



THE DEPUTY SECRETARY OF THE INTERIOR
WASHINGTON

JAN 25 2013

Mr. Dan Sullivan
Commissioner, Department of Natural Resources
State of Alaska
550 W. 7th Ave. #1400
Anchorage, Alaska 99501

Dear Commissioner Sullivan:

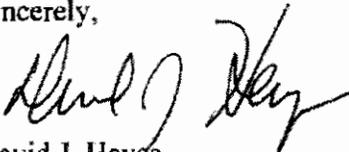
Thank you for your letter regarding the Department of the Interior's Expedited Assessment of 2012 Arctic Operations and expressing your interest in an opportunity to provide input into this process. I had the opportunity to meet with Mayor Brower and discuss the review process while she was recently in Washington.

The Department of Interior (Department) voluntarily chose to undertake this high-level, expedited review of Shell's activities as part of our commitment to safe and responsible exploration for energy resources in the Arctic. The review will be a retrospective of the 2012 offshore drilling season with special attention to challenges that Shell encountered in connection with certification of its containment vessel, the *Arctic Challenger*; the deployment testing of its containment dome; and operational issues associated with its two drilling rigs, the *Noble Discoverer* and the *Kulluk*. We aim to thoroughly review Shell's management and operations in the Beaufort and Chukchi Seas with an eye towards recognizing successes, identifying challenges and evaluating lessons learned, and ultimately informing future permitting processes in the region. The review is on a 60-day timeline to be finalized by March 8, 2013.

Due to the need to expedite this process, the Department's review is not a formal investigation and does not include a review panel. Nonetheless, the review is being conducted with recognition of the need to receive input from key partners and stakeholders. To date the Department has full cooperation from Shell, technical assistance from the United States Coast Guard and other Federal agencies, and has arranged for input from stakeholders, such as the State of Alaska and the North Slope Borough. You are aware that the Department's review is led by Acting Assistant Secretary for Land and Minerals and the Director of the Bureau of Ocean Energy Management, Tommy Beaudreau. On behalf of the Department, Mr. Beaudreau will travel to Anchorage, Juneau, and Barrow during the weeks of January 28 and February 4, 2013, to further discuss the review. He looks forward to the opportunity to receive important and insightful input from you and other stakeholders.

As you stated in your letter, the State and North Slope Borough were instrumental in responding to the *Kulluk* incident and are key partners in overseeing offshore drilling operations, from start to finish. I appreciate your continued involvement in these activities and am committed to working with you and other partners to ensure that OCS drilling operations conducted in the challenging Arctic environment are done in a responsible manner.

Sincerely,



David J. Hayes

Dan: I have asked Tommy to
make a point to meet with you.
The State's interests are very important, and
we know that —
David

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

SEAN PARNELL, GOVERNOR

550 WEST 7TH AVENUE, SUITE 1400
ANCHORAGE, ALASKA 99501-3650
PHONE: (907) 269-8431
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July 20, 2012

The Honorable David J. Hayes
Deputy Secretary
United States Department of the Interior
1849 C Street, NW
Washington, DC 20240

Dear Mr. Hayes:

I am writing to follow up on a concern I raised in our last meeting regarding the timeliness of the federal permitting at Point Thomson on Alaska's North Slope. More specifically, I am writing to bring your attention to procedural decisions made by the U.S. Army Corps of Engineers (Corps) that have the potential to undermine efforts you are undertaking at the President's direction to coordinate federal agencies on energy projects in Alaska. I am gravely concerned that these procedural decisions are a harbinger of negative decisions on permits associated with the development of Point Thomson.

As a cooperating agency, the State of Alaska continues to work closely with the Corps as the Point Thomson Final Environmental Impact Statement (EIS) nears completion. The State has been actively involved throughout the National Environmental Policy Act (NEPA) process and remains keenly interested in the timely and proficient permitting of the Point Thomson project. Developing the Thomson Sands Reservoir remains a strategic interest for the State and the country because it would help offset current declines in North Slope production and maintain efficiency of the Trans-Alaska Pipeline System (TAPS). In the face of steadily declining oil production, Governor Parnell maintains an ambitious goal for Alaska and the nation to increase TAPS throughput to one million barrels of oil per day within a decade. Bringing Point Thomson development online will certainly help the State achieve this goal. It is due to our keen interest and involvement in this project that I write this letter of concern.

The State of Alaska, Department of Natural Resources ("we") recently asked the Corps to participate in Least Environmentally Damaging Practicable Alternative (LEDPA) discussions as the Corps executes 404 permitting for the Point Thomson project. We offered additional State resources and critical expertise from subject matter experts to aid the Corps in their decision-making after the Final EIS is released, realizing that pursuant to 404(b)(1) guidelines, the final federal permitting decisions would be made solely by the Corps. Unfortunately, the Corps is not willing to allow the State to participate in any discussions to help inform a LEDPA decision (See Attachment 1). Disappointingly, the Corps' response does not support President Obama's efforts to coordinate state and federal permitting. The insular approach the Corps is choosing to take during 404 permitting will run the risk of isolated decision-making, unaligned regulatory agency approval, and the potential for further permitting delays. Indeed, the EIS is already over a year delayed.

I recently asked Colonel Lestochi to reconsider the Corps' decision to exclude the State of Alaska in the 404 permitting discussions for the Point Thomson project (See Attachment 2). I outlined the following critical reasons highlighting the need to coordinate 404 permitting for the Point Thomson project:

- Lessons Learned from CD-5: The initial Record of Decision (ROD) for the CD-5 Alpine Satellite Development project failed to give deference to the State's interest as landowners of the affected property and failed to adequately take into consideration State expertise regarding above-ground versus Horizontally Directionally Drilled (HDD) pipelines. Expertise from the State of Alaska was necessary during LEDPA deliberations for the CD-5 project, but unfortunately, the Corps only sought additional State expertise after the ROD was issued and appealed (See Attachment 3) and agencies rejected the permit decision (See Attachment 4).

Additionally, similar to the flawed CD-5 decision, certain federal agencies like the EPA and the USFWS appear to be influencing the Corps without a proper understanding of the technical challenges of the Point Thomson development.

- Point Thomson Settlement Agreement: Timely permitting is essential to prevent barriers for Exxon Mobil to satisfy commitments within the recent settlement agreement.
- Isolated Federal Decision-making Affecting State Permits: Continued cooperation and informed decision-making between the State of Alaska and the Corps is essential in order to help allow for the subsequent and efficient State permitting of the Point Thomson project.
- No Environmentally Preferred Alternative in the Final EIS: The Corps decided against publishing an environmentally preferred alternative in the Point Thomson Final EIS. As a result, the State of Alaska is effectively carved out of the decision-making process.
- 401 Certification, Alaska Department of Environmental Conservation (ADEC): Obtaining the 401 certification from ADEC is a standard process for projects in Alaska, but we assert that including the State of Alaska into LEDPA discussions prior to the issuance of the ROD would help streamline the Corps' decision-making process.
- State and Federal Permit Coordination: Governor Parnell previously asked the Department of Interior to add the Point Thomson project to the Interagency Working Group on Coordination of Domestic Energy Development and Permitting in Alaska (See Attachment 5). President Obama's July 12, 2011 order describes that the Working Group shall:
 - Ensure the sharing and integrity of scientific and environmental information and cultural and traditional knowledge among agencies to support the permit evaluation process for onshore and offshore energy development projects in Alaska
 - Coordinate Federal engagement with States, localities, and tribal governments, as it related to energy development and permitting issues in Alaska

The State of Alaska has processed numerous permits and rights of way applications for the Point Thomson project. The Corps' continued delays threaten to delay State permitting in other areas.

In the spirit of open communication between the state and federal government, to help adhere to President Obama's order, and most importantly to assist with the successful and timely permitting of the Point Thomson project, it is unfortunate that the Corps will not allow our expertise and services during the Clean Water Act 404 (b)(1) and LEDPA discussions.

Any action or follow-up on your agency's behalf to help ensure timely and proficient permitting of the Point Thomson project would be most appreciated.

Sincerely,



Daniel S. Sullivan
Commissioner

Attachments:

- (1) June 20, 2012, Corps response re. LEDPA
- (2) July 6, 2012, letter to Colonel Lestochi
- (3) April 12, 2011, L. Kozisek technical expertise
- (4) May 3, 2011, letter from David Hayes to Colonel Koenig
- (5) October 31, 2011, letter from Governor Parnell to Secretary Salazar

cc:

Heather Zichal, Deputy Assistant to the President for Energy and Climate Change
The Honorable Mark Begich, U.S. Senate
The Honorable Lisa Murkowski, U.S. Senate
The Honorable Don Young, U.S. House of Representatives
Randy Ruaro, Deputy Chief of Staff, Office of the Governor
Kip Knudson, Director of State & Federal Relations, Office of the Governor
Mark Robbins, Associate Director, Office of the Governor
Larry Hartig, Commissioner, Alaska Department of Environmental Conservation
Gary Mendivil, Office of the Commissioner, Alaska Department of Environmental Conservation
Joseph Balash, Deputy Commissioner, Alaska Department of Natural Resources
Ed Fogels, Deputy Commissioner, Alaska Department of Natural Resources
William Barron, Director, Division of Oil and Gas, Alaska Department of Natural Resources
Thomas Crafford, Director, Office of Project Management and Permitting, Alaska Department of Natural Resources
Sara Longan, Large Project Manager, Office of Project Management and Permitting, Alaska Department of Natural Resources

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ATTACHMENT 1

From: Bill, Harry A. Jr. POA
To: Lonan, Sara W. (DNR)
Subject: State of Alaska Requests on Point Thomson Project
Date: Wednesday, June 20, 2012 5:10:25 PM

Sara,

I have discussed the Alaska DNR Team requests presented to me during our June 6, 2012 coordination meeting on the Point Thomson Project with Corps of Engineers Regulatory Division (RD) managers. Your request centered upon assisting us in identifying our Environmentally Preferable Alternative (NEPA) in our Record of Decision and by providing oil and gas development expertise for our least environmentally damaging practicable alternative (LEDPA) decision (CWA).

The RD managers have considered your request and chosen to not include the State of Alaska in deliberations on these decisions.

The direction from supervision is to not enter into deliberations with any party on any of our decision responsibilities. If we need information not available in our administrative record, we can and will ask the State of Alaska for specific subject matter expert information and data they may have. We will not solicit opinions or advice from any parties in order to develop our LEDPA decision or to identify an Environmentally Preferable Alternative.

The Corps of Engineers will be soliciting public comments on ExxonMobil's revised permit application in the coming weeks when the Final EIS is published. This will be your opportunity to provide opinions to us on the applicant's final proposal. We look forward to receiving any helpful information you can provide.

I do appreciate your willingness to assist us. Please extend my gratitude to the ADNR Team for their time and efforts. I look forward to working with you all in the future.

Respectfully,

Harry A. Baij Jr.

US Army Corps of Engineers, Alaska
Office: 907.753.2784
Cell: 907.350.5097
www.poa.usace.army.mil/reg

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

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July 6, 2012

The Honorable Colonel Lestochi
Department of the Army
United States Army Corps of Engineers, Alaska District
P.O. Box 6898
Joint Base Elmendorf-Richardson, AK 99506-0898

Dear Colonel Lestochi:

Congratulations on your appointment and I apologize that I was unable to attend your change of command ceremony. The State of Alaska looks forward to building a positive working relationship with you as you assume command of the U.S. Army Corps of Engineers (Corps), Alaska District. I welcome the opportunity to meet with you as soon as both of our schedules allow. In the meantime, I wanted to raise an issue with you that is of utmost importance to the State of Alaska.

We are concerned that certain steps are being taken regarding the Point Thomson Final Environmental Impact Statement (EIS) and permit decision-making that may result in a repeat CD-5 experience, where isolated decision-making caused uninformed permit decisions and subsequent permit delays. The State would like you to reconsider the Corps' denial of our request to participate in Least Environmentally Damaging Practicable Alternative (LEDPA) discussions as the Corps executes 404 permitting for the Point Thomson project. It is due to our keen interest and involvement in this project that I write this letter of concern.

As you may know, as a cooperating agency, the State of Alaska continues to work closely with the Corps as the Point Thomson EIS nears completion. The State has been actively involved throughout the National Environmental Policy Act (NEPA) process and remains keenly interested in the timely and proficient permitting of the Point Thomson project. Developing the Thomson Sands Reservoir remains a strategic interest for the State because it would help offset current declines in North Slope production and maintain efficiency of the Trans-Alaska Pipeline System (TAPS). In the face of steadily declining production, Governor Parnell maintains an ambitious goal for Alaska and the nation to increase TAPS throughput to one million barrels of oil per day within a decade. Bringing Point Thomson development online will certainly help the State achieve this goal.

The State of Alaska, Department of Natural Resources ("we") recently asked the Corps to participate in LEDPA discussions as the Corps executes 404 permitting for the Point Thomson project. We offered additional State resources and critical expertise from subject matter experts to aid the Corps in their decision-making after the Final EIS is released, realizing that pursuant to 404(b)(1) guidelines, the final federal permitting decisions would be made solely by the Corps. Unfortunately, the Corps is not willing to allow the State to participate in any discussions to help inform a LEDPA decision (Attachment 1). Disappointingly, the Corps' response does not support President Obama's efforts to coordinate state and federal permitting. The insular approach the Corps is choosing to take during 404 permitting will run the risk of isolated decision-making, unaligned regulatory agency approval, and the potential for permitting delays.

The following outlines several critical reasons highlighting the need to coordinate 404 permitting for the Point Thomson project.

Lessons Learned from CD-5

The Corps should recall previous experiences where State expertise and coordinated decision-making was necessary to come to an accurate, practicable, and environmentally preferred permit decision. The initial Record of Decision (ROD) for the CD-5 Alpine Satellite Development project failed to give deference to the State's interest as landowners of the affected property and failed to adequately take into consideration State expertise regarding above-ground versus Horizontally Directionally Drilled (HDD) pipelines. Expertise from the State of Alaska was necessary during LEDPA deliberations for the CD-5 project, but unfortunately, the Corps only sought additional State expertise after the ROD was issued and appealed (Attachment 2) and agencies rejected the permit decision (Attachment 3).

There would be great benefit from seeking State expertise and coordinating subsequent permit decisions regarding Point Thomson, given the CD-5 experience (Attachment 4). Our request to the Corps was to offer State services and expertise during LEDPA discussions that could help inform the Corps' LEDPA decisions at an earlier time to help prevent any repeat, isolated decision-making that may produce uninformed permit decisions and permitting delays.

Point Thomson Settlement Agreement

On March 29, 2012, the State of Alaska settled its litigation with ExxonMobil and other leaseholders regarding the Point Thomson field on the North Slope. A component of this settlement includes commitments to an Initial Production System (IPS), which enforces commitments and timelines. For example, the IPS requires Exxon Mobil to bring Point Thomson 15 & 16 wells into production by the end of the 2015-2016 winter season, which has already been delayed by one year due to federal EIS delays (the initial agreement between Exxon Mobil and the State had an IPS start date for the end of the 2014-1015 winter season). The settlement agreement also positions North Slope gas for a large-scale gas pipeline project, which is a goal President Obama has championed.

Any additional EIS or permitting delays should be avoided to help mitigate the risk of extending the Point Thomson project schedule any further. To help mitigate future potential delays under our purview and responsibility, the State of Alaska has a great interest in participating in and staying informed on what permit decisions may be made through the LEDPA process. It is disconcerting that the Corps does not accept additional support from the State to help ensure accurate and timely federal decision-making.

