preferred to extract harsh punishments on an arbitrary number of firms to scare others into cooperating."

This sort of talk isn't merely unjust and threatening to investors in energy projects, it hurts the EPA. The question will remain, is an aggressive attitude like the one Mr. Armendariz described common among EPA officials?" And that's the end of that quote.

I raise these issues because I think these statements are somewhat consistent with some of the fears that have been expressed

by some of my constituents and that I have expressed about the EPA.

That it can sometimes be arrogant, use arbitrary enforcement or put in permitting requirements which then in turn discourage the market from investing in critical projects that are necessary to get folks back to work, invigorate our economy.

There's a couple of examples in Alaska that I will cite too that suggest that this attitude has perhaps affected EPA's work on issues within my State.

You are very familiar, of course, with Shell Oil and its effort to gain the necessary permits to pursue exploring offshore there.

They've spent more than 5 years and \$50 million pursuing air permits from the EPA for no more than two drill ships to operate in the Arctic Outer Continental Shelf (OCS). At the same time, these kinds of permits were issued routinely in the Gulf of Mexico in about a 6-week period in air sheds where there are many, many more drilling rigs operating year-round, and with many more communities in close proximity.

As you know, I worked with my colleagues last year to transfer air permitting authority in the Arctic OCS from the EPA to the Department of the Interior who already has the permitting responsibilities within the gulf.

A second case in point is the watershed assessment for Bristol Bay. This assessment is in response to a petition to block the proposed Pebble Mine under section 404 of the Clean Water Act.

I've heard from a lot of Alaskans on this issue. They're concerned about so many different aspects of it, from the potential development of a mine affecting our State's fisheries, to the need for a fair permitting process and the potential economic benefits of mineral development.

But precisely because this is such a controversial and very complex issue, I think that the process used by the EPA must be absolutely fair and transparent. And, I've been somewhat concerned about the potential for unintended consequences from such an assessment.

Back in February of last year, and again just last month, I sent letters to you inquiring what would stop the assessment from being used by opponents of other nonmining development in Bristol Bay.

I think that the assessment would be flawed if it doesn't contain an answer to that question. So that is something that I have asked and hope to get a firm answer on.

I do want the EPA to do its job in the regular order of things.

You clearly have the responsibility to protect the public health. I support that. I respect that, and I respect the passion for which you exercise your responsibility. But I do believe that it has to be done in a way that the public believes is fair and based on objective science.

And I would hope that you would agree with that. Mr. Chairman, again, I thank you.

Administrator Jackson, I appreciate you being before the committee today, and I look forward to our discussions later on. Thank you.

Senator REED. Before I recognize the Administrator, Senator Tester, do you have any comments?

Senator TESTER. No.  
Senator REED. Thank you very much. Administrator Jackson, please.

SUMMARY STATEMENT OF LISA P. JACKSON

Ms. JACKSON. Thank you all, and thank you, Mr. Chairman.

Thank you for inviting me to testify on the President's fiscal year 2013 budget for the EPA. And, as you noted, thank you. I'm joined by our Chief Financial Officer, Barbara J. Bennett.

EPA's budget request is \$8.344 billion, and it focuses on fulfilling EPA's core mission that's protecting human health and the environment, while making sacrifices and, indeed, tough choices that Americans across the country are making every day.

EPA's budget request fully reflects the President's commitment to reducing Government spending. The budget is down and finding cost savings in a responsible manner, while still supporting clean air, clean water and the innovative safeguards that are essential to an America that's built to last.

In some cases, we have, indeed, had to take a step back from programs. This budget reflects a savings of \$50 million through the elimination of several EPA programs and activities that have either met their goals or can be achieved at the State or local level or by other Federal agencies.

I just want to spend a moment discussing a few elements of EPA's budget request.

The budget request recognizes the importance of our partners at the State and local and tribal level. As you know, they are, indeed, at the front lines of implementing our Nation's environmental laws like the Clean Water Act, and the Clean Air Act.

And, in fact, the largest portion, fully 40 percent of EPA's funding request, is directed to State and Tribal Assistance Grants appropriations. And that's to support their efforts.

Specifically, the budget proposes that \$1.2 billion, nearly 15 percent of EPA's overall budget request, be allocated back through categorical grants to the States and tribes. This includes funding for State and Local Air Quality Management grants, Pollution Control grants, and the Tribal General Assistance Program.

The budget also proposes that a combined \$2 billion, fully 25 percent of EPA's budget request, goes directly to the States for the Clean Water and Drinking Water State Revolving Funds.

As you noted, Sir, this funding will help support systemwide investments that are efficient and that develop water infrastructure in our communities. We are working collaboratively especially to identify opportunities to fund green infrastructure, projects that can reduce pollution efficiently and much less expensively than traditional grey infrastructure.

Additionally, our budget request would fund the protection of the Nation's land and water in local communities, including important water such as the Narragansett Bay.

Reflecting the President's commitment to restoring and protecting the Great Lakes, the budget requests that the Congress maintain the current funding level of \$300 million for the Great Lakes Restoration Initiative.

This support will continue to be used for collaborative work with partners at the State, local and tribal level, and also with nonprofit and municipal groups.

The budget also requests support for protection of the Chesapeake Bay, and several other treasured and economically significant water bodies.

The budget reflects the importance of cleaning up contaminated land requesting \$755 million for continued support of the Superfund cleanup programs and maintaining EPA's emergency preparedness capabilities.

EPA's budget request makes investments in its science and technology account of \$807 million, that's almost 10 percent of the total request. That includes \$576 million for research, including \$81 million in research grants and fellowships to scientists and universities throughout our country for targeted research as part of the Science to Achieve Results, or STAR program, on areas that include issues like children's health, endocrine disruption, and air monitoring research.

Also, as part of this request, EPA is funding increases in areas that include green infrastructure and hydraulic fracturing.

As I've mentioned before, natural gas is an important resource abundant in our country, but we must make sure that the way we extract it does not jeopardize our water supplies.

This budget continues EPA's ongoing congressionally directed fracking study, which we have taken great steps to ensure is independent, peer reviewed, and based on strong and scientifically defensible data.

Building on these ongoing efforts, this budget requests \$14 million in total to work collaboratively with the USGS, the Department of Energy (DOE), and other partners to assess questions regarding hydraulic fracturing.

Strong science means finding the answers to tough questions, and that's what our budget request is intended to do.

We are making investments to support standards for clean energy and energy efficiency in this budget. Specifically, this budget supports EPA's efforts to introduce cleaner vehicles and fuels, to expand the use of home-grown renewable fuels.

This includes funding for EPA's Federal Vehicle and Fuel Standards and Certification program and compliance testing for emissions standards. This also includes implementation of the President's historic agreement with the auto industry for reducing carbon pollution and increasing fuel economy standards through 2025 for cars and light duty vehicles, including testing support for NHTSA's fuel economy standards.

#### PREPARED STATEMENT

Taken together, the administration's standards for cars and light trucks are projected to result in \$1.7 trillion in fuel savings and 12 billion fewer barrels of oil consumed.

This funding will also help support implementation of the first ever carbon pollution and fuel economy standards for heavy duty vehicles.

Mr. Chairman, I thank you for the opportunity to testify. While my testimony reflects only a few highlights of EPA's budget re-

quest, I look forward to answering all questions of the subcommittee.

[The statement follows:]

PREPARED STATEMENT OF LISA P. JACKSON

Thank you for inviting me to testify on the President's fiscal year 2013 budget for the Environmental Protection Agency (EPA). I'm joined by EPA's chief financial officer, Barbara J. Bennett.

EPA's budget request of \$8.344 billion focuses on fulfilling EPA's core mission of protecting public health and the environment, while making the sacrifices and tough decisions that Americans across the country are making every day.

EPA's budget request fully reflects the President's commitment to reducing Government spending and finding cost savings in a responsible manner while supporting clean air, clean water, and the innovative safe guards that are essential to an America that's built to last. In some cases we have had to take a step back from programs—this budget reflects a savings of \$50 million through the elimination of several EPA programs and activities that have either met their goals, or can be achieved at the State or local level or by other Federal agencies.

Let me spend a moment discussing major elements of EPA's budget request.

This budget recognizes the importance of our partners at the State, local, and tribal level. As you know, they are at the front lines of implementing our environmental laws like the Clean Water Act, and the Clean Air Act. In fact, the largest portion—40 percent of EPA's funding request—is directed to the State and Tribal Assistance Grants appropriation to support their efforts.

Specifically, this budget proposes that \$1.2 billion—nearly 15 percent of EPA's overall request—be allocated back to the States and tribes, through categorical grants. This includes funding for State and Local Air Quality Management grants, Pollution Control grants and the tribal general assistance program.

The budget also proposes that a combined \$2 billion—another 25 percent of EPA's budget request—also goes directly to the States for the Clean Water and Drinking Water State Revolving Funds. This funding will help support efficient systemwide investments and development of water infrastructure in our communities. We are working collaboratively to identify opportunities to fund green infrastructure—projects that can reduce pollution efficiently and less expensively than traditional grey infrastructure.

Additionally, EPA's budget request would fund the protection of the Nation's land and water in local communities. Reflecting the President's commitment to restoring and protecting the Great Lakes, this budget requests that the Congress maintain the current funding level of \$300 million for the Great Lakes Restoration Initiative. This support will continue to be used for collaborative work with partners at the State, local and tribal level, and also with nonprofit and municipal groups. The budget also requests support for protection of the Chesapeake Bay, and several other treasured and economically significant water bodies. The budget reflects the importance of cleaning up contaminated land sites in our communities by requesting \$755 million for continued support of the superfund cleanup programs and maintains EPA's emergency preparedness and response capabilities.

EPA's budget request makes major investments in its science and technology account of \$807 million, or almost 10 percent of the total request. This request includes \$576 million for research, including \$81 million in research grants and fellowships to scientists and universities throughout the country for targeted research as part of the Science to Achieve Results—or STAR—program, including children's health, endocrine disruption, and air monitoring research. Also, as part of this request, EPA includes funding increases into key areas that include green infrastructure and hydraulic fracturing.

As I've mentioned before, natural gas is an important resource which is abundant in the United States, but we must make sure that the ways we extract it do not risk the safety of public water supplies. This budget continues EPA's ongoing congressionally directed hydraulic fracturing study, which we have taken great steps to ensure is independent, peer reviewed, and based on strong and scientifically defensible data. Building on these ongoing efforts, this budget requests \$14 million in total to work collaboratively with the United States Geological Survey, the Department of Energy and other partners to assess questions regarding hydraulic fracturing. Strong science means finding the answers to tough questions, and EPA's request does that.

We are making investments to support standards for clean energy and efficiency in this budget. Specifically, this budget supports EPA's efforts to introduce cleaner

vehicles and fuels and to expand the use of home-grown renewable fuels. This includes funding for EPA's Federal Vehicle and Fuel Standards and Certification program to support certification, and compliance testing for all emissions standards. This also includes implementation of the President's historic agreement with the auto industry for carbon pollution and fuel economy standards through 2025 for cars and light duty vehicles, including testing support for National Highway Traffic Safety Administration's (NHTSA) fuel economy standards. Taken together, NHTSA's standards for cars and light trucks are projected to result in \$1.7 trillion of fuel savings, and 12 billion fewer barrels of oil consumed. This funding will also help support implementation of the first ever carbon pollution and fuel economy standards for heavy duty trucks.

Stepping back from EPA's budget request, let me spend a moment discussing the impact of a sequester. Mr. Chairman, as you know, as part of the Budget Control Act of 2011 (BCA), through a sequestration, spending may be forced to be slashed in an irresponsible manner that can endanger the public health protections that we rely on and not invest in an America that's built to last. By design the sequester is bad policy, bringing about deep cuts in defense and nondefense spending to act as an incentive for congressional action on deficit reduction.

Even without the sequester, discretionary spending has already been cut in nominal terms for 2 straight years. Under the BCA, it is on a path to reach its lowest level as a share of GDP since the Eisenhower administration.

If the sequester were to happen, it would bring another round of deep cuts in discretionary spending. Although the administration is continuing to analyze the impact of the sequester, CBO has said that in 2013, the sequester would result in a 7.8-percent cut in nonsecurity discretionary accounts that are not exempt from the sequester. It would be impossible for us to manage cuts of that magnitude and still achieve our fundamental mission to protect human health and the environment.

The sequester would thus have a devastating effect on our country's ability to conduct the following activities over the long haul:

- A sequester would result in deep cuts to EPA's operating budget, which includes funds for the enforcement of public health and environmental protections.
- It would significantly harm our ability to help State and local governments finance needed drinking water and wastewater projects that provide communities clean and safe water.
- A sequester also would slash EPA grants that help States carry out basic functions that protect human health and the environment like water quality permitting and air quality monitoring.
- The sequester would impair progress on the country's ability to clean up the nation's hazardous waste sites over the long haul.

The President has been clear that the Congress needs to avoid a sequester by passing a balanced deficit reduction—at least as much as the BCA required of the Joint Select Committee on Deficit Reduction to avoid sequestration. The President's budget reflects such a balanced proposal, and we believe the Congress should enact it and cancel the sequester.

Mr. Chairman, thank you for the opportunity to testify today. While my testimony reflects only some of the highlights of EPA's budget request, I look forward to answering your questions.

Senator REED. Thank you very much, Administrator.

We'll do 6-minute rounds, and I assume that we'll have a second round at least and maybe more. But let me begin.

#### STATE REVOLVING FUNDS

Obviously, with my initial comments about SRFs, I want to give you a chance to respond about the deep cuts relative to other programs.

And the two points that I made in my comments, I'll just reiterate and ask for you to respond. One is, there are numerous projects at the State level that are available, billions of dollars and more than 10 years worth of projects that have to be funded and we're cutting back on it.

And this is a program obviously that creates the kind of construction jobs and multiplier effect in the local communities that is



so critical at this moment, particularly, up in Rhode Island, and I think every State in the country.

So, Madam Administrator, I know you had to make tough choices, but does it make sense to cut this program this much?

Ms. JACKSON. Well, thank you for recognizing, Chairman, that this does represent the kinds of tough choices that we have to face.

This administration really has strongly supported investments in drinking water and wastewater infrastructure to the tune of \$18 billion more than the budgets so far. That includes \$6 billion that was in the American Reinvestment and Recovery Act, of which, 100 percent allocated to States and tribes has been obligated.

So it's important for us, and I think we would love to work with you. I understand the concern. There is great need out there. It is absolutely true that clean water is the basis for economic growth and development, and it's also a clear stimulant for jobs and construction.

We'd like to take a look at what's out there, what has been expended and whether there are still monies that will be expended over the coming year. Part of this is a recognition that we may have money that because of the incredible investment, that \$18 billion, we can look to make sure that the funds are being purposed and put out on the street for jobs.

Senator REED. Thank you. Obviously, we'll be following up with you to try to get that information and also to continue to press the case that this program could, I think, effectively use additional funding.

#### NARRAGANSETT BAY

I want to, as I said before, thank you and Ms. Bennett for your work with the coastal watersheds of Region 1, in particular, in Narragansett Bay.

Can you give us an idea of your concept? I know there's \$2 million within the budget for this, and how do you see this not only affecting Narragansett Bay, but also being consistent with and maybe a model for other watersheds throughout the country?

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

I think, as you pointed out, southeast New England faces environmental challenges, and the region has typical challenges associated with the legacy of some amount of contamination, channelized and impounded rivers, and natural systems that have been altered.

Under your leadership and working together, I think we do have an opportunity to develop and test and implement best practices for restoration and renewal that would benefit the entire bi-State areas, the entire areas along that coastline, especially Narragansett Bay.

We, of course, have the National Estuary Program, and we worked on that. We have other estuary programs where there is some opportunity to work together. But our hope here is to bring expertise and commitment on water quality together with an intense focus on the Narragansett Bay, in particular, to determine what specific levers can be pulled to make the largest increases in water quality as well as habitat and coastline improvements along the Bay.

Senator REED. Thank you.

## STATE AND LOCAL AIR QUALITY GRANTS

Let me raise a final question in my first round. And that is, I've received letters from the directors of nine State environmental agencies, and I think Senator Murkowski and others have received the letters.

And they are responding to your proposal to change the formula for State and local air quality grants which would essentially change the formula to favor the south and the west from the current arrangement.

And their fear, even though you're increasing funding so that there's no immediate decrease, their fear is obviously that this fund is locked in. If funding is not increased over time consistently, they will begin to receive less and less for these important functions.

One other point I have, and this is just specific to the Northeast, one of the ironies of course is that we have to monitor a lot of air that comes from the Midwest. So that our air quality efforts are not simply a function of, you know, our regional or even local output.

And that I think also is another rationale for maintaining the formula. And there is a second issue too. And that is that they've raised the point that you are proposing to transfer authority for particulate monitoring from section 103 to section 105.

The bottom line is that this transfer requires a State match, which means, in the worst case, and generally, they think it's the worst case, they're going to see their funds decrease. And then another portion of their operations will require a State match which is virtually impossible to obtain given the reality of the States, all of our States at the moment.

Could you comment?

Ms. JACKSON. Yes, Mr. Chairman, thank you.

I do think, we have heard some of those concerns and received copies of those letters. And I think that once we receive our appropriation amount, there is an opportunity for us to try to work with States on how the money is allocated between section 103 and 105 authorities.

There is some difference across the country in need. Actually, the need is greater than what we can give them. We are increasing, and we're very, very proud, we'd love to be able to give you even more money.

But we're increasing because we recognize that States are so strapped, and that these monitoring systems for air quality are really the basis of determining whether air is healthy or not. And, of course, potentially taking action.

So I think there is opportunity to work to make sure that there are no unintended consequences for States. But the increase is very real.

Senator REED. Well, I appreciate that.

But, again, taking the longer view, there's a real fear that this formula change could significantly disadvantage, as well as the shifting of authorities.

So we will be working with you and looking very closely for the justification for these proposals and also to ensure that if these concerns are justified, we can respond and make appropriate changes.

With that, let me recognize Senator Murkowski.

Senator MURKOWSKI. Thank you, Mr. Chairman.

Administrator, as I go around the State meeting with constituents, more people ask me questions about EPA than any other Federal agency out there.

And they ask me to intervene. They ask me to do everything that I can to help just deal with an agency that they're having some difficulty understanding.

In fact, I had asked my Alaska staff to, as they meet with various community leaders, to just kind of keep a running list of some of the issues that are coming out of our communities. Some of them are what you would certainly expect, concerns about Boiler MACT, Utility MACT.

Others are pretty local, everything from how we get different ice melt on airport runways to how animals that are on the Alaska marine highway system moving from small island community to small island community, how the waste from those animals can be dealt with.

So it's really a range all over the board. What I would ask for you this morning is a commitment to have your senior staff with operational authority sit down with some of my senior advisers within the next few weeks or so to discuss where the EPA is on a range of these issues.

Senator MURKOWSKI. Again, many of them are so very local that I don't want to take the subcommittee's time to resolve, but exceptionally important to these more isolated and smaller communities.

So I'd ask if you'd be willing to appoint some folks to sit with me.

Ms. JACKSON. Of course.

Senator MURKOWSKI. Thank you.

[The information follows:]

Administrator Jackson committed to have senior staff with operational authority sit down with some of Senator Murkowski's senior advisers within the next few weeks to discuss where the Environmental Protection Agency (EPA) is on a range of issues (ice melt on airport runways, Boiler Maximum Achievable Control Technology (MACT), Utility MACT, animal waste, etc.).

Senior EPA staff met with staff from Senator Murkowski's office on May 31, 2012. The meeting resulted in numerous issue-specific, follow-up meetings, and an ongoing discussion on specific matters.

#### BRISTOL BAY WATERSHED

Senator MURKOWSKI. Let me ask you, just a quick question on the Bristol Bay watershed. I understand that an announcement on that is due out shortly. And, of course, my hope is that in addition to the questions that I had posed in my two letters to you, that we will not see a pre-emptive veto.

The concern that I have expressed, and just mentioned in my opening, is how far this assessment can be utilized beyond just the Pebble project itself.

Can you legally limit the impact to just EPA's consideration of the mining activity? Or, will it impact or affect the development decision in the watershed involving other issues, whether it's dredge or fill material?

Of course, the concern is, is that within this area that's about the size of the State of West Virginia, if they're not going to be able

to build a road, build a runway, because of this assessment, this is extraordinarily limiting.

So I'm trying to understand that EPA authority, if you could address that for me.

Ms. JACKSON. Yes, Senator. And thank you for your letter.  
[The information follows:]

UNITED STATES SENATE,  
Washington, DC, April 18, 2012.

