

**ALASKA STATE LEGISLATURE
SENATE RESOURCES STANDING COMMITTEE**

September 21, 2010
10:07 a.m.

MEMBERS PRESENT

Senator Lesil McGuire, Co-Chair
Senator Bill Wielechowski, Co-Chair

MEMBERS ABSENT

Senator Charlie Huggins, Vice Chair
Senator Hollis French
Senator Bert Stedman
Senator Gary Stevens
Senator Thomas Wagoner

OTHER LEGISLATORS PRESENT

Representative Bill Stoltze
Representative Dave Guttenberg
Representative Carl Gatto
Representative Craig Johnson

COMMITTEE CALENDAR

Overview: Status of Alaska's Oil Spill Preparedness and Response
Capability

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

MARILYN CROCKETT, Executive Director
Alaska Oil and Gas Association (AOGA)
Anchorage, AK

POSITION STATEMENT: Commented on the status of Alaska's oil
spill preparedness and response capability.

BECKY SILVES, HSE, Alaska Drills and Training Coordinator
ConocoPhillips Alaska
Anchorage, AK

POSITION STATEMENT: Commented on the status of Alaska's oil spill preparedness and response capability.

PETE SLAIBY, General Manager
Shell Alaska

POSITION STATEMENT: Commented on the status of Alaska's oil spill preparedness and response capability.

DR. JEFF SHORT, Pacific Science Director
Oceana Alaska
Alaska

POSITION STATEMENT: Commented on the status of Alaska's oil spill preparedness and response capability.

LOIS EPSTEIN, P.E.
Arctic Program Director
The Wilderness Society
Alaska

POSITION STATEMENT: Commented on the status of Alaska's oil spill preparedness and response capability.

NANCY WAINWRIGHT, Senior Staff Attorney
Trustees for Alaska
Alaska

POSITION STATEMENT: Commented on the status of Alaska's oil spill preparedness and response capability.

HAROLD CURRAN, CEO, speaking for Mayor Edward Itta
North Slope Borough
Alaska

POSITION STATEMENT: Commented on the status of Alaska's oil spill preparedness and response capability.

MIKE MUNGER, Executive Director
Cook Inlet Regional Citizens Advisory Council
Alaska

POSITION STATEMENT: Commented on the status of Alaska's oil spill preparedness and response capability.

MARK SWANSON, Executive Director
Prince William Sound Regional Citizens Advisory Council (RCAC)
Alaska

POSITION STATEMENT: Commented on the status of Alaska's oil spill preparedness and response capability.

COMMISSIONER LARRY HARTIG
Department of Environmental Conservation (DEC)

Anchorage, AK

POSITION STATEMENT: Commented on the status of Alaska's oil spill preparedness and response capability.

LARRY DIETRICK, Director
Division of Spill Prevention and Response
Department of Environmental Conservation (DEC)
Anchorage, AK

POSITION STATEMENT: Commented on the status of Alaska's oil spill preparedness and response capability.

DAN SEAMOUNT
Geologic Commissioner and chair
Alaska Oil and Gas Conservation Commission (AOGCC)
Anchorage, AK

POSITION STATEMENT: Commented on the status of Alaska's oil spill preparedness and response capability.

CATHY FOERSTER, Engineering Commissioner
Alaska Oil and Gas Conservation Commission (AOGCC)
Anchorage, AK

POSITION STATEMENT: Commented on the status of Alaska's oil spill preparedness and response capability.

KEVIN BANKS, Director
Division of Oil and Gas
Department of Natural Resources (DNR)
Anchorage, AK

POSITION STATEMENT: Commented on the status of Alaska's oil spill preparedness and response capability.

ACTION NARRATIVE

[10:07:14 AM](#)

CO-CHAIR WIELECHOWSKI called the Senate Resources Standing Committee meeting to order at 10:07 a.m.

Overview: Status of Alaska's oil spill preparedness and response capability

[10:07:45 AM](#)

CO-CHAIR WIELECHOWSKI said the idea to hold a meeting to assess Alaska's oil spill preparedness and response capability arose in the wake of the Deepwater Horizon spill in the Gulf of Mexico. In light of that disaster, it seems only prudent to examine Alaska's laws, regulations, policies, and budgets to ensure that

we have the best possible regulatory structure in place. Alaska has billions of barrels of oil and trillions of cubic feet of natural gas sitting on the Outer Continental Shelf (OCS) in Alaska and on state and federal lands onshore. If we cannot convince the federal government that we have the strongest regulatory structure and response capability in place we will not be able to see those lands opened up for exploration.

He said that both he and Senator McGuire are both strong supporters of additional oil development in Alaska, both on- and off-shore. Oil production produces roughly 85 percent of the state's unrestricted revenue, providing funding for education, public safety, roads, and other essential services. Yet, production is declining. The Trans-Alaska Pipeline (TAPS) once carried 2.1 million barrels of oil every day. It is now down to 671,000. He said:

This reality must lead us all to ask if we are to encourage more oil production in Alaska, how can we ensure that it is done in the safest way possible. How can we minimize impacts on other industries and aspects of Alaska's economy, on our fish and wildlife?

CO-CHAIR WIELECHOWSKI said they had assembled four expert panels to help answer these critical questions. He thanked each of the panelists for participating today and thanked them in advance for any recommendations they might provide that will help ensure that oil development in Alaska proceeds in the least risky, most sustainable manner possible.

CO-CHAIR WIELECHOWSKI asked Co-Chair McGuire if she had any opening thoughts.

[10:09:16 AM](#)

CO-CHAIR MCGUIRE echoed Senator Wielechowski's sentiments that they wanted to give time for the experts in the Gulf to contain the oil spill so that these hearings wouldn't be a catalyst for more controversy, as well as the fact that some of the experts would have been busy responding to it. She said that she looks forward to a future where Alaska continues to do it the very best, and Prudhoe Bay is that world class example of how resources can be developed in an environmentally sound way. Alaska is held out across the world as a global leader; and we want to be a model for OCS development as well. The OCS is much different than what is being dealt with in the Gulf; it is shallower-only a couple hundred feet in some cases, it has Arctic ice and whale migration, and indigenous populations that

depend on that very delicate region of the world. Alaska wants to do it right. She and Senator Wielechowski hoped to create a base foundation today for continued dialogue with industry and with the executive branch. The panel idea is a good one as they don't want to go forward with one theme. They tried to create a fair and balanced process to allow each discussion to take place divided into industry, environment, community and the agencies.

She recognized Representative Craig Johnson in attendance.

CO-CHAIR WIELECHOWSKI announced that the industry panel would have three presenters: Marilyn Crockett from AOGGA, followed by Becky Silves of ConocoPhillips, and Pete Slaiby from Shell Alaska. Each panelist would have about 10 minutes to provide their assessment of Alaska's oil spill preparedness and response capability and offer any recommendations for improving it.

[10:12:31 AM](#)

MARILYN CROCKETT, Executive Director, Alaska Oil and Gas Association (AOGA), said this is an appropriate first step to having an ongoing dialogue on this issue.

MS. CROCKETT said her presentation would be focused on the importance of prevention in terms of oil industry operations and capabilities currently in place for responding to a spill if one does occur.

She said the State of Alaska has long been recognized as the leader in oil spill and hazardous substance spill prevention and response laws and regulations. A large number of personnel were deployed from Alaska to assist in the Gulf of Mexico response. She stated:

- Prevention is the key. The AOGCC is the agency that is responsible for the "down hole" activities; they regulated the oil and gas industry on blow out prevention equipment (BOPE).
- AOGCC requires BOPE be tested:
 - No greater than every 14 days for development wells
 - Every 7 days for exploration wells & workover wells
- 98 percent component pass rate for BOPEs over the past four or five years
- Since 1968, 7 blowouts from 5,000 wells drilled on the North Slope (last occurrence 1994)
- Since 1962, 4 blowouts in Cook Inlet (last occurrence 1987)
- All were from loss of control in shallow gas zones
- None resulted in injuries or oil spills

[10:16:39 AM](#)

MS. CROCKETT said the State of Alaska has 19 approved Primary Response Action Contractors. Cook Inlet has a spill response agency called CISPRI; Prince William Sound has Alyeska and SERVS as well as the individual tanker owners; and Alaska Clean Seas (ACS) for the North Slope. These organizations are all in place in addition to the responsibilities of the individual companies.

She said the Alaska Clean Seas has been around for more than 30 years and started off as ABSORB and was reconstituted from a co-op to a response action contractor in 1990. It is responsible for providing personnel, equipment and spill response training in preparing for and cleaning up oil spills. The membership encompasses companies operating on the North Slope and in the Arctic offshore (OCS); they have 78 full-time personnel as well as a great number of trained responders available via NSSRT, ACRT and VRT.

ACS inventory that they maintain and operate on behalf of ACS and the companies operating on the North Slope includes:

- \$50 million in inventory
- 287,184 feet containment boom
- 160 skimmers (over 19,000 bbls/hr)
- Eight heli-torch aerial ignition systems
- 94 vessels
- Two 128 barrel and twelve 249 barrel mini barges

MS. CROCKETT said ACS provides extensive training not only to its own personnel, but also to others on the North Slope in 580 Classes in 2009 with 7,310 trainees, and 29,913 student hours.

ACS is a leader in research and development and has been actively participating in R&D since the early 1980's. They participated in the SINTEF program for oil spill response in ice infested and Arctic waters. They are in the process of updating the Tundra Treatment Manual in connection with the Department of Environmental Conservation (DEC) on treatment of Arctic tundra as a result of a spill as well as airborne ground-penetrating radar to detect oil under ice.

She said that any change to the state's requirements need to wait until the federal efforts are completed. It wouldn't be useful for the state to create its own wheel without knowing what the federal baseline is going to be initially.

[10:20:46 AM](#)

REPRESENTATIVE GATTO asked how much money it costs to purchase and install a blow out preventer.

MS. CROCKETT answered that she didn't know.

REPRESENTATIVE GATTO asked if it's possible to stack them so that the failure of the first one could default to the second one.

MS. CROCKETT indicated yes; and said that would be covered in the next presentation.

REPRESENTATIVE GUTTENBERG said the Alaska Department of Environmental Conservation (DEC)ADEC had a couple of programs, the GAP analysis was one, that took a couple of years to organize, but the national academy shot it down because industry wasn't participating. He hoped they would do a better job in the future, because at the end of the day both industry and government would have a lot of responsibility. Clearly prevention comes first, but the public expects a quick response to a spill.

MS. CROCKETT responded that she disagreed with his point that the industry wasn't cooperating. They were very interested in cooperating, but the scope of the risk analysis was too big for the methodology that was developed. The data requested would have filled this room and the rooms next door and it would not have been useful to the contractor. So, the project was reduced and industry has been cooperating. She didn't know the status of the reports.