Isolated Federal Decision-making Affecting State Permits

Continued cooperation and informed decision-making between the State of Alaska and the Corps is essential in order to allow for the subsequent and efficient State permitting of the Point Thomson project. The proposed Point Thomson project is solely located on state lands. The State of Alaska is the landowner, primary land manager and regulator for the project, particularly after the NEPA process is completed and the Corps issues its ROD.

Once the ROD is issued (target date of 9/21/12), the State will have numerous permits to authorize and issue in order to meet aggressive deadlines for Exxon Mobil to begin construction in winter 2012-2013. Without being part of the LEDPA discussions, as also prescribed by 404(b)(1) Guidelines, we fear the State will not have sufficient, timely information regarding the LEDPA alternative to proceed in an expeditious manner. This lack of information could restrict the State's ability to proactively plan for project permitting and have negative implications for the Point Thomson project. If the LEDPA alternative differs significantly from the project as described in draft permit applications, many of which have already been submitted to the State, select State permit processes would need to re-start in order to accommodate new or altered project plans. The timeline associated with the re-start of processing permit applications could result in project start-up delays considering the State permitting process is robust and imposes additional processes with associated timelines as prescribed by state law.

No Environmentally Preferred Alternative in the Final EIS

The Corps decided against publishing an environmentally preferred alternative (EPA) in the Point Thomson Final EIS. As a result, the State of Alaska is effectively carved out of the decision-making process. Cooperating agencies are typically allowed the opportunity to deliberate with the lead federal agency to help determine a preferred alternative in a Final EIS. Absent this opportunity, the State of Alaska was hopeful the Corps would allow agency discussions to help determine an environmentally preferred alternative in the ROD, considering this is the approach the Corps has chosen for the Point Thomson project. Unfortunately, the Corps is not interested in allowing expertise from cooperating agencies to help determine an environmentally preferred alternative. This is another tactic to make decisions in a vacuum without critical expertise from cooperating agencies.

401 Certification, Alaska Department of Environmental Conservation (ADEC)

According to the Clean Water Act (33 U.S.C § 1251) any federal permit in Alaska that may result in discharge into waters of the U.S. must obtain a Certificate of Reasonable Assurance (401 Certification) from the Alaska Department of Environmental Conservation (ADEC). Without a 401 Certification from ADEC, the 404 permit is prohibited from being issued. If ADEC grants the 401 certification with specific conditions in order to be consistent with Alaska standards, those conditions become enforceable conditions of the resulting federal permit. The State of Alaska should have a voice in the Corps' LEDPA decision, since conditions imposed by ADEC's 401 certification could materially affect the LEDPA analysis, especially when it comes to examining the practicability of the alternatives. Obtaining the 401 certification from ADEC is a standard process for projects in Alaska, but we assert that including the State of Alaska into LEDPA discussions prior to the issuance of the ROD would help streamline the Corps' decision-making process.

State and Federal Permit Coordination

Governor Parnell previously asked the Department of Interior to add the Point Thomson project to the Interagency Working Group on Coordination of Domestic Energy Development and Permitting in Alaska (Attachment 5). President Obama's July 12, 2011 order describes that the Working Group shall:

- Ensure the sharing and integrity of scientific and environmental information and cultural and traditional knowledge among agencies to support the permit evaluation process for onshore and offshore energy development projects in Alaska; and
- Coordinate federal engagement with states, localities, and tribal governments, as it related to energy development and permitting issues in Alaska.

In the spirit of open communication between the State and federal government, to help adhere to President Obama's order, and most importantly to assist with the successful and timely permitting of the Point Thomson project, it is unfortunate that the Corps will not allow our expertise and services during the Clean Water Act 404 (b)(1) and LEDPA discussions.

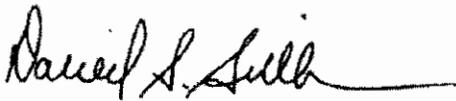
In a meeting with one of your colleagues, and in response to our questions about joining LEDPA discussions for the Point Thomson project, we were told state agencies did not participate with the Corps during 404 permitting -- it simply wasn't done. Our research indicates otherwise and we have learned that other state agencies follow a merged NEPA and 404 permitting process. This merged process allows state employees to work with the Corps during 404 permitting. We would like you to look at examples where coordinated permitting efforts between state and federal agencies have successfully gained efficiencies. Furthermore, we ask you to reconsider our request of working together during 404 permitting to prevent permitting delays or isolated decision-making that could negatively affect the final permit outcome for the Point Thomson project. Sharing State expertise during LEDPA discussions for the Point Thomson project is essential and would encourage

informed decision-making as your agency determines LEDPA for the proposed Point Thomson project.

I recognize that this is a lot to put on your plate as you begin your new position in Alaska. However, these are very important issues with extremely tight timelines for the near future.

Again, I look forward to meeting with you soon.

Sincerely,



Daniel S. Sullivan
Commissioner, Alaska Department of Natural Resources

Attachments:

- (1) June 20, 2012, Corps response re. LEDPA
- (2) April 12, 2011, L. Kozisek technical expertise
- (3) May 3, 2011, letter from David Hayes to Colonel Koenig
- (4) July 30, 2011, letter from Daniel S. Sullivan to Colonel Koenig
- (5) October 31, 2011, letter from Governor Parnell to Secretary Salazar

References:

- U.S. Clean Water Act § 1251, 33 U.S.C (1972)
State of Alaska. (2011). Governor Parnell welcomes progress on CD-5. Retrieved from, <http://gov.alaska.gov/parnell/press-room/full-press-release.html?pr=5977>

cc:

Randy Ruaro, Deputy Chief of Staff, Office of the Governor
Kip Knudson, Director of State & Federal Relations, Office of the Governor
The Honorable Larry Hartig, Commissioner, Alaska Department of Environmental Conservation
Joseph Balash, Deputy Commissioner, Alaska Department of Natural Resources
Ed Fogels, Deputy Commissioner, Alaska Department of Natural Resources
William Barron, Director, Division of Oil and Gas, Alaska Department of Natural resources
Thomas Crafford, Director DNR, Office of Project Management and Permitting
Sara Longan, Large Project Manager, Office of Project Management and Permitting

ATTACHMENT 3

MEMORANDUM

Department of Natural Resources

State of Alaska

State Pipeline Coordinator's Office

TO: Mike Thompson
State Pipeline Coordinator

DATE: 12 April 2011

FROM: Louis Kozisek, P.E.
Chief Engineer, SPCO

FILE NO: NA

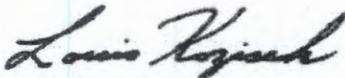
SUBJECT: Opinion on Aboveground vs. HDD Pipeline Crossings for the Nigliq Channel

The attached is my technical opinion on the best method for crossing the Nigliq channel of the Colville River. It is provided per request. The opinion evaluates the advantages of the two types of crossings for the Nigliq channel. It also discusses general principles used by engineers for selecting the optimal method for pipeline crossings over or under waterways in a region such as the North Slope.

My work, educational, and experience qualifications for offering a technical opinion are listed below. I have been involved with the Trans-Alaska Pipeline and with the North Slope oilfield facilities and pipelines for 32 years. That time has been spent in various capacities. I have worked and observed these issues from several different perspectives. My past employment includes responsibilities as a civil/structural design engineer, as a mechanical design engineer and as a project manager/engineer on oil and gas projects. I have worked for pipeline and oil companies and for an engineering consultant. I have also been employed in federal and state government, performing engineering oversight and review and technical evaluations. I have been the engineer of record on a number of oilfield and piping/pipeline projects. I have co-authored several papers on pipeline and arctic design.

I have three engineering degrees and professional engineering licenses in mechanical and civil/structural engineering in Alaska, as well as other professional engineering registrations. In addition, I am a Project Management Professional (PMP) and a NCEES Model-Law Engineer.

In my present position as Chief Engineer with the State Pipeline Coordinator's Office, I have responsibilities involving engineering evaluation of most of the long-distance transmission pipelines in the state, including the Alpine pipeline and the Horizontal Directionally Drilled (HDD) crossing at the Colville River. The latter is of importance because it is the closest analog to the proposed alternative of an HDD crossing of the Nigliq Channel. It remains (to the best of my knowledge) the only example of an HDD pipeline crossing in a permafrost area.



Louis Kozisek, P.E.

cc: Tina Kobayashi, LAW
Anne Brown, DNR/Deputy SPC

Aboveground and HDD Pipeline Crossings Nigliq Channel

General

The selection of a pipeline-crossing mode involves site-specific evaluations of the engineering, financial, and environmental merits of the available options. The following is a recommendation for the optimal mode of crossing the Nigliq Channel. It also includes discussion of the most important engineering considerations in selecting a method of pipeline crossings for the North Slope, in general, and for the Nigliq Channel, specifically.

The following opinion will place special emphasis on environmental considerations and the importance of selecting the Least Environmentally Damaging Practical Alternative (LEDPA). In particular, it will give the greatest weight to the prevention of oil spills over the lifetime of the crossing.

Other environmental design considerations such as preventing scour, avoiding changes in velocity of the river, avoiding ice pile-up, and small-boat access have importance, but the need to select a design that provides the greatest pipeline integrity outweighs all of these. In other words, the need to select an alternative that minimizes the risk of an oil spill should be the highest priority in selection of the most appropriate crossing.

In addition, this opinion will emphasize the need to design for the long term. On the North Slope, operators and engineers are currently struggling with maintaining aging oil production facilities and pipelines. Many design decisions made decades ago have only demonstrated problems with the passage of years and decades. Experience has shown that the difficulties of maintaining integrity over years of service have too often been given insufficient consideration in the original design.

During the conceptual and preliminary design, engineers evaluate many factors, both major and minor. Extensive evaluation of hydrological, soil, geological and other information should result in selection of a design that is optimal for the site, for the situation, for the people who live in the area, and for the company that maintains and repairs the pipeline.

The following discussion is broken into subject areas. Each area will discuss the environmental and design issues involved in selecting the pipeline crossing for the Nigliq channel.

Maintenance and Repair

Observations over the past three decades of the North Slope pipelines and facilities have demonstrated the importance of design to allow the easiest and simplest surveillance monitoring and repair. These aspects become increasingly important as pipelines age, and should be given prominence in selection criteria. Design for ease of maintaining integrity over the lifetime of a pipeline has shown itself to be a pre-eminent requirement, perhaps the most important one.



The concept is to design piping for easier internal and external access where practical. As an example, during the past few years inaccessible piping has been replaced at Pump Station 1. Concrete-encased piping at the Kuparuk pipeline, the Prudhoe pipeline and at the booster pump building have been replaced. The lesson to be learned is that pipes and pipelines that are easily accessible encourage pipeline operators to inspect more frequently.

This lesson has become increasingly obvious as North Slope pipelines have aged. It is an element of their design that has paid dividends in the areas of repair and maintenance. Unlike buried installations, the pipelines on the North Slope are elevated above the tundra. This allows operators to use simple techniques such as ultrasonic probes or portable X-Rays to evaluate potential problem sites. This compares to "digs" on buried pipelines that require extensive equipment and the logistics of moving the equipment to the site.

The Trans-Alaska Pipeline provides an example of this general principle. Originally, half of the pipeline was buried; half, elevated. Now, after a number of changes, 380 miles are buried and 420 miles are elevated. Engineers and maintenance managers report that the cost of maintenance and repairs, and the extent of external corrosion, is much lower on the elevated section.

This demonstrates a principle important to the selection of a pipeline crossing in an arctic area. Where possible, a pipeline that is in an elevated location is more maintainable and easier to monitor. An elevated pipeline can be more easily investigated by a variety of tools for non-destructive examination (NDE), external corrosion direct assessment (ECDA) and internal corrosion direct assessment (ICDA).

A design that makes maintenance and repair easier and less expensive will encourage these activities. This is especially important because, as pipelines and infrastructures age, less money is typically available in budgets for these activities. If these activities become too expensive, pipeline operators can often reduce these activities, reduce discretionary repairs, and still comply with regulatory requirements. Some suspected problems fall into gray areas, where expert technical judgment determines if anomalies require further action. A design that provides for lower cost field activities should encourage more maintenance and result in a pipeline that is in better condition, ages better and has higher integrity.

For inspection, repair and maintenance, therefore, the aboveground option is a clear winner. It keeps the pipeline easily accessible, and lowers the costs and reduces the response times. Making the pipeline easier to maintain and repair encourages the operator to increase these activities, which in turn increases the integrity levels, and this in turn results in less environmental risk.



Surveillance and Monitoring

On the North Slope, pipeline operators have developed programs for monitoring elevated pipelines via ground inspections, visual air inspections, ground-base infra-red (IR) and airborne forward-looking infrared (FLIR) surveys. The advantages of continually monitoring pipelines by these means have become increasingly obvious as the installations age in the arctic and subarctic.

In-Line Inspection (ILI) or smart pigging mitigates some of the disadvantages of surveillance and monitoring a buried and largely inaccessible HDD crossing. It is the most important tool for assuring integrity of the pipeline and thus preventing oil spills into the waterway.

ILI can be used for both aboveground as well as belowground crossings. However, it is the only practical method for verification of many characteristics of belowground installations. Aboveground crossings have the important advantage that data from ILI and ECDA and other methods can be correlated to improve the certainty of condition assessments. Multiple lines of evidence will always provide stronger proof to convince companies to budget for and plan investigations and repair of suspect sites.

In addition, an aboveground crossing might provide more accurate ILI data than a belowground crossing. Changes in direction change the speed of an ILI tool and this often results in loss of data. Another cause of lost data is deposits in a pipeline. An HDD pipeline crossing will accumulate sediments and water at the lowest point. No conceptual design has been prepared for an HDD crossing at this location, but a typical maximum depth of such an installation may be 40 feet below the riverbed. This value, added to the depth of the river, the bank height and the VSM height, would result in a total drop as much as 60 to 70 feet. This low area would collect sediments, scale, wax, substances such as asphaltene, and water. Even extensive cleaning prior to an ILI run might not suffice to remove enough contaminants to assure the same accuracy in a belowground HDD crossing as can be attained in an aboveground crossing.

Perhaps the most important surveillance, though, could be simple visual inspection. The bridge is anticipated to be heavily used by the residents of Nuligut. They will be crossing both day and night for shift work in the Alpine oilfield. They also will use the bridge for access to hunting grounds. Employees and others can be trained to observe the pipeline for signs of leaks. In addition, ConocoPhillips operates frequent flights to the Alpine Oilfield and has sophisticated FLIR imaging. Their FLIR system has proven itself. None of these methods, which could be used to spot a leak at the Nigliq crossing quickly, can be used for an underground HDD installation.

However, it should be pointed out that belowground river crossings on the North Slope have ranged from the simple, such as the tranced crossing of the Shaviovik, to the sophisticated, such as the Colville crossing. Some of the disadvantages of an underground crossing were mitigated at the Colville HDD by use of sophisticated equipment and instrumentation. However, this approach represents the use of increased complexity and



technology to overcome problems inherent in a design. Simply keeping the pipeline where it can be easily inspected and monitored represents the optimal solution.

These items are extremely important for maintaining the integrity of the pipeline, especially as it ages, and for minimizing the risks of an oil spill into the Niglig channel. Therefore, the aboveground option for crossing is the clear winner for surveillance and monitoring.

