

NATIONAL PETROLEUM RESERVE

HEARING
BEFORE THE
COMMITTEE ON
ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE
ONE HUNDRED TWELFTH CONGRESS
SECOND SESSION

TO
PROVIDE OVERSIGHT ON REMEDIATION OF FEDERAL LEGACY WELLS
IN THE NATIONAL PETROLEUM RESERVE-ALASKA

JULY 12, 2012



Printed for the use of the
Committee on Energy and Natural Resources

U.S. GOVERNMENT PRINTING OFFICE

76-612 PDF

WASHINGTON : 2012

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
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NATIONAL PETROLEUM RESERVE

THURSDAY, JULY 12, 2012

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

The committee met, pursuant to notice, at 9:36 a.m. in room SD-366, Dirksen Senate Office Building, Hon. Jeff Bingaman, chairman, presiding.

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

The CHAIRMAN. OK. Why don't we call the hearing to order?

Today, the Committee on Energy and Natural Resources will have a hearing on the issue of Federal oil and gas legacy wells in the National Petroleum Reserve-Alaska. This is an issue that, of course, Senator Murkowski has had a great interest in and urged us to have the hearing.

The NPRA has an interesting history, having been first designated as a Naval petroleum reserve by President Harding in 1923 for defense purposes. The U.S. Navy, and subsequently the U.S. Geological Survey, undertook exploration drilling from the period 1944 until 1982. As a result, 136 so-called legacy wells and boreholes are located within the NPRA. Jurisdiction over the NPRA was transferred from the Navy to the Department of the Interior by legislation in 1976.

According to information provided by the BLM, of the 136 legacy exploration wells and borehole sites, 41 legacy wells remain. The agency continues to monitor site conditions. According to BLM, the agency has done significant work on wells that have been subject to coastal erosion in an effort to avoid increased risk to public health and to the environment.

I understand that obtaining the resources necessary to remediate these sites has been a challenge. In this time of fiscal constraint, securing adequate appropriations for this effort is difficult. I am told that the base level of appropriations for legacy well remediation in the NPRA in recent years has not been high.

However, I am glad that over \$16 million has been made available under the Recovery and Reinvestment Act to remediate the Drew Point well site. I know that emergency authority has also been invoked in the past by the BLM in order to address problem well sites.

So we thank the witnesses for traveling as far as they have to offer testimony today. I look forward to hearing from them. Let me defer to Senator Murkowski for her comments.

**STATEMENT OF HON. LISA MURKOWSKI, U.S. SENATOR
FROM ALASKA**

Senator MURKOWSKI. Thank you, Mr. Chairman. I truly appreciate you scheduling this very important hearing this morning.

This is important to Alaska, but I think from a larger perspective it's important because I think it speaks to the commitment that the Federal Government should have when it comes into a State and operates and then leaves. I think we all assume that there is a responsibility to be a, quote, "responsible operator." In this instance, I think we have seen some failures here, so the opportunity to speak to that and to what the potential solutions are, I think, is important.

I'd like to take a moment and thank our witnesses that are here today. We have the BLM Alaska Director, Mr. Bud Criphey. We have from the State Legislature our Representative, Charisse Millett, from the Anchorage area. We also have the Alaska Oil and Gas Commission Chair, Cathy Foerster—all who have traveled here today to testify before the committee.

I thank you for making the long trek. The good news for you is it's not as hot now as it was last week. So you'll be able to survive this brief visit back here.

I also want to take a moment to recognize North Slope Borough Mayor Charlotte Brower. The mayor couldn't be with us here today. She is from Barrow, Alaska. But this is, of course, a very important issue to Mayor Brower and the folks in the North Slope Borough. The mayor had asked that I read a very brief statement into the record on her behalf. She states as follows:

"As a cooperating agency with BLM, the North Slope Borough must be a part of the process to prioritize and address the impacts of oil and gas exploration. Just a few months ago, I was in Washington, DC, and met with then Director Abbey and raised our issues of concern with this process of cleaning up the legacy wells left behind after the Navy and USGS exploration process.

"He stated that BLM is committed to capping these wells, but it is a, quote, 'unfunded mandate,' close quote. The Federal Government wishes to act as steward of the land in Alaska, often telling Alaskans and residents what they can or cannot do on the land. Yet here is an example of the same government failing to fulfill the most basic of responsibilities as the landowner.

"Residents want to develop the resources, but they also want to do so responsibly. The residents of the NPRA and the North Slope Borough that rely on the planning area for subsistence must be assured that they are not exposed to harmful levels of oil development associated contaminants, contaminants, and that they will be protected against a range of contaminant associated disorders.

"Reassurance to our communities of continued safety of subsistence resources will foster the continued viability of the subsistence diet and way of life. It will also reinforce our common goal of environmentally responsible development of the oil and gas resources in the area. This we can do by working together."

That's the comment from Mayor Brower.

Mr. Cribley, I really do appreciate you taking the time to come here today. But I also recognize that you get it. You understand the situation and the problem in Alaska. It probably would have been

more cost effective for us if we had had some of the folks from the BLM office here in DC testifying on this issue.

I know from numerous meetings on this topic that you recognize the problem. I would be surprised if you told me that you have not personally pushed for increased funding from your superiors to remediate these leaking wells. So I think the message needs to be relayed very clearly that we want to hear directly from those here in Washington in terms of what they anticipate the schedule will be.

I want to emphasize to my colleagues how dire the situation in the National Petroleum Reserve-Alaska really is and, I think, shed a little bit of light on the hypocrisy hypocrisy that is on display here in the Federal Government. As the chairman has noted, there were 136 wells that were drilled in NPRA over a period of many decades. Only 16 of those 136 wells have been properly plugged. Seven were taken care of by the North Slope Borough, not by BLM. The remaining 120 wells are in various conditions of non-compliance with State law. There's 3 missing wells, one of which is under a land slide at the edge of the Colville. The two others are at bottoms of lakes where remediation is going to be tough to get to.

I think we recognize that this is a costly process. It doesn't come cheap. But, again, when you think about the standards that others are held to and held accountable for, it's only right, it's only appropriate that the Federal Government be held to those same standards.

This is the same Federal Government and Department of Interior who has held private industry to the highest of standards with regard to environmental protection, as they should. Alaskans want responsible development and exploration, but not at risk of the environment.

I commend the private industry, as they have worked with the Federal Government to meet the high standards. But the question really has to be asked: Why, then, should the Federal Government not have to live up to those same standards?

When you couple this failure in the NPRA with other broken promises by the Federal Government to Alaskans, I think it really pushes and strains the relationship that Alaskans have with our own government. I must say I'm having a bit of a difficult time reconciling the fact that DOI is unable—they say they are unable to fund well remediation efforts within NPRA, even though funding for the Land and Water Conservation Fund continues to increase. Not only does each land management agency have staggering maintenance backlogs, but Interior as a whole, I think, has more pressing needs than purchasing additional land.

Alaskans are united on this issue. I commend you, Representative Millett, for taking the lead on this and pushing it. I know that other members of this committee share my concern for cleaning up the ongoing environmental pollution within the NPRA.

Again, I thank you all for being here, and I thank the chairman for his commitment to work with us on this issue.

The CHAIRMAN. All of you have been essentially introduced. Why don't we start with you, Mr. Cribley? If you'll give us the BLM perspective on this, and then Ms. Millett and then Ms. Foerster—we'll be glad to hear from all of you. Each of you take 5 or 6 minutes,

tell us what you think we need to know, and then we'll have some questions.

STATEMENT OF BUD CRIBLEY, ALASKA STATE DIRECTOR, BUREAU OF LAND MANAGEMENT, DEPARTMENT OF THE INTERIOR

Mr. CRIBLEY. Thank you, Mr. Chairman. Before I begin my oral testimony, I would like to take this opportunity to thank you, Chairman Bingaman and Senator Murkowski, for taking time out of a very important schedule to recognize the significance of this issue and take it to a national forum.

I'd also like to recognize State Representative Charisse Millett and also Chairman Cathy Foerster for the work that they have done in Alaska to bring this issue up and provide an opportunity for a dialog on it. It's a very important issue to us in Alaska and I know nationally to the Bureau. So thank you.

With that, I would like to thank you for the opportunity to discuss the Bureau of Land Management's role in remediating legacy wells in the National Petroleum Reserve in Alaska. NPRA is a 23 million acre roadless area located 200 miles north of the Arctic Circle. This remote, treeless, and mostly frozen landscape exists in a sensitive ecological balance. It is rich in resources and holds significant potential for oil and gas production.

The Arctic ecosystem supports caribou, water fowl, shore birds, polar bear, walrus, and other marine mammals. It is home to a people who have inhabited it for over 8,000 years and depend upon it for its subsistence. Within the NPRA, the BLM manages surface and subsurface resources and the legacy wells. The legacy wells are 136 test wells and boreholes drilled by the Navy and the United States Geological Survey from 1943 to 1982. They are drilled to evaluate the use of modern petroleum exploration and production methods in Arctic conditions.

The BLM priority is to protect public health, safety, and the environment through the remediation of the legacy wells. The agency actively monitors site conditions and directs available funding to address sites that pose a potential risk.

The BLM has plugged and remediated 18 legacy wells. In addition, one well was plugged by the U.S. Navy. Eighteen wells were partially plugged and currently managed by the USGS to monitor climate change. Twenty-four have been transferred out of Federal ownership, and 34 are uncased boreholes drilled for geologic and permafrost research. The BLM actively monitors conditions on the remaining 41 legacy well sites.

In 2004, the BLM completed an inventory and analyzed the risk associated with each of the legacy wells. The report identified a number of wells that posed a potential risk and determined other sites present no significant threat. The information from the inventory guided the BLM's decision to direct funding to plug wells at sites that posed the greater risk, including a series of wells located near Umiat, a town on the southeastern boundary of the NPRA. Umiat's proximity to an airstrip, fuel supplies, and camp facilities and other infrastructure significantly reduced the cost to bring people, equipment, and materials into the area for a remediation project.

The BLM also responded when a series of Arctic storms caused a large area of coastal shoreline to calve into the ocean and placed 4 legacy well sites in danger of eroding into the Beaufort Sea. The BLM secured emergency funding and plugged the wells threatened by coastal erosion, including the JW Dalton legacy well site, where more than 300 feet of shoreline had eroded, exposing the well head.

Moving forward, the BLM will continue to monitor legacy wells and will plug and remediate wells that present a potential risk. To guide our efforts, BLM will complete an updated legacy well summary report and strategic plan in this fiscal year. The plan will outline the agency's potential for plugging the remaining legacy well sites.

In preparing the updated report, the BLM is working with the Alaska Oil and Gas Conservation Commission to come to a common understanding of the status and condition of the wells and to consider their recommendations on priority sequencing. The BLM has shared individual legacy well file information with the AOGCC and expects to receive the results from their review in September.

In the meantime, BLM has developed cost estimates and a proposed plan to plug the Iko Bay Well No. 1 and two other wells. The BLM is also developing a draft multi-season strategy to address an additional 13 legacy wells over 3 seasons.

The BLM recognizes the importance of remediating legacy wells in the NPR-A. The agency remains committed to directing available funding to plug and remediate the remaining legacy wells in order to protect health, safety, and the environment. The agency also recognizes the importance of working collaboratively with the State of Alaska, native corporations, tribal governments, and other partners, including the Alaska Oil and Gas Commission, to accomplish this strategy.

I'll be glad to answer any questions. Thank you.
[The prepared statement of Mr. Cribley follows:]

PREPARED STATEMENT OF BUD CRIBLEY, ALASKA STATE DIRECTOR, BUREAU OF LAND
MANAGEMENT, DEPARTMENT OF THE INTERIOR

Introduction

Thank you for the opportunity to discuss the role of the Bureau of Land Management (BLM) in the remediation of legacy wells in the National Petroleum Reserve in Alaska (NPR-A). The BLM is responsible for the management of 136 test wells and reserve pits in the NPR-A that were drilled, but not closed, by the U.S. Navy and Federal civilian agencies from 1943 to 1982. The BLM's priority is to protect human health and the environment through the remediation of the legacy wells. The agency actively monitors site conditions and directs available funding to address sites that pose a potential risk.

Background

The NPR-A is a 23 million-acre roadless area located 200 miles north of the Arctic Circle. This remote, treeless, mostly frozen landscape exists in a sensitive ecological balance. It is rich in both renewable and nonrenewable resources, including one of the most prolific geologic systems on the North American continent. Portions of the NPR-A hold high potential for oil and gas production. The area also features recreational and cultural values, including more than 1,000 historic and prehistoric sites, and Arctic wetland ecosystems, riverine habitats and upland areas that support caribou, waterfowl, shorebirds, polar bear, walrus, and other marine mammals. Furthermore, the area is home for a people who have inhabited it for 8,000 years and depend upon it for subsistence.