[10:25:57 AM](#)

BECKY SILVES, House Safety and Environment (HSE), Alaska Drills and Training Coordinator, ConocoPhillips Alaska, said the focus of her testimony would be on their offshore exploration plans for the Chukchi Sea as well as their spill prevention for those activities. ConocoPhillips has 40 years of operating experience in the Alaska Arctic as well as experience in other high latitude areas such as Norway. Their Chukchi prospect is about 80 miles offshore; the first well is planned for no earlier than 2012 and most likely will happen later than that given ongoing unresolved litigation and regulatory uncertainties.

In order to focus their prevention activities ConocoPhillips has to understand the environment they are operating in. They have and will continue to do the pre-work in order to conduct safe exploration activities; they have worked with scientists from

the University of Alaska Fairbanks, as well as industry partners with Shell and Statoil, in order to implement an integrated environmental studies program. This program has given them insight to the various species living in their prospect area and the physical oceanography that will affect their exploration activities - such as air temperature, wind direction and strength, wave height, ocean currents and ice profiling.

They plan to drill their exploration wells during the open water season, which on average is from mid-July through October/November and they plan to drill where there is a history of no ice. However if there is ice, they have developed a system for managing and responding to ice in the area. Their ice alert system which requires approval from the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) is a systematic procedure in order to manage ice that comes in to their operating environment. The key to the system is detection ability, which includes using satellite tracking that provides pictures to the five meter resolution. They are actively gathering data on ice movement in order to predict the length of time until ice comes into their drilling area. Physical management of the ice will include the use of two ice breakers as well as tactics such as pulling the ice away from the area.

She provided a slide of shallow water wells with relatively shallow formations that helped illustrate how much flexibility they have in drilling. They can use either a jack up or a floating drilling vessel. Because of the shallow water, blow out preventers located on the subsea can easily be accessed by divers. Furthermore, a well was previously drilled by Shell on their prospect site which gives them knowledge about the geological and pressure characteristics there.

MS. SILVES said ConocoPhillips' focus is prevention, but they will have a BOEM-approved spill response contingency plan that includes on-site dedicated spill response personnel and equipment, which will for an immediate response to a Chukchi incident.

[10:29:51 AM](#)

Their spill response strategy is to maintain oil spill response vessels and a recovered oil storage tanker in the area of the drill site. ConocoPhillips is planning a near shore barge to store additional response equipment on the water in order to have a ready and mobile response fleet able to contain and recover oil that comes towards the shoreline. Furthermore, they have developed a shoreline protection plan that identified

priority protection sites along the entire Chukchi Coast with protection and recovery strategies and tactics for each site. Emergency preparedness is a part of their culture at ConocoPhillips, and this contingency plan is being developed from their experience of operating on the North Slope, Cook Inlet, and Prince William Sound.

MS. SILVES said training their responders to execute the contingency plan is also one of their dedicated efforts, and it is definitely a focus for their current operations. They do this through table-top scenarios, equipment deployment drills, and large-scale integrated exercises. They have already begun conducting training and table-top scenarios for their Chukchi operations.

In addition to their drills and training program, they are also actively engaged in research and development for oil spill response. ConocoPhillips has been participating in R&D projects that look to improve spill detection and oil monitoring, that assesses environmental saturation effects on spilled oil, and enhance and develop response technology. Specifically in the Arctic, they are working on projects similar to ACS's such as in situ burning, fire boom testing in Arctic conditions, GIS and trajectory mapping, viscous oil pumping and mechanical recovery testing.

MS. SILVES said ConocoPhillips is also a member of a multi-year joint industry program for oil spill response for Arctic and ice covered waters that ended last year. The project managed by SINTEF is one of the largest independent research institutes in Europe; it is a consortium of Norwegian, US governments and industry partners across the globe working with some of the world's experts on oil spills. They uncovered important knowledge and developed new solutions for oil spill response in ice-covered waters.

[10:31:58 AM](#)

The next program of this magnitude is being planned through an Arctic Oil Spill Response Task Force under the International Petroleum Industry Environmental Conservation Association (IPIECA) and the International Association of Oil and Gas Producers (OGP). Their goal is to launch this program within the first quarter of 2011.

REPRESENTATIVE GATTO asked if the five-meter resolution is through a satellite.

MS. SILVES answered yes; and it is able to see through clouds and weather - within five meters of their prospect area.

CO-CHAIR WIELECHOWSKI asked her talk about some of the particular challenges they have in icy waters in the Beaufort and Chukchi Seas that they might not have in the Gulf [of Mexico].

MS. SILVES replied that there is no ice in the Gulf of Mexico, and ConocoPhillips is planning to drill in open water. So the environment and its challenges will be very similar during their exploration season.

[10:33:51 AM](#)

CO-CHAIR WIELECHOWSKI asked if there was a spill in the Chukchi and Beaufort Sea in the winter with ice, what kind of challenges would that present to a cleanup.

MS. SILVES answered that access to the spill would be a challenge, but she emphasized that they are not planning to drill in the Chukchi Sea during ice conditions.

CO-CHAIR WIELECHOWSKI said he understood that, but once the wells is up, if there were an incident in ice covered conditions, does something additional need to be done. What do other countries do?

MS. SILVES replied that they are over 10 years away from that, and multiple public review sessions and where technology could change over time. Their focus right now is looking at an exploration well.

[10:35:20 AM](#)

CO-CHAIR MCGUIRE said they are looking forward to connecting one or both of these projects up with the TAPS; and right now they are assessing open-water season exploration activities and making sure we have the best response capabilities there. The next part (having been bifurcated) is what will have to be considered with full production. She asked if there is any chance that an ice flow will come in even in mid-July, and what ConocoPhillips has done to consider that shoulder season.

MS. SILVES answered that is part of what they are using their satellite detection for now.

REPRESENTATIVE GUTTENBERG asked who they are partnering with now for tracking ice.

MS. SILVES replied that she wasn't as familiar with that area of their work, but she would get back to him.

10:37:55 AM

REPRESENTATIVE GUTTENBERG said there is a total lack of infrastructure on the North Slope, and asked where they would put workers if they needed to be up there for a spill or an accident.

MS. SILVES answered that their logistical planning is ongoing for the Chukchi operations and they are still a few years away from exploring there. Some initial thoughts go back to "float hotels" that were used during the Exxon Valdez spill that housed responders on the water.

CO-CHAIR MCGUIRE said they would have two more hearings during the Interim that will focus on things like different aspects of infrastructure. On October 1 the Northern Waters Task Force will meet and the premise is to discuss whether or not the Coastal Zone Management Program should be changed; another part of it will be about infrastructure. They also formed the Arctic caucus through PNWR that is meeting in December in Barrow to assess infrastructure in the Arctic in general.

10:40:05 AM

REPRESENTATIVE GATTO recalled that she said ConocoPhillips' BOP was accessible by divers at about 150 feet, but that is probably at the outer limit of a diver's ability to function. He asked if they had access to remote vehicles like the ones (ROBs) that were used in the Gulf of Mexico or can't they be used in the Arctic.

MS. SILVES answered that all possibilities for their exploration activities would be looked at.

10:41:05 AM

PETE SLAIBY, Vice President and General Manager, Shell Alaska, said he wasn't an expert in oil spill response, but he has experts behind him that he could call. He said they have 137 Beaufort leases - \$84 Million, 275 Chukchi leases - \$2.1 Billion for a total investment in Alaska to date of \$3.5 Billion. It has provided hundreds of millions to Alaskan companies and offshore service providers.

He said Shell likes the offshore and has been involved there in over 50 years of being in Alaska. They have drilled four of the

five wells in the Chukchi Sea in the 1990s; and 12 of the 90 wells drilled in the Alaskan portion of the Beaufort Sea and partnered in another 7. They drilled 33 exploration wells in Alaska (not counting what they did in Cook Inlet in the 1960s) of 32 of them were offshore.

[10:43:54 AM](#)

He said they had a fairly successful 3-D seismic acquisition in the last three years with USGS estimates of 25 Billion barrels of oil and 120 TCF of gas in the Alaska Arctic. So when you look at OCS, it is material. The only other area with more hydrocarbons would be the Deepwater Gulf of Mexico (GOM OCS) with around 44 billion barrels of oil. Alaska offshore exceeds all the East/West Coast OCS resources combined. It could provide 35,000 jobs per year for Alaska over a 50-year period; and about \$72 billion in payroll. It will extend the life to the TAPS and has a real capability to open up the NPRA (with a pipeline from the Chukchi Sea).

MR. SLAIBY said they don't want to ever have a blow out, so they put a huge effort into prevention. He described their view of the world as a bowtie; everything on one side is prevention and where you spend a huge amount of time; the event is the knot in the tie; and then the other end of the tie would be the response. Truly successful companies are always ready for the response and Shell is one of these. They spend a lot on prevention which doesn't get a lot of air play.

[10:47:24 AM](#)

MR. SLAIBY said they have four phases:

Phase I - Proper Planning, Drill Well on Paper (DWOP) workshops, risk identification, training, routine drills on rig (bop tests, pit drills, trip drills)
Phase II - Early kick detection and kick response procedures. continuous monitoring, response, including use of rtoc (shut down pumps - flow check - shut in - kill well)
Phase III - Mechanical barriers basically blow out preventers (including at least two special arctic barriers), testing and inspection criteria in place to ensure competency
Phase IV - Loss of Control - relief well operations, contingency plans in place for the worst case scenario

One of the things they have committed to doing by 2011 is putting a containment system in place that could be deployed in the Arctic to capture hydrocarbons before they are released. He

said that Shell already has a system in place that would keep the hydrocarbons at their source.

[10:48:57 AM](#)

MR. SLAIBY said some of their own assets would be in place, but some equipment would be shared. They have committed to have this ready to go for the 2011 season. It has all been available since 2007.

He said Shell has a separate c-plan for the Beaufort and Chukchi Seas; the assets are either under contract or owned by Shell. It is based on a three tier system very similar to what ConocoPhillips just talked about. They view success as not having a blow out, but the issue will be to keep the oil around the source if there is one. That has always been their plan.

The vessels they have are the ice class Nanuq, which is designed to operate and be deployed within one hour from the start of an incident. It is presently in Dutch Harbor. On the near shore they have an ice class barge that is in the Port of Seward. The equipment has met ADEC standards, but most of it has been designed to twice the specifications. The wells they are proposing to build in 2011 would be under the ADEC standards, but possibly the Beaufort Sea wells would not exceed those standards.