Hon. LISA P. JACKSON,  
Environmental Protection Agency,  
Washington, DC.

DEAR ADMINISTRATOR JACKSON: The Environmental Protection Agency (EPA) announced over a year ago that it would undertake a "scientific assessment of the Bristol Bay watershed" in Alaska in response to a petition to preemptively veto development, in that area, under section 404(c) of the Clean Water Act. These actions materialized in response to the potential development of the so-called Pebble Mine.

Since that project became a possibility, I have encouraged all stakeholders to withhold judgment until 1) a detailed development plan is released for review and 2) all relevant analyses of that plan are completed. A preemptive veto, just like a preemptive approval, would be based purely upon speculation and conjecture. It would deprive relevant government agencies and all stakeholders of the specifics needed to take an informed position. As I have communicated to you in the past, this would be an unacceptable outcome to me.

Even as the EPA proceeds with its watershed assessment, I have continued to hear from many Alaskans about it. They are concerned about everything from the potential development of a mine and the importance of our State's fisheries to the need for a fair permitting process and the potential economic benefits of mineral development. Needless to say, I remain apprehensive about EPA's handling of this matter generally, but I write today regarding one particular issue.

Setting aside my opposition to a preemptive veto of a mining project that has not yet applied for a permit, I am worried about the unintended consequences for other development should the EPA decide to take such action. Specifically, I remain concerned that an attempt to preemptively veto the Pebble mine would have the practical effect of halting any development in the Bristol Bay area that might generate dredge or fill material. It remains unclear to me how dredge or fill material from a mining operation might be substantively different from dredge or fill material generated from any other form of development.

In my letter to you of February 16, 2011, I raised this issue and asked a pair of detailed questions. I was disappointed to find that your response of March 21, 2011 did not definitively answer either of those questions, both of which appear with the responses that the EPA provided in the attachment. Since our exchange, and in continuing to hear from my constituents about the EPA's activities in Alaska, I have only become more concerned. It was my hope that a recent meeting with EPA officials would finally alleviate some of these concerns, but I regret that it failed to accomplish that objective as well.

On March 6th, members of my staff met with EPA's Region Ten Administrator, Dennis McLerran. Consistent with my past inquiries, they asked Administrator McLerran about the potential impact of a preemptive veto of development in the Bristol Bay watershed for not only mining, but all other development. They were told that the watershed assessment would be narrowly crafted to look at hypothetical mining activities and that any preemptive veto would be similarly structured to avoid impacting other development. I ask that you provide further, written clarification on this matter.

In particular, I fail to see what grounds the EPA might have for asserting that dredge or fill generated by a hypothetical mine and the acceptability of impacts resulting from its disposal—is any different from dredge or fill material generated by any other hypothetical development. Given the EPA's apparent comfort with consideration of hypothetical scenarios, and for purposes of more definitively answering my previously submitted questions, I ask that you do so again.

Specifically, please assume that EPA goes ahead with a preemptive veto of mineral development in the Bristol Bay area. Having done so, please consider the possibility of a subsequent proposal to develop an airfield—one that would generate, and require disposal of, dredge or fill material—in the same area. If a third-party litigant sued to prevent construction of this hypothetical airfield, please describe the

legal grounds upon which that challenge might be reliably defeated and the airfield development allowed to move forward.

To date, I have not received a satisfactory response to this question, no matter how it has been phrased. This makes me very concerned, so I appreciate any assistance you might be able to provide in clarifying the matter and hope that the more specific example provided herein will be helpful to that end. In attempting to answer this question, I ask that you do so no later than—and ideally prior to—the issuance of the watershed assessment that the EPA has undertaken. To be clear: I will view as fatally flawed any assessment that does not include, or is not accompanied by, an official legal opinion from the administration on this matter. I further ask that your analysis be performed in conjunction with the Department of Justice and the EPA's Solicitor.

As the people of my State work to attract investment and create jobs, regulatory uncertainty is hampering those efforts and they need answers to questions about actions that the EPA is considering. This is particularly true when those actions could have a permanent and detrimental impact on our ability not only to develop Alaska's resources, but also to undertake any other forms of development in our State.

Thank you for your attention to this important matter.

Sincerely,

LISA MURKOWSKI,  
*U.S. Senator.*

cc: Administrator Dennis McLerran and Attorney General Eric Holder

ATTACHMENT

Question:

Should a veto be exercised preemptively within the Bristol Bay watershed—not in relation to an application to undertake specific development in the area—could that decision be interpreted by courts or future administrations to extend more broadly to all future development proposals (e.g., an airstrip, fish-processing plant, refinery, hospital, school, museum) that may require a dredge or fill disposal site?

EPA Response:

EPA's assessment is not a regulatory action. This assessment will help inform consideration of options for improving protection of the Bristol Bay watershed. EPA has made no decision at this time to proceed with a CWA section 404(c) review in Bristol Bay. As a result, we are not prepared to speculate regarding the scope of any action taken under this authority.

Question:

It seems that a preemptive veto could set a number of highly-problematic precedents. For example, the Bureau of Land Management, the U.S. Forest Service, and other federal agencies have historically been tasked with land planning decisions on federal acreage. Similarly, state lands are managed by analogous entities. Should the EPA issue a preemptive veto of an entire area which, in this case, consists largely of state lands, those aforementioned agencies would no longer be able to plan for multiple-use activities, but instead be subjected to preemptive yes-or-no decisions from the EPA under whatever speculative assumptions regarding development the EPA may choose to adopt.

Has the EPA considered the precedents that would be set by a preemptive veto? Has the EPA consulted relevant federal and state agencies regarding such a course of action? Could third-party litigants cite the veto as precedent in opposing other projects within the watershed?

EPA Response:

EPA has not made any decision regarding whether or not to initiate an advance 404(c) action at this time. As we have emphasized, we have instead chosen to work with our federal, state, and tribal partners, and the public, to assess the resources in Bristol Bay and identify options for improving protections for fisheries in the Bay that depend so significantly on clean water and a healthy watershed. We look forward to working with federal agencies, corresponding state agencies, tribes, and others to take advantage of their experience and information to support the Bristol Bay assessment. As part of the assessment process, EPA will collaborate with an extensive list of federal, state, tribal, and local government agencies and organizations; the public; private interests such as mining project proponents; and others with an interest in Bristol Bay. EPA's assessment process is being conducted in an open and transparent manner to allow the issues you have raised to be effectively raised and discussed. This information and public discussion will help inform decisions following completion of the study.

Ms. JACKSON. I'll lay this out more fully in my response to your letter which will be coming very, very shortly. And, because your letter was addressed, and copied to the Attorney General, we have been also consulting on the legal issues here.

[The information follows:]

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,  
Washington, DC, May 17, 2012.

Hon. LISA A. MURKOWSKI,  
United States Senate,  
Washington, DC.

DEAR SENATOR MURKOWSKI: Thank you for your April 18, 2012, letter requesting additional clarification about the U.S. Environmental Protection Agency's (EPA) Bristol Bay watershed assessment. I appreciate the opportunity to respond to your letter.

As detailed in my letter of March 21, 2012, EPA undertook this assessment after numerous native villages and other organizations in Alaska and elsewhere raised concern about potential environmental, water quality, fisheries and associated economic and subsistence impacts from proposed large-scale mining development in the Bristol Bay watershed. Clean Water Act Sections 104(a) and (b) clearly provide the Agency with the authority to study the resources of the Bristol Bay watershed, evaluate the effect of pollution from large scale mining development on those resources, and make such an assessment available to the public. Although these groups requested that EPA use its authority under Section 404(c) of the Clean Water Act, others argued that any action should be based on submission and review of a particularized permit application.

EPA decided it was premature to make any decision on the use of Section 404(c). Instead, the Agency opted to undertake a scientific assessment to obtain a more informed basis for future decisionmaking. The EPA is conducting this assessment in coordination with Federal agencies, tribal organizations, and the public. We have also consulted with the State of Alaska. We intend to make our draft available for public comment and are convening a peer review panel to provide us with independent scientific feedback. Our goal is the finalization of a robust, technically sound assessment. Only upon its completion will the Agency examine regulatory options, including application of 404(c), if appropriate. We will be happy to brief you and your staff on the draft assessment and its implications when it is released.

Your letter raises an important question about the precedential effect of a hypothetical EPA section 404(c) review of mining in Bristol Bay on other future development activities in the Bristol Bay watershed. Before turning to this issue, I want to be clear that the focus of our assessment is on the environmental and water quality impacts from discharges of dredged or fill material associated with large-scale mining in the watershed. The assessment does not address impacts associated with other development activities, such as construction of an airfield, which have a wholly different environmental footprint from large-scale mining. Since this assessment focuses only on the impacts of large-scale mining projects to the Bristol Bay watershed, use of the assessment in support or in opposition to other types of wetland fill activities is not appropriate. Therefore, we would not expect the assessment to play a significant role should controversy arise about possible regulation of development activities unrelated to large-scale mining.

While your question is hypothetical, and EPA has no plans to use 404(c) authority unless justified by the full technical assessment, let me also assure you that we have a broad range of discretion in our use of the 404(c) authority. A final 404(c) action in Bristol Bay prohibiting or restricting large scale mining activities would not affect other development in the watershed. CWA section 404(c) authorizes the EPA to prohibit or restrict discharges in a defined area of the waters of the United States when those discharges are determined to have unacceptable adverse environmental or water quality impacts. Discharges associated with activities outside the focus of a particular Section 404(c) decision are not prohibited or restricted by EPA's action. As a result, if EPA were to prohibit or restrict certain discharges from large-scale mineral development at Bristol Bay, this action would not preclude other development or infrastructure such as airport construction that had less damaging impacts.

Historic application of this authority demonstrates that we have used it sparingly and only for severe and widespread impacts on ecological resources that we felt justified protection of these resources. I am unaware of any case where our decision to use 404(c) in one situation was interpreted to compel its use in a different set of factual circumstances.

Impacts from the discharge of dredged or fill material vary significantly depending on the location, scale, and duration of the activity associated with the discharge. The impacts from using clean fill material to build a private boat dock are not the same, for example, as impacts from placing contaminated fill material to construct a large solid waste landfill. EPA carefully considers these distinctions in its review under Section 404 to ensure that our actions protect against unacceptable adverse impacts to public health and the environment while assuring that environmentally responsible development may proceed.

Preparation of this letter was coordinated within the EPA's Office of General Counsel and with the Department of Justice. I hope it responds effectively to your questions. Please contact me if you have any additional questions regarding EPA's Bristol Bay watershed assessment or your staff may contact Arvin Ganesan, Associate Administrator for Congressional and Intergovernmental Relations, at 202-564-5200.

Sincerely,

LISA P. JACKSON,  
*Administrator.*

Ms. JACKSON. And I feel confident that I can answer that the assessment focuses on large-scale mining. And using the assessment to oppose or support any other type of project will be inappropriate.

It's a draft assessment. It's going out for public comment and then it will go for peer review. So it's early on.

Senator MURKOWSKI. How long a public comment do you anticipate on that?

Ms. JACKSON. I believe it's 60 days, Senator. And we're trying to get it out before commercial fishing and other successive fishing seasons begin.

So we do believe that it won't apply to nonmining projects, and that will be laid out more fully in the letter.

Senator MURKOWSKI. Have you requested a legal opinion to that effect then?

Ms. JACKSON. Well, we've coordinated with the Attorney General's office to ensure that our reading of the law under Section 404 of the Clean Water Act is correct and accurate.

Senator MURKOWSKI. Do you have or will you have anything in writing that you can provide to us on that legal opinion?

Ms. JACKSON. Well, I have the letter which will indicate our having consulted with our counterparts at the Attorney General's office.

Senator MURKOWSKI. Well, I understand you're going to be sending me a written response, and I will await that.

But I think it's going to be important that it clearly be established through legal opinion, or some form of assurance out there that, in fact, this can be and will be limited to large-scale mining.

Because again, I think the big unknown here is what this potential impact may mean to any other kind of development within this region.

Ms. JACKSON. Well, definitely, the letter will reflect the concurrence of opinion between EPA, but having consulted with the Attorney General's office, not only our internal attorneys, but those who would be responsible for interpreting the law.

And so we do believe that it will do that.

Senator MURKOWSKI. Well, I will await that letter. But I may want to double back with you in just ascertaining where we really are.

Because this is the big issue that we're dealing with, with Pebble right now, is how this, the extent of this assessment might be interpreted.

#### NEW RULES AND REGULATIONS

One last question before my time has expired here. A lot of concern about the rush toward additional regulations coming out of the administration as we come to the end of President Obama's first term here.

And a concern that we're going to see a rush of major, new rules and regulations prior to January 20.

Can you give a list to the subcommittee, for the record, on what major rules and regulations are due to be final, by either virtue of the statute, or by court order, prior to January 20.

[The information follows:]

The Congressional Review Act (CRA) defines a major rule as one that "has resulted in or is likely to result in (1) an annual effect on the economy of \$100 million or more; (2) a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; or (3) significant adverse effects on competition, employment, investment, productivity, or innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic and export markets." (5 U.S.C. 804(2).)

The Office of Management and Budget (OMB) reviews rules to ensure that regulations are consistent with applicable law, the President's priorities, and the principles set forth in Executive Order 12866, and that decisions made by one agency do not conflict with the policies or actions taken or planned by another agency. OMB's Administrator of the Office of Information and Regulatory Affairs determines whether a rule is classified as "major".

Generally, the Environmental Protection Agency's (EPA) rules that have been determined as "major" under the CRA are based on the annual effect on the economy of \$100 million or more" part of the definition. EPA's Semiannual Regulatory Agenda captures information on rules that are "major" as well as any associated deadlines for the rules in question. EPA's Semiannual Regulatory Agenda is available at <http://www.epa.gov/lawsregs/regulations/regagenda.html>; please note that a more updated Agenda is scheduled to publish in the very near future.

Executive Order 12866 defines a significant regulatory action as one that is likely to result in a rule that may:

- Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;
- Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive order. (section 3(f).)

EPA rules that have been determined as "significant" under Executive Order 12866 are based on the "annual effect on the economy of \$100 million or more" and "raise novel, legal or policy issues arising out of legal mandates, the President's priorities, or principles set forth" parts of the definition.

Accordingly, EPA's Semiannual Regulatory Agenda captures information on rules that are meet the criteria of "economically significant" or "other significant." EPA's Semiannual Regulatory Agenda is available at <http://www.epa.gov/lawsregs/regulations/regagenda.html>; please note that a more updated Agenda is scheduled to publish in the very near future.

Senator MURKOWSKI. And then again, a list as to those significant rules that you expect to go final within that same timeframe, just so that we understand what it is that we're dealing with.

Ms. JACKSON. Most certainly, Senator.



There are two things though I just need to clarify. We have a regulatory agenda that tends to be somewhat broader than what actually comes to be in terms of proposed or final regulations.

And we are right now in the middle of several court cases which may change our agenda. So I can certainly give you a listing of those things, and they're fairly publicly known major regulations that we are working on.

For example, finalizing the fuel economy standards and others. But our regulatory agenda, which we're working on updating, is probably the best source of that information, and we'll get that updated as soon as we can.

Senator MURKOWSKI. Thank you.

Senator REED. We're going to go back and forth on order of arrival. Senator Tester.

Senator TESTER. Thank you, Mr. Chairman. And thank you for being here, Administrator Jackson.

I want to tag onto your statement earlier that clean air and clean water is important for economic development. It's also the basis of life.

And I think that as we, whether it's mining for gold or drilling for oil, it's critically important we don't sacrifice one resource for another.

#### HYDRAULIC FRACTURING

And along those lines, there is a robust discussion regarding hydraulic fracking or fracturing. Fracking is what's taken North Dakota to number two in oil production in this country.

And DOE's advisory board, shale and gas production subcommittee of the National Petroleum Council, have released reports about hydraulic fracturing and domestic production of oil and gas.

These reports provide suggested steps that the government, industry and researchers need to take to assure that we have a balanced regulatory regime to protect development and citizens.

Just last week your agency released draft guidance on Class 2 injection wells and the use of diesel fuel. BLM just released their draft regulation of hydraulic fracturing on BLM and Tribal Trust lands.

And from my read, one of the most critical parts of the recommendation is the standards for casing and constructing wells.

If there isn't public trust that this technology can be used safely, that will inhibit its future development. And I believe that the industry is starting to recognize that.

My question for you is, do you believe that the standards provided by American Petroleum Institute (API) and used by the BLM are sufficient to protect groundwater and surface water contamination both during protection and into the future?

Ms. JACKSON. I believe, based on what we know now, Senator, our staff worked—I can't speak about API, as much as I can say that our staff at EPA were consulted and reviewed the proposed regulations that the Department of Interior put out last week.

It's obviously their jurisdiction because it's on public lands. The only caveat I would offer, Sir, is that we are in the middle of this

2-year, congressionally directed study on groundwater, on the effect or potential effect of fracking on groundwater.

And anything that we learn as a result of that will be available to the private sector, the public sector, States, locals, and of course, our colleagues at the Department of the Interior.

Senator TESTER. Another major section of the recommendation is about disclosure. There are many forms of disclosure.

Do you believe that the Web site, FracFocus, provides sufficient information to the public?

Ms. JACKSON. I believe that the proposal that the Department of the Interior put out leaned heavily on the information in FracFocus, and that they are probably best able to describe how their regulations mesh with the FracFocus effort.

But I do think it is an important effort that the industry step forward and recognize that one of the major concerns the public has is the lack of awareness and transparency around the chemicals being injected.

Senator TESTER. Okay. Thank you very much.

#### FARM FUEL TANKS

One of the things that I visited with your office before about is EPA's implementing new regs on farm fuel tanks to prevent fuel spills into rivers and streams.

My concern is that EPA has not adequately explained the rules or educated the public about them, particularly, people in production agriculture.

Look, I don't think farmers have, nor should they, check the Federal Register or regularly check the EPA's Web site. Although it might be handy, I don't think it's high on their list and I don't think it probably should be.

As EPA implements the regulations, and I think it's EPA's responsibility to make sure that the folks out there know what's coming. In this particular case, farmers and ranchers, and how they can work through the process.

Many folks in my neck of the woods continue to have questions and deadlines. There's good information. There's bad information about the certification process, and whether they can certify themselves.

I guess just to cut to the chase, we asked you to hold off. What progress has EPA made in conducting outreach to the folks in production agriculture? I'm talking farmers and ranchers.

Ms. JACKSON. And I thank you, Senator.

And, yes, you're right. Happy to give you an update on our progress after we put in place a delay to include additional outreach. We met with national agricultural groups who have an interest in the issue.

We've drafted, and it's with their input, new materials that can be provided to grower groups, States, and cooperative extensions.

I think just in the last week or so, we had a discussion with communication directors at the major grower groups to particularly focus and discuss other outreach efforts to make sure that the information is clear and useful for farmers.

Senator TESTER. Have you got any feedback from farmers on it yet?

Ms. JACKSON. I can certainly check on that, Sir. But I don't, I think we are—Let me check on it for you.

[The information follows:]

The Environmental Protection Agency has actively engaged in a significant number of outreach efforts to ensure the farmer community is fully aware of their responsibilities under the Spill Prevention, Control, and Countermeasure regulations and have the tools needed to meet those requirements. Our efforts have included developing a flyer to be used by trade associations and agriculture extension services to inform and educate their members; holding webinars for the farming community to educate and provide opportunity to ask questions regarding their responsibilities; attending fairs and conventions to speak and distribute information; compiling a list of outside materials (such as articles, videos, blogs, Web sites, etc.) produced by outside groups like agriculture centers, universities, trade associations; and creating and supporting a Web site with pertinent information and tools for farmers. At this time, we have had no additional formal feedback from farmers; however, we have received some anecdotal information from trade associations and farmers that they are finding this information useful.

Senator TESTER. Okay. That's fine.

In Montana, we pride ourselves on self-sufficiency. Many folks in Montana are trying to use biodiesel on their farms to help increase energy independence.

Unfortunately, certifying each batch of biodiesel for small producers is cost prohibitive. A while ago, I asked CPA to consider an exemption for on-farm/regional biodiesel use.

I don't think any progress has been made on that, but you can correct me if I'm wrong. So I guess what I'm asking you is if you can commit to working with me to develop a reasonable certification process for small, on-farm regional use of biodiesel, I think this could do a lot of things, Administrator Jackson.

I think it can help contribute to our energy independence. I also think it could create some jobs in rural America where we need a few more.

