

**ALASKA STATE LEGISLATURE**  
**SENATE RESOURCES STANDING COMMITTEE**

February 21, 2012

3:35 p.m.

**MEMBERS PRESENT**

Senator Joe Paskvan, Co-Chair  
Senator Thomas Wagoner, Co-Chair  
Senator Bill Wielechowski, Vice Chair  
Senator Bert Stedman  
Senator Lesil McGuire  
Senator Hollis French  
Senator Gary Stevens

**MEMBERS ABSENT**

All members present

**OTHER LEGISLATORS PRESENT**

Senator Cathy Giessel

**COMMITTEE CALENDAR**

SENATE BILL NO. 192

"An Act relating to the oil and gas production tax; and providing for an effective date."

- HEARD & HELD

- Analysis of Royalty Modification (Focus on Economic Analysis)  
Presentation by Department of Natural Resources

- HEARD

SENATE BILL NO. 176

"An Act exempting sand and gravel and marketable earth mining operations from the mining license tax; and providing for an effective date."

- MOVED CSSB 176(RES) OUT OF COMMITTEE

COMMITTEE SUBSTITUTE FOR HOUSE BILL NO. 144(RES)

"An Act requiring the Department of Natural Resources annually to deliver to the legislature and the governor a report on fishing stream access."

- MOVED CSHB 144(RES) OUT OF COMMITTEE

COMMITTEE SUBSTITUTE FOR HOUSE BILL NO. 185(RES)

"An Act relating to an exemption from authorizations that may be required by the Department of Environmental Conservation for the firing or other use of munitions on active ranges."

- HEARD & HELD

**PREVIOUS COMMITTEE ACTION**

BILL: SB 192

SHORT TITLE: OIL AND GAS PRODUCTION TAX RATES

SPONSOR(s): RESOURCES

02/08/12	(S)	READ THE FIRST TIME - REFERRALS
02/08/12	(S)	RES, FIN
02/10/12	(S)	RES AT 3:30 PM BUTROVICH 205
02/10/12	(S)	Heard & Held
02/10/12	(S)	MINUTE(RES)
02/13/12	(S)	RES AT 3:30 PM BUTROVICH 205
02/13/12	(S)	Heard & Held
02/13/12	(S)	MINUTE(RES)
02/14/12	(S)	RES AT 3:30 PM BUTROVICH 205
02/14/12	(S)	Heard & Held
02/14/12	(S)	MINUTE(RES)
02/15/12	(S)	RES AT 3:30 PM BUTROVICH 205
02/15/12	(S)	Heard & Held
02/15/12	(S)	MINUTE(RES)
02/16/12	(S)	RES AT 3:30 PM BUTROVICH 205
02/16/12	(S)	Heard & Held
02/16/12	(S)	MINUTE(RES)
02/17/12	(S)	RES AT 3:30 PM BUTROVICH 205
02/17/12	(S)	Heard & Held
02/17/12	(S)	MINUTE(RES)
02/21/12	(S)	RES AT 3:30 PM BUTROVICH 205

BILL: SB 176

SHORT TITLE: EXEMPTIONS FROM MINING TAX

SPONSOR(s): WAGONER

01/27/12	(S)	READ THE FIRST TIME - REFERRALS
01/27/12	(S)	RES, FIN
02/15/12	(S)	RES AT 3:30 PM BUTROVICH 205
02/15/12	(S)	<Bill Hearing to Continue 2/17/12>
02/17/12	(S)	RES AT 3:30 PM BUTROVICH 205

02/17/12 (S) Heard & Held  
02/17/12 (S) MINUTE(RES)  
02/21/12 (S) RES AT 3:30 PM BUTROVICH 205

BILL: HB 144

SHORT TITLE: REPORT ON FISHING STREAM ACCESS

SPONSOR(S): GARA

02/07/11 (H) READ THE FIRST TIME - REFERRALS  
02/07/11 (H) FSH, RES  
02/24/11 (H) FSH AT 5:00 PM CAPITOL 120  
02/24/11 (H) Moved Out of Committee  
02/24/11 (H) MINUTE(FSH)  
02/25/11 (H) FSH RPT 4DP 2NR  
02/25/11 (H) DP: MILLER, KAWASAKI, AUSTERMAN,  
THOMPSON  
02/25/11 (H) NR: PRUITT, JOHNSON  
04/01/11 (H) RES AT 1:00 PM BARNES 124  
04/01/11 (H) Moved CSHB 144(RES) Out of Committee  
04/01/11 (H) MINUTE(RES)  
04/04/11 (H) RES RPT CS(RES) 8DP  
04/04/11 (H) DP: GARDNER, MUNOZ, P.WILSON, HERRON,  
DICK, KAWASAKI, FEIGE, SEATON  
04/12/11 (H) TRANSMITTED TO (S)  
04/12/11 (H) VERSION: CSHB 144(RES)  
04/13/11 (S) READ THE FIRST TIME - REFERRALS  
04/13/11 (S) RES  
02/17/12 (S) RES AT 3:30 PM BUTROVICH 205  
02/17/12 (S) Scheduled But Not Heard  
02/21/12 (S) RES AT 3:30 PM BUTROVICH 205

BILL: HB 185

SHORT TITLE: EXEMPT DISCHARGES FROM USE OF MUNITIONS

SPONSOR(S): T.WILSON

03/10/11 (H) READ THE FIRST TIME - REFERRALS  
03/10/11 (H) RES  
03/18/11 (H) RES AT 1:00 PM BARNES 124  
03/18/11 (H) Heard & Held  
03/18/11 (H) MINUTE(RES)  
03/28/11 (H) RES AT 1:00 PM BARNES 124  
03/28/11 (H) Moved CSHB 185(RES) Out of Committee  
03/28/11 (H) MINUTE(RES)  
03/29/11 (H) RES RPT CS(RES) 7DP 1NR  
03/29/11 (H) DP: FOSTER, MUNOZ, P.WILSON, HERRON,  
DICK, FEIGE, SEATON  
03/29/11 (H) NR: GARDNER