[10:51:31 AM](#)

Questions have been raised about what escalation looks like, and their response is to be there in an hour. They recognize that they can keep things at bay for a certain amount of time, but things have to start very quickly thereafter. He showed a world chart of other resources (including personnel, lodging) that could be sent up as well. Shell already has quarters up there, but they would build more.

He said Shell's c-plan has been through numerous reviews and has withstood a barrage of litigation from a number of different sources. It has been reviewed and approved by the BOEM, MMS, EPA, US Coast Guard, FWS, NMFS, the North Slope Borough and has been upheld in court. They participate in a number the different studies that people have talked about as well.

In summary, he said, Shell's view is that they would be responsible for any operations in the Arctic. There is no question about that, and they would hold the job of primacy. Their assets would be ready for any event, Shell or otherwise.

He said Shell supports the Coast Guard moving into the Arctic, but their role is to run the unified command center (the Coast Guard didn't collect a drop of oil in the Gulf of Mexico). The operators are expected to provide the physical assets, and Shell stands ready to provide those. He said they have contemplated that Shell will be able to deliver a same-season relief well, but their primary response would be by the rig that drilled the well, the Noble Discoverer. To that end, they have purchased a second set of blow out preventers that would be kept on it. Obviously, if you're in a blow out situation, your first set of blow out preventers stay with the well. The second set would also require the associated casing piping and mud systems. Besides that they are bolstering their BOPs by putting a second set of sheer ends in one of the cavities (it's a four-cavity BOP). The BOPs would have remote access panels. They had initially planned for four divers and for remote operated vehicles, but they are doubling those numbers to have good escalation capability.

[10:56:20 AM](#)

Shell Alaska agreed to go to seven day testing for their BOPs. Federal requirements in the Gulf are 14 days. Even though Alaska's standards are more rigorous, Shell will adhere to them.

MR. SLAIBY said they also have a second drilling unit, called Kulluk that was recently pulled out of the Mackenzie Delta; and it is presently in Dutch Harbor. They have always planned on warming the rig up regardless of where they are, but they have agreed to going to the point of activating it. This means it will have a marine crew and partial deck crew as wells as a partial rig crew on board. Their drilling contractor has crews they keep on standby in North America primarily to work in the maritime provinces of Canada, but they could be used if mobilization were required. This asset could be ready to respond in a number of days. This is what they will do until they are drilling with two drilling rigs in the Arctic Ocean. When they have two floating drilling units in the Beaufort and Chukchi Seas there will be no need to have a dedicated relief well rig. The rig that is drilling the second well would simply stop the work, temporarily abandon it, and move over.

[10:58:22 AM](#)

He said when one looks at complexity, no well is without risk. But these wells are not Gulf of Mexico wells that are highly pressured at a profound water depth. They believe Shell has the highest response planning standard and stricter oversight ever

seen anywhere in the US and the world. He said ongoing investigations may yield further recommendations.

10:59:16 AM

CO-CHAIR MCGUIRE asked to what extent Shell subcontracts the operational roles. And is there an agreement in place to adhere to the standard?

MR. SLAIBY responded that Shell has a number of contractors, but there is no ambiguity about who ultimately has accountability; in Alaska; it's Shell. The contractors will be supervised by Shell people, but they will have their own house safety and environmental (HSE) management systems that work under Shell's HSE management system. They are linked by a "bridging document" that delineates how their responsibilities flow into Shell's accountabilities to deliver a well. This process requires management, audit, and review.

11:01:26 AM

CO-CHAIR MCGUIRE said some people have speculated that a methane gas bubble might have contributed to the Gulf disaster, and asked if Shell's c-plan had considered how they would factor into the blow out preventer standard.

MR. SLAIBY answered they are currently clearing drill sites on Harrison Bank, Shell's area in the Beaufort Sea. They are required to do a shallow hazard survey that actually seismically determines if there is shallow gas or hydrates sitting below a potential drill site. He can't submit a plan to the BOEM until that work is thoroughly done and analyzed.

REPRESENTATIVE JOHNSON asked what they know about the pressure and viscosity characteristics of the resource.

MR. SLAIBY answered that they have a number of well control points for their five wells in the Chukchi and 30 wells in the Beaufort. The wells here tend to be less pressured than in the Gulf of Mexico, and it's for a number of different reasons. One is that the sedimentation process here happened a lot slower. In the Gulf of Mexico the Mississippi River is a source of the sediment and when the biological material settled out, there was a massive amount of "dump" on top of it putting more and more pressure on volatile materials without a chance to escape. As a result, over time pressure built up. So, their worse-case discharge numbers in Alaska are smaller than in deep water Gulf of Mexico operations. The bulk of Shell's production is coming from 25 wells with smaller capacity.

REPRESENTATIVE JOHNSON said both ConocoPhillips and Shell have indicated a fairly extensive response plan and asked if they are working together.

11:05:50 AM

MR. SLAIBY answered that more and more cooperation is evolving. The Coast Guard would direct any incident; Shell would work through them. ConocoPhillips would eventually submit a c-plan for the work they are going to do. The protocols would be inside the c-plan, which specify telephone numbers and radio frequencies et cetera.

CO-CHAIR WIELECHOWSKI said oil spill cleanup is significantly more difficult in colder temperatures and ice-covered waters, and asked him how he deals with a blow out in the middle of January in completely ice-covered water.

MR. SLAIBY answered there is never a good time for that kind of work, but they will have to work in ice - in areas of the Beaufort and the Chukchi. Their open water season is mid-July through October 31, so they don't really plan on being out there in January.

The way they handle broken ice is with ice management vessels that carefully break ice - very gingerly, he explained. They don't want to add noise into the water. They have incidental harassment authorizations that they take very seriously and don't want to obstruct or change routines of marine mammals and other creatures out there. In an oil spill situation all that changes. Their c-plan provides ways that they can actually harass animals to keep them out of the area. In that instance, they would be setting up areas where they could burn or disburse or mechanically collect oil.

Dwindling hours of light becomes a factor as well, and their vessels do have infrared capabilities on vessels and spotter aircraft. They keep the ice away and use burning, which works better in the Arctic, because the water is shallower, which means they can physically anchor their burn booms to bottom of the seafloor. The cold temperature means that the oil tends to disperse less and combust more completely. Arctic and SINTEF work actually works pretty well; even in the Gulf of Mexico burning worked well. Work is being done in Barrow testing the toxicity of dispersants on Arctic biota and marine animals. Work is also being done with microbes that will eat and absorb the

oil after the dispersant. Keeping the oil localized and building a containment dome will also benefit Alaska.

11:12:13 AM

REPRESENTATIVE GATTO asked if they need a relief well drilled in the Beaufort, how they would move a structure if the ice is 15 ft. thick.

MR. SLAIBY answered they would move the vessel through open water, and if it was icy they would manage the ice. Three feet of ice is manageable with their ice breakers. Obviously they wouldn't break through 15 ft. of ice, but he didn't think they would be out there drilling in 15 ft. of ice during the exploration phase. Under normal circumstances in the Beaufort they are not going to tell their ice management vessels to break ice because of the noise it would create in the water. If they had a blow out in those conditions, they would temporarily abandon the well and bring the rig, which has an ice breaker and handler dedicated to it, into play. They wouldn't work through a 15 ft. ice pack; they would work south of it.

REPRESENTATIVE GUTTENBERG asked if the plan would be the same for a production well.

MR. SLAIBY answered that would be different. The structures they will put out there would be drilling year-round 24/7. They would be large concrete gravity-based structures that would have a large amount of containment within the structure itself (like structures they use in the northern North Sea where conditions are much worse than in the Chukchi and Beaufort in terms of wind and waves). It's just colder in the Beaufort and Chukchi Seas.

He also pointed out that while he looks forward to development there, it is a decade away; and the science they are gathering now is what they will need to support a large development. In the last three years they have spent \$50 million gathering science to support the EISs. He estimated that between industry and the taxpayers they had spent a half billion dollars putting together the environmental baseline studies that support exploration drilling.

11:16:18 AM

CO-CHAIR MCGUIRE recalled that the second largest spill in Alaska was the Selendang Ayu, a freighter, and asked with possible trade routes opening up in the Arctic, if Shell would make its assets available to non-oil industry traffic that comes through the Arctic that might have an incident.

MR. SLAIBY answered yes; and it's not just Shell; it's everybody who has these assets. Three of every four barrels of oil he has picked up have been other peoples' oil.

CO-CHAIR MCGUIRE announced a break from 11:18 to 11:31.

11:31:48 AM

CO-CHAIR WIELECHOWSKI called the meeting back to order and announced that the environmental panel would testify next.

DR. JEFFERY SHORT, Pacific Science Director, Oceana Alaska, an international marine conservation organization dedicated to using science, law, policy, and public input to protect the world's oceans. Prior to that he worked for the National Oceanic and Atmospheric Administration (NOAA) and in that role, I led numerous studies on the Exxon Valdez oil spill. His entire career has been devoted to studying the effects of oil pollution.

He applauded the presentations they had just seen and all the oil industry had done to prevent oil spills in Alaska, giving us the enormous benefits of those revenues at minimal environmental cost, recognizing that they expend a lot of ingenuity and effort to do that. He recognized that we're on the cusp of major decisions regarding the environmental fate of the northern coast of our state.

11:33:49 AM

While recognizing all that industry has done, Dr. Short said, there is one fact everyone has to soberly recognize - that every major marine dependent oil region in the United States has had at least one major unanticipated oil spill. These projects run for decades once development begins and it's prudent to expect if we launch into major development on the north coast of Alaska offshore that we will very likely have another unanticipated major spill. No one anticipates these things because they are almost always unique because and as a result of human error that combines with an unfortunate set of circumstances that are impossible to predict. Don't think in terms of if, but when a major spill occurs.

DR. SHORT said from his perspective the Deepwater Horizon happened because of an unfortunate combination of lax regulatory oversight and response performance plans that are based on ideal test conditions but that have to be applied under conditions that were almost always less than ideal. In the Arctic they will

often be far from less than ideal. And little noticed, but very important, are the challenges posed by just the differences in scale.

He said when they do tests of oil spill response preparedness they are usually under ideal conditions but they are also small-maybe consisting of a few barrels. For example, when oil leaked out of the Exxon Valdez, it created slick at the rate of half a football field per second for two and a half days. The Deepwater Horizon was twice that for almost three months. The logistical challenges of coping with that rate of slick creation become overwhelming.

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Currently evidence is scant that we have adequate technology in place to cope with a marine spill on the North Slope. One exercise conducted in 2000 resulted in video documentation that was far from reassuring. Oceana made a state records request for all subsequent field tests and got basically nothing. So, they are not at all persuaded that the response assets are there for the north coast.