Petroleum exploration in the NPR-A has been ongoing for nearly 100 years. In the early 1900s, field geologists from the United States Geological Survey (USGS) exploring the North Slope of Alaska found several oil seeps in this area. Their dis-

covery prompted President Warren G. Harding to set aside this portion of Alaska's North Slope as an emergency oil supply for the U.S. Navy. President Harding established the Naval Petroleum Reserve No. 4 (NPR-4) by Executive Order in 1923. During early exploration programs, the U.S. Navy (1944-1953) and the U.S. Geological Survey (1975-1982) drilled 136 exploratory wells and boreholes at depths ranging from 100 to 20,335 feet. Now called "legacy wells," these exploratory wells and boreholes were drilled to establish the feasibility of using modern petroleum exploration and production methods in Arctic conditions. Naval Petroleum Reserve No. 4 was renamed the "National Petroleum Reserve in Alaska," and administration of the area was transferred from the U.S. Navy to the U.S. Department of the Interior, under the Naval Petroleum Reserves Production Act of 1976 (P.L. 94-258, 90 Stat. 303).

The BLM, an agency of the Department of the Interior, is responsible for protecting the resources and managing the uses of our nation's public lands, which are located primarily in 12 Western states, including Alaska. Within the NPR-A, the BLM is responsible for the management of the surface and subsurface resources which includes the legacy wells and reserve pits.

Since 1952, 19 wells have been plugged. The U.S. Navy plugged 1 well in 1952. The BLM began its plugging efforts in 2002 and has plugged 18 wells, remediated contaminated soils where necessary, and removed surface debris; another 18 wells are partially plugged and are used and managed by the U.S. Geological Survey (USGS) as climate change monitoring wells; 24 are on land that has been transferred out of Federal ownership; and 34 are uncased or partially cased boreholes drilled for geologic strata and permafrost research. On the remaining 41 legacy well sites, the BLM actively monitors site conditions.

Inventories, Assessment & Remediation

In 2004, the BLM completed an inventory and reviewed the condition and analyzed the risk posed to humans and the environment from the legacy wells. The inventory identified a number of legacy wells that posed a potential risk to public health, safety and the environment, and determined that many other sites presented no significant threat. The information from the assessments allowed the BLM to direct funding and attention to plug wells and remediate surface soils at sites that posed the greatest risk, while continuing to monitor conditions at the other sites. Costs for remediation vary dramatically depending on the proximity to infrastructure and the level of soil remediation necessary.

Umiat

Based on the priorities identified in the 2004 report, the BLM plugged a series of wells located near Umiat, addressing concerns with surface contamination and well condition. Umiat's proximity to infrastructure, including an airstrip, fuel supplies, and camp facilities, significantly reduced the cost to bring people, equipment, and materials into the area and to remove contaminated soils and surface debris from the area. In 2012, the BLM plugged two legacy wells near Umiat for \$3.5 million.

Response to Coastal Erosion

The BLM monitors wells adjacent to the ocean annually to determine if coastal erosion or other changes pose an increased risk to health and the environment and takes appropriate action as necessary. The BLM has responded to several emergencies. After a series of Arctic storms caused severe coastal erosion, including the calving of large swaths of coastal shoreline, four legacy well sites were in imminent danger of eroding into the Beaufort Sea. The BLM responded to the emergencies at these four sites in the following manner:

- JW Dalton—More than 300 feet of shoreline eroded near the JW Dalton well site during the 2004 winter season, exposing the well head. The BLM spent \$8.9 million to plug the JW Dalton well site.
- East Teshekpuk—The East Teshekpuk well remediation was completed by the end of 2008 for \$13 million. The high cost was due to the remote location of the site and the need to excavate, transport, and dispose of contaminated soils and solid waste.
- Atigaru—Remediation of the Atigaru well site was completed in April 2009 at a total cost of \$18.7 million. The high cost of this remediation was also due to the need to excavate, transport, and dispose of contaminated soils and solid waste.
- Drew Point—The BLM removed 13,500 gallons of diesel fuel from the wellbore prior to plugging the well and removed approximately 5,000 cubic yards of petroleum-contaminated mud from the reserve pit. The contaminated mud was

hauled 35 miles overland from Drew Point to a disposal site. The project was completed in 2010 with \$16.8 million in American Recovery and Reinvestment Act (ARRA) funding.

Moving Forward

Moving forward, the BLM's strategy is to continue monitoring the legacy wells and to first plug and remediate those wells that present a potential risk, while prioritizing future plugging and remediation based upon available funding. The BLM also recognizes the importance of working collaboratively with the State of Alaska, Native Corporations, Tribal governments, and other partners including the Alaska Oil and Gas Conservation Commission (AOGCC) to accomplish this strategy.

To guide future efforts, the BLM expects to complete an updated Legacy Well Summary Report and a Strategic Plan in late 2012. The BLM monitors wells annually to determine changes in site or well conditions. The BLM uses the information gathered during inspections to assist in prioritizing the wells for future actions. The updated Strategic Plan will outline the agency's priorities for plugging the remaining legacy well sites. In preparing the updated Legacy Well Summary Report and Strategic Plan, the BLM is working closely with the AOGCC to come to a common understanding of the status and condition of the wells. The BLM has shared individual legacy well file information with the AOGCC. The BLM expects to receive the AOGCC recommendations on priority sequencing in September.

In the meantime, the BLM has developed cost estimates and a proposed plan to plug the Iko Bay #1 well and two other wells in close proximity to Iko Bay during the winter of 2013, pending funding approval. The BLM also developed a draft multi-season strategy to address 13 legacy wells over three seasons.

Conclusion

The BLM recognizes the importance of remediating the legacy wells in the NPR-A. The BLM remains committed to directing available funding to plug and remediate the remaining legacy wells in order to protect health, safety, and the environment. I will be glad to answer any questions.

The CHAIRMAN. Thank you very much.
Representative Millett, go right ahead.

**STATEMENT OF CHARISSE MILLETT, REPRESENTATIVE,
ALASKA HOUSE OF REPRESENTATIVES, ANCHORAGE, AK**

Ms. MILLETT. Thank you, Chairman Bingaman, Ranking Member Murkowski, and members of the committee. I am Alaska State Representative Charisse Millett and a lifelong Alaskan.

Thank you for the opportunity to communicate a message from the citizens of Alaska over their frustration on this 70-year-old problem and advocate for a solution. With this committee's help, I believe we can get the Federal Government to clean up its mess and be good stewards of our land as our mission States.

During the 2012 Alaska Legislative Session, I sponsored House Joint Resolution 29. It has been submitted to the chair for this hearing, and I ask that it be submitted for the record.

The CHAIRMAN. We'll be glad to include that in our record.

Ms. MILLETT. Thank you. This resolution urges the Bureau of Land Management, the BLM, to plug legacy wells properly and to reclaim the legacy well sites as soon as possible in order to protect the environment in the Arctic. It passed the House unanimously. In fact, every member of the Alaska House of Representatives signed on as a co-sponsor.

From 1944 to 1982, the United States Navy and the United States Geological Survey drilled 136 wells in or near the National Petroleum Reserve-Alaska, NPRA. NPRA is part of the northern Arctic coastal plain that includes Prudhoe Bay, the Arctic National Wildlife Refuge, ANWR, and stretches all the way to northern Can-

ada. These areas are similar in biology, geography, and oil and gas potential.

The NPRA was a test bed, not just for oil and gas exploration practices in the Arctic, but also presented a significant opportunity to test Arctic engineering practices. Nearly every site has a variation on the surface and the subsurface as different technologies were tried.

The BLM is now the custodian responsible for the surface and subsurface property, including the custody of the abandoned wells now referred to as legacy wells. Only 16 of the 136 wells have been properly plugged and abandoned. Of those 16, 7 were plugged not by the BLM but by the North Slope Borough.

The remaining 120 wells are in various conditions of flagrant non-compliance. The drill sites, many of which have rusting barrels filled with contaminants—and may still be. We just don't know. Two of the 120 wells are currently, and may have been for up to 30 years, leaking hydrocarbon gas into the atmosphere.

Three other wells can no longer be found. Of those 3 missing wells, one well is under a land slide at the edge of the Colville River, the same river that a bridge permit for a private operator was delayed for over 5 years due to environmental concerns. Two others are at the bottom of lakes where remediation will be very difficult and very expensive.

As you can see by the shockingly graphic pictures presented today, we should agree that remediation is long overdue. Allowing these unsafe and unsightly wells to litter Alaska's wilderness while threatening wildlife, human safety, and damaging the pristine Arctic environment is unacceptable.

These legacy wells have been an issue for over 60 years. Many administrations have failed Alaskans, responsible operators, and by extension, all Americans. However, the current Federal Government has the opportunity now to take action and solve this problem. Let's stop the out-of-sight, out-of-mind mentality.

The Federal Government has received approximately \$9.4 billion from lease sales in the NPRA and the outer continental shelf of Alaska. Of that \$9.4 billion, there has not been one penny used to plug the abandoned or reclaim the legacy wells.

The State of Alaska cannot impose fines on the Federal Government like we would on our private operators. But if we could, the fines would exceed \$8 billion. If the statute of limitations were removed, \$40 billion. While the Federal Government rightfully demands proper environmental stewardship on development in Alaska and often uses its administrative powers to delay, stop our responsible developers in the name of environmental protection, it turns a blind eye to its own environmental disaster.

This hypocrisy outrages Alaskans and should outrage all Americans. It adds insult to injury. Alaskans take pride in how we hold developers to the highest environmental standards in the world. Yet the Federal Government, responsible for protecting America's land, is the worst offender in Alaska.

Currently, the Federal Government is rewriting the management plan for the National Petroleum Reserve. It just finished with the public comment portion. Amazingly enough, enough, environmental NGO's submitted over a thousand pages of comments, stating they

supported the most restrictive plan that would provide the most protection to the environment of the NPRA. So it's ironic that not one of those NGO's has felt any similar urgency to come to the aid of the legacy wells and the damage already inflicted by the Federal Government.

This goes to the fundamental question of why land should be removed from potential exploration when the true test is one of management. On this level, both the Federal Government and the environmental groups have misplaced their priorities.

The Alaska BLM receives about \$1 million a year toward this cleanup effort. The last 3 wells they remediated cost \$2 million each. At that pace, my 2-year-old grandson will only see half of these well sites cleaned up in his lifetime. The rest would pollute into the next century.

Now for solutions. The administration is planning more offshore Alaska and NPRA lease sales. Let's use a portion of those revenues and plug the abandoned wells and clean up the Arctic tundra.

Another option is to lease the well sites to private operators to clean up as a lease requirement those well sites. Last, convey the lands back to Alaska. We'll take responsibility. We'll clean up those lands. Let's help keep Alaska clean.

Thank you for your consideration and time, and I'm available for questions.

[The prepared statement of Ms. Millett follows:]

STATEMENT OF CHARISSE MILLETT, REPRESENTATIVE, ALASKA HOUSE OF REPRESENTATIVES, ANCHORAGE, AK

Chairman Bingaman, Ranking Member Murkowski, and members of the committee.

Thank you for the opportunity to communicate a message from the citizens of Alaska over their frustration on this 70-year-old problem and advocate for a solution. With this committee's help I believe we can get the federal government to clean up its mess, and be good stewards of our land as their mission states.

During the 2012 Alaska legislative session I sponsored House Joint Resolution 29. It has been submitted to the Chair for this hearing. The resolution urges the Bureau of Land Management (BLM) to plug legacy wells properly and to reclaim the legacy well sites as soon as possible in order to protect the environment in the arctic. It passed the House unanimously; in fact, every member of the Alaska House of Representatives is a co-sponsor of this legislation. Attached to my written testimony is a copy of the Resolution. (Attachment 1*)

From 1944 to 1982 the United States Navy and the United States Geological Survey drilled 136 wells in or near the National Petroleum Reserve-Alaska (NPR-A). NPR-A is part of the northern Arctic coastal plain that includes Prudhoe Bay, the Arctic National Wildlife Refuge (ANWR) and stretches all the way to the Northern Canada. These areas are all similar in biology, geography and oil and gas resource potential. Attached you will find a map of current map of current, relinquished and expired tracts for NPR-A, and a map of locations of the legacy wells. (Attachment 2)

The NPR-A was a test bed not just for oil and gas exploration practices in the Arctic, but also presented a significant opportunity to test Arctic-engineering practices. Nearly every site has a variation on the surface and underground as different technologies were tried.