Ms. JACKSON. Yes, Senator. I'm not aware of what progress, if any, we've made. So I'm happy to commit to working with you on that issue.

[The information follows:]

Fuel and fuel additive registration requirements under 40 CFR part 79 are not required for producers who make biodiesel fuel for off-road use (e.g., in agricultural equipment).

Senator TESTER. All right. Thank you very much for that. Thank you for being here.

Ms. JACKSON. Thank you.

Senator TESTER. Mr. Chairman.

Senator REED. Thank you, Senator Tester. Senator Blunt, please.

#### PREPARED STATEMENT

Senator BLUNT. Thank you, Mr. Chairman. I've got a statement for the record I'll submit and I'm sure that EPA will want to read it carefully.

[The statement follows:]

#### PREPARED STATEMENT OF SENATOR ROY BLUNT

Thank you Chairman Reed and Ranking Member Murkowski for holding this hearing today. I appreciate the opportunity to examine not only the budgetary needs, but also some of the recent activities of the Environmental Protection Agency (EPA). I would also like to thank Administrator Jackson and Chief Financial Officer Barbara J. Bennett for being here.

Around this time last year, I pointed out that EPA had issued or planned to issue almost 20 different rules placing mandates on manufacturing, the power industry, and even our farmers. EPA should not be using taxpayer dollars to impose costly and burdensome regulations that could severely impact jobs, our economy and the cost of everything we do or buy.

Only one regulation from this list was stopped, and that was the expensive tightening of ozone standards that EPA publically supported despite the economic toll it would have. Of course this was only because the White House scrapped it at the last minute, no doubt realizing the impact in a political year.

There is yet a new medium for EPA regulations, through something called “guidance”. Guidance, in EPA’s own words is “frequently used by federal agencies to explain and clarify their understanding of existing requirements”. This says to me that guidance can have just as far reaching consequences as traditional rulemakings can.

Yet guidance technically is not “final”, so affected parties have no recourse to appeal the rules. This circumvents the fair procedures put in place to safeguard against overreaching agency action, like affected parties’ ability to appeal to the courts.

EPA recently came out with guidance that expands the jurisdiction of the Clean Water Act—meaning that EPA now can control even a stream that EPA “determines” has a close enough connection to the navigable waters the Clean Water Act traditionally regulates. This could have devastating effects for our farmers, miners, and even construction workers. Oddly enough, EPA still accepted comments before issuing the final guidance document, many of which pleaded with the EPA to use notice and comment rulemaking. Yet EPA did not undertake a rulemaking, issuing the final guidance soon after.

This is the most recent example of the dangers of agency overreach. The cumulative effects of these rules are vast and probably cannot be determined at this time. Even EPA’s own cost-benefit analysis used in these rules often do not include job losses or what it would mean for families if their food and energy prices go up.

We all can agree that cleaning up and protecting our environment are important goals. Yet this must be balanced among economic losses. A robust economy doesn’t just mean businesses are making more money; it means people are employed, and it means consumer choice thrives and keeps costs of goods low. Economic and environmental goals must be balanced.

I hope the EPA can stop and consider the multitude of rules coming out of the Agency that threaten the economic viability of our country’s energy, manufacturing, and agricultural sectors.

Again thank you for your time, and I look forward to your testimony.

Senator BLUNT. I’ve got three questions I want to ask about three areas.

#### FUEL HARMONIZATION

One is fuel harmonization, a fuel harmonization study. I sent you a letter in May of last year. The Ranking Member of this subcommittee—Senator Murkowski—Senator Cochran, a number of my other colleagues signed that letter as well.

In 2005, in the Energy Policy Act, EPA and DOE were asked to do a fuel harmonization study. One of the things we did in the Energy Policy Act was give you the ability to waive fuel standards under certain difficult situations to where all of these different boutique fuels wouldn’t all have to be available under specific circumstances.

The most notable time it was used was during Katrina. It was used effectively and well for about 6 months. But that’s a stop-gap solution to trying to figure out how many different fuel blends we really need.

So what I’m asking is, why haven’t you done the study? The response to the letter we sent in May of last year was pretty much nonresponsive. It was basically, we received your letter response.

The 2005 Act asked the Department to do that. You haven't been responsible since for all that time. I get that. But can you do that study as the Congress requested you to do?

Ms. JACKSON. Well, Sir, just a couple of points.

I think the reason that there hasn't been a commitment to do the study is that on the ground we see that these local fuel requirements. They're put in place by State regulators looking at smog issues and air pollution issues in their regional districts.

The use of those special fuels has decreased since 2002.

Senator BLUNT. Has decreased?

Ms. JACKSON. Decreased. Yes, Sir.

Senator BLUNT. Yes.

Ms. JACKSON. And that we do know about, the effect on the price of gasoline: they add very little to the cost of gasoline.

So we have people using fewer and fewer of these fuels. We know that they are not adding significantly to the price of gasoline, and we know that they are used in the places where there are still remaining summer fuels issues. I know that certainly from New Jersey that it is important—

Senator BLUNT. Well, there was a Kansas City Star, there was a Kansas City Star article recently that said that their 6-year study indicates that the average has cost 10 cents more per gallon because of their boutique fuel.

So, you know, if I'm standing there watching that tank and every time I fill it up it costs me 10 cents more a gallon and I live in Kansas City, I would think that was significant.

Ms. JACKSON. Well, the—

Senator BLUNT. But the question is, can you come up with a series of fuels that people could choose from rather than this idea that every community has a perfect fuel that's only right just for it? That's what the study asked if you could do.

Ms. JACKSON. Yes, Sir. And I think what I'm trying to convey is that the market is moving toward fewer and fewer of that kind of situation happening.

More and more, we see some regions that have regional blends, but fewer and fewer specialized, local blends. And so, the market is taking care of the problem itself.

What's remaining are those fuels where State regulators have determined that there's a need to have a special fuel in summer to reduce smog levels because of an increased volatilization of gasoline.

So I understand your concern for the issue. I guess I'm offering, respectfully, that I think the issue is, the impact on cost is not that high, and that there aren't as many fuels that are truly unique in the country.

Senator BLUNT. Well, we capped the number of fuels you could have in that same act, so that does have some impact on how many more there could be.

All right. That was not quite as nonresponsive as the letter, so I'll accept that.

## CLEAN WATER ACT

The Clean Water Act guidance. A lot of concern about moving, removing the word “navigable waters” from the Clean Water Act. Give me some thoughts. Why guidance instead of a rule?

You all have issued some guidance, and I’m not sure anybody really quite knows how binding guidance is, or what guidance means, except guidance doesn’t go through the rulemaking process.

So this guidance, it looks like to me, suggests that anything that eventually gets into, extends the authority to streams, ponds, or even maybe puddles that the EPA would determine has a connection to a larger body of water.

Not true?

Ms. JACKSON. Not quite, Senator.

First, to your question as to why guidance? In the wake of the two Supreme Court decisions in both 2003 and then 2008, the EPA and the Corps of Engineers (COE) jointly issued guidance to assist in determining what water bodies were jurisdictional under the Clean Water Act.

That has widely, I think, very widely, been seen as not being helpful enough. So COE and EPA have set out, and we have not issued final guidance, but we issued draft guidance, I believe last year, and took public comment on it.

And are working to finalize guidance that would replace the 2003 and 2008 guidances. So that is why, guidance.

As to your concern about extending jurisdiction. The guidance is intended to help answer the question of, in a navigable water body, certainly we know what “navigable” should be or can be, although there have been even disputes about “navigable”.

But how far up in the watershed do you have to go? Since certainly, in order to protect navigable waters, you have to protect the streams that feed into them otherwise, you know, you don’t stand a chance.

So that’s what the guidance is intended to do. It has been out in draft and for public comment, and we’re working to finalize that, Sir.

Senator BLUNT. Well, why guidance rather than a rule?

Ms. JACKSON. Well, the guidance will replace the guidance that’s currently out there. Certainly, a rulemaking could be considered, but we believe it’s better to start with the guidance and then we can certainly move towards a rule if necessary.

## PORTLAND CEMENT ASSOCIATION

Senator BLUNT. Okay. The last question I had is short and can get a short answer I think.

In mid-April, EPA entered into a proposed settlement agreement with the Portland Cement Association. And, do you intend to finalize that agreement?

I think they’ve accepted the proposed settlement, and are waiting for you to accept it as well.

Ms. JACKSON. Yes, Sir. To my knowledge, I don’t think there’s any concern with finalizing our agreement.

Senator BLUNT. Okay. Thank you, Chairman.

Senator REED. Thank you, Senator Blunt. Senator Hoeven, please.

Senator HOEVEN. Thank you, Mr. Chairman.

I want to begin by thanking you, Administrator Jackson, for your help with North Dakota's State Implementation Plan (SIP), in regard to regional haze. We do appreciate that.

We're not quite completed. We've resolved it for a number of our plants, but there's still some work remaining and I ask for your continued help as we continue to fully resolve that issue on regional haze as to continuation of the State's SIP versus a FIP on some of our plants.

So thank you for your help. And I ask for your continued help in that regard.

#### HYDRAULIC FRACTURING

My questions, at least my initial questions, relate to hydraulic fracturing. As Senator Tester said, North Dakota is now in the process of moving into becoming the second-largest oil producing State in the country behind Texas.

The good Senator from Alaska, Senator Murkowski, of course, I share her desire to produce much more oil and gas in Alaska. I know that's going to happen too.

So, long term, we know that you're going to be a real powerhouse. But the point I want to make is that we can't do it without hydraulic fracturing. We cannot produce oil and gas without hydraulic fracturing.

So it's incredibly important to us. And a State-led approach is the right approach. It's working very well. It will continue to work very well.

So we're concerned about regulations that you're proposing in regard to hydraulic fracturing, and also, we're very concerned about how you conduct the study. We are very supportive of transparency, good environmental protection, and we believe we work very hard to do that.

But, at the same time, we believe that the State-led approach not only provides those things, but also empowers the industry to produce more energy for this country.

So, specifically, I want to ask you about, and it's interesting, because Senator Blunt was asking about guidance versus rules. And I think he made some very important points as to what is guidance mean, and how do we deal with guidance?

But on May 4 of this year, EPA released a draft permitting guidance regarding the use of diesel fuel in hydraulic fracturing. Now, on the one hand, in that draft guidance, you refer to six chemical abstract service registry numbers. So you're specific. And we're working with industry to find out if those specific, defining those specific chemicals as diesel is a workable situation.

But then you go on in this draft guidance and you use terms like, in addition to those six chemicals. You talk about substantially similar. You talk about several others. You talk about common synonyms.

So we go from specifically defining what you're going to consider diesel in this guidance. And, as Senator Blunt says, we've got to understand, with a State-led approach, what does guidance mean?

In other words, does the State have to follow your guidance or you'll step in and take over the program? Or, exactly, what do you mean by guidance?

And, then, second, when you specifically define those chemicals by registry number, okay, maybe we can work with that. But then, when you start saying, you know, several others, substantially similar, common synonyms. Now we get vague, and creates ambiguity.

So my question to you is, in your final guidance, will you continue to use language like substantially similar, several others, and common synonyms? That's my first question.

Ms. JACKSON. The guidance is out for public comment, Sir. And I should note that we worked with industry in the drafting of it. But the purpose of the public comment is to get information, and I can't really pre-judge what will happen on finalization.

Senator HOEVEN. Would you comment as to my point regarding the ambiguity and the vagueness and the problems it creates for industry if you say, well, it's this chemical. This is diesel, but, gee, it could be all these other things and we're not going to say what they are.

Now, industry has to work with that. How would you address that?

Ms. JACKSON. Well, I think we're happy to have discussions with industry so that there is some clarity. And synonym is pretty straightforward.

If you call it something different by trade name, or some other thing, I think, the implication there is clear, that you shouldn't be able to name it something different, and therefore, not have it subject to the guidance when it is finally put in place.

As far as substantially similar, we certainly can have additional comments on that.

I should just add, Sir, that the reason for that guidance is because there was something of a loophole in the exemption from regulation for hydraulic fracturing under the underground injection control standards.

And the one thing that wasn't exempt was the injection of diesel. And there was great uncertainty in the regulated community that whether or not when they injected diesel, they needed a permit.

And in some States, EPA issues those permits, not the State. They did not receive delegation or sought it.

Senator HOEVEN. If they don't have primacy, that's correct.

Ms. JACKSON. That's right, Sir.

So this is not an attempt to change. There are many States that already deal with this issue.

But there was ambiguity and uncertainty as to how to deal with those cases where someone was injecting diesel.

And that's what this guidance is attempting to give additional information on for permit writers, as well as the regulated community.

Senator HOEVEN. Administrator, I'm trying to get to two points here.

If we're going to empower industry, and if we're going to empower investment to produce more energy in this country and do



it with good environmental stewardship, they need to know the rules of the road, and they need consistent enforcement.

If you say, okay, this is diesel and they can understand that, fine. Then perhaps they can work with that. I mean, I have to understand what those six chemicals are, and we have to get some feedback from them. Hence, the reason for the proposed draft guidance.

So we need to find that out. Maybe that works. We need to determine that. But then when you say, or it could be all these other things like that, now we're starting to get ambiguity and a vagueness that is very hard for industry to work with.

So we need you to work with us through that process.

Ms. JACKSON. And I'm happy to do that, Sir.

I mean, we're in public comment, and we will finalize the guidance. But part of the reason for the comment is to get information and to try to assure that we do remove ambiguity from the process.

We have the same goals, Sir.

Senator HOEVEN. Thank you. And I have more questions, but I'll come back to them. I see my time has elapsed.

Senator REED. Thank you, Senator Hoeven. We will have a second round.

Let me begin it by continuing the line of questioning that both Senator Tester and Senator Hoeven opened up with respect to hydraulic fracturing, but from a slightly different perspective.

#### HYDRAULIC FRACTURING STUDY

Your budget includes \$40 million to deal with this topic—an increase of \$8 million.

And I think we all recognize, and it's explicit in the comments, that we don't want to trade access to the very valuable petroleum and carbon resources at the cost of degraded water supplies and environmental problems.

I think that's our position consistently across the board. So your research is absolutely necessary and your collaboration with industry is absolutely necessary.

Your money is part of a larger pool of about \$45 million that the President has directed throughout several different Departments. One thing though that we did in 2010 is we directed EPA, specifically, to initiate a multi-year study on the potential impacts of hydraulic fracturing on drinking water resources, to be specific.

And I understand the first report for the study is scheduled for the end of this year, 2012. Is the EPA still on track to meet this timeline, and can you give us sort of a preview of what information that might be revealed?

Ms. JACKSON. We are still on track, Sir. And I have not been briefed on any preliminary findings, so I'm not in a position to give any information at this point.

Senator REED. Let me again look at sort of the overall approach to the research with respect to hydraulic fracturing.

On April 13, the President issued an Executive order to align all current and future research which, again, I think we all say is absolutely necessary for the protection of the public, made up of 13 Federal agencies.

On that same day, EPA joined DOE and the United States Geological Survey in signing a Memorandum of Agreement (MOA) creating a new steering committee. So we've got what appears to be two steering committees here.

Can you explain these two efforts, does one subsume the other? Is one parallel, is one complementary? Can you just give us an idea of the approach you're taking administratively?

Ms. JACKSON. Yes, certainly.

The Department of the Interior, DOE, and EPA are currently, obviously at the order of the President, and under the direction of the White House, working together to scope out a series of studies.

You're absolutely correct, Mr. Chairman. Of course, EPA already had an ongoing 2-year study. That goes on about \$6 million in EPA's fiscal year 2012 enacted budget is for it. There's now an \$8 million increase, and we would be looking to expand the scope potentially, but only working together with the other agencies to other issues, maybe ecosystem impacts or air quality.

Some amount of that additional \$8 million, that's in the fiscal year 2013 budget, would go to those areas.

Senator REED. Let me follow up with another related question. That is, you have this Memorandum of Understanding with USGS which presumably you would allocate the responsibilities.

It appears from the budget request that part of the \$8 million of additional funds you're going to use is for seismic risk from hydraulic fracturing practices. And we understand that USGS is also studying, no surprise, seismic risk, et cetera.

Can you comment upon this? Is this duplication, or is it complementary?

Ms. JACKSON. I want to go back and check on that, Mr. Chairman, because in general, my response on seismic issues is, it's not us. That's USGS.

[The information follows:]

The fiscal year 2013 President's budget requested for hydraulic fracturing (HF) research includes \$6.1 million to complete the study plan on the potential environmental impacts of HF on drinking water; and an additional \$4.3 million to address questions raised by stakeholders regarding the potential environmental impacts of hydraulic fracturing on water quality and ecosystems. Of the \$4.3 million request, less than \$100,000 was intended to screen for HF induced seismic risks in association with underground injection control wells.

Subsequent to the submission of the fiscal year 2013 President's budget, the MOA between the EPA, DOE, and USGS on Multi-Agency Collaboration on Unconventional Oil and Gas Research was developed. During the MOA's development, it was determined that the USGS is best suited to manage research in induced seismicity. As defined in the MOA, EPA will collaborate as appropriate with USGS regarding seismic issues.

Ms. JACKSON. So I don't believe we're doing a lot although we may be providing some expertise on the groundwater aquifer regimes down there. But they're pretty much the experts in USGS.

Senator REED. Well, you know, that was my presumption too. So I think if you could clarify that, that would be helpful to us.

And, you've already mentioned some of the additional resources, about \$3.8 million is going to go to air quality studies.

Can you give us an idea of the concept of how you're going to spend that money with respect to the hydraulic fracturing and air quality?

Ms. JACKSON. I think we would probably be best served if we gave you a briefing update. The scoping meetings that have just begun to look at the potential ways to scope these research studies, are just really beginning.

I think they've had a couple of meetings so far. So it's a little premature. But, obviously, we have the opportunity over time to update you on those as well.

There have been some. Obviously, we just finalized rules on air quality issues around oil and gas development. They were not loved by everyone, but that's usually okay in our world. They were pretty well received.

And I think one of the things we were doing is trying to look at additional information to ensure we're not missing something.

#### ENVIRONMENTAL EDUCATION PROGRAM

Senator REED. Well, let me change the subject for my final and brief comment, which I think will require a brief response from you.

That is, we've had an environmental education program through EPA for many, many years. In fact, my distinguished predecessor, John Chafee, I think in 1990, through the National Environmental Education Act put it in place.

And the proposed budget would require severe reductions in this education program which raises the question, why that program?

The bottom line is, how do you continue to maintain the legal requirements under the 1990 legislation?

Ms. JACKSON. Yes, Sir. Let me limit it to two very quick things.

First, I want to assure you, we remain committed to the spirit and goal of environmental education and increasing environmental literacy.

What we found from an efficiency standpoint in EPA is when we looked at the program as it was being funded, we believe there is better opportunity to do more and do it better in the programs by each of the programs, air, water, waste, or some amount of it, maybe recycling and waste, or energy and air.

Letting the programs put forth those educations and then coordinating their efforts. So there will be resources going towards environmental education. They're going from the programs.

I also want to say that we're working really hard to have our national environmental education foundation, which was also in that law, become more active and vital in helping to promote some of those opportunities.

Senator REED. Thank you very much.

With the concurrence of the Ranking Member, Senator Cochran has just arrived. We've already had a first round, Senator. If you would like to take your first round now, if you're prepared.

Senator COCHRAN. Well, Mr. Chairman, I do have a question I was going to ask the Administrator.

Senator REED. Go ahead, Sir.

#### DeSOTO COUNTY

Senator COCHRAN. In DeSoto County, Mississippi, which is our northernmost county in the State, and adjoins the State of Tennessee, right at the Memphis metropolitan area, is one of those sit-

uations where the metropolitan area of Memphis spills over into both Arkansas and Mississippi.

Anyway, the point is, that I wanted to bring to the attention of the Department something that really came to my attention because the DeSoto County area has been declared by EPA to be in a state of nonattainment.

One of the new bureaucratic words—"Nonattainment". What it means is, you can't build anything or do anything in terms of urban growth without jumping through a lot of new hoops and abiding by rules that really are beyond the control of local elected officials or the population or zoning authorities.

And I just wanted to bring to the attention of the Administrator that this is really, I think it's discrimination of the worst kind in terms of rulemaking by the EPA.

And I just hope that the highest authorities at EPA and in the Department can give their attention to this to see what are the options for continued growth in that area.

Anyway, I don't know whether this has reached your desk or not, Madam Administrator, but I wanted to bring it to your attention. Are you familiar with this? Or has anybody, Ms. Jackson, brought this to your attention personally?