04/01/11	(H)	TRANSMITTED TO (S)
04/01/11	(H)	VERSION: CSHB 185(RES)
04/04/11	(S)	READ THE FIRST TIME - REFERRALS
04/04/11	(S)	RES
04/13/11	(S)	RES AT 3:30 PM BUTROVICH 205
04/13/11	(S)	Heard & Held
04/13/11	(S)	MINUTE(RES)
02/17/12	(S)	RES AT 3:30 PM BUTROVICH 205
02/17/12	(S)	Scheduled But Not Heard
02/21/12	(S)	RES AT 3:30 PM BUTROVICH 205

**WITNESS REGISTER**

DAN SULLIVAN, Commissioner  
 Department of Natural Resources (DNR)  
 Juneau, AK

**POSITION STATEMENT:** Provided department background on royalty issues and plans of development.

BILL BARRON, Director  
 Division of Oil and Gas  
 Department of Natural Resources (DNR)  
 Juneau, AK

**POSITION STATEMENT:** Testified on royalty modification issues in Alaska.

KEVIN BANKS, Petroleum Market Analyst  
 Division of Oil and Gas  
 Department of Natural Resources (DNR)  
 Juneau, AK

**POSITION STATEMENT:** Explained royalty as an economic mechanism in Alaska and answered questions about its applications.

JOANNA BALES, Deputy Director  
 Tax Division  
 Department of Revenue (DOR)  
 Anchorage, AK

**POSITION STATEMENT:** Answered questions about application of state's mining tax relative to SB 176.

ASHLEY BROWN, Attorney  
 Civil Division  
 Department of Law (DOL)  
 Anchorage, AK

**POSITION STATEMENT:** Had no further comments on SB 176.

REPRESENTATIVE LES GARA

Alaska State Legislature  
Juneau, AK

**POSITION STATEMENT:** Sponsor of HB 144.

ED FOGELS, Deputy Commissioner  
Department of Natural Resources (DNR)  
Anchorage, AK

**POSITION STATEMENT:** Commented on access issues relative to HB 144.

REPRESENTATIVE TAMMIE WILSON  
Alaska State Legislature  
Juneau, AK

**POSITION STATEMENT:** Sponsor of HB 185.

KEVIN WARD, regional counsel  
U.S. Army, Northern Regional Environmental Office  
Denver, CO

**POSITION STATEMENT:** Supported HB 185.

SETH BOSANG, Assistant Attorney General  
Civil Division  
Environmental Section  
Department of Law (DOL)  
Representing the Alaska Department of Environmental Conservation (DEC)  
Anchorage, AK

**POSITION STATEMENT:** Agreed that HB 185 is intended to make state and federal law consistent.

KARLA HART, representing herself  
Juneau, AK

**POSITION STATEMENT:** Opposed HB 185.

#### **ACTION NARRATIVE**

[3:35:26 PM](#)

**CO-CHAIR JOE PASKVAN** called the Senate Resources Standing Committee meeting to order at 3:35 p.m. Present at the call to order were Senators Wielechowski, McGuire, French, Stedman, Co-Chair Wagoner and Co-Chair Paskvan.

#### **SB 192-OIL AND GAS PRODUCTION TAX RATES** **PRESENTATION BY DEPARTMENT OF NATURAL RESOURCES: ANALYSIS OF** **ROYALTY MODIFICATION (FOCUS ON ECONOMIC ANALYSIS)**

[3:36:30 PM](#)

CO-CHAIR PASKVAN announced the consideration of SB 192. He asked DNR Commissioner Sullivan to provide introductory comments to the presentation of the economic analysis of royalty modification.

[3:37:00 PM](#)

DAN SULLIVAN, Commissioner, Department of Natural Resources (DNR), said he had asked permission to provide an overview of things he is doing in some of the areas this committee was interested in. He said an overview is important because it will put into context some of the more detailed issues that Mr. Barron and his team will soon be testifying on about royalty issues and plans of development. He complimented his team for their work today and emphasized that the goal of DNR is to be responsive, respectful and informative with regard to the legislature as it grapples with some of the most critical issues facing the state.

[3:38:43 PM](#)

COMMISSIONER SULLIVAN said this committee shares an important strategic goal with the DNR and the Parnell administration: to increase the numbers of companies and investors in Alaska in terms of hydrocarbon exploration, development and production in both Cook Inlet and the North Slope. All kinds of companies are needed to do that from the super majors, the legacy producers, to the small and nimble companies focusing on all kinds of resource development plays whether it's new large fields, legacy fields, smaller conventional pools of oil or unconventional plays such as shale, heavy or viscous oil. He said the USGS would have estimates of North Slope unconventional hydrocarbons coming out soon.

Given the importance of the issue, the commissioner said over the last year that DNR has taken unprecedented actions to "relentlessly get out and tell the Alaska story to all types of companies" in the U.S. and overseas. They have been focusing on four things: Alaska's amazing resource base, investment incentives, tax reform, and lease terms. The department had follow up meetings with its technical lead by Mr. Barron.

[3:41:52 PM](#)

While the department is out making the case for Alaska, they gain intelligence on what these companies think about Alaska. Literally all of them see Alaska's resource base as a world class structure on the North Slope. Some of the more negative feedback was about the cost of doing business in Alaska from drilling wells, remoteness, infrastructure, short exploration

season to high tax rates. He acknowledged all the new players on the North Slope and in Cook Inlet and he vowed to continue focusing on telling the story.

COMMISSIONER SULLIVAN said once they get here he wanted to advance responsible development policies that help spur action and Mr. Barron had done a good job of that over the past year. In general, that means using a business-like in dialogues to establish commitments and benchmarks for development and then working hard to hold lessees to these commitments and having consequences when they are not met. He said the state is aligned with these companies in a lot of areas - for example the CD5 issues, some of the federal OCS issues and EIS issues at Point Thomson.