The BLM is now the custodian responsible for the surface and sub-surface property, including the custody of the abandoned wells, now referred to as the legacy wells. Secretarial Order Nos. 3071 and 3087 were issued in 1982. With the abolishment of the Conservation Division of the USGS in 1982, the NPR-A became under sole jurisdiction of the BLM.

*All attachments have been retained in committee files.

Only sixteen of the 136 legacy wells have been properly plugged and abandoned. Of those sixteen 7 were plugged not by the BLM but by the North Slope Borough.

The remaining 120 wells are in various conditions of flagrant non-compliance. The drill sites, many of which are contaminated by wood, metal, plastic, glass and concrete debris are also littered with rusting barrels once filled with contaminants and may still be, we don't know.

Two of the 120 wells are currently, and may have been for 30 years leaking hydrocarbon gas into the atmosphere. Three other wells can no longer be found. One well is under a landslide at the edge of the Colville River, the same river that a bridge permit for a private operator was delayed for over five years due to environmental concerns.

Two others are at the bottom of lakes where remediation will be very difficult and expensive.

Allowing these unsafe and unsightly wells to litter Alaska wilderness while threatening wildlife and human safety and damaging the pristine arctic environment is unacceptable.

In June of 2001 an EPA pollution report was filed by the North Slope Borough (NSB) received a report that Simpson Well #31 was leaking crude oil from a private citizen. NSB confirmed this report on a site visit performed June 4, 2001. An estimate provided by North Slope Borough Officials indicates that there is 40—50 gallons of crude oil on the ground around the wellhead. On June 7, 2001, BLM was notified by the NSB and reported the situation to the NRC and ADEC. On June 8, a BLM Petroleum Engineer and Petroleum Engineering Technician visited the site and confirmed a minor leak. The master valve was not completely closed and the wellhead was leaking at a swedge (pipe reduction coupling) above the master valve, and the master valve may be leaking. The total volume that has leaked from the well is unknown, but it was estimated that the well is leaking at a rate of about one gallon per day. This report went to 8 different people. The BLM responded, however, this well is 40 miles from Barrow and there is much human activity that takes place near Barrow in the form of subsistence hunting and fishing. There are many wells within the NPR-A that are only visited by wildlife and the sporadic visits to monitor the wells by the BLM. My worry and the worry of many Alaskans there are more wells like Simpson 31 that have, or are currently polluting the environment. I attached the full EPA report. (Attachment 3)

The legacy wells have been an issue for over 60 years. Many administrations have failed Alaskans, responsible operators, and by extension all Americans on this problem, however the current federal government has the opportunity to take action now and solve this problem. Lets stop the—out of sight out of mind mentality on this issue.

The federal government has received approximately \$9,400,000,000.00 from lease sales in the NPR-A and the outer continental shelf of the Alaska. Of that \$9.4 billion dollars there has not been one penny has been used to plug, abandon or reclaim legacy wells in NPR-A.

The State of Alaska cannot impose fines on the federal government like we would on our private operators for violating our State regulations, if we could the fines would exceed \$8,000,000,000.00. If the statute of limitations were waived, the fines would exceed \$40,000,000,000.00

While the Federal Government rightfully demands proper environmental stewardship on development in Alaska, and often uses administrative powers to delay or stop responsible development in the name of environmental protection. It turns a blind eye to its own festering environmental disaster. This hypocrisy outrages Alaskans, and should outrage all Americans. It adds insult to injury. Alaskans take pride in how we hold all developers to the highest environmental standards in the world, yet the federal government responsible for protecting America's lands is the worst offenders in Alaska.

Currently the federal government is rewriting the management plan for the NPR-A. It just finished the public comment portion. Amazingly enough the Environmental NGO's submitted over a 1000 pages of comments stating they supported the most restrictive plan that would provide the most protection to the environment of the NPR-A. So it is ironic that not one of those NGO's has felt any similar urgency to come to the aid of cleaning up the damage already inflicted by the federal government's legacy wells. This goes to the fundamental question of why lands should be removed from potential exploration, when the true test is one of management. On this level, both the federal government and the environmental groups have misplaced their priorities.

The only media coverage on this problem has been from the local Alaska, in the media reports we get mixed messages from the local BLM. I have attached a few

samplings so you can get the feel for the frustration Alaskans have over the inaction of the federal government (Attachment 4)

I have also included a link to an extensive data base of pictures of legacy wells, the BLM Legacy Well Summary Report; National Petroleum Reserve-Alaska—November 2004, and other pertinent documents: <http://video.housemajority.org/index.php?dir=BLM+Legacy+Wells%2F>

Now for solutions: The Administration is planning more offshore Alaska and NPR-A lease sales. Lets take a portion of those revenues and plug those wells and clean up the waste left on the tundra around these legacy wells.

Upcoming planned lease sales in the NPR-A could target these legacy wells and as part of a lease agreement the leasee could as a condition of their lease take responsibility of remediation.

The Federal Government could hand over the land to the State of Alaska, and in State of Alaska ownership we would remediate the legacy wells.

The Alaska BLM receives about a million a year toward this clean up effort, the last three wells they remediated cost two million dollars each. At that pace my two-year-old grandson would only see half the sites properly contained in his lifetime. The rest would pollute into the next century.

I was in DC last spring admiring the monuments, the reflecting pool, the National Mall, “Americas front yard” and all the history this great District has to offer. I came upon a beautification project managed by the Department of the Interior for the National Mall; it is \$250,000,000.00 project just to “spruce things up”. I know the Department of the Interior has it’s priorities, and respect that things here in DC need attention now and then, but I and many Alaskans are asking please—please clean up your mess in our “backyard” now before more wells are lost and the damage to the pristine Arctic worsens.

Lets help keep Alaska clean.

Thank you for your time and consideration.

The CHAIRMAN. Thank you very much.

Ms. Foerster.

STATEMENT OF CATHY FOERSTER, ENGINEERING COMMISSIONER AND CHAIR, ALASKA OIL AND GAS CONSERVATION COMMISSION, ANCHORAGE, AK

Ms. FOERSTER. Thank you. Chairman Bingaman, Ranking Member Murkowski, and members of the committee, I’m Cathy Foerster, the Chair of the Alaska Oil and Gas Conservation Commission, the regulatory agency that oversees oil, gas, and geothermal exploration and production activities for the State of Alaska.

Of the 136 legacy wells, only 16 have been properly plugged and abandoned to Alaska’s standards. I’m here representing the Governor of the State of Alaska, who has asked me to tell you that we expect the Federal Government to obey Federal and State laws by cleaning up each and every one of these wells and doing it properly.

We have serious problems with the 120 wells that have not been properly addressed. Unfortunately, the Interior Department has only provided us data for the downhole condition of 61 of those wells, and 55 wells we’ve got the surface condition for.

As much as I would love to talk about all 120 wells, I will limit my discussion to those wells for which I have up-to-date data. But we have no reason to believe that the remaining wells don’t have similar problems.

A well that is plugged and abandoned to Alaska’s requirements has surface re-vegetation and remediation sufficient that the site blends in with the natural environment. Within a few summers, there should be no indication that there was ever a well there. All but two of the well sites for which we have surface data have some

manmade blemish marring the surface. Some of these, in my opinion, should be considered crimes against the environment.

Twenty-six wells have been left open to the atmosphere and were left filled with drilling fluids. Several of them also encountered oil or gas. There has likely been significant contamination of the surrounding tundra and atmosphere by these various fluids escaping into the environment.

Wood, metal, plastic, glass, and concrete debris litter 44 of the sites. Forty-nine have metal piping sticking out of the ground, and 10 have open cellars, creating hazards for human and animal travelers.

Seventeen wells were left filled with diesel. Diesel is the fluid that the EPA has prohibited operators from putting into wells. These wells also remain unremediated at the surface. They are environmental eyesores, at best, and potential sources for hazardous fluid contamination, at worst.

Two of the wells leak hydrocarbon gases. Three can no longer be found. Twenty-nine are partially re-vegetated at the surface, but have unknown downhole conditions, making them landmines. The Interior Department considers these wells no longer of a concern because they're fixed at the surface. Some of these wells do still have surface remediation issues, in our opinion.

Let's leave the surface for a minute and look at the downhole problems. In front of you should be well sketches for some actual legacy wells. We couldn't make them into posters. I apologize for that. For each pair of well sketches, the sketch on the left shows the well's existing condition, and the sketch on the right shows what it would look like if it were properly plugged.

First is the East Simpson Test Well No. 2. At least 18 wells are in this condition. On the left, we see the existing situation, a well that was drilled to about 7,500 feet, cased to a little below 6,400 feet, and has a series of cement plugs staged with drilling mud. Above that last plug, the well is left filled with diesel. But there is no guarantee that the diesel is still there after 32 years of neglect.

On the right, we see the same well if it were plugged properly. The diesel would be safely removed and replaced with a water-based fluid. Then a cement plug would be placed at the surface and the pipe cutoff below ground level with a marker plate identifying the well in case of future excavations. The second well, Simpson Core Test No. 27, is a well that is representative of at least 28 wells that were drilled deep but cased shallow. The Interior Department considers these wells to be of low concern.

You might ask why we're worried about decades-old holes like this that the Interior Department isn't concerned about. They re-entered a well just like this earlier this year, the Umiat No. 6. However, when they got below the casing, they lost control of the well, and it started to flow on them. That's called a blowout. Fortunately, they were able to regain control of the well. But that's why we worry about these holes.

For the sake of time, I'll skip over the other two wells that I was planning to discuss. But I want to make a brief comment on one of them. It's the Iko Bay No. 1, which the local residents, the na-

tives that live in a village nearby, have nicknamed the whistling well, because they can hear it leaking natural gas constantly.

The Interior Department has no documented standards for plugging and abandonment procedures. But the State of Alaska does, and the Interior Department is required by law to comply with those standards. The Interior Department is, however, very clear on the time limits for plugging a well. It must be done within 1 year. Extensions can be granted but only for good reasons. Lack of budget and lack of interest are not good reasons.

Senators, I can't express my disappointment and shame at the Interior Department's failure to address these environmental ticking time bombs, these 120 messes. It's long past time for them to take responsibility and clean them all up. My agency knows exactly what needs to be done, and we stand ready to help address these wells now.

Thank you for allowing me to testify. I am available to answer questions.

[The prepared statement of Ms. Foerster follows:]

STATEMENT OF CATHY FOERSTER, ENGINEERING COMMISSIONER AND CHAIR, ALASKA OIL & GAS CONSERVATION COMMISSION, ANCHORAGE, AK

Chairman Bingaman, Ranking Member Murkowski, and members of the committee. From 1944 to 1981, the Federal Government drilled 136 wells in the western half of northern Alaska, in an area comparable to ANWR—in plants, animals and geography as well as in oil and gas resource potential.

The Bureau of Land Management (BLM) within the Department of the Interior operates these wells for the Federal Government. Every one of the wells has been out of compliance with Alaska regulations at one time or another, and most still are.

I am here representing the Governor of Alaska. He has asked me to tell you that we expect the Federal Government to obey Federal and State Laws by cleaning up every one of these wells, promptly.

Total well count is 136. Of the 136, only 16 are properly plugged and abandoned. Of those 16, 7 were plugged by a local Alaska government body.

Five more wells have been considered plugged and abandoned by the BLM, but not by the AOGCC because they do not meet our safety and environmental requirements.

Twenty-nine wells are holes in the ground. They never had any casing placed in them. BLM does not consider these wells to be a concern, but they have yet to convince the AOGCC of this. The downhole conditions of these wells are unknown and some of the wells still have surface remediation issues.

Seventeen of the wells are allegedly being used for temperature monitoring by the United States Geological Service (USGS). However, USGS has provided no evidence to the AOGCC that (1) they are truly using the wells and (2) the wells are in a safe condition, even though Alaska law requires that they do so.

Seventeen of the wells have been transferred to Alaska native ownership and are no longer a concern to the BLM. But they are still a concern to Alaskans.

Two of the wells are leaking greenhouse gases.

The remaining wells are also out of compliance but just don't fit nicely into another category.

AOGCC is working to get from BLM accurate data on the condition of the wells, but we don't yet have accurate downhole data on 75 of the wells nor do we have surface data on 81 of the wells; so I will limit my descriptions to the specific problems that we know we have with the 61 for which we have good downhole data and the 55 for which we have good surface data. However, we have no reason to believe the remaining wells do not have similar problems.

At least 26 wells are open to the atmosphere and were left filled with drilling fluids. There has likely already been significant contamination of the surrounding tundra by these fluids swapping out after years of snow and snow melt. Further, several of the wells encountered oil or gas, and there is no way to guarantee that those fluids are escape.

Wood, metal, plastic, glass, and concrete debris litter at least 44 of the sites. It's embarrassing, no it's pathetic, that the Federal Government will give the BLM

enough money to rent a helicopter, fly people up to the North Slope, and take pictures of these messes, but not enough to clean them up.