Ms. JACKSON. Yes, Sir.

And I know that area staff at the very highest levels have met with Mississippi Department of Environmental Quality staff. There was data that was exchanged.

The nonattainment designation is not a no growth designation, Sir. DeSoto County, that part of the county that's being designated nonattainment for small growth zone, is really part of the municipal area around Memphis.

And it has to do with commutation patterns and growth in terms of primarily automobiles and others within the Memphis urban boundary. It's a matter of working with the Memphis Metropolitan Planning Organization of which that portion of DeSoto County is a part.

And so we have explained to them that as cars become cleaner and more efficient, we do foresee a time when this nonattainment issue will, through other Federal rules, become less of a concern.

But the attainment and the nonattainment designations, are based on data. And we have to make calls based on what we have which show that the area is contributing.

That's what the law says, whether it contributes to nonattainment in the nonattainment area.

So I believe where things were left is that they met recently with Mississippi, and I'm not sure what happened as a result, but I can certainly check on that for you.

Senator COCHRAN. Well, I would hope that you could give this your personal attention to be sure that the obvious intent of the rules and the laws are fairly applied particularly in an area that is a very popular area for job creation activity and business activity, that is not a very serious polluter in and of itself.

Working in an office, you're not going to pollute a lot. But office buildings and the like would be attracted to this area if it were not for the EPA nonattainment ruling.

So I hope that you can help ensure that fairness is the result rather than arbitrary rulemaking without a basis in fact. Thank you, Mr. Chairman.

Senator REED. Thank you, Senator Cochran. Senator Murkowski, please.

#### HYDRAULIC FRACTURING STUDY

Senator MURKOWSKI. Thank you, Mr. Chairman.

Administrator Jackson, I want to follow up with a discussion about the hydraulic fracturing study. I've got a copy of the actual statute here from 2010.

And it states, "The conferees urge the Agency to carry out a study on the relationship between hydraulic fracturing and drinking water, using a credible approach that relies on the best available science, as well as independent sources of information. The conferees expect the study to be conducted through a transparent, peer-reviewed process that will ensure the validity and accuracy of the data. The Agency shall consult with other Federal agencies as well as appropriate State and interstate regulatory agencies in carrying out the study, which should be prepared in accordance with the Agency's quality assurance principles."

So I guess I'm a little concerned about the scope of the study that we're seeing come out. You've just mentioned in response to the Chairman here that you're expanding the scope of the study to address not only ecosystem but air quality.

It's my understanding that now part of the study includes collecting data on the environmental justice impacts on disadvantaged communities.

It seems to me that the language in the legislation was pretty clear in terms of assessing the relationship between hydraulic fracturing and contaminated water. And that there has been a very stepped up increase and expansion of scope.

Can you address that part of it?

Ms. JACKSON. I can, Senator.

And if I misspoke before, I shouldn't have. This is not an expansion of the congressionally directed study.

We have a congressionally directed study. You read the scope of it. That is the scope we've kept to. It's been publicly scoped. There's been peer review of the actual scope of the study.

The study is ongoing, and we, of course, have had to work with industry in order to get access to some of the sites. Because if you want to test around hydraulic fracturing sites, many of them are in private ownership.

There is, on the part of the administration, from the President, from the White House, a desire to do additional science around hydraulic fracturing, partially as someone said earlier, because the public's trust in that technology we believe is also based on the belief that we are looking to bring the very best science to bear to ensure that it remains safe.

I have said over, and over again, that natural gas, hydraulic fracturing, and fracturing for oil is an incredibly important part of our energy mix, but we need to assure the American public that we are stepping up to the challenge in getting the best science so that it remains as safe as it possibly can be.

So it is not an expansion of the scope of the study. It's a proposal in the President's budget to add funding to do studies in additional areas, and those would be done with the Department of the Interior and DOE.

Senator MURKOWSKI. Okay. So I would agree with you in terms of the science there. But it's my understanding that part of the study now includes collecting data on the environmental justice impacts of disadvantaged communities.

So it seems to me that you're presuming that there is an impact. I guess I look at it and say, it would be more appropriate to look at these impacts only if you do discover that there is a link between fracking and contaminated water first.

So I don't disagree with you that we want to be using best science, not only through the study that EPA is doing, but what the other agencies are doing as well.

But it would appear to me that there is an added expansion here in terms of the scope. You've indicated that it will be peer reviewed as the statute requires, and that industry has provided input in terms of giving access to data.

Will industry and others be permitted to review the study before it's released?

Ms. JACKSON. The study will be put out for public comment, but it will also be peer reviewed during the process. We can get you a briefing on exactly the steps.

[The information follows:]

Later this year, we will update our peer-review plan to describe the steps we are taking to assure peer review of the specific research products comprising the study. In addition, we are forming a new Science Advisory Panel (SAB) panel later this year that will consult with the Environmental Protection Agency (EPA) periodically on the progress of the study and ultimately review the conclusions and findings in the 2014 report.

The public, including members of the oil and gas production and service companies and industry associations, as well as other Federal agencies, State and interstate regulatory agencies, nongovernmental organizations, tribes, the public, and others will have comment opportunities built into the workings of this SAB panel.

In fiscal year 2013, EPA requested a total of \$14.1 million for hydraulic fracturing. This includes \$6.1 million to complete the study plan on the potential environmental impacts of hydraulic fracturing on drinking water. In response to stakeholders concerns, an additional \$8 million was requested.

To address the potential environmental impacts of hydraulic fracturing water quality and ecosystems, \$4.3 million and \$3.7 million to address questions about the potential impact of hydraulic fracturing on air quality.

Ms. JACKSON. I know that original data that comes out will go out for public comment to everyone after it's been reviewed.

#### EMISSION CONTROL AREA

Senator MURKOWSKI. Let me ask you a question about the standards that relate to the low sulphur fuel standards rules. These are on freight carriers and cruise ships bound for Alaska.

The new standards start this August. It ramps up over a 3-year period to reduce the sulphur emissions.

We, as you know, are a State that relies on almost all of our freight, everything that comes into the State pretty much comes to us by barge, by freight, over the water.

And there's a great concern that this standard could cause what is anticipated to be a 20-percent rise in freight costs. If you look

at the cost of goods in Alaska already, they're astonishingly high. So 20 percent is really a great deal of concern.

We recognize that this is going to increase the cost of living in Alaska at a time that we can't handle it. We're also concerned because it could have a very serious impact on the State's tourism industry.

Our cruise ships carry 80 percent of the State's summer tourists to Alaska and the concern is that this will, these standards will increase the cost to those who are coming north.

There is further concern that we simply won't, or the industry won't, be able to meet the deadline because the maritime industry won't be able to obtain the 1-percent sulphur fuel without blending different types of fuel that increase operational and safety issues.

So there's a real concern about their ability to meet the standards in the first place. The marine industry's been working with EPA on this issue trying to determine if there's an alternative compliance mechanism that could ultimately result in lower overall air emissions than even what the EPA rule would actually produce.

There have been efforts. I understand that they have not yielded a positive result at this point in time. So the question to you is whether or not the EPA will give serious consideration to accepting the pending alternative compliance proposal and do so soon.

The cruise industry basically has to set their schedule well more than a year out, and the obvious concern is that if there isn't discussion and action on this in the very, very short term, we're all going to see and suffer the consequences.

Ms. JACKSON. Well, certainly, Senator, EPA will continue to give serious consideration to any issues of compliance or fuel availability.

We've been told by fuel suppliers that they expect to make fuel available for the August 1 date for 10,000 parts per million fuel. Obviously, we'll continue to work with them and keep an eye on that.

This standard was adopted by the International Maritime Organization (IMO). And we've made clear that we support the use of innovative equivalent methods, but only as long as they achieve the same results as the standard that they're intended to replace.

I know that IMO is currently working on guidance to ensure that equivalent methods that any country tries to approve are based on a common set of criteria.

And EPA will continue to work with the Coast Guard, we'll work with IMO, we'll reach out to the suppliers, and, of course, to the folks who use the fuel in meeting the 10,000 part per million standard in August.

Senator MURKOWSKI. Well, this is something that we need to have further discussion on.

#### AMBIENT TESTING

There has been no ambient testing done in either Alaska or Hawaii. We've been attempting to make that distinction. So far, it has not been considered which I think is unfortunate.

You indicate that the fuel suppliers can make the fuel available. Yes, fuel can be made available, but at what cost?

And, truly, and in an effort to deal with these extraordinarily— You cannot put a 20-percent increase on the cost of freight that comes into the State of Alaska and expect people to be able to continue to buy groceries or lumber or whatever it is that they need.

We've got to have some ability to work with you on this. This would be one of those issues that I would hope that your senior folks sitting down with our folks can have a further discussion on.

Ms. JACKSON. To be clear, Senator. I'm not, I'm certainly not saying, well, we don't want to discuss this further with you. And I don't know that we necessarily agree with the outcome of the study that you cite.

But I do think we would agree that it has to be affordable and it has to be practical.

Senator MURKOWSKI. Thank you.

Senator REED. Thank you, Senator Murkowski.

Senator Blunt.

#### HYDRAULIC FRACTURING

Senator BLUNT. Thank you, Chairman.

Let me ask a couple of other questions on this hydraulic fracturing issue. You may have answered this already, and I was trying to listen and I just may have missed the answer.

Report language in the fiscal year 2010 appropriations bill asked for a study whether there was a link between the hydraulic fracturing and drinking water. You're asking for \$14 million more to expand that study, is that right?

Ms. JACKSON. There is an additional \$8 million, I believe, pulling out my card here. It's a total of \$14 million.

But some of the money is to do the study that was authorized in fiscal year 2010. And there's an additional request for \$8 million to do additional work outside the scope of that study.

Senator BLUNT. And when will you expect to get that study done, since the fiscal year 2010 study isn't done yet?

Ms. JACKSON. Well, we have just begun meetings with the other Federal agencies that will be involved with the studies.

And so I can't give you details, but we're happy to continue as I mentioned earlier.

Senator BLUNT. And does that study stop us from moving forward with hydraulic fracturing?

Ms. JACKSON. Well, this is science. This is science. This is intended to ask and answer questions related to hydraulic fracturing. So it's research, Sir.

Senator BLUNT. So it doesn't set any obstacle in the way of hydraulic fracturing anywhere it's going on, or did we have to have the drinking water study before certain things could be done?

Ms. JACKSON. No, Sir. Hydraulic fracturing, as you heard, is continuing apace.

And what I've said about the drinking water study is that if we learn things that teach us better ways to protect drinking water, certainly we're going to share that with all the people who are out there as our partners trying to protect drinking water.

But we don't have any results yet. The first results will be toward the end of this year.



Senator BLUNT. So you are moving forward with the drinking water part of the study?

Ms. JACKSON. Yes, Sir. That's the one that we have funding for. It was directed by the Congress.

This is a budget request for additional studies coordinated across EPA and other agencies.

Senator BLUNT. And if this budget request isn't met, you would still do the drinking water study?

Ms. JACKSON. Provided that portion of the \$14 million, and I think it's \$6 million in fiscal year 2012, that we already have then.

So, yes, the answer to your question.

Senator BLUNT. How much was provided in fiscal year 2010?

Ms. JACKSON. Let us grab the number for you while we sit here, but we believe it was \$2 or \$4 million.

[The information follows:]

\$1.9 million and three full-time equivalents were provided in fiscal year 2010.

Ms. JACKSON. The study on drinking water in fiscal year 2011 was enacted with \$4.3 million and \$6.1 million in fiscal year 2012.

And then there's \$4.1 million in the present budget for fiscal year 2013. But the study is—

Senator BLUNT. So the drinking water study would cost around \$14 million?

Ms. JACKSON. Four plus six, 12, yes, Sir.

Senator BLUNT. And you've asked for another \$8 million to start this new series of studies.

Ms. JACKSON. Yes, but other agencies are asking for additional funding as well.

So as the Chairman mentioned, I believe it's \$45 million in total additional research around hydraulic fracturing.

Senator BLUNT. And what you would hope to find out is that even if drinking water wasn't affected, that wastewater treatment plants were, or other water sources were?

Ms. JACKSON. The general areas have been air quality, water quality, and ecosystems. We have had other issues that States have dealt with, or are dealing with. Wastewater, certainly, surface water can raise some concerns.

But the idea is to ask the questions so that the American people know that their Government is doing the research to ensure we stay in front of any issues before they develop.

Senator BLUNT. And we would expect to see the drinking water study, when?

Ms. JACKSON. The initial results would be at the end of this calendar year, Sir. But the study goes on an additional year after that.

Senator BLUNT. Thank you. Thank you, Chairman.

Senator REED. Thank you, Senator.

Senator Hoeven, please.

Senator HOEVEN. Thank you, Mr. Chairman.

I would like to follow up on Senator Blunt's question as well as Senator Murkowski.

You're more than doubling your budget for hydraulic fracturing.

How can you make the argument that you're not greatly expanding the scope of the study?

Ms. JACKSON. Well, I hope it's not a matter of semantics. I just want to be clear.

The study that we were directed by the Congress to do, we are doing. And we're seeking the funding we need, and we already have the authority to continue and complete it. That will happen.

But to be, you know, but the President has also said we need to do additional science to assure the American people that we're looking at hydraulic fracturing. So there is additional money proposed in the fiscal year 2013 budget to do additional studies.

Senator HOEVEN. So is that broken out between what is required to do the study, as defined in scope by the Congress, and the additional work that you just referenced?

Ms. JACKSON. Yes, Sir.

The total funding for research in the fiscal year 2013 request is \$14.1 million. And I believe, I saw a number somewhere else, that about \$4 million of that is for the study that is ongoing.

Senator HOEVEN. This also relates to the earlier question I was asking you about guidance.

When you provide guidance then, because whether it's pursuant to this study or proposed rules that you've already put out. Like we're talking about, for example, diesel fuel.

Where we have a State primacy program, which we have with hydraulic fracturing, when you issue guidance, is the State required to follow that guidance or risk having you take over their program?

Ms. JACKSON. First, EPA is not looking to take over the State programs.

But if the State is acting as the primacy agent for the underground injection control program, the guidance is intended to tell them how to meet the requirements of law under that program.

Many States have their own laws that either supersede, that add to, or supersede, or go further than Federal standards.

But for a State who says, listen, my permit that I issue is also intended to be an underground injection control permit, so EPA doesn't have to issue a separate one, this is the guidance the study is intended to say here is how EPA views the injection of diesel, because diesel is not exempt.

The injection of every other chemical is exempt by law, so EPA does not permit that injection. Many States do, but EPA does not.

Senator HOEVEN. But it's important to distinguish between a rule and between guidance and understand that under a State primacy program, the State has the authority to make its own determination.

They can take into account your guidance, but that doesn't give EPA the authority to step in front of the State on a State primary program.

You would agree with that?

Ms. JACKSON. Yes, guidance is intended to give a State, guidelines to know how EPA believes to meet the requirements of the regulation. So the regulation tends to be broader. It talks about the injection of any number of things.

But with respect to diesel and hydraulic fracturing, there was an omission. There was nothing that told a State, or in some States, EPA does indeed write those permits. What a Federal or State per-

mit writer would need to do to assure that their meeting the requirements of the Safe Drinking Water Act.

Senator HOEVEN. And as you do this study, and again, we've got to look at the scope of the study as was defined by the Congress and your funding, it's very important that you are specific in the guidance so that States understand it and industry understands it, and can use that as a guidepost.

And you agree with me, it is a guidepost. It is not the same as a proposed rule.

Ms. JACKSON. It does not have the same stature as a rulemaking, but it is not uncommon for EPA to issue permit writers guidance on how to meet the requirements of a law.

So the EPA does issue guidance often, and it's for Federal and State permit writers, but it is not the stature of a rulemaking, Sir.

Senator HOEVEN. And if you'll work with us both in terms of collaborating with States, with the tribes and with industry, I think we can help make that guidance more effective in a way that creates some rules of the road that the industry understands, again, produce more energy, and have good environmental stewardship.

So we ask for your consultation.

Ms. JACKSON. Absolutely. More than just public comment, our State partners and tribal partners, have a special role in implementing and understanding these issues. And we want the same thing, Senator.

We want certainty, and we want clarity. And that's not what we had before. We had people threatening to sue because diesel was being injected, and permits were not issued.

And so that's what this guidance is intended to address.

Senator HOEVEN. On some of our reservations, particularly, Three Affiliated Tribes Reservation in North Dakota doing a tremendous amount of drilling. The tribes are doing a fantastic job working with industry to do that.

Their concern is in regard to the Synthetic Miner Source Rule. Right now we operate under a consent agreement that expires, or the tribe does, excuse me, they're operating under a consent agreement, that expires at the end of July.

And it is very important that we get a workable rule in place. Both the tribes and the industry want to be, consult with you, in establishing that workable rule. But they need a rule by the end of July here.

Otherwise, unless the consent decree is extended, they can't keep drilling wells. So I would strongly encourage you assisting Region 8, manager Jim Martin, in making sure that we get a solution there.

Now, I believe there is some dialogue going on. Tex Hall, the Three Affiliated Tribes chairman, wants consultation here, but we need a workable rule. We need something in place by the end of July for both the tribe and the industry.

And I ask for your help to the Regional Administrator to do that, and again, with good consultation.

Ms. JACKSON. Yes, Sir.

Senator HOEVEN. The other item, well, I see my time has expired. I have one remaining item.

Senator REED. Please, go ahead.

Senator HOEVEN. Thank you, Mr. Chairman.

CO<sub>2</sub> EMISSIONS

You have a new source performance standard for CO<sub>2</sub> emissions on coal-fired plants. This is a proposed rule that you issued on April 13, 2012. It sets a CO<sub>2</sub> emissions limit of 1,000 pounds per megawatt hour.

That is essentially a natural gas fired electric plant standard, which no coal plant in the entire country can meet, cannot meet it.

Does this new performance standard that you're proposing apply to new plants, only new plants, or does it also apply to existing plants?

And, how do you expect, and I see at the same time, you know, you increase your enforcement budget by 20 percent, from \$27 million to \$34 million. And then, you issue this rule which no coal plant in the entire country can comply with. How do you expect that to work?

Ms. JACKSON. Well, first we can't enforce a rule that isn't final. It is only a rule for new plants. It does not apply to existing coal plants.

And, you know, the standard as proposed, creates a path forward for technology, for those plants that want to use technology, burn coal, and capture their carbon pollution. It allows a period during which a plant, if it chooses to, can operate and then enact a 10-year period where it doesn't have to have the carbon captured and sequestered.

After 10 years, it has to commit to 50-percent capture of its carbon emissions. So, in fact, I personally believe the rule does the opposite. It allows a path forward for investment in coal-fired power plants that doesn't exist at the current time.

And it's a proposal, Sir. It is not final.

Senator HOEVEN. So your proposal applies to any new plant construction, not to existing plants.

What about any improvement or major renovations to an existing plant?

Ms. JACKSON. It does not apply to existing plants, Sir. Only new plants, only new.

Senator HOEVEN. All right, thank you.

Then, we are going to need to work through with you both the technological and the economic viability on that rule because we need to take a hard look at that.

If we want to continue to develop clean coal technology, we've got to have a realistic rule.

Ms. JACKSON. Thank you, Sir.

Senator HOEVEN. Thank you.

Senator REED. Senator Cochran.

Senator COCHRAN. I have no further questions.

Senator REED. I have some additional questions which will be handled in writing.

Senator REED. Senator Murkowski, do you have additional questions?

Senator MURKOWSKI. I have just a couple here, if I may.

Senator REED. Go right ahead.

Senator MURKOWSKI. And I hope that they will be quick.

PM<sub>2.5</sub>

And both of these involve communities in the, well, energy impact within the interior.

Fairbanks, Alaska, our second-largest city, pretty cold up there, dealing with the increased standards, or the tightened standards on small particulate matter (PM), the PM<sub>2.5</sub>.

And, as you know, this has been an issue that they've gone back and forth with, trying to meet these standards. They're providing incentives for citizens to change out their older furnaces and their wood stoves and their boilers for new more efficient stoves and furnaces.

The biggest problem that Fairbanks has is they have no other options. They can't turn to natural gas because it's not available to them. So their options are extraordinarily limited.

EPA has provided grant aid to other larger communities to help them meet the PM<sub>2.5</sub> issues. Fairbanks has received just some very, very minimal grants from the agencies. I know they are looking for assistance. Not much in the total scheme of things.

They were seeking initially \$3 million to help with this wood stove exchange to cut their emissions, \$1 million of it is still, unfunded.