Other times they are not aligned and that is when they try to guard the state's interest and work constructively. For example, the commissioner said he revised the lease terms with regards to the very significant North Slope lease sale. Some have been as short as 5 years, which is kind of tough given the short exploration seasons and the different challenges with exploration on the North Slope, and as long as 10 years. He also raised the rent rate from \$10 (for the first 7 years) to \$250 an acre for years 8, 9 and 10 if adequate work hadn't been performed to encourage exploration and production, particularly on the North Slope, or give up the lease. He also accelerated work commitments in last spring's lease sale in Cook Inlet where he knew hydrocarbons were present.

[3:45:30 PM](#)

SENATOR STEVENS joined the committee.

[3:46:27 PM](#)

COMMISSIONER SULLIVAN said the second area he had worked on was unit applications and that last year several applications came in to unitize large areas of North Slope acreage, and with Mr. Barron's help, they dramatically decreased the size of what would be accepted in terms of unitized acreage and required firm and aggressive work commitments. The acreage they didn't accept to unitize just went back out for lease. Several tens of thousands of acres were denied unit status in the December lease sale and were put back out to lease. One unit application was denied outright, because the previous work commitments weren't met and all of that acreage went back out to lease.

[3:48:23 PM](#)

COMMISSIONER SULLIVAN said they have been trying to cooperate with the federal government to accelerated responsible resource development by testifying in front of Congress and by meeting with senior federal officials in Washington, D.C., on a whole variety of issues. For instance DNR played a very critical role in developing a white paper that was sent to the federal administration resulting in a CD5 reversal. He said all of this relates to the broader strategic goal of his five-part 1 million barrels a day within 10 years strategy.

[3:50:10 PM](#)

BILL BARRON, Director, Division of Oil and Gas, Department of Natural Resources (DNR), testified on several aspects of royalty modification. Basically, he said, royalty is the sovereign's share regardless of the activity of the developer; it is a driver of the Permanent Fund and of the General Fund. In the last several years, royalty has gained the state \$2-3 billion a year.

CO-CHAIR PASKVAN said in this context, royalty is the representation of Alaska's ownership interest in the resource.

MR. BARRON said that was absolutely correct.

CO-CHAIR PASKVAN said the term "royalty" might be used in other jurisdictions and then it may be applicable to a private ownership as compared to state ownership in Alaska. Now they were looking at the potential for a company to receive royalty modification based upon an economic analysis.

[3:52:27 PM](#)

MR. BARRON replied that was correct. He said the unmodified royalty rates throughout the state are 12-16  $\frac{2}{3}$  percent. The elevated royalty (16  $\frac{2}{3}$  percent) are primarily in the North Slope and portions of the Beaufort, because those areas are very well known hydrocarbon producing areas.

He explained that the royalty modification statute is long-standing but a very much unused opportunity in the state. It was amended in 1995 and basically gave the DNR the opportunity to look at three classifications of areas: the cost of development, the volume of the oil or gas in the field and the price of the product, itself. New fields and pools were added, the reason being that the commissioner at the time identified a lot of new discoveries and new developments that were smaller. It was again amended in 2003 and designed to allow more public interest and

participation in the process. Part of that was to push Liberty in Badami.

MR. BARRON said in 1995, product price was \$15-18/barrel; today it's \$124/barrel. In 2003, the first uptick in product price happened at \$25-30/barrel. What was going on in the industry at those two times? In 1995, Milne Point was shut-in, because the oil price low. There had only been one new unit on the North Slope and that was North Star. Overall world-wide production was declining primarily due to low oil prices. In 2003, TAPS dropped below 1 million barrels a day for the first time and there seemed to be a bit of a surge on North Slope unit approvals, probably tied to lease terms that were coming due. Oil prices were beginning to climb, but there hadn't been any use of royalty modification by the industry.

[3:56:05 PM](#)

MR. BARRON said companies have three opportunities to bring in applications for royalty modification and the division believes that it should be the last thing touched in any negotiations with companies in terms of revenue to the state.

[3:56:39 PM](#)

The first category that a company can apply for royalty modification in is if it is a field or a pool that has no previous production; it has to be reasonably well delineated (DNR's jurisdiction), and it has to be a field that in the company's opinion would not otherwise be economic if it did not receive royalty modification. If it is granted through this process, the royalty can't be reduced below 5 percent.

CO-CHAIR PASKVAN commented that means that the commissioner as part of this process can reduce the royalty by more than 50 percent.

MR. BARRON replied that was correct.

[3:57:51 PM](#)

SENATOR FRENCH asked if a company says a field is not economically feasible, how the division makes its decision.

MR. BARRON asked him to hold that question until after the presentation walked through that very point, because is the real heart of what he was going to talk about.

SENATOR FRENCH responded that he would wait.

MR. BARRON continued that the second opportunity for royalty modification is when a field is just about at the end of its life. Again, it is the whole premise of uneconomic, and then it can't go below 3 percent.

[3:59:18 PM](#)

He said the last opportunity to request royalty relief is when the field is shut-in and a company wants to reestablish production.

CO-CHAIR PASKVAN asked what the liability for production tax is if one is making an application for royalty modification.

MR. BARRONS replied that as part of the application process, the department runs the economics on whatever tax fiscal system is in place at the time. Royalty modification is not designed to be applicable at a project level (pool), but rather to an entire field. He said the DNR can hire a consultant, if they deemed it appropriate (at the cost of the applicant) to make sure the department's work is transparent and for verification. He said the relief mechanism is usually an adjustment based on price change of the oil and gas; it can be based on other relevant factors including the production rate, the ultimate recovery, development and operating costs.