At least 17 are filled with diesel. They are an environmental eyesore at best and a source of contamination at worst.

At least three can no longer be found. One is under a landslide at the edge of the Colville River and two are in lakes. Since they can no longer be found, we have no way to confirm their surface or downhole conditions, essentially making them underwater mines and possible drinking water contaminators.

At least two leak greenhouse gases. The leaks are at very low rates but have been allowed to continue for well over thirty years, thus having a substantial cumulative impact.

Twenty-nine are partially re-vegetated at surface but have unknown downhole conditions, making them landmines. And some of them still have surface remediation issues.

At least 49 have metal piping sticking out of the ground, which creates a hazard for local travelers (and not just of the human variety), especially in winter with snow cover. Ten have open cellars, which create a trip-and-fall hazard for human and animal travelers.

The State of Alaska requires proper plugging and abandonment of wells to protect public safety, sources of drinking water, and the environment.

A properly plugged and abandoned well has sufficient cement and other plugs placed in the hole to ensure that underground fluids cannot migrate. Only 16 of the 136 wells meet this requirement.

A properly plugged and abandoned well has the casing and all other protrusions cut off at least 3 feet below ground level so that they cannot create a hazard or become a problem during subsidence or other normal earth movement. Only 16 of the 136 wells meet this requirement. A properly plugged and abandoned well has sufficient surface remediation that the site blends in with the natural vegetation. Within a few summers, there should be no surface indication of the well's location. All but two of the wellsites for which we have data have some unaddressed man-made blemish marring the surface.

The pictures you've seen so far have demonstrated the problems at the surface, but now let's turn our attention to the downhole problems. The next two sets of sketches are for actual legacy wells. I've chosen these two wells because they show real problems that exist in many of the wells. For each pair of well sketches, the sketch on the left shows the well's existing condition and the sketch on the right shows what it would look like if it were plugged properly.

The first well is the East Simpson Test Well #2. At least 18 wells are in similar condition. The sketch on the left shows the existing situation, a well that was drilled to about 7500 feet, was cased to a little below 6400 feet, and has a series of cement plugs staged with drilling mud. Above the last plug, at about 2100 feet, the well is filled with diesel (the fluid that EPA has prohibited operators from pumping into wells). Actually it is more accurate to say that the top 2100' held diesel in 1980. There is no guarantee that the diesel is all still there after 32 years of neglect.

The sketch on the right shows what the well would look like if plugged properly. The diesel would be safely removed and replaced with a water-based drilling fluid. Then a 150-foot cement plug would be set at the surface, and the pipe cut off at least three feet below ground level with a marker plate identifying it in case of future excavations. This work should cost less than \$500,000 per well.

The second well is the Simpson Core Test #27. At least 28 other legacy wells are similar but 25 of them are worse because they have no wellhead. Thus the drilling fluids left in these wells have been open to the environment for between 30 and 68 years. It is likely that some or all of these fluids have escaped to and damaged the surrounding tundra.

The sketch on the left shows the existing situation, a 1500-foot deep open hole with about 100 feet of casing in the hole and sticking out at the surface. The hole was left filled with oil-based drilling fluids and no plug on top.

The sketch on the right shows what the same well would look like if it were properly plugged and abandoned. The oil-based drilling fluids would be safely removed, the open hole section filled with cement through all depths that showed oil or gas potential—to ensure no migration of reservoir fluids. (This is important, since the well encountered discreet oil sands between 278 and 380 feet.) The cement plug would be carried to the top of the casing and the casing would be cut off at least three feet below ground level with a marker plate identifying it in case of future excavations. Again, this work should cost less than \$500,000 well.

You might ask why we're worried about old holes that have been open since 1951. Certainly you would expect that the hole has healed itself below the casing. Well, that's what the BLM expected when they plugged the Umiat #6 last year. However

when they got about 200 feet below the end of the casing, they lost control of the well and it started to flow on them. Fortunately they were able to regain well control and avoid a blowout, but that's why we worry about these wells.

The third well is the Iko Bay #1, which is called the whistling well by the native residents of the area because its wellhead leaks hydrocarbon gas. I included this well as an example of a well that might be more expensive to clean up, since a rig would be required to pull existing tubing out of the well before it could be abandoned. However, a big part of the rig cost would be for mobilization and demobilization and that cost could be shared by other wells if this were cleaned up as part of a larger program.

The sketch on the left shows the existing situation, a 2700-foot open hole with casing set from 1200 feet to surface. There is no cement at the surface in several of the casing annuli; these annuli are supposed to have cement at the surface to prevent reservoir fluids from flowing and building up dangerous pressure at the surface. The open hole is plugged with cement from 2035 feet to 2200 feet. Above that, a slotted liner runs from within the casing down to about 1950 feet. A slotted liner is pipe with slots (holes) in it to allow fluids to flow through. No drilling fluids were left in the tubing or casing, which means the reservoir fluids from the open-hole section are in direct communication with the wellhead. And the open-hole section encountered several intervals with hydrocarbon gas potential. Thus, once the neglected wellhead developed a leak, this became the whistling well.

The sketch on the right shows what the well would look like if properly plugged and abandoned. The tubing would be removed from the well. The entire slotted liner section would be plugged with cement to prevent any further migration of reservoir fluids. A 150-foot plug of cement would be set at surface. The previously un-cemented annuli would be filled with cement. Again, all casing strings would be cut off at least three feet below the surface and a marker plate would be placed.

The last well is West Dease Test #1. I've included this well simply because it is representative of the 17 wells allegedly being used for temperature monitoring by USGS. I use the word "allegedly" because the USGS has not provided the required documentation to demonstrate that the wells are actually being used. They have also failed to provide the required information to demonstrate that the wells have mechanical integrity. For proper abandonment, these seventeen wells would simply need the diesel to be cleaned out of the hole (which should be done anyway), a 150-foot cement plug placed on top, the pipe cut off to at least three feet below ground level, and marker plates installed. All seventeen of these wells could be plugged for less than five million dollars.

Out of curiosity, I looked up the BLM requirements for proper plugging and abandonment. The BLM requires an operator to plug and abandon a well promptly and according to an approved plan, whatever that means. In other words there are no documented BLM standards for plugging and abandonment. (Interestingly the National Park Service has very specific guidelines for onshore wells within their jurisdiction, as does BSEE for offshore wells.) However, even if BLM has no specific plugging and abandonment requirements they are still obligated to follow the laws of the State of Alaska and follow our regulations.

Although BLM has no documented standards for plugging methods, they are very clear on time limits for plugging a well that is not in use. It must be plugged within ONE YEAR. Extensions can be granted for no more than one more year at a time, but the operator must demonstrate a good reason for the delay (And lack of budget or interest is not a good reason.) and must resubmit the request annually.

Allowing these unsafe and unsightly wells to litter Alaska's wilderness while threatening both human safety and the environment is unacceptable. Nonetheless, BLM has properly addressed only 9 of the 136 wells and well sites and Alaskans have taken care of another seven.

If an oil company operated these wells, the AOGCC along with several Federal agencies would force compliance with our regulations and impose fines for non-compliance. And if we didn't, the public outcry would be deafening.

When it comes to the Federal Government as operator, we can find them to be in violation of our regulations but, unfortunately, we have no legal authority to force them into compliance. And we shouldn't have to. Adequate funding should be specifically designated for the purpose of bringing these wells into compliance with Alaska's—Federal—regulations.

As a regulator I am aghast, along with my fellow Alaskans, that the BLM consistently fails to offer a plan to deal with these environmental ticking time bombs. It is long past time to take responsibility for and clean up these 120 messes. My agency has a thorough understanding of what is required to plug and abandon wells properly and in compliance with Alaska law. We want to work with the BLM to develop and implement a plan to accomplish this as soon as possible.

The CHAIRMAN. Thank you all for your testimony. Let me start with a few questions.

Mr. Cribley, Ms. Foerster just testified that the AOGCC—that's the Alaska Oil and Gas Conservation Commission—is working to get from the BLM accurate data on the condition of the wells, but they do not have accurate downhole data on 75 wells, nor do they have surface data on 81 of the wells. Is there data that the BLM has that it is refusing to make available to the AOGCC?

Mr. CRIBLEY. The Bureau is working very closely with the AOGCC right now, and we have provided to them all of the records that we have on the legacy wells in the NPRA and are ready to discuss with them the disposition or the condition and status of those wells. So we have shared everything that we have in our records.

The CHAIRMAN. So you do not have information or data about wells that you have failed to provide to the AOGCC?

Mr. CRIBLEY. No. We had just recently gone through and searched all of our records and provided additional records that we had not shared with them previously. But we have shared with them everything that we have in our files right now.

The CHAIRMAN. Let me ask you about this strategic plan that you folks are developing, as I understand it. When is that going to be completed?

Mr. CRIBLEY. Right now, we've provided all of our information to AOGCC, and they're scheduled to get back with us in September to have a discussion on the characteristics of the 136 wells. Our intent is to try to have that plan completed by the end of this year, calendar year 2012.

The CHAIRMAN. Will that plan include an estimated cost of doing complete remediation or necessary remediation on the remaining wells?

Mr. CRIBLEY. What the Bureau is working on right now is a 5-year strategy on how we would most efficiently approach remediation of the highest priority wells. One of the things that we need to do or we want to do is sit down with the Commission and also with tribal interests in the North Slope Borough as far as priorities of the wells. We don't have that done yet, but that would be factored into that strategy as far as what we would do in the near term.

The CHAIRMAN. But, now, are you implying there that you've got a 5-year strategy to identify what needs to be done on the highest priority wells, but at the end of the 5 years there will still be unremediated wells? Is that what I understand?

Mr. CRIBLEY. That 5-year strategy won't address the remediation of all of the wells, no. It will be just the ones that we feel that we can do within that 5-year period.

The CHAIRMAN. So you're not trying to do a proposed strategy for fixing this problem. It's just a strategy for what can be done over the next 5 years. Is that right?

Mr. CRIBLEY. We're looking at the near term. Yes, sir.

The CHAIRMAN. It seems that there is a disagreement about such a basic thing as how many wells have been plugged. I noticed that you say, Mr. Cribley, in your testimony that since 1952, 19 wells

have been plugged. The U.S. Navy plugged one well in 1952. The BLM began its plugging and has plugged 18 wells since then.

Then when I get over here to the testimony of the other two witnesses, it doesn't seem that there is agreement on that. Representative Millett says only 16 wells have been properly plugged. What explains the difference in opinion about the facts that we're dealing with here?

Is there a reason, Ms. Foerster, why you do not believe that the 19 wells have been plugged that Mr. Cribley says have been plugged?

Ms. FOERSTER. Chairman Bingaman, a well is considered properly plugged and abandoned to my satisfaction if it complies with the regulations of the State of Alaska. Only 16 wells do that, and 7 of those wells were wells that aren't considered in that list of 19 that Mr. Cribley addresses. Seven of those wells he's classified in the 24 that were transferred in the land swap. So that's one of the problems.

He's also considering the 34 re-vegetated wells as properly abandoned. However, nothing has been done to address those wells. The Interior Department has written those wells off simply because there's nothing left at the surface.

Now, it is possible that the Interior Department could come back to us and demonstrate to us that those wells are of no concern. But that is the operator's responsibility to come to this agency and say, "Here is the technical data and the scientific proof that those wells are safe and secure." No one has done that. We're open to them to do that.

But there are at least 5 wells that they've written off as properly plugged and abandoned, but none of those wells meet State of Alaska requirements. This is part of that getting on the same page that we need to do.

But, I'm sorry, for the State of Alaska to consider a well plugged and abandoned, it has to meet our requirements. Our requirements were put in place to protect the environment, to protect human safety, to prevent migration of downhole fluids, and to protect ground waters that people waters that people might use. Only 16 of the wells meet all of those requirements, and 7 of those are ones that aren't part of his 19 because they're in the land swap.

The CHAIRMAN. Senator Murkowski.

Senator MURKOWSKI. Thank you, Mr. Chairman. I want to continue on this issue of the data that has been conveyed.

Mr. Cribley, you've indicated that you've gone through everything and have conveyed that, and now you're waiting for a sit-down with AOGCC. I like sitting up here, because I can read the body language of not only the people that are testifying but oftentimes those that are in the audience who have a little bit of knowledge about what is going on, too. What I saw with the body language was there is real disagreement as to whether or not the full data has been conveyed, whether or not there is a good working relationship between BLM and AOGCC.

The Chairman, I think, has appropriately queried on the issue of what has been satisfactorily plugged and abandoned according to State standards. So I'd like to spend just a little bit of time under-

standing where we are with the two of you on either side of the table.