Hydrology, Including Ice and Scour

The two options have various advantages and disadvantages for the hydrology of the channel. At first glance, the HDD option appears to be the most benign. An HDD crossing does not interfere with the channel hydraulics under most circumstances. Nonetheless, the situation is not clear-cut.

A pipeline bridge across an arctic river channel must look at a number of environmental and site-specific design issues. The location of abutments, the width between abutments, ice-crushing capability, the amount of the river obstructed by structures in the water, the local scour and the height of the pipeline above the water are all key design parameters. A review of the bridge design revealed that the design has addressed these concerns:

- Abutments have been located completely outside of the normal flow path of the channel.
- Flow does not impinge on the bridge abutments until the water level reaches the two-year flood stage.
- The bridge is built for long-return flood periods.
- Relatively thin piles are located far apart. This means that relatively little flow is blocked. Under normal flows, only 2.5% of the flow is blocked.
- This means that there is a small velocity change at the bridge, and therefore, reduced scour.
- Under normal flow, scour is negligible. Under flood conditions, scour is controlled and highly localized. Shifting bottom sediments should soon fill in scour holes.
- Ice breaking structures and deeply embedded piles will resist ice loads.
- The deck of the bridge is high above the water surface, even in a 200-year flood stage. This reduces the likelihood of ice pile-up.

The belowground option has advantages in these areas because it does not interfere with the flow path of the channel. However, it does have an Achilles' heel: the transitions between the aboveground modes to the belowground mode (the locations at which the pipeline goes underground). A relatively flat terrain in this area makes it difficult to locate the transition in an area of higher elevation, better protected from floodwaters. It is paramount to design HDD to withstand a higher flood stage, so that spring breakup would not impinge upon this vulnerable area, potentially rupturing the pipeline. An oil spill during river breakup, when ice and massive amounts of water flow toward the Arctic Ocean, would be extraordinarily difficult to control and to contain. This vulnerability might be mitigated by building protection, such as armored revetments or locating the



transitions on higher ground, if practical. However, reduction of this risk by engineering counter-measures is not certain prior to more engineering being completed on this option.

Therefore, the underground option appears moderately superior for resistance to problems caused by flooding, ice and scour, but this cannot be fully determined until conceptual or preliminary engineering for an HDD crossing is finished.

Internal Corrosion

Many, if not most, of the recent flowline and pipeline incidents on the North Slope have involved corrosion. Correct engineering to reduce the likelihood of corrosion is paramount. It can be argued that many of the high-profile oil leaks from pipelines on the North Slope could have been prevented had the pipe segments been designed to reduce the accumulation of sediments.

For internal corrosion, the aboveground design is undoubtedly superior. At lower velocities, some of the water and some sediment would drop out and remain in the bottom of the pipe. Typically, these solids include scale, reservoir sand, and frac sands. At lower temperatures, the solids might also include wax and asphaltene.

An HDD crossing at this site could have an elevation drop as much as 60-70 feet. That is far greater than the drops in similar pipelines on the North Slope. This is about 10 times greater than most elevation changes in road and caribou crossings, which are known to be at higher risk for corrosion. The topography in this area of the North Slope is flat. Typical elevation changes in three-phase pipelines are in the range of three to twelve feet. Changes in direction or elevation, such as at an HDD crossing, might cause cleaning pigs to press against the top, bottom or sides of the pipe, leaving deposits. The changes in direction might also interfere with the accuracy of ILI devices such as smart pigs, by interfering with good contact between sensors and the pipe wall. Inaccuracies can be caused by increased depositions or lift-off of the sensors from the inner surface of the pipe.

Deposits within pipelines are considered high-risk factors for corrosion because of several factors, including microbially induced corrosion (MIC). This type of corrosion, when found in oil pipelines, is primarily caused by the presence of Sulfate-Reducing Bacteria (SRB) and acid-generating bacteria, although other microbes may also be present. These are produced with oil because they naturally exist in reservoirs. They can be distributed throughout the upstream production equipment and pipes, and these upstream deposits may have bacteria populations that contribute to MIC in downstream pipelines. The microbes can find a home in solids located anywhere in a production system. The bacteria can literally dissolve steel. They excrete acidic products that damage the internal pipe wall and change the pH of the local environment under the deposit. All of these factors can interact to accelerate corrosion. In addition, solids deposits can block the efficacy of corrosion inhibitors and biocides that are used to counteract the effects of MIC. They can also increase corrosion by physically blocking the action of treatment chemicals and by absorbing them.



The large drop in elevation in an HDD crossing might also reduce the effectiveness of these beneficial chemicals via another mechanism. The flow regime under the Nigliq channel will be very different from the Colville crossing. The flow will be three phase (oil, gas and water) and pressured directly from well flow, not pumps. This means that a large elevation change could produce a slugging flow regime at the crossing and possibly far downstream in the pipeline, as well.

External Corrosion

The two options, aboveground and belowground, also differ in risks for external corrosion. The risk for the aboveground option is relatively well known because of the accumulated history of elevated pipelines on the North Slope. It should be noted that few of the pipelines and flowlines have external coatings, such as is required for this pipeline. Few spills have been attributed to problems in the external coatings of insulated aboveground pipelines on the slope.

On the other hand, external corrosion of a buried pipeline under a river carries a greater range of risks. It is subject to unknowns in the in situ conditions, and the pipeline's external coating could easily be damaged during installation. The risks of corrosion at the Colville crossing were mitigated by several design features, most of which are considered unique or innovative for HDD design. The pipelines are cased (pipe enclosing another pipe); they have an active electrical corrosion protection (CP) system; they have a separate leak detection system; and the atmosphere between the pipeline and casing are purged with nitrogen, which may reduce the oxidative types of corrosion damage.

A cased underground crossing is also susceptible to another mode of accelerated corrosion that is extremely rare or non-existent in aboveground pipelines: galvanic corrosion at a point. Cased crossings rely on electrical isolators to ensure that the pipeline exterior does not complete an electrical circuit with the casing. The resultant electron flow can cause greatly accelerated corrosion in a highly localized area. Periodically, continuity testing is performed to find such problems, but sometimes they can be difficult to diagnose. Adding to this problem, a cased crossing cannot have its coating and CP condition evaluated on the shores via standard close-interval surveys, and there is the potential that ultrasonic and magnetic-flux smart pigs may have data recording skewed by the additional metal surface in a cased crossing.

All of these design features have the potential to reduce external corrosion, but they also have limitations, which will be further discussed in the containment section. It also should be noted that they are technological fixes for increased risks that largely do not exist on the aboveground option.

Therefore, for external corrosion, the aboveground option is considered greatly superior to the belowground option. The risks and unknowns are less. For internal corrosion, the aboveground option, which will have unimpeded flow, is greatly preferred. It does not have the potential for increased accumulation of water and sediments, and the consequent increased corrosion that these often cause.



Reliability

To overcome some of the disadvantages of a buried crossing, the designers of the Alpine Colville crossing incorporated special features not found in most other HDD crossings. These include such items as a separate, specialized leak detection system and several corrosion prevention measures. This crossing has operated successfully for a decade. However, it remains a unique example of a North Slope HDD installation. The vast majority of pipeline crossings in this region are still aboveground, reinforcing the idea that it is the tried and true method.

The Colville crossing was, to the best of my knowledge, the first (and remains the only) HDD installation in a permafrost area. Constructing it was considered problematic. ARCO developed two contingency plans should it not be feasible. They allowed an extra winter to complete the HDD crossing, as a cushion in the overall project schedule. They also investigated a proposed pipeline bridge. HDD in permafrost is considered more difficult than in thawed ground for a variety of reasons. The beds of larger waterways are thawed and the thawed areas can extend down tens of feet. The thermally affected area can extend much farther down. An HDD crossing at this site must be designed for difficult soils. It must deal with widely varying soil conditions, from cold permafrost to warm permafrost, from transitional soils to fully thawed soils. Warm permafrost, in general, is less stable than the cold permafrost typically found on the North Slope. HDD drilling will thermally change the crossing because the act of drilling inputs heat to the soil. To stabilize the HDD crossing at the Colville River, engineers employed several countermeasures, installing passive heat pipes and large quantities of subgrade insulation.

Still, there have been surface stability problems and thermal stability issues at some pipeline crossings on the North Slope. The Colville crossing had surface subsidence and subsequently had to have surface restoration. Subsidence at the Badami crossing drained a nearby lake and altered local surface runoff. It should be noted that at these locations, the designers had the forethought to bury the pipe deep enough so that, to date, we have seen no significant subsidence of the pipe, only the land surface. However, the arctic provides an unusual potential for failure of belowground crossings. If the surface is thermally destabilized, some of the soil above the pipe thaws. Most of the soils are ice-rich and subside. The land is relatively flat in most locations on the North Slope and minor changes in elevation can change surface water flow, sometimes dramatically. Flow of relatively warm surface waters can warm permafrost further, and the cycle will continue until thermal stability is reached. Water surfaces change the albedo and this increases the solar heat absorbed. This issue, a complex interaction of soil temperatures, melting ice, surface water, flowing water, and changed absorption of solar radiation, can destabilize the area directly above a crossing.

Caution should be practiced in applying the experience of the Colville crossing to other sites, especially to the Niglig Channel. The geotechnical requirements of each site are different, and the two pipelines are fundamentally different. The Alpine pipeline transports sales-quality oil that is processed to TAPS specifications, with little natural gas and a limit of 0.35% BS&W (Basic Sediment and Water). In contrast, the CD5 pipeline



transports unprocessed three-phase fluid (oil, gas and water). The corrosion rates are typically much higher in three-phase pipelines and flowlines.

If the Niglig Channel pipeline crossing is constructed using HDD, parts of the design will be unprecedented. Studies will have to be done to determine if an HDD is technically feasible. The District Engineer's letter remanding the project back to the Alaska office stated that the technical feasibility of a CD5 HDD was a given, since it was not an extended reach installation. Other documentation from the Corps of Engineers indicates an assumption that the Colville River crossing is an analog proving the technical feasibility of the project.

This is an oversimplification and may be incorrect. Flow studies, including dynamic modeling, need to be performed to see if an HDD crossing may be constructed and still provide adequate flow assurance. Flow of processed crude oil delivered by pumps is a much different situation than three-phase flow powered by well pressure. In three-phase pipelines, changes in elevation can create flow problems. As previously stated, slugging may interfere with flow. Slugging happens when pipe flow transitions from laminar or turbulent regimes to a flow regime where liquid and gas separate. The water and gas flow separately downstream as pockets, or "slugs", that are mainly gas or mainly liquid. Dynamic flow modeling and other research is needed to determine if an HDD crossing has the potential to create slugging, intermittent flow, or other flow impedances in the CD5 pipeline. However, slugging is not a completely understood phenomenon, so risks would remain even if a computational flow model predicted no problems.

Any pioneering engineering design introduces risks, some not fully appreciated until after considerable operating experience. The unknown geotechnical conditions at the site, the accumulation of deposits caused by elevation changes, the assurance of flow, and the tricky issues of installing a hot oil pipeline in a permafrost area make an HDD option, in my opinion, technically indeterminate. More studies are needed to define whether it is practical. ARCO stated to the press that the feasibility studies for the Colville crossing took three years and three million dollars (1998 costs). The statement that an HDD crossing at the location is feasible, without additional engineering analysis, is questionable.

The assumption that an HDD crossing is a technical certainty is further undermined by a closer look at the unique difficulties of installing a pipeline beneath a waterway in a permafrost area. There are substantive differences between the Colville and the Niglig crossings. Unlike other HDD crossings, crossings in permafrost must be both thermally and structurally stable. In the selection of the optimal alternative, the probable expansion of oil development to the west must be considered. In addition to the original utility and oil pipelines and spare casing(s), new HDD crossings will likely be drilled for new production locations (CDs). In addition, smaller HDD crossing might be installed for cathodes to help protect the main pipes against corrosion. It should be recognized that, although the Niglig crossing is shorter, it will be wider than Colville. The number of pipelines will be greater. The design of an HDD for this location is speculative, but a rough estimate may be based upon the thirty-foot spacing at Colville, the number of heat



pipes at Colville, and the possibility that the final crossing may have up to nine crossings for proposed CD developments. The final crossing might be up to 300 feet wide and require either mechanical refrigeration or a few to several hundred heat pipes to stabilize the banks. A Nigliq HDD crossing will be more technically challenging in this respect than the Colville, and pushing technical frontiers can result in greater long-term risks.

Reliability analysis involves risk analysis, and risk is the product of failure frequency and the consequences of failure. A failure mode unique to belowground crossings in the arctic should be noted, because of its extreme consequence. Standard leak detection systems involving constant monitoring of changes in pressure, volume and temperature (PVT) are typically not used for three-phase pipelines because the changes in the gas phase are difficult to measure accurately. This is another important distinction between the Colville crossing and the proposed Nigliq crossing. However, underground pipeline crossings in an area of thick, landfast ice may leak and may not be noticed for some time. Smaller leaks can be more environmentally damaging than large leaks because it may take much longer for anyone to realize that something is wrong. Ice covers the channel on the surface but water flows beneath the ice for several months per year. A leak during this period may eventually reach the shore, the barrier islands and the Arctic Ocean, where a continually flowing and fast gyre sweeps the Arctic Coast. At the Colville River Alpine crossing, the designers provided a casing and a secondary leak detection system to obviate this scenario. However, this raises a question. Why employ these complex preventive measures? Raising the pipe above the surface is a much simpler and more efficacious solution. Vehicle traffic, FLIR surveillance and other monitoring activities would likely cause a leak aboveground at this site to be quickly spotted. Cleanup would also be aided by an aboveground crossing. During winter, leaked fluids could more easily be removed from the surface of the ice.

Therefore, the reliability (certainty of design) of an aboveground crossing is greater than that of an HDD crossing. More work is needed to prove an HDD design in the areas of flow assurance, corrosion protection, geotechnical feasibility and permafrost temperature stabilization.

Containment

In this context, the subject refers to a method of installing a second pipe or a second structure around a pipe to contain a potential spill in the interior pipe. The nearest comparison is a cased crossing under a road, railroad or waterway. Less applicable examples are double-walled pipe and pipe-in-pipe configurations that are used for areas of high hazards, extremely toxic chemicals, or for specialized purposes like cold restart. Pipeline engineers have split in opinions on the long-term integrity of this method.

Most examples are for entirely different situations than the Nigliq channel. For example, pipeline builders evaluated pipe-in-pipe options for the Northstar, Liberty and Oooguruk projects, but these projects are not good analogs for the Nigliq channel. For one thing, all of these pipelines are relatively shallow trenches in ocean environments. Secondary pipe was proposed primarily for increased mechanical protection against ice strikes and



increased protection against loss-of-support for a near-shore phenomenon unique to the arctic that is known as *strudel scour*. The Nigliq channel crossing has none of these risks.

BP argued strongly against a pipe-in-pipe design, stating that this change would result in an installation of lesser integrity. For the Northstar field, they constructed both the gas and oil pipelines as single-wall designs. They designed Liberty as single pipelines, too, but the plans were abandoned when they decided to develop the prospect from an onshore location. However, Pioneer selected a bundled pipe-in-pipe design for Oooguruk. The differing designs reflect the lack of a clear consensus on the best method for near-shore arctic pipelines.