[4:02:20 PM](#)

So edging in toward Senator French's question about just the application review process; the department doesn't solicit these applications. The companies come forward asking for royalty modification. Part of the stipulation is that it is incumbent upon them to submit a significant amount of technical and financial data to prove to the department that the field is uneconomic. All of this information is held in confidence; that is a very important part of this statute.

MR. BARRON said that the department does not blindly accept this information; it goes through an incredibly rigorous process of "stochastic modeling" and looking at things like net present values, rates of return, break even analysis, operating costs of the area and if capital costs are reasonable. They come up with their own assessment of whether or not a prudent investor would carry the project forward. Sunk costs (costs in the past) are typically excluded, because the department evaluates the forward-looking set of economics.

[4:05:07 PM](#)

CO-CHAIR PASKVAN asked him to define "forward-looking" company more fully.

MR. BARRON answered that "forward-looking" means that you are looking forward and not including anything in the past. A lot of times companies do two sets of economics; one is point-forward economics to see if their investments from today forward make sense, and at the same time they will run "full field" or "full history" economics for internal purposes (that includes all the sunk costs). The reason sunk costs are excluded in this assessment is because they are looking at costs that impact net present value. Once the department is done with its modeling, Mr. Barron said, they issue a preliminary finding as a public notice and then there is a 30-day public comment period. They evaluate the public comments and respond to them and then issue a final finding.

[4:06:38 PM](#)

MR. BARRON next talked about the decision parameters in terms of economics. He said they primarily use the "expected monetary value (EMV)," a stochastic (statistical) term used when different distributions of different variables are used to determine the expected value of a project. For a simple example, if you have a decision tree with two branches; one is at 90 percent probability and one is at 10 percent (both adding to 100 percent). The 90 percent probability has a value of \$10; the 10 percent may have a value of \$100. Your expected monetary value is .9 times \$10 and .1 times \$100, added together.

[4:07:42 PM](#)

CO-CHAIR PASKVAN said he was describing a Monte Carlo analysis that looks at multiple factors to arrive at EMV.

MR. BARRON said yes. The key parameters they look at are: product price, potential reserves and production rates, the capital costs and the operating costs. The key is that all of these have uncertainty.

CO-CHAIR PASKVAN referred to the Nikaitchuq royalty case from October 30, 2006, that said "granting royalty modification should influence the behavior of the applicant." What does that mean when performing their economic analysis?

MR. BARRON replied in that document, the behavior they are trying to influence is the decision of the company to either proceed with the development of the field or not. If they grant royalty modification and the company moves forward with the

field, that is the change of decision. Otherwise the field would not be developed.

4:09:34 PM

SENATOR WIELECHOWSKI asked when a company takes out a lease in the State of Alaska, at what point in time are they obligated to develop it or can they just sit on it forever.

MR. BARRON replied when a company takes out a lease, they have been granted the exclusive right to hold that acreage for the term of the lease. There is no requirement for them to do anything during the primary lease term; they can sit on it. At the end of the life of that term, the state takes the property back and it can be put back into a lease sale. As the commissioner mentioned, that is one thing they were very cognizant of in the current lease sale and modified the lease terms to increase the opportunity of development by increasing the cost after year 7 to \$250 an acre instead of \$10. There is a choice: you can hold the land but it will cost you a significant amount.

SENATOR WIELECHOWSKI asked if it is the best policy for the state to lease land that is wildly economic and let companies sit on that land for seven or eight years and not develop it.

4:11:58 PM

MR. BARRON replied that in a primary lease term the land may or may not be known to be productive. The heart of the lease sale is to offer state land to companies to do adequate exploration and to then take that exploration and knowledge and, if it is something that can be developed, to move into the development phase.

SENATOR WIELECHOWSKI asked if he knew of other jurisdictions that try to encourage exploration by different means through their lease terms.

MR. BARRON replied that many jurisdictions, internationally and domestically, have many different ways of trying to encourage companies to do adequate exploration and development.

SENATOR WIELECHOWSKI asked if they have no obligation to do a single thing to develop or do a single seismic test under current Alaska law.

MR. BARRON answered that was correct under the primary lease term.

CO-CHAIR PASKVAN asked him to define "primary lease term."

4:14:00 PM

MR. BARRON said the primary lease term in the case of the North Slope is for 10 years. If a company is deemed the highest bidder in a lease sale, they are granted the right for a 10-year timeframe. During that timeframe, the state's objective is to have them do as much exploration work as possible to establish the productive potential of the land. Once they have deemed it to be commercial hydrocarbons, they ask the division for unitization, which is when they establish work commitments and financing criteria during their first primary phase of unitization. That's typically a five-year timeframe. This is where the department has made modifications in its negotiations with companies this year to drive that discussion forward. In the first year or two, they have an obligation to the state and if they aren't performed (i.e. drill a well), you will lose the bond and the acreage. Once that field is in production, that production holds the lease.

SENATOR WIELECHOWSKI asked if Kuparuk is producing 150,000 barrels a day and the producer said they were going to lower production to 1,000 barrels a day until they get tax breaks, was he saying the state couldn't take action.

MR. BARRON replied he thought that would be correct; that land is held by production. Companies have an opportunity to discuss on an annual basis their plans of development (tomorrow's presentation), but in theory and practice once a lease has production on it, it is held by that production.

4:16:29 PM

SENATOR STEDMAN asked if he knew of any cases when industry turned down the volume for reasons that weren't mechanically or constraint driven on a productive lease.

MR. BARRON answered not that he was aware of.

SENATOR WIELECHOWSKI asked what kind of internal rate of return he would expect for a project to be deemed economic for a producer.

MR. BARRON replied that DNR's keeps its economic assessments very internal in royalty modification cases. That is done, because they don't want to encourage the industry to work its numbers in a way that would slant them toward royalty

modification. He said the department looks at each project differently so that the parameters they use for one are different than the parameters for another, because their reserves are different, the product profiles are different, the escalation curves may be different and all of their operating conditions could be different. Each one has its own hurdle rate. They are trying to find at what point in time, if they were to give royalty modification, what it would be to change the behavior of that company to go from a nonproducing asset to a producing asset.