Ms. Foerster, do you feel that you have the data that you need at this point in time to sit down with BLM and map forward a schedule, not only going forward, but addressing those wells that BLM considers to be complete and, in fact, the State of Alaska has said, "We don't have the information to be able to sign off on that?"

Ms. FOERSTER. Ranking Member Murkowski, the short answer is no. But the longer answer is we only have data on the wells that I described in my written and oral testimony.

Senator MURKOWSKI. That was how many?

Ms. FOERSTER. But—

Senator MURKOWSKI. How many wells was that that you described then?

Ms. FOERSTER. We have downhole data on 61 wells and surface data on 55, and what that tells me is, at best, something in the process of transferring data has failed. When we get back to Anchorage, we'll fix that, and the data that I'm missing, I'll get. But the worst case scenario for that is they have given us all the data they've got. How can they assure us that wells that they have no data for aren't a problem? That's what really worries me.

Senator MURKOWSKI. Mr. Cribley, do we have situations where we simply don't have data on certain wells?

Mr. CRIBLEY. That's probably true, yes. I mean, everything that we have is based on wells that have been drilled for a large number of years, and a lot of those a long time ago. We don't have all of the records, or we—well, what we have does not characterize fully everything that has been drilled out there.

Senator MURKOWSKI. So whose responsibility is that?

Mr. CRIBLEY. Ultimately, right now, it's the Bureau of Land Management's responsibility. But we have, as far as we know, captured all the data that is available on those wells, and some of those where it isn't complete.

Senator MURKOWSKI. If you've captured the data that is available, I can understand that. You have some wells that were drilled back in the mid to late 2040s.

Mr. CRIBLEY. Yes.

Senator MURKOWSKI. But you also have a responsibility, then, to ensure that whatever activity that was conducted, however long ago it was, is then properly plugged, abandoned, and the government can walk away from that. Now, the fact that you don't have the data doesn't mean that you get to walk away from the responsibility. So how do you collect the data to provide to the State so that you can give the assurance that this has been properly remediated?

Mr. CRIBLEY. That's what we're trying to go through right now—is sharing all of the data that we do have and then sitting down with the Commission and having a dialog on the status of all the wells so that we both have the same information and are in agreement with the numbers and the status of all those wells. One of the challenges that we have right now is that we haven't come to agreement on that, and that's why there's a discrepancy and we need to resolve that. It is our commitment to work with the State on that issue, and if additional information needs to be collected,

and we come to agreement on that, we'll do everything we can to try to achieve that.

Senator MURKOWSKI. I appreciate your words. But I also recognize that it is literally taking an Act of Congress to get the Department of Interior, to get BLM to step up to its responsibility. That ought not to be the case. You know, I have brought this up to every secretary since I've been here in the Congress.

Through the good work of Representative Millett and just pushing the legislature, we have managed to get the attention, but now we're sitting here. We've got a hearing—and, again, I really appreciate what the chairman has done—and now we're sitting down with a plan.

But, you know, to be at a point where it is decades after the liability has been incurred—I mean, the regulations, the law, requires that you go in, you explore, you drill, you leave, you plug it and abandon it within 1 year. This just continues, the failed and broken promises that this Federal Government has made to the State of Alaska and just walked away from the promise. You leave it there sitting on the tundra, and you say, "Well, the budget doesn't allow for it."

But our budget is able to allow for other things within the department that other people place priorities on. As Alaskans, we place a priority on taking care of our land. When the Federal Government comes in, they've got an obligation to work with us to make this happen.

I don't mean to pile on you, because I do believe that you have been working in good faith to try to make some progress here. But we've got some folks within the department that have not yet woken up to the responsibility, and we're going to keep on them.

Mr. Chairman, my time is up, but I've got some more specific questions. I'll let my colleague from West Virginia proceed.

The CHAIRMAN. Senator Manchin.

Senator MANCHIN. Thank you, Mr. Chairman and Ranking Member Murkowski. As West Virginians, we have a lot of sympathy for Alaska trying to do all they can to provide energy for this great country and then being treated like a second class citizen. So we understand very well your frustration. With that, I know the royalties, or the severance tax that the Federal Government receives—I'm sure it's quite substantial from Alaska.

Is that correct, Ms. Millett?

Ms. MILLETT. Senator Manchin, yes, \$9.4 billion for offshore and NPRA lease sales since they've been leasing.

Senator MANCHIN. So the wells that we're talking about, basically—does anyone have a total cost of what it would cost to plug these wells?

Mr. CRIBLEY. We have not made an estimate of the total cost.

Senator MANCHIN. What type of formations are you in, or how deep are these wells? Are they all varied?

Mr. CRIBLEY. They vary. Some of them are shallow. Some of the wells were as much as 20,000 feet deep.

Senator MANCHIN. But as far as casing, the cost of casing, or cementing them in is about the same, no matter how deep or not, because you don't—you're basically going down below the surface to do that, correct? It's all about the same.

Mr. CRIBLEY. Yes.

Senator MANCHIN. So it would probably be a very insignificant cost compared to the resources and revenue you receive. The only thing I would say and the frustration I would have—and I know that Senator Murkowski and other people who have a lot of natural resources in our State—resources in our State—is why is the government allowed to be treated differently than the private sector? If this would be a private company that has done what has been done by our own government, what do you think EPA would have done by now?

Ms. Foerster.

Ms. FOERSTER. I love this question, because if this—so thank you. If this situation—well, this situation would not exist if these wells had been drilled by a private company, because there is not an operator in Alaska that operates this way. However, let's pretend that there were. An operator—

Senator MANCHIN. Would they be banned for life from doing business in Alaska?

Ms. FOERSTER. They would be fined out the yah-zoo. Excuse me. They would be fined excessively, and we would refuse to approve permits to drill for them. They would never be allowed to operate. Then the landowner would likely be the State of Alaska, and the Department of Natural Resources would step in and take the land back away from them.

Senator MANCHIN. Are any more exploratory wells being drilled by the government in Alaska?

Ms. FOERSTER. The BLM and the USGS drilled a couple of wells near the city of Wainwright a few years ago. But as of now, no.

Senator MANCHIN. You, as the State, have no jurisdiction over the Federal Government preventing them—

Ms. FOERSTER. Yes, we do.

Senator MANCHIN. Can you prevent them from drilling until they plug the others? I know you would do that with a private—with a private company, you would do that, correct?

Ms. FOERSTER. With a private company, we would do that. So with the Federal Government, we would do everything we can. However, my attorneys tell me that the Feds trump State, and while we can find them to be in violation of our laws, we cannot fine them. We cannot exert our authority over them. All we can do is embarrass them in the court of public opinion and ask them nicely to be compliant.

Senator MANCHIN. Have you asked the EPA to use all of their influence to try to get this corrected?

Ms. FOERSTER. We have, and we've even spoken with an investigator for the EPA's environmental crime section. He says that the statute of limitations has expired on these wells. I find that hard to believe since they're still a problem, but that's what we've been told.

Senator MANCHIN. Do you have any comparison to how a private company has been treated, whether it be in Alaska or anywhere else in the country, and the statute of limitations allowed to expire, but they still go after them? Have you been able to compare that to what you're getting told?

Ms. FOERSTER. We don't have an operator in Alaska who behaves this way. But if they did, I guarantee you I would exert every bit of power and attention and energy I could to fixing the problem.

Senator MANCHIN. I think you all can understand our frustration, especially in West Virginia, and what we go through every day with our own government. We just want a little partnership. I think that's what the senator from Alaska—all of us—just work with us. We'll be the best partner you've ever had. But, boy, when you've got to fight your government every day, it just—the frustration just grows and grows.

So with that, I yield whatever time I might have back to my good friend from Alaska.

The CHAIRMAN. Let me just make the obvious point that this is an issue that cries out for an earmark. Would my colleagues agree with that? I think anyone who is opposed to earmarks hasn't been sitting in on this hearing.

I'll just defer to Senator Murkowski for her additional questions.

Senator MURKOWSKI. Thank you, Mr. Chairman. I look forward to working with you on that one.

Ms. Foerster has presented and, I think, Representative Millett has also presented a couple of different options here. We will await the plan for how you approach the next 5 years. But there have been some suggestions that, as one course, you could transfer these wells to the State. You could provide through a leasing arrangement with a remediation requirement.

Are there any serious discussions about these as possible action plans, Mr. Cribley?

Mr. CRIBLEY. We haven't had discussions with the State up to this point as far as looking at alternatives or options for dealing with this. I know that Ms. Foerster has presented this at different meetings and such, but we haven't had a dialog specifically on that, no.

Senator MURKOWSKI. Ms. Foerster or Representative Millett, do you care to comment?

Ms. MILLETT. I actually did come down here in March and meet with local BLM officials and gave them all the options that we spoke of today, first with having them lease the land, retain ownership, and as a part of the lease agreement have the companies, the operators that lease the land, remediate the wells. It was a win-win. The revenues from the lease would go to the Federal Government. It would create jobs, and it would create a stable energy supply for stable energy supply for America. They didn't want to have anything to do with that.

I also asked them to convey the lands to the State and we would take care of the remediation, and they weren't interested in that, either. So we've reached out to the BLM locally. We've reached out to them here in DC. At every turn, there is nothing but a plea of poverty about these wells, which is incredibly frustrating for me. We've given options. They seem realistic. They seem reasonable. So we just haven't had any traction.

Senator MURKOWSKI. Mr. Cribley, do you know anything about—you say you haven't been involved in any of these conversations. Do you know why the BLM would just reject out of hand any of these other options?

Mr. CRIBLEY. No. Like I say, I haven't been directly involved with any of those conversations, and so I can't really respond to what our response would be to those. But I am open to sit down with the State and also with our Washington representatives to have discussions on this as far as looking at what our options are within our authorities. I mean, we can only do so much with the authority that we have currently.

Senator MURKOWSKI. It does cause me to question, though, that if you were to do this, either to turn it over to the State or turn it over through a leasing situation, if if then you wouldn't have the 1-year requirement to kick in and have, you know, an almost impossible task to remediate within the time period before whoever takes it over gets fined. The Federal Government has been able to sit there for 40 years. There's no fine. There's no consequence. There's no nothing.

But if you are able to find a fix, whoever might be willing to step forward could then be subject to a level of fine because they haven't remediated it. Again, it goes to kind of the double standard that Senator Manchin has spoken to. Only the Federal Government can get away with this.

So, Ms. Foerster, are you aware of whether there's been any further conversations about other options?

Ms. FOERSTER. The conversations that Representative Millett has had are the only ones I'm aware of. So no.

Senator MURKOWSKI. All right.

Mr. Cribley, I want to go back to a question that the chairman had asked about the 5-year plan. I have interpreted your comments to mean that you are going to work with AOGCC to identify what you believe to be the highest priority wells to move on first. You've indicated that 13—you've got a plan for 13 wells over the next 3 seasons. So does your 5-year plan incorporate these 13 wells over 3 seasons, so you're really only working on 2 years after that?

Mr. CRIBLEY. Actually, you probably just corrected me, and my plan is 3 years, not 5 years. But what we're looking at is looking at what we can do within the next 3 funding cycles and putting that together.

Senator MURKOWSKI. What you can do within the next 3 funding cycles, assuming you don't ask for anything more than you've typically asked for in the budget process, in the president's budget?

Mr. CRIBLEY. What we will be doing is putting together a plan on how and what we would do and what that cost would be. Then we would go through our budget process as far as submitting and trying to get support for funding of those remediation actions.

Senator MURKOWSKI. So 13 wells over 3 years out of 120. I think people can do the math. We're going to be sitting here for a long while. You mentioned you've got a 2-year-old grandson. Do you think that this is a reasonable schedule?

Mr. CRIBLEY. I guess we're framing it within what we feel are reasonable capabilities or reasonable amounts of funding to ask for to do the work. Up to this point, since 2002, the Bureau has spent over \$85 million, or almost \$86 million, in the remediation of 18 wells. The cost of remediation on the North Slope, as you well know, is know, is significant, and we're trying to stay within reason as far as what we're asking for from a budget perspective, espe-

cially considering the environment that we're working in right now with our budgets potentially declining.

I mean, we can put a plan together as big as the sky. But, you know, the reasonableness of being able to secure that level of funding is probably remote, at least from our perspective.

Senator MURKOWSKI. I might be more sympathetic if you hadn't received \$9.4 billion from the lease sales within the NPRA. I mean, it just seems to me that you've got some money coming in, and you're not willing to spend it on this. You're willing to spend it in other budget categories. But where the responsibility lies—after you come in and take, you're not willing to clean it up, even though you've gotten the lease sales. Maybe if we hadn't seen some lease sales up there, it would be a different picture.