DR. SHORT pointed out they have very little idea of what they are risking on the North Slope. A lot more science needs to be done to come up with a credible biological impact management plan. How much science is enough? They need to know what all the major species are that inhabit the region, which currently they don't; they need enough science to construct a quantitative food web model with conservative basis a credible environmental risk assessment. By that he means a spill has killed this many marine mammals. How long will it take for the food web to recover? Third, they need enough science so that they know where the important ecological areas and sensitive habitats are so that they can be prioritized.

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The coastal native cultures are also at risk, he said. These people have lived there for 8,000 years and have a very intimate relationship with the marine environment that become threatened existentially by an offshore oil spill - because, as they have seen on the Deepwater Horizon and every other major marine spill, whenever on happens people become terrified that the seafood is no longer safe. In the case of coastal maintenance, this severs the generational link between the young and the old because they no longer trust the food supply to go out and continue their subsistence way of life. And you end up with a

problem that money can't fix and that can't be remedied by any means.

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He implored them if they are going forward with developing offshore resources on the north coast that they at least do three things: increase fund for science with a nickel a barrel tax and remove the \$50 million cap. Second, require realistic response and rescue capabilities and demonstrated technology under realistic field conditions. Finally, allow for meaningful community involvement so that the decisions don't have potential devastating impacts on the local residents.

[11:40:55 AM](#)

REPRESENTATIVE GATTO said everyone is an environmentalist. Everything they do adds something to the environment that someone is going to object to.

[11:42:05 AM](#)

DR. SHORT said that is why he began his comments with recognizing the efforts and cooperation industry is displaying.

[11:42:54 AM](#)

REPRESENTATIVE JOHNSON asked him to explain his second point more fully.

DR. SHORT responded by referencing the video documentation of the field exercise in 2001 to see how oil spill cleanup would work in the Beaufort Sea; it was not impressive and far from reassuring. These exercises occur under close to ideal conditions, which are rarely going to be the case in actual operations off the north coast of Alaska where it could be foggy; it could have major storms, high winds, and darkness. Oceana Alaska would like to see some credible demonstration that response approaches would work under those conditions.

REPRESENTATIVE JOHNSON asked if his group had done anything to develop a reasonable response other than listing criteria.

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DR. SHORT replied that they have recommended that much more resources go into research; he didn't have the capacity to do oil spill response research.

REPRESENTATIVE JOHNSON said there will be drilling in the Arctic, and it might not be the United States. Someone else

might not have the same high standards that we do. Is he working with Canada, Norway, the former Soviet Union?

DR. SHORT answered that they are working with those countries - China, Russia, Norway, and Canada. The US could benefit from a closer relationship with Norwegian and Canadian communities. Much of the Gulf capability came from Canada.

[11:47:38 AM](#)

CO-CHAIR MCGUIRE asked if Oceana had looked at what other agencies might fill the financial gap that is a result of a decline in production.

DR. SHORT answered that removing the cap would be one way.

CO-CHAIR MCGUIRE asked if they had taken a position on whether the state should invest in research through its university system. Part of that discussion comes from the need to establish first hand and local data that is unbiased.

DR. SHORT answered Oceana encourages and endorses the State of Alaska to broaden its research capability and infrastructure through the university, especially in collaboration with Norway.

REPRESENTATIVE GUTTENBERG asked what Oceana is and what it does.

DR. SHORT answered that they are an international marine conservation organization that tries to combine science, law and policies to effect change in management of ocean resources to the benefit of those ecosystems. They want to make more fish for everybody.

REPRESENTATIVE GUTTENBERG asked that they don't conduct drills; they just advise.

DR. SHORT said that was correct.

CO-CHAIR WIELECHOWSKI thanked him and introduced Ms. Epstein.

[11:50:16 AM](#)

LOIS EPSTEIN, P.E., Arctic Program Director, The Wilderness Society, a national conservation organization with an office in Anchorage, said she has spent over 25 years, 9 in Alaska, working on oil and gas technical and policy issues as a consultant and as an employee of non-profit organizations. She has served for many years on federal advisory committees for the U.S. Department of Transportation on oil pipeline safety and for

the US Environmental Protection Agency on petroleum refining, and was one of 15 outside technical advisors on the report to the President in May 2010 containing recommendations to increase offshore drilling safety. She was in Houston two weeks ago speaking on a Bureau of Ocean Energy Management panel on safety.

As someone who has commented on and utilized Alaska Department of Environmental Conservation (DEC) regulations covering pipelines and c-plans since 2001, Ms. Epstein said she recognized that there are a number of good components to those regulations, and to Alaska Oil and Gas Conservation Commission (AOGCC) regulations on wells. The key problem lies, however, in regulatory implementation. Everyone knows that even the best regulations are not valuable unless they are enforced effectively. This is the number one problem with the state's oil spill prevention and response program.

This past summer it became clear to most Americans that the Minerals Management Service - the federal offshore drilling regulatory agency was dysfunctional. One of its biggest problems was the conflict of interest the agency had in regulating offshore drilling while simultaneously collecting federal leasing and royalty income. Without effective enforcement of even the best regulations, what you have is self-regulation which could lead to worst-case scenarios as it did this summer in the case of BP's Deepwater Horizon tragedy. Unfortunately, the State of Alaska has this same conflict of interest problem in that the state seeks to increase revenue by maximizing leasing and production. This means, in certain instances, enforcement might not be pursued because that would change the revenue picture.

To many state leaders, a strong and effective enforcement program means that some oil companies may choose to locate where regulations and/or enforcement are looser. Another way to look at this situation, however, is that industry leaders do not need to worry about enforcement while industry laggards would choose not to operate in Alaska. According to a statement made by a DEC representative just two weeks ago in Anchorage before former Lt. Governor Fran Ulmer and Co-Chair Bill Reilly of the National Oil Spill Commission, the State of Alaska has "zero tolerance" for oil spills. In reality, though, spills like those from BP's North Slope pipelines in 2006 which resulted in revenue loss to the state could have been prevented with an effective state enforcement program; in fact, those leaking low-stress pipelines were regulated by the state and not regulated federally, which is true for many gathering lines, flow-lines, produced water

lines, and well piping. In the case of the BP North Slope spills in 2006, which resulted in revenue loss to the state could have been prevented with an effective state enforcement program. The state was the only entity that regulated those pipelines not the federal government, and there was not enough preventive enforcement activity prior to those spills occurring. So, clearly our zero tolerance did not work in that case.

In 2004, she completed a report for Cook Inlet Keeper entitled "Cops Off the Beat" that identified three types of releases regulators should focus enforcement resources on: high spill volumes, repeated spills (which are and indicator of ongoing problems), and spills to environmentally (and historic or culturally) sensitive areas. The report also makes the case for increased criminal enforcement for egregious conduct. Fair, clear, visible, and consistent enforcement, including criminal enforcement in egregious instances, is critical to a well-functioning regulatory system.

To ensure improved enforcement and prevent oil spills, and to some extent address the conflict of interest that is inherent at the state level, she suggested that they require DEC and AOGCC to provide the legislature and the public by the start of the upcoming legislative session with reports of their enforcement actions for each of the past five years on oil-spill related issues, along with annual updates. These reports should contain, at a minimum, information on the numbers and types of inspections, civil and criminal penalties assessed, a listing of which operators had enforcement actions brought against them, and descriptions of any releases or other violations resulting in enforcement actions. This way they could look at trends, see whether enforcement is primarily focused on operators or individuals.

A second key way to help ensure a well-functioning regulatory system that prevents oil spills is to support creation and mandatory industry funding of regional citizen advisory committees or RCACs, especially for the Trans-Alaska Pipeline System (TAPS). These committees, like the Prince William Sound RCAC, are the eyes and ears of the public on the ground working on spill prevention. RCAC funding would support staff that would conduct or supervise public interest research on issues like pipeline safety. Additionally, creation of RCACs promotes ongoing dialogue among the public, industry, and regulators. Such entities would ensure ongoing vigilance and prevent the complacency that leads to problems.

11:55:36 AM

MS. EPSTEIN said she continues to support the following measures to prevent and mitigate oil spills which I submitted to DEC in 2009 as a package of alternatives to its problematic oil spill risk assessment process:

1. Create an oil and gas Ombudsman position on the North Slope and in Cook Inlet to receive and act on public and whistleblower-identified problems. The Ombudsman position would have funds for field investigations and analysis;
2. Strengthen regulations where needed so Alaska would, in fact, have the best possible oil and gas regulatory system in the world. This can be done by conducting a comparative analysis. Note that the state's limited corrosion prevention requirements for state-only regulated oil pipelines is a particular problem at this time which needs to be remedied;
3. Contract with accident investigators so severe/significant accidents are investigated for root causes, with recommendations made to prevent future similar events. This is needed because the National Transportation Safety Board and the Chemical Safety and Hazard Investigation Board rarely, if ever, come to Alaska to investigate oil and gas industry accidents. They need that kind of independent analysis, and;
4. Develop a reporting requirement for "near misses" which would protect confidential business information but provide enough information to ensure that the Ombudsman and state regulators would be able to detect problematic patterns of behavior.

She also provided the committee with some recommendations on spill response provided to me by conservation community colleagues with many years of experience in this area:

1. Require that there be a relief well drilling capability at the ready during offshore drilling to address a blowout scenario. Alaska has had several blowouts in Cook Inlet in past decades and Arctic blowouts during shallow water drilling are possible;
2. Create a navigation system equivalent to Prince William Sound for tankers and other large vessels in Cook Inlet and Unimak Pass, including tug escorts;
3. Ensure that abandoned wells, pipelines, and platforms are shut-in, flushed, and removed, respectively. One exception might be if a platform could be used for another purpose, e.g., to support renewable energy generation;
4. Require c-plan holders to enter into binding contracts with experienced and capable responders, and to list spill response assets in the region of the spill;
5. Require c-plans to provide realistic "Effective Daily Recovery Capacities," and;

6. Given the likelihood of another eruption of Redoubt and the Drift River terminal's problematic location, require Cook Inlet operators to install a pipeline to replace the terminal's operations.

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A final comment she said is that while Alaska may have high standards, they still are inadequate. The Alaska Response Planning Standard, for example, is nowhere close to addressing a Deepwater Horizon size spill; it's an order of magnitude too low and it's required for too few days. It's important to acknowledge that oil spill cleanup will be limited regardless of the resources deployed by Shell and others. She thought that was even an area of agreement among the stakeholders.

CO-CHAIR WIELECHOWSKI thanked her for her testimony and introduced the next speaker, Ms. Wainwright.