These types of trenched subsea pipelines are of very limited usefulness in selecting the best design for the Nigliq channel. The design requirements and the governing conditions for design are too different. A better comparison is with cased waterway, road and railroad crossings.

The record is less ambiguous. There has been a consistent move away from cased to uncased crossings. As one indicator, in 2009 NACE (formerly, the National Association of Corrosion Engineers) hosted a discussion forum, "Protecting Pipelines at Crossings: Are Casings Obsolete?"¹ The consensus of this discussion appeared to be that, although most of their problems can be surmounted, cased crossings should be used only where structurally necessary and where an uncased crossing is not practical.

The promises of secondary containment have to be balanced against the practical problems of barriers to inspection and monitoring and "indeterminate conditions" that exist between the inner and outer walls. In engineering, an indeterminate condition is essentially an unknown condition. In a typical cased pipeline crossing, more information is known about corrosion and soil conditions on the outside of the casing. More information is known about the inside wall of the pipeline. Less information is known about the interstitial space between the pipeline and the casing. This space is also the most difficult to inspect. During construction, the installation of a pipe within the pipe may damage a pipeline's external coating in a location where it is difficult to find the damage or monitor it via galvanic or close-interval methods.

It should be noted that the designers of the Colville Alps crossing attempted to address these problems by several means, including installing a secondary leak detection system, inerting the atmosphere between the pipes with nitrogen and providing an active CP electrical system. However, these are all partial solutions. The leak detection system can take a long period to detect hydrocarbons and no instrumentation is perfect. A nitrogen blanket inert only specific oxidative reactions. Corrosion and microbial activity can occur in an anaerobic environment, as internal corrosion in gas and oil pipelines demonstrate. A CP system can slow corrosion, but locations of high and low voltage can occur and, again, no system is perfect.

¹ Pipeline & Gas Journal, Vol. 236, No. 3, March 2009.



The environmental advantages of containment in a cased-crossing design are obviated by inspection and condition monitoring difficulties and increased risk of corrosion. In addition, an HDD crossing may be installed without a casing and an aboveground crossing may be installed within a secondary pipe. At the Nigliq crossing, both aboveground and belowground options have advantages and disadvantages in the areas of containment and environmental protection. Additional engineering is needed to determine a clear choice in this category.

Incident Response and Emergency Access

A good pipeline engineering design increases an operator's capability to provide environmental remediation by providing the means for responding as quickly as practical to incidents with the optimal mix of equipment, vehicles and material. The proposed bridge provides vehicle and equipment access to portions of the pipeline route. This access is especially important in any area where spilled oil and produced water could flow to water, such as at the crossing.

Much of the equipment that is needed to respond to an oil spill have high tread loadings and cannot be directly used on the tundra during the summer. In winter, ice roads would have to be built, and if the weather at the time of the incident is warm, this construction could delay response. To respond to a problem, an operator typically must send out specialists who might use construction vehicles, side-booms or cranes, welding trucks, connexes filled with spill-response material, tractor-trailers, front-end loaders, bulldozers, and other light and heavy equipment.

It is important to recognize that there are two types of pipeline access needed by an operator: day-by-day and emergency. The first is needed for activities such as inspection, monitoring, minor repairs and modifications, testing, pigging, construction, and monitoring. The second is for emergency response activities, such as response to a spill, security, leak mitigation, emergency repairs, emergency access to equipment or valves, and fire fighting. Quick access can mitigate environmental impact from all of these.

A roadless development complicates both types of access. The North Slope has an unforgiving climate and the geography is very difficult. Although relatively flat, the tundra is difficult to travel upon during winter and more difficult during summer. In many places, the surface is rough and pockmarked, cut by the edges of permafrost polygons. In summer, a person can sink through the melted soil, the active layer, which is often about two feet deep. The polygon edges are much deeper and filled with water and mud.

Roads, work pads, mats, special equipment, vehicles are of immense value for both everyday and emergency response in another manner. Bad weather can prevent access by air for hours or days. Ice fog, white-outs with blowing snow, poor lighting, unpredictable winds, and low temperatures hamper operations during winter. Surface transportation is sometimes disrupted by weather, but far less frequently than air.



Although this opinion focuses on environmental concerns, it should be noted that surface transport during inclement weather has one other important advantage: medivac operations and other medical emergencies. In this area, only oil production centers have trained medical personnel and airports suitable for medivac to regional hospitals in Fairbanks and Anchorage. Sometimes specialized care, such as that found in burn centers, requires transport to the Lower 48.

The aboveground option with vehicle access is a superior choice to an HDD crossing for environmental protection. It can result in quicker responses and more reliable access for both everyday work and for emergencies, winter or summer.

Recommendation

As previously discussed, the environmental issues surrounding the selection of a channel crossing include items such as fisheries, small boat navigation and subsistence hunting and fishing. However, the scour potential of a bridge has been minimized by the design, and a third-party review of scour indicated that it would be localized. It is difficult to see how fisheries would be significantly affected by such low scour values. For more expertise, one should refer to the decisions of the Fish and Game Dept and their consensus on the bridge. It is also difficult to comprehend how small boat navigation would be a large concern, as the piers are only four feet wide and placed 200 feet apart. The nearby village, which represents nearly the entire boating population, heavily favors the bridge option. They also represent the subsistence population that would use the bridge for easier access to hunting grounds. They must navigate past the bridge piers to hunting and fishing grounds. It is difficult to see how the piers in the river would be an impediment, as they take up only 2.5% of the surface. The abutments are also not a serious obstacle because they are typically outside of the normal channel flow.

Therefore, in my opinion, the primary environmental concern in design of the crossing is simply "keeping oil in the pipe." Prevention of spills is such an overwhelming design consideration that it should overshadow other concerns.

For the purposes of overall environmental protection at the Nigliq crossing, an aboveground pipeline is preferred. This conclusion is explained by the results of the evaluation of different categories:

Maintenance and Repair. The aboveground option has important advantages over an HDD installation. It keeps the pipeline easily accessible, and lowers the costs and reduces the response times. The pipeline is easier to maintain and repair.

Surveillance and Monitoring. The aboveground option is greatly preferred for surveillance and monitoring. Keeping the pipe high, where nearby traffic can monitor leaks, and where inspection crews can easily and inexpensively reach suspect areas. Surveillance methods for aboveground pipelines, such as ground IR and airborne FLIR, provide important capabilities to the pipeline operator.



Hydrology, Including Ice and Scur. The underground option appears moderately superior for resistance to problems caused by flooding, ice and scour. The advantage of a crossing mode that does not affect the riverbed has to be balanced against the severe disadvantage of the vulnerability of the transition locations. However, a firm conclusion in this category cannot be reached until more design is completed for an HDD installation.

Internal Corrosion. The aboveground option is considered greatly superior to the belowground option. It does not have the potential for increased accumulation of water and sediments, and the consequent increased corrosion that these often cause. Nor does it have the potential problems described for pigging, cleaning, and chemical applications.

External Corrosion. The aboveground option is preferred for prevention of external corrosion. It does not have the potential problems of accelerated corrosion due to groundwater or maintaining the correct CP voltage level or coating damage during boring or installation.

Reliability. The reliability (certainty of design) of an aboveground crossing is greater than that of an HDD crossing. More work is needed to prove an HDD crossing, providing greater assurance of technical success in the areas of flow assurance, corrosion protection, geotechnical feasibility, and permafrost temperature stabilization.

Containment. For the Niglig crossing, this is essentially the issue of whether a pipe should be cased within another pipe. Although secondary containment first appears to be an obvious addition to a pipeline's integrity, it may not be upon closer inspection. Opinion is divided on the efficacy of cased pipe and pipe-in-pipe design. The risks inherent in both approaches have much uncertainty. As a result, both options are rated as equal. It should also be noted that secondary containment is not an exclusive option of the belowground option. An aboveground pipeline crossing can be built inside of another pipe, and an HDD installation may be installed as a single pipeline without a casing.

Incident Response and Emergency Access. The design of the aboveground crossing of the Niglig channel provides for a high-quality vehicle bridge. This provides access for construction equipment and emergency response to the areas across the channel. This could be a valuable tool for faster emergency response and could mean that an incident can be remediated by a better equipment mix. This makes the aboveground crossing a strongly preferred alternative in this category.

In summary, the aboveground mode has major advantages for environmental protection in six of seven subject areas. The one potential exception is hydrology. In this category, the belowground HDD option has a slight advantage, but this statement must be qualified. The HDD option still needs to be defined by additional engineering before this can be concluded with certainty.

The subject areas and the level of advantage in each category are listed below:



Advantages Listed by Subject Area		
Subject Area	Aboveground	HDD
Maintenance and Repair	Strong	
Surveillance and Monitoring	Strong	
Hydrology, Including Ice and Scour		Weak
Internal Corrosion	Strong	
External Corrosion	Moderate	
Reliability (Certainty of Design)	Strong	
Containment (Pipe-in-Pipe)	Neutral	Neutral
Incident Response and Emergency Access	Strong	

It needs to be reiterated that every crossing location is unique, and therefore each should be evaluated on its own merits. Numerous parameters must be evaluated to select the optimal solution. For some sites, HDD might be the optimal choice. For other sites, trenching would be best. In arctic regions, above-water crossings have been generally favored as the prime method because of the unusual characteristics of permafrost and arctic rivers.

This opinion considers the advantages and disadvantages of each mode from the point of view of environmental protection, using the perspective of a pipeline engineer. The decision is clear. For the Nigliq crossing, the aboveground crossing offers the greatest overall benefits for environmental protection because it best accommodates the all-important need to mitigate spill risks at a waterway. An aboveground crossing is, in my opinion, the Least Environmentally Damaging Practical Alternative (LEDPA) for this site.



ATTACHMENT 4



THE DEPUTY SECRETARY OF THE INTERIOR
WASHINGTON

MAY 03 2011

Colonel Reinhard W. Koenig
U.S. Army Corps of Engineers, Alaska District
P.O. Box 6898
Elmendorf AFB, Alaska 99506-0898

Dear Colonel Koenig:

I am writing on behalf of the Department of the Interior (DOI) regarding the current review by the U.S. Army Corps of Engineers of ConocoPhillips Alaska, Inc.'s (CPAI) permit application for the CD-5 Alpine Satellite Development (POA-2005-1576). At the direction of Secretary Salazar, I have been communicating with CPAI; representatives of Native Alaskans with a direct interest in this project; and several of the agencies involved, including the Bureau of Land Management (BLM), the U.S. Fish and Wildlife Service (FWS), and the U.S. Environmental Protection Agency (EPA). Based on these discussions, it is our view that this matter can and we hope will be resolved so that the project can go forward without further delay.

The primary issue in the remand proceeding now before you is whether the full record, including additional evidence being presented to the Corps following its initial decision, supports a finding that the underground pipeline alternative in the CD-5 matter is the "least environmentally damaging practicable alternative" (LEDPA). As you know, the Record of Decision that DOI issued for this action concluded that a bridge over the Colville River would be the environmentally preferred alternative based on the environmental analysis prepared on the project and its alternatives. Some parties, including the FWS and EPA, raised concerns about potential negative environmental consequences that could be associated with a proposed bridge. Also, local parties, including the North Slope Borough and the Native Village of Nuiqsut, initially raised concerns about the bridge alternative.

Based in large part on these concerns, the Corps declined DOI's recommendation and instead found that an alternative that employs Horizontal Directional Drilling (HDD) – with the use of an underground pipeline – under the Nigliq Channel would be less environmentally damaging, and that HDD is practicable.

In the proceedings that have followed, new attention has been directed on the HDD alternative, and there is important new evidence that should be considered following the Corps' Administrative Appeal Decision remanding the denial back to the Alaska District for reconsideration. In particular, the State of Alaska has provided extensive analysis on the substantial risks associated with an underground pipeline such as that proposed, and the use of HDD in this area. Alaska's Joint Pipeline Office, which has more than two decades of experience in overseeing pipeline operations in the State of Alaska, concurs in this view and we understand that it will be submitting comments under separate cover in addition to those already

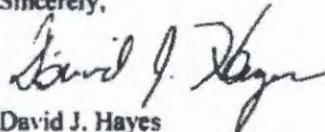
supplied on behalf of the State Pipeline Coordinator's Office. The new information regarding the environmental risks associated with buried pipelines is particularly compelling in light of the recent experience with the Trans Alaska Pipeline System, in which a buried portion of the pipeline developed an undetected leak. An undetected leak in a pipeline underlying the extremely sensitive Colville River could lead to environmentally catastrophic results. After the experience that our Department had with last summer's failure of previously-assured oil and gas technology in the Gulf of Mexico, we feel strongly that an above-ground crossing of the Nigliq Channel, which can be visually inspected and monitored with confidence, is an inherently less damaging alternative for this location than an underground pipeline. This is especially the case in this situation where the pipeline would transport a highly corrosive three-phase mixture of oil, gas, and water.

Also, while initial concerns were raised about the proposed bridge from surrounding landowners and Native communities, there is now widespread support for that alternative from the State of Alaska, the Arctic Slope Regional Corporation, the Kuukpik Corporation, the North Slope Borough, and affected subsistence users in the area, including Alaskan Natives in the City and the Native Village of Nuiqsut. The CPAI engaged in extensive and important negotiations with many of these entities, including the Native communities in the area, and was able to identify several measures to minimize the potential impacts to hydrology, subsistence, and historic landmarks in and around Nigliq Channel. The support of each of these entities is vitally important and should be a primary consideration in the Corps' current review process.

Because of the importance of resolving this matter and moving forward with the CD-5 development, our office has initiated discussions with the parties to determine whether the concerns raised initially regarding the proposed approach of using a bridge to transport unprocessed oil and gas across the Colville River might be addressed, particularly in light of new evidence indicating that a buried pipeline may pose unique environmental risks of its own. Based on discussions that we have had with FWS and EPA, in particular, we believe that environmental concerns raised about the bridge crossing can and should be addressed and mitigated. Toward that end, we are moving forward with additional discussions with these parties to outline a mitigation approach to accompany the application that is before the Corps.

We wanted to alert you to the fact that we are proceeding with these discussions in parallel with the Corps' on-going consideration of the new information that has been submitted regarding the environmental risks associated with the buried pipeline alternative. We anticipate concluding these discussions by the end of May so that the Corps has a more complete record upon which to evaluate which river crossing approach is the "least environmentally damaging practical alternative" and can bring this matter to conclusion without further delay. We will follow up with you as these discussions proceed and hope that we can convene a meeting to discuss next steps in the near future. Please do not hesitate to contact me at (202) 208-6291, if you have any questions or would like to discuss this matter further. Thank you for your consideration.

Sincerely,



David J. Hayes

**Cc: Jo-Ellen Darcy, Assistant Secretary of the Army, Civil Works
Rowan Gould, Acting Director, U.S. Fish & Wildlife Service
Robert Abbey, Director, Bureau of Land Management
Dennis McLarren, Regional Administrator, EPA
T. E. Johansen, President, ConocoPhillips Alaska, Inc.
James W. Balsiger, Administrator, Alaska Region, NOAA**

ATTACHMENT 5

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Governor Sean Parnell
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October 31, 2011

The Honorable Ken Salazar
Secretary
Department of the Interior
United States Department of the Interior
1849 C Street, NW
Washington, DC 20240

Dear Mr. Secretary,

The Obama Administration has taken positive steps on several fronts to increase coordination between the federal government and the State of Alaska, which has improved our working relationship. We appreciate these efforts.