But I don't buy into this, you know, "Oh, poor us. We've got tough budget problems." We've been helping you out in Alaska in considerable ways, and you're walking away from the responsibility, and we're not going to allow that.

My time is over. I don't know whether—

Senator MANCHIN. Just one quick question.

The CHAIRMAN. Go ahead, Senator Manchin.

Senator MANCHIN. Thank you, Mr. Chairman.

I think, Ms. Foerster, you might be able to help me on this and maybe Ms. Millett on this, too, from the State Legislature.

Ms. MILLETT. Yes.

Senator MANCHIN. I don't know how your money flows, because in West Virginia, we don't have federally owned resources. Most of them are privately owned. Does your money flow basically from the Federal budget? Does it come directly to the State, and the State forwards on a check to the Federal Government for the severance tax you receive? If there was ABC Drilling Company leasing from the State on Federal land, how does that money flow?

Ms. MILLETT. Senator Manchin, the Federal money flows from the operator to the Federal Government on Federal lands. From the State government—if an operator is on State land, it flows to the State government. So we never receive any revenue streams from the Federal Government on drilling or activity that's on our Federal lands. So the money flows from—

Senator MANCHIN. I don't think that's correct. I don't think that's—the reason I say it's not correct—I don't think that anywhere else in the country that happens. I think that, basically, you do get resource—you should you should get revenue—

The CHAIRMAN. You get—50 percent of the revenue from Federal leases go to the State of Alaska.

Ms. MILLETT. Right. So the Federal money—so are we talking about—

Senator MANCHIN. I'm just trying to follow the money here.

Ms. MILLETT. OK.

Senator MANCHIN. If you're getting a 10 percent royalty—

Ms. MILLETT. Yes.

Senator MANCHIN. OK. If a 10 percent royalty comes off, and ABC Drilling Company owes \$1 million, does \$500,000 go directly to the State and \$500,000 to the Federal Government? Does \$1 million go to the Federal Government and \$500,000 back to the State? Or does \$1 million go to the State and you forward on \$500,000?

Ms. MILLETT. The taxes go from—the portion that is owned by Alaska—50 percent, so 50 percent and 50 percent—they each go to each entity. So the State would get 50 percent, and the Federal Government would get 50 percent.

Senator MANCHIN. Let me ask Ms. Foerster.

Ms. FOERSTER. I think you're talking about royalties, and there's no Federal land that's getting royalties. Is that what you were asking about?

Senator MANCHIN. The Federal Government doesn't get royalties on—

Ms. FOERSTER. There's no production on Federal land.

Ms. MILLETT. Right.

Senator MANCHIN. This is all on State land, then.

Ms. FOERSTER. It's all on State land, so there—

Senator MANCHIN. Let me ask you this, then. The only thing I'm saying is it doesn't look like the government is going to come forward in any type of an expedient manner to fix the environmental problem that they caused. If the State took it upon itself to go forward with this and use your resources then withheld, basically, you're basically front-loading it. But you're going to take care of an environmental—I don't think there's a court in this country that you would lose—to get your money back from the Federal Government if you have to go out and do it.

But if you sit here and wait, you're going to do 3 a year or—it's just not going to happen. You're going to have to, if you can—and if we can support you some way, we'll do it.

Ms. FOERSTER. Senator Manchin, as good as that sounds and as eager as I am to fix this problem, the precedent that that would set is just horrifying, because then any operator who wanted to use the time value of money would say, "State, you go plug my wells, and when I've got a budget, I'll pay budget, I'll pay you back." We just can't set a precedent of fixing other people's problems.

Senator MANCHIN. I would assume that a private entity—you're going to get bonding on that. They have to bond on the front end. If they don't do it, then you use their bonding money—I would assume that's how you all do your business. If not, I hope you do. I would encourage you to—

Ms. FOERSTER. The bonding that we have right now would not be sufficient to—

Senator MANCHIN. Then, you need to raise that.

Ms. FOERSTER. We do. Yes, sir. You are exactly right.

Senator MANCHIN. I can tell you there's a way to fix that. I'm just trying to get you in a position to clean up for the sake of the country and the sake of Alaska a horrible environmental problem that's not your fault.

Ms. FOERSTER. Yes, sir. Again, I just hate to set precedents that would allow others to abuse.

Senator MANCHIN. I got you. I understand. I'm just trying to—if we can get it figured out, because—Mr. Cribley?

The CHAIRMAN. Mr. Cribley.

Mr. CRIBLEY. Just a point of clarification as far as receipts that have been received from oil and gas lease sales. The \$9 billion figure they're talking about includes both offshore leasing and leasing within the NPRA. In the last 10 years, in the leasing that we have

been doing in the NPRA, we have received \$250 million of lease sales, and 50 percent of those funds go directly to the State.

So, in fact, the Federal Government has received \$125 million. Of that \$125 million, the Federal Government has spent \$86 million on remediation of the legacy wells in the NPRA. Now, the funds that come back from lease sales go directly to the Treasury, and then the Congress then appropriates those dollars. But as far as moneys received and moneys expended in the NPRA, we have expended significant resources to do the work that we've been able to do up to this point.

The CHAIRMAN. Now, do the numbers that you just recited include the bonus bids?

Mr. CRIBLEY. I believe so.

The CHAIRMAN. Because the State gets 50 percent of those bonus bids, just as it gets 50 percent of the royalty from the production in the NPRA.

Mr. CRIBLEY. Right. The other point of clarification is that there is no production at this date within—of oil and gas resources on Federal leases in the National Petroleum Reserve—

The CHAIRMAN. But there have been some bid sales.

Mr. CRIBLEY. Yes. We have done sales. We've been doing sales for the last 10 years, and we have done extensive exploration work. But nothing has gone into production yet.

The CHAIRMAN. Right. But the bonus bids that have been received—the State is entitled to 50 percent of that—

Mr. CRIBLEY. Yes, sir.

The CHAIRMAN [continuing]. Has received it.

Mr. CRIBLEY. Yes, sir.

The CHAIRMAN. Senator Murkowski.

Senator MURKOWSKI. I have 3 more questions, and, hopefully, these will be quick.

I believe it was you, Representative Millett, that mentioned that the price of remediation of these wells—there's some discrepancy here, that BLM says it costs roughly \$2 million to plug one of the wells, and North Slope Borough says it costs roughly \$700,000. Why the discrepancy—the very wide discrepancy between the two? Can you speak to that, or maybe Ms. Foerster?

Ms. MILLETT. Ranking Member Murkowski, \$86 million for 18 wells is what the BLM testified to today. The North Slope Borough did 7 wells at the cost of about \$300,000 each well. So there is a big discrepancy, and I think that's an incredibly good question to ask the BLM—why their costs are so high when private sector can go out and plug wells for just a fraction of that.

Senator MURKOWSKI. Mr. Cribley.

Mr. CRIBLEY. The records that we've got right now—the costs for remediation vary anywhere—the highest is about \$25 million, anywhere down to \$1.4 million for individual wells. The reason for the discrepancy is that the wells that the borough are remediating are within driving distance or can be accessed easily from the borough, and they can do that year round. Most of the wells that we are remediating are in very isolated regions of the National Petroleum Reserve, and most of the work that we do out there can only be done during the winter. As any oil and gas company will tell you, production cost on the North Slope is extremely expensive and is

very time sensitive. It involves stationing or positioning equipment, and then getting in and doing the work during the wintertime, and then positioning so you can take out hazardous materials, and then transporting them by barge, you know, through the Arctic Ocean down to the West Coast for proper disposal.

So the work that we're doing is very difficult and very challenging. I think we have done a very excellent job in the work that we've done up to this point. But our challenge and part of the problem is just the isolation and the conditions that we operate in on the North Slope.

Senator MURKOWSKI. When you determine which well to move to next in terms of the remediation and setting forward this plan—you've got your 13 wells proposed over the next 3 years—are you prioritizing them based on the hazards or the threats that they present to the environment, or are you prioritizing them because you've got a few that are closer together where you can get some efficiencies with your costs as you work to plug them? Do you prioritize them because you can do one cheaper than the next and not use up your whole budget? You can click off 1 or 2 because they're easy, and you save the tough ones for later that may be a greater environmental threat?

Mr. CRIBLEY. I think, actually, it's both. The first priority, as far as when we're selecting wells, is based on the environmental or health and safety risks, and those are the ones that we deal with or treat first. As we identify those, we try to see if there are any wells adjacent to or associated to those that we can also deal with while we're in that area just to try to reduce our overhead cost and try to be as efficient as possible and try to basically get the biggest bang for our buck when we are mobilizing on the ground in the NPRA.

But the primary driver is the risk involved, and those are where we're going first. That's one of the things that we need to come to agreement on with AOGCC—is which ones—what that list looks like so that we're focusing on what everybody agrees are the most important wells.

Senator MURKOWSKI. Ms. Foerster.

Ms. FOERSTER. Thank you, Ranking Member Murkowski. I'd like to add a little bit. First, at the working level, the AOGCC and the BLM staffers have a very good working relationship. That was questioned earlier. We're all Alaskans and we're all trying to achieve the same goal, I think.

But there are some strategies that we can employ that have not been employed in the past that I think contribute to the high relative cost of the BLM's cleanup. First, mobilization and demobilization of equipment is a large portion of the cost. So if you pick one well at a time, and you do that move and de-move on that well and ignore the wells that are nearby and say, "Get you later," then you will incur those same move and de-move costs every time you go out, whereas if you can get every well in the area, all of those wells can share that cost.

That's one of the things that the North Slope Borough did, and that's one of the reasons that their costs were so much lower. They used a rig that they had in the area to do all of the work.

Another thing that will lower the cost is if you don't wait until you have a crisis, if you don't wait until the well is about to fall into the Arctic Ocean, or something like that that just astronomically adds to the cost, then you can cut down your cost. If you don't go in assuming that a particular type of well is not going to be a problem and then get surprised when it is, and then you start to have to fight a blowout, then you can reduce your cost.

So there's a lot of things that we can do. If we work together, get a good understanding of what the condition of those wells is, we can drive down the cost.

Another example—some of these wells can likely be remediated using a coiled tubing unit rather than a drilling rig. Coiled tubing units are cheaper.

My agency is anxious to work with Mr. Cribley's, and we will work on the schedule that he has outlined. I promise you we're going to do everything we can to do it right, to do it safely, and to do it as efficiently and effectively and cost consciously as possible.

Senator MURKOWSKI. Do you think that 13 wells over the next 3 seasons is reasonable?

Ms. FOERSTER. It depends on your definition of reasonable. Putting my hat on as a regulator, heck no, it's not reasonable. If an operator were to come to me and say, "We've got 120 wells that are out of compliance with your regulation, and we think it's reasonable to spend the next 5 years doing 13 of them, and we'll follow that schedule until you're dead," no, I would not consider that reasonable.

Senator MURKOWSKI. Mr. Cribley, one further question for you. As you're aware, the public comment period on the NPRA management plan has just closed out. There's 4 alternatives. Some of them have some proposals within the alternatives that place some serious restrictions on activity within the Petroleum Reserve.

Is it your understanding whether or not the NPRA management plan, as is being considered, would have any impact or restrict BLM's ability to move in and do any of the remediation or the cleanup on any of these outstanding wells?

Mr. CRIBLEY. There won't be any decisions in the plan that would limit us or prevent us from doing remediation on legacy wells.

Senator MURKOWSKI. So regardless of what happens with the NPRA management plan, BLM is assured that—not only what we're talking about here today, with a proposal of 13 wells over 3 seasons—that you wouldn't be restricting or limiting in any way this cleanup?

Mr. CRIBLEY. Yes.

Senator MURKOWSKI. I thank the chairman for the focus that he has given this issue this morning. I am very hopeful that as a consequence of what has been shared today we will have an accelerated process to identify the priorities in a way that the State, through the AOGCC, is satisfied, that the BLM recognizes that there is an imperative, that there is an urgency to this, because from the Alaskans' perspective, this is the absolute height of hypocrisy when we hold our private operators to the highest of standards

and our Federal Government can not only reject those standards but literally walk away from their level of responsibility.

It reflects poorly on us as a government. I think, as a State, we've got an obligation to stand up, to push back, and make this right. I don't think it's the responsibility of the State to pick up the tab on this if the Feds did this, and so how we work it out is going to be critically important.

I am not one who is willing to have to drag folks into a committee hearing on an annual basis to say, "Where are we?" I'm still doing that with our land conveyances 50 years after statehood, because that's another promise that was not kept. The reason they say they can't do it is because we don't have the budget. You know, easy come, easy go.

It's not acceptable, and I think we all recognize it's not acceptable. So I will work on the appropriations side to do what I can, but I need this administration to place a priority on it, to place the priority in the budget and make good on its obligations.