[11:59:24 AM](#)

NANCY WAINWRIGHT, Senior Staff Attorney, Trustees for Alaska, commended this committee on examining this issue at this time, the best guarantee for not sustaining future oil spills is vigilance every year to ensure that the state's standards are met and lessons are learned from other spills and near spills. She encouraged them to use this as a beginning of having ongoing review. She said she would focus on the current capability and limitations of the state's oil spill prevention and response statutes and recommendations.

Since 1980, she said, the Alaska legislature has required that oil spill contingency plans (c-plans) have best available technology (BAT). After the Exxon spill the legislature reconfirmed that BAT was required for prevention and response in Alaska. In about 1997, the statute was amended to say that DEC may prepare findings and make a list of BAT technologies that are considered best available. This change has proven to be somewhat problematic. First, DEC held no BAT conferences for many years, and a search of their website today reveals a 2004 BAT conference that addressed a limited set of technologies. The findings for that conference were not released until 2006, when they were already outdated.

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DEC is under budgetary constraints, so unless the legislature mandates that doing a review every five years and issuing a timely report is a priority, the technologies will forever be outdated. One example is that leak detection for pipelines was

addressed in 2004 and it is current applied. It must be able to detect 1 percent of the daily throughput of the pipeline; yet the technology exists today for a .5 percent throughput detection and it is occurring at some operations in Alaska. It's very important that DEC update these findings, and particularly given the North Slope spills on the pipeline that there be a redundant leak detection system.

The way the state handles leak detection is to negotiate at every c-plan renewal with the operators. This puts a tremendous burden on DEC; so they recommend that there be a minimum standard requirement that DEC doesn't have to renegotiate every time a c-plan comes along.

MS. WAINRIGHT recommended a BAT for ice-class vessels in the Arctic. Right now there are none. Likewise, she recommended an Arctic-grade oil spill response organization. Ozro is an oil spill response organization and is certified for rivers and offshore response but none for the Arctic environment. After the Gulf spill, Alaska should require the best and most improved blow out preventer design and much of that information is being developed by the federal government at this time. So, she recommended that the DEC not wait years to implement it, but instead require best available BOP today and more frequent testing and inspections.

12:06:00 PM

She said there have been few, if any, unannounced spill response drills in Alaska. Even when the operators have had knowledge of the drill being called, they have frequently failed to meet their response requirements when their c-plan is tested. Those exercises are a learning experience. Every time they have oil spill prevention and response drill it is improved. She recommended at least one unannounced drill per operator in each c-plan cycle of the operator. This would ensure the operator would improve by the next c-plan. She recommended eliminating or revising that section so that you don't allow old out-dated technology to meet the response planning standards.

One of the DEC response planning standards for wells is 5500 barrels day times the number of days it will take to control the well. This assumes a 15-day time to control the well, but that is very unrealistic if one looks at the Gulf of Mexico spill. This issue needs to be addressed in legislation to insure that the time for response to this bill and the number of barrels per day assumed is realistic and not something that is developed from theory.

MS. WAINRIGHT said they recommend also that there be no offshore exploration allowed until there is a drill rig vessel is present and under contract to drill a relief well. And the legislature should consider whether statutory changes are needed to require better coordination among the AOGCC regulation of blow out preventer devices with DEC's c-plan oversight role.

12:09:10 PM

BP's spill in the Gulf of Mexico shows that the commonly used method in Alaska for skimmer effectiveness is fatally flawed. BP claims there that the ability to recover more than 491,000 barrels a day and they actually deployed equipment to contain 1.2 million barrels a day. But they actually recovered only 1800 barrels a day. So, again, realistic standards are needed on the ground. Drilling and tests would give us those more realistic standards.

12:10:00 PM

She referred again to the 2000/01 DEC Minerals Management Service and USGS drill on the North Slope that was referenced by Dr. Short and said that the North Slope Borough ICAF and others have highlighted this problem of the inability to respond in realistic conditions on the North Slope. So, if Alaska is going to continue to permit exploration and production in areas where ice may seasonally be present, at the very least the legislature should require strict seasonal drilling restrictions or increase preventative measures during those times.

12:10:37 PM

MS. WAINRIGHT said some recommendations had been covered before, but they recommend zero ballast water discharge for tankers with ballast water originating out of the state, particularly in state critical habitat areas. Smithsonian research has found over a dozen invasive species in Kachemak Bay presumably from ballast water. Ensure that the Cook Inlet terminal is not allowed to be used any more for storage and that a pipeline be installed instead. Cook Inlet fisheries deserve the same protections as those in Prince William Sound, and therefore they recommend that tug escorts be mandatory for all large tankers. They also recommend a mandatory pipeline mapping inspection reporting system be made available at the Joint Pipeline Office so that interested members of the public and regional citizens' advisory councils can review where those pipelines are located and assist DEC in its oversight of them.

Finally, Ms. Wainwright addressed dispersants, which were heavily used in the Gulf of Mexico. They recommend that the state work with the Alaska Regional Response Team to clearly define when, where and in what volumes dispersants are safe and effective. When the National c-plan was first adopted the use of COREXIT 9527 was allowed in Alaska, it had to be at least 50 percent effective. But unfortunately laboratory tests showed that dispersant was not effective on North Slope's low crude; it was only 30 percent effective. So, they said well, we'll average its effectiveness. So, its effectiveness on Louisiana crude is 70 percent, on North Slope crude it's 30 percent. "Boom it's 50 percent effective, but in fact it's not." You would have to use a lot more dispersant. So, whatever is used in Alaska needs to be tested for its effectiveness in Arctic and cold conditions as well as on the species present in its waters.

REPRESENTATIVE GATTO said the term "best available technology" is almost scary - because it would preclude big projects from ever getting built. Within reason, he asked, do they want to be 80 percent of the best or 90? It has to be a different number than 100. Do you have a number?

MS. WAINWRIGHT replied that she didn't have a number, but that is why the technology forums that the legislature recommended that DEC have are so important. "We don't want to have an outlandish BAT standard that nobody can meet; we want to be realistic." When you get good minds together, have those conferences and come up with best recommended technology.

REPRESENTATIVE JOHNSON said two people testified that they should get rid of the Drift River terminal and build a pipeline and asked if she would convince her organization to support a pipeline if that is what happens.

[12:15:01 PM](#)

MS. WAINWRIGHT replied that comment came from a member of her staff, and they would definitely work with everyone to supplant that terminal with a pipeline.

[12:15:20 PM](#)

lunch break

[1:35:28 PM](#)

CO-CHAIR MCGUIRE called the meeting back to order at 1:35, and announced that that the panel from impacted communities would testify next.

[1:36:44 PM](#)

HAROLD CURRAN, CEO, speaking for Mayor Edward Itta, North Slope Borough, said the ability to respond to an oil spill is constrained by arctic conditions, including prolonged darkness, extreme cold, absence of or remoteness from response infrastructure and equipment, a lack of facilities to house, feed, and otherwise support large numbers of response personnel, and - perhaps most challenging - extreme and variable ice conditions. Broken ice, fall slush ice and solid ice conditions that trap oil under ice or in amongst ice flows make a successful oil spill response unlikely with existing equipment and technologies. Their primary goal is to try and put measures in place to keep oil from being spilled.

Their first recommendation is to upgrade blowout preventers and well pressure control devices to insure best technology and practices are used including type of control, secondary control of that system, inspection maintenance and repair program. You can't just assume that these systems are in place and functioning well. The Gulf of Mexico has demonstrated that.

Upgrade blowout preventer and well pressure control devices to ensure best technology and practices are used, including: the type of control system; secondary control of that system; inspection; maintenance; and repair programs.

BOPs must have two sets of blind shear rams to prevent BOP failure. They must have reliable emergency back-up control systems and immediate access to sufficient remote operating vehicles to manually activate a subsea BOP if needed.

BOPs should be required to be tested more frequently, 7 days, as opposed to every 14 days, which is the interval that is the normal standard today. They also would like BOPs to have reliable emergency backup control systems; so it's not just the preventer itself, but the control systems that are duplicated. They also want immediate access to vehicles to manually activate a BOP if needed. If a subsea blowout preventer is used, require a second redundant blowout preventer on the floating drilling unit, when technically feasible. So, they are asking for two BOPs. They are also recommending codifying a minimum two-barrier policy - two BOPs and two barriers.

Seasonal drilling should be used in the OCS where it is effective to prevent offshore oil spills during broken ice conditions. Offshore pipelines should be required as the transportation method for the Arctic Ocean. Industry has a lot

of information on where the major spills come from, and in terms of industry spills it comes from tankers. So, tankers should not be used.

There are some risks with pipelines and so they have recommendations to try to address those. One is to codify that offshore pipelines must be buried below ice gouging and strudel scour depths. Industry as a matter of practice does testing to find out what those depths are and generally plans to do that, but it ought to be codified. They recommend requiring redundant leak detection systems for offshore pipelines and updating leak detection standards to reflect best available technology; if dispersants are to be used they should be tested to determine whether they are safe or not. Once tested and determined safe, they ought to be pre-approved. Using dispersants in the Gulf of Mexico was very controversial and there were many time delays in justifying their use. Arctic oil spill response equipment standards should be established; a lot of equipment doesn't function well in the Arctic. A same-season relief well plan should be required just like the Canadians have. Shell has relief well plans, but they ought to be required.

[1:43:03 PM](#)

MR. CURRAN said they would like to see worse case oil spill planning and not go light in terms of how long it's going to take to drill a relief well or the quantities of oil that will be discharged during that time period. If you don't plan for the worst then you will just aggravate that possibility. Require well blowout containment equipment or caps on subsea wells. Equipment should be onsite or readily available nearby along with the expertise to safely deploy it and use it effectively. A cap or top hat is what BP eventually used on its BOP. It can sit down over the well and capture the oil so that it can be brought up to the surface and put in a container.

[1:44:02 PM](#)

Oil spill response: Require a signed contract for a relief well rig, with trained and qualified personnel and equipment needed to drill the relief well. All of that will make the response more effective and timely. Require an operator to plan for the Absolute Open Flow Potential (AOFPP) for an uncontrolled well blowout with no backpressure. Alaska's default blowout rate of 5,500 bbl/day (wells in Cook Inlet plus wells on the North Slope) for exploration wells needs to be increased to account for higher rate Arctic wells. The average is not fair to wells in Cook Inlet which could have less deliverability, and it

undermines proper planning for North Slope wells, which generally exceed that.