In the spirit of open communication between State and federal government, I am writing to convey my significant concern over the preliminary Draft Environmental Impact Statement (DEIS) for ExxonMobil's Point Thomson development project, which the Corps of Engineers recently circulated to the State and other Cooperating Agencies for comment.

First some background. The Point Thomson field is on State land near the 1002 Area of the Arctic National Wildlife Refuge (ANWR). This field is one of the largest undeveloped oil and gas fields in North America. This area is estimated to have well over 400 million barrels of oil and gas condensates and over eight trillion cubic feet of natural gas. Point Thomson's timely development will provide enormous benefits to the State and country and will lead to more jobs, significant revenue, and enhanced energy security. Furthermore, increased domestic production from Point Thomson will extend the life of the Trans Alaska Pipeline System (TAPS). The field's development is also a necessary prerequisite for a natural gas pipeline from the North Slope. For these reasons, I have taken a personal interest in ensuring that ExxonMobil diligently moves forward with production in a manner that advances the State's interests.

Unfortunately, the Point Thomson DEIS is another example of federal overreach on State lands. It has come to my attention that the Point Thomson DEIS includes ANWR in its evaluation "due to its proximity to the project" and assumes that activities occurring outside refuge boundaries could impact ANWR's "wilderness values." Indeed, based on the Department of the Interior's input, the DEIS spends considerable effort evaluating the potential impacts of the Point Thomson project on refuge "values," including wilderness, aesthetic, and national values, which are very subjective and difficult to quantify.

The Honorable Ken Salazar

October 31, 2011

Page 2

It is disconcerting that the DEIS places so much emphasis on the proposed project's proximity to ANWR and implies that the State should manage its adjacent lands as if they were part of the refuge. We have serious issues with the appropriateness of the DEIS assessing such impacts when the project is located on State lands designated for oil and gas development, well outside refuge boundaries. Moreover, a huge portion of ANWR already includes over eight million acres that are designated as "wilderness", and ANWR also encompasses vast ecosystems that are specifically designed to protect fish, wildlife, and wilderness values. Therefore, there is no reason to extend ANWR's reach beyond its boundaries.

The DEIS also conflicts with the Department of the Interior's 1988 "Arctic Refuge Comprehensive Conservation Plan", which stated that the Fish and Wildlife Service has no authority to regulate lands outside of the refuge:

What impact will the comprehensive conservation plan have on impacts from developments on adjacent lands?

This is not a significant issue for the plan. The plan cannot address this question because *the Service has no authority to regulate the use of lands outside the refuge or the activities that occur on those lands*. In all of the alternatives, however, the Service will work with adjacent landowners to minimize the potential for impacts from their activities and developments. If refuge resources are adversely affected by off-refuge development, the Service would have the same remedies under state and federal law that any landowner would have. The Service would cooperate with the appropriate agency(ies) to resolve the problem. The Service will rely on the U.S. Environmental Protection Agency, State of Alaska Department of Environmental Conservation, and other appropriate local, state and federal agencies to enforce compliance with environmental laws and pollution control standards (Page 39).

The current Point Thomson DEIS, however, is a backdoor way to allow the Fish and Wildlife Service to regulate oil and gas activities on State lands. Thus, the State has requested, and is still requesting, that the DEIS clarify that the Fish and Wildlife Service's authority to manage the Refuge stops at ANWR's boundary.

Finally, the DEIS contains an additional fatal flaw – it inaccurately states that the Alaska National Interest Lands Conservation Act (ANILCA) stipulated the 1002 coastal plain "*was to be managed as a wilderness study area*" (page ES-52). As my administration has repeatedly stated in letters and conversations with your agency, this is not what ANILCA says.

ANILCA Section 1002(a) directed the Secretary of Interior to study the ANWR coastal plain "to provide for a comprehensive and continuing inventory and assessment of the fish and wildlife resources of the coastal plain of the Arctic National Wildlife Refuge; an analysis of the impacts of oil and gas exploration, development and production, and to authorize exploratory activity within the coastal plain in a manner that avoids significant adverse effects on the fish and wildlife and other resources."

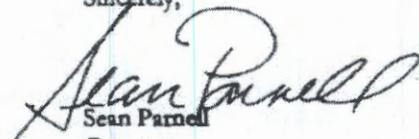
The Honorable Ken Salazar
October 31, 2011
Page 3

ANILCA Section 1002(c) and (h) directs the Secretary to publish the results of the study, which concluded the Secretary should recommend that Congress authorize oil and gas development in the coastal plain.

In short, the State has already submitted detailed comments to the Corps regarding the apparent attempt to bootstrap a wide range of ANWR issues into the Point Thomson DEIS. It is unclear how the Corps of Engineers will respond to the State's concerns. My hope is that the Corps removes all of the objectionable language from the DEIS identified in the State's comments, and we can remove this contentious issue early in the process.

Finally, because timely development at Point Thomson is critical to State and country, I would also like to request that ExxonMobil's Point Thomson project be included in Deputy Secretary Hayes' Interagency Working Group on Coordination of Domestic Energy Development and Permitting in Alaska.

Sincerely,


Sean Parnell
Governor

cc: David Hayes, Deputy Secretary, United States Department of the Interior
Kim Elton, Director, Office of Alaska Affairs, United States Department of the Interior

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES OFFICE OF THE COMMISSIONER

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November 4, 2011

RE: State Pipeline Coordinator's Office Annual Report - Fiscal Year 2011

Dear Reader,

The SPCO is pleased to enclose a copy of the SPCO Annual Report for fiscal year 2011.

Safe and reliable energy is essential to our quality of life and economic stability. Since the construction of the Trans-Alaska Pipeline System in the late 1970s, Alaska has been a key contributor to the nation's energy security. Once again, Alaska's natural resources are becoming a topic of discussion across the nation.

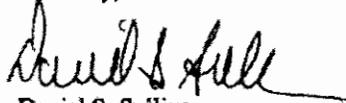
In December, the state will hold one of the largest oil and gas lease sales in the country this year, encompassing nearly 15 million acres in the Beaufort Sea, North Slope and North Slope Foothills. In addition, the Bureau of Land Management will hold its NPR-A lease the same day, offering about 3.06 million acres. Excitement is building over new developments on existing leases in the North Slope area and Cook Inlet, and multiple large-scale pipeline projects are being proposed to ship Alaska's immense natural gas reserves to market. New and existing pipelines regulated by the State Pipeline Coordinator's Office (SPCO) will play a critical role in the future of oil and gas development in Alaska.

The State of Alaska's policy is that development, use, and control of a pipeline transportation system make the maximum contribution to the development of the human resources of this state, increase the standard of living for all its residents, advance existing and potential sectors of its economy, strengthen free competition in its private enterprise system and carefully protect its incomparable natural environment. The SPCO is responsible for the 18 jurisdictional pipeline right-of-way leases issued under Alaska Statute 38.35, the Alaska Right-of-Way Leasing Act, and one right-of-way grant issued under Alaska Statute 38.05, the Alaska Land Act.

The attached report provides general information for each jurisdictional pipeline, highlights lessee reported activities, summarizes specific state oversight activities for construction, operation, and maintenance, then provides some thoughts on the outlook for the next fiscal year, including updates on several proposed natural gas pipeline projects. An electronic version of the SPCO Annual Report is available at <http://dnr.alaska.gov/commis/pcoc>.

The SPCO annual report is an evolving document, which strives to provide the reader with an effective summary of pipeline activities during the preceding fiscal year. You are welcome to contact the State Pipeline Coordinator's Office at (907) 269-6859 with any comments or questions.

Sincerely,


Daniel S. Sullivan
Commissioner

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"Develop, Conserve, and Enhance Natural Resources for Present and Future Alaskans."

2011 ANNUAL REPORT



STATE
PIPELINE
COORDINATOR'S
OFFICE



STATE OF ALASKA
Sean Parnell, Governor



DEPARTMENT OF NATURAL RESOURCES
Daniel S. Sullivan, Commissioner

STATE PIPELINE COORDINATOR'S OFFICE
Frederick M. Thompson, State Pipeline Coordinator

The State Pipeline Coordinator's Office Annual Report is available online at
<http://dnr.alaska.gov/commis/pco>.



Copies may be requested from:

State Pipeline Coordinator's Office
411 West Fourth Avenue, Suite 2C
Anchorage, Alaska 99501

Front Cover: In 2011, North Fork Pipeline began shipping Cook Inlet natural gas and brought a new source of energy to Southcentral Alaska. Fiberspar LinePipe® is a composite pipe consisting of an inner thermoplastic pressure barrier reinforced by high-strength glass fibers embedded in an epoxy matrix. North Fork Pipeline is the first common carrier line in Alaska to be constructed out of a composite pipe material.

Photo credit: Ben Hagedorn Cover design: Graham Smith

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Introduction to the SPCO



The SPCO issues and provides oversight of AS 38.35 pipelines in Alaska. SPCO lease compliance specialists spend hundreds of hours each year monitoring pipelines and rights-of-way.

State of Alaska policy, as referenced in Alaska Statute 38.35.010, mandates that development, use and control of a pipeline transportation system make the maximum contribution to Alaska human resources development, increase the standard of living for all Alaska residents, advance existing and potential sectors of Alaska's economy, strengthen free competition in Alaska's private enterprise system and carefully protect its incomparable natural environment.

The Commissioner of the Department of Natural Resources (DNR) has the authority to issue leases on state land for pipeline rights-of-way to transport products under conditions prescribed by Alaska Statute 38.35.015 and the associated administrative regulations. The Commissioner delegates the authority and responsibility to administer pipeline right-of-way leases, as allowed by Alaska Statute 38.35.210, to the State Pipeline Coordinator.

An administrative order, signed by Gov. Walter Hickel in 1987, established the State Pipeline Coordinator's Office (SPCO) within the DNR. Subsequent administrative orders designated the SPCO as the State's lead agency for issuing right-of-way leases under AS 38.35, the Right-of-Way Leasing Act, and coordinating the State's efforts related to the federal right-of-way grant process. The SPCO also coordinates the State's oversight of pre-construction, construction, operation and termination of all common-carrier pipelines.

Organization

In addition to right-of-way and lease compliance specialists, engineers and administrative staff, the SPCO includes a representative from the Department of Fish & Game, Habitat Division; safety and electrical inspectors from the Department of Labor & Workforce Development; three representatives from the Department of Environmental Conservation, Spill Prevention & Response and Industry Preparedness programs, and inspectors/building permit reviewers representing the Department of Public Safety, State Fire Marshal's Office. A complete SPCO organizational chart is available in Appendix A.

Right-of-Way Leases

A right-of-way lease includes a wide range of commitments and governs the conduct of both the State and the lessee. A lease remains in effect for the lifetime of the corresponding pipeline and addresses construction, operations, maintenance and termination. The intent of every lease is to preserve human health and environmental stewardship through safe and responsible pipeline operations.

To ensure that all pipeline activities are conducted safely and in compliance with all applicable laws and regulations, each lease incorporates a comprehensive set of stipulations that require conformance to multiple technical, environmental and other important conditions. The stipulations require lessees to establish specific processes, programs and systems to be implemented in all aspects of pipeline operations. When properly administered by the lessee and monitored by the SPCO, the stipulation requirements can effectively ensure the integrity of pipeline system operations.

The SPCO, in issuing and providing continued oversight of right-of-way leases, strives to limit duplication of efforts while utilizing the expertise of cooperating regulatory agencies. When other state or Federal regulatory agencies have jurisdictional authority over certain aspects of pipeline operations, the SPCO will work with the agencies and their respective subject matter experts and regulatory enforcement staff to ensure lease compliance.

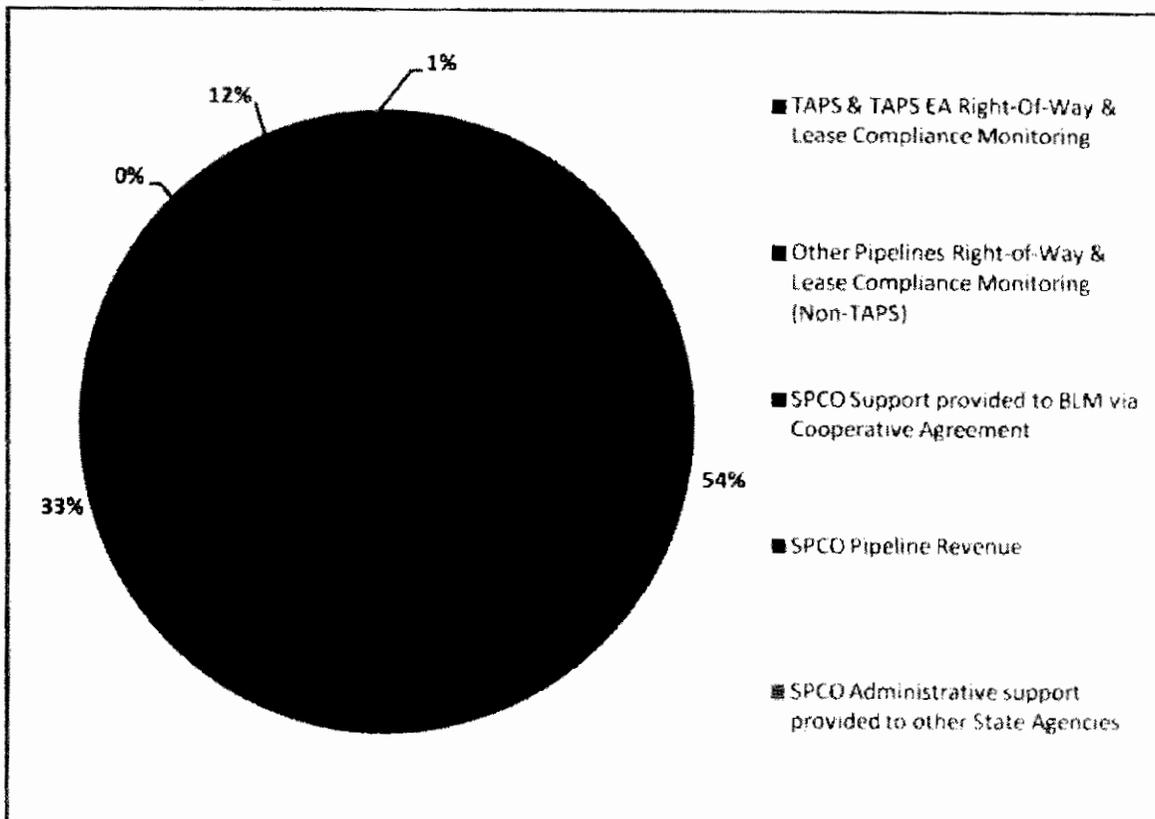
Sections Overview

The SPCO comprises four main sections: administration, lease compliance and monitoring, right-of-way and permitting (ROW) and engineering.

Administrative Section

The administrative section performs multiple functions critical to daily office operations. Administrative staff manage incoming and outgoing correspondence; right-of-way case files; and financial, procurement and other administrative records. Administrative staff also assist with public records requests and perform all administrative functions relating to personnel, payroll, recruitment, budgeting, grants and contracts, accounting, computer and network maintenance, facility management, property control, procurement and travel. In fiscal year 2010 (FY10), administrative staff coordinated and finalized more than 200 travel arrangements for SPCO compliance and right-of-way specialists to conduct pipeline compliance, assessment and inspection activities.