So I would hope that we could get a report back from your offices, Mr. Cribley, and working with you, Ms. Foerster, sometime after September after you have advanced a schedule. But I think we need a game plan on this, because up to this point in time, it's been absolutely insufficient, inadequate, and an embarrassment to the Federal Government.

So with that, I thank you again, all of you, for making the flight back. We'll see you back in Alaska.

Thank you, Mr. Chairman.

The CHAIRMAN. We thank you all for coming, and that will conclude our hearing.

[Whereupon, at 10:46 a.m., the hearing was adjourned.]

[The following statement was received for the record.]

STATEMENT OF CHARLOTTE BROWER, MAYOR, NORTH SLOPE BOROUGH, AK

Chairman Bingaman, Senator Murkowski, members of the committee. I want to thank you for the opportunity to provide comments for your hearing on "Remediation of Federal Legacy Wells in the National Petroleum Reserve—Alaska."

Thank you, Senator Murkowski, and staff of the Energy and Natural Resources Committee for your tireless efforts to address an issue that has been of concern to our people for almost 70 years—the cleanup and remediation of exploration activity in the NPR-A.

I also want to thank the Alaska House of Representatives for their unanimous passage of House Joint Resolution 29, calling on the federal Bureau of Land Management to fulfill its mission of protecting public land by plugging and remediating more than a hundred oil wells in northern Alaska.

These wells, known as the "Legacy Wells," were drilled between 1944 and 1982 by the federal government in an attempt to locate commercial quantities of oil and natural gas. The U.S. Navy and U.S. Geological Survey drilled 136 wells in Northern Alaska over the span of five decades, which are now abandoned. Only a handful of the 136 wells have been plugged and cleaned up by State of Alaska standards. The Sponsors of the bill, specifically Representative Millett recognized that these wells pose significant risk to ground water, vegetation, waterfowl, land and sea mammals, and fish which the people of the North Slope have depended on for thousands of years.

This issue is of concern to the entire State and I look forward to working with the legislature, our Governor, and of course you, Senator Murkowski, and this committee regarding the remediation of the legacy wells.

I was recently elected to this office but I've been a resident of the North Slope for 40 years. This week the North Slope Borough is celebrating its 40th Anniversary as a local municipal government. I am the wife of a whaling captain and grandmother to 23 grandchildren. My family and my people rely on the land and waters

of the North Slope for our survival. My experience tells me that the best approach to solving problems is to work together.

In that vein, my administration is based on three simple concepts:

- The people of the North Slope need a seat at the table in Arctic planning;
- The people of the North Slope deserve a fair and stable share of the revenues generated from the development; and
- The development must find ways to preserve the culture and communities of the North Slope.

As a cooperating agency with the BLM in the current EIS process that will determine the future management of the NPR-A, the North Slope Borough must be a part of the process to prioritize and address the impacts of oil and gas exploration. Just a few months ago, I was in Washington DC and met with then-Director Abbey and raised our issues of concern with this process of cleaning up the “legacy wells” left behind after the Navy and USGS exploration process. He stated that BLM is committed to capping these wells, but it is an “unfunded mandate”. The Federal government wishes to act as steward of the land in Alaska, often telling our people what they can or cannot do on the land, yet here is an example of the same government failing to fulfill the most basic of responsibilities as the land owner. Residents want to develop the resources, but they want to do so responsibly.

Recently the State of Alaska’s Oil and Gas Conservation Commission (AOGCC) made the following comments:

All legacy wells are or have been out of compliance with multiple Alaska regulations.

Although by no means exhaustive, the following summarizes the most troubling issues:

Proper plugging and abandonment of wells is governed by Article 2 of the AOGCC’s regulations, 20 AAC 25.105, et seq. The purposes of properly plugging and abandoning wells include public safety, protection of the environment, and protection of sources of drinking water.

Delaying the plugging and abandonment has already caused several of the wells to be “lost” due to subsidence and other normal earth movement. Two wells are at the bottom of what subsidence and snow melt have now turned into lakes and a third has been buried in a landslide. Additional wells simply can no longer be found, with no explanation for why. Postponing abandonment of the remaining wells puts them at risk of also becoming “lost.”

Allowing these unsafe and unsightly wells to litter Alaska’s wilderness while threatening both public safety and the environment is unacceptable. Nonetheless, BLM has only plugged and abandoned approximately ten of the 137 wells.

If these wells were operated by an oil company, the AOGCC would force compliance with its regulations and impose fines for any non-compliance. While the AOGCC can find BLM to be in violation of AOGCC regulations, the AOGCC has no legal authority to force the Department of the Interior into compliance.

The Federal Government should provide adequate funding specifically designated for the purpose of bringing the legacy wells into regulatory compliance.

Additionally, two weeks ago, a spokesperson for the BLM said that the Iko Bay #1 well near Barrow is leaking gas and is at the top of the agency’s list of wells that need to be plugged. We believe that BLM is responsible to do this work, but in their 2004 “Alaska Legacy Wells Summary Report: National Petroleum Reserve-Alaska” it states that 33 wells conveyed to the North Slope Borough under the Barrow Gas Field Act of 1984 or to Arctic Slope Regional Corporation are out of BLM’s jurisdiction. We believe that the BLM is also responsible for these legacy wells too. This is an issue that needs to be addressed. And we can resolve it by working together.

Inupiat on the North Slope have always viewed the world through a different cultural lens, and sometimes that has led to a conclusion that we are anti-development. When we express a concern regarding local development (past or present) it’s for the same reasons that any other community might have when development occurs in their backyard. In the past we have aggressively supported opening many of the areas that were closed to development, in fact we continually assist with visits by political and media delegations. We have accommodated NPR-A development, except in an area around Teshekpuk Lake, where valuable wildlife habitat and subsistence

activities have historically taken precedence. We supported the bridge over the Niglik channel and see it as a gateway to further NPR-A development. We also recognize that NPR-A development could be a large contributor to future North Slope production, but we must be partners in maintaining the integrity and vitality of all resources.

Just the other day, Secretary Salazar issued a press release related to the Norway Arctic Roundtable. He said the Arctic “is a place development can only safely expand if we also expand our understanding through science and experience.” He went on to say that that is why the Arctic demands its own approach. “We have to listen to each other as global partners and we must listen to local communities. We have to cooperate in our planning. And we must always put caution and safety first.”

Let me be clear, my administration supports responsible oil and gas development, and the broad goal of the North Slope Borough is to maintain a healthy environment supporting Inupiat subsistence practices while at the same time promoting economic growth and responsible resource development. We support responsible development, particularly when reasonable mitigation measures are applied to minimize subsistence and socio-cultural impacts.

The abandoned wells can have a real and direct effect on the health and welfare of all of our residents, and especially the youth in our communities. In the past, we’ve seen the scars left behind on the tundra and the waste generated from early development littering the areas we rely on. There is a connection with subsistence hunting and the negative impacts related to decreased hunting success. The passage of the subsistence way of life to younger generations hinges on successful hunts, and the presence of a healthy stock to hunt. It is both a safety hazard and a health hazard.

We have had many good examples of working together to open the NPR-A to oil and gas development. You may recall the issue of a bridge across the Colville River at the Niglik channel to CD-5, ConocoPhillip’s western expansion of the Alpine field development. Working together with residents of Nuiqsut, local corporations, the Federal and State agencies, a solution was found.

The 2004 report mentioned above offers an example of a future opportunity to work together—the concept of building staging areas with airstrips and storage pads to facilitate development of infrastructure in remote areas of the leased acreage. These staging areas would have the potential to also allow BLM’s future remediation work associated with the legacy wells. By working with our Departments of Planning and Wildlife Management, we could assist in making recommendations for the location of these staging areas, continuing our support of environmentally responsible development of the NPR-A and expediting the cleanup of the legacy sites.

There have also been cases that didn’t work out as well as planned. In 1994, the Umiat area was considered “cleaned up” and was the subject of a proposed FONSI. The NSB just happened to have students and staff at Umiat that summer. At the time, witnesses recorded on video, barrels of waste sloughing out of the river bank, proving the cleanup was not yet complete. Had it not been for our insistence that the job was not yet done, the wells around Umiat might very well remain hazards to the environment and our food supply. For nearly a decade following this event, residents of Nuiqsut feared contamination of the fish they rely on from the Colville River.

When BP and Arco were proposing a merger in 1999, many issues came up about commercial concerns, but we raised issues about environmental and community concerns. “Orphaned sites” were identified for clean up and industry agreed to work with State and local representatives to collaboratively address our concerns. The downside to the cleanup efforts, just like the legacy well program, was that it was subject to limited funding—\$10 million. A cleanup/restoration project should not be limited by its expense alone, particularly when human health impacts have been identified. What cost do we place on our health and safety?

The 2006 Northeast NPR-A Supplemental IAP/EIS identified key issues including “control of contaminant-related health risk”. A new stipulation was set out requiring an initial survey that should examine species and habitat potentially impacted by contaminants by lessee’s proposed developments. This addressed new development. We need the BLM to apply the same standard to all historic activity—including the work done by the Navy, Air Force, USGS and Husky Oil under contract to the federal government as part of the original NPR-A exploration efforts.

“Contaminant containment monitoring” and “Mitigation of contaminant impacts on subsistence” are not negotiable for us. The Federal government must find a way to provide funding to accomplish this effort, and it should not affect the NPR-A Impact Aid grant program. The BLM retains 50% of the revenues from rents, bonuses and royalties associated with NPR-A leasing and development. These funds only ac-

count for annual revenue of about \$4.5 million. Additional funding is necessary to do this right.

The residents of the NPR-A (and the North Slope Borough) that rely on the planning area for subsistence must be assured that they are not exposed to harmful levels of oil-development associated contaminants, and that they will be protected against a range of contaminant-associated disorders. Reassurance to our communities of continued safety of subsistence resources will foster the continued viability of the subsistence diet and way of life. It will also reinforce our common goal of environmentally responsible development of the oil and gas resources in the area. This we can do—by working together.

Quyanaqpak (Thank you very much) for the opportunity to address you today.

APPENDIX
RESPONSES TO ADDITIONAL QUESTIONS

RESPONSE OF REPRESENTATIVE CHARISSE MILLETT TO QUESTION FROM
SENATOR LISA MURKOWSKI

Question 1. There was some confusion during the hearing as to whether Alaska receives royalty payments from the NPR-A. Please state for the record whether, and to what extent, federal leases have yielded royalty payments to the State of Alaska and whether any revenue is derived from lease sales, bonus bids, or production royalties.

Answer. Under federal law 42 U.S.C. Chapter 78, Section 6506a, revenue from lease sales from the National Petroleum Reserve-Alaska are equally divided between the federal government and the State of Alaska.

Alaska's portion is deposited into the NPR-A Impact Mitigation Program. Created by the Alaska Legislature in 1984 (AS 37.05.530), the program provides grants to communities most directly impacted by oil and gas development. Funds are also distributed to the Alaska Permanent Fund, the Public School Trust and the General Fund.

As a result of a lawsuit (*Barrow v. State*) brought against the state by Barrow, Wainwright and the North Slope Borough, the state was required to rework the distribution formula to make the impacted communities first priority.

Because there is no oil or gas production in the NPR-A at this time, the State of Alaska does not receive any production royalties.

RESPONSE OF CATHY FOERSTER TO QUESTION FROM SENATOR MURKOWSKI

Question 1. There was some confusion during the hearing as to whether Alaska receives royalty payments from the NPR-A. Please state for the record whether, and to what extent, federal leases have yielded royalty payments to the State of Alaska and whether any revenue is derived from lease sales, bonus bids, or production royalties.

Answer. The State of Alaska receives from the Federal Government a portion of the revenues for lease sales, bonus bids, production royalties and rentals on federal lands within the state. This portion varies, depending on the location, as follows:

Three to six miles offshore: 27%
Beyond six miles offshore: 0%
Onshore Cook Inlet: 90 to 100%
NPR-A: 50%

There is production, and thus royalty payment, from the offshore three-to-six-mile area and from federal lands onshore Cook Inlet. There is no production, and thus no royalty payment, from NPR-A or offshore beyond six miles.

RESPONSES OF BUD CRIBLEY TO QUESTIONS FROM SENATOR BINGAMAN

Arctic Conditions

Question 1. Are there any aspects of operating in the Arctic environment that make it more difficult to remediate the legacy wells?

Answer. Yes. These wells are located in remote parts of Alaska where work is performed in extreme conditions. These sites can be several hundred miles from the town of Deadhorse, which is the principal supply depot and nearest developed community. Access into the NPR-A for well-plugging and remediation activities is limited to overland travel in the winter to protect tundra vegetation and because the tundra bog will not support overland travel or infrastructure in the summer months.