MR. CURRAN said three assembly members went down to the Gulf of Mexico and talked to local representatives and elected officials from the communities in Louisiana and asked what they would do differently. This is their list of activities:

- Inventory of boats available in coastal communities
- Train boat operators and crews
- Train beach responders
- Evaluate disposal locations
- Develop a chain of command and response plan
- Plan for additional fuel needs
- Enhance Coast Guard presence on the North Slope

Having the infrastructure in place is important - if you're going to mobilize people to respond to an oil spill, they have to stay somewhere. You're not going to put them in a tent on the North Slope in Arctic conditions. It's very important to provide them with beds, food, and a heated facility if they are going to function properly.

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REPRESENTATIVE GUTTENBERG asked if he thought best industry standards needed more clarification.

MR. CURRAN answered that a lot of their recommendations are best industry standards. They have looked at other countries and Arctic nation and have found good standards.

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REPRESENTATIVE GUTTENBERG asked where the coastal zone management stops offshore. Does it include a drill rig a couple miles off?

MR. CURRAN replied that whatever is done in the OCS has to be consistent with the state plan if it has been approved by the federal government. It's not an absolute standard, but if there is a conflict between federal law and the state's coastal zone management program, then there is an administrative process that occurs in the Department of Commerce.

REPRESENTATIVE GUTTENBERG asked if that process is in place for the North Slope Borough.

MR. CURRAN answered they don't have an approved district program.

CO-CHAIR MCGUIRE asked him to review the North Slope Borough's efforts over the Interim to prepare for the Northern Waters Task Force meeting on October 1, so that Alaskans know generally how he is fairing with the state's neighbors who will arguably be the most impacted by development in negotiations with the federal and state governments.

MR. CURRAN prefaced that by saying that whatever happened in the Gulf of Mexico has changed the playing field. But, since 2007 they have been in negotiations with Shell on discharge and baseline science issues, and they have been responsive on both. They are close to signing an agreement with them where they will fund some baseline science that would be managed by the North Slope Borough. On discharge they have orally indicated they may modify their proposals to reduce the amount of discharge for their drilling activities.

In terms of what used to be MMS, Mr. Curran said, he sat down with them about three days before the Gulf of Mexico and developed an MOU to try negotiate eight points that Mayor Itta had identified that should occur in the OCS to see if those could be addressed administratively as opposed to legislatively. They were slowed down as a result of the Gulf of Mexico, but are committed to following up on that. Also, he hoped that BOEM would require the same mitigation of impacts to hunting of the Bowhead whale that has been put into their permits for the first time last summers.

MR. CURRAN said response is being seen from both the federal government and industry. He said the NSB is a cooperating agency with the BLM in its area-wide EIS for the NPRA, as well as with AEC [Army Environmental Command] with NMFS and its analysis of trying to mitigate impacts to marine mammals in the Arctic Ocean for future oil and gas activities. But he still thinks more can be done.

[1:52:54 PM](#)

CO-CHAIR MCGUIRE said there is a perception that the North Slope Borough opposes drilling or any kind of activity in the OCS, but that hasn't been her experience. Rather it's that they want it done right.

MR. CURRAN added that the Mayor knows the Borough ultimately doesn't get to make decisions about ANWR or OCS, and understanding that the federal government will make a decision to go into the OCS, they are putting a lot of energy into

improving the standards. Their preference is still that oil and gas that is available on land be explored and developed before anybody goes in the OCS.

[1:54:46 PM](#)

MIKE MUNGER, Executive Director, Cook Inlet Regional Citizens Advisory Council, thanked the committee for the opportunity to speak this afternoon. He said their board is comprised of 13 members. Municipality members represent the communities of Anchorage, Kenai, Homer, Seldovia, and Kodiak; also the Kodiak Island and Kenai Peninsula Boroughs. Stakeholder members include the Alaska State Chamber of Commerce, representing tourism, commercial fishing, aquaculture, Native, recreation, and environmental organizations. Cook Inlet Regional Citizen's Advisory Council's mission is to represent the citizen's of Cook Inlet in promoting environmentally safe marine transportation and oil facility operations in Cook Inlet. Oil spill prevention and response are key focuses for the Council.

He said the Senate Resources Committee's interest in Alaska's oil spill preparedness and response capacity is very much in line with the Council's. In fact, it has just undertaken a project to review Alaska oil spill statutes and regulations and to develop recommendations for possible changes. That project is on a fast track. His comments would be followed-up in writing once the project is completed.

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First question: How would they assess Alaska oil spill preparedness? Alaska is one of the best prepared states in the US. Yet, there is room for improvement.

They have four very capable primary response action contractors - CISPRI, SERVS, ACS, and Alaska Chadux - with an impressive array of equipment and highly trained responders. Alaska's current response capability is one of the highest in the world. However, everyone needs to realize that no matter how much response equipment and how many responders are required there will never be an adequate response to a catastrophic spill like the one in the Gulf of Mexico. The realities of the harsh environment in Alaska and the basic physics of oil on the water, means that it is not possible to put the genie back in the bottle. Mr. Munger said we have to be prepared to do the best job humanly possible and we have to require a robust oil spill response system, but we must place our primary focus on preventing a major spill from occurring in the first place.

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Second question: What changes, if any, would you make to state laws, regulations, procedures or budgets to improve our preparedness and response capability? His response was:

Continuous Improvement: Our current laws and regulation do not adequately force continuous improvement of oil spill response technology. There should be incentives for developing better response technologies. The issue is not that we need more equipment; the issue is we need better equipment. There is a Best Available Technology (BAT) analysis requirement in the Alaska Department of Environmental Conservation regulations but it does not apply to response equipment used to meet a response planning standard. As long as the c-plan holder meets the standard, their equipment is considered BAT. This removes any incentive for continuous improvement.

There are a few exceptions, but for the most part the spill response technology being used today has not changed in the last 20 years. Whether it is funded directly or incentives are created, focus should be on more research and development in spill response technology. One exception he considered a significant improvement was the fuzzy disc skimmer system recently brought to Alaska. This has a high volume recovery capacity but its greatest feature is virtually no water is recovered during the operation. He explained that on water temporary storage of recovered oil is always a large factor in spill response. The skimmer was brought to Alaska through the efforts of Tesoro. CISPRI, the response action contractor in the Cook Inlet area, has recently received four of the skimmer systems to complement their response inventory.

Equipment Standards: We should also look at requiring plan holders to utilize equipment that meets minimum standards. The American Society for Testing and Materials (ASTM) has developed standard testing protocols for booms and skimmers. Contingency plans utilizing boom or skimmers that have not been tested using these protocols and found to meet a minimum standard should not be approved.

Field Trials: The development of full-scale trials designed to measure the limitations and effectiveness of an entire response system, such as an open-water recovery task force should be encouraged. The capability of the task force is limited by its weakest component; that weak component might be people, vessels, boom, or skimmers, but without trials, they won't know and they can't be fixed.

[2:00:16 PM](#)

Oil Well Blowout Planning: He recommended that oversight and approval responsibility for well control and blowout planning be transferred from the ADEC to the Alaska Oil and Gas Conservation Commission (AOGCC). AOGCC is responsible for the approval of normal drilling operations and it only makes sense that they would be responsible for the review and approval of emergency response plans for blowouts. AOGCC has drilling engineers on staff and ADEC does not, so the proper expertise for reviewing well control plans is in the Commission. Given the recent blowout event in the Gulf of Mexico, we probably need to review our standards for emergency well control plans, but this process should not begin until the responsibility is transferred between agencies.

Unannounced Drills: Many people use the terms exercise and drill interchangeably, and in fact they are not distinguished in the current laws and regulations. But they are different things with different purposes. An exercise is planned ahead and everyone knows it is coming; it is valuable for training and practice, but it is not a test of response readiness. On the other hand drills should be unexpected and designed to test response capability. Currently too few unannounced drills are conducted, because ADEC does not have enough resources to plan and conduct them.

Funding: They strongly support more funding for the ADEC Division of Spill Prevention and Response. Their staff reviews contingency plans, conducts inspections and unannounced drills, and responds to actual spill events. Like most agencies they have seen their budgets cut in the past few years. Without adequate funding, none of our other recommendations will be implemented.

CO-CHAIR MCGUIRE asked if any other authority would work.

MR. MUNGER answered they see this as the natural thing and now the DEC doesn't have that. The review needs to be finished.

[2:03:38 PM](#)

MARK SWANSON, Executive Director, Prince William Sound Regional Citizens Advisory Council (RCAC), said in the RCAC was formed after the Exxon Valdez oil spill to provide citizen oversight of crude oil transportation in Prince William Sound. In 1994, the Alaska Legislature passed a law that included a requirement for a review of best available oil spill prevention and response

technology each time an Oil Discharge Prevention and Contingency Plan (more commonly called a contingency plan) is approved. The goal of the 1994 law was to ensure continuous improvement of oil spill prevention and response technology in Alaska.

He said Alaska's laws and regulations requiring best available technology assessment and implementation for oil spill prevention have resulted in a number of oil spill prevention improvements across Alaska. In Prince William Sound, the most notable oil spill prevention improvement came in the form of today's tug escort system, along with improvements to leak detection technology, corrosion control, tank overfill controls, and improved maintenance practices. However, Alaska's laws and regulations requiring BAT assessment and implementation for oil spill response have not yielded comparable improvements.

State statutory amendments in 2002 and regulatory amendments in 2004 eliminated the requirement to conduct a rigorous technical and economic assessment of Best Available Technology for most mechanical oil spill response equipment. These amendments affected skimmers, booms, and other mechanical oil spill response equipment required to meet the state's Response Planning Standard. This standard requires operators to be able to contain, control, and clean up 300,000 barrels of spilled oil in Prince William Sound within 72 hours. Today, the only oil spill response equipment and procedures required to undergo a rigorous BAT assessment are: communications; source control procedures; trajectory analysis and forecasting; and wildlife capture, treatment and release programs.

[2:06:13 PM](#)

The ADEC's 2004 regulatory amendments weakened oil spill response requirements by allowing operators to substitute non-mechanical response techniques for mechanical response during severe weather. This change was made despite the fact that the Prince William Sound Regional Citizens' Advisory Council and other stakeholders oppose chemical dispersant use, which is a primary non-mechanical response tactic. Additionally, dispersants and in situ burning (another common non-mechanical response technique involving the burning of spilled oil while it is still on the water) suffer from the same limitations as mechanical response equipment in severe weather.

The steady erosion of the state's best available technology requirements over the past 16 years has left Alaska with an arsenal of oil spill response equipment based largely on late 1990s technology. Minor improvements have been made voluntarily

by some c-plan holders, but the ADEC has not compelled or alternatively provided adequate incentives to tanker operators and other contingency plan holders to drive more significant and much needed updates and changes.