CO-CHAIR PASKVAN asked if a duty to produce is part of that prudent producer obligation.

[4:20:07 PM](#)

MR. BARRON said that was an interesting question and he was trying to understand the difference between the two concepts. He didn't think any sovereign had the right to force a company to produce uneconomic assets. So, while company may be prudent and may have a duty to produce, the question would be at what point in time any sovereign has the right to force a company to produce an uneconomic asset.

CO-CHAIR PASKVAN said he assumed that when he does the Monte Carlo simulation on granting royalty relief, he would look at net present value and internal rate of return. If he comes to the determination that a prudent investor would develop this field based upon the department's modeling, doesn't that determination also create a duty to produce?

[4:22:00 PM](#)

MR. BARRON responded that thinking through the royalty modification context, when the division does its assessment and deems that a prudent investor or operator would move forward with the development without royalty modification, the application is denied. The first threshold of an assessment is that it's not on production. At that junction, they then have a choice to make: if they choose not to develop the field after a period of time, that land is relinquished and returned to the state.

In the case of the other two aspects of royalty modification, if the field is already on line and it is essentially either almost dead or is dead, that is the state's opportunity to increase production by modifying the royalty. It's not reasonable to think a company is purposely withholding production. It's not in

their best interest or that of their shareholders' and it's against the concept of capitalism and entrepreneurship.

SENATOR WIELECHOWSKI asked if OPEC had ever withheld production.

MR. BARRON replied that is market manipulation and market control; and whether anyone in the state is withholding production is not the crux of this committee's question. OPEC is a cartel; it is not an individual company that is based on capitalism; they are trying to control an entire market and not produce economically the reserves of the field that they are operator on.

[4:24:47 PM](#)

CO-CHAIR PASKVAN said a decade ago the division director said in a document dated January 3, 2002 that this state had an oligopoly.

MR. BARRON responded by urging them to think back a little bit about what that meant. In terms of operations on the North Slope, clearly there are three primary players; there are two new players and there is an opportunity to have at least one more this year two more after that. At the time that document was presented, there were issues on access, cost structure and available resources for new entries into the market to break in. The context was a little bit different and the thrust of that dialogue probably had nothing to do with royalty modification. It had to do with if there was a need for additional competition on the North Slope, and the DNR and the DOG have made great strides in the last several years to increase the competitive nature on the Slope.

CO-CHAIR PASKVAN said he had talked about his in-house economic models for performing the analysis for royalty modification and he assumed that he believed it's reasonably accurate and effective.

MR. BARRON agreed yes.

CO-CHAIR PASKVAN asked if the DOG used that model to assess the homogenized oil industry in Alaska, for example taking FY13 and using the parameters the department knows about the oil industry to determine net present value, internal rates of returns and those types of Monte Carlo analyses.

[4:28:11 PM](#)

MR. BARRON replied no, not to his knowledge. That would be a huge undertaking and be exceptionally complicated for one field, to say nothing of how much more complicated it would be to do it for the whole state of Alaska. The next slide showed numerical distributions of various variables; the first one was product price and was basically a normal distribution of production rates and production, operating costs and capital costs, which in this presentation are demonstrated as triangular, and they all have high end and low end truncations. Each one of those could be looked at a little bit differently. In some areas operating costs can be used as a uniform distribution (the same throughout time). A Monte Carlo run uses all of these distributions; and including a production decline is very complicated if you want to take it to a well level or a field level. "Doing it on a statewide basis would be an incredible task."

4:36:08 PM

SENATOR WIELECHOWSKI said they have heard talk that if they pass an oil tax reduction there will be an investment of \$5 billion over five years and it will generate 90,000 barrels of oil a day. Some of them in the building also ran some numbers and concluded that the state would pick up 60 percent of the costs, so it would actually be an investment of \$2 billion by the oil industry. That would generate a net present value of over \$3 billion and an internal rate of return of about 92 percent. "Does that sound like an economic project to you under ACES?"

MR. BARRON answered yes.

SENATOR WIELECHOWSKI asked if he thought that project should go forward under ACES and the terms of the leases.

MR. BARRON responded that part of the answer is the discussion of what it is being compared to relative to the company and its desire to advance its commerciality. The DOG doesn't necessarily look at that. In terms of royalty modification, if a project came to them and had a 92 percent rate of return in its application, he guessed it would probably be rejected.

SENATOR WIELECHOWSKI asked if something was wrong with the system, assuming the numbers are correct, that there are fields out there that can generate a net present value under ACES of \$3 billion at a rate of 92 percent ROR, and they are not being developed.

MR. BARRON replied that he would welcome the opportunity to look at the facts and figures he was discussing. He didn't know of any field that is not currently producing with those economics.

4:33:08 PM

SENATOR FRENCH asked what sorts of improvements he sees in taking royalty from 12 percent down 5 percent (if that's a typical case).

MR. BARRON answered that involves a field-by-field assessment of how big the resource plays in it and the longevity of that field. The current product price and what it's going to do may actually have a greater swing than the royalty modification itself. What you think the escalations or de-escalations on operating costs and capital costs are, what the company's plans are over the next 10, 20 or 30 years in terms of what they think is required for capitalization. These are the kinds of in-depth discussions the department has with these companies in terms of overall long-term field development.

SENATOR FRENCH said many of their questions come back to the current ACES debate and the fact that the state has suddenly gone from one exploration well last year to a much more robust exploration season this year and maybe next, and now they are hearing questions about whether they will develop. It seems like this is exactly what royalty modification is for and he was trying to get a feel for how big a lever royalty modification is.

MR. BARRON asked Mr. Banks to field that question.