However, winter temperatures routinely reach -40 degrees Fahrenheit, there is very little daylight during this season, and mobilization efforts during the winter months are extremely difficult. Self-sufficient camps are transported to these sites via ice roads, offshore sea ice, and snow packed roads. Fuel and provisions require constant resupply, and all specialized equipment needs to be winterized for arctic conditions.

Funding

Question 2. Can you please describe for us the Federal funding available for the remediation of the legacy wells?

Answer. To date, \$85.9 million has been spent to plug and remediate 18 legacy wells. As shown in the table below, funding for this work has come from the annual appropriations of the Department of Defense and the Department of the Interior and from supplemental appropriations under the American Recovery and Reinvestment Act of 2009 (ARRA). In FY 2005 and FY 2009, the Secretary of the Interior used emergency transfer authority to fund these activities. The FY 2013 President's Budget includes \$1.0 million for the legacy wells.

Year	Activity	Amount	Source
2002	Army Corps of Engineers plug and abandon Umiat #2 and #5	\$25 Million	Defense Appropriation
2004	BLM plugged Umiat #3, #4, #8 and #10	\$1.4 Million	Interior Appropriation
2005	BLM plugged the J.W. Dalton Well	\$8.9 Million(including \$7.5 Million emergency transfer)	Interior Appropriation
2006	BLM plugged 5 wells in the Simpson Peninsula	\$1.8 Million	Interior Appropriation
2008	BLM plugged the East Teshekpuk Lake well	\$12 Million	Interior Appropriation
2009	BLM plugged the Atigaru Point #1 well	\$14 Million (including \$8.9 Million emergency transfer)	Interior Appropriation
2010	BLM plugged the Drew Point #1 well	\$16.8 Million	ARRA
2011	BLM plugged the Umiat #9 well	\$2.5 Million	Interior Appropriation
2012	BLM is plugged Umiat #6 and #7 wells	\$3.5 Million	Interior Appropriation

Question 2a. How much money would be necessary to remediate the remaining NPR-A legacy wells?

Answer. To date, \$85.9 million has been spent to plug and remediate 18 legacy wells. The cost of plugging and remediating individual well sites varies due to the location and type of work needed to plug a well or remediate the site, and has ranged from several hundred thousand dollars to \$16.8 million. Project costs include cleanup, transport and disposal of reserve pit and other solids waste in addition to the costs of actually plugging wells, especially those threatened by coastal erosion. In circumstances where well sites are in extremely remote locations, the costs of transporting equipment and wastes collected at these sites and disposing of it properly is very expensive.

In 2004, the BLM completed a comprehensive assessment and report of the legacy wells in the NPR-A. This report was shared with the Alaska Oil and Gas Conservation Commission (AOGCC). The BLM prepared a strategic plan to prioritize the remediation of the priority wells identified in the report, in addition to those wells being threatened by coastal erosion. With the completion of the upcoming Iko Bay project, which is anticipated for the winter of 2013-2014 (pending availability of adequate funds), all high priority wells that were identified in the 2004 report will be plugged. The BLM is preparing an update to the report based on field inspections over the last several field seasons, and is working closely with the AOGCC to come

to agreement on the actions needed or warranted for the remaining wells. The AOGCC is reviewing BLM well file information, with a goal of completion in the next few months. Once the BLM receives feedback from the AOGCC, the BLM can develop a reasonable cost estimate for the remaining work.

Number of Legacy Wells

Question 3. Your testimony indicates that of the original 136 wells and boreholes, there are 39 unplugged wells, as well as 2 that have not been located. However, Commissioner Foerster's statement indicates that only 9 of the 136 wells and well sites have been properly addressed by the BLM. Could you please explain for us the discrepancy in these numbers?

Answer. The following table is the current BLM accounting of the 136 legacy wells:

Status	Tally	Action
Wells that are plugged	*19	
Not under BLM's jurisdiction	24	No BLM Action
Not under BLM's jurisdiction (USGS)	18	Final disposition to be determined
Uncased geologic core tests	34	No BLM Action
Wells without accurate GPS coordinates	2	Monitoring area
Remaining unplugged wells	39	Monitoring and Prioritizing
Well Total	136	

*Includes one well plugged by the U.S. Navy in 1952 and two wells plugged by the Army Corps of Engineers. BLM has plugged 16 wells, including remediating contaminated soils where necessary and removing well site debris.

The BLM has plugged 16 wells, the Army Corps of Engineers plugged two wells and one well was plugged by the U.S. Navy in 1952. Nine of these wells were permanently plugged as Commissioner Foerster notes. The BLM has plugged an additional nine wells with surface plugs. These plugs prevent migration of any material to the surface and ensure that no materials are introduced in the well bore. The AOGCC considers these temporarily plugged. The BLM continues to meet with the AOGCC to discuss technical issues, share data, and work towards an agreement on the status of the wells and develop future actions.

Commissioner Foerster's numbers do not take into account 24 wells that were transferred out of Federal ownership to the North Slope borough or to Native Corporations as part of the Barrow Gas Field Transfer Act of 1984 (P.L. 98-366); the one well plugged by the U.S. Navy in 1952; 18 wells that are partially plugged and currently operated by the U.S. Geological Survey (USGS) for monitoring efforts; and 34 uncased geologic bore holes and foundation test holes drilled by the U.S. Navy in the 1940s.

Question 3a. How many wells have been plugged and remediated to date?

Answer. A total of 19 wells have been plugged. Of that number, the U.S. Navy plugged one well in 1952, the BLM plugged 16 wells, including remediating contaminated soils where necessary and removing well site debris, and the Army Corps of Engineers plugged 2 wells. An additional 18 wells are partially plugged and are used and managed by the USGS as climate change monitoring wells.

Question 3b. Please also describe for us the wells that are used currently by the USGS.

Answer. There are 18 wells that were drilled in the late 1970s and early 1980s. These are generally the deeper drilled wells that range from a depth of 4,000 to 20,000 feet deep. These wells have been properly plugged back to a depth of approximately 2,000 feet deep. USGS uses the unplugged interval from the surface to 2,000 feet to monitor changes in depth of permafrost as part of their climate change research. These 18 wells are scattered throughout the NPR-A, but are predominately in the northern portion of the reserve.

Work with the State of Alaska

Question 4. Are you making efforts to work with the State of Alaska on this issue? If so, please describe.

Answer. Yes. The BLM invites state inspectors on all annual surface inspections of the legacy wells, and BLM has asked the AOGCC to provide any input on priorities for site visits. The BLM also invites the AOGCC to witness all plugging efforts conducted by the BLM. The BLM has shared all available well file information with

the AOGCC to reach concurrence with the AOGCC on the number of wells present, the current status of these wells, and the status of the wells outside BLM's jurisdiction.

As a matter of practice, the BLM provides Sundry Notices to the AOGCC on all plugging and abandonment efforts to ensure that the BLM is in compliance with state regulations. (A Sundry Notice is a form to evaluate proposed changes to the operation of a well after it has already been permitted.)

For matters where there is a technical question or opinion concerning the final plugging of the well, as in the case of the nine wells that the state considers "temporarily plugged," BLM meets with AOGCC to discuss the well condition and future actions that may be warranted.

The BLM anticipates a hearing with the AOGCC to review the status of 34 uncased or partially cased boreholes drilled for geologic strata and permafrost research. The geologic and foundation core tests are uncased and are shallow (from less than 50 feet deep to 1,600 feet) boreholes. Core tests are naturally reclaimed and are indistinguishable from the natural environment. The BLM intends to request that the AOGCC remove the boreholes from their list of legacy wells.

The BLM is preparing an updated report that summarizes site visits and risk assessments conducted over the past two field seasons, which will be provided to the State once finalized. The BLM has solicited State input concerning prioritization of wells and upcoming projects.

Failure to Remediate

Question 5. Why has the BLM failed to remediate the NPRA legacy wells to date?

Answer. BLM has not failed to remediate all legacy wells: this process is ongoing. The BLM has adopted a risk-based approach to remediation of the most critical legacy wells and conducts an active monitoring program to determine if well or environmental conditions have changed at these sites. The BLM's 2004 Strategic Plan and the soon-to-be completed Strategic Plan Update are both risk-based approaches that consider technical issues and availability of funding. BLM's active monitoring program is also an important element in addressing the legacy well issue and BLM has taken action quickly when the on-the-ground situation warranted immediate action to prevent catastrophic failure that would threaten health and safety and harm the environment. For example, BLM's periodic monitoring efforts showed that several wells were threatened by coastal erosion, the J.W. Dalton (in 2005) and the Atigaru well (in 2009), and needed immediate remediation. As the remediation work for these two wells was costly and there was not time to request money through the normal appropriations process, the Department used an emergency funding transfer mechanism authorized by the Interior Appropriations Act. This rarely-used mechanism allows the Secretary to transfer funds from other BLM and DOI accounts only in very specific emergency situations, and other projects were delayed because of the transfer.

As discussed in the answer to the second part of question 2, the BLM has taken a risk-based approach to the issue. In 2004, the BLM completed a comprehensive assessment and report of the legacy wells in the NPR-A. The BLM prepared a strategic plan to prioritize the remediation of the priority wells identified in the report, in addition to those wells being threatened by coastal erosion. Pending available funding and timing of contracting, completion of the Iko Bay project, which is anticipated for the winter of 2013-2014, all high priority wells that were identified in the 2004 report will be plugged. Additionally, the BLM has remediated all reserve pits that remained as a result of legacy well drilling activity consistent with Federal and State regulations.

In 2010, BLM determined that an update to the 2004 report was warranted and has revisited the sites of all the legacy wells during 2010-2012. The new report, which BLM expects to complete by the end of 2012, will provide comprehensive updated well and site condition information and provide the basis for further strategic planning of legacy well remediation in coordination with AOGCC.

The efforts to plug and remediate abandoned wells are extraordinarily expensive due to the fact that the wells are located in remote parts of Alaska where work is performed in extreme conditions, often several hundred miles from a primary supply depot and nearest developed community. To date, BLM has spent \$85.9 million to plug and remediate 18 legacy wells with the cost of plugging and remediating individual well sites ranging from several hundred thousand dollars to \$16.8 million. Securing adequate and timely funding to complete remediation efforts in extreme arctic conditions is the limiting factor to proceeding more quickly with additional remediation efforts.

Question 5a. What are your plans to address this problem going forward?

Answer. The BLM expects to complete an updated Legacy Well Summary Report and a Strategic Plan in the next few months. The updated Strategic Plan will outline the agency's priorities for plugging the remaining legacy well sites. In the meantime, the BLM has developed a short-term strategy to address 13 legacy wells over three seasons. The first step in the short-term strategy will be the remediation of the Iko Bay well and two nearby wells over the winter of 2013-2014, pending availability of adequate funds to complete the project.

Abandoned Wells in the Lower 48

Question 6. While I understand that in the Lower 48 the wells were not drilled by the Federal Government, there are many orphaned and abandoned wells on Federal lands in states such as New Mexico that need to be plugged. How much funding does BLM have available for this purpose on an annual basis?

Answer. The BLM refers to an abandoned well as a non-producing well that has been properly plugged, the site reclaimed to its original condition, and abandoned for purposes of oil and gas development. The BLM refers to an orphaned well as a non-producing well on Federal land that is not associated with a responsible or liable party and for which there is not sufficient bond coverage for plugging and surface restoration costs.

The BLM has worked diligently with industry and state and local governments to assure that non-producing wells are properly remediated and the site reclaimed by the responsible party. The BLM works with our cooperators including existing lease holders, oil and gas producers, and local and state governments in partnership to minimize orphaned well occurrence and mitigate orphaned well conditions.

The BLM works on a case-by-case basis to address the issue of orphaned wells. The amount expended by the BLM for the isolated cases of orphaned well remediation and site reclamation varies from year to year but ranges from approximately \$75,000 to \$125,000 annually of appropriated funds to cover operation needs of well plugging and abandonment. Additional funds for orphan well remediation come from industry, state funds raised through permit fees for orphaned well remediation, and forfeited bond revenues.

RESPONSE OF BUD CRIBLEY TO QUESTION FROM SENATOR MURKOWSKI

Question 1. What regulatory and legal mechanisms are available to the BLM in cases where a leaseholder or operator maintains operations in a manner which is out of compliance with environmental standards in a chronic or repeated manner on multiple oil or gas wells?

Answer. The BLM's regulations for management and oversight of oil and gas operations are contained in 43 CFR 3160, Onshore Oil and Gas Operations. Subpart 3163 of these regulations addresses Noncompliance, Assessments, and Penalties. As noted in these regulations, the establishment and forfeiture of the oil and gas bond may be used for addressing repeat violations. Without a bond, a lessee may not operate a Federal or Indian oil and gas lease.