If Alaska is to be held up as the "gold standard" for BAT for oil spill prevention and response equipment, the state will need to revise its laws and regulations to require that all oil spill response equipment— including skimmers, booms, and response vessels—undergo a Best Available Technology assessment at least once every five years (each time a contingency plan is renewed), and to require that enhanced oil spill prevention measures be taken during periods when even the best available mechanical response technology cannot operate.

In addition to the problems just outlined, the state Division of Spill Prevention and Response, which is responsible for enforcing Alaska's regulations on oil spill prevention and response, faces an ever-worsening funding shortage. The division's budget is tied to a per-barrel surcharge on oil production in Alaska, which is steadily declining. As a result, the division's funding is steadily being reduced, even though its workload is not.

Recommendations:

- Require all equipment including individual components of recovery systems used to meet the state response planning standards and undergo a best available technology review.
- Require contingency plan holders to inspect, test, and certify that all Response Planning Standard equipment is Best Available Technology.
- Within 30 days of a spill response, require c-plan holders to re-inspect and test Response Planning Standard equipment used in the response to verify it remains suitable for continued service.
- Require c-plan holders to inspect, test, clean, and repair equipment on a state-approved schedule as part of their contingency plans.
- Require that Response Planning Standard equipment not be over 20 years of age unless it has been inspected, tested, and certified by the Alaska Department of Environmental Conservation as suitable for continued use.
- Require that enhanced oil spill prevention measures—such as double booming or daylight-only operations—be negotiated in advance and enforced when weather is too severe for Best Available Technology mechanical response equipment to operate.

- Clarify in regulation that the contingency planning process does not allow non-mechanical response techniques – such as dispersants and in situ burning – to be used to meet the Response Planning Standard, and that only mechanical response equipment can be used to meet the Response Planning Standard.
- Consider increased financial incentives to plan holders to enhance spill response capabilities outside the normal five year plan cycle.
- Provide inflation-adjusted funding for the state Division of Spill Prevention and Response to ensure it has an adequate budget to meet its responsibilities.

[2:10:07 PM](#)

REPRESENTATIVE GUTTENBERG asked how accurate it is now that Alaska is the gold standard.

MR. SWANSON replied it remains very accurate. Standards are much higher in Alaska than anywhere else in the nation. Most equipment works well in good weather but not in bad weather or icy conditions.

[2:12:00 PM](#)

five minute break

[2:23:57 PM](#)

CO-CHAIR WIELECHOWSKI called the meeting back to order at 2:23 and announced that the state agencies' panel would comment next.

[2:24:21 PM](#)

LARRY HARTIG, Commissioner, Department of Environmental Conservation (DEC), said he would provide an overview of how DEC addresses the risk of a major crude oil spill to marine waters in Alaskan, and in light of the additional information that will be coming in from the expert panels looking into the Gulf of Mexico spill, where they anticipate putting additional attention as DEC continues to reduce the risk of crude oil spills in Alaska waters. They must reduce the probability of the events that could lead to a spill and be prepared to contain, control and the stop the flow of oil quickly if a spill occurs.

COMMISSIONER HARTIG said his overview would be broken down into four parts:

- A quick summary of the legal framework that allocates responsibilities among the regulated community, and federal and state agencies;
- The primary measures implemented by DEC to reduce the risk of spills;

- The primary response measures in place to prepare for and respond to marine spills in Alaska; and
- A summary of areas where they will likely be focusing our attention as reports stemming from the Gulf spill are reviewed.

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COMMISSIONER HARTIG said the incident in the Gulf was a wake-up call to the Nation. It reminds us of the need for vigilance. But it is also important to be mindful that:

- The systems and measures we have in place in Alaska to prevent and respond to marine spills have been developed over decades by people with Alaska experience and expertise, and we don't want to make unnecessary changes or import something new that won't work here;
- In many areas, spill prevention and response are very technical areas and any changes we might consider should be supported by good science and engineering, and
- There is a tremendous amount of work underway by some of the best experts in the Nation to look at oil spill prevention and response, and we should take that body of work into account as we decide which lessons apply here and the best way to respond to them.

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LEGAL FRAMEWORK:

A prerequisite to assessing Alaska's oil spill risks and our capacity to respond is an understanding of the legal framework that governs who is responsible, who is liable, and who is required to respond. Both the federal and state statutory frameworks require that the "spiller" or responsible party immediately respond and contain, control and clean up a spill. He commented that many people thought the Coast Guard had an armada of spill responders that would be immediately launched for a big spill, where actually under federal law the spiller has that responsibility and the Coast Guard has oversight and coordinating responsibility.

Certain facilities, such as oil terminals, exploration and production facilities, pipelines, tank vessels, non tank vessels and, in Alaska, the railroad, are further required to have an "oil discharge prevention and contingency plan" and to meet "financial responsibility" standards set by state statute and regulation.

Oil spill c-plans detail spill prevention measures and equipment that must be in place. They also specify a "response planning standard," which is the size of spill and the conditions under

which an operator must be prepared to respond to a spill. The response planning standard dictates the requirements for equipment, vessels and trained personnel the operator must have available and be ready to contain, control and clean up a spill.

Spill response is regulated by the state and federal government. If a response is inadequate, the governments may augment or direct the response. The state or federal response organizations are able to augment a response typically by engaging their own spill response contractors looking outside the state for help, or bringing their own resources to bear.

[2:30:17 PM](#)

PREVENTION:

There are a number of ways DEC strives to reduce the risk of crude oil spills:

- 1) Identifying or developing technical standards and other requirements to assure the integrity of critical equipment used in the storage and transport of crude oil;
- 2) Incorporating these requirements into regulations or contingency plan approvals;
- 3) Reviewing and inspecting records, operations and equipment to assure compliance with applicable requirements; and
- 4) Instituting enforcement actions as needed to compel compliance.

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COMMISSIONER HARTIG explained that in the marine environment, DEC shares jurisdiction with other federal and state agencies. On the Outer Continental Shelf (OCS), the federal agencies, including the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEM) (formerly MMS), have primary if not exclusive jurisdiction. However, DEC spill prevention requirements still apply in the OCS through the Alaska Coastal Management Program (ACMP). They must show consistency with the ACMP plans which incorporate their c-plans. In state waters and on-shore, DEC strives to prevent spills through requirements contained in regulations and state-approved c-plans.

Regulatory requirements have been developed for training, transfer operations, laden tank vessels and oil barges, exploration and production facilities, flow lines, crude oil transmission pipelines, storage tanks, facility piping and secondary containment, all of which may be incorporated into the c-plan requirements. Both DEC's approval of c-plans and the comparable ACMP process that extends state requirements into the

OCS include a public process. The public has an opportunity to review and comment in advance of any final decision by DEC.

[2:32:16 PM](#)

PREPAREDNESS:

Response preparedness activities are also included in c-plan requirements. Facilities with contingency plans are subject to inspections, drills, exercises, and table top drills. In Alaska, as at the national level, the spiller and the state and federal governments use the incident command system (ICS) as the response management framework. Typically you would see DEC, EPA, the Coast Guard, the RCAC, local officials and the spiller and their contractor all be centralized in one facility managing the response together. He said, also, unique to Alaska is an emergency response fund of \$50 million paid for through a conservation surcharge on crude oil produced in the state, which is available to the state to respond to spills. In the event of a large spill, one of the first things that happen is he gets a memo from the division director saying this is the estimated cost to the response asking to tap the fund. If appropriate, he would authorize tapping the fund; notice goes to the legislature and the governor.

[2:33:46 PM](#)

COMMISSIONER HARTIG said they have been strengthening the state's c-plan requirements ever since the Exxon Valdez spill. Progress has been made in many areas over the last 20 years. The steps in this process include:

- Evaluation of general response procedures, deployment strategies and response strategies. State law requires applying best available technology in the review of for certain components of the c-plan, and they hold a BAT conference at least every five years. A year or two ago they held a conference on digging and corrosion issues relating to the North Slope events.
- Evaluation of technologies and their application to determine they are the best available.
- Establishment of response planning standards based on the maximum and most damaging oil discharge that could occur based on the size, location, capacity and analysis of possible mishaps during the lifetime of the facility or vessel. Today they heard that there is a 5500 barrel per day response plan requirement that was based on the average flows at the time from oil being produced in Alaska when the standard was set. But they have the ability to go back with AOGCC help and look at the actual reservoir pressures and what the flow might be from a particular reservoir and adjust that and adjust the c-plan requirement.

- Evaluation of incident management teams, equipment, vessels and trained personnel to immediately respond to meet the established response planning standards and other c-Plan requirements. He said the state also has a unique requirement in the case of exploratory and development wells; the c-plan holder must have a plan in place to regain well control within 15 days of loss of well control.

- In the case of exploratory and development wells, the c-plan holder also must have a plan in place to regain well control within 15 days of loss of well control. They are currently looking for recommendations. DEC regulations require having a c-plan, but it has no review process yet. However, the DEC is probably not the right agency to do that and would defer to AOGCC (either give it to them and their answer back or transfer authority to them).

2:35:28 PM

COMMISSIONER HARTIG said they continue to learn from the Gulf event and are looking at recommending changes to:

- Accuracy and methods for estimating crude oil flow rates, which form the basis for the response planning standard and planning a response, from exploration and production wells;
- Technologies for regaining control of a blowout;
- Planning and resource requirements to respond to a "worst case" spill; and
- Evaluation of mechanical and non mechanical (dispersants and in situ burning) technologies for oil recovery or dispersion.

He said they are considering the advisability of having the ability to quickly deploy dispersants that were used quite extensively in the Gulf, more than at any other time. They are very interested in what the long-term benefits and effects are.

Again, the commissioner said, embedded in these issues are highly technical questions that demand data, analysis and expertise to answer. It is too early to say what changes will be warranted in Alaska in these areas, but the legislature would be getting recommendations from all the state agencies

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CO-CHAIR WIELECHOWSKI asked his position on using best available technologies.

COMMISSIONER HARTIG answered that using BAT is a requirement in state statute; they are to be employed in the c-plans. Then every five years a conference is required where the BATs can be selected. During renewal of c-plans new technologies can be

recognized. The bottom line is that the response planning standards have to be met.

They are looking at having future conferences in light of some of the questions that have arisen in the Gulf including well control, blow out preventers, well safety and regaining control of a well if there is a blow out. Funding could come from funding requests or industry. They are expecting cooperation with RCACs and the industry.

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CO-CHAIR WIELECHOWSKI asked what he thought about the use of unexpected drills that might need more funding.

COMMISSIONER HARTIG replied that there are pros and cons. There are safety concerns with any drill in open water, and especially large ones; but he is a great believer in them. He turned that answer over to Mr. Dietrick.