So what I get when I go to Fairbanks every time, and I was there this weekend, is, what, if anything, can be done to help? And we recognize that the budgetary issues are extraordinarily debilitating and we appreciate that.

But given the very unique climate conditions that the interior faces, will the Agency look at a possible extension to give the community more time, additional time, to meet the new standards before the penalty phase kicks in in 2014?

They are working. They are being aggressive on it. It's not as if they're putting their head in the sand. But they are really in a difficult, difficult spot because they have no other options.

Again, I'd like you to either give me your sense on this, or consider what options Fairbanks might be able to consider.

Ms. JACKSON. How about I promise to look at the options for you, both in funding and in compliance. Because that's for the existing PM<sub>2.5</sub> standard, right, Senator?

Senator MURKOWSKI. It is the tightened standards that come into play in 2014. So they are the new PM<sub>2.5</sub> standards.

Ms. JACKSON. Yes. Well, I'm not sure exactly what you are referring to. Why don't I look at both.

Senator MURKOWSKI. All right.

HEALY CLEAN COAL PLANT

And then, the other one that I would like to bring to your attention is the Healy Clean Coal Plant that we have been trying to get online since 1991 as an option for the residents in the interior to help them meet their energy needs.

Golden Valley is working with the EPA right now on the appropriate terms for renewal of their air permit for the plant. They have been aggressive in trying to resolve, go through all the hoops, doing what EPA has asked.

I met with some of the folks just this past weekend. I guess, I need your assurance that this is something that EPA is going to continue to work with the Golden Valley Electric Association to find a fair and hopefully final conclusion on this.

Ms. JACKSON. I'm happy to assure that knowing none of the facts, but that doesn't seem unreasonable to ask, so we'll continue to—

Senator MURKOWSKI. Okay. We'll put that one on our to-do list when we meet.

Ms. JACKSON. We have a lot to do.

Senator MURKOWSKI. And then, my final question, Mr. Chairman, and I will conclude.

#### AVIATION FUEL

And this relates to the new regulations for aviation fuel. As you know, we have more people that fly in Alaska than anywhere else in the country, and it's like the family minivan. You use it to haul the family around.

The concern that we have is the advance notice of rulemaking that could sharply reduce the lead content in the aviation fuels. It's impossible for the engines in older aircraft to run without lead being in their fuels.

It's estimated that up to one-third of all the general aviation in the State will have to be pulled from service if in fact EPA proceeds with these rules.

Because, as I understand, it's just not technically possible to repower, retrofit the planes. Last December, I was informed by Gina McCarthy, that the EPA would likely consider changes in the rules over the next one to 2 years.

So the question to you this afternoon is where you are in this study on the air quality impacts of lead in aviation fuel, and where does the EPA stand on modifying the proposed rule to lessen what we know to be a considerable impact on aviation in Alaska?

Ms. JACKSON. Thank you, Senator.

Yes, to my knowledge, we are still on course. We're looking at the study. This issue I saw personally when I visited Alaska, the one time I was able to get up to Alaska. Clearly, that's how everyone gets around. Clearly, it was a concern everywhere I went.

And so I came back with an understanding that we need to do something. I don't have a date for you today, but when we meet, we'll put it on the list and give your staff an update.

Senator MURKOWSKI. I appreciate that. And I hope that your voice feels better than normal levels.

Ms. JACKSON. Thank you.

Senator MURKOWSKI. But I thank you for your testimony and your time this morning. Thank you, Mr. Chairman.

#### ADDITIONAL COMMITTEE QUESTIONS

Senator REED. Thank you, Senator Murkowski. Thank you, Administrator, for your testimony. Thank you, Ms. Bennett for all your work with the Administrator.

I will ask my colleagues to submit any further written statements or questions by next Wednesday, the 23d of May.

And then ask the Administrator to respond as quickly as possible with any written questions so we can close the record.

[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 JACK REED

STATE AND LOCAL AIR QUALITY MANAGEMENT GRANTS

*Question.* What are the Environmental Protection Agency's (EPA) plans regarding the two proposed funding changes to the State and Local Air Quality Grants, which are:

- changing the formula for allocating the section 105 funds to States; and
- transitioning funding for particulate monitoring from section 103 authority to section 105 authority?

CHANGING THE FORMULA FOR ALLOCATING SECTION 105 FUNDS

*Answer.* EPA has been working with State and local air pollution control agencies and State associations since 2006 to revise the formula to ensure that grant resources are targeted to address current air quality circumstances, priorities, needs, and concerns while also protecting gains already achieved. The last comprehensive analysis and re-allocation of grants occurred from 1991–1993 to implement the 1990 Clean Air Act Amendments. The increase in State and Tribal Assistance Grant funds requested for fiscal year 2013 would ease implementation of an updated allocation approach that would provide increases for each region of the country. Increased funding notwithstanding, EPA must still assure that funds are targeted to the most pressing air-quality problems and that the integrity of State/local air program operations is maintained. If funding remains static, shifts will be limited so that no region will experience a decline any greater than 5 percent of its prior year funding level. This approach will be phased in over a multiyear period to minimize any disruptions to State and local program operations and can be re-evaluated based upon updated data, changes in air quality, or changes in available funding.

TRANSITIONING PARTICULATE MONITORING FUNDING FROM SECTION 103 TO SECTION 105 AUTHORITY

EPA intends to transition 10 percent of the particulate monitoring funding in year 1 (fiscal year 2013); 20 percent in year 2; 40 percent in year 3; and 60 percent in year 4; and will continue to work closely with State/local/tribal agencies on implementing an adequate particulate matter (PM)<sub>2.5</sub> monitoring network.

BEACHES PROTECTION CATEGORICAL GRANTS

*Question.* I am concerned that EPA proposed eliminating the Beach Grant Program in your fiscal year 2013 budget request. Since 2000, Rhode Island has received \$2.4 million through the program to monitor water quality at beaches and notified the public when recreational waters are not safe for swimming. My home State has reported 45 beach closures over the past 2 years, so we know firsthand how important funding for monitoring is. I am worried that without continued Federal funding, States and local governments will not have the capacity to continue beach monitoring. Administrator Jackson, can you explain why EPA singled out these grants for elimination?

*Answer.* To help meet the fiscal challenges of fiscal year 2013, EPA has reviewed its programs for areas where any potential efficiencies and streamlining can yield savings. EPA is proposing to eliminate certain mature program activities that are well-established, well-understood, and where there is the possibility of maintaining some of the human health benefits through implementation at the State and local levels.

EPA's beach program has provided important guidance and significant funding to support successfully State and local governments in establishing their own programs. Beach monitoring continues to be important to protect human health. However, States (including territories and tribes) and local governments now have the technical expertise and procedures to continue beach monitoring without Federal support as a result of the technical guidance and more than \$110 million in financial support EPA has provided over the last decade through the beach program. As a result, EPA is proposing that this grant program be terminated at the end of fiscal year 2012.

## DIESEL EMISSIONS REDUCTION ACT

*Question.* I would like to talk a little bit about your proposal to phase out the Diesel Emission Reduction Act (DERA) program. As you may know, I cosponsored the DERA reauthorization in 2010. It is a successful program and one that has enjoyed bipartisan support.

Last year EPA proposed eliminating the program, but this subcommittee restored the \$30 million funding. You have cut the program by one-half in your fiscal year 2013 budget request, for a total of \$15 million, and identify the program for future elimination. Yet EPA has estimated that in 2030 there will still be 1.5 million existing diesel engines polluting the air. Can you explain why the administration thinks this program should be cut back significantly this year and eventually phased out given this need?

*Answer.* The DERA grant program results in tangible emissions reductions, but it is important to strategically target the available resources to communities with the greatest need. The funding strategy EPA proposes for fiscal year 2013 would do just that—it would provide rebates on the purchase of pollution control technology and grants for revolving loan programs, and target these funds to communities with the greatest need, such as those areas with the highest levels of exposure near ports and transportation hubs.

Second, the DERA program can point to success in retrofitting and replacing the oldest, most polluting diesel engines, complementing the stringent emissions standards on new diesel engines that EPA promulgated in 2007. For example, with the \$469 million appropriated by the Congress in 2008–2010, EPA has funded projects that reduced approximately 203,900 tons of nitrogen oxides (NO<sub>x</sub>) and 12,500 tons of PM. States and localities have also established programs to address diesel emissions from older engines not subject to current regulations, such as the Texas Emissions Reduction Program and the Carl Moyer Program in California.

*Question.* In the Office of Management and Budget's budget materials it says that you will use fiscal year 2013 DERA funding to create revolving loan programs that will subsidize retrofits and replacements of older engines "without the need for additional infusions of Federal grant dollars." I'm not sure how to square this statement with the enormous demand for the grants. There is such a pressing demand that EPA received seven times more applications for DERA grants than it can fund. How does EPA expect to establish a robust revolving loan program that will not need additional Federal funding with only \$15 million?

*Answer.* The DERA program has shown that retrofits and engine replacements are effective in reducing emissions and provided valuable lessons in how to administer clean diesel programs. Going forward, the fiscal year 2013 budget request recognizes the limited availability of Federal funding and would transition the program to greater reliance on State and local efforts to address diesel emissions from legacy fleets. In fiscal year 2013, EPA will pilot a new approach

That will target specific fleets in high diesel exposure areas such as near ports and freight distribution hubs and other disproportionately affected communities. The Federal monies spent under the \$15 million request would be split into two categories. The first category would allocate funds to a new rebate program established under DERA's reauthorization. The second component would allocate funds toward low-cost revolving loans or other financing programs that help fleets reduce diesel emissions. We believe the rebate and loan programs may allow greater precision in scrapping certain model years of vehicles and equipment and assisting public and private fleet owners with retrofitting or replacing those engines. This pilot would also test financial mechanisms to continue accelerating diesel retrofits without ongoing Federal funding. By using grant funds to establish revolving loan programs administered by non-Federal parties, EPA would be able to have that funding revolve back into the programs (as the loans are repaid) to make more loans available on an ongoing basis. For the revolving loan mechanism to be successful, it would need to be coupled with State or local requirements to phase out the dirtiest engines, thereby creating the incentive for fleet managers to seek a lower-cost loan to make the necessary upgrades.

*Question.* DERA requires that 30 percent of funding be made available to support grant and loan programs administered by States. What is going to happen to the State formula grants in your proposed budget?

*Answer.* Under the proposed budget, the State program would not be funded in fiscal year 2013.

*Question.* You are also starting a new DERA rebate program. Setting up a rebate program is an area where EPA doesn't have a lot of experience. What is your timeline for setting up this program? Why is a rebate program better or more effi-



cient than a grant program? How do you plan to operate both a rebate program and a revolving loan fund given the cuts in your budget request?

Answer. The Diesel Emissions Reduction Act of 2010, which modified and reauthorized EPA's Diesel Emission Reduction Program through fiscal year 2016, added rebates to the grants and loans already authorized under the initial authorization of DERA. EPA will utilize rebates and grants to establish revolving loan programs under the reauthorized DERA language, and match those mechanisms to the needs of fleets and communities in their quest to reduce emissions from the legacy diesel engines. This will expand the number of options for targeting certain types of engines, model years and fleets for retrofit or replacement. Use of the rebate option would make DERA funding available directly to private fleet owners for retrofit or replacement of older, high-pollution engines. Similar to how a rebate works in a retail situation, EPA would use rebates as an efficient incentive mechanism to turn over parts of the existing fleet sooner than through natural attrition. The program could specify the most cost-effective and beneficial type of engines and technology solutions, in locations of greatest need. EPA continues to believe that grants should be used to establish revolving loan programs; at the same time rebates offer a specificity and simplicity which would be welcomed by stakeholders and policy leaders alike.

EPA plans to initiate the rebate program in the fall of 2013.

#### GREAT LAKES RESTORATION INITIATIVE

*Question.* Administrator Jackson, as you know the Great Lakes Restoration Initiative (GLRI) has been a huge investment that affects the States of a number of members of this subcommittee. I am very interested in hearing about the results that have been achieved. Since 2010, GLRI has received more than \$1 billion of funding and you propose another \$300 million in your fiscal year 2013 budget request. Can you tell us what results you have achieved thus far?

Answer. The investments made under the GLRI are showing promising results in addressing the most critical environmental challenges facing the Great Lakes. Some of the notable achievements from GLRI include:

- The Presque Isle, Pennsylvania Area of Concern (AOC) will be delisted this year, now that all necessary management actions are complete. Eighteen Beneficial Use Impairments (BUIs) at 10 different AOCs have been removed since GLRI's inception.
- One million cubic yards of contaminated sediments have been remediated in the basin.
- GLRI has been central to keeping self-sustaining Asian carp populations out of the Great Lakes. No new invasive species populations have been detected in the Great Lakes.
- GLRI-funded projects contributed to the delisting of the Lake Erie watersnake under the Endangered Species Act.
- GLRI-funded projects have contributed to a 5-year low in swimming bans and advisories at Chicago's beaches.

Additional achievements include:

- More than 13,000 acres are being managed in order to keep populations of invasive species controlled to a target level.
- GLRI funding has helped increase the number of acres within the Great Lakes basin subject to the Department of Agriculture conservation practices to approximately 270,000, an increase of more than 50 percent. GLRI funding is now being targeted at three priority subwatersheds to reduce phosphorus contributions from agricultural and urban lands that contribute to harmful algal blooms and other water quality impairments.
- Hundreds of river-miles have been cleared for fish passage by removing or bypassing barriers. More than 20,000 acres of wetland, coastal, upland, and island habitat have been protected, restored, or enhanced.
- Rapid response capabilities have been improved:
  - six rapid response actions were performed in the fight against Asian carp; and
  - four States have now updated their Aquatic Nuisance Species Management Plans to include rapid response capabilities.

*Question.* GLRI funds—\$353 million—have been directed toward toxic substances and AOCs to remedy huge underwater sites where contamination is especially dangerous. Specifically, what progress has been made toward delisting AOCs?

Answer. Because EPA and its partners have prioritized and accelerated AOC work, we expect to meet or exceed our goals to remove a cumulative total of 41 BUIs

by the end of fiscal year 2013 and to complete management actions at a cumulative total of four AOCs. A few examples of delisting progress are as follows:

- As noted above, the Presque Isle, Pennsylvania AOC will be delisted by the end of this year. This will be the first U.S. delisting of an AOC since Oswego River was delisted in 2006.
- All the management actions necessary for delisting at four additional AOCs (Ashtabula, Ohio; River Raisin, Michigan; White Lake, Michigan; and Sheboygan, Wisconsin) are expected to be completed this year and all the management actions necessary for delisting at an additional AOC (Deer Lake, Michigan) are expected to be completed in 2013.
- EPA and its partners have started 88 projects to address BUIs at AOCs and we remain on track to start an additional 22 projects to address BUIs at AOCs in fiscal year 2012.
- Work done at AOCs includes completion of Great Lakes Legacy Act projects at sites in five AOCs. This work has removed contaminated sediments and is re-viving waterfronts in the Kinnikinnick River, Wisconsin; Grand Calumet River, Indiana; Ashtabula River, Ohio; Detroit River, Michigan; and Muskegon Lake, Michigan.

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QUESTIONS SUBMITTED BY SENATOR DIANNE FEINSTEIN

PERCHLORATE

*Question.* In February 2011, the Environmental Protection Agency (EPA) announced its intention to regulate perchlorate under the Safe Drinking Water Act. Given the nearly 300 public drinking water wells impacted by perchlorate contamination in California, this was certainly welcome news. Can you tell me what is the status of EPA's effort to develop perchlorate regulations and when do expect they will be finalized?

*Answer.* EPA is moving forward with the process to develop a national primary drinking water regulation for perchlorate. EPA is evaluating the science on perchlorate health effects and exposure to develop a proposed Maximum Contaminant Level Goal (MCLG). The MCLG is a nonenforceable level in drinking water at which no known or anticipated adverse effects on the health of persons occur and which allows an adequate margin of safety. EPA also is evaluating treatment technologies, analytical methods, and costs and benefits of potential Maximum Contaminant Levels (MCLs). The MCL is the enforceable standard that is set as close as feasible to the MCLG, taking cost into consideration. EPA has a statutory deadline of February 2013 to issue the proposed perchlorate rule. EPA is working to develop the proposed regulation for public review and comment expeditiously and expects to promulgate a final regulation within 18 months of the proposal.

*Question.* Will the new perchlorate standard consider pregnant women and children as well as potential perchlorate exposure from food products?

*Answer.* Yes. As EPA works to develop the MCLG, the Agency is closely reviewing data on the effects of perchlorate on pregnant women and children because these lifestages may be at greater risk of adverse effects due to exposure to perchlorate in drinking water. EPA is also considering perchlorate exposure from food products in developing the MCLG. EPA is currently seeking input from the Science Advisory Board on key issues related to the scientific basis for the MCLG. One of the questions EPA has asked the SAB for input on is how life stage differences should be considered in developing the MCLG.

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QUESTIONS SUBMITTED BY SENATOR PATRICK J. LEAHY

MERCURY IN AMBIENT AIR

*Question.* Administrator Jackson, throughout your fiscal year 2013 budget justification, I repeatedly see references to the importance of having a strong air monitoring network for our Nation's air quality. I steadfastly believe in having air monitoring tools to measure and track pollutants, to identify pollutant sources, and to inform us how and where Americans could be exposed to air pollutants. These are critical resources that serve the Nation and should be fully supported by the Environmental Protection Agency's (EPA) work.

I understand that EPA is partnering with utilities to collect mercury emission data directly from utilities and that you believe that this partnership will allow you to assess the effectiveness of existing technologies in meeting current mercury reduction requirements. I am curious, though, as to how this partnering will serve

those citizens who live at a considerable distance from utilities with mercury emissions but are nevertheless subject to the regional transport of out-of-State sources of mercury. In my home State of Vermont, we have collected a continuous sampling of particulate and gaseous mercury air levels at the Underhill Air Quality site (VT99), where research measurements have been made since 2004. This long-term record is necessary for detecting trends, and since 1993 we have established an unbroken record of mercury measurements in precipitation. Through this monitoring, we have learned many important lessons and have also found that the current Community Multi-scale Air Quality model estimates for mercury deposition have proven too low for northern Vermont and New England. This is the longest continuous mercury deposition record in the United States.

I find it extremely troubling and perplexing that the EPA has made cuts in funding to the Atmospheric Mercury Network (AMNet) and VT99, which coincides with your December 2011 announcement of new mercury and air toxics standards for coal and oil-fired power plants. Can you please explain to me your rationale for ending this research and long-term air monitoring program at the exact moment when the need for continued monitoring for human health risk and tracking of emission levels is most essential?

Do you agree that measurements of mercury in ambient air are necessary to verify the anticipated deposition reductions as a result of your newly mandated emissions reductions? If so, we must continue the work at VT99 so we can measure progress toward restoration of environmental quality.

Answer. Mercury is a complex and multi-faceted issue that necessitates monitoring in all media, including air, water, sediments, fish, and wildlife. EPA recognizes the need for comprehensive, long-term mercury monitoring. EPA has collaborated 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. In particular, advances have been made in developing a national atmospheric mercury monitoring program by building, where possible, upon the existing long-term monitoring infrastructure which has successfully tracked the effectiveness of programs to control emissions of sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>). Since 2007, EPA has worked through the National Atmospheric Deposition Program (NADP) to develop AMNet—a North American network that monitors atmospheric concentrations of mercury at 20 sites throughout the United States and Canada. NADP/AMNet is sponsored by a multi-organizational cooperative of Federal, State, and tribal agencies, universities, and private companies.

Many of the AMNet mercury sites were established by different organizations to support an array of diverse research and monitoring objectives. The Underhill VT99 site is an example of an existing atmospheric mercury monitoring site that joined AMNet. Historically, these sites operated in an uncoordinated manner, using disparate protocols for measurement, data management, and quality assurance. In other words, they did not comprise a coordinated network of atmospheric mercury monitoring sites providing comparable data to assess implementation of a national mercury control program. With the development of AMNet, NADP and its partners, including EPA, took an opportunity to coordinate existing monitoring sites and collaborate with the scientists operating those sites to create a cohesive network of standardized measurements complemented by an organized scientific community.

As part of the initial catalyst to establish AMNet, EPA provided a small amount of funds, through competitively awarded time-limited contracts, to six monitoring groups to operate atmospheric mercury sites. With a core set of AMNet sites established, EPA's focus turned to facilitating the development and implementation of a centralized NADP data management program to assure high quality and comparable mercury measurement data across the United States. Toward that end, EPA uses its resources to continue supporting AMNet by funding NADP's AMNet quality assurance and data management activities.