4:35:37 PM

KEVIN BANKS, Petroleum Market Analyst, Division of Oil and Gas, Department of Natural Resources (DNR), explained that Director Barron's caveats about responding to the question were important, because every project is so different. Looking at Pioneer's application in the Oooguruk Unit, their royalty relief (12.5 to 5 percent) moved the IRR dial only a couple of percentage points at relatively higher prices (for the time). At a \$60 price, the IRR change was about 1.5 percent; at lower prices it was a little bit more. The royalty relief mechanism, because a fairly small slice of the pie is being changed, has a somewhat moderated effect on the economics.

4:37:10 PM

SENATOR WIELECHOWSKI asked if he was aware of any projects, fields or developments under current lease that are uneconomic under the current tax structure.

MR. BARRON answered that the Pioneer project may fall within that category, because it has been granted royalty modification. The Eni or any project even though it has royalty modification probably is not in that category because it takes effect at a \$40-\$43 basement. Some fields in Cook Inlet possibly, but they are under a completely different royalty and tax code and probably shouldn't be part of the dialogue at this juncture. He didn't know of any uneconomic fields that were uneconomic under the current tax structure, because no one has come forward to apply for royalty modifications.

SENATOR WIELECHOWSKI asked if the administration had done any analysis of fields to see whether they are economic or uneconomic under the current tax structure.

MR. BARRON replied that he was not aware of any activity like that being done or not being done.

[4:39:09 PM](#)

MR. BARRON reviewed a short list of royalty modification applications that had come in:

- BP at Milne Point in 1995 - that was denied.
- Unocal for 10 platforms in Cook Inlet 1997 - did not pursue, but it wouldn't have fallen into any of the buckets, because 10 platforms was beyond the scope of any specific field or pool.
- Phillips' application for Tyonek Deep in Cook Inlet in 1999, but it was withdrawn voluntarily. It might have qualified, because the Deep unit had never been produced from that facility.
- Pioneer for Oooguruk in 2005 - it was granted and royalty was reduced to 5 percent until their NPSL lease has payout.

CO-CHAIR PASKVAN asked him to define NPSL payout.

MR. BARRON answered that means "net profit share lease," the lease term for payout. There's one lease within the Oooguruk field that is an NPSL lease and when that lease has payout, the reduction goes away; the state has audit rights on Pioneer's books to make sure the payout has taken place.

-Kerr-McGee came forward in 2006 with the Nikaitchuq and Kakivik Units and the application was denied. After looking at it very

seriously, the department felt it could have moved forward without royalty relief.

-Chevron came forward with Ivan River and Stump Lake in the Kenai area in 2007 and it was withdrawn.

-Eni came forward with the Nikaitchuq Unit again in 2007 - this was approved based on a different assessment and analysis that had the most to do with the trigger point of product price and volume. If the field falls below 4,000 barrels a day within the first 120 months, they get their royalty modification. If the product price drops below \$42.64, they get royalty modification. He said Eni's production to date is around 7,000 barrels a day and they do not enjoy royalty modification, because neither one of the two triggers have been satisfied.

[4:43:54 PM](#)

He said two modifications have been granted since 1995 and only one is being used. The division is very careful to not grant reduction to a field forever; at some point the state has to recapture its sovereign share.

CO-CHAIR PASKVAN asked if he assumed that all other operations are currently economically profitable.

MR. BARRON replied that one could make that assumption and that conclusion, but it's important to understand that the three categories of applications fall within very discreet bounds; that a field has never been on production and the other two are at the very end of field life or when a field has been shut in. While they could assume that all fields are currently economically viable, none of them are at the end of the life of the field and don't qualify to make an application for reduction.

SENATOR WIELECHOWSKI asked if he saw any benefit to changing the law to allow for royalty relief in the case of a heavy oil project, for example, within Prudhoe Bay that is very profitable.

MR. BARRON replied that they would have to be incredibly cautious about structuring something like that. Heavy oil might be a good example of royalty modification by a participating area (PA). It would be very difficult to structure the language if someone were to put gas injection in the crest of a structure. The question would be how to assess what production to apply royalty relief to; that production would also have to be audited for accuracy in a greater field.

CO-CHAIR PASKVAN said one of the Nikaitchuq applications had an analysis that indicated at \$60 a barrel that the operator would experience "very large profits." Is that accurate?

MR. BARRON deferred to Mr. Banks.

[4:48:19 PM](#)

MR. BANKS said that was in reference to the Kerr-McGee project that was eventually denied. He recalled that that project was quite a bit different than the one proposed by Eni somewhat later. A couple of factors formed the conclusions for the Kerr-McGee application. One had to do with the taxpayer situation at the time. Kerr-McGee was owned by Anadarko and had existing production going on; so their PPT tax situation was different than Eni's simply because there was an existing tax upon which credits and deductions could be taken (that weren't available to Eni in the same way). The other important factor for the Kerr-McGee project was the prices at the time were relatively low (\$40-\$50) and the costs they had predicted in the go-forward economics were substantially less than what Eni proposed somewhat later. So at just a slight increase in price the project would be profitable and the downside risk for the project was rather small as well. The two conclusions were combined in evaluating this project.

[SB 192 was held in committee.]

[4:51:11 PM](#)

At ease from 4:51:11 to 4:51:43 p.m.

#### **SB 176-EXEMPTIONS FROM MINING TAX**

[4:51:43 PM](#)

CO-CHAIR WAGONER called the Senate Resources Committee meeting back to order and announced SB 176 to be up for consideration. It had been heard on February 17 when there was some discussion about whether the tax would still apply to possible future mining of rare earth elements by removing "marketable earth" from the definition of "mining." He asked Ms. Bales if she could respond to that concern.