SPCO FY10 Budget Expenditures



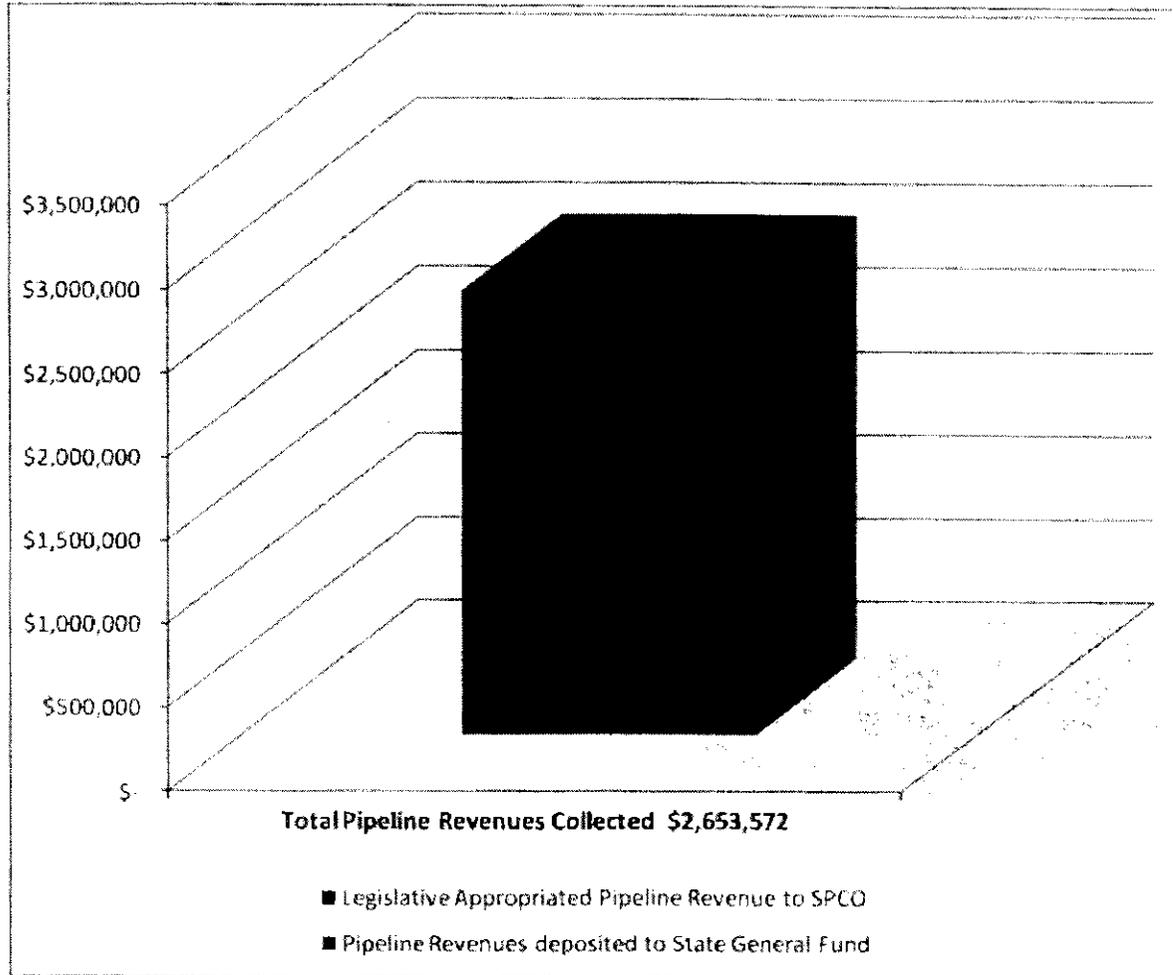
Budget Overview

The SPCO budget is revenue-based and largely funded with reimbursements from industry. State agency representatives are supported through reimbursable service agreements administered by the SPCO; thus integrating the expertise and authority of multiple departments into one coordinated office. FY11 SPCO program costs totaled \$3,820,972.

On behalf of the State, the SPCO collects general fund/program receipts, also known as pipeline revenues, from lease payments, material sales and application

fees. Pipeline revenues are deposited in the State's general fund. Each year, the Alaska Legislature appropriates some general fund monies to the SPCO, which are used to support operations unrelated to any specific pipeline lease. The FY10 net deposit (revenue collected minus legislative appropriation) to the general fund was 2.18 million dollars.

SPCO General Fund Revenues



Lease Compliance Section

The role of the lease compliance section is to monitor AS 38.35 pipeline operations for compliance with the requirements of the corresponding right-of-way lease. The SPCO lease compliance program integrates three primary elements: compliance monitoring, lessee annual report monitoring and the SPCO annual report.

Compliance Monitoring

The purpose of the lease compliance monitoring program is to routinely evaluate compliance with active lease requirements. Compliance team members first evaluate each lease requirement and then determine functional status relative to annual surveillance efforts. Many lease provisions are definitions or clarifications of legal/administrative language and do not require surveillance; other provisions apply to specific activity phases, such as construction or termination, and may not be applicable to surveillance and monitoring programs during normal pipeline operations. Some provisions, referred to as "conditional" provisions, are invoked only after an action initiated by the lessee or State Pipeline Coordinator.

The compliance monitoring program is dynamic and subject to change in response to changing conditions. An annual internal review provides an opportunity for SPCO staff to incorporate program improvements or other necessary modifications to the monitoring program.

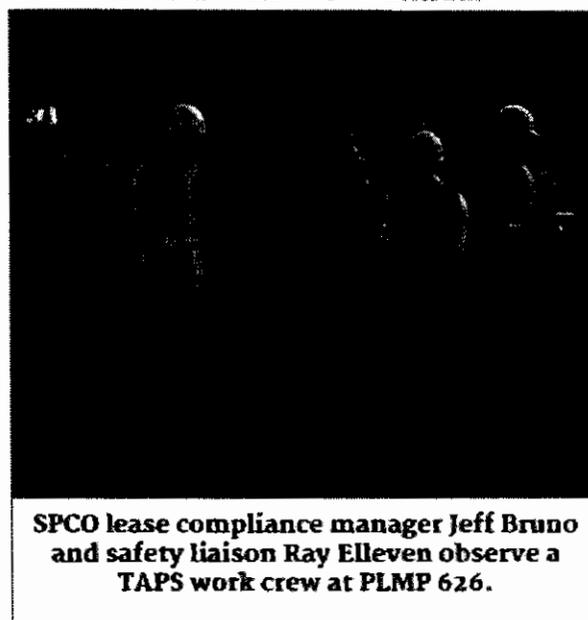
Lease requirements cover a broad range of subjects; the compliance section frequently utilizes the expertise of the SPCO engineers, right-of-way specialists and other state agencies in order to maintain a comprehensive monitoring program.

The SPCO compliance monitoring activities comprise three primary categories:

Project Review and Monitoring

Lessees submit proposals for construction and maintenance projects to the SPCO for review on a quarterly or annual basis. Projects are generally differentiated from baseline work by the requirement for project-specific regulatory permits and the subsequent need for engineering analysis and design.

For larger and more complex projects, SPCO and lessee staff (permitting specialists, land managers, subject matter experts and engineers) meet early in the planning



SPCO lease compliance manager Jeff Bruno and safety liaison Ray Elleven observe a TAPS work crew at PLMP 626.

process to identify and account for particular items of concern, such as the potential impact of project work on fish and wildlife habitats.

After the lessee and SPCO agree on the final design for a project, SPCO staff shift from a planning/permitting role to one of surveillance and verification. In addition to specific permit stipulations, many projects encompass a broad spectrum of lease requirements; compliance staff must adopt a multi-disciplinary approach when conducting surveillances. Compliance representatives employ the permit and lease requirements and the lessee's issued-for-construction (IFC) package to develop surveillance checklists, which they use in the field to verify compliance with the various safety, engineering, environmental and other regulatory requirements identified for verification.

Surveillance Monitoring

Surveillances serve as independent compliance evaluations, as the factual basis for an assessment or technical report or as supporting documentation for an agency permit issuance-determination or verification. SPCO compliance representatives conduct planned and unplanned surveillances on SPCO-jurisdictional pipelines throughout the year and record their observations in surveillance and lease compliance reports.

Assessments

Assessments are broader in scope than surveillances and focus primarily on processes or systems, rather than specific lease or permit requirements. Compliance representatives must first identify the scope of an assessment and then gauge the appropriate level of sampling and the resources required to conduct the assessment. As an example, the steps below represent the process that an SPCO compliance representative would follow in order to conduct an assessment of a lessee's right-of-way surveillance and monitoring program.

1. Identify the lease requirements.
2. Determine the purpose of the assessment, usually to verify compliance with the identified lease requirements.
3. Define the scope of the assessment - will the assessment account for the entire surveillance and monitoring program or only a specific portion? The scope should also identify the facilities, activities, documents and employees included in the assessment.
4. Identify methods - establish the specific data collection methods. The compliance representative might, as part of the assessment, conduct new surveillances, review lessee records and documentation to evaluate compliance trends, interview lessee employees or utilize other methods deemed appropriate by the State Pipeline Coordinator.

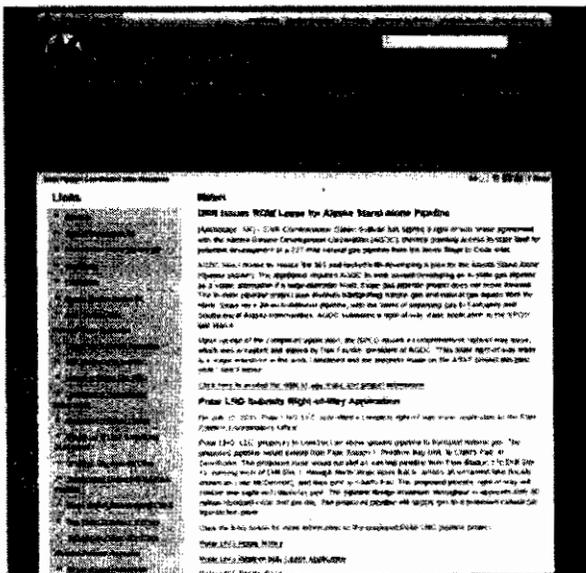
5. Analyze data – the compliance representative will integrate the available information and evaluate compliance with the requirements identified in the first step.
6. Write assessment report – the compliance representative will produce a report summarizing the process, analysis and results of the assessment. The report may also include observations, recommendations or findings.

SPCO Annual Report

The purpose of the SPCO Annual Report is to provide information about SPCO compliance, right-of-way and engineering activities and summarize the lessee annual reports for the public, industry and government audiences. Specifically, the report

provides background information about SPCO-jurisdictional pipeline systems, a summary of the SPCO oversight program, a description and the status of issues identified in compliance monitoring efforts and summaries of lessee annual reports.

Appendix C contains citations of major source documents for the SPCO Annual Report.



SPCO annual reports and hundreds of other documents are available online at <http://dnr.alaska.gov/commis/pco>.

SPCO works with the lessees, through their quality assurance programs, to make certain that the information required to document compliance with the lease and lease stipulations is identified and, upon request, available for review. Several lessees have developed internal compliance matrices that list the lease requirements,

parties responsible for managing compliance, necessary processes to manage each requirement, records expected from the process and applicable activities subject to the requirement.

Many lease sections and stipulations impose requirements that are the same as, or overlapped by, legal requirements of state or federal laws or regulations administered and enforced by other regulatory agencies. To avoid duplication of efforts, SPCO will, when appropriate, defer to other agencies' regulatory enforcement to ensure compliance with lease requirements. SPCO monitors and reports on the enforcement activities as they relate to specific lease requirements.

Engineering Section

The SPCO engineering section has several important functions. SPCO engineers provide technical oversight of facilities, equipment, infrastructure and activities on pipeline leases. SPCO engineers also provide, upon request, civil and technical engineering assistance and recommendations to liaison agencies, the DNR commissioner and the State Pipeline Coordinator.

The engineering section is responsible for verifying that lessees meet all technical requirements of each right-of-way lease. SPCO engineers verify that each lessee conforms to all applicable technical codes and regulations by conducting thorough code reviews and design basis

examinations. In particular, SPCO engineers work to ensure that, as stated in AS 38.35, “the applicant has the technical and financial capability to protect state and private property interests,” that the lessee “maintain the leasehold and pipeline in good repair” and “promptly repair or remedy any damage to the leasehold.”



In FY11, the SPCO hired Joe Kemp (second from left) to serve as the agency's civil engineer.

Lease Pre-Application

Pre-application activities involve gathering information on the technical aspects of a proposed pipeline project. Design basis production and evaluation is one of the most critical phases of

the pre-application process for any pipeline. The purpose of the design basis is to provide a general description of the technical aspects of the project and demonstrate a commitment to design and build the pipeline and ancillary facilities in accordance with relevant codes, standards and regulations. The project's design basis must be acceptable to both the SPCO and the lease applicant before an application is accepted.

Lease Processing

During the lease processing stage, SPCO engineers carefully evaluate the capabilities of the lease applicant and prepare a recommendation to the State Pipeline Coordinator or the DNR Commissioner, identifying any conditions or requirements for approval.

Lease Monitoring

Technical evaluation of pipelines and leasehold facilities comprise the bulk of the engineering section's work. Specifically, SPCO engineers scrutinize significant

maintenance, repair and construction projects to provide for the State Pipeline Coordinator an independent opinion of leasehold activities. Activities related to the Trans-Alaska Pipeline System (TAPS) require the most effort on the part of the SPCO engineers; see the TAPS section of this document for more information.

Special Projects

On occasion, the SPCO engineering section encounters significant items that do not have a direct relationship with a pipeline lease. Recent examples include:

- Assistance provided to other state organizations
- Assistance provided to the State's support of a ConocoPhillips Alaska, Inc., appeal of the CD-5 permit denial by the U.S. Army Corps of Engineers

See the Special Projects section of this report (page 102) for more information.

Right-of-Way and Permits Section

The SPCO right-of-way and permits section (ROW section) is responsible for a multitude of tasks related to pipeline lease administration. The ROW section processes lease applications and amendments, implements public processes (as required by state statute), prepares legal land contracts, writes decision documents, issues project-specific authorizations, administers rental and other payments, reviews letters of non-objection and performs myriad other functions as necessary or requested by the State Pipeline Coordinator.

Pre-lease

The ROW section encourages all applicants to meet with SPCO staff prior to submitting a lease application. Pre-lease meetings help to coordinate realistic timelines and provide an invaluable opportunity to discuss potential obstacles or challenges to preparing and processing the lease application.

Pre-lease meetings provide the opportunity for the SPCO and the applicant to discuss the state statute requirements with regards to the public process, the specific expectations of the SPCO and ways to avoid or mitigate any environmental concerns. The ROW section also coordinates permitting for pre-lease applicants to help with field research, exploration and route alignment.

The SPCO issues a public notice after receiving a complete application from the project proponent. After the Commissioner's Analysis and Proposed Decision is written, the SPCO issues a second public notice and continues to work on the draft lease. Comments received during the public review period are considered in the Commissioner's Final Decision. If the applicant has met all the requirements and the State Pipeline Coordinator and DNR commissioner determine that the potential lessee is "fit, willing and able" to construct, maintain and eventually terminate the pipeline, then a lease can be issued.