EPA served as a catalyst in launching the AMNet collaborative mercury monitoring effort. We remain committed to working with NADP and our partners in the scientific community to track progress of mercury emissions reductions under our air rules. We hope that the atmospheric mercury monitoring sites and experts participating in AMNet will continue to improve our understanding of mercury in the environment.

#### CHEMICAL SAFETY

*Question.* As a cosponsor of the Safe Chemicals Act of 2011 I am acutely aware of the need to modernize the Toxic Substances Control Act of 1976 (TSCA). It is clear that the EPA desperately needs new tools to regulate the health and safety

testing of toxic chemicals. Your fiscal year 2013 budget justification requests a funding increase of \$11 million for enhancing chemical safety and assessing chemical risks.

Please tell me what resources EPA proposes to put toward work on carbon nanotubes with this requested increase in funding.

Answer. EPA's fiscal year 2013 President's budget requests a total of \$67.6 million to support the Chemical Risk Review and Reduction (CRRR) program, which includes an \$11.1 million increase more than the fiscal year 2012 amount appropriated for the CRRR Program account (\$56.5 million). As detailed in the Congressional Budget Justification, the fiscal year 2013 CRRR request is divided into four areas of activity:

- \$13.9 million to support Existing Chemicals—Obtaining/Managing Data efforts;
- \$14.9 million to support Existing Chemicals—Chemical Assessment efforts;
- \$24.6 million to support Existing Chemicals—Risk Management efforts; and
- \$14.2 million to support the New Chemicals Program.

Resources supporting EPA's work on carbon nanotubes are housed in all four of these activity areas. We should note that EPA does not estimate resources on a chemical-by-chemical basis, as would be required in order to further specify the amount of funding budgeted for carbon nanotube work.

*Question.* Does EPA have sufficient resources to truly address and assess the risk level from carbon nanotubes and efficiently approve nanomaterials that manufacturers have proven minimize or eliminate the associated adverse impacts on human health?

Answer. EPA's fiscal year 2013 President's budget requests the resources necessary to continue to gather environmental health and safety data, assess risk levels and, as necessary, undertake risk management action to address identified risks associated with some of the carbon nanotubes already in commerce and to continue to review new nanomaterials submitted to EPA through the new chemicals program prior to their entry into commerce. As the science of nanomaterials evolves, EPA will continue to enhance its approach to obtaining and using information to inform both risk assessment and risk management to inform decisionmaking. For example, EPA is considering the development of categories of nanomaterials, based on shared chemical and toxicological properties, which may enable the Agency to make use of accumulated data common to each category (such as data on chemical hazard, structure, and properties) as well as a history of past decisions that may be relevant. In most cases, sufficient history would have been accumulated so that testing recommendations would vary little among the chemicals within a category.

*Question.* What progress can you assure me will occur in EPA's work on nanoscale materials? In addition, do you expect that EPA will be able to make advances in its work in determining when nanoscale materials may require further assessment and when there has been sufficient testing without requiring undue additional expenses for manufacturers?

Answer. EPA will continue to pursue a comprehensive regulatory approach under TSCA to ensure that both new and existing nanoscale materials are manufactured and used in a manner that protects against unreasonable risks to human health and the environment. EPA's approach includes pre-manufacture notifications; Significant New Use Rules; information gathering rules; and test rules. For example, EPA has played a leading role in guiding the development of test data and harmonized approaches to the testing, assessment, and management of nanomaterials with other Federal agencies for several years. EPA will continue to work in fiscal year 2013 with other Federal agencies through the National Nanotechnology Initiative and internationally with other governments to identify and develop these sources of data, with an emphasis on providing guidance for applying internationally harmonized chemical test guidelines to nanomaterials. EPA is already assessing and addressing the potential risk from carbon nanotubes and other nanomaterials. As new data are developed for nanomaterials, EPA will refine its approach to both risk assessment and risk management. EPA will identify those nanomaterials or categories of nanomaterials that require additional data development or risk management as well as the nanomaterials that do not warrant further testing or other actions.

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#### QUESTIONS SUBMITTED BY SENATOR JON TESTER

##### CAMELINA BIODIESEL AND THE RENEWABLE FUELS STANDARD

*Question.* Just over 2 years ago, Environmental Protection Agency (EPA) released a final rule setting up the Renewable Fuels Standard (RFS2). Every year since then,

EPA has had to drastically revise its advanced biofuel quotas down, due to the fact that there was no chance the biofuel industry could meet them.

Part of the RFS2 rule was the establishment of a process to approve new feedstocks for production of biofuel. However, since the RFS2 was established, Canola is the only feedstock that has been approved through that process.

At the same time, I know that Montana producers have been working toward approval of biodiesel from camelina and ethanol from barley almost since the day the RFS2 was established.

I have watched with growing concern the lack of newly approved fuel pathways eligible for Renewable Identification Numbers (RINs), particularly given the backlog of petitions that the EPA is considering. EPA did approve a handful of pathways in January, only to withdraw that approval shortly thereafter, resulting in yet another crop year without recognition of these innovative fuels.

I am concerned that unless EPA enhances the diversity of fuel pathways eligible for RINs, the renewable fuels standard will continue to act as a barrier to entry for new and promising feedstocks by supporting incumbents that frankly don't need the help.

To what extent is EPA's inability to approve new fuel pathways contributing to the lack of advanced biofuel? What is EPA doing to get the petition program for new fuel pathways working as intended?

Answer. As a clarification, in the past 2 years, EPA has not had to reduce the advanced biofuel mandate, only the cellulosic volume mandate. Therefore, we do not believe that the new fuel pathway approval process is contributing to a shortage of advanced biofuels. Since the RFS2 volume standards are nested (with cellulosic fuels being a subset of advanced fuels), the total advanced biofuel mandate can remain unchanged even if cellulosic volumes are reduced. To date, EPA has not reduced the overall advanced volume mandates since our analysis has shown that there is a sufficient supply of advanced biofuels. What this means is that refiners and blenders have still been obligated to acquire sufficient advanced biofuel to fulfill the statutory mandate, even though the EPA Administrator lowered the required volume for cellulosic biofuel. Biodiesel from camelina and ethanol from barley could potentially qualify as advanced biodiesel, if the fuel pathways satisfy certain criteria.

In the final RFS2 rule, EPA developed a petition process to allow for new potential pathways to be reviewed and incorporated into the RFS program. In the last 2 years, EPA has made significant progress in evaluating new feedstocks and fuels under the RFS program. For example, EPA has approved canola as a new feedstock and six other new fuel pathways through the petition process. In addition, EPA released for public comment analysis on six other feedstocks (arundo donax, camelina, energy cane, napiergrass, palm oil, and sorghum). EPA recognizes the need to review and include new advanced biofuel feedstocks to help further the goals of the Energy Independence and Security Act. To this end, EPA tried to expedite the approval of arundo donax, camelina, energy cane, and napiergrass through a direct final rulemaking process. However, EPA received relevant adverse comments as part of the public review process and was legally required to withdraw the direct final rule and proceed instead with a proposed rule. EPA is working to respond to these comments and finalize the analysis of these pathways as quickly as possible.

#### ENHANCED OIL RECOVERY

*Question.* Administrator Jackson, I understand that your agency is in the process of developing guidance for Enhanced Oil Recovery (EOR) projects. I am a strong supporter of enhanced oil recovery and believe it is a win-win for the storage of CO<sub>2</sub> as well as getting more oil out of existing fields. EOR helps to localize the impact of oil field development, while increasing our energy security with domestic production.

I have heard some concern from some in industry that this proposed guidance makes could hinder EOR use and expansion.

*Question.* Are you supportive of developing EOR?

Answer. EPA remains committed to the safe implementation of enhanced oil and gas recovery technologies. Since the 1980s, EPA has worked with State co-regulators to ensure that injection of CO<sub>2</sub> (and other fluids) for enhanced oil and gas recovery is conducted in an environmentally sound manner that enables increased energy security through domestic hydrocarbon production.

*Question.* Can you assure me that EPA will continue to work with stakeholders to assure that guidance on this program is workable and encourage the use of EOR?

Answer. EPA will continue to work with stakeholders, including State co-regulators and industry representatives, to develop this guidance and intends to imple-

ment it in a manner that is consistent with existing EOR regulations and Underground Injection Control program authority under the Safe Drinking Water Act.

OIL SPILL RESPONSE AND TRIBES

*Question.* Administrator Jackson, last year on the Blackfoot Reservation in Montana there was a small oil spill from an oil distribution pipeline. This occurred about the same time we had the larger spill on the Yellowstone River. Unfortunately the small spill wasn't found for nearly 1 month because it was in a distribution line.

In Montana a number of tribes, including the Blackfeet are actively developing their traditional energy resources, in particular oil and natural gas. Unfortunately, many tribes lack a full staff of people to regularly monitor well and develop safeguards for the development of energy resources.

*Question.* What is EPA doing to provide technical assistance to tribes who have expanding energy development to develop safeguards are in place to prevent incidents like what happened on Browning?

*Answer.* EPA conducts numerous workshops and inspections to provide technical assistance to tribes who have expanding energy development regarding oil spill prevention and response. EPA routinely includes inspections of production facilities on tribal lands with tribal environmental personnel to train the tribe on the requirements of the SPCC regulation and address facilities the tribe may have concerns about. EPA also routinely answers technical questions from the tribal environmental office to provide assistance on the requirements of the spill prevention control and countermeasure (SPCC) regulation, respond to spills and complaints, and address noncompliance.

The following examples are representative of the types of assistance EPA provides to tribes that are developing their traditional energy resources:

- In 2010 and 2011, EPA worked with Fort Berthold officials on spill response capabilities and conducted workshops to improve compliance with SPCC regulations. In previous years, EPA similarly conducted SPCC workshops on the Uintah & Ouray, Southern Ute, and Wind River Reservations.
- In August 2011, EPA provided technical assistance to the Blackfeet Tribe by conducting interactive SPCC training for nine participants from tribal environmental staff, emergency response staff, and a representative from the Bureau of Indian Affairs (BIA). This training focused on how to identify facilities that could pose a high risk for a spill or that may not be in compliance. EPA also discussed with the tribe concerns they had regarding facilities or spills that had occurred.
- In June 2011, EPA inspectors were accompanied by tribal personnel during the SPCC inspections conducted on the Fort Berthold reservation. In August 2011, EPA inspectors were accompanied by Blackfeet Tribal environmental and emergency staff, as well as a BIA representative, on SPCC inspections.
- During Tribal Region Operation Committee meetings held at the Region 8 office, the prevention and preparedness program presented and distributed outreach materials. The region also distributed materials on oil spill prevention during the Denver March Pow Wow.
- In September 2011, EPA held a 4-day oil response training course for members of the Three Affiliated Tribes. This course is designed for EPA Federal On-Scene-Coordinators (FOSCs), U.S. Coast Guard (USCG) FOSCs, and tribal, State, and local responders who are involved in inland oil spill prevention and cleanup. The course was focused around a hands-on practical oil spill response scenario on fast water usually found in rivers in the western regions of the United States. Course participants learned physical and chemical properties; statutory and regulatory framework; factors affecting response and cleanup decisions; how to read rivers; determine oil recovery locations; determine various methods of boom deployment; and deploy oil recovery methods on fast water rivers.
- In addition to oil spill prevention and response training, EPA initiated meetings with all 27 tribal governments to create a foundation for open communication and to understand the priorities, risks and vulnerabilities of the Region 8 tribes. The region plans to meet with the tribes in order to conduct an assessment of tribal emergency planning and preparedness capabilities in order to tailor an appropriate technical assistance and training regimen specific to the tribal needs.
- With oil and gas production being one of the top priorities for the tribes, on June 13, 2012, EPA conducted a workshop to help tribal communities understand potential issues and resources available to prepare for and address environmental accidents, spills, and releases due to oil and gas drilling and produc-

tion processes. Information included an overview of the production process itself, a summary of the various EPA laws and regulations that cover oil and gas production, and information from other guest speakers including, but not limited to, private industry, the Department of Transportation, and the Bureau of Land Management.

As with EPA's activities in previous years, there are also plans to continue one-on-one outreach, SPCC technical assistance, and joint inspections with certain tribes in 2012.

EPA has a goal to update and create new Area Contingency Plans that would include Browning, Montana. As part of this effort, EPA Region 8 has held meetings with representatives from the tribes, U.S. Fish & Wildlife Service, BIA, Army Corps of Engineers, Departments of Agriculture and State, and local agencies to discuss subarea contingency planning for the Missouri River-Lake Sakakawea area.

#### LIBBY, MONTANA SUPERFUND SITE

*Question.* Montana also has some big challenges with Superfund. In Montana we have the dubious honor of having 11 Superfund sites on the National Priorities List. These are some of the largest and most complex in the United States. And Administrator Jackson, as I've said each year as you come before this subcommittee it needs your personal attention.

Let me take a moment to talk about Libby, Montana. It has been more than 10 years since EPA's work in Libby commenced, and there are still a number of unanswered questions and actions with questions. Currently the toxicological review of Libby Amphibole Asbestos has a draft form and is being circulated.

*Question.* When do you believe you will be able to finalize that study? And when can you start using the Science Advisory Board's (SAB) information to make decisions about if homes are safe or clean for the citizens of Libby?

*Answer.* EPA currently anticipates completing and posting the Integrated Risk Information System (IRIS) Toxicological Review of Libby Amphibole Asbestos in fall 2013. EPA's SAB has indicated that they expect their peer review advice will be published by November 2012. As per the IRIS process, EPA will then conduct any further analyses needed to respond to the peer review and revise the draft assessment to respond to comments. After internal and interagency reviews, a final Toxicological Review of Libby Amphibole Asbestos will be posted on IRIS.

To date, risks from exposure to Libby Amphibole have been substantially reduced through cleanup actions at 1,670 properties in Libby, including homes, commercial buildings, parks, and other recreational spaces. Once the Toxicological Review of Libby Amphibole Asbestos is posted on IRIS, the toxicity values can be used for human health risk assessments. EPA will evaluate the remaining properties in Libby and reassess the properties that have undergone cleanup actions to determine whether additional cleanup is required. Region 8 will be able to publish a draft cumulative human health risk assessment for the Libby Superfund Site approximately 6 months after the IRIS posting of the Libby Amphibole toxicity values. The results of the human health risk assessment, as well as community opinions and concerns, will be considered by EPA as it evaluates alternatives and selects an appropriate response to address site risks.

#### CLARK FORK CLEAN UP SITE

*Question.* Currently in the State of Montana has great work going on the Clark Fork River restoring a watershed. This work will restore clean water, fish, and aquatic species habitat and revitalize a corridor home to many of Montana's farms and ranches.

This site, listed in 1985, has waited a long time for clean up.

The State and EPA have entered into a consent agreement with the State as lead agency, a position well deserved after their good work in Silver-Bow County and on Milltown Dam.

There is more than \$100 million ready to put people to work in the restoration economy in Montana. Unfortunately, as of my last update, this work has is still stalled for while lawyers bicker over small technicalities and details.

*Question.* Can I have your commitment that you will work the lead agency, the State of Montana, to get any issues resolved and make sure this project commences in a timely fashion so that by this summer we can be putting people back to work cleaning up the banks of the Clark Fork?

*Answer.* EPA remains committed to working with the lead agency, the Montana Department of Environmental Quality (Montana DEQ), to help the Montana DEQ implement the remedy in an efficient and effective manner. Under a 2008 consent decree, the Montana DEQ received \$123 million from Atlantic Richfield to perform

State-lead Superfund remedial design, remedial action, and natural resource damage restoration for the Clark Fork River Operable Unit (Clark Fork Site) of the Milltown Reservoir Sediments/Clark Fork River Superfund Site. EPA has consistently met review times requested by the Montana DEQ for deliverables and has worked expeditiously to resolve issues to help the Montana DEQ complete design and construction on the Clark Fork River.

The Montana DEQ began construction in 2010 by removing arsenic and lead contaminated soil from eight residential properties located on East Side Road in Deer Lodge. The Montana DEQ also cleaned up six residential properties adjacent to the Clark Fork River in Deer Lodge in 2011. Cleanup construction was completed at the Trestle Area Bridge in Deer Lodge in fall 2011. Construction firms out of Butte, Missoula, and Lincoln, Montana were able to bid successfully on these construction projects.

In addition, engineering firms from Helena and Butte, under contract to the Montana DEQ, collected design level data in 2011 at the Grant Kohrs Ranch National Historic Park and the Clark Fork Coalition Ranch. The Montana DEQ has already incorporated data collected during these investigations into Design Summary Reports. Draft preliminary designs are anticipated in fall 2012, with final design packages going out for construction bids in 2013.

Finally, the Montana DEQ is currently incorporating design review team comments into its final design for cleanup of the first 1.6 miles of the Clark Fork River directly below the Warm Springs Ponds (Reach A, Phase 1). Montana DEQ will solicit bids later this summer for a multi-year construction project that will begin in fall 2012.

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QUESTIONS SUBMITTED BY SENATOR MARY L. LANDRIEU

DESIGN FOR THE ENVIRONMENT PROGRAM

*Question.* Administrator Jackson, I would like to bring to your attention some concerns I have with the Design for the Environment (DfE) program. This program is intended to identify chemicals for which increased margins of safety may be needed and to make suggestions on alternative chemicals that would provide increased margins of safety. As I understand it, Congress did not explicitly fund or create this program, nor did the Environmental Protection Agency (EPA) issue regulations outlining any criteria on which to select products for which substitutes are sought. Furthermore, there is no criteria that exists to define the improved safety of the alternatives. While the program may be deemed voluntary, the process will lead to manufacturers substituting alternatives, none of which have been approved by a government agency as safe for use or by industry as technically or commercially viable. Therefore the DfE program can effectively drive major structural changes in the chemical industry while avoiding the rigor of the regulatory process.

I am very concerned with the lack of transparency in the decisionmaking process and the lack of defined criteria upon which DfE chemical evaluations are based.

Are the chemical evaluations under the DfE program done consistent with other EPA chemical evaluations or assessments such as under the Integrated Risk Information System (IRIS)?

*Answer.* Yes, DfE chemical evaluations are consistent with other EPA evaluations, including IRIS, and use similar criteria. For example, the IRIS assessment process includes obtaining information through a comprehensive literature search and data call in. The IRIS assessment process also includes professional EPA science experts evaluating research studies on health effects and providing judgments regarding issues such as appropriate study choice, characterization of effects, and uncertainty factors, among others. Data sources for DfE evaluations include the following:

- Publicly available data obtained from a literature review;
- Data contained in confidential business information received by EPA;
- Structure-Activity-Relationship based estimations from EPA's Pollution Prevention Framework and Sustainable Futures predictive methods; and
- Professional judgment of EPA science experts with decades of chemical review experience.

When IRIS assessments are available, they are a primary consideration for DfE chemical evaluations.

*Question.* If chemical evaluations for DfE are not conducted in a similar fashion, what is the evaluation process and where is it documented?

*Answer.* The DfE approach for conducting chemical evaluations is similar to evaluations in other EPA programs.



## WASTEWATER OPERATIONS—UNDERGROUND PIPE INFRASTRUCTURE

*Question.* Efforts are currently being made by innovative companies to assist small- and medium-sized cities to maximize cost savings and asset management for their underground pipe infrastructure. Efforts involve aggregating data and leveraging information to the benefit of municipalities' wastewater operations and financial planning. What is EPA currently doing to aggressively compliment or incentivize municipalities to embrace this proven, comprehensive, cost savings practice?

*Answer.* EPA has been in the forefront, especially in the area of Asset Management practices, with a whole series of initiatives to assist communities in making more efficient and effective long-term, life-cycle based decisions regarding water and wastewater infrastructure. The key elements in the EPA strategy are based on providing training and knowledge transfer and supporting the development of new tools and techniques to foster better municipal system outcomes. Over the past decade, approximately 60, 2-day "hands-on" workshops have been held with more than 4,500 local water and wastewater personnel attending these training sessions. In addition, EPA has worked closely with the Water Environment Research Foundation to establish a focused research program to address some of the key knowledge questions associated with the aging of our water and wastewater infrastructure. Much of this work is focused on underground pipe infrastructure, where the issues associated with the aging of the networks are most prominent. Finally, a number of State SRF programs have adopted Asset Management related incentives associated with their funding decisions and a few States have started integrating Asset Management requirements into their National Pollutant Discharge Elimination System permit process.