[4:52:39 PM](#)

JOANNA BALES, Deputy Director, Tax Division, Department of Revenue (DOR), said she did confer with the Department of Law (DOL) about Senator Wielechowski's question and apologized that the confusion was more hers, but they agreed that rare earth elements are taxable under the current definition of "mining" as a "valuable metal ore or a mineral." Their interpretation of

"marketable earth," historically, has been that it is things such as top soil and peat. She said whenever they have confusion with interpretations, they also go to the dictionary definitions and in this case the definition of "earth" is "soil." So they felt confident that excluding "marketable earth" does not exclude the rare earth elements.

[4:54:05 PM](#)

ASHLEY BROWN, Attorney, Civil Division, Department of Law (DOL), said he didn't have any more comments [on SB 176].

CO-CHAIR PASKVAN moved to report SB 176 [CSSB 176( ), 27-LS1201\B] from committee with individual recommendations and attached fiscal note. He disclosed that he has an interest in a gravel operation in Interior Alaska.

CO-CHAIR WAGONER withdrew his objection to adopting the CS, and finding no further objections, announced that CSSB 176(RES) moved from the Senate Resources Standing Committee.

[4:55:05 PM](#)

At ease from 4:55 to 4:57 p.m.

#### **HB 144-REPORT ON FISHING STREAM ACCESS**

[4:57:27 PM](#)

CO-CHAIR WAGONER announced HB 144 to be up for consideration [CSHB 144(RES), 27-LS0220\I, was before the committee].

CO-CHAIR PASKVAN moved to bring HB 144 before this committee for purposes of discussion.

CO-CHAIR WAGONER objected for discussion purposes.

[4:58:25 PM](#)

REPRESENTATIVE LES GARA, sponsor of HB 144, testified that people have lost their public access to fishing streams throughout the country. For instance, people can no longer access 180 miles of the Missouri River and in Wyoming and Montana, ranchers and movie stars are famous for being able to close off fishing streams' access to people. Alaskans are lucky, but we're slowly losing fishing stream access, especially along the road system where roughly half of the Salcha River in Fairbanks is thus endangered, along with over one mile of Montana Creek and Willow Creek in the Valley and over one mile of the Anchor River on the Kenai Peninsula.

REPRESENTATIVE GARA said when the state owns the land there is access in the smaller rivers where one can wade up to the high water mark, but other big rivers are mostly in wilderness status (nobody has wanted to develop them) and privately owned by Native corporations and other private property owners. And one day they will be developed, which is fine. That is the private property owners' right. But HB 144 asks the Department of Natural Resources (DNR) and the Alaska Department of Fish and Game (ADF&G) to say what they have done to maintain and protect public access in the prior year and what their plans are for the next year. The goal is to remind them that they have a duty to promote and maintain public access, and if we are going to start to lose it, it's much cheaper for the state to try and negotiate a voluntary easement purchase before the land is developed rather than after. That is the problem in Missouri, Wyoming and Montana. Once the land has been developed, you can only buy tiny parcels back. In Alaska, before the landowners decide they are going to do something with the land, it would be smart for the state to at least approach the landowner, and the legislature could appropriate whatever funds it thought appropriate, about the public access. If they say yes, easements are wanted to the river and along it and in places where the rivers are too deep to wade. He said this is a simple bill and it maintains the state's heritage of sport and other sorts of fishing and helps in subsistence fishing, too.

[5:02:06 PM](#)

With time being too short for a lot of testimony, he listed letters of support from the Alaska Fly Fishers, the Outdoor Council, the Kenai River Sportfishing Association, and a number of other individuals.

SENATOR STEDMAN said this request is for an annual report and that seemed like a lot of work and asked if it could be done every four or five years.

REPRESENTATIVE GARA replied that the department already knows where public access is being lost and the report won't change much from year to year unless new access has been successfully accumulated. It takes a long time to negotiate a piece of easement and having an annual requirement will force them to think it through every year.

[5:04:18 PM](#)

ED FOGELS, Deputy Commissioner, Department of Natural Resources (DNR), said the conservation of public access is a very important part of DNR's obligation and they take it very

seriously. Whenever they sell land, they make sure to conserve access to public waters, whether they are streams or lakes; also when they convey land out of state ownership, to municipalities, for instance, they retain easements for public access to public water bodies. This bill wouldn't significantly affect their workflow or workload and it would give the legislature an accounting of what they had accomplished over the year and what they hope to accomplish for the following year.

CO-CHAIR WAGONER closed the public hearing.

CO-CHAIR PASKVAN moved to bring CSHB 144(RES), version I, before the committee. There were no objections; Co-Chair Wagoner removed his objection.

SENATOR WIELECHOWSKI moved to report CSHB 144(RES) from committee with individual recommendations and attached fiscal note(s). There were no objections and it was so ordered.

[5:07:23 PM](#)

At ease 5:07 to 5:10 p.m.

**HB 185-EXEMPT DISCHARGES FROM USE OF MUNITIONS**

[5:10:49 PM](#)

CO-CHAIR WAGONER announced HB 185 to be up for consideration.

CO-CHAIR PASKVAN moved to bring CSHB 185(RES), 27-LS0506\X, before this committee for purposes of discussion.

CO-CHAIR WAGONER objected for discussion purposes. He invited the sponsor to present the bill.

[5:11:43 PM](#)

REPRESENTATIVE TAMMIE WILSON, sponsor of HB 185, explained that in 2008 the state sought Environmental Protection Agency (EPA) approval of its Clean Water Act program. Title 46 now excludes the firing or other use of munitions in training activities conducted on active ranges including: active ranges operated by the U.S. Department of Defense or a military agency unless it results in a discharge into waters of the United States.

She said that HB 185 was vetted by the EPA, the Department of Environmental Conservation (DEC), the Department of Defense (DOD), and the state Department of Military & Veterans Affairs (DMVA). It clarifies section (e)(7) such that it cannot be misinterpreted to restrict military exercises on ranges other

than instances where the federal Clean Water Act would apply. It reduces the chance of litigation in trying to interpret waters within the U.S.