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LARRY DIETRICK, Director, Division of Spill Prevention and Response, Alaska Department of Environmental Conservation (DEC), said he was available for questions. He said they all agree that a robust drill program is a key part of verification to make sure spill response preparedness capability is in place. They had two unannounced drills in the last couple of months and more than that on a fiscal year basis. That is reported annually through the budget process.

The state has to look at a large number of facilities statewide. In deciding who to drill, they frequently look at the product type and the facilities that they store, transport or produce - persistent products get first attention. Spill histories, inspection results, incidents at the facility all go into "triaging" which facilities are picked for a drill. They also try to target specific objectives and then carry them out with a full field deployment. They coordinate with the federal government for maximum efficiency; many of the facilities are also required to have federal c-plans and are subject to federal drill requirements.

CO-CHAIR MCGUIRE asked what he thought about the blanket requirement that equipment can't be over 20 years and older unless it has been tested and specifically certified by the state.

MR. DIETRICK answered that was an interesting concept. The BAT requirement is in two parts; one is for prevention and the other part is for response. The BAT is set by the response planning standards which gives the operators some flexibility to pick from approved equipment. It doesn't eliminate any one operator and has worked well.

With regard to age, the equipment is tested during the drills and inspection program where it gets actually tested in the water. If they should test and recertify 20-year old equipment, in the skimmer world, for instance, new products come out, but he didn't know if a testing program would enhance their capability. He would have to consider it.

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CO-CHAIR MCGUIRE said there was also a suggestion that they transfer authority for blow out prevention and well response plans from DEC to AOGCC, given that they have the engineers on staff and asked his response.

COMMISSIONER HARTIG replied they are already looking at that, and are in discussions with AOGCC and the Division of Oil and Gas. Regulations already require exploratory and production well c-plans to have a well control plan where they would regain control of the within 15 days after losing control (a blow out situation). It is true they don't have the same expertise AOGCC has and would turn to them anyway for advice. They are not trying to protect turf, but he wants to make sure that the issues go to the experts one way or the other to get it done right.

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CO-CHAIR MCGUIRE asked with respect to "the smaller guys" like Pioneer, to what end is DEC looking at assessing the federal recommendations, and various financial positions and locations for drilling operations of these different companies. She doesn't want to end up putting smaller explorers and operators out of business.

COMMISSIONER HARTIG replied that the economics of a particular project and what a company can afford are not part of the c-plan approval process; rather they look at the realistic maximum discharge scenario. But there is a way to make the economics better, which what the companies have done; they have formed co-ops where they can share equipment.

[2:52:32 PM](#)

DAN SEAMOUNT, Geologic Commissioner and Chair of the Alaska Oil and Gas Conservation Commission (AOGCC), said the committee asked them two questions and their "AOGCC Statement to the Governor" and the Compass piece they sent into the Anchorage Daily News regarding blow out prevention goes to question one. Question two is if they can do other things to mitigate the risk of a blow out even more; handout number three addresses that.

He stated that a previous presenter said the state has a conflict in that it oversees the regulators and the revenue generators with the state, but that's not the case with AOGCC. They used to be under the Department of Natural Resources (DNR), but were split away from them in 1977 when someone actually did perceive that conflict. They are a totally independent agency and report to the legislature and the people of Alaska.

First question: How would you assess Alaska's oil spill preparedness and its capability to respond to oil spills?

MR. SEAMOUNT said he would speak to issues that only AOGCC has authority over. They don't have authority over oil spill cleanup, but they do have oversight over well operations and relief well drilling in order to control the blow out.

They have very important authority over oil spill prevention, which should be heavily emphasized. Prevention makes a response unnecessary. They maintain a technically comprehensive and codified well permitting process and a rigorous, interactive well operations inspection program administered by a highly experienced and professional staff.

All Alaska oil and gas (and soon, geothermal) wells must be permitted by the AOGCC. All drilling and completion permit applications are thoroughly reviewed by competent, experienced geologists and state-licensed petroleum engineers. Among other things, the staff insures that the well plan includes adequate mud weights (first line of defense), proper casing and cement design (second line of defense), and properly working blow out preventers (third line of defense). They oversee other elements of well integrity after the well is drilled and completed.

If an application fails to meet all of AOGCC regulations, fails to be compliant or in any other way satisfy good engineering practices the well operator is required to make the necessary changes or the application gets denied.

A robust AOGCC field well inspection program follows permitting to ensure regulatory and permit compliance. AOGCC employs 5 Petroleum Inspectors with an average 30 years oil and gas experience (private industry and AOGCC) per inspector, tasked with witnessing critical tests of equipment used in the drilling, production and measurement of hydrocarbons, and the proper abandonment of wells.

He explained that AOGCC performs periodic compliance inspections to ensure the equipment being used is consistent with the approved application, provides redundant levels of safety and protection for the well operations being performed, and is suitable for the environment in which activities are being conducted.

Blowout prevention equipment inspections and witnessing tests per the regulatory frequency is a particular emphasis for AOGCC inspections. The AOGCC requires that BOPE must be tested at a frequency no greater than every 14 days for development wells and every 7 days for exploration wells and well work-overs. In essence, every active rig in Alaska is inspected by the AOGCC at least once every 60 days. All blowout prevention test results must be provided to the AOGCC for review and records must be maintained by the operator to substantiate the tests. If any major component on the BOPE fails a test, drilling operations are suspended until it passes.

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MR. SEAMOUNT said since Prudhoe Bay Field was discovered in 1968 there have been seven blowouts from the 5000 wells drilled on the North Slope. The last one was in 1994. All except one were the result of loss of control within shallow gas zones. Since 1962, there have been four offshore blowouts in Cook Inlet, the last in 1987. All were from loss of control in shallow gas zones. None of the blowouts on the North Slope and Cook Inlet has resulted in injuries or oil spills. Since then, due to improvement and seismic acquisition, geologic knowledge, improved drilling technology and increased regulatory requirements, the risk of blowouts from shall gas has been greatly reduced.

He explained that after a well is completed, AOGCC requires installation, use and maintenance of safety valve systems that do for a producing well what a blow out preventer does for a drilling well - if there is a release it will shut the well in immediately. They inspect and require testing of safety valve

systems, and he didn't know of a failed safety valve system in Alaska that has resulted in a loss of well control.

MR. SEAMOUNT said that they also require that wells maintain mechanical integrity over their operating life. If an operator can't demonstrate this to their inspectors, he is required to shut in the well and insure the well is safe until the problem is fixed.

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ENFORCEMENT ACTIONS: Failure to comply with AOGCC regulations results in one or more of the following enforcement actions: increased testing and oversight; restricted operations; notice of violation (with timeframe for corrective actions); civil penalty; or criminal penalty. All deficiencies found during AOGCC inspections or reviews of operator reports must be corrected. He said enforcement actions are available on their website and are accessible by the public.

He said they continuously work to keep their regulatory oversight current, recently revising their blow out prevention equipment, well safety valve system, and suspended well regulations. Ultimately, though, as evidenced by their strong regulations, they believe prevention is the key to protecting the people, environment and natural resources of the state of Alaska.

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Second Question: What changes if any would you make to state laws regulations, procedures or budgets to improve our preparedness and response capability?

MR. SEAMOUNT said they have been working on the regulations and making them tighter, but they have also provided a notice of inquiry and possible changes (handout 3) in AOGCC Docket OTH-10-16, evaluating if changes or additions are needed to commission regulations governing well control in offshore and ultra-extended reach wells. He said they would hold meetings within 30 days after the public report of investigation results by the National Committee on BP's Deepwater Horizon oil spilled offshore drilling. They will discuss the 14 things on that notice. He said the public was invited.

CATHY FOERSTER, Engineering Commissioner, AOGCC, said he did a good job.

CO-CHAIR WIELECHOWSKI thanked them for testifying.

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CO-CHAIR MCGUIRE said they look forward to hearing the results of talks.

[3:05:48 PM](#)

KEVIN BANKS, Director, Division of Oil and gas, Department of Natural Resources (DNR), highlighted a few points. Obviously, OCS development is going to be exceedingly important for our future as well as being a key part of our nation's energy endowment. He hoped the state can demonstrate it can take care of its own business and can establish some confidence among all the states that we can take care of our offshore development.

He said a Northern Economics and ICER study indicates there is 130 tcf of undiscovered recoverable natural gas in the OCS, 27 bb/oil in OCS that could add 35,000 jobs to the Alaska economy with payrolls of \$27 billion over that period. It will add to longevity to the North Slope facilities and TAPS. By having that equipment up and running more of our own state lands will be developed.

Alaska has long-standing experience in offshore development. Endicott was started up in 1987 and has produced 490 barrels from two artificial drilling islands, the North Star project is in its 9th year and has produced about 140 mm barrels of oil which exceeds their mean estimate, Oooguruk is now up and Nakiachuk will start soon, both of which have artificial islands components.

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He said obviously these are shallower waters, and not only does that give us better access to the sea floor, but it also means that we are using different kinds of equipment than in the Gulf of Mexico. In some of the most shallow, gravity-based bottom founded structures can be used like ice or grave islands for temporary drilling and exploration.

MR. BANKS said our reservoirs don't have the same kind of pressure because of the depth and deposition is much different, and we already have a handle on the drilling environment. So we know what to expect when it comes time to establish requirements for blow out prevention in the OCS.

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What changes will administration recommend? Commissioner Hartig already talked about a dialogue within the administration

regarding the role of AOGCC in broader responsibilities for oil spill prevention. That was conducted in part under an offshore oversight team that the governor established earlier in the summer. Their work continues and involves members of state agencies involved in oil and gas development, including DEC, AOGCC and the DNR. Recommendations will be forthcoming. The Petroleum Systems Integrity Office has undertaken the GAP analysis, and when that is completed it will generate much further discussion on changes.

MR. BANKS pointed out that as serious an event as the Deepwater Horizon was something of a rare event. So, they should remember to make reasonable changes that are efficient and work rather than being a reaction to an event this highly unlikely to occur here.

3:12:29 PM

Also, he said the Petroleum Systems Integrity Office is completing program development stage for a performance based management system assessment program, a program in which the core of the PSIOs' activities will be to examine and oversee the kinds of qualify management program that the industry itself has put into place to regulate itself. This is in keeping the requirements of AO 234. They intend to coordinate that program with the industry and the administration.

3:14:03 PM

CO-CHAIR WIELECHOWSKI thanked everyone for coming. Staff would put recommendations together so people will have an idea of what happened at the hearing. He invited members of the public to submit comments.

CO-CHAIR MCGUIRE thanked everyone, too.

CO-CHAIR WIELECHOWSKI adjourned the meeting at 3:15.