## QUESTIONS SUBMITTED BY SENATOR LISA MURKOWSKI

## INTEGRATED RISK INFORMATION SYSTEM

*Question.* In testimony before the Congress in July, 2011, Environmental Protection Agency's (EPA) Science Advisor stated that the EPA did not intend to implement the reforms identified in chapter 7 of the National Academy of Science (NAS) peer review report on the formaldehyde Integrated Risk Information System (IRIS) assessment for draft assessments that had then been released for peer review but not finalized. Since that time, EPA has also chosen not to implement those reforms to certain draft assessments subsequently released for peer review. EPA's stated rationale for that decision was that NAS did not intend to delay IRIS assessments pending development of program-wide reforms. However, a review of the specific NAS recommendations for improving the formaldehyde assessment demonstrates that they parallel the NAS recommendations for longer-term IRIS reform. Clearly, then, NAS wanted and expected EPA to implement on a chemical-specific basis going forward recommendations comparable to those NAS was recommending that EPA develop over a longer-term for the program as a whole.

Given NAS' conclusion that its recommendations are "critical for the development of a scientifically sound IRIS assessment" and EPA's conclusion that all the NAS' recommendations are warranted, what is EPA's justification for implementing those reforms for some chemicals, like formaldehyde, but not others in like or earlier stages of development than formaldehyde at the time of the NAS report?

In its recent progress report to the Congress on the status of its IRIS reform efforts and elsewhere, EPA has stated that it agrees that all the NAS recommendations are scientifically sound and should and will be implemented by EPA. However, EPA is applying only a few of those reforms to some of the assessments in the pipeline and none of them to others now under development.

*Answer.* EPA agrees with and is implementing the NAS recommendations. Consistent with the advice of the NAS in their "Roadmap for Revision" in chapter 7 of the formaldehyde review report, EPA is implementing the recommendations using a phased approach. Specifically, the NAS stated that "the committee recognizes that the changes suggested would involve a multiyear process and extensive effort by the staff of the National Center for Environmental Assessment and input and review by the EPA Science Advisory Board and others." In implementing the recommendations in a phased approach, EPA is making the most extensive changes to documents that are in the earlier steps of the assessment development process.

For assessments that are in the later stages of development, EPA is implementing the recommendations without taking the assessments backwards to earlier steps of the process. Phase 1 of implementing the NAS recommendations has focused on editing and streamlining documents and using more tables, figures, and appendices.

However, for some assessments, EPA went beyond the changes that were slated for Phase 1 to incorporate changes slated for Phase 2. For example, the final dioxin reanalysis (released as part of the Phase 1 batch of assessments) included:

- Evaluation tables for epidemiology study summaries;
- Health effects study descriptions in an appendix to streamline the main text;
- Graphical and tabular displays of potential points of departure and oral reference dose candidate values; and
- Links to the Health and Environmental Research Online (HERO) database for all citations.

EPA is now in Phase 2 of implementing the NAS recommendations, as evidenced by the recent release of the draft IRIS assessment of ammonia. This assessment represents a major advancement in implementing the NAS recommendations. EPA is using a new document structure, including an executive summary presenting major conclusions, a preamble describing methods used to develop the assessment, distinct sections on Hazard Identification and Dose-Response Analysis, and more tables and figures to clearly present data. Additionally, as part of Phase 2, EPA is addressing all of the short-term recommendations provided by the NAS, including:

- Eliminating redundancy in format to substantially reduce the volume of text;
- Adding a preamble to describe the methods of the assessment;
- Providing detailed information about the literature search and describing how studies were selected for evaluation;
- Using the HERO database to allow public access to all studies considered and cited in the assessment;
- Using standardized evidence tables instead of long text descriptions;
- Conducting a more thorough and standardized evaluation of studies, including strengths and weaknesses;
- Developing a more integrated synthesis of health information organized by toxicological effect, including a discussion of weight of evidence;
- Clearly describing all decision points;
- Presenting candidate reference values for multiple endpoints, where appropriate; and
- Considering the possibility of combining multiple studies or effects for deriving toxicity values, instead of choosing the most sensitive effect.

Phase 3 of implementation, which will begin when EPA convenes a workshop on weight of evidence, will incorporate the longer-term scientific recommendations made by the NAS, including:

- Incorporating a systematic identification of the relevant evidence;
- Developing and utilizing criteria for evaluating the strength of the evidence; and
- Developing language for describing the strength of the evidence of causation so that a standardized approach is used that is comparable among different agents and outcomes.

*Question.* Given EPA's concurrence with NAS' conclusion that all these reforms are critical to scientifically sound assessments, upon what basis has EPA concluded that some assessments now being prepared are more deserving of these reforms than others?

*Answer.* As discussed in the response to question 1, EPA has used a systematic approach to implementing the NAS recommendations in a phased manner based on stage of assessment development.

*Question.* The recommendations are being applied based on the stage of development of the assessment. Thus, those in the earliest stage of development are in Phase 3, while those in the later stages are in Phases 1 and 2. We did this so as not to unduly delay the release of final assessments and to ensure that the effort placed in drafting the document was not lost. This is consistent with the advice of the NAS.

If EPA's basis is that it is important to finalize quickly assessments now in the later stages of development, has EPA concluded that it is more important to get these assessments prepared quickly than it is to get them prepared correctly, that is, in a manner that both EPA and NAS have concluded is critical to scientifically sound assessments?

*Answer.* EPA is working as quickly as possible to finalize assessments. However, quality and correctness of assessments are not being sacrificed for speed.

*Question.* Sound science and independent, open-to-the public, scientific peer review are the cornerstones of the IRIS program and the foundation upon which IRIS is built. Every IRIS assessment that has been finalized has been through rigorous independent external peer review and has been revised to address the peer review comments, ensuring that EPA is using the best-available sound science.

The Board on Environmental Studies and Toxicology of NAS recently informed the Senate and House Appropriations Committees that it had unanimously concluded that in lieu of the two discretionary NAS IRIS assessment peer reviews called for by the conference report language for EPA's appropriation in title II of Public Law 112-74, it would be more productive and valuable for the IRIS program if NAS undertook a comprehensive in-depth review of EPA's IRIS report development process and the changes in that process contemplated by EPA. Do you concur with that conclusion?

Answer. Yes, EPA agrees that it would be more productive and valuable for the IRIS Program if the NAS undertook a comprehensive in-depth review of the IRIS assessment development process in lieu of peer reviewing two draft IRIS assessments. It is most appropriate for the NAS to address broad scientific issues rather than conducting reviews of individual IRIS assessments.

*Question.* EPA is committed to a strong and robust IRIS program. The EPA welcomes NAS' review of the IRIS assessment development process and looks forward to working with the NAS to continue to strengthen the IRIS program.

We have received several reports of newly developed IRIS toxicity values that are well below naturally occurring background levels of the chemicals involved to which the public is routinely exposed. If these values were scientifically valid, wouldn't one expect to find evidence of adverse health effects that to date are not apparent?

Answer. By definition, a reference dose (RfD) is an estimate (with uncertainty spanning perhaps an order of magnitude) of a daily oral exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime. That is, the RfD is the level of exposure that a person could experience every day over their entire lifetime without an appreciable risk of harmful effects. The derivation of an RfD generally includes the use of uncertainty factors that account for limitations in scientific information. Therefore, it is designed to be public health protective. It is expected that a person's exposure to a certain chemical might vary throughout their lifetime, increasing at some points and decreasing at others. Exceeding the RfD for one day, or a week or more does not necessarily mean that an individual has a greater risk of a health effect. As exposure increases above the RfD for prolonged periods, then the potential risk for health effects increases. It is generally not possible to determine an exact exposure level at which the risk of adverse effects will start to increase. Nor is it generally possible to determine exactly how many days of exposure above the RfD it would take to increase the risk of health effects.

In addition, the term "background" may mean different things, such as the production of endogenous compounds or naturally occurring substance. Just because something occurs naturally in the environment does not mean it is without harm. In some cases, naturally occurring substances may lead to adverse health effects in humans. For example, people in certain locations outside the U.S. are exposed to high levels of naturally occurring arsenic in their drinking water. Health effects, such as skin pigmentation and cancer, have been identified in these populations. In most cases, however, well-conducted epidemiological studies have not been performed to evaluate whether adverse effects are occurring at background levels of exposure.

Finally, the human body does not discern between naturally occurring and man-made substances. The toxicity of a chemical is the same regardless of the source, and understanding the toxicity of a chemical, natural or not, makes for better informed decisions.

*Question.* Moreover, in as much as the principal purpose of IRIS assessments is to educate the public and risk managers as to concentrations of chemicals above which unacceptable risks may exist, how useful are these values when they are at levels that risk managers and the public cannot rectify?

Answer. IRIS assessments are useful to risk managers and the public. IRIS assessments provide information on the toxicity of chemicals. Risk managers use IRIS values, along with information about exposure, to characterize the public health risk of chemicals. When making decisions, they also take into consideration other factors, such as statutory and legal considerations, risk management options, public health considerations, cost/benefit considerations, and economic and social factors.

It should also be noted that just because something occurs naturally in the environment does not mean it is without harm. The human body does not discern between naturally occurring and manmade substances. The toxicity of a chemical is the same regardless of the source, and understanding the toxicity of a chemical, natural or not, makes for better informed decisions. It is important that risk managers and the American public have the most up-to-date information on the health effects of chemicals in their environment.

*Question.* When EPA develops a toxicity value that is lower than background levels in such public spaces as urban areas and schools, or at people's homes, does it evaluate the implications of such a value on public perception of safe levels of chemicals and on use of societal resources to address such exceedingly low values?

*Answer.* IRIS assessments provide information on the toxicity of chemicals. When this information is combined with specific exposure information, government and private entities can use IRIS to help characterize the public health risks of chemical substances. When risk managers make decisions, they consider additional information, such as the use of societal resources, statutory and legal considerations, risk management options, public health considerations, cost/benefit considerations, and economic and social factors.

*Question.* The IRIS program is very important to establishing credible cleanup standards that touch many people and organizations. It's very important that these standards be credible and be based on the best-available science. The Congress has asked EPA to implement the NAS recommendations with regard to the IRIS program to restore its credibility. Yet implementation is slow and reports are still moving through the approval process without the benefit of being subjected to the rigor recommended by the NAS. Could you explain why you are pushing through new standards for individual substances absent the sound science approach recommended by NAS?

Again, our goal is to have the best-possible science guide this standard setting.

*Answer.* EPA is using a systematic approach to implementing the NAS recommendations in a phased manner, based on stage of assessment development. Every IRIS assessment that has been finalized has been through rigorous independent external peer review and has been revised to address the peer review comments, ensuring that EPA is using the best-available sound science.

*Question.* IRIS assessments and IRIS toxicity values are not standards. An IRIS human health assessment is a scientific and technical report that provides information on hazard identification and dose response. When information from an IRIS assessment is combined with specific exposure information, government and private entities can use IRIS to help characterize the public health risks of chemical substances. It is during the risk management part of the risk assessment/risk management paradigm that standards are developed. In making risk management decisions, EPA considers the supporting science, as well as statutory and legal considerations, risk management options, public health considerations, cost/benefit considerations, and economic and social factors.

Could you explain why you are willing to have the IRIS program subjected to wide criticism by rushing through standards absent the rigor of an NAS type review?

Many of us on the subcommittee have already heard from constituents that have problems with some of the proposals in the works.

EPA has stated that it does not want its reforms in response to the NAS report to delay issuing of IRIS reports.

*Answer.* IRIS assessments and IRIS toxicity values are not standards. An IRIS human health assessment is a scientific and technical report that provides information on hazard identification and dose response. When information from an IRIS assessment is combined with specific exposure information, government and private entities can use IRIS to help characterize the public health risks of chemical substances. It is during the risk management part of the risk assessment/risk management paradigm that standards are developed. In making risk management decisions, EPA considers the supporting science, as well as statutory and legal considerations, risk management options, public health considerations, cost/benefit considerations, and economic and social factors.

EPA is using a systematic approach to implementing the NAS recommendations in a phased manner based on stage of assessment development. This is consistent with the advice of the NAS in their "Roadmap for Revision" in chapter 7 of the formaldehyde review report. The NAS did not intend for their recommendations to slow down or delay issuing IRIS assessments, but rather noted that "the changes suggested would involve a multiyear process and extensive effort by the staff of the National Center for Environmental Assessment and input and review by the EPA Science Advisory Board and others."

Independent, open-to-the public, scientific peer review is a cornerstone of the IRIS Program. Every draft IRIS assessment is subject to independent, external scientific peer review. Every IRIS assessment that has been finalized has been through rigorous independent external peer review and has been revised to address the peer review comments, ensuring that EPA is using the best-available sound science.

*Question.* Given EPA's statement that IRIS documents do not have regulatory effect and given EPA's existing statutory authority at cleanup sites and for regulatory standards and permitting, are there any specific EPA program needs for IRIS values

that cannot be met through EPA's other existing authorities? If so, please explain these needs. If not, please explain why it is sound public policy not to carry out the NAS recommendations before issuing IRIS values?

Answer. IRIS was designed to develop assessment values for use throughout EPA, and this remains the case. The IRIS program develops health assessments and toxicity values in concert with scientists from across EPA's programs and regions. The toxicity values are then added to the IRIS database for use by EPA's program and regional offices and others. Time and again, EPA's program and regional office have indicated their need and strong support for the IRIS program.

The IRIS program is responsible for developing IRIS health assessments and providing the associated toxicity values in the IRIS database. EPA's program and regional offices determine which toxicity values to use in their work. While we know that IRIS values are widely used, the IRIS program does not track what toxicity values the program offices use in every aspect of their work. The rigorous assessment development process, which includes opportunity for public comment and independent external peer review, ensures that EPA decisions will be based on the best-available science.

#### REGIONAL HAZE REGULATIONS

*Question.* What steps has EPA taken to coordinate more effectively with States on regional haze issues in response to the congressional directive included in the conference report accompanying the fiscal year 2012 Appropriations Act?

Why is EPA rejecting State Implementation Plans that reduce visibility impairment consistent with the Clean Air Act (CAA) and the congressional directive to work with the States?

Answer. Since 1999, EPA has been collaborating with the States and with their regional planning organizations on the development of regional haze plans. Our preference has always been to allow States that are moving forward to complete their work, and then to give due deference to the emission controls decisions that they reach based on accurate technical information. In fact, we have fully approved the plans for the District of Columbia and the following 12 States:

- California;
- Delaware;
- Illinois;
- Kansas;
- Maine;
- Maryland;
- New Hampshire;
- New Jersey;
- Rhode Island;
- South Dakota;
- Vermont; and
- Wisconsin.

All have proposed to fully approve the Alaska, Colorado, Connecticut, Idaho, Massachusetts, and Oregon plans.

In addition, for the following 10 States, we have fully approved the regional haze plans with the single exception that we have adopted a simple "housekeeping" Federal plan to substitute reliance on the Cross State Air Pollution Rule (CSAPR) for these States' earlier decision to rely on the Clean Air Interstate Rule, an approach that will not result in any additional control requirement for any powerplants in these States solely for regional haze purposes:

- Georgia;
- Indiana;
- Iowa;
- Kentucky;
- Missouri;
- Ohio;
- Pennsylvania;
- South Carolina;
- Virginia; and
- West Virginia.

We collaborated with these States on this approach of adopting the CSAPR-based Federal plan. These States do not need to take any further action to meet the current regional haze planning requirements. We fully expect to add Tennessee to this group once the State submits and we approve a revision to its State Implementation Plan (SIP) for a particular source (Eastman Tennessee) so that this source can pursue its preferred approach to the regional haze requirements. We have also relied

on a CSAPR-based Federal plan element in the case of Nebraska, such that Nebraska also does not need to make any changes in its SIP. North Carolina and Alabama need to amend their SIPs to substitute reliance on CSAPR for their original reliance on CAIR, but otherwise we have fully approved their plans.

We have also been collaborating very closely with Florida on staged revisions to its plan to address the fact that Florida cannot rely on CSAPR to meet all of its regional haze requirements for powerplants. We have proposed approval of the revisions submitted to date and anticipate proposing approval of the remaining revisions as they are submitted. Mississippi also could not rely on CSAPR to meet all of its regional haze requirements and therefore we had to disapprove its plan, but we were not required to issue a Federal plan so we did not do so. We are working with Mississippi to help it address this issue within the next 2 years so that a Federal plan can be avoided.

In Arkansas and Louisiana, we could not fully approve the SIP and we were required to take final disapproval action on some portions already, but we were not required to issue a Federal plan so we did not do so. We are working with these States to help them address the disapproval issues within the next 2 years so that a Federal plan can be avoided. The same situation will apply for Utah if we finalize our proposed disapproval of portions of its SIP.

In Hawaii, Montana, and the U.S. Virgin Islands, by mutual agreement we have developed and proposed complete Regional Haze Federal plans because those governments did not have the resources to develop SIPs.

Of the 11 States not mentioned above, final actions remain to be taken on 10 States. For these 10 States, if we do not fully approve the SIP we are required by a consent decree to adopt a Federal plan.<sup>1</sup> Because of this requirement, we have already adopted final partial Federal plans for New Mexico, North Dakota, and Oklahoma. We have proposed to disapprove portions of the SIPs for Arizona, Michigan, Minnesota, Nevada, New York, and Wyoming, and there is not sufficient time remaining for the State to submit new plan revisions. However, we are duly considering the comments received from these States on our proposed disapprovals. Also, we will collaborate with these States if they wish to replace the final Federal plan with a State plan. We have negotiated significant consent decree extensions for portions of the SIPs from Arizona, Washington, and Oklahoma, and for the entire SIP from Texas, and we will take advantage of this time to collaborate with these States.

*Question.* The stringent pollution control equipment being selected by EPA as BART under the Regional Haze Rule is that which would typically be classified as best-available control technology (BACT) or maximum achievable control technology (MACT), which is more stringent than typically would be classified as BART.

What is the basis for this change?

Answer. EPA assesses all regional haze SIPs in accordance with the Regional Haze Rule BART Guidelines, which were issued in 2005. With respect to BART determinations, EPA reviews the State's assessment of each individual source considering five statutory factors. These five factors are:

- the costs of compliance;
- the energy and nonair quality environmental impacts of compliance;
- any existing pollution control technology in use at the source;
- the remaining useful life of the source; and
- the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.

As determinations are made on a source-specific basis considering all of the five factors, there is no promotion of one control technology over another. Similarly, there is no "bright line" as to what the EPA considers to be cost-effective technology nor is there any presupposition that BART is more or less stringent than BACT or MACT would be for affected sources. The magnitude of the visibility improvement expected may warrant greater emission reductions at a higher cost, for example when the visibility improvement is very large. Alternatively, a BART determination may require fewer emission reductions at a lower cost when the visibility improvement is not as significant.

*Question.* EPA's regional haze SIP requirements are found in the Regional Haze Rules (40 CFR 51.300), Appendix Y to Part 51 (Guidelines for BART Determinations under the Regional Haze Rule), and the preamble discussion in the Federal Register (70 FR 39104) concerning Appendix Y. Appendix Y indicates that NO<sub>x</sub> control costs more than \$1,500 per ton are not cost effective for BART purposes.

<sup>1</sup>This distinction in consent decree terms across States stemmed from the interaction of the provisions of the Clean Air Act and the timing of the actions taken by the States to submit their plans, not from any choice on the part of the EPA.

Is EPA no longer relying on Appendix Y presumptive limits, despite being part of the BART guidance relied on by States and companies? If so, what is the justification for this disregard for Appendix Y?

Answer. EPA is still using its guidance on presumptive limits. Appendix Y does not indicate that NO<sub>x</sub> control costs more than \$1,500 per ton are not cost effective for BART. In Appendix Y, EPA states that most sources can meet the presumptive limits for less than \$1,500 per ton, but the guidelines do not establish that value as a threshold for cost effectiveness. States must conduct a proper evaluation of the five statutory factors, as required by 40 CFR 51.308(e)(1)(ii)(A) and section 169A(g) of the CAA, before determining whether the presumptive emission limits are the “best available retrofit controls” for affected units. Because the five factors are evaluated separately and weighted accordingly, there are no “bright line” thresholds for cost effectiveness or visibility improvement.

*Question.* When a State has determined that alternatives (Selective Non-Catalytic Reduction technology or combustion controls, such as Low NO<sub>x</sub> Burners) could achieve visibility improvements at much lower cost with visibility benefits that are on a reasonable path to the 2064 goal, what is EPA’s legal justification for requiring different, more expensive retrofit controls and more stringent emissions limits?