[5:12:55 PM](#)

KEVIN WARD, counsel, U.S. Army, Northern Regional Environmental Office, Denver, said he was representing the Department of Defense Regional Environmental Coordinator and the military services in Alaska, and that they all supported HB 185. The committee had a couple of questions at the last hearing and he reiterated his answer that HB 185 adds clarity to current Alaska Clean Water Act statute so that application of it to military ranges will be determined in accordance with the federal Clean Water Act. Secondly, he said this bill has absolutely no effect on Alaska's primacy of the Clean Water Act program, which it received from the EPA. This amendment has been coordinated with the EPA and it has no objection to it.

CO-CHAIR PASKVAN said he was trying to figure out why they were going through this process and asked what differences there are between the federal and state standards for discharge into waterways.

MR. WARD replied that this bill changes language in the existing Alaska statute that reads: "Unless it results in a discharge into waters of the United States." to: "Unless otherwise regulated by the federal Water Pollution Control Act." This will not result in any different standards, effluent limitations or water quality criteria between the military and any other member of the regulated community. The real purpose for this change is at the phrase "waters of the United States," which is a term that has been much debated and disputed not only in Congress but within EPA, the Corps of Engineers and the courts. The courts decisions, despite their many efforts, have not resulted in great clarity as to what the meaning of that phrase is and its meaning may change over time. So rather than have the application of the state Clean Water Act be determined by a phrase that is ambiguous and may be further be interpreted in different ways by the courts, he simply felt that they would have more clarity and confidence in what situations need to comply with the state act if it simply refers to the generic federal act.

CO-CHAIR PASKVAN said he was trying to understand how Alaska would retain its primacy position as permitting agency if it defers to federal standards (as compared to state standards).

MR. WARD replied that this amendment will not have any effect on Alaska's primacy. Alaska received primacy from the U.S. EPA forward state program about two years ago. EPA has reviewed this proposed amendment and does not object to it. So Alaska will remain the permitting agency. The way the requirements will apply to the military ranges will be if and when the federal act would apply, so there will be consistency between the Alaska act and the federal act. The reason that is important to the Department of Defense is so that it will not be faced with different requirements when they do or don't have to obtain permits for their ranges in different jurisdictions in different states. But if a permit is required, it would be a state permit. The state departments will also take over the schedule component for looking at military ranges and determining which permits will be required in about October 2012.

CO-CHAIR PASKVAN said he understood what he was saying in terms of primacy in the sense that the State of Alaska retains its position as the permitting authority, but he perceived the substantive issue beyond who processes the paperwork was that it removes substantive Alaskan standards and defers them to the substantive standards of the federal government. And the river ways and the federal government has been a hot topic in Alaska over the last year.

[5:21:42 PM](#)

MR. WARD responded with an example of how this might apply. If a citizen group wanted to assert that a military range required a Clean Water Act permit pursuant to the state act, they might assert that there is a discharge to waters of the United States. Since it is an ambiguous term and is interpreted different ways, an Alaska court might say yes, this is a "waters of the United States" under Alaska statute even though it might not be waters of the United States under the federal act.

[5:22:03 PM](#)

SETH BOSANG, Assistant Attorney General, Civil Division, Environmental Section representing the Alaska Department of Environmental Conservation (DEC), said he agreed with the testimony so far that this bill really is intended to make state and federal law consistent. As it stands right now, there is at least a potential that state law on this subject would be broader than federal law and the intention is to make state and federal law consistent.

CO-CHAIR PASKVAN said this where he was trying to understand the difference between the Alaska law on this subject and the

federal law that Alaska is ceding to it. Why does it need to be done?

[5:23:21 PM](#)

MR. BOSANG responded that this would not affect the state's primacy and the state would continue to be the permitting agency. The only thing it would affect is whether or not a permit is required and it removes some potential ambiguity where a court could construe the terms "waters of the United States" in a way that people may not have intended or anticipated. So the substantive standard that would apply would remain the same.

SENATOR WIELECHOWSKI said that last year, they asked the legislative drafting attorney, Alpheus Bullard, about it and he said the definition of "waters of the U.S." is actually found in Alaska regulations at 18 AAC 83.990(77). Did Mr. Bosang agree? Mr. Bullard was also asked to explain what the bill does and he said it wasn't clear to him.

MR. BOSANG said he didn't know the answer.

MR. WARD answered that he believed that was correct. If it is not in the state regulations, there is certainly a definition in the federal regulations. The term has been defined various ways through policy and court decisions; but a definition that may look simple on its face has over time become not as simple as people would like.

CO-CHAIR PASKVAN asked if this addresses whether a permit application even needs to be presented. In other words, if it's under the federal law and it's a discharge into federal waters, there is a potential that there would be no permit application necessary; but assuming that there was one, the only involvement that the state has is that it would be the permitting agency applying purely federal law.

[5:27:16 PM](#)

MR. WARD answered that he had accurately stated that the threshold issue that this addresses is whether or not a permit is required. Because if a permit is not required as a threshold matter pursuant to the federal Clean Water Act for a military range, then one would not be required pursuant to the state act and that is the consistence they were looking for. If a permit is required, then it is a state permit and state standards, procedures and criteria apply to determine the terms of the permit.

[5:28:07 PM](#)

KARLA HART, representing herself, described herself as a private citizen with a passion for clean water. She was concerned that this bill was a bit of a sleeper that because of its complexity might bite us at some point when water is polluted potentially with very persistent and dangerous toxins, leads and other things that could be with us for a long time. Alaska's clean water is too important to its economy and allowing an exemption to military ranges of our clean water standards seems like a degradation of the state's regulation over clean water overall.

CO-CHAIR WAGONER closed public [testimony] and held HB 185 in committee.

[5:29:58 PM](#)

Finding no further business to come before the Senate Resources Standing Committee, Co-Chair Wagoner adjourned the Senate Resources Standing Committee meeting at 5:29 p.m.