Lease Issuance

The DNR commissioner receives the proposed final lease after negotiations conclude and the applicant signs the document. After the commissioner agrees to and signs the document, it becomes a fully-executed lease. The SPCO provides an original of the lease for the applicant and maintains another original in state case files. All AS 38.35 pipeline right-of-way leases and amendments are available online at <http://dnr.alaska.gov/commis/pco>. Table 1 (see following page) contains a list of SPCO-monitored pipelines.

Lease Administration

The ROW section is responsible for permitting or coordinating any activity associated with a lease. The ROW section is the main point of contact within the SPCO for land use and pipeline rights-of-way.

Permitting

The ROW section issues lease authorizations for all AS 38.35 pipelines. For TAPS, the ROW section issues land use permits, temporary water use permits and rights-of-way for roads and boat launches required for operations and maintenance activities and special projects. The permit review process can involve a substantial amount of coordination; each project has unique lease or permit requirements, often depending on these factors:

- Type of work activity
- Project details (schedule, location, special circumstances)
- Land ownership
- Public notice requirements
- Public comments
- Navigable waters proximity
- Water use needs
- Coordination with state, Federal and local agencies
- Enforcement and jurisdictional implications
- Effect on habitats and wetlands
- Impact on fish and wildlife
- Engineering and surveying standards
- Land appraisals
- Potential to disturb historic, prehistoric and archaeological resources

Amendments

The ROW section evaluates and adjudicates any necessary amendments to SPCO-jurisdictional leases. The lease amendment process is used to revise lease language or add lands to the existing right-of-way for maintenance and operation purposes, or both. The amendment process includes a Commissioner's Decision and public notice.

Other Administrative Duties

The ROW section helps the SPCO records analyst update and maintain the SPCO case files, manages rental schedules, directs and processes payments, documents pipeline

activities, updates the State of Alaska electronic files, coordinates the lessee annual documentation requirements, updates legal descriptions and performs any additional tasks associated with lease administration for AS 38.35 pipeline right-of-way leases.

The ROW section also issues and manages material sales contracts with Alyeska Pipeline Service Co. and periodically conducts surveillance inspections of TAPS operations material sites.

Table 1: SPCO-monitored Pipelines

Issued Leases	ADL #	Location	Length (miles)*	Lessee(s)	Status
Alpine Diesel	415932	North Slope	34	ConocoPhillips	Operating
Alpine Oil	415701	North Slope	34	ConocoPhillips	Operating
Alpine Utility	415857	North Slope	34	ConocoPhillips	Operating
Badami Sales Oil	415472	North Slope	25	BPTA**	Operations Suspended
Badami Utility	415965	North Slope	31	BPTA**	Operations Suspended
Endicott	410562	North Slope	26	Endicott Pipeline Co.	Operating
Kenai Kachemak	228162	Cook Inlet	50	Kenai Kachemak Pipeline, LLC	Operating
Kuparuk	402294	North Slope	28	KTC***	Operating
Kuparuk Extension	409027	North Slope	9	KTC***	Operating
Milne Point	410221	North Slope	10	Milne Point Pipeline, LLC	Operating
Milne Point Products	416172	North Slope	10	Milne Point Pipeline, LLC	Operations Suspended
Nikiski Alaska	69354	Cook Inlet	70	Tesoro Alaska Pipeline Co.	Operating
Northstar Gas	415975	North Slope	17	Northstar Pipeline Co., LLC	Operating
Northstar Oil	415700	North Slope	16	Northstar Pipeline Co., LLC	Operating
Nuiqsut Natural Gas Pipeline	416202	North Slope	14	North Slope Borough	Operating
Oliktok	411731	North Slope	28	Oliktok Pipeline Co.	Operating
Trans-Alaska Pipeline	63574	Prudhoe Bay to Valdez	800	****	Operating

* The lengths in the table are the approximate total length of the pipeline centerline.

** BP Transportation (Alaska)

*** Kuparuk Transportation Co.

**** BP Pipelines (Alaska) Inc. (46.93%), ConocoPhillips Alaska Transportation Inc. (28.29%), ExxonMobil Transportation Company (20.34%), Unocal Pipeline Company (1.36%), Koch Alaska Pipeline Co. LLC (3.08%)

SPCO Liaisons

Alaska Department of Environmental Conservation

The broad mission of the Alaska Department of Environmental Conservation (ADEC) is to conserve, improve and protect Alaska's natural resources and environment and to control water, land and air pollution to enhance Alaskans' health, safety, welfare and economic and social well-being. As a SPCO liaison agency and a participating member of the Joint Pipeline Office (see page 15), the ADEC strives to accomplish its mission through implementing state statutes and regulations governing jurisdictional pipelines and facilities throughout Alaska.



Three full-time ADEC employees are located in the SPCO. The designated liaison provides technical and policy advice and overall coordination of ADEC efforts within the SPCO; the other two are environmental specialists and focus primarily on oil spill prevention and response readiness.

The ADEC liaison, Ron Doyel, provides coordination and policy guidance for implementing the requirements of ADEC's air quality, water, environmental health and contaminated sites divisions. The ADEC divisions oversee wastewater and solid waste operations and permits, air and water quality permits and management of contaminated sites. The ADEC liaison works with SPCO staff to ensure authorizations and permits issued by the SPCO are consistent with ADEC statutes and regulations. The ADEC liaison is a member of the Joint Pipeline Office management team.

The ADEC environmental program specialists, Graham Wood and Bill Haese, focus exclusively on oil discharge prevention and contingency plan (C-plan) requirements for TAPS and the Valdez Marine Terminal (VMT). The ADEC Spill Prevention and Response Division's industry preparedness program requires comprehensive review and approval of TAPS and VMT C-plans every five years.

C-plan activity oversight involves inspecting facility and response equipment, auditing records and conducting and evaluating oil spill response exercises. ADEC's prevention regulations provide for direct oversight of facility piping, crude oil storage tanks, secondary containment and the TAPS mainline. The SPCO engineers, along with licensed professional engineers in ADEC's industry preparedness program, provide continuous support to the environmental program specialists for technical analysis of compliance with prevention regulations.

Alaska Department of Fish & Game

The Alaska Department of Fish & Game (ADF&G) liaison, Lee McKinley, acts primarily as a staff assistant to the director of the Habitat Division. The liaison's duties were expanded in 2010; in addition to managing ADF&G issues related to TAPS, the redefined position also serves as the ADF&G lead on a proposed gas line to the Donlin Gold mine site and the ADF&G liaison to the Petroleum Systems Integrity Office (PSIO). Lee administers the fish habitat permit program under Alaska Statutes 16.05.841 and 16.05.871, which includes issuing fish habitat and special area permits, commenting on other agency permits, conducting compliance inspections (using SPCO surveillance procedures) and, when necessary, taking enforcement actions.



The ADF&G liaison's mission is to ensure that pipeline activities avoid or mitigate foreseeable impacts to fish and wildlife resources, habitats and public use of fish and wildlife. Lee works with state and federal agencies, Donlin Gold, LLC, and Alyeska Pipeline Service Co. to review and provide input on design criteria, project plans, schedules, procedures, manuals, technical specifications, drawings, facility site selection, alignments and restoration or mitigation proposals pertaining to pipeline-related work, including:

- Pipeline pre-construction
- Construction
- Operation
- Maintenance
- Termination activities

Lee serves on the JPO management team, provides environmental comments for authorization requests under the state TAPS lease and federal grant, reviews TAPS and VMT oil spill contingency plans, participates in oil spill response events and drills and prepares surveillance reports and assessments that document the lessee's compliance with environmental and other lease and federal grant stipulations.

Alaska Department of Labor and Workforce Development

The Alaska Department of Labor and Workforce Development (DOLWD) is represented within the SPCO by a safety liaison and electrical inspector; both positions focus primarily on TAPS.

Ray Elleven, the DOLWD safety liaison, serves as the SPCO program manager for worker safety and DOLWD technical and policy objectives. Ray conducts annual safety inspections of TAPS work sites and facilities, reviews project safety plans, monitors Alyeska Pipeline Service Co. accident statistics and represents DOLWD on the Joint Pipeline Office management team. Ray also serves as the SPCO safety manager and facilitates staff safety training.

Dan O'Barr, the DOLWD electrical inspector liaison and licensed Alaska electrical administrator, serves as the SPCO electrical safety program manager. Dan spends most of his time conducting routine and random inspections of TAPS facilities to ensure compliance with Alaska's electrical codes and licensing requirements. Dan has the legal authority, established by Alaska statutes and administrative codes (see SPCO website for detailed information), to enforce the National Electrical Code (NEC), State electrical codes and licensing requirements on behalf of the SPCO and the Joint Pipeline Office.

Dan is a member of the International Association of Electrical Inspectors (IAEI). Dan attends meetings and training sessions hosted by IAEI and other continuing education training on NEC requirements, and he maintains a journeyman electrician license.

Alaska Department of Public Safety, Division of Fire and Life Safety, State Fire Marshal's Office

The duties of John Cawthon, one of the State Fire Marshal's Office liaisons to the SPCO, include, but are not limited to, fire inspections, construction and building inspections and building fire system plan reviews. John conducts inspections of facilities related to 18 SPCO-jurisdictional pipelines. Diana Parks, a fully-certified ICC building and fire code plans examiner, works with SPCO liaison John Cawthon to conduct building and fire and gas system plan reviews.

Joint Pipeline Office

Mission Statement: *To work proactively with Alaska's oil and gas industry to safely operate, protect the environment and continue transporting oil and gas in compliance with legal requirements.*

The State/Federal Joint Pipeline Office (JPO) was created in 1990 to facilitate coordination between state and federal agencies in monitoring the Trans-Alaska Pipeline System (TAPS) and a proposed pipeline project to commercialize North Slope gas.

Since its inception, the scope of the JPO has increased to include petroleum and natural gas pipelines within the State of Alaska and the adjoining Outer Continental Shelf under the respective authorities or jurisdiction of one or more participating agencies.

The JPO is composed of representatives from the follow agencies:

State Agencies

- Alaska Department of Environmental Conservation
- Alaska Department of Fish and Game
- Alaska Department of Labor and Workforce Development
- Alaska Department of Natural Resources
 - State Pipeline Coordinator's Office
- Alaska Department of Public Safety
 - Division of Fire and Life Safety
- Alaska Department of Transportation and Public Facilities

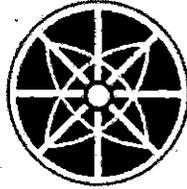
Federal Agencies

- U.S. Department of Defense
 - Army Corps of Engineers
- U.S. Department of the Interior
 - Bureau of Land Management, Office of Pipeline Monitoring
 - Bureau of Ocean Energy Management, Regulation and Enforcement
- U.S. Department of Homeland Security
 - Transportation Security Administration
 - U.S. Coast Guard
- U.S. Department of Transportation
 - Pipeline and Hazardous Materials Safety Administration
- U.S. Environmental Protection Agency



JPO cooperating agencies share the desire to maintain a system-wide approach to pipeline oversight. The JPO Executive Council Agreement is available online at www.dnr.alaska.gov/commis/pco. Each agency has a unique mission; however, the participating agencies collectively focus their resources on oversight activities that facilitate the safe and reliable transportation of oil and gas to market. Administratively, the lead federal agency of the JPO is the Bureau of Land Management (BLM), represented by the Office of Pipeline Monitoring. The lead state agency of the JPO is the Department of Natural Resources, represented by the State Pipeline Coordinator's Office.

The JPO was formed to provide better service to the public and industry by eliminating duplication of efforts; coordinating activities; improving communication between agencies, industry and the public; sharing expenses and streamlining the permitting process. While all agencies retain their individual authorities, through the JPO they collaborate on administrative, technical and regulatory issues regarding jurisdictional oil and gas infrastructure. The terms of these collaborative efforts are described in the Operating Agreement for the Joint Pipeline Office, available online at www.jpo.doi.gov.



ALASKA RURAL JUSTICE AND LAW ENFORCEMENT COMMISSION

3600 San Jeronimo Drive
Anchorage, Alaska 99508

October 29, 2010

SENT VIA U.S. POSTAL SERVICE

The Honorable Larry Echo Hawk, Assistant Secretary, Indian Affairs
U.S. Department of the Interior
Indian Affairs
MS-4141-MIB
1849 C Street, N.W.
Washington, D.C. 20240

Re: Training Initiative to Support Rural Alaska Law Enforcement

Dear Assistant Secretary Echo Hawk:

We are writing to you on behalf of, and as commissioners on, the Alaska Rural Justice and Law Enforcement Commission (ARJLEC), to urge you to give serious consideration to a proposal made by Alaska Commissioner of Public Safety Joseph Masters, and Alaska Attorney General Daniel Sullivan for inter-agency sponsored training for rural Alaska. Congress created the ARJLEC in 2004 to evaluate how best to enhance the delivery of justice in isolated, predominately Native communities in Alaska, charging it with studying four broad issues affecting rural Alaska communities, including law enforcement. The unique composition of the ARJLEC brings together leadership from federal, tribal, state, municipal, non-profit and private sector stakeholders that all serve these isolated, predominately Native communities. Commissioner Masters and AG Sullivan both serve as ARJLEC commissioners.

In their letter dated July 28, 2010, Commissioner Masters and Attorney General Sullivan propose a collaborative, intergovernmental training initiative that would incorporate funds from U.S. Department of Justice and U.S. Department of the Interior programs to provide enhanced, ongoing training at the Alaska Department

of Public Safety Training Academy for Village Public Safety Officers (VPSOs), Village Safety Officers (VPOs) and Tribal Police Officers (the relative administration, jurisdictional authority and training may differ by category).

As you know, these officers all serve rural, predominately Alaska Native communities. Law enforcement in these communities is, and will likely remain, challenging. The need to address the situation is well recognized.

The funding requested would provide an initial four-to-six week training session at either the Alaska Department of Public Safety Training Academy or the BIA Indian Policy Academy in Artesia, New Mexico, as appropriate to the category of officer. We expect that this training would be followed by several one-to-two weeks =regional training sessions offered annually, again potentially specific to the category of officer involved.

The proposed training initiative and additional funding is needed, and ARJLEC supports the July 28 proposal wholeheartedly. The funding and the training go largely hand-in-hand, and the training is consistent with the Commission's recommendations in its 2006 Initial Report and Recommendations (*Initial Report*):

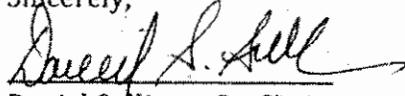
There is a shortage of funding for rural police officer and public safety officers that need further training and certification.... The additional funding should be sought from all available sources including the state and federal governments.... (Recommendation 11 (LE-2).)

In its *Report*, the Commission made a number of key recommendations to improve the delivery of justice in isolated communities throughout the state, noting that "[t]here is no doubt that...increased cooperation, coordination, and collaboration between state and tribal courts and agencies would greatly improve life in rural Alaska and better serve all Alaskans." *Initial Report at 35*. Of particular importance, the ARJLEC concluded that providing increased and ongoing training for police and public safety officers serving these remote Alaskan communities would "ensure professional competency and service delivery" and greatly improve the safety of these communities. *Initial Report at 39*.