Answer. The overarching goal of section 169A of the CAA is for States to submit SIPs that ensure reasonable progress toward remedying visibility impairment in Class I areas. Each SIP must include the measures necessary to make reasonable progress, including BART limits (or alternatives that achieve greater reasonable progress than BART). Section 169A of the CAA defines the BART requirements as “an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted” by a BART eligible facility, and requires that States consider five factors when assessing a control determination for BART:

- the costs of compliance;
- the energy and nonair quality environmental impacts of compliance;
- any existing pollution control technology in use at the source;
- the remaining useful life of the source; and
- the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.

In considering these five factors, States must use technically sound approaches in estimating costs and visibility improvements. Assuming that a State does this, the BART requirement is satisfied by putting in place emission reduction measures that are reasonable in light of the costs and visibility benefits associated with a control technology, not by any presumed path between current conditions and natural conditions.

*Question.* The EPA Air Pollution Control Cost Manual, Sixth Edition, was published in 2002 and has been used by EPA in estimating costs in its BART determinations.

Given that it was published in 2002, is it out-of-date? What steps are being taken by EPA to update it?

Answer. The current version of the Control Cost Manual is the sixth edition. Revisions of the Control Cost Manual usually include either publication of new chapters or substantial revisions to existing ones. Given the size of the Control Cost Manual (18 chapters) and the reliance by many parties on its contents, EPA limits completion and publication of new editions to avoid confusion on the State of the contents.

The current version of the Control Cost Manual includes a well-recognized control cost methodology that provides consistency for States and local agencies in reviewing cost estimates prepared for BART and other programs, and offers a foundation for the comparison of cost estimates prepared by different sources in different locales. This methodology is still well-recognized and valuable today. It should be noted that a major reason for EPA disapproval of cost estimates included in Regional Haze SIPs has been the failure to follow the methodology for cost estimation provided in the Control Cost Manual by either including items that are not part of this methodology or not including all cost items. EPA has no reason to believe that the methodology for cost estimation is out-of-date.

*Question.* How does EPA, a State, or a company integrate current cost information for purposes of regional haze compliance planning with the methodology prescribed by EPA’s 2002 cost manual?

Answer. The Control Cost Manual has considerable cost and other information (design and installation, to name two) to serve as a basis for the preparation of BART analyses. However, we want to be clear that the Control Cost Manual is not the only source of cost information for a BART analysis. For instance, the reference to the Control Cost Manual in the BART Guidelines, which is an important basis

for cost analyses to be done for Regional Haze SIPs, clearly recognizes the potential limitations of the Manual and the need to consider additional information sources.

A source can use data supplied by an equipment vendor or firm (i.e. quotes, bids, or budget estimates) as cost information for a BART analysis. The basis for using these data should be clearly documented, either by the equipment vendor or firm or by a referenced source (e.g., the Control Cost Manual or other recognized source of cost information). Thus, where the Control Cost Manual's information is valuable and up to date for use in BART analyses, then it should be used; where additional equipment cost data is needed to overcome any limitations with the Control Cost Manual's data, such information should be clearly documented as previously expressed, and should be provided to support analyses using the Control Cost Manual's methodology.

*Question.* Given that the Regional Haze program is a program to protect the aesthetics of national parks and national wilderness areas, and not human health, should the required visibility improvement be discernible?

*Answer.* Failing to consider less-than-perceptible improvement in visibility impairment would ignore the CAA's intent to have BART requirements apply to sources that contribute to, as well as cause, such impairment (70 FR 39104; RH Regulations and Guidelines for Best Available Retrofit Technology (BART) Determinations, July 6, 2005). A perceptible visibility improvement is not a requirement of the BART determination as a visibility improvement that is not perceptible may still be determined to be significant. The importance of visibility impacts below the thresholds of perceptibility from each of a number of individual sources cannot be ignored given that regional haze is a problem that is produced by a multitude of sources and emissions that are distributed across a broad geographic area.

*Question.* EPA has used CALPUFF Version 5.8 to conduct visibility modeling to analyze the impacts on visibility impairment from proposed NO<sub>x</sub> retrofit technologies.

How does EPA respond to scholarly, peer-reviewed studies asserting that CALPUFF Version 5.8 overestimates visibility improvements?

*Answer.* While the studies mentioned are stated to be peer-reviewed, they are largely papers included as part of general proceedings at conferences, as opposed to a formal peer review associated with submission to scientific journals. Therefore, we do not consider these references suitable for establishing the validity of a model or demonstrating that a model has undergone independent scientific peer review in accordance with EPA's Guideline on Air Quality Models (published as Appendix W to 40 CFR part 51). These guidelines, which oversee the EPA's approach to updating air quality models, require that studies supporting the air quality model's validity be appropriately peer-reviewed through publication in a professional journal, a panel review by subject experts, or other formal and well-documented process.

That said, in promulgating the BART guidelines, the EPA made the decision to recommend the use of the CALPUFF model to estimate the 98th percentile visibility impairment rather than the highest daily impact value as proposed. This decision acknowledged that the regulatory version of the CALPUFF model could lead to modeled over predictions and, therefore, provide conservative (higher) results for peak impacts.<sup>2</sup> The decision to use the 98th percentile rather than the highest daily value is EPA's adjustment to account for potential overestimates.

*Question.* What does EPA need to do to update CALPUFF Version 5.8? Is this underway?

*Answer.* In coordination with the Federal Land Managers (FLMs), EPA is currently pursuing updates to the current regulatory version of CALPUFF (Version 5.8) to address known "bugs" and expects to complete these updates later this year. EPA and FLM representatives met with WEST Associates and the model developer, TRC, in February 2011 and discussed the current status of the regulatory version of CALPUFF and the updates implemented by TRC related to underlying model formulation and to account for atmospheric chemistry. The information provided to EPA at that meeting indicated that the planned updates account for new science related to complex chemistry reactions in the atmosphere. Because this is a regulatory application for which this model was never approved under Appendix W, these changes would necessitate a notice and comment rulemaking and not a simple update as previously done to address bug-fixes.

At this time, EPA and the FLM representatives are planning to review all available models to determine their suitability for these analyses, including updated

<sup>2</sup>"Most important, the simplified chemistry in the model tends to magnify the actual visibility effects of that source. Because of these features and the uncertainties associated with the model, we believe it is appropriate to use the 98th percentile—a more robust approach that does not give undue weight to the extreme tail of the distribution." 70 FR 39104, 39121.



versions of the CALPUFF modeling system. After review of public comment from EPA's 10th Modeling Conference, EPA will provide more concrete plans on the process and plans for updating Appendix W to address chemistry for individual source impacts on ozone, secondary PM<sub>2.5</sub> and regional haze/visibility impairment.

*Question.* Why is EPA not allowing the use of more recent versions of CALPUFF, such as Version 6.4?

*Answer.* The newer version(s) of CALPUFF have not received the level of review required for use in a regulatory context. Based on EPA's review of the available evidence, the models have not been shown to be sufficiently documented, technically valid, and reliable for use in a BART decisionmaking process. Because of documented concern with the science updates in the new CALPUFF versions, which affect air quality related values, EPA has not approved these new versions of the CALPUFF model as a "preferred" model. The use of the regulatory version is approved for increment and NAAQS analysis of primary pollutants only. Currently, CALPUFF Versions 6.112 and 6.4 have not been approved by EPA for even this limited purpose.

Under the BART guidelines, CALPUFF should be used as a screening tool and appropriate consultation with the reviewing authority is required to use CALPUFF in a BART determination as part of a SIP or FIP. Moreover, Appendix W does not identify a particular modeling system as "preferred" for modeling conducted in support of State implementation plans under 40 CFR 51.308(b) nor for supporting secondary particulate matter or visibility assessments. Under this general framework, EPA followed the general recommendation in Appendix Y to use CALPUFF as a screening technique only subject to Appendix W requirements, which include an approved protocol for using the current 5.8 version.

Furthermore, it should be noted, that the U.S. Forest Service (USFS) and EPA review of CALPUFF (Version 6.4) results for a limited set of BART applications clearly indicates that the lower results are driven by two input assumptions and not associated with the "improved chemistry." Use of the "full" ammonia limiting method and finer horizontal grid resolution are the primary drivers in reducing modeled visibility impacts in CALPUFF (Version 6.4). These input assumptions have been previously reviewed by EPA and the FLMs and have been rejected based on lack of documentation, adequate peer-review, and technical justification and validation.

*Question.* In its cost estimates, it appears that EPA is substituting the judgment of its experts, the National Park Service, and USFS for the cost judgments of the States, utilities and most notably expert engineering firms. For example, EPA's cost estimates are significantly lower than the cost estimates prepared by Black and Veatch, Sargent and Lundy, and Burns and McDonnell—each of whom is actively engaged in the business of designing and retrofitting Selective Catalytic Reductions (SCR) and other pollution control equipment on existing powerplants.

What is the legal authority for EPA's lower cost estimates?

What is the legal authority for rejecting cost estimates based on actual construction experience and market-supported bid documents?

*Answer.* When reviewing State plans, EPA must consider all the cost information in the record. However, it would be arbitrary and capricious for EPA to accept submitted cost information without any analysis of its accuracy or consideration of significant issues raised in comments. It would also be arbitrary and capricious for EPA to simply reject cost estimation studies submitted by a State or source, and we have not done so to date. Where EPA has itself estimated the cost of control, this is because of specific flaws in the cost estimate submitted by a State, and both our finding that there were flaws and our own cost estimates have then been subject to public notice and comment.

*Question.* How is EPA taking into account the impact of higher elevations present in the Western United States over those in the Eastern United States in its regional haze retrofit technology decisions, and what is the effect of higher elevations on the operation of SCRs?

*Answer.* A retrofit SCR at high elevation could require a somewhat larger unit than what might be required at lower elevations. Any differences in costs necessary for larger units would be part of the factors considered in making the BART determination. For example, in the case of the San Juan Generating Station in New Mexico, which is at a particularly high altitude compared to other powerplants, we modified our original cost estimates to increase SCR costs in response to comments from the owners of the station on this particular point. Cost estimates submitted by other Western States, often prepared by the affected sources, have not always included an explicit cost adjustment for this possibility.

*Question.* How is EPA taking into account retrofit challenges associated with congested site and equipment layouts of individual facilities in its cost estimates of SCRs?

How is EPA taking into account the need for an affected utility company to move and relocate previously installed pollution control equipment in order to accommodate SCRs?

Answer. Where the State has provided reasoned cost estimates of equipment staging and other operational or logistical concerns in installing retrofits, EPA adopts and approves the State's figures when evaluating a SIP for approval. In cases where EPA must estimate these costs independently, EPA relies on its engineering judgment and experience to make reasoned cost estimates. In some instances, EPA has conducted site visits and revised its estimates to accommodate spacing concerns and in another case, has invited public comment to better estimate costs and compliance timing concerns for a source that was faced with several SCR retrofits.

*Question.* In computing the cost per ton of emission reductions expected to result from adding new controls on a unit, what is the legal justification for EPA lowering its cost effectiveness determinations by including reductions already achieved by emission controls that already exist on that unit?

For example, if Low NO<sub>x</sub> Burners already exist on a unit, why does EPA assume that emission reductions resulting from those Low NO<sub>x</sub> Burners should instead be attributed to new SCR controls and thus result in lower dollars per ton removed amount for the SCR controls?

Answer. These questions address the distinction between what is commonly referred to as average versus incremental cost effectiveness when evaluating the cost factor for the BART determination. Average cost effectiveness is the overall cost per ton of implementing a given control option compared to the control (if any) that is in place now or was in place as of some historical baseline date. Incremental cost effectiveness is the marginal cost per ton of implementing each succeeding and more stringent control option. Usually, incremental cost/ton will be higher than average cost/ton. The BART Guidelines recommend consideration of both types of cost effectiveness metrics when making a BART determination. It is a misperception that EPA considers only the average cost effectiveness when reviewing regional haze SIPs, i.e., that we give credit to SCR for emission reductions that could be achieved by Low NO<sub>x</sub> burners. The records of our actions on regional haze SIPs document that EPA has considered both metrics when reviewing whether a State has made a technically correct and reasoned BART determination, or when EPA makes a BART determination. When we use BART outcomes that have been decided in other States or for other sources in the same State as benchmarks for what costs are reasonable, we logically compare incremental cost/ton values to incremental cost/ton values, and average cost/ton values to average cost/ton values. EPA does not use a bright line test for either the average or the incremental cost/ton.

*Question.* CAA requires reasonable progress toward the goal of reducing regional haze at national parks and wilderness areas for 2064.

If EPA requires the most stringent pollution reduction equipment on nearby coal plants today, what steps will be left to take in the future to achieve this goal?

Answer. In the regional haze rule, EPA recognized the relatively long time horizon necessary to achieve the aggressive statutory goal of the prevention of any future, and the remedying of any existing, impairment of visibility in Class I areas. CAA, however, neither requires States to achieve that goal by 2064 nor does it excuse States from adopting reasonable measures that would achieve the goal more quickly. EPA adopted an analytical requirement in the regional haze rule requiring States to consider the measures necessary to achieve the national goal by 2064. The adoption of this analytical requirement does not mean that States should delay the adoption of reasonable measures such that the national goal is not achieved until 2064.

States must adopt, in their SIPs, the measures necessary to make reasonable progress, which is defined as the emission reduction measures that are reasonable to put in place in a given planning period in light of costs and visibility benefits, not by any presumed path between current conditions and natural conditions. Given the significant impact on visibility from many coal plants and the highly cost effective control measures, in many cases the installation of controls on coal plants is appropriate to ensuring reasonable progress. Even with such measures, much additional work will still be necessary in future planning periods to meet the national goal.

#### INFORMATION TECHNOLOGY EQUIPMENT—EXECUTIVE ORDER 13514

*Question.* Executive Order 13514 requires the Federal Government to purchase energy-efficient computer equipment that has been approved by Electronic Product Environmental Assessment Tool (EPEAT). EPEAT is a proprietary list owned by the Green Electronics Council (GEC), which certifies information technology equipment

to the Institute of Electrical and Electronics Engineers (IEEE) 1680 standard. GEC charges six-figure fees to manufacturers to certify that their equipment is compliant with IEEE 1680 and eligible for government purchase. Other testing labs have indicated that they are capable of certifying products to IEEE 1680 at a much lower price.

Is EPA taking any steps to allow for competition, which will reduce the prices that the Government pays for computer equipment?

Answer. EPA is not responsible for the management of EPEAT or GEC, but EPA has a representative on the EPEAT Advisory Council who, in that capacity, has opportunities to provide suggestions to the GEC on ways to improve this green purchasing tool.

Through its role on the EPEAT Advisory Council, EPA has communicated, and the GEC has recognized, the value of increasing competition for verification services under the EPEAT Program. In May 2012, the GEC entered into a formal partnership with four third-party certification organizations to expand the breadth and depth of verification options available to manufacturers under the EPEAT program. These organizations—UL Environment, Intertek, VDE, and DEKRA SE—just took part in an extensive training GEC organized on the EPEAT system in preparation for their verification of products on the EPEAT Registry. For further information, please see <http://www.epeat.net/pre-network>.

By way of clarification, the GEC utilizes a sliding scale under which the annual fees that manufacturing companies pay for verification services are calibrated according to their sales volume. Thus, smaller firms with lower sales volume pay significantly less in annual fees than do firms with higher sales. For further information about fees, please see <http://www.epeat.net/documents/subscriber-resources/epeat-mse-1680.1-fee-schedule.2011-12.pdf>.

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#### QUESTIONS SUBMITTED BY SENATOR JOHN HOEVEN

##### FORT BERTHOLD RESERVATION

*Question.* The Environmental Protection Agency's (EPA) Synthetic Minor Source rule has the potential to shut down oil and gas drilling on the Fort Berthold Reservation if a workable rule is not finalized by August 30, 2012. Will EPA have a rule finalized by August 30 to ensure the economic activity continues on the Fort Berthold Reservation? If a plan is not finalized by August 30, how will EPA provide a pathway to compliance for operators to ensure drilling will continue on the Reservation?

Answer. In responding to the question, EPA assumes that the "Synthetic Minor Source rule" refers to the Review of New Sources and Modifications in Indian Country Rule (also known as the Tribal Minor New Source Review Program) published July 1, 2011 (76 FR 38748). EPA does not believe there is the potential to shut down oil and gas drilling on the Fort Berthold Reservation. In fact, just the opposite is true. For projects in Indian country that exceed major source thresholds, EPA has now made "synthetic minor" permits available. This streamlined permitting mechanism has previously been available in States, but only became available in Indian country with the publication of the Tribal Minor New Source Review (NSR) Program. Without this streamlining mechanism, oil and gas drilling projects on Fort Berthold that exceed major source thresholds would be subject to permitting under the Prevention of Significant Deterioration (PSD) Program.

Ten companies operating on the Fort Berthold Reservation are currently subject to consensual enforcement agreements for drilling operations that may have been conducted without first obtaining the appropriate permits. EPA is actively working with these companies to amend their agreements to allow construction of new wells during July and August of 2012 without first obtaining synthetic minor permits from EPA. This action will effectively protect the companies through the end of August 2012, when the agreements expire.

We recognize that additional measures are necessary to maintain the continued pace of development of oil and gas resources on the Fort Berthold Reservation. To accomplish that goal, EPA, in consultation with the tribes and the Fort Berthold Reservation operators, is developing a targeted rule for the Fort Berthold Reservation that would provide enforceable controls on specific oil and gas production equipment. For the large majority of oil production sources, these controls are likely to be sufficient to limit emissions to below the major source PSD thresholds. EPA also proposed synthetic minor permits for several of these sources. These proposed permits and the comments received regarding them have informed the rule development.

EPA has committed to develop the Tribal Minor NSR rule in a timely manner. Management in both the regional and headquarters offices fully support this effort and have already committed substantial technical and legal staff resources to the rule. To date, there have been no permit-related delays in the development of new oil wells on the Reservation. If Fort Berthold operators desire an added layer of insurance against operating delays or interruption of activities they are encouraged to file synthetic minor permit applications for equipment they intend to operate in the near term after August 30, 2012. EPA does not believe this added insurance is necessary, but will process quickly any permits that it receives.

PERMITTING GUIDANCE—DIESEL FUEL AND HYDRAULIC FRACTURING

*Question.* May 4, 2012, EPA released draft permitting guidance for using diesel fuel in oil and gas hydraulic fracturing.

How is EPA going to enforce this guidance with States that have primacy?

*Question.* In a State with Underground Injection Control primacy, will EPA have the ability to over-file against a company that does not permit a well that uses diesel?

*Answer.* EPA's draft permitting guidance for diesel fuels hydraulic fracturing was directed at EPA permit writers where EPA is the enforcement authority. As indicated in the draft guidance, it also sets forth EPA's best current interpretation of the existing statutory and regulatory requirements with respect to diesel fuels hydraulic fracturing, and, therefore, may be useful to States. States with primacy for the Class II Underground Injection Control program have some latitude in designing a permitting program for diesel fuels hydraulic fracturing. While in some cases the EPA may have the authority to bring an enforcement action in a primacy State, it is not the EPA's intention to assume the role of State primacy agencies.

PERMITTING GUIDANCE—DIESEL FUEL AND HYDRAULIC FRACTURING

*Question.* Please identify what is the source of dollars EPA is using to complete the study identified by the Congress in EPA's fiscal year 2010 budget?

*Answer.* EPA is using the funds that the Congress appropriated through the Science and Technology (S&T) appropriation in fiscal years 2010, 2011, and 2012 to continue to study the relationship between hydraulic fracturing and drinking water as specified in the 2010 Senate Appropriations Committee conference report.

*Question.* Please identify the source of dollars the EPA is using for any other study of hydraulic fracturing the EPA is a party.

*Answer.* Currently, we are not doing any hydraulic fracturing research outside of the fiscal year 2010 "Plan to Study the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources". EPA will continue to use the drinking water research S&T appropriated funds to complete this study.

*Question.* Please identify the source of funds for each individual study.

*Answer.* The only hydraulic fracturing study EPA is conducting is the fiscal year 2010 congressionally requested, "Plan to Study the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources." All current hydraulic fracturing research falls under the purview of this study plan. EPA will continue to use the drinking water research S&T appropriated funds to complete this study.

SUBCOMMITTEE RECESS

Senator REED. If there are no further questions, I will conclude the hearing.

[Whereupon, at 12:07 p.m., Wednesday, May 16, the subcommittee was recessed, to reconvene subject to the call of the Chair.]