The U.S. Department of Justice is investing considerable funds to improve training and qualification of police officers in tribal communities located within Indian Country throughout the lower 48. Unfortunately, in spite of the fact that rural tribal communities in Alaska face the same law enforcement challenges faced by tribes in the lower 48, in many instances U.S. Department of Justice funding does not reach tribal communities in Alaska because of the dearth of Indian country in Alaska. This proposal for inter-agency sponsored training for rural Alaska would further encourage a closer working relationship between the State and municipal police agencies, and reduce peace officer turnover in rural communities where the demands on individual officers is often overwhelming.

We welcome an opportunity to talk with you further about this proposal. Please do not hesitate to contact us if you would like to set up a meeting or teleconference with us.

Sincerely,



Daniel Sullivan, Co-Chair

Bruce M. Botelho, Commissioner

Charlotte Brower, Commissioner

Loretta M. Bullard, Commissioner

Wilson Justin, Commissioner

Joseph A. Masters, Commissioner

Gail R. Schubert, Commissioner

James E. Torgerson, Commissioner

Cc: The Honorable Ken Salazar, Secretary, U.S. Department of the Interior
The Honorable Thomas Perrelli, Associate Attorney General, U.S. Department of Justice

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EXEDITION...
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DEPARTMENT OF THE...
INDIAN AFFAIRS

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United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Washington, DC 20240

DEC 22 2010

IN REPLY REFER TO:
COCR_2010_004595
Office of Justice Services

The Honorable Daniel Sullivan
Attorney General of Alaska
Alaska Rural Justice and Law Enforcement Commission
3600 San Jeronimo Drive
Anchorage, Alaska 99508

Dear Mr. Sullivan:

Thank you for your letter dated October 29, 2010, regarding a training initiative to support rural Alaska law enforcement. You also sent a letter dated July 28, 2010, regarding the same subject of improving law enforcement in the remote towns and villages of rural Alaska through training. The Department of Justice (DOJ) is responsible for administering the Community Oriented Policing Services, we referred both of your letters to the DOJ for a response. Our response to this letter is the same as our response to your letter dated July 28, 2010.

The Indian Police Academy (IPA) is located with the Federal Law Enforcement and Training Center (FLETC) in Artesia, New Mexico. A critical eligibility requirement to attend the IPA and FLETC is that an officer must be a full-time law enforcement officer with full powers of arrest. The Bureau of Indian Affairs (BIA) Office of Justice Services funds are authorized for purposes of providing law enforcement in Indian country as defined by 18 U.S.C. §1151. While funds have increased in the BIA budget for law enforcement purposes, these funds do not support the entire need for currently funded programs within Indian country. Regretfully, there are no available funds to support new programs or initiatives within the BIA Office of Justice Services.

In the spirit of collaboration and coordination, Mr. Thomas Woolworth, the Chief of Training, Indian Police Academy, is available to meet with your designated staff to identify alternative training opportunities for the Village Public Safety Officers and Tribal Police Officers. You may contact Mr. Thomas Woolworth at (505) 746-5643.

Sincerely,

Acting Director, Bureau of Indian Affairs

STATE OF ALASKA

DEPARTMENT OF LAW

OFFICE OF THE ATTORNEY GENERAL

SEAN PARNELL, GOVERNOR

1031 WEST 4TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501-5903
PHONE: (907)269-5100
FAX: (907)276-3697

September 30, 2010

Secretary Ken Salazar
U.S. Department of the Interior
1849 C Street NW
Washington, D.C. 20240

Re: Petition for rulemaking to repeal or amend 36 CFR §1.2(a)(3) and 36 CFR §13.2

Dear Secretary Salazar:

Pursuant to 5 U.S.C. §553(e) and 43 CFR §14.2, the State of Alaska petitions for the repeal of the regulation at 36 CFR §1.2(a)(3) or amendment of the regulation to make it inapplicable to Alaska, with a corresponding repeal of revisions to 36 CFR §13.2. As currently written, 36 CFR §1.2(a)(3) makes all National Park Service (NPS) regulations applicable to navigable waters within the exterior boundaries of all national park system units without regard for State ownership of the submerged lands and State sovereignty over natural resources within such lands and waters. Congress, in clear and plain language, prohibited the application of NPS' regulations to State owned lands and waters in Alaska. *See Alaska National Interest Lands Conservation Act (ANILCA), §§ 103(c), 102(3)(A), 16 U.S.C. §§ 3103(c), 3102(3)(A).*

This has been a long standing matter of dispute between the State and the NPS; numerous attempts to resolve the dispute at the state and national levels have been unsuccessful. For example, over the past several months, the State has met with the leadership of the NPS Alaska Regional Office and wrote to NPS Director Jon Jarvis raising concerns about the legality of these regulations. Unfortunately, Director Jarvis exhibited little desire to adequately address this problem. Therefore, we are filing this petition to seek effective action from you on this matter which is extremely important to the State of Alaska and our citizens.

Background

In 1976 Congress passed the National Park Service Administration Improvement Act which authorized NPS to:

Promulgate and enforce regulations concerning boating and other activities on or relating to waters located within areas of the National Park System, including waters subject to the jurisdiction of the United States: Provided, That any regulations shall be complementary to, and not in derogation of, the authority of the United States Coast Guard to regulate the use of waters subject to the jurisdiction of the United States.

16 U.S.C. §1a-2(h). This statute provides that such regulations will complement Coast Guard authority, which relates to navigation and boating safety concerns. Based on this statute, and over the objections of the State of Alaska and other commenters, in 1996 NPS adopted the national regulation extending federal jurisdiction to regulate public activities in state waterways within national park unit boundaries, 36 CFR § 1.2(a)(3), along with a corresponding modification to the Alaska-specific Part 13 regulations, 36 CFR pt. 13.

Legal Analysis Regarding Alaska's Unique Status Under ANILCA

Regardless of whether the NPS has authority to apply 36 CFR §1.2(a)(3) in other states, Congress has spoken clearly and directly with respect to Alaska; NPS regulations do not apply to State owned lands and waters.

Adopted 4 years after the 1976 act, ANILCA plainly provides:

Only those lands within the boundaries of any conservation system unit which are public lands (as such term is defined in this Act) shall be deemed to be included as a portion of such unit. No lands which, before, on, or after the date of enactment of this Act, are conveyed to the State, to any Native Corporation, or to any private party shall be subject to the regulations applicable solely to public lands within such units. ...

16 U.S.C. §3103(c). Section 102(1) of ANILCA defines "land" as "lands, waters, and interests therein." 16 U.S.C. §3102(1). Section 103(c) clearly states that "no lands" owned by the State, including waters, will be subject to NPS regulations. Congress adopted this very specific provision after it enacted the 1976 general authority. "[C]onflicting statutes should be interpreted so as to give effect to each but to allow a later enacted, more specific statute to amend an earlier, more general statute." *Mangano v. U.S.*, 529 F.3d 1243, 1247 (9th Cir. 2008), quoting *Acosta v. Gonzales*, 439 F.3d 550, 555 (9th Cir. 2006). Under this well-settled principle of statutory construction, the NPS regulations do not apply to State owned navigable waterways in Alaska.

Furthermore, ANILCA specifically defines "public lands" to exclude:

land selections of the State of Alaska which have been tentatively approved or validly selected under the Alaska Statehood Act and lands which have been confirmed to, validly selected by, or granted to the Territory of Alaska or the State under any other provision of Federal law.

16 U.S.C. §3102(3)(A). Title to the beds of navigable waterways within the state was confirmed to Alaska at statehood. In addition, §103(a) provides:

the boundaries of areas added to the National Park ... System[] shall, in coastal areas not extend seaward beyond the mean high tide line to include lands owned by the State of Alaska unless the State shall have concurred

16 U.S.C. §1303(a). These provisions are facially clear: In Alaska, NPS regulations do not apply to State lands, including submerged lands.

Although ANILCA is unambiguous on this point, its plain meaning is reiterated throughout the legislative history. House Concurrent Resolution 452 added §103(c) to the bill that became ANILCA on November 21, 1980. Its purpose was to "specif[y] that only public lands (and not State or private lands) are to be subject to the conservation system unit regulations applying to public lands" and "to make clear that other particular provisions of the bill apply only to public lands." 126 Cong. Rec. H 30498 (November 21, 1980) (repeated in 126 Cong. Rec. S 15129, daily ed., December 1, 1980).

In 1978, in an earlier version of the Alaska lands bill, Congressman Young offered an amendment to the definitions section of the bill to clarify that Alaska's rights in and to navigable waters confirmed to the State under §6(m) of the Alaska Statehood Act were protected. The amendment passed. 124 Congressional Record H 4233 (May 18, 1978). A 1979 Senate Report on H.R.39 states:

Those private lands, and those public lands owned by the State of Alaska ..., are not to be construed as subject to the management regulations which may be adopted to manage and administer any national conservation system unit which is adjacent to, or surrounds, the private or non-Federal public lands.

S. Rep. No. 96-413 at 303 (November 14, 1979). During floor debates in May 1979 House members stressed their intention to

make clear beyond any doubt that any State, Native or private lands, which may lie within the outer boundaries of the conservation system unit are not parts of that unit and are not subject to regulations which are applied to public lands which, in fact, are part of the unit.

125 Cong. Rec. H 3240 (May 15, 1979). *See also* 125 Cong. Rec. H 3237, H3239. The language adopted in ANILCA and its legislative history leave no room for doubt. Section 103(c) prohibits the blanket application of the NPS regulations to State owned submerged lands and navigable waters.

In addition to the controlling sections of ANILCA, the statute under which the NPS asserts authority for this regulation, 16 U.S.C. §1a-2(h), only authorizes NPS to regulate boating and related activities already subject to Coast Guard regulation, not any and all activities on waters within parks. The House Report that accompanied the final bill states:

A clarification of the ability of the Secretary to promulgate boating activities [sic] is included, thus ensuring that this expanding use within our national parks can be specifically controlled. The Committee amendment ensures that any exercise of this regulatory authority will not be in derogation of the regulatory powers of the U.S. Coast Guard.

H.R. Rep. 94-1569, 1976 U.S.C.C.A.N. 4291-92. The section-by-section analysis describes the authority granted as follows:

The Secretary is specifically authorized to promulgate and enforce regulations concerning boating and related activities on any waters within the system. A proviso is included to make clear that any such regulations would be complementary to the authority of the U.S. Coast Guard to regulate navigable waters and would not lessen this authority in any way. The National Park Service would thus have the specific ability to regulate boating and related uses, but this would be accomplished as a supplement to, and not in conflict with, any Coast Guard regulations and enforcement.

Id. Even as to boating and related activities, under the Property and Commerce Clauses of the U.S. Constitution, NPS must show that activities on State owned waters sufficiently impact NPS controlled lands or resources as to justify extra-territorial regulation. The Department of the Interior report on the bill asserts: "In effect, Congress

would be clarifying its intent to invoke its powers under the Commerce Clause of the Constitution to regulate boating and other activities to assist in the administration of the Park System.” *Id.* at 4298. In fact, Congress only authorized NPS to supplement Coast Guard actions.

Congress made no statement of intent to diminish the equal footing and public trust doctrines and supplant state management of navigable waterways. Congress would not have made such a sweeping change without more explicit language, and could not constitutionally usurp traditional state authority, at least without a clear statement of intent to do so. The legislative history of the 1976 act never hints that it was intended to authorize a significant expansion of federal regulatory authority, nor implicitly repeal in part the 1953 Submerged Lands Act and the equal footing doctrine, nor diminish states’ traditional authority to manage state navigable waters.

From 1976 to 1996, NPS respected the exclusion of State owned land and waters from park regulations. Prior to the 1996 rulemaking, the NPS narrowly defined the applicability of certain regulations to lands and waters “under legislative jurisdiction of the United States.” When promulgated in 1983, 36 CFR §1.2(b) clearly stated that Service regulations “are not applicable on privately owned lands and waters except as may be provided by regulations relating specifically to privately owned lands and waters under the legislative jurisdiction of the United States.” 48 FR 30275. The 1983 preamble clarifies the provision was “intended to also include state inholdings that are under the legislative jurisdiction of the United States.” 48 FR 30261. In 1987, 36 CFR §1.2(b) was revised to read “Parts 1 through 5 and Part 7 of this chapter do not apply on non-federally owned lands and waters . . . within the boundaries of a park area.” 52 FR 12037. The 1987 preamble confirmed the limited application of select regulations by stating the revision “clarifies the fact that those regulations apply, regardless of land ownership, on lands and waters within a park area that are under the legislative jurisdiction of the United States.” 52 FR 12037. The 1983 and 1987 revisions to NPS regulations contain both language and intent to clearly limit the application of NPS authority to lands and waters under legislative jurisdiction and specifically exclude State owned lands and waters. *See also* 52 FR 35238, 35239.

In 1996, NPS regulations were again revised for the stated purpose of “...clarifying a separate and distinct application of the regulations, [the 1987 revision to 36 CFR §1.2(b), which] had the unforeseen and unintended effect of arguably linking federal title to submerged lands with the exercise of management authority over activities occurring on navigable waters....” 61 FR 35133. Both 36 CFR §1.2(b) and 36 CFR §13.2(e) (now §13.2(f)) were revised to apply all NPS regulations to navigable waters, in spite of the clear language and intent in the 1976 Act, in 36 CFR §1.2(b) as promulgated in 1983, and in ANILCA and the original Part 13 implementing regulations, the latter of which restricted the applicability of the NPS regulations to “federally owned” lands in

Alaska. In particular, the 1981 preamble to the final Part 13 regulations clarified that "these regulations would not apply to activities occurring on Native or any other non-federally owned land interests located inside park area boundaries." 46 FR 31843.

The 1996 preamble for the revisions to 36 CFR Parts 1 and 13 indicated "The proposed rule clarifies and interprets existing NPS regulatory intent, practices and policies, and generally would not place new or additional regulatory controls on the public." 61 FR 35133. As demonstrated in the previous discussion, this was a gross mischaracterization of what was in essence a major expansion of NPS jurisdiction.

Requested Action

The State requests that the Secretary repeal 36 CFR §1.2(a)(3) and the 1996 revisions to 36 CFR §13.2 effective immediately because they exceed the Secretary's authority. Alternatively, the State requests that the NPS amend its existing regulations to exempt Alaska from its national regulation at 36 CFR §1.2(a)(3) and repeal the revisions to 36 CFR §13.2 effective immediately. Either of these actions would be consistent with the intent of Congress in ANILCA §103(c), which prohibits the application of regulations that are promulgated for management of federal conservation system units in Alaska to any State owned lands, including submerged lands, within those units. Such a revision would limit the extent of NPS authority over public activities in State of Alaska waterways that unnecessarily impact State management of public transportation and fish and wildlife traditionally managed by states, among other uses.

Thank you for your prompt consideration of this petition. Please contact the undersigned if you need additional information.

Sincerely,



DANIEL S. SULLIVAN
ATTORNEY GENERAL

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United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, DC 20240

NOV 29 2010

The Honorable Sean Parnell
Governor of Alaska
Juneau, Alaska 99811

Dear Governor Parnell:

On behalf of the Secretary, this letter is to confirm that we received your letter of September 30, 2010, and the petition to repeal or amend 36 CFR 1.2(a)(3) and 36 CFR 13.2. These regulations address the applicability and scope of National Park Service regulations, including their application on navigable waters within the boundaries of National Park System areas nationwide and in Alaska.

We will be evaluating the petition and will respond after we have reached a decision.

Sincerely,

Fay S. Iudicello
Director, Office of the Executive Secretariat
and Regulatory Affairs

CC: Daniel Sullivan, Attorney General, State of